

## Camshaft and Camshaft Bearings

The camshaft is supported in four bearing brackets screwed to the cylinder head. With the exception of the 2nd and 3rd bracket, the bores of the various brackets are of a different size (see Table 21).

The camshaft bearing journals can be reground twice (see Table 20). The brackets, which are supplied ready for installation, must be exchanged correspondingly (see Table 21).

The lubricating oil for the bearings and cams flows from the first camshaft bracket through a hole of 6 mm (0.24") in the first camshaft bearing journal into an oil passage in the camshaft, from where it reaches the various bearings. In the camshaft oil passage an oil distributing pipe is provided to improve distribution of the oil. The oil outlets for the bearings and cams have a diameter of 3 mm (0.12") and 1.3 mm (0.05"), resp.

## Grinding of Camshaft

Types 220 and 220 a

**Operation  
No.**

M 28

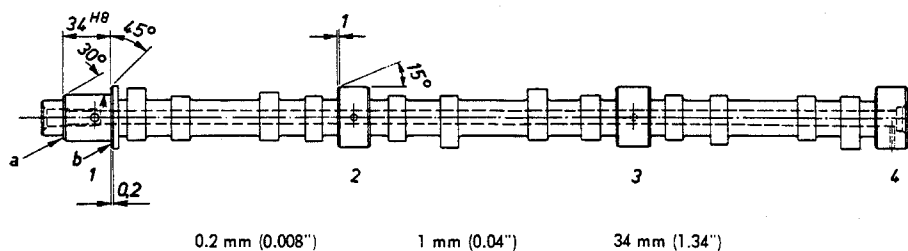


Fig. M 28/00

Before regrounding the camshaft, remove cover plate (2) sealing off the oil passage and pull out oil distributing tube accommodated in the camshaft (see Fig. M 28/01). If one or both centering holes are damaged, which is likely to be the case, regrind them on a center grinding machine or a lathe. Before this is done, check camshaft for concentricity. With shaft supported in end bearings 1 and 4, the max. out of true of center bearings 2 and 3 as well as steering wheel seat must not exceed 0.025 mm (0.001").

To achieve correct side play of the camshaft, measure bore of camshaft bearings to be installed and determine to which tolerance the journals are to be reground, making provision for the side play given in the table.

## Camshaft Plays

in mm (in.)

### Table 19

Side play	End play
0.025 – 0.057 (0.00098 – 0.0022)	0.050 – 0.128 (0.002 – 0.00504)