INSTALLATION MANUAL

Dual Fuel Pump Carrier – 39mm Fuel Pumps

PFEFCA003

Included Items	QTY
Fuel Pump Carrier Top	1
Fuel Pump Carrier Fuel Pump Bracket	1
Fuel Pump Carrier Return Shaft	1
Fuel Pump Carrier Filler Cap + O-ring	1
Fuel Pump Carrier Top Gasket	1
PFEBT-0102 Electrical Post Connector	4
PFE790-08-06BK AN8 Male to 3/8'' Barb	2
M6 x 12mm Socket Head Cap Screw ISO 4762	12
M5 x 10mm Socket Head Cap Screw ISO 4762	1
O-ring-ISO3601-1-129A-39.34x2.62-S	4

WARNING: 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.

TYPICAL INSTALLATION

Carrier Assembly

1. Screw the return shaft with the supplied o-ring into the bottom return port.
2. Fasten the supplied 3/8” barbed fittings into the two bottom ports with the supplied o-rings.
3. Slide the fuel pump bracket over the return shaft to your desired height (depending on tank depth) and fasten the supplied M5 socket head cap screw to secure the clamp.

   Ensure you use a medium grade loctite on this screw to avoid it coming loose in the tank due to vibration.
4. Slide your desired 38/39mm diameter fuel pumps into the fuel pump bracket with the 4 o-rings securely in their housing grooves. Lubrication may be required to insert the pumps into the sleeves.
5. Connect either one or two pumps to each individual port of the top plate by using compatible submersible hose and EFI rated clamps. Ensure each pump has the appropriate strainer attached.
6. If only using a single pump, plug the top port on the plate using an AN8 ORB style plug.
7. Connect the fuel pumps to the positive and negative terminals of each post connector using the appropriate ring terminals. Upgraded high amperage wiring can be purchased seperately (PFEBT-0101) if required.
8. Drop the fuel pump carrier assembly into the fuel cell or tank with the flat gasket and fasten using the supplied M6 x 12mm socket head cap screws using a low strength loctite.
9. Torque each socket head cap screw in a cross pattern to approximately 6 Nm.
10. If installing on a custom fuel cell or tank, ring adaptors can be purchased separately which can be welded to the tank (PFEFCWR – 120.5mm PCD).
11. Screw the filler cap into the top plate with the supplied o-ring.

Wiring

This fuel pump carrier is designed so you have the ability to activate multiple pumps in stages. Running two pumps at the same time is not necessary for light driving or while the car is idling. This will add excess heat to the fuel system and potentially damage the fuel pumps.

- → **Stage 1 (Primary):** This pump should be wired to activate when the vehicle is started.
- → **Stage 2 (Secondary):** This stage can be triggered in several different ways depending on your vehicles setup. Cars with forced induction can trigger the second stage with a Hobbs switch that activates at low boost pressure, or a WOT switch for naturally aspirated setups. If you are running a standalone ECU, you can setup a second pump output and use that wire to trigger this stage.

Note: If using both pumps on one set of terminals to activate together, it is recommended to use upgraded wiring to handle the excess current draw of two pumps running together (PFEBT-0101 purchased separately).

Plumbing

All ports on the pump carrier are threaded with AN8 ORB threads. The PUMP 1 and 2 ports will be the high pressure outlets to the vehicles fuel rail. These can be combined into one feed line using a Y-adaptor. If using only 1 fuel pump, block the second port with the appropriate plug sold seperately. The RETURN port accepts the excess low pressure fuel from the fuel pressure regulator's return port. The main fuel cell must also be vented in order to avoid excessive pressure building inside the tank.

Figure 1: Dual fuel pump carrier port configuration.

PROFLOW LIMITED WARRANTY

This product is warranted to be free from defects in materials and workmanship for a period of one year from the original date of purchase.

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