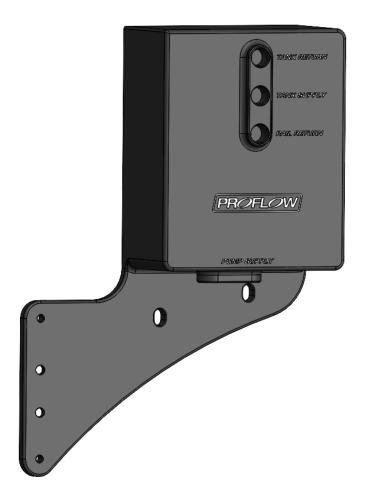


INSTALLATION MANUAL

Ford Falcon BA/BF/FG Undercar Surge Tank PFEST9BK



Included Items	QTY
PFEST9BK Surge Tank 2.0L	1
M8 x 40mm Hexagon Flange Bolts + Washers ISO 4162	2
M6 x 12mm Socket Head Cap Screw ISO 4762	4

<u>WARNING</u>: PLEASE READ ALL INSTRUCTIONS BEFORE PROCEEDING. PROFLOW WILL NOT BE RESPONSIBLE FOR ANY DAMAGE AS A RESULT OF THE INCORRECT INSTALLATION OF THIS PRODUCT. IT IS RECOMMENDED THAT A QUALIFIED AUTOMOTIVE TECHNICIAN PERFORMS THIS INSTALLATION.

<u>WARNING:</u> THE INSTALLATION OF THIS PRODUCT REQUIRES THE HANDLING OF FUEL. IT IS RECOMMENDED TO WORK IN A WELL-VENTILATED AREA AND WEAR APPROPRIATE PERSONAL PROTECTION. KEEP ALL IGNITION SOURCES AND FLAMES AWAY FROM THE VEHICLE AT ALL TIMES.



Fuel Pump Plumbing

Single Pump

- 1. Bolt the single fuel pump bracket (PFEBOSBKBLK purchased separately) to the surge tank with M6 screws using the two threaded holes.
- 2. Insert your 044 style fuel pump into the bracket with the supplied rubber sleeve.
- **3.** Using barbed fittings, 1/2" rubber hose and clamps, plumb the right-hand side port on the bottom of the surge tank to the fuel pump as shown in figure 1 below. All fittings and hose can be purchased separately.



Figure 1

- **4.** Block the second pump supply port with the appropriate ORB plug fitting as this port will not be used.
- **5.** Ensure all fittings are securely fastened and all hose is secured with clamps.

Dual Pumps

- 1. Bolt the dual fuel pump bracket (PFEFS5076BK purchased separately) to the surge tank using the supplied M6 screws and the two countersunk bolt holes located on the back of the base plate.
- **2.** Insert your 044 style fuel pumps into the dual bracket with the supplied rubber sleeves. Tighten the pump clamp.
- **3.** Using barbed fittings, 1/2" rubber hose and clamps, plumb both pump supply ports to the fuel pumps as shown below in figure 2 (most convenient plumbing solution shown). Please note that the pumps may need to be pushed slightly away from the tank to make space for the barbed fittings for the inner fuel pump.





Figure 2

Note: This dual pump setup uses a 90 degree push-lock fitting with an AN8 straight fitting to plumb the inner fuel pump.

4. Ensure all connections are securely fastened and all hose clamps are tightened.

Surge Tank Installation

- 1. Disconnect the battery from the vehicle
- **2.** Jack the front of the car off the ground and ensure suitable stands are used with the vehicle in park and with the handbrake on. Ensure both sides of the vehicle are jacked correctly.
- 3. Remove the two bolts on the front left hand side sway bar bracket.

Note: Starter motor wiring may need to be re-routed to provide adequate clearance for the surge tank.

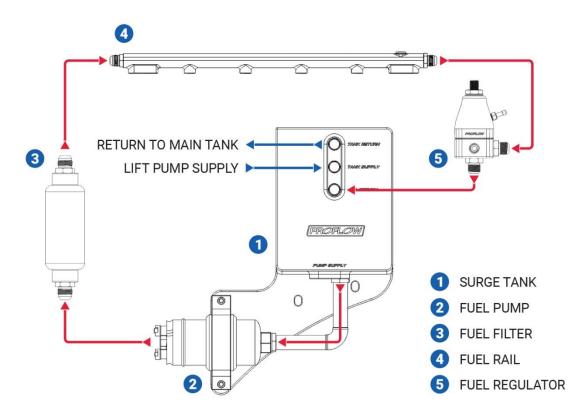
- **4.** Disconnect both fuel lines where the flexible hose meets the hard-line piping along the left-hand side of the vehicle. These are OEM style connectors, and the tabs need to be pushed together to release.
- **5.** It may now be best to screw AN6 fittings into the return, supply and overflow ports on the surge tank before placing it on the vehicle.
- **6.** Using the supplied bolts and washers, bolt the surge tank in place using the sway bar bracket bolt holes.
- 7. Connect the pump(s) outlet hose(s) to the fuel rail feed line which will supply the vehicle with the high-pressure fuel to the fuel rail.



- **8.** Connect the OEM or lift pump from the main fuel tank to the middle port labelled 'tank supply' on top of the surge tank using the appropriate quick connect hose and fittings. This will supply the surge tank with fuel from the main fuel tank.
- **9.** Connect the fuel rail return hose (which may come from the regulator depending on setup) to the lower AN6 port on the surge tank.
- **10.** Plumb the top port labelled 'tank return' back to the main fuel tank hard line which will feed the main fuel cell when the surge tank is full (while idling for example).
- 11. Ensure all fittings and connections are securely tightened before proceeding.
- **12.** Wire the fuel pumps using the appropriate high amperage wiring, fuses, and relays.
- **13.** Before starting the car, the surge tank will need to be primed with fuel. This can be done by cycling the vehicle's ignition power on and off several times. This will activate the primary lift pump in the main fuel tank to fill the surge tank.
- **14.** Start the vehicle and finally inspect the surge tank assembly for any leaks.

Surge Tank Plumbing Diagram

The below diagram shows an example of plumbing the surge tank when using a single fuel pump:



Note: This surge tank must always be mounted in the orientation shown above if mounting elsewhere on the vehicle or using it universally (vertically).

