



FUEL VORTEX INSTALLATION AND MAINTENANCE INSTRUCTIONS

PRIOR TO UNDERTAKING THIS INSTALLATION WE SUGGEST THE ENGINE IS RUN AND CHECKED FOR ANY SIGNS OF AIR IN THE SYSTEM. IF YOU FIND AIR IS GETTING INTO THE FUEL THIS SHOULD BE FIXED BEFORE EMBARKING ON THE VORTEX INSTALLATION

This unit has been part pre-assembled. Should you need to undo any connections ensure they are reassembled air tight.

Fuel Vortex Specifications:


Model	Max Engine Power		Max Flow Rate (Ltr/Min)
	(hp)	(kW)	
FGV-2	100	73.5	2
FGV-6	200	147	6
FGV-10	500	368	10

Note: hp/kW figures are as a guide only Fuel flow figures vary considerably depending on fuel system type and manufacturer. Always ensure Fuel Vortex model is matched to engine fuel flow (consult engine manufacturers data sheet for maximum fuel flow).

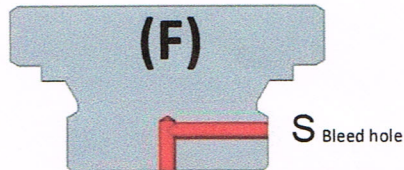
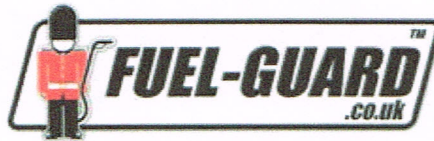


Fully assembled
FGV-2 with swaged
fittings

Fitting Notes:

1. This product should only be used for its intended purpose. Using this product for any other than its intended purpose will invalidate the warranty and could result in serious injury or death.
2. Continuous contact with diesel oil can cause cancer and other skin complaints. When installing or servicing this equipment always use appropriate safety equipment (PPE) e.g. Safety glasses, Protective gloves, Safety shoes etc. and observe local health and safety requirements
3. Always isolate fuel tank prior to cutting into supply pipe. Using the mounting bracket supplied, mount the vortex in a vertical position. Ideal position is prior to the primary filter, level with or lower than the intake of the primary filter. Make sure to provide sufficient clearance for fuel connections and adequate room below to allow for draining. Clear drain hose supplied within this kit may be fixed as required to bottom drain valve
4. Clips and hose supplied with this kit should always be used as other types of hose and clips may not be compatible. Ensure all clips are tightened fully.
5. We recommend double clipping the two new joints as per illustration. 
6. Inland water units only are supplied with compression fittings and a plug for the drain valve to meet boat inspection criteria.
7. These are generic instructions, if you have asked for a specific installation type some of the above may vary.

WARNING: INCORRECT FITTING OF FUEL HOSE OR POOR ASSEMBLY OF COMPONENTS CAN RESULT IN LEAKING OF DIESEL OR AIR BEING DRAWN INTO FUEL LINE



Priming & Maintenance Instructions

Fuel Vortex located below Fuel Tank

- 1) Loosen Vent Plug (F) until the 1.5mm bleed hole is just showing above the boss.
- 2) Air should leave the Fuel Vortex as diesel is gravity fed into the unit.
- 3) Closely watch the vent; Diesel will be seen emerging once the unit is fully primed.
- 4) Tighten the bleed plug of the vent.
- 5) Bleeding at another point in the system may be required.
- 6) Open the drain Valve (G) 2-3 times a week to remove any water which may have been collected.

Fuel Vortex located above Fuel Tank

- 1) Remove the Vent Plug (F) from the Fuel Vortex
- 2) With a measuring jug pour diesel into the Fuel Vortex until the unit is completely full.
- 3) Reassemble the Vent Plug (F) and tighten.
- 4) Bleeding at another point in the system may be required.
- 5) Open the drain Valve (G) 2-3 times a week to remove any water which may have been collected. When located above the fuel tank units it may be necessary to prime again using the above procedure.

Note; Make sure all air has been evacuated from the vortex. If a priming pump is not provided on the engine it may be necessary to remove the top plug and refill the vortex once or twice during the initial installation or subsequent engine or filter service.

Maintenance Notes:

- 1) While it is recommended to drain the Fuel Vortex 2-3 times a week this may vary depending on quality of fuel and frequency of operating the machinery.
- 2) It is NOT necessary to drain the entire unit.
- 3) Do not drain or prime the Fuel Vortex while the engine is running; this may cause spillage of diesel or air being drawn into fuel line.
- 4) Water drained from the Fuel Vortex will contain traces of diesel and must be disposed of in accordance with local environmental regulations as this will be classed as hazardous waste.
- 5) In some installations, especially if the Vortex is located on the suction or vacuum side of the fuel system, fuel may drain back into the tank whenever the top fill plugs is opened. It may be necessary to fit a check valve in the intake line, this is available as an Fuel Guard extra, Order Fuel Guard inline check valve 8mm or 10mm.
- 6) If a check valve cannot be installed within the in line of the vortex it may be helpful to install the incoming line so that a loop extends above the level of the top of the vortex (so that the fuel line creates a reverse "P" trap).

For Technical Support call 0845 676 9250