

RG 225 ENGINE

WATER PUMP

Description

The water pump is an 'Impeller' type bolted to the front of the cylinder block and driven through a 'Vee' belt from the crankshaft pulley. A cooling fan is bolted to the front boss. The pump assembly consists of an alloy housing containing a bearing/impeller assembly and baffle plate. This is separated from the main housing by a gasket, which cannot be removed over the impeller. A second gasket is fitted between the baffle plate and cylinder block.

To Remove

Disconnect the battery.

Open and secure the bonnet.

Remove rear undertray.

Drain the cooling system (Refer to Sub-section C 200 PARTIAL DRAINING).

Remove the radiator (Refer to Sub-section C 200).

Slacken alternator mounting bolts to allow the 'Vee' belt to be removed.

Remove the cooling fan, drive pulley and spacer.

Release the heater hose from water pump return pipe adaptor above the timing cover.

Detach the water return pipe from alternator mounting bracket.

Release the thermostat by-pass pipe from water pump inlet.

Unscrew the six bolts retaining water pump and remove pump complete with return pipe and bottom radiator hose. Disconnect hose from pump.

Note: As the pump is removed, a small amount of coolant will be released from a pocket behind the pump. If the timing cover has previously been removed, the coolant will flow into the sump.

To Refit

Before refitting the pump ensure that the baffle plate has not separated, however slightly, from the pump housing. If separation has occurred the gasket will be damaged and a new one must be fitted. Apply 'Hylomar' to both sides of the gasket before fitting. The necessary gaskets are supplied in the 'Engine Gasket Set, Lower'. The gasket with the wide faces is fitted between the pump assembly and the baffle plate.

Ensure that all faces are clean and dry.

Coat a new gasket with 'Hylomar' on both faces and position on the baffle plate.

Position the pump and insert the six bolts into their respective positions. The medium length bolt passes into the water gallery and the thread must be coated with 'Hylomar' to prevent water leakage.

Note: Three lengths of bolts are used to secure the pump and these must be refitted in their original positions as follows:

Long bolt 60 mm (2.36 in) at 11 o'clock position, passing through fuel pipe clip and spacer.

Medium length bolt 45 mm (1.77 in) at 9 o'clock position. This bolt passes into the water gallery.

Short bolts 30 mm (1.18 in) fit into the remaining vacant positions.

Refitting is a reversal of the removal procedure.

Adjust the 'Vee' drive belt tension to obtain a deflection of 10 mm (3/8 in).

Refill with coolant.

THERMOSTAT

To Remove

Disconnect battery.

Open and secure bonnet.

Partially drain cooling system (Refer to Sub-section C 200 PARTIAL DRAINING).

Remove two bolts securing thermostat cover noting that one of the bolts retains the dipstick tube bracket.

Displace the thermostat cover complete with top radiator hose.

Remove the thermostat from its housing and discard the gasket.

To Refit

Reassembly is a reversal of the removal instructions.

Clean the joint faces and fit a new gasket.

Refill with coolant.

Run engine and check for leaks.