

# 9-441-0901

## DeatschWerks 2020 Toyota Supra DW440 Brushless Pump Installation Guide



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## Included Parts:

- DW440 Brushless 440LPH Fuel Pump
- 5" Pump Electrical Connector
- Fuel Sock Pump Pre-Filter
- Fuel Safe Heat Shrink Butt Connectors (x4)
- O-Rings (x2)
- Pump Outlet Spacer
- 1cc Packet SuperLube

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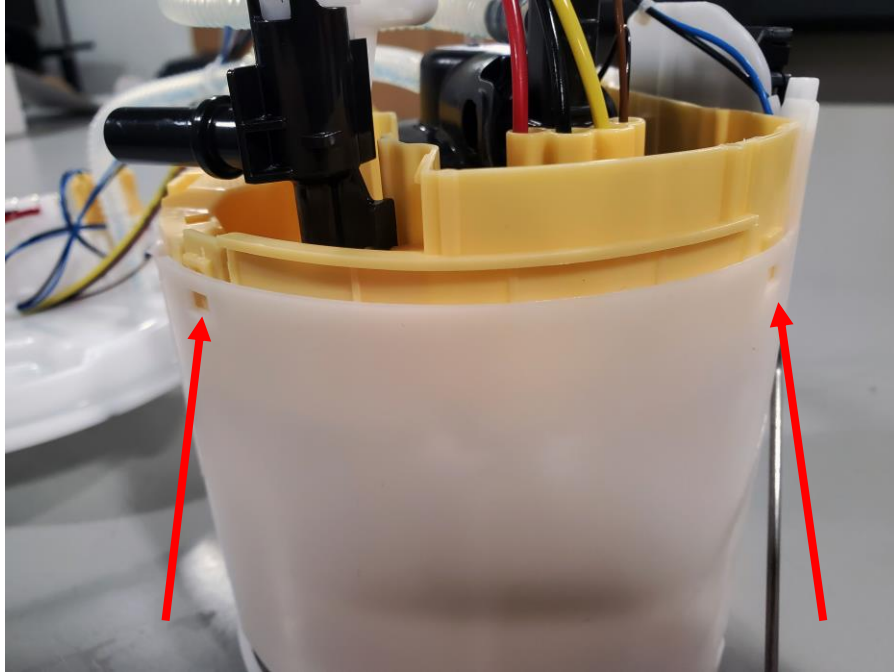
**PLEASE READ:** This guide is intended to aid in the installation of our products. It is recommended that factory manuals or instructions are followed to remove the fuel pump assembly from the vehicle. Instructions in this guide are generic and are intended to aid in the installation of a DW440 Brushless fuel pump. The factory manual should supersede any contradiction.

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

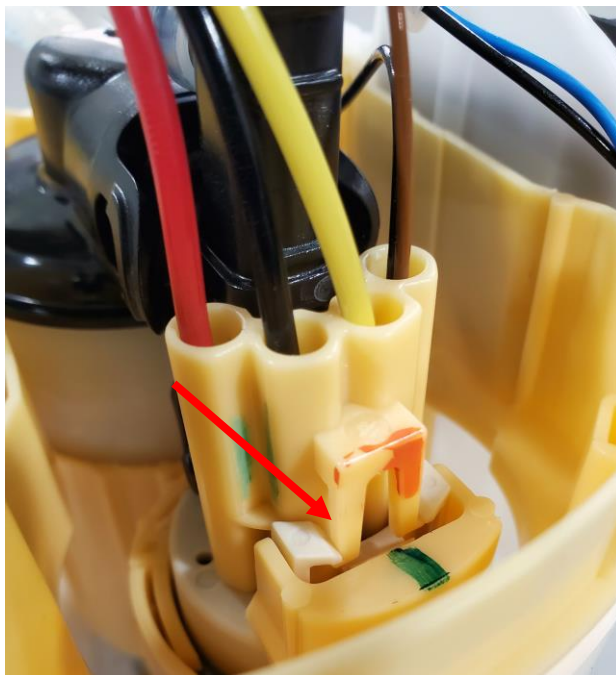


## Disassembly of OEM Module

1 – Separate the module center section from the lower bucket by lightly prying away the four locking tabs located around the edge of the bucket. It is typically easier by using 2-4 pick or pocket screwdriver style tools to slide between the bucket and center section, leaving 2-3 of them in place, while gently pulling the center out of the bucket.

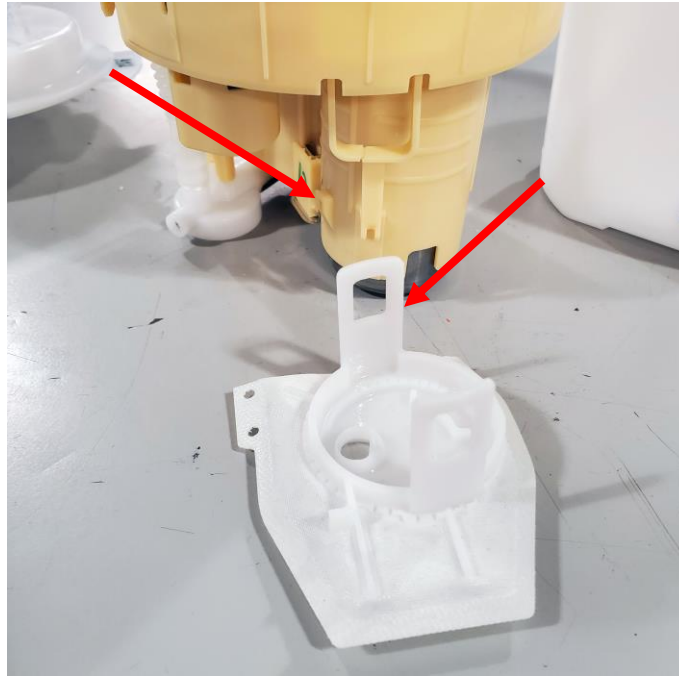


2 – Disconnect the wiring harness from the factory brushless fuel pump and pry off the ground ring terminal from the filter stud.

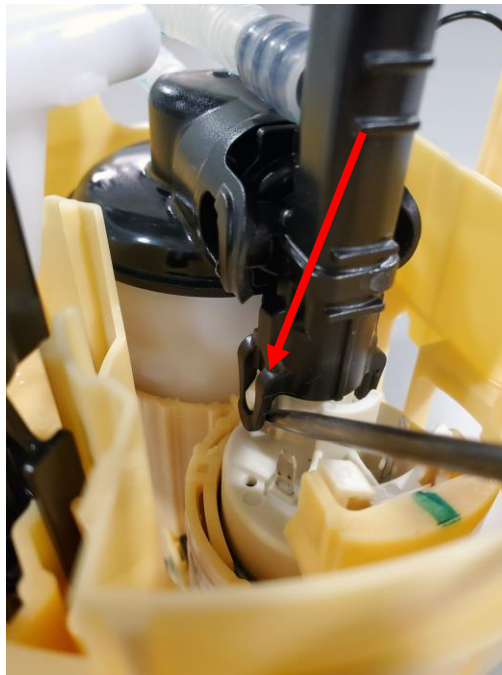


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3 – Remove the factory pre-filter sock from the module by gently prying out the lock tabs on either side of the pump holder, once they are out of the way pry away from the bottom of the fuel pump gently to remove.



4 – Remove the factory pump from the module by gently prying out the lock tabs on either side of the pump outlet, once they are out of the way push down on the pump to remove it from the filter assembly.



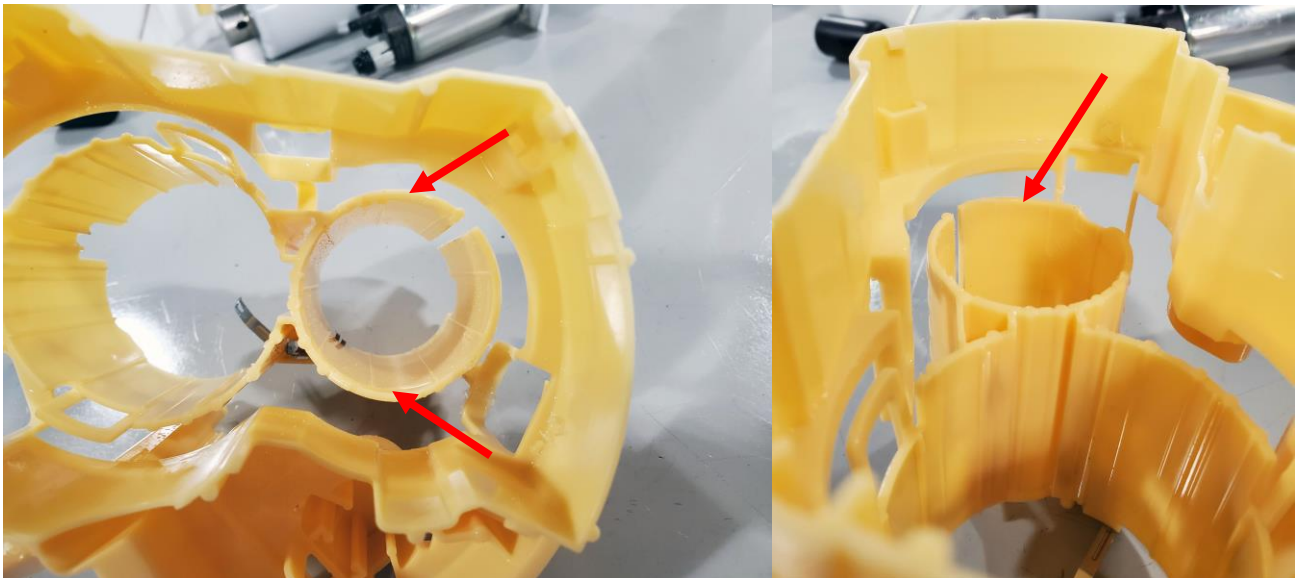


## Modifications to the Module

5 – Due to the larger diameter of the DW440 Brushless pump the sleeve that holds the factory pump in place must be modified to accommodate the new pump. The modifications are simple, using a hacksaw or Dremel style tool, make a slice all the way down one side of the module, refer to the picture for optimal placement.



6 – Carefully remove the OEM connector guide, and the small arms that limit how high the pump can insert, this will allow the DW440 pump to orientate itself correctly and allow full engagement of the o-rings to seal.



## Installation of the DW440 Pump

7 – Install the supplied pre-filter sock onto the pump.



8 – Install the provided spacer onto the outlet of the pump followed by the 2 supplied O-rings.



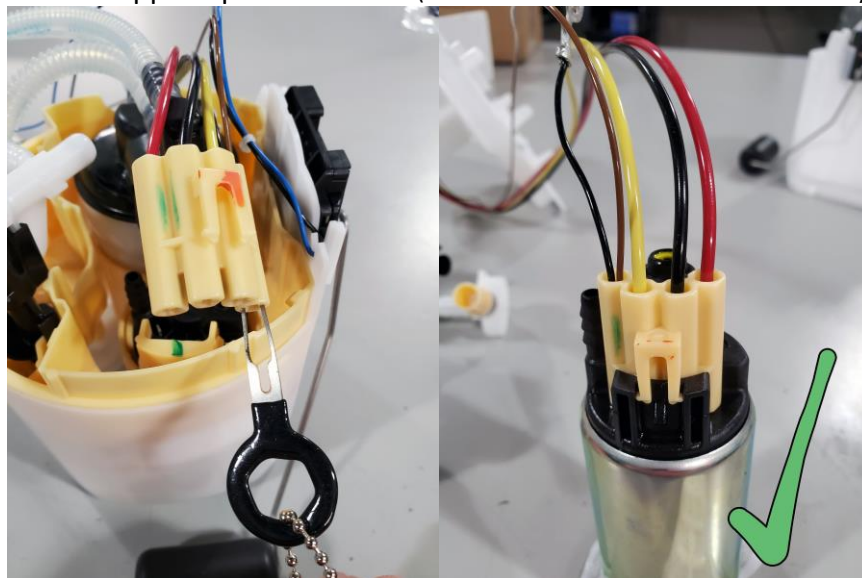
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9 – Install the pump into the assembly, make sure the O-rings are fully seated into the inlet of the filter module. Use the supplied Super-Lube packet to ease installation. Once fully sealed, tuck the filter sock up against the pump and install the center section back into the module bucket.



10 – The DW440 Brushless pump wiring is different from the OEM pump wiring. There are two ways to correct this. We have supplied a pigtail and fuel safe heat shrink butt connectors if you would like to cut and crimp the correct connector on or the OEM Toyota connector can be re-pinned easily and will connect to the DW pump.

- 1) Re-Pinning, using a de-pin tool simply insert it into the connector and remove the pins, re-pin the wiring to look like the supplied picture below. (OSOF 21Pcs Auto Terminals Removal Key Tool Set on Amazon)





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- 2) Cut and Crimping, cut the factory connector off a few inches from the end, strip the ends of the wires and crimp the supplied fuel safe shrink butt connectors onto the connector or wiring. Using the picture below match up the colors and finish crimping. Once you are done crimping use a heat source to shrink the butt connector and melt the internal adhesive.

**Note: Never use an open flame around gasoline.**



11 – Using the re-pin method, the factory latch on the OEM connector will no longer lock onto the pump, but the friction from the 4 pins is more than enough for the typical application. Only the cut and crimp method will retain the locking function of the connector. If you use the re-pin method and experience a non-functioning fuel pump, pull the assembly and check to see if the connector is still in place.

12 – 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

13 – 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

14 – Attach supply line to the outlet of the pump assembly



For additional technical support please contact us at: [TechSupport@DeatschWerks.com](mailto:TechSupport@DeatschWerks.com) or 405.233.3991