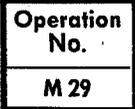


Replacement of Camshaft Bearings

Types 220 and 220a



Procedure:

1. Remove cylinder head and disassemble it (see Operation No. M 20).

Note: This operation can also be carried out on the car with cylinder head installed. In this case only the rocker arm brackets must be removed.

However, the contact surfaces for the camshaft bearing brackets must be checked for planeness, even if the cylinder head is mounted (see cf. 2).

2. Clean cylinder head and check whether both mating surface and upper side of cylinder head are plane. The maximum unevenness is 0.1 mm (0.004"). If this value is exceeded, the cylinder head must be reworked (see also Operation No. M 21).
3. When replacing the camshaft bearing brackets, it is recommended to install a complete set of new brackets. If in exceptional cases the replacement of a single bearing bracket is sufficient, particular attention must be given to correct alignment of the bores.
4. Before you undertake to install the camshaft bearing brackets, measure the bores and re-

grind them according to the camshaft plays (see Operation No. M 28).

5. Bolt bearing brackets to cylinder head and insert the camshaft into the bores without applying oil.

It must be easily possible to rotate the camshaft by hand. If this is not the case, it must be determined which of the brackets is binding. Proceed as follows: take the two end brackets off and check again whether camshaft turns easily. Should this not be the case, correct alignment of the two center brackets by tapping them lightly with a hammer.

Install one of the two outer brackets again and check whether camshaft turns easily. If necessary, correct position of the bracket by tapping it with a hammer. Proceed with the last bearing in the same way.

The camshaft must by all means rotate easily. This is also of great importance in installed condition of the cylinder head with cylinder head screws tightened.

Note: The first bearing bracket must be completely tight where its contact surface meets the cylinder head surface, as otherwise oil pressure trouble might develop.