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## AEROFLOW PERFORMANCE

### EFI SURGE TANK

### WARNING!

BEFORE PROCEEDING WITH INSTALLATION PLEASE READ INSTRUCTIONS CAREFULLY. THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

THE INSTALLATION OF THIS PRODUCT REQUIRES THE HANDLING OF FUEL. WE RECOMMEND TO WORK IN A WELL VENTILATED AND WEAR APPROPRIATE SAFETY WEAR FOR PROTECTION.

KEEP ALL IGNITION SOURCES AND OPEN FLAMES AWAY FROM VEHICLE AT ALL TIMES WHILE INSTALLING THIS PRODUCT.

THESE SURGE TANKS UTILIZE O-RING SEALED AN STYLE PORTS AND DO NOT REQUIRE THREAD SEALANT ONLY AN APPROPRIATE LUBRICATE SHOULD BE USED

#### Item list included in this kit:

1x Single Outlet 2.3 Litre compact efi surge tank (Dimensions: Length= 130mm (5") Width 130mm (5") Height 187mm (6.3").)

#### INTRODUCTION

Congratulations on your purchase of Aeroflow Performance single pump efi compact surge tank kit. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

This Aeroflow Performance Surge Tank is designed to prevent starving the fuel pump by increasing the fuelling capability of the system. It is usually installed in vehicles that potentially can experience fuel starvation due to fuel sloshing around in an inadequately baffled tank. While this can occur in any vehicle when the tank is not fully filled, it is more frequent in vehicles subject to violent changes in directions such as autocross, off-road, drag racing and other types of racing that involve high g-force.

These smart little tanks are designed to have the fuel pump submerged in fuel for quieter operation and longer life of the fuel pump. Utilizing a billet single 40mm pump hanger with a -6an male for the feed, 3 x -8ORB and two electrical bulkheads. Designed to work with Aeroflow Performance AF49-1041, AF49-1042, AF49-1057 high flow fuel pumps or any other branded 40mm diameter fuel pumps. The tank can be mounted in the engine bay to reduce the work and cost to route from the rear of a vehicle. Both tanks are available in either polished or black anodised finish, the black anodised finish is what we recommend for use with corrosive fuels such as Ethanol and Methanol.

The primary fuel pump in the vehicle's main fuel tank will no longer directly feed the engine. This pump will now be used to fill and maintain the level of fuel in the surge tank. In turn with the aftermarket external fuel pump will require an aftermarket fuel pressure regulator to be installed. Also recommended when upgrading fuel pumps to also upgrade wiring and add relays/fuses where required. Refer to individual pump instructions for further details.

This surge tank is only one component of your vehicles complete fuel system. Please ensure the vehicles complete fuel system is up to the task of supplying the right amount of fuel to your engine. Failure to do so may result in severe engine damage and damage to other related components.

## MOUNTING

- When mounting this surge tank ensure it is on a stable and structural location.
- We recommend to mount this surge tank vertically with fuel pump vertical as well.
- Ensure to mount surge tank on level surface.
- Recommended to mount away from excessive heat, moving components and collision prone areas
- Surge tank has mounting plates welded to tank, utilize all mounting holes provided to ensure tank is secure.

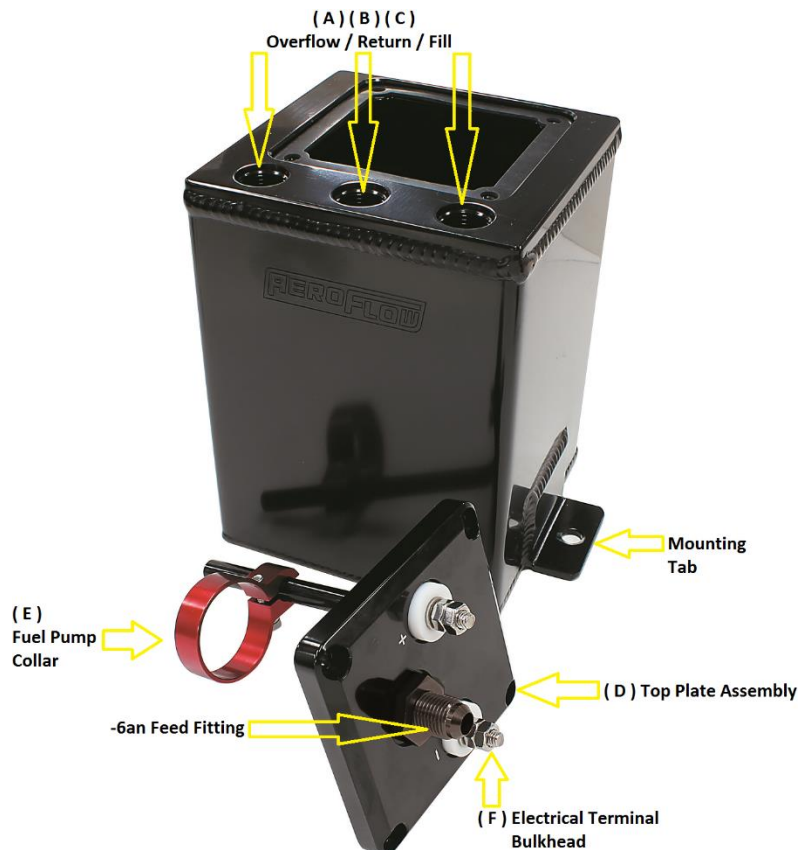
## PLUMBING

- This surge tank features three female -8ORB fittings.
- Once fuel pump is installed run your desired hose from the -6an male feed fitting.
- Three holes on the top of the tank ( A ), ( B ) & ( C ) are designed for overflow from surge tank back to the fuel tank and/or return from the engine/fuel regulator and/or the feed from fuel tank
- To install fuel pump into surge tank, remove the four socket cap screws from square top plate ( D ). Undo the fuel pump collar ( E ) and install onto new fuel pump. Using the supplied PTFE in-tank hose clamp onto fuel pump barb.
- Using the M6 electrical terminal bulkheads ( F ) pre-installed in top plate assembly wire in fuel pump using appropriate connections and wiring suitable for use in fuel. Ensure to wire all positive wires to the positive terminal and all negative wires to the negative terminal, which are marked on the top plate assembly from above.
- **NOTE: required upgrade to wiring / fuses and installation of relay (sold separately)**
- Once fuel pump is secured and wired in correctly to top plate assembly. Install top plate assembly back onto surge tank ensure to use the rubber gasket included. Torque down socket cap screws to 6-7 ft-lb. Ensure not to overtighten these bolts as they will strip and cause damage to tank.

## INITIAL START UP

- Before starting the car ensure that the surge tank is fully primed with fuel. This can be done by cycling the vehicle's ignition power (accessories) on & off several times. This process activates the primary fuel pump a few seconds at a time. This process should be done 3-4 times before cranking or starting engine.

Failure to follow any of the above may result in fuel leakage, bursting of fuel lines, poor vehicle performance and/or decreased fuel pump life.



*For more information or technical enquires*

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