9-401-7060

Deatschwerks 2006+ Dodge Charger, Challenger, and Chrysler 300 X2 Dual Pump Module Installation Guide

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This module is designed to fit the following applications:

2006-2021 Dodge Charger
2008-2021 Dodge Challenger
2006-2008 Dodge Magnum
2006-2019 Chrysler 300

**Will not fit 6.2L Supercharged Hellcat/Demon/Redeye/Super Stock or Jailbreak applications.*

Included Parts:

- Billet Aluminum Hemi X2 Module
- DW400 415 LPH Fuel Pumps (x2)
- 10” Pump Electrical Connectors (x2)
- Convoluted Tube 6” x 3/8”
- Fuel Sock Pump Pre-Filter (x2)
- 3/8” Pinch Hose Clamp (x2)
- 12-10awg #10 Ring Terminals (x3)
- 14-16awg #10 Ring Terminals (x4)
- 18-22awg #10 Ring Terminals (x7)
- OEM Style Plastic Bucket Assembly
- OEM Style Fuel Level Sensor
- OEM Style Rubber One Way Valve
- Module Support Spring
- M5 Flange Head Allen Bolts (x3)
- Regulator Pressure Relief Bypass (RPRV) Plug
- Venturi and Siphon Hose Holders (x2)

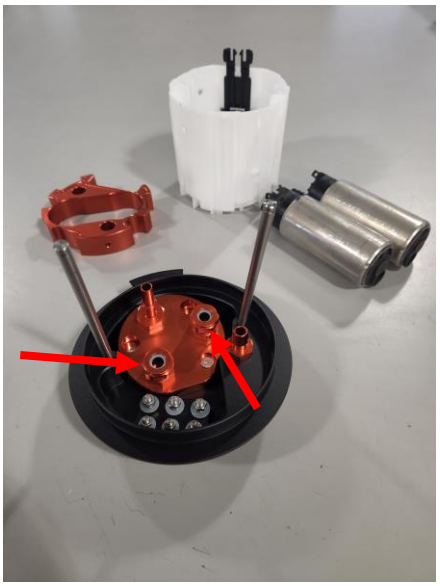
PLEASE READ: This guide is intended to aid in the installation of our products. It is recommended that factory manuals or instructions are followed to remove the fuel pump assembly from the vehicle. Instructions in this guide are generic and are intended to aid in the installation of a X2 pump module.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

Important Notes: The Hemi X2 module is intended to be used with Deatschwerks 46mm DW400 fuel pumps. The kit includes OEM replacement components, these are required for fitment.

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

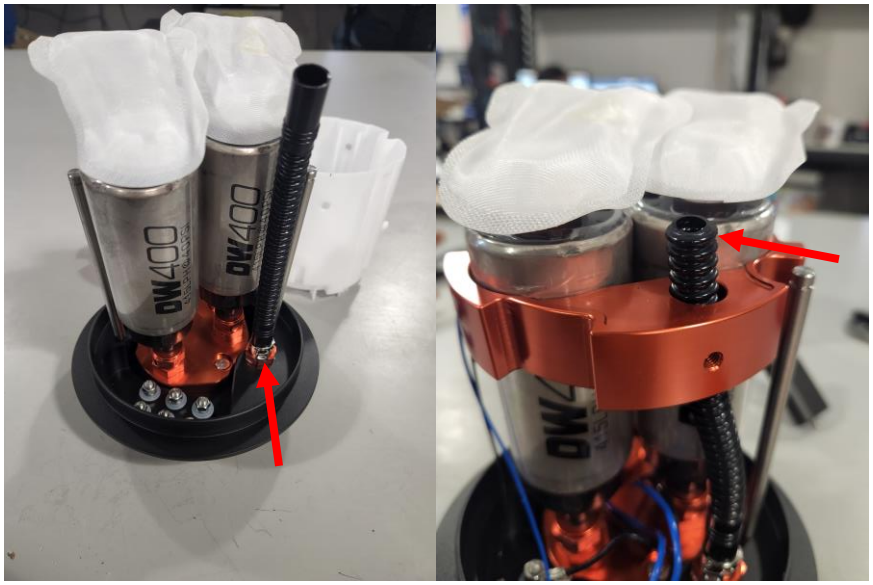
Assembly of the X2 Module

1 – Loosen the 6AN to Pump Adapter fitting retaining nut and remove along with the O-rings. Slide the nut and O-ring on to the DW400 fuel pumps.

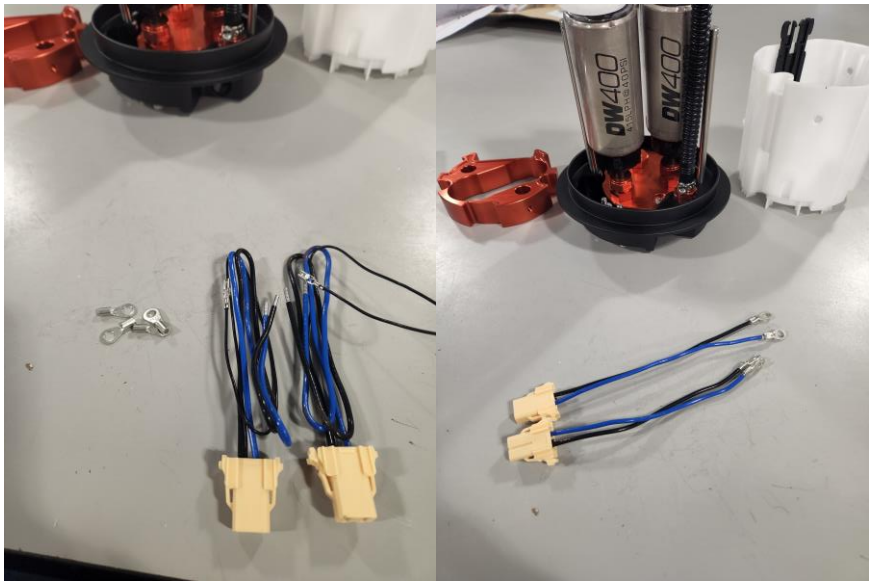


2 – Install the supplied filter socks on the DW400 pumps, then install and tighten the pumps onto the X2 top-hat. See pictures for filter sock and pump orientation,

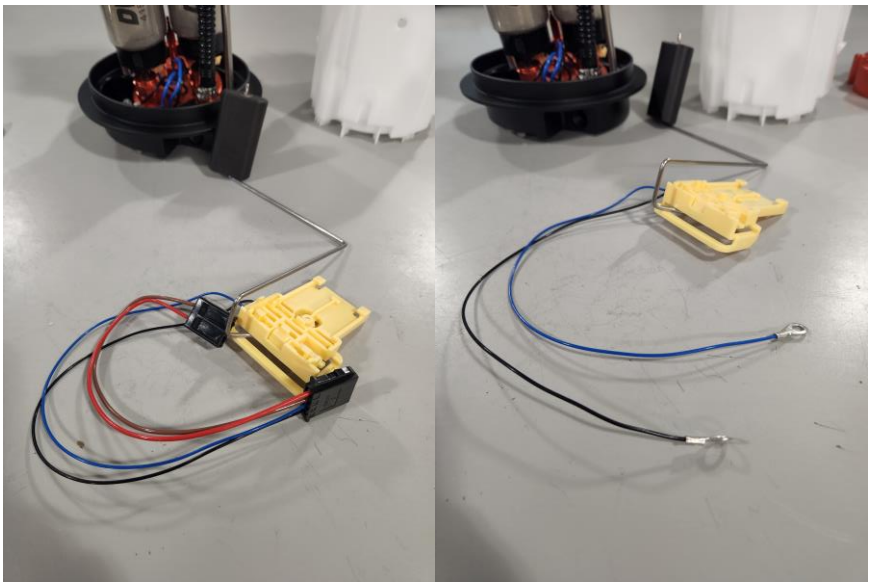
3 – Install the supplied 6” x 3/8” convoluted tube onto the return fitting and secure with the supplied 3/8” pinch clamp. Cut the return hose flush with the bottom of the pump filter socks.



4 – Remove the small gauge black wire and shorten the supplied pump wiring harness. Using the supplied 14-16awg ring terminals crimp them onto the pump power and ground wires. Attach both ground wires to the pump negative terminal and attach each pump power wire to its separate positive terminal.

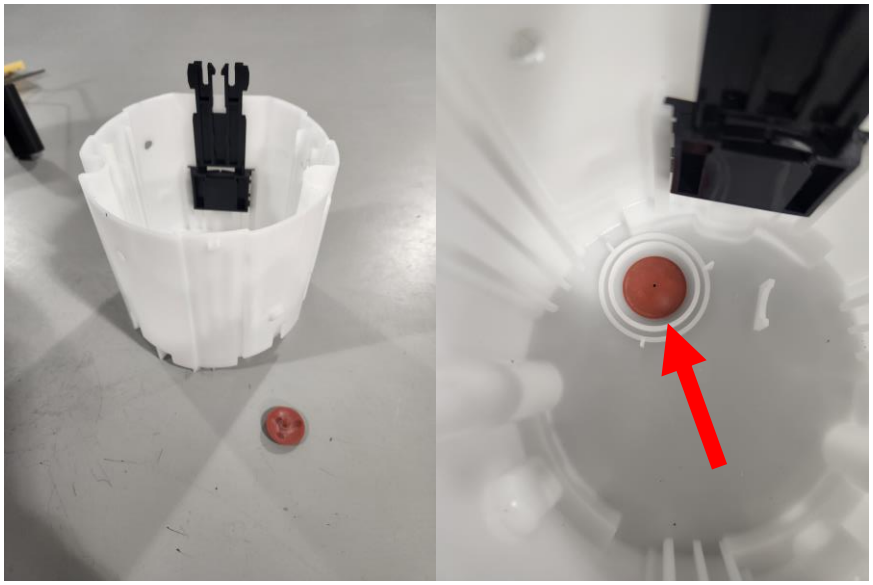


5 – Cut the factory connector off the fuel level sensor, shorten the wires as necessary for a cleaner install, strip the ends and crimp on two of the supplied 22-18awg ring terminals. Attach the Blue level sensor wire to one of the positive level wire terminals and the black to the negative.

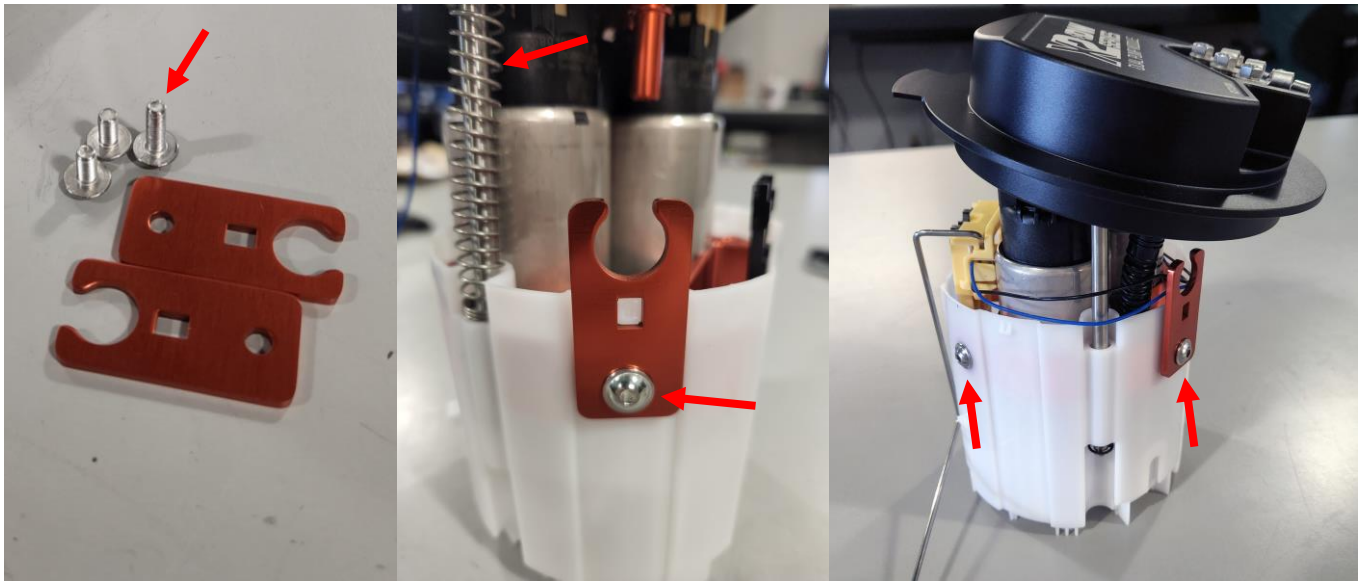


6 – Locate the orange anodized center section and slip it over the pumps, if installation is difficult remove and the filter socks and reinstall after. Tuck the return hose through the hole located above/below it. (See Step3 Picture 2)

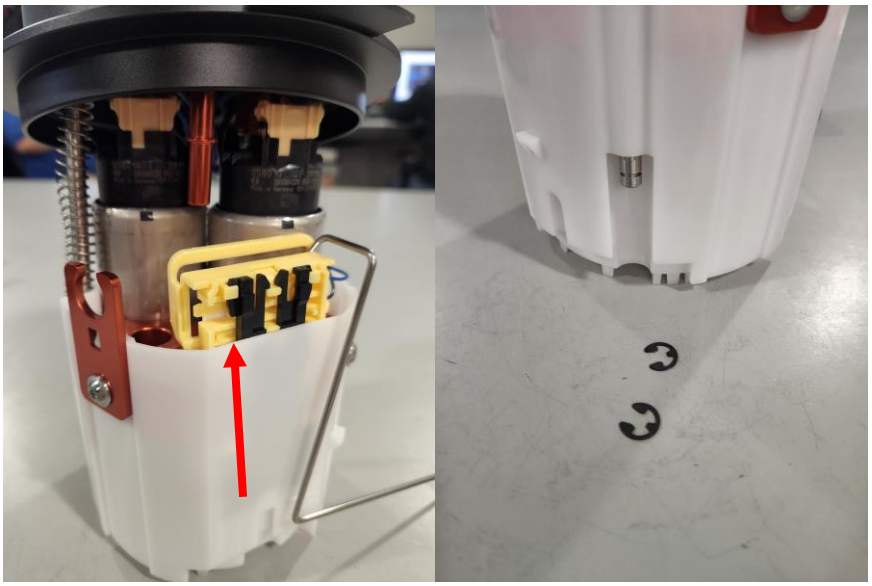
7 – Locate the supplied plastic bucket assembly and the rubber one way valve. Slip the valve into position and pull the nub through its locating hole.



8 – Locate the supplied orange aluminum siphon hose holders and M5 flange head bolts. Slide the assembled module into the bucket, slip the support spring onto one of the posts as you are installing them into the bucket. Align the holes in the bucket with the holes in the center section. One of the M5 bolts is longer, this one goes in the location closest to the 5/16” EFI Quick Connect feed fitting (Shown Below).

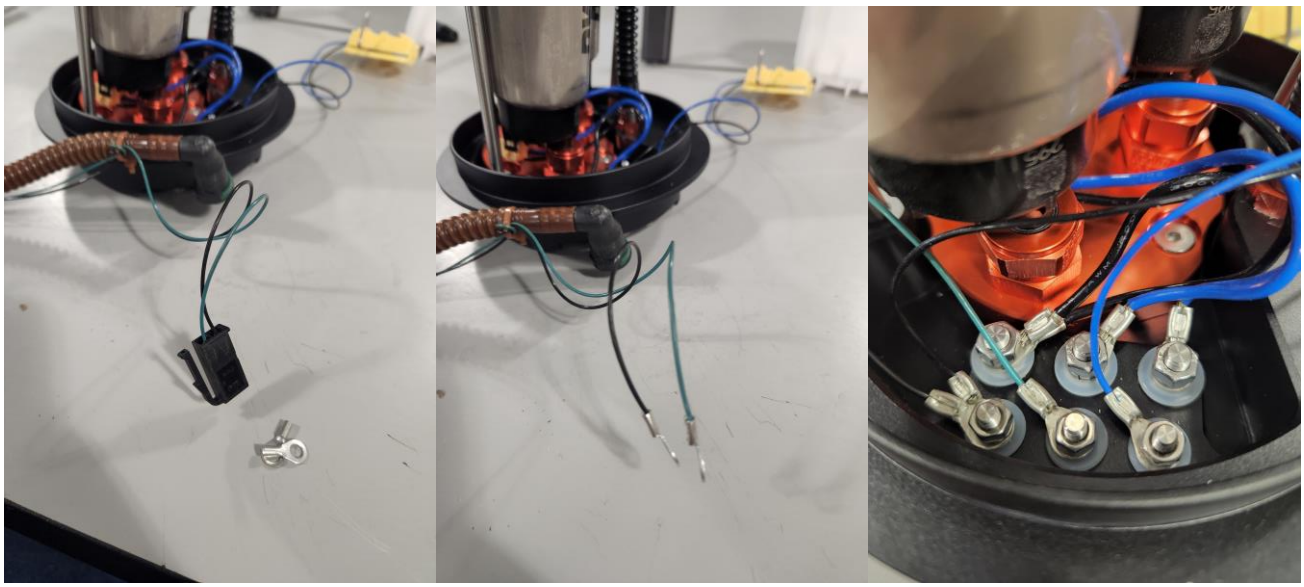


9 – Install the remaining two bolts and hose holder, the second hose holder goes closest to the return line and may be used in some applications. Install the fuel level sending unit into the bucket assembly and route the wiring as needed. Install the e-clip retainers onto the module support rods.

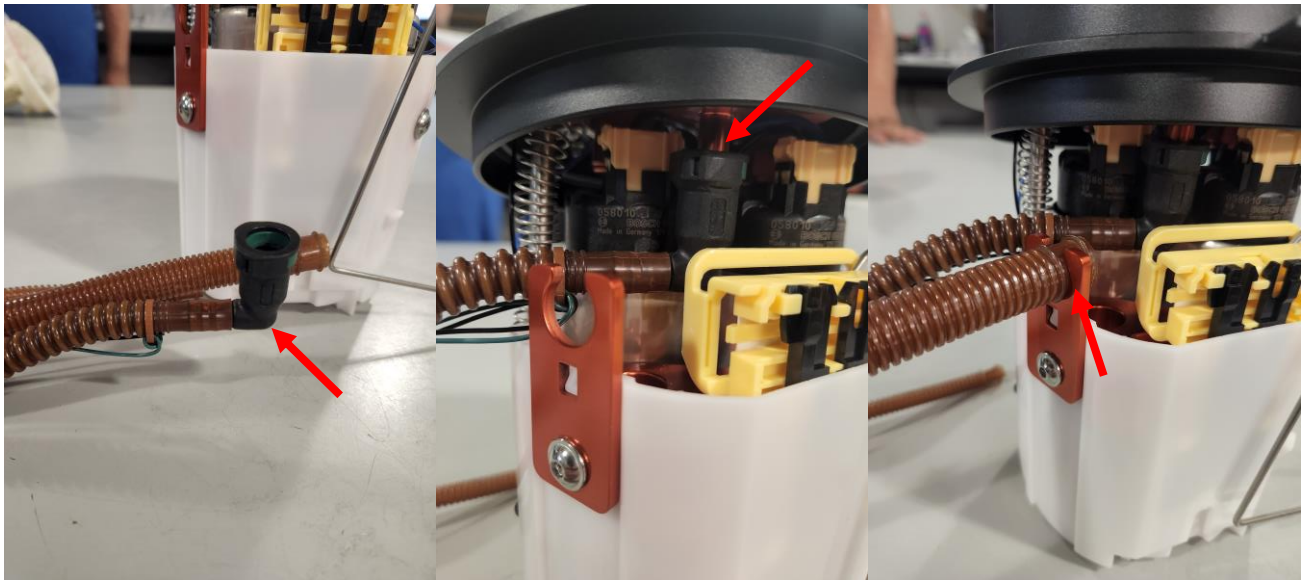


Installing the X2 Module

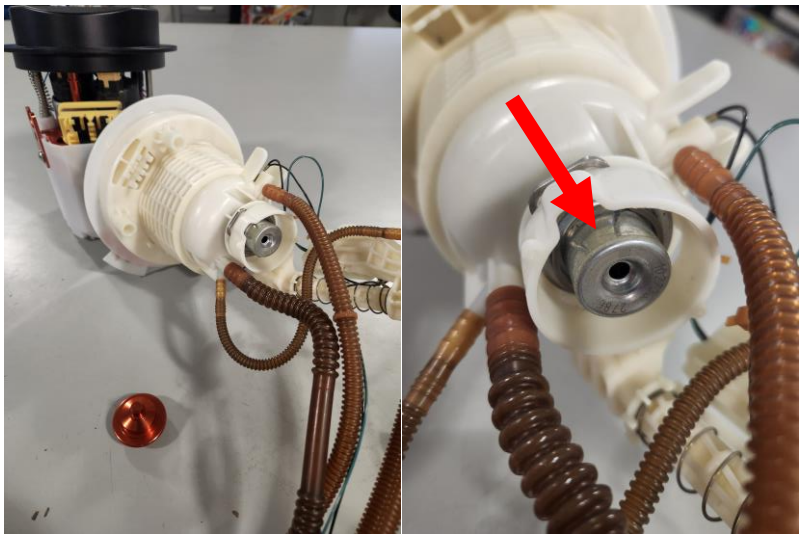
10 – Once the OEM fuel pump module is removed from the fuel tank, you will need to take the secondary fuel level sending unit wires inside the tank and attach them to the X2 module sending unit terminals. Attach both black wires to the negative terminal and each colored wire to the positive terminals.



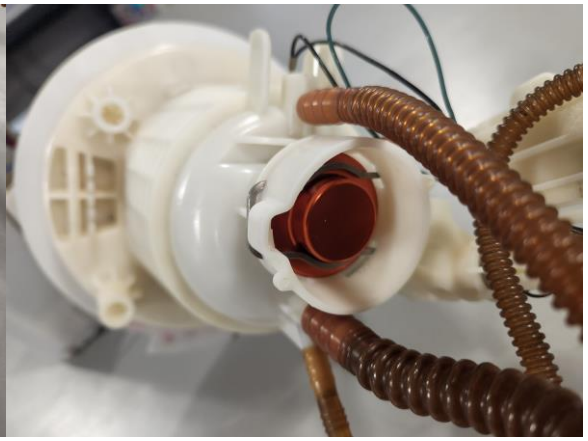
11 – Before installing the module into the tank opening, connect the OEM feed line to the orange Quick Connect fitting, it may be necessary to rotate the OEM plastic fitting inside the OEM convoluted tubing. Next take the larger siphon return hose and snap it into the orange hose holder. The smaller RPRV return hose will no longer be needed due to the RPRV bypass plug, it can be zip tied out of the way, so it will not interfere with the fuel level float and arm.



12 – Install the X2 fuel pump module into the tank and tighten the lock ring. To install the Regulator Pressure Relief Valve (RPRV) bypass plug, to allow for pressures higher than 58psi. You will need to remove the fuel filter module on the opposite side of the fuel tank. Disconnect the OEM fuel feed line from the top of the module and remove the lock ring. Lift the filter module out of the tank to expose the bottom of the filter and the OEM RPRV.



13 – Remove the OEM RPRV by prying out the metal retaining clip and removing the unit. Swap both O-rings from the OE unit to the orange DW bypass. Lubricate the O-rings and reinstall into the filter module, secure with the OEM retaining clip. Reinstall the filter unit into the tank, tighten the locking ring to secure the module.



Wiring the X2 Module

17 – The DW X2 Series Hemi module comes with supplied ring terminals, the pump terminals are designed for up to 10awg wiring the fuel level for 22-18awg. The level sending unit wires should be connected to the factory level sending unit wires.
Due to the OEM fuel pump controller, it may be necessary to either turn off the variable voltage/duty cycle options or bypass the FPDM completely. This is easily accomplished 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 FPCM and use a direct battery voltage to run the fuel pumps.

- The factory fuel pump positive trigger wire is Blue/Orange, this will connect to the Blue wire on the Hardwire Kit.

- The factory fuel level sending unit wires are a combination of Blue/White and Blue/Grey (+ Positive) and Black (- Negative), depending on the year the car may have 2x Blue/White, or a Blue/White and a Blue/Grey.

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