

C. Machining and Pressure-Testing of Cylinder Head

If the separating surface or the upper side of the cylinder head is uneven or has become distorted or if there is slight surface damage such as scorings, scratches, etc., the damaged surface must be re-faced.

In the longitudinal direction, the separating surface must not be more than 0.10 mm out of level, and in the lateral direction, not more than 0.01 mm.

If the cylinder head surface is machined, the overall thickness of metal machined off must not exceed 0.5 mm. The standard height H of

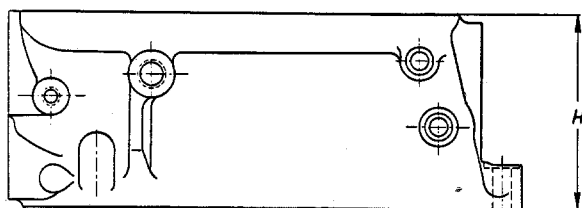


Fig. 01 — 5/4

the cylinder head is 84.80—85.00 mm (Fig. 01 — 5/4).

After the separating surface has been machined, the capacity and the height of the compression chamber must be measured. Any discrepancies must be corrected by milling out the compression chamber to the correct capacity (Fig. 01 — 5/5).

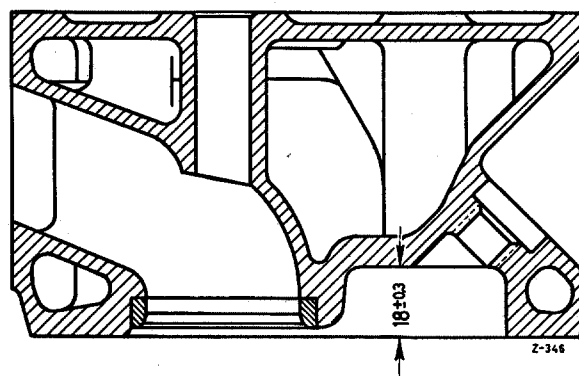


Fig. 01 — 5/5

Compression Ratio and Capacity of Compression Chamber

Cylinder head	Standard compression	Lower compression (Optional, SA 10 250)
Compression factor ϵ	maximum 7.8 : 1 standard 7.5 : 1 minimum 7.25 : 1	7.0 : 1 6.8 : 1 6.6 : 1
Total compression chamber capacity with cylinder head fitted	69.8 — 75.8 cm ³	78.5 — 84.5 cm ³
Compression chamber capacity in cylinder head with valves and spark plugs fitted	62.3 — 63.3 cm ³	70.3 — 71.3 cm ³

After machining the cylinder head separating surface, the head must be pressure-tested at a pressure of 2 atmospheres.

Cylinder Head with Lower Compression (Optional, SA 10 250)

In countries where only fuels with a lower anti-knock value are available, a cylinder head with a lower compression (Part No. 121 010 33 20) is available as an optional item.

If such a cylinder head is to be installed, another type of cylinder head gasket (Part No. 121 016 10 20) must be installed at the same time.

When this is done, the ignition setting must be adjusted so that the engine operates without pink-ing when the vehicle is driven.