

CAMSHAFT AND TAPPETS

CAMSHAFT

Introduction

The camshaft has an integral oil pump and distributor drive gear and fuel pump eccentric (Fig. 1).

Rearward camshaft thrust is taken by the rear face of the camshaft sprocket hub, bearing directly on the front of the cylinder block, eliminating the need for a thrust plate.

The helical oil pump distributor drive gear and camshaft lobe taper both tend to produce only a rearward thrust.

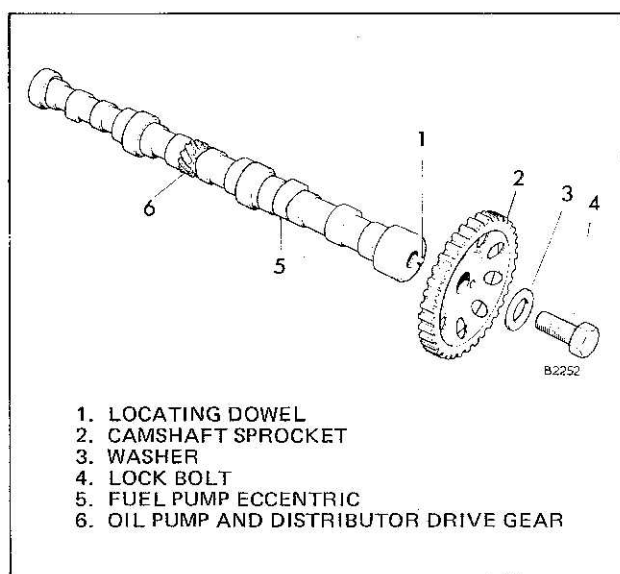


Fig. 1 Camshaft and sprocket assembly

To Remove

Disconnect the battery.

Drain the engine oil.

Drain the cooling system.

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

Remove fan and fan belt.

Remove the distributor (Refer to Sub-section D 310).

Remove fuel pump (Refer to Sub-section B 122).

Remove oil pump (Refer to Sub-section A 222).

Remove cylinder head (Refer to Sub-section A 231).

Remove tappets (this section).

Remove timing cover, camshaft sprocket and timing chain (Refer to Sub-section A 215).

Carefully withdraw camshaft, taking care not to damage camshaft bearings with the cam lobes (Fig. 2).

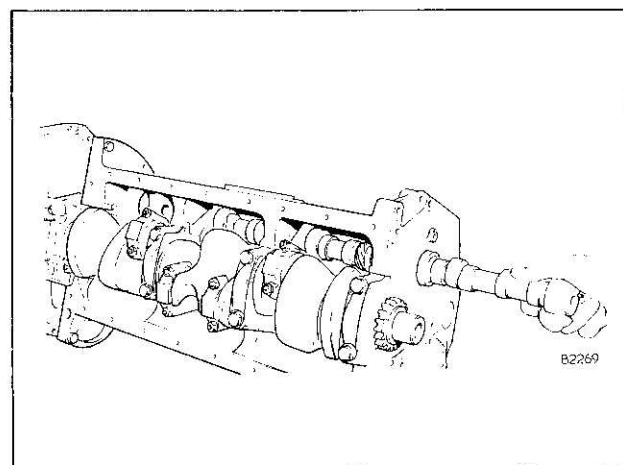


Fig. 2 Withdrawing camshaft

Inspection and Overhaul

Examine the camshaft journals for scores or pitting.

Note: New tappets must be used if a new camshaft is fitted.

To Refit

Refitment is a reversal of the removal procedure noting the following:

Lubricate the camshaft and bearings with clean engine oil. Insert the camshaft, supporting it carefully so that the cams and gear do not damage the bearings.

TAPPETS**To Remove****Special Tool**

Tappet remover C4129

Disconnect the battery.

Drain the cooling system.

Remove the cylinder head (Refer to Sub-section A 231).

Using Tool C 4129 lift out the tappets, identifying them so that they may be refitted in the original order.

Inspection and Overhaul

Examine the tappets for wear and damage and the push rods for straightness. If the tappets are faulty it is advisable to examine the camshaft.

All tappet faces must be inspected for crown with a straight edge. If any negative crown (dish) is observed, the tappet must be renewed.

New tappets must be used if a new camshaft is fitted.

To Refit

Refitment is a reversal of the removal procedure noting the following:

Smear the tappets with clean engine oil.