

INSTALLATION INSTRUCTIONS

FUELAB BRUSHLESS FUEL SURGE TANK

DOCUMENT #19-0162

Support: info@radiumauto.com

READ AND UNDERSTAND THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION

The Radium Engineering Fuel Surge tank for Fuelab Prodigy brushless in-tank power modules is designed to enhance the fuel system by providing resistance to starvation (from fuel slosh) and by increasing the fueling capability of the system. It is designed for fuel injected engines only and should not be used in carbureted applications.

This surge tank is compatible with the following Fuelab Prodigy In-Tank Power Modules:
90902, 91901, 92902

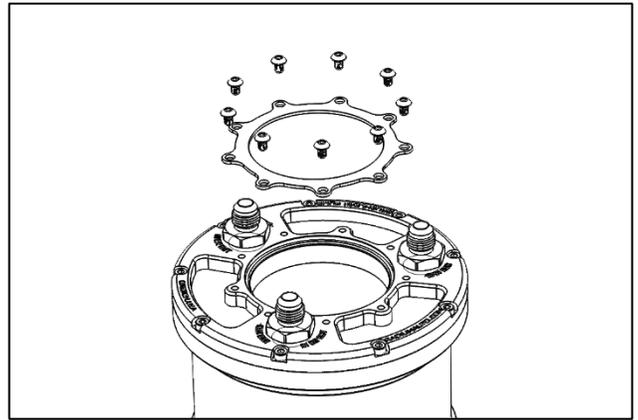
A high flow lift pump should be used to feed fuel to this surge tank. Radium generally recommends a pump with a rated flow of 400+ LPH.

The Fuelab Prodigy fuel pump should be wired and powered according to the installation documentation provided by Fuelab.

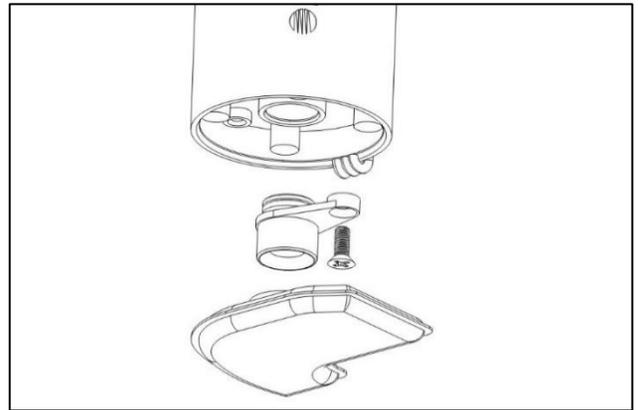


ASSEMBLY

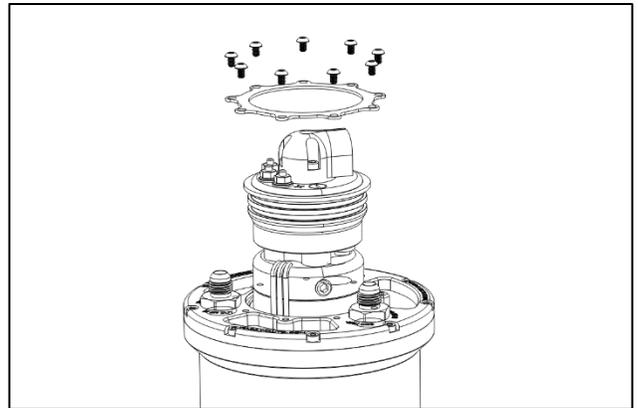
Using a 2.5mm Allen hex wrench, remove the retaining ring's nine M4 button head bolts.



Next, lubricate the O-ring on the included pump inlet adapter fitting and press it into the fuel pump inlet. Secure the adapter fitting to the pump using the included Phillips head screw.



Make sure the Fuelab Prodigy pump has the large blue o-rings installed on the pump body (not included with surge tank). Lubricate these O-rings with light oil and drop the pump assembly down into the FST. Reinstall the green retaining ring and nine screws. Clock the Fuelab pump outlet to the proper direction for the particular installation before fully tightening the screws. The retaining ring that comes with the Fuelab pump will not be used. Lubricate the O-ring and install the -8AN male pump outlet fitting.



MOUNTING

The FST should be firmly mounted to a stable, structural component of the vehicle away from moving parts, and excessive heat. The FST should not shake or vibrate excessively during operation. This surge tank is designed to be mounted in a standing vertical orientation. Effectiveness of the surge tank will be compromised if the tank is excessively tilted from the vertical position. At least three mounting bolts should be used (one at each foot). Extra holes are provided in each foot to increase mounting bolt location options.

PLUMBING

There are three general 3/4-16 (-8AN ORB) threaded ports. The general ports are for the following: feed from main fuel tank's "lift" pump, return fuel back to main fuel tank, and fuel returning from the fuel pressure regulator. These ports are not specific and can be interchanged to suit the best plumbing and routing of hoses. Included are three -6AN male adapter fittings screwed into each port. If different -AN adapters are required, go to www.radiumauto.com and browse the 8AN ORB adapter fittings found in the Universal Plumbing section.



There are many different ways to plumb this system depending on many variables.

INITIAL START UP

The surge tank must be fully primed with fuel before the engine will start. To do this, activate the lift pump only and allow it to fill the surge tank canister. Excess fuel will return back to gas tank. After a few seconds of running the lift pump, the Fuelab pump can be powered up and the rest of the fuel system will prime.