

OIL PUMP

To Remove

Disconnect the battery.

Remove the sump (Refer to Sub-section A121).

Note: If required the oil pressure relief valve can be inspected after removal of the plug.

Remove the two setscrews and washers securing the pump to the block.

Tilt the pump and remove from the crankshaft chain, leaving the chain attached to the crankshaft sprocket.

Collect the shim(s), if fitted, between the pump and block.

To Refit

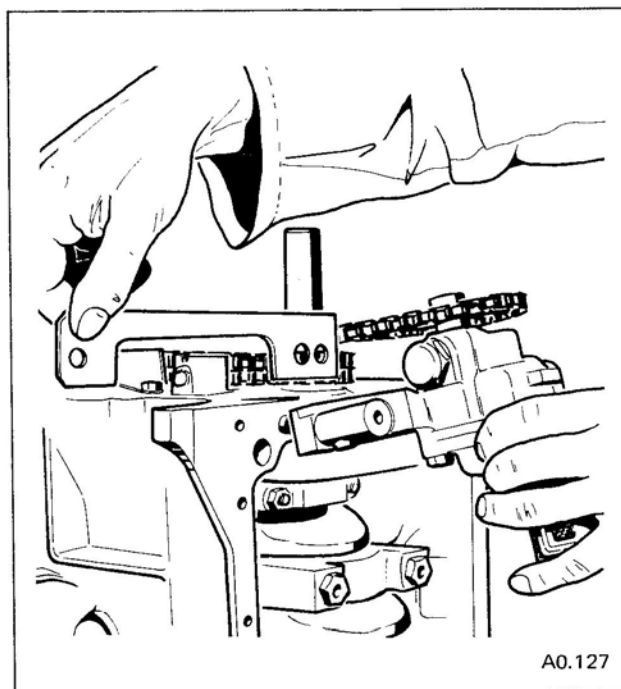
Ensure that the two ring dowels are fitted in the block face.

Position the oil pump on the crankshaft chain.

Locate the pump on the two ring dowels, secure with the two setscrews and washers torque tightened to Data figure.

Check the chain tension. Chain tension should not be excessive. If it is too slack, it can be tightened by placing one or more shims made from 0.1 mm or 0.05 mm (.004 or .002 in) shim material to the dimensions shown in Fig. 1.

If shims are necessary, they must be placed between the block and the pump (Fig. 2).

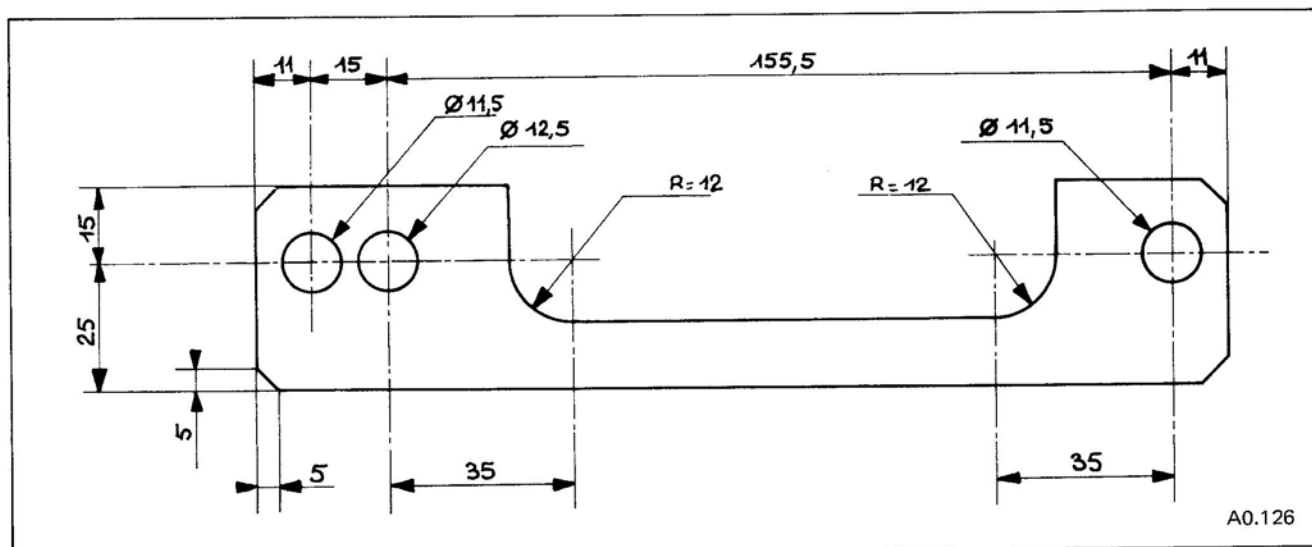


A0.127

Fig. 2 Fitting shims to oil pump

Refit the sump (Refer to Sub-section A121).

Reconnect the battery.



A0.126

Fig. 1 Oil pump shim dimensions. Dimensions in mm.

To Dismantle

Remove the setscrew, washer and nut securing the anti-drain plate and strainer.

Remove the six setscrews and washers securing the cover. Remove cover.

Take out the driven gearwheel.

Remove the valve plug (Fig. 3).

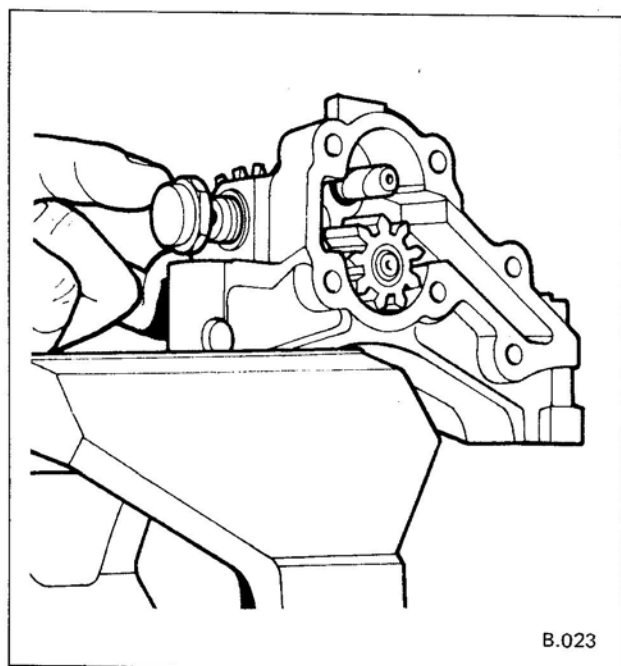


Fig. 3 *Removing valve plug*

Unscrew the valve body with an Allen key and take out the ball retaining spring, ball and pressure spring.

Using a suitable extractor remove the drive sprocket.

Remove the drive gearwheel and shaft.

Note: The drive gearwheel and its shaft are supplied as a single assembly. It is essential that these parts are not separated.

Inspection and Control

Thoroughly clean all pump components.

Check the pump body for wear.

Check the sprocket teeth for wear or damage.

Check the drive gear wheel and driven gearwheel for wear or damage.

Check the valve spring for length and distortion.

Check the valve ball for damage.

To Re-assemble**Special Tools**

Oil pump setting jig 21607Y

Place the drive gearwheel and its shaft in the bore in the pump body.

Fit the assembly onto setting jig Pt. No. 21607Y with end of the drive gearwheel located in the cut-out in the fixture base. Adjust the stop screw in the base until it makes contact with the end of the shaft (Fig. 4).

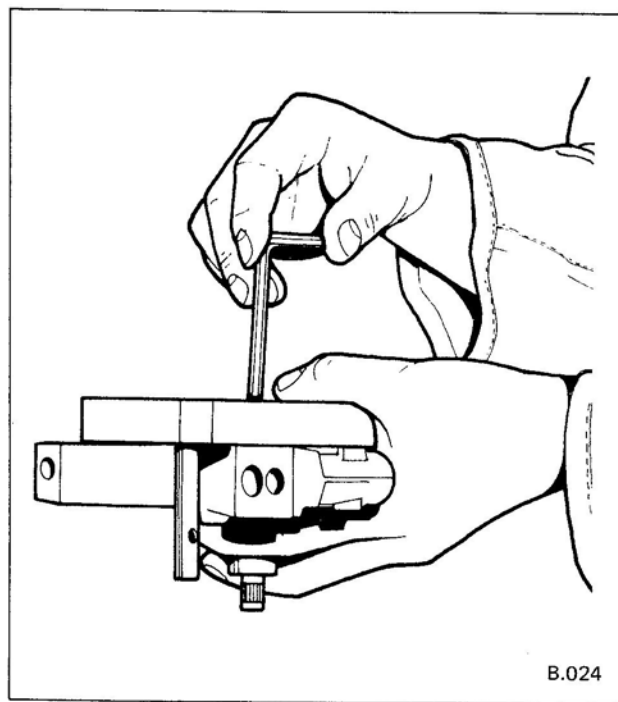


Fig. 4 *Adjusting the setting jig*

Oil Pump

Place the drive sprocket on the end of the drive shaft so that the boss on its hub faces outwards.

Push down the sprocket, on the press, until a 0.1 mm (.004 in) feeler gauge is a good sliding fit between the sprocket and the fixture screwed rod (Fig. 5).

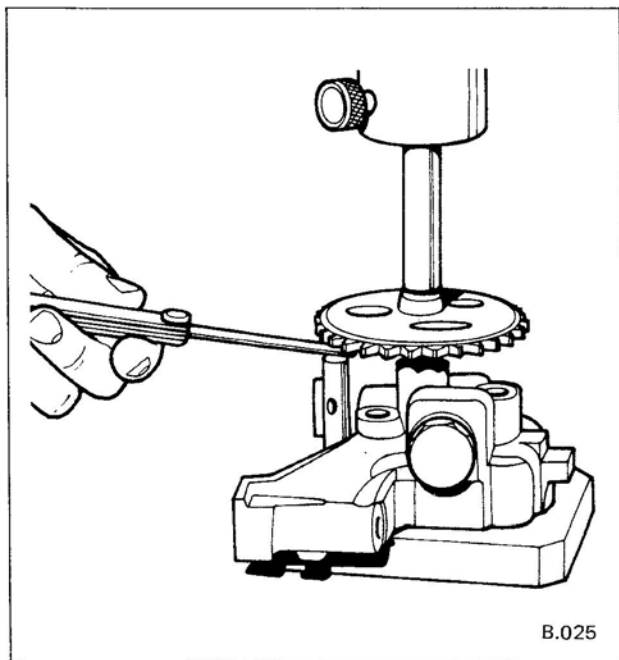


Fig. 5 *Checking sprocket clearance*

Place the ball retaining spring, the ball and the pressure spring in position and screw in the valve body. Fully tighten it.

Screw in and tighten the plug, fitted with its copper washer, to the specified torque.

Fit the driven gearwheel.

Fit the cover, secure with setscrews torque tightened to Data figure.

Fit the strainer and anti-drain plate. Secure with setscrew, washer and nut.