

Link do produktu: <https://bizongarage.pl/fuel-hanger-surge-tank-bmw-e90-e92-e93-for-walbro-f90000267274285-e85-radium-engineering-p-3116.html>



Fuel Hanger Surge Tank BMW E90 E92 E93 for Walbro F90000267/274/285 E85 Radium Engineering

Cena brutto	3 642,08 zł
Cena netto	2 961,04 zł
Dostępność	Na zamówienie
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Opis produktu

The Radium Engineering FHST (fuel hanger surge tank) is compatible with all BMW E90/92/93 3-series with the N54 or N55 engine.

NOTE: This system is compatible with the E90/92/93 M3 fuel tank, however the stock M3 fuel pump cannot be controlled with the factory fuel pump controller, advanced system modifications are required to overcome this issue. This is not covered in the installation instructions and is up to the installer to devise a solution. The Fuel Feed Kit is NOT compatible with the M3.

Overview

The Radium Fuel Hanger Surge Tank is a revolutionary way to eliminate fuel starvation that can occur during high performance driving, while also providing a way to upgrade the fuel pumps for high-horsepower engine modifications. This system installs inside the BMW fuel tank on the opposite side of the factory fuel pump and can hold one or two high-flow aftermarket fuel pumps. The stock fuel pump is used to pump fuel into the FHST, while the pumps inside the FHST then supply fuel to the engine. The system is E85 compatible and does not require any permanent modifications for installation.

Read below to see how the FHST works.

BMW Fuel Tank

The OEM saddle bag fuel tank is quite complex. The venturi jet pump is driven by the feed line instead of the return (M3 has 2 venturi jet pumps). The post pump filter and FPR are integrated into the LH side of the tank where the FHST mounts.

Radium FHST

When these BMWs experience high lateral Gs, they inherently suffer from fuel slosh. The FHST is the best solution in preventing fuel starvation. As described below, the FHST pump(s) are supplied with fuel from 3 different sources: the OEM electric "lift" pump, the fuel pressure regulator (FPR), and the integrated 1-way valve.

Note that the BMW fuel pump is still retained but is now repurposed as a "lift" pump to fill and maintain volume in the FHST. The lift pump fills the FHST canister through a special orifice in the FHST. This keeps the required pressure for the venturi jet pump(s) to be active and deliver fuel to the lift pump. When a low demand of fuel is present, the FHST canister will overflow back into the LH side of the OEM tank. Fuel will then cycle back into the FHST through a 1-way valve integrated to the bottom of the FHST. Unlike traditional surge tanks that rely heavily on surge tank pump and lift pump flow matching, the FHST uses an extra source that negates this important relationship. No matter what is dynamically changing with the other 2 fuel sources, the high flowing 1-way valve will constantly supply fuel to the FHST canister until the LH side of the gas tank becomes extremely low. At this point, it is up to the lift pump and the FPR to supply the last few ounces of fuel to the FHST.

Integrated Fuel Pressure Regulator

Like OEM, a fuel pressure regulator (FPR) is integrated into the unit. Furthermore, if an intake manifold signal is installed, this FPR can operate at a 1:1 ratio permitting fuel pressure to proportionally increase with boost pressure. The returning low pressure fuel from the FPR is sent back into the FST canister keeping it full. A 6-hole diverter evenly disperses fuel inside the canister preventing air bubbles and foaming. Also, 2 fuel return orifices are included for fine-tuning the desired fuel pressure to the fuel pumps' flow rate.

Plumbing

To clear the OEM fuel pump cover plate, the 8AN ORB threaded feed port features a preinstalled low profile 8AN male fitting.

As shown above, sock filters are used on the fuel pump inlets. But because the FHST eliminates the OEM post pump filter, a low micron filter will need to be purchased separately. See the 20-00475-0X fuel feed kit below.

Electrical

The custom designed stainless electrical studs easily handle the high current demand that compact bulkhead connectors lack. These serviceable connections are properly sealed and impervious to all standard and exotic fuels. Nonconductive acorn nuts are provided to prevent any accidental short circuiting. Electrical hardware is included for the fuel pump(s) and OEM level sender. Furthermore, the in-tank wiring is insulated with high quality chemically resistant ETFE.

These kits include 1 relay, 1 fuse, and all associated wiring and hardware to install 1 surge tank pump.

If an extra fuel pump will be installed, purchase a Radium 17-0031 DIY Wiring Kit

Pump Compatibility

This system is suited, but not limited, to the following fuel pumps:

Walbro F90000267 E85

Walbro F90000274 E85

Walbro F90000285 E85

Walbro GSS342 255lph

AEM 50-1200 E85

Features

- Drop-In OEM Replacement
- Permits 1 or 2 Surge Pumps
- 1:1 Fuel Pressure Adjustments
- Fuel Starvation Protection
- Integrated 1-Way Fill Valve
- High Current Electrical Hardware
- Compatible with Various Pumps
- Anodized Aluminum Construction
- Gasoline and Ethanol Compliant
- Anodized Aluminum 8AN Male Outlet Fitting
- Anodized Aluminum Surge Tank Canister
- Fuel Resistant Tubing and Wiring
- Stainless Steel Hardware

-Relay(s) and Fuse(s)

Pump Configuration

The kit will come partially assembled as shown above. There will be enough components included with this option to run one or two surge tank fuel pumps.

[Instruction PDF](#)