

Usually cylinder blocks are provided with cylinder liners. There are two main types of cylinder liners, namely, wet liners in which cooling water surrounds the liner barrel, and dry liners which do not get into contact with cooling water (Fig. 44).

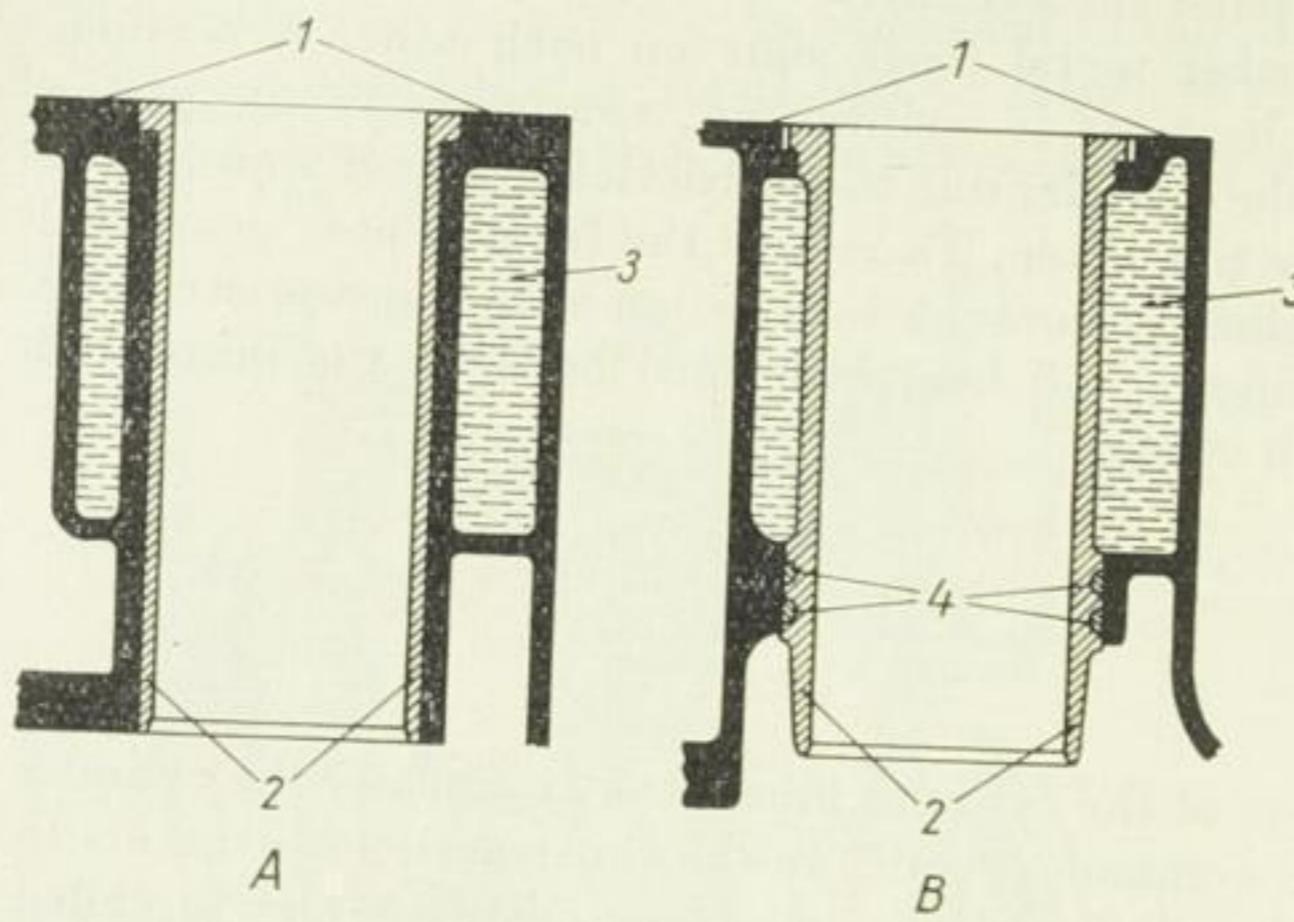


Fig. 44. Cylinder liners
 A Dry liners
 B Wet liners
 1 Engine block
 2 Cylinder liners
 3 Cooling water
 4 Packing rings

The cylinder block has bore-holes for the valve-control linkage and ducts for the cooling water. Further, a drain cock is provided at the lowest point of the cavity designed as cooling-water reservoir in the cylinder.

The cylinder block of air-cooled engines is provided with cooling ribs, also called cooling fins, which improve the heat dissipation conditions (Fig. 45).

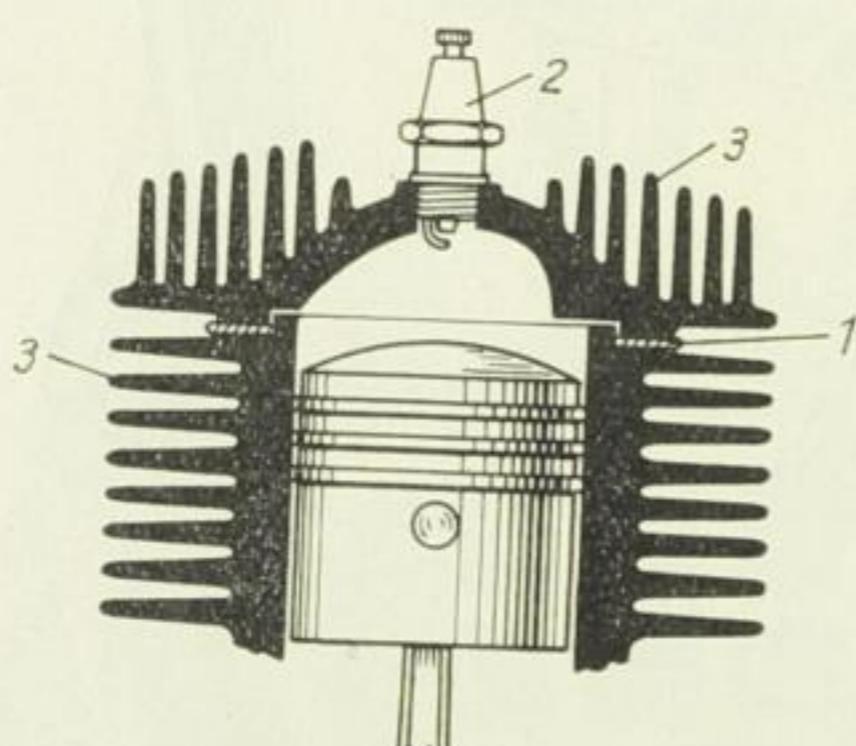


Fig. 45. Cooling fins at cylinder block and cylinder head
 1 Cylinder head gasket
 2 Sparking-plug
 3 Cooling fins

(b) Crankcase

The crankcase houses the revolving parts. These include, above all, the crankshaft and the camshaft. In the case of four-stroke engines, the oil filler pipe and the oil dipstick are arranged at the crankcase in such a way that they are accessible from the outside (Fig. 46). The crankcase of tractors built in the unitised construction must be very sturdy, a requirement which is not raised in motor-car construction.