



6V, 12V, and 24Volt
Piston & Diaphragm
Electric Fuel Pumps
Product Range
2009



Piston electric fuel pumps



015

020

060

024

FUELFLOW Piston Pump 015
12 Volt

FUELFLOW Piston Pump 020
12 Volt

FUELFLOW Piston Pump 060
6 Volt

FUELFLOW Piston Pump 024
24 Volt

In addition to our range of diaphragm type pumps, we produce the FUELFLOW™ brand of piston type electric fuel pumps.

The FUELFLOW™ range of pumps are light, compact and efficient, and can be easily installed in any convenient position on the vehicle. Considerable attention has been paid to reduction of the operational noise usually inherent in this style of pump.

The FUELFLOW™ electric fuel pumps are ideal replacements for both mechanical and electric O/E fuel pumps. With just one model, part no. 015, stockists or installers are able to provide a suitable replacement fuel pump for the majority of carburetted vehicles, as the 015 suits most 4 and 6 cylinder vehicles. The other models in the range are

part no. 020 which suits larger and high performance engines, part no. 024 which is a 24 volt version, and the 6 volt model 060. Deciding which fuel pump to use is a simple matter of knowing the vehicles engine size or fuel flow requirement, and voltage, no vehicle application catalogues are required.

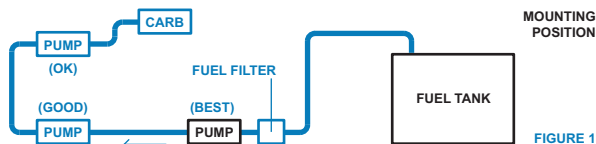
All models are suited as a supply pump for diesel applications.

Model Number	Volts	Max Flow/Min	Operating Pressure (varies with demand)	Maximum Pressure (no flow)
015	12	1.5 L	1 - 4 psi	4 - 5
020	12	2.0 L	1.25 - 5 psi	5 - 6
060	6	1.25 L	1 - 4 psi	4 - 5
024	24	1.75 L	1.25 - 5 psi	5 - 6

FITTING INSTRUCTIONS

Before fitting, investigate cause of original pump failure and rectify. Check for: clogged fuel filter, contaminated fuel, blockage, restriction or leak in fuel lines, low voltage or intermittent power supply.

1. Ensure selected pump model is correctly suited to engine requirements.
2. Fit supplied anti-vibration mounts to pump mounting lugs.
3. Select convenient position to mount pump, can be installed at any angle. See FIG 1.
4. When vehicle has a fuel return to tank system, see SUGGESTION C.
5. Mark positions and drill mounting holes (5/32 or 4mm).
6. Mount pump in position using screws and washers provided.
7. Fit inlet and outlet hoses. Use correct fuel resistant hose and clamps as required.
8. Connect red wire of pump to a key-controlled power source, connect black wire to earth (for positive (+) earth vehicles, reverse connections). Ensure that power supply line to pump is protected with a 3-5 amp fuse. Hook up wire should be rated 2 amp or higher
9. Switch on and test pump. If pump does not operate, check electrical polarity.
10. Check for fuel leaks and rectify as required.



POSITION: Fuel pump should be sited below the fuel level in the carburettor float chamber :

- In areas of high ambient temperatures, installation close to fuel tank is essential to overcome vapour lock problems which can occur.
- A squirt of 2 stroke or diesel fuel into the outlet of the pump before installation will assist faster priming of the pump on initial start-up.
- An in-line filter should be fitted between the fuel tank and the pump inlet.
- We recommend the installation of a FUELFLOW™ COLLISION SAFETY SWITCH, which in a collision will instantly switch off the fuel pump, greatly reducing fire hazard.

SUGGESTIONS

A. ELECTRIC FUEL PUMP REPLACEMENT

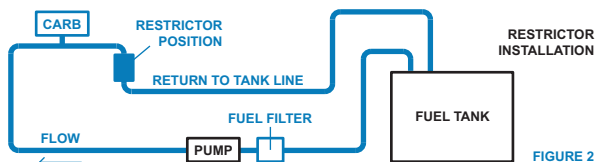
The excellent suction performance of FUELFLOW™ UNIVERSAL ELECTRIC PUMPS will, in many cases, pull fuel through in-tank or separately mounted electric pumps. Therefore there may be no need to remove the faulty pump, but it should be bypassed or removed wherever possible.

B. MECHANICAL FUEL PUMP REPLACEMENT

Disable faulty pump by removing operating lever from pump and refitting faulty pump to engine. The FUELFLOW™ replacement pump can then be connected directly to the carburettor fuel inlet or low pressure diesel filter inlet.

C. RETURN TO TANK (CONSTANT FLOW/FULL FLOW) FUEL SYSTEM

A Fuel Return Line Restrictor is supplied in this kit. It's purpose is to ensure adequate pressure and flow into the carburettor. Without a restrictor fitted in the return to tank line the pump may not deliver enough fuel to the carburettor in heavy demand situations.



Installation:

1. Cut Return to Tank fuel line close to carburettor, see FIG 2.
2. Rejoin using supplied Restrictor and suitable hose and clamps.

WARRANTY: Product warranty liability is restricted to supply of replacement product only. All freight, installation, towage, salvage, labour or other repairs and/or service charges relating to product warranty replacement are specifically excluded from liability. Tampering with pump voids warranty.

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Diaphragm electric fuel pumps



➔ **1LM12** **15LM12** **2LM12** **LM102** **LM115**

FUELFLOW ECCO 1LM12 **FUELFLOW ECCO 15LM12** **FUELFLOW ECCO 2LM12** **FUELFLOW ECCO LM102** **FUELFLOW ECCO LM115**
 12 Volt 12 Volt 12 Volt 12 Volt 12 Volt

We have manufactured our FUELFLOW™ ECCO range of diaphragm type electric fuel pumps for over 30 years. The pumps we produce today are the result of a continuous programme of research and improvement in both design and materials. The performance and quality of these pumps reflects that reinvestment philosophy operated by Fuel Flow Solutions Ltd.

The FUELFLOW™ ECCO pump is loosely styled on the original SU type electric fuel pump, which was used on most British sourced vehicles for many years, and is still widely used today. Our version has solid state electronic switching (i.e. no contacts). We present these pumps as universal replacements, suitable for all carburetted vehicles, but they also have a niche in the market for classic car enthusiasts seeking original type replacements.

These pumps are exported worldwide and have a proven and very loyal customer base. The models in this range of pumps are very quiet in operation, and can be used as replacements for both electric and mechanical pumps on all carburetted vehicles, and as a supply pump for diesel engines.

Model Number	Volts	Max Flow/Min (nominal)	Operating Pressure (varies with demand)	Vehicle Application (suitability)
1LM12	12	1.0 L	2 - 3 psi	most engines up to 2.0 L
15LM12	12	1.5 L	3 - 4 psi	most engines up to 5.0 L
2LM12	12	2.0 L	5 - 6 psi	double solenoid model
LM102 (low pressure pump)	12	1.0 L	1 - 2 psi	specific vehicles only
LM115	12	1.5 L	3 - 4 psi	specific vehicles only

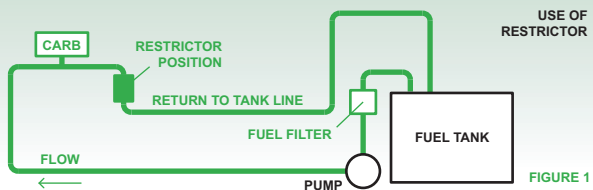
FITTING INSTRUCTIONS

Before fitting, investigate cause of original pump failure and rectify. Check for: clogged fuel filter, contaminated fuel, blockage, restriction or leak in fuel lines, low voltage or intermittent power supply.

PLEASE READ INSTALLATION NOTES BEFORE PROCEEDING:

1. Ensure selected pump model is correctly suited to engine requirements.
2. Select best position to mount pump - (Fig 1). Install pump as close to tank as possible and no higher than 300mm from bottom of fuel tank.
3. Pump to be horizontal with outlet uppermost. Observe OUT or T marking on flange.
4. When fitting in a constant flow or fuel return to tank system, fit Restrictor provided (Fig 1).
5. CAUTION. Do not mount pump close to battery as battery gases can damage certain components of the pump.
6. Mount pump by drilling 4mm holes and using screws provided, also adjust and tighten mounting bracket.
7. Adjust fuel hose nozzles (1LM12) or fit threaded union supplied (15LM12).
8. Fit outlet & inlet petrol resistant hose to pump, making sure a new filter is fitted to pump inlet.
9. Connect red wire of pump to a key-controlled power source, connect black wire to earth. (For positive (+) earth vehicles, reverse connection) Ensure that power supply line to pump is protected with a 3-5 amp fuse.

10. If pump is mounted above fuel level in tank, prime inlet with fuel before connecting inlet hose.
11. Start vehicle, check for fuel leaks, rectify.
12. Check carburettor for flooding, rectify as required.



USE OF RESTRICTOR

This fuel pump should not be operated continuously at full flow. In a Return to Tank system the supplied Restrictor must be fitted in the return line, this will ensure sufficient fuel to the carburettor in heavy demand situations, and will also ensure that the pump does not run at full flow when carburettor demand is low. In an open system, e.g. fuel transfer, fit the Restrictor between the pump and the fuel receiver.

Installation:

1. Cut Return to Tank fuel line close to carburettor (Fig 1)
2. Rejoin using supplied Restrictor, suitable hose and clamps.

WARRANTY: Product warranty liability is restricted to supply of replacement product only. All freight, installation, towage, salvage, labour or other repairs and/or service charges relating to product warranty replacement are specifically excluded from liability. Tampering with pump voids warranty.

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