

E. Re-Bedding of Camshaft

Note: The operation of re-bedding the camshaft can only be carried out with the cylinder head removed from the vehicle.

1. After cleaning the disassembled cylinder head, both surfaces — the separating surface and the upper face of the cylinder head — must be inspected to see if they are perfectly even. The maximum permissible degree of unevenness in the longitudinal direction is 0.1 mm and in the lateral direction, 0.01 mm. If it is in excess of this, the cylinder head must be re-faced (see Job No. 01 — 5, Section C).
2. When new camshaft bearing blocks are fitted, it is normal practice to use a complete set. If it happens that the replacement of a single bearing block is sufficient, particular care must be taken to ensure that the bores are perfectly aligned.

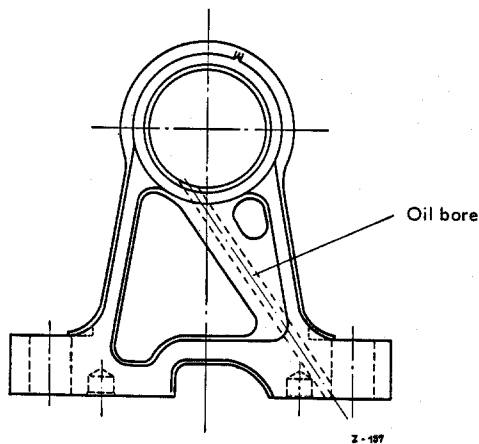


Fig. 05 — 5/8

1 Camshaft bearing, seen from the front

3. Before the camshaft bearing blocks are installed, the bores must be measured and

the camshaft re-ground in accordance with the bearing play (see Job No. 05 — 5, Section D).

4. Fix the bearing blocks onto the cylinder head and insert the camshaft — for the time being without oil — into the bores.

The camshaft must be easy to turn by hand and if it is not, the bearing block causing it to bind must be traced. To do this, one of the two outside bearings should be removed and the camshaft once again tested for free running.

If the camshaft does not run freely, the removed bearing should be re-installed and the other outside bearing removed instead in order to ascertain which of the bearings is incorrectly aligned.

The misalignment of the bearing can be corrected by lightly tapping the base of the bearing with a plastic hammer.

The camshaft must be easy to turn under all circumstances. Particular care must be taken to check this when the cylinder head is fitted, and after the cylinder head attaching bolts have been tightened.

Note: An oil passage runs from the left bolt shank bore of No. 1 camshaft bearing to the bearing bore for the lubrication of the camshaft (Fig. 05 — 5/8). For this reason, the contact surface of No. 1 camshaft bearing must make a perfect seal with the cylinder head surface to avoid any decrease in oil pressure.

Before placing No. 1 camshaft bearing on the cylinder head, the oil passage must in all cases be carefully cleaned.