

DeatschWerks Modular Surge Tank Pump Adapter Inserts for 2.5L and 3.5L Tanks



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Included Parts:

2.5L Adapter

2.5 Adapter Puck
2.5 Surge Tank O-Ring
6AN ORB to 5/16" Barb Fitting
Pump Support Rod
2-1/4" Adjustable Hose Clamp
M5 Power/Ground Terminals (x2)
16-14awg #10 Ring Terminals (x4)

3.5L Adapter

3.5 Adapter Puck
3.5 Surge Tank O-Ring
8AN ORB to 3/8" Barb Fitting
Pump Support Rod
2-1/4" Adjustable Hose Clamp
M5 Power/Ground Terminals (x2)
16-14awg #10 Ring Terminals (x4)

3.5L Brushless Adapter

Brushless Adapter Puck
3.5 Surge Tank O-Ring
8AN ORB to 3/8" Barb Fitting
Pump Support Rod
2-1/4" Adjustable Hose Clamp
M5 Power/Ground Terminals (x4)
16-14awg #10 Ring Terminals (x8)

Note: Part numbers including fuel pump will include fuel pump, hose, clamps, wiring and filter sock.

Surge Tank Adapters 9-XXX-5002, 9-XXX-5003, and 9-XXX-5004 Install Guide

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.

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



Assembly of the 2.5 and 3.5 Adapter

1 – First we are installing the M5 terminals into the surge tank adapter. Remove the PTFE washer from the bottom of the terminal.



2 – Push the M5 terminal into the surge tank adapter. Apply lube to the O-ring to ease installation.



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3 – Reinstall the Teflon washers onto the terminals.



4 – Take the 6AN ORB to 5/16" Hose barb fitting and install it into the surge tank adapter. Tighten fitting until O-ring is no longer visible and fitting is snug.



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5 – Take the pump support rod and thread it into the surge tank adapter.



6 – The surge tank adapter is now assembled. We can move onto pump installation. Take the DW pump and install kit out of the box. These are the pieces you will need to install the pump. Everything is included in the pump kit and Surge tank adapter.

Note: This installation works for all pumps bodys, for DW Brushless Pump wiring see Step 14a.



Pump Installation into the Adapter

7 – Remove the plug from the pump pre-filter, then install the pre-filter on the bottom of the pump. Be sure to use the retaining ring to fasten the pump pre-filter to the pump. This ensures the pre-filter stays on the pump.



8 – Take the small length of hose and install it on the pump. You can also install the hose clamps at this time as well but, they may need to be removed later to cut the hose.



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9 – Install the pump and adapter into the surge tank to check fuel hose length. The height may be incorrect. In this case you will need to shorten the hose by the length the adapter sticks out plus approx. 1/4"(6mm).



10 – Cut the hose down by the length that you need to fit the tank. Now install the clamps and hose on the pump and surge tank adapter.



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11 – Reinstall the adapter one more time to double check the height is correct. If the adapter seats all the way down into the surge tank its perfect. The lower the filter sock into the tank the better as that will keep the slosh to protection to a maximum.



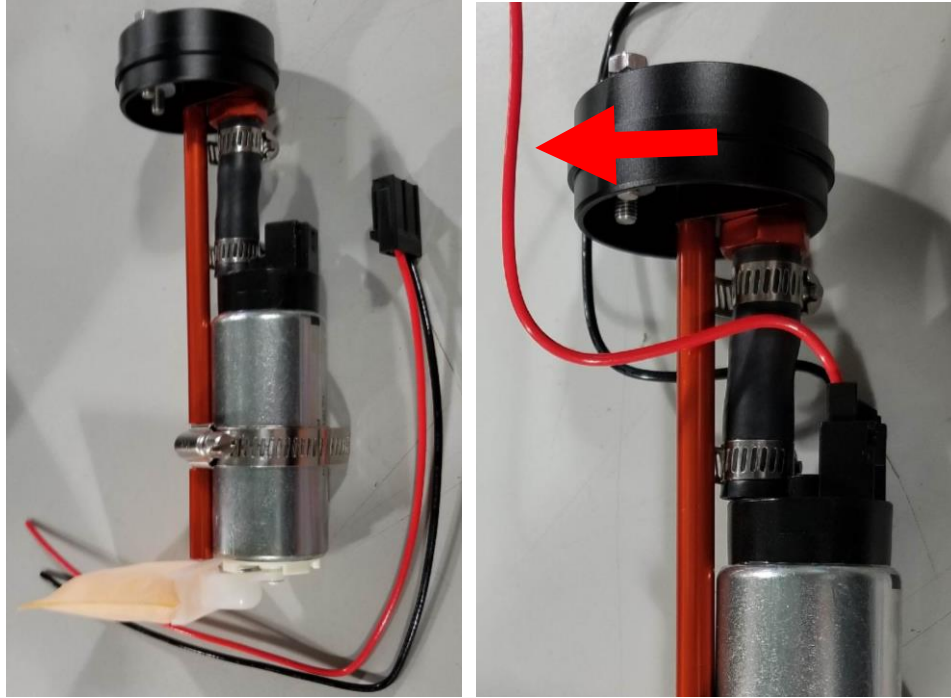
12 – Remove the pump and adapter and install the large hose clamp supplied with the adapter. This retains the fuel pump to the support rod. **Be sure to face the clamp like the picture below.** The clamp, pump, and support rod are a tight fit through the surge tank and universal mount hole. Tighten the adjustment screw as close the rod as possible with the head of the screw facing away from the rod.

Note: If unable to install assembly into the surge tank re-orientate the hose clamp as shown in the pictures.

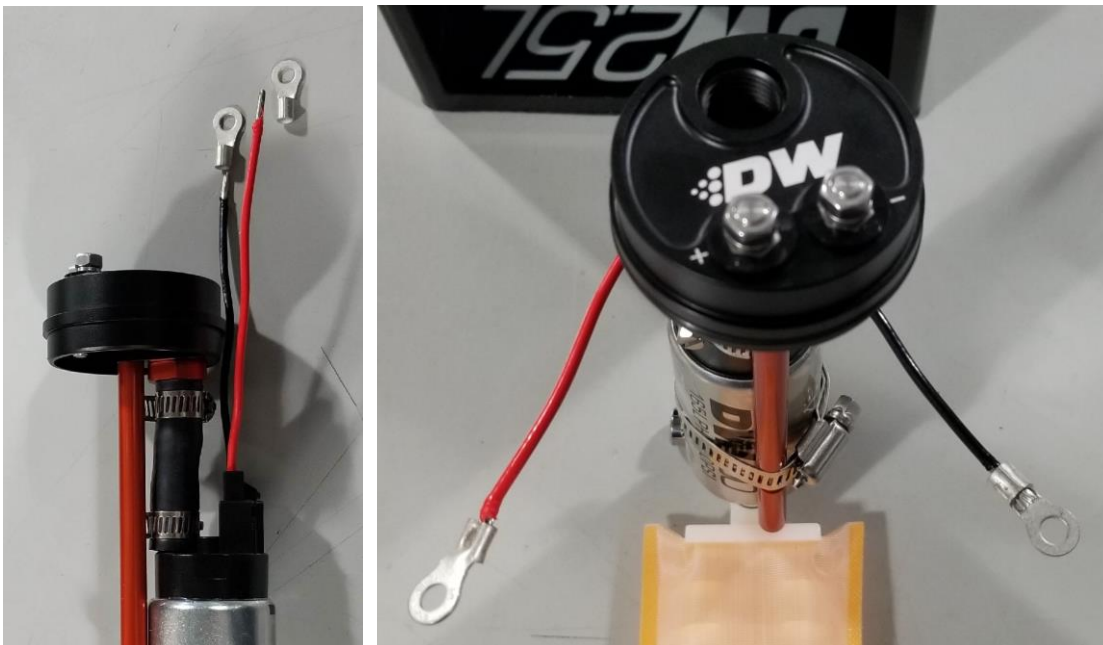


Wiring the Pump into the Adapter

13 – Take the supplied pigtail for the pump and route it towards the M5 Terminals that were install in step 3. Shorten the wires to approximately where the red arrow shows in the picture. Do this to both the black ground and red power wire. Always cut less off than you think, leaving extra wire will NOT cause any operational issues.

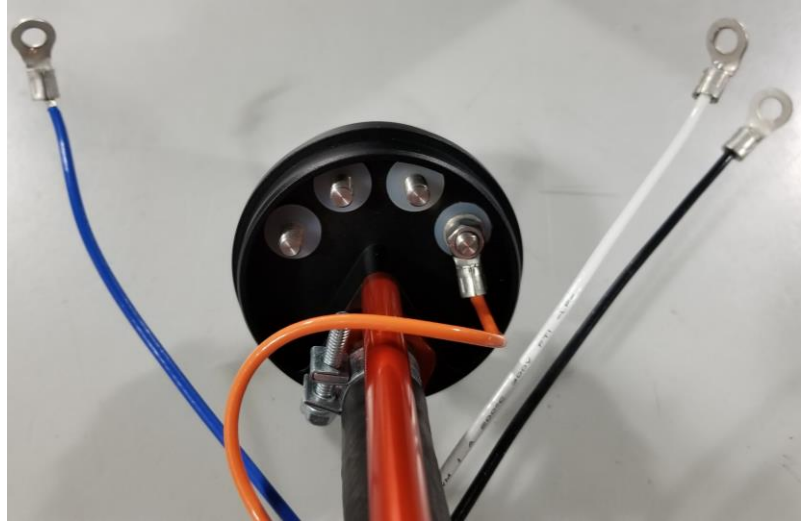


14 – Strip back the wires insulation and install the ring terminals on to the wire. Run the wires to the corresponding power and ground indicated by the Positive (+) and Negative (-) on the adapter.



Wiring a Brushless Pump

14a – Wiring the brushless is slightly different than a brushed pump. Using the color abbreviation on the terminals make sure the wires are running to the correct one. BK(Black), W(White), BL(Blue), and O(Orange).



14b – Install the terminals like in the steps 14 and tighten the ring terminals down to 15 in/lbs.



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15 – Tighten the nuts down to apply the lock washers. Torque the nuts to 15inch lbs.

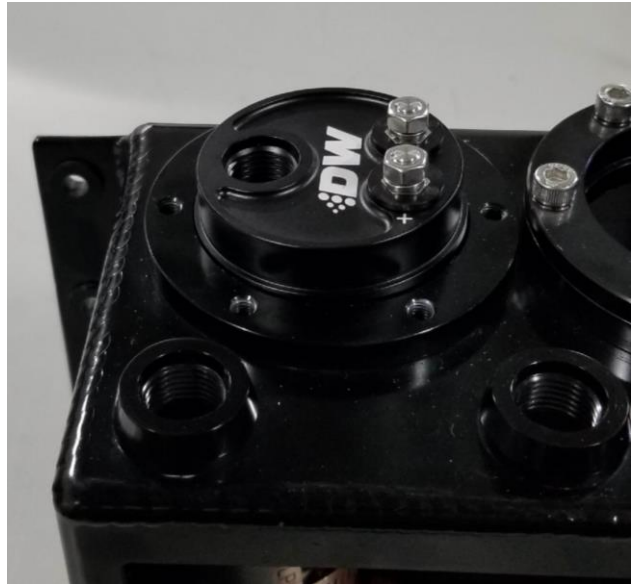


16 – Install the supplied the O-ring that seals the adapter to the surge tank on the bottom side of the adapter shown below.



Installing the Pump and Adapter

17 – Next will be installing the complete unit into the surge tank. Fold the two outside edges on the pump pre-filter to slide it into the surge tank. Make sure the adapter is seated properly and the O-ring is not pinched or misplaced.



18 – Install the retaining ring with the six bolts. They require a 4mm Hex head. Tighten to 50 in/lbs.



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18 – The surge tank adapter is now installed and complete. If you are running two pumps and adapters the filters can overlap if needed to clock the adapters as you see fit.



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