

9-xxx-1000

Universal DW100/200/300/420 Fuel Pump Installation Guide



Parts List:

- DW Standard 39mm OD Fuel Pump
- Fuel Sock w/ Retainer Clip
- 8" Submersible Fuel Injection Hose
- 5/16" Hose Clamps (x2)
- Electrical Connector w/ Leads

Universal DW100/200/300/420 Fuel Pump Installation Guide

Universal Plastic Assembly DW100/200/300/420 Fuel Pump Install

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 DW100/200/300/420 pump in the typical fuel pump assembly. The factory manual should supersede any contradiction.

IMPORTANT NOTE – This guide is universal and will cover several types of pump hangers/modules. Many of the late model plastic assemblies use the outflow of the pump to perform secondary functions within the fuel tank. Some of the OE fuel pumps will have a smaller, second outlet from the pump that cannot be duplicated with an aftermarket pump. In these applications, the secondary functions will either be bypassed or disabled which will affect how the pump picks up fuel. If the application requires circumvention of the secondary functions, it is not recommended to run the fuel level below one-fourth tank.

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

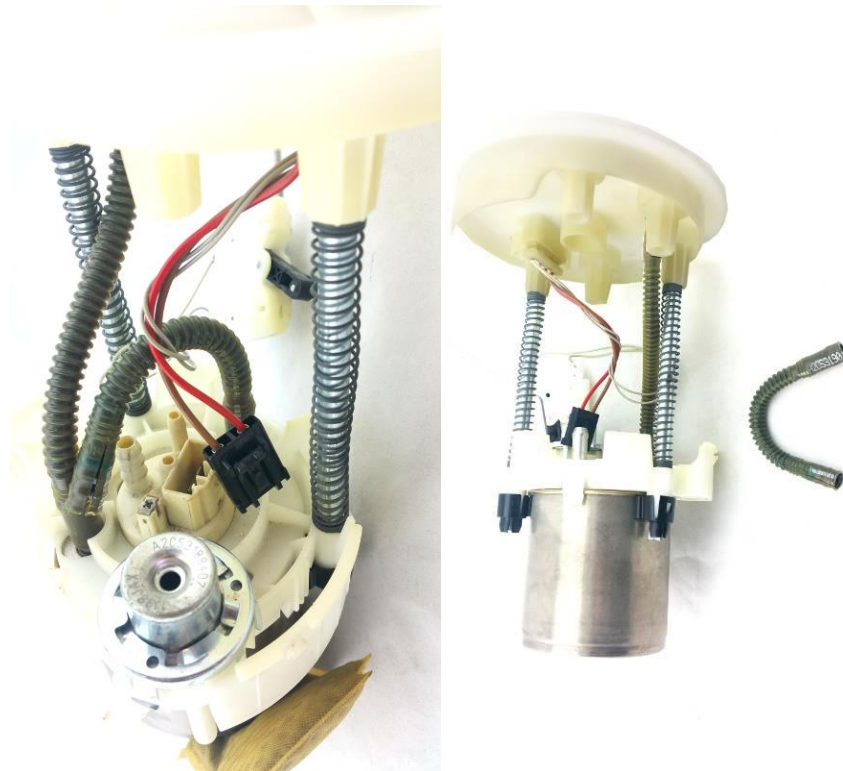


Late Model Plastic Module Installation

1 – separate the bucket from the assembly, use caution when removing connectors and clips and inspect the wiring and soft components condition for consideration of reuse.



2 – plastic hoses have to be cut for removal and cannot be reused. Take note of wire routing and connections



3 – if applicable, splice the OE connector with the electrical connector from the installation kit. Also, check to make sure the connector is wired with the correct polarity.

NOTE: in this example, the connector was soldered together and covered with fuel resistant tape. Covered (fuel safe) connectors can also be used.



4 – remove OE fuel pump. In this example, the OE fuel pump has a secondary stage built into the bottom cap of the fuel pump. This stage is what supplies the scavenging system that draws fuel in the bucket of the assembly. As the DW pump is not able to recreate this function, provisions will be detailed later in the guide.



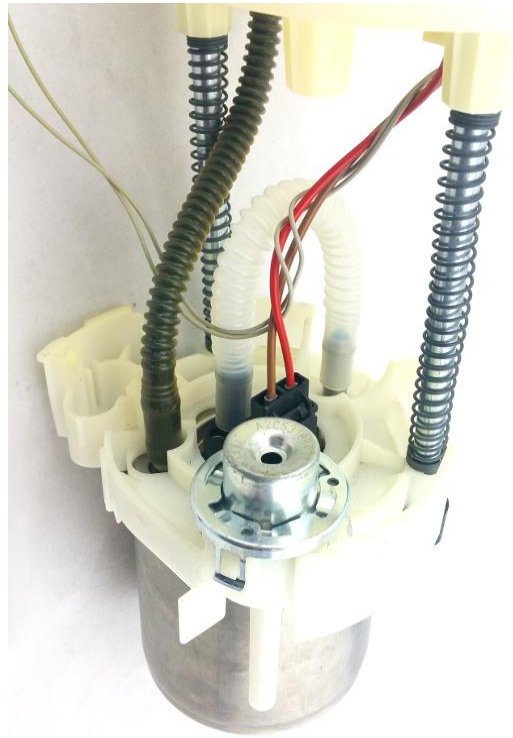
5 – the universal kit may not have all the components necessary to install the DW pump as the OE pump was installed. Some of these components – like the plastic tubing pictured below – can be sourced outside of the kit.



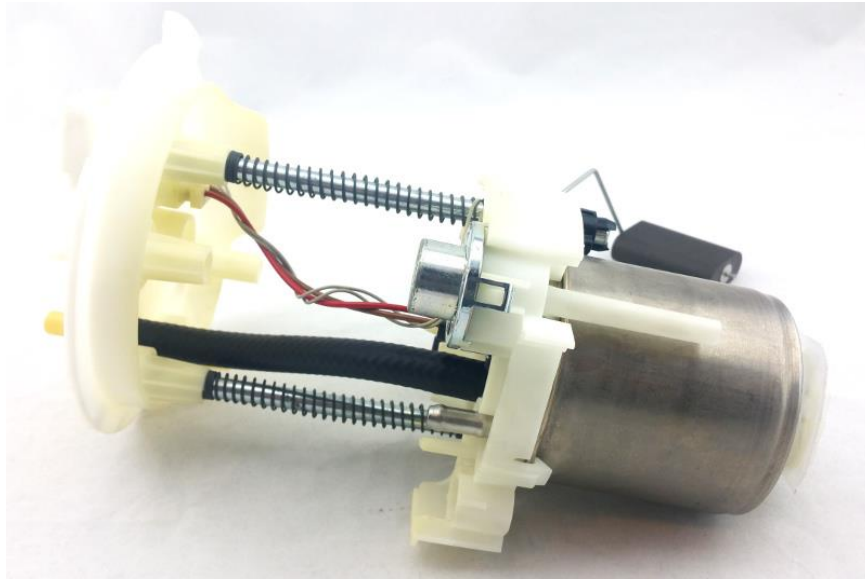
5a – some of the late model, plastic assemblies will have the pump seal directly into the assembly with O-rings instead of hose. Below is the recommend configurations of O-rings:



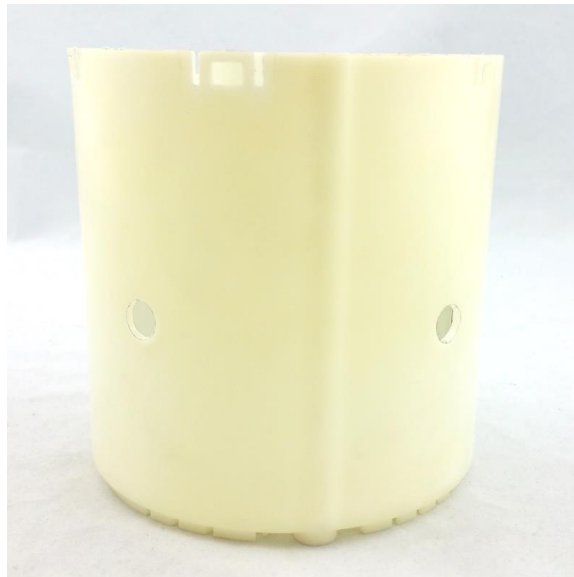
6 – in many of the late model, plastic pump assemblies, the fuel pump first fills a reservoir with a non-serviceable filter before sending the fuel out of the tank. It is recommended that this function is retained, if feasible.



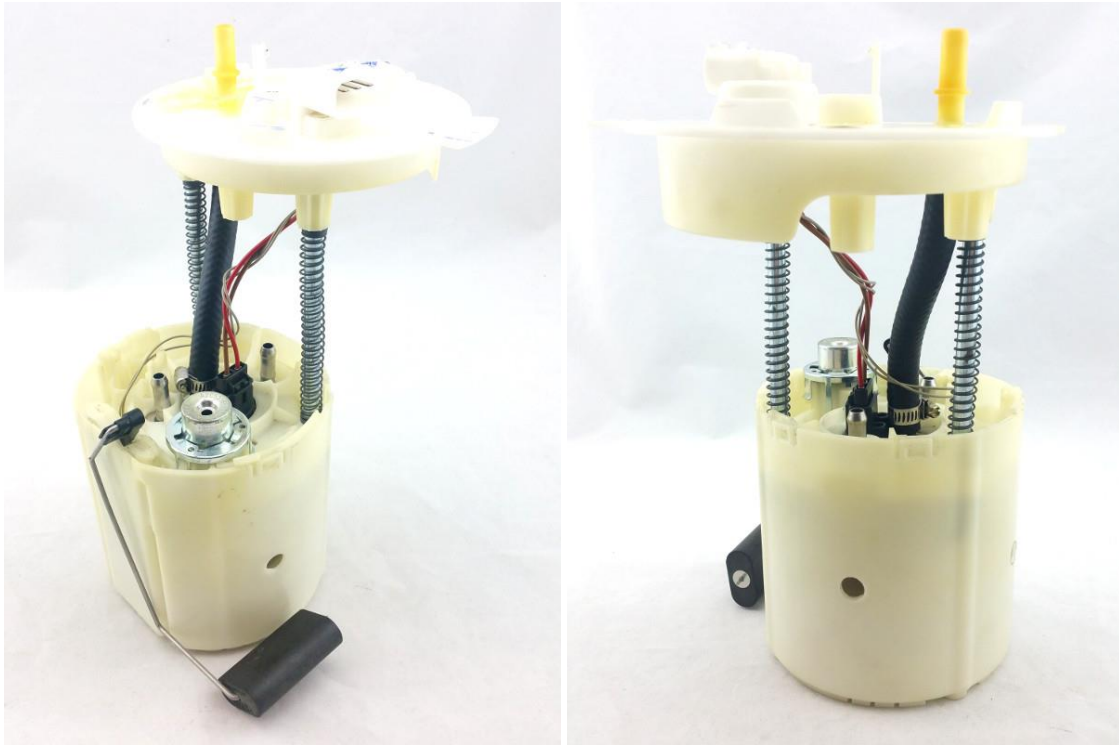
7 – if the vehicle has a return fuel system that is externally regulated or will be converted to a return fuel system, the reservoir can be bypassed and not affect the function of the pump's fuel delivery to the engine



8 – as mentioned in step 4, with the secondary scavenging system being disabled or bypassed, the bucket of the assembly needs to be filled via gravity. To allow gravity to work, holes need to be drilled in the bucket 2" above the base of the assembly. Size and number of holes will depend on the application, however, three (3) three-eighths" holes should be sufficient for DW100/200 pumps and four (4) for the DW300/420 pumps.

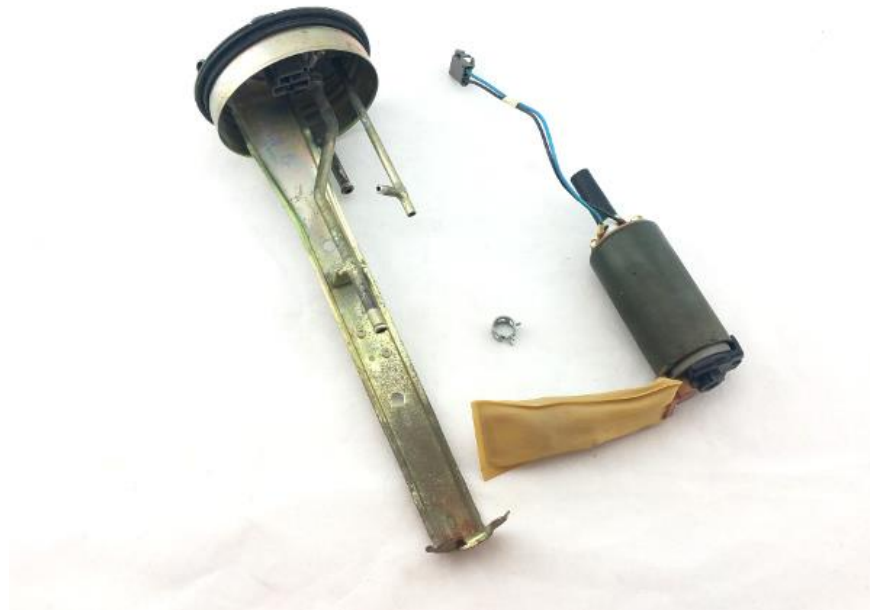


9 – reinstall the assembly into the bucket



Early Model Metal Pump Hanger Install

1 – separate the pump from the assembly, use caution when removing connectors and clips and inspect the wiring and soft components condition for consideration of reuse.



2 – prep the DW pump with components from the universal installation kit and reusable OE components.



3 – if applicable, splice the OE connector with the electrical connector from the installation kit.

NOTE: in this example, the connector was soldered together and covered with fuel resistant tape. Covered (fuel safe) connectors can also be used.



4 – install the DW pump and plug in the connector



5 – reinstall the assembly into the fuel tank and attach a length of hose to the outlet of the pump assembly allowing it to drain into a fuel safe container and prime the fuel pump assembly

6 – cycle the key to the on position as many times as required to prime the pump assembly and evacuate the air introduced during the pump installation process

7 – attach supply line to the outlet of the pump assembly

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