

## Fuel Pump — 2 Litre Engine

## FUEL PUMP

### 2 Litre Engine

**Description**

The fuel pump is fitted to the top of the cylinder head front cover, driven by a cam on the front end of the camshaft. As the camshaft rotates the cam presses up the rod and diaphragm against the spring, creating a vacuum in the valve housing that opens the inlet valve and draws fuel into the valve chamber.

On the return stroke the spring forces the diaphragm down, closing the inlet valve and expelling fuel through the outlet valve and filter to the carburettor.

The pump incorporates a filter gauze that is accessible for cleaning. The pump is fully sealed in other respects, with a spun-over upper chamber, and is only serviced as an assembly.

**Fuel Pump Filter — To Clean**

Remove the fuel pump upper chamber retaining screw and sealing washer.

Lift off the cover. The fine gauze filter and joint may remain in the cover or stay on top of the fuel pump body.

Remove filter and joint ring, and wash in clean fuel, or renew if damaged.

Clean top of fuel pump taking care to prevent dirt entering the interior of the fuel pump through the "D" shaped hole or cover fixing screw hole; clean top cover.

Place the joint ring in position on fuel pump, and filter in position on joint ring WITH ITS CENTRALISING LUGS POINTING UPWARDS.

Refit top cover and cover fixing screw ensuring that the sealing washer is under the cover fixing screw. Secure cover fixing screw firmly but do not overtighten.

Start and run the engine and check for fuel leaks.

**TESTING**

If the fuel pump output is suspect, the following tests should be made before removing the pump from the engine.

**Leak Test**

With the engine running, examine the fuel pump and carburettor for fuel leaks. Rectify as necessary, but do not overtighten the fuel line connections to correct a faulty union.

**Pressure at Zero Output**

This is the pressure recorded at the fuel pump outlet with the pump valves wetted, the fuel pump empty, and the supply pipe disconnected.

Disconnect the fuel supply pipe at the pump inlet and plug the pipe to prevent a fuel leak. Disconnect the output pipe from the pump, place a container over the outlet and crank or run the engine until the fuel pump is empty.

Connect a pressure gauge to the pump outlet. Connect a temporary fuel supply to the carburettor, start and run the engine at a fast idle. Note the pressure gauge reading and compare it with the figure given in Data. If the pressure is too low or too high the pump is faulty and must be renewed.

**To Remove**

Lift and secure the bonnet.

Disconnect the fuel pipes at the fuel pump. Plug the pipe to minimise fuel spillage and prevent the entry of dirt.

Release the two securing nuts and washers, remove the pump and gasket.

**To Refit**

Ensure the faces of the fuel pump and cylinder head front cover are clean.

Fit a new gasket to the front cover.

Refit the pump to the front cover. Secure with two nuts and washers torque tightened to Data figure.

Reconnect the fuel pipes.

Start and run the engine. Check for oil and fuel leaks.

Lower and secure the bonnet.