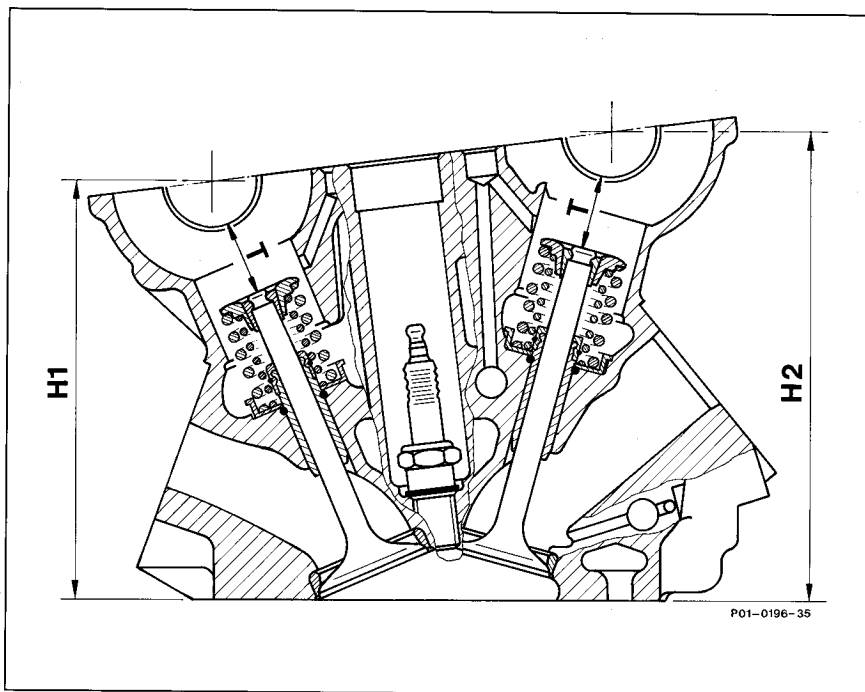


01-4180 Checking cylinder head mating surface, facing

Preceding work:
Valves removed.

Operation no. of operation texts and work units or standard texts
and flat rates
01-7162



Data

Reference sizes	H1	H2	T
When new	<u>130.6</u> ¹⁾ 130.7	<u>145.9</u> ¹⁾ 146.0	-
Minimum height after stock removal	130.4 ¹⁾	145.7 ¹⁾	-
With camshaft bearing dia. Standard size			<u>23.07</u> 23.81
Permissible variation from evenness of mating surface	in longit. dir.	0.08	
	in transv. dir.	0.0	
Permissible variation of parallelism of top to bottom mating surface in longitudinal direction		0.1	
Peak-to-valley height		0.003-0.010	
Test pressure with air under water in bar gauge		2	

- 1) Measure by inserting a shaft and dressing half the diameter. The stock removal at the cylinder head and at the crankcase of an engine must together not be more than 0.4 mm (see 01-1200).

Commercially available tools

Surface grinding machine with milling tool for light alloy surfaces	e.g. P. Schoenleber GmbH Caorle Cramer-Klettstr. 8 D-83229 Aschau Order no. 9033 0006
Set of mounts for side attachment M119	Order no. 90330037
Knife-edge straightedge approx. 500 mm long	e.g. Roaro u. Fi. Schio / Italien

Note

Only machine cylinder head mating surface if porous or damaged points exist or if an impermissible variation has been measured from the evenness in the longitudinal direction.



The top cylinder head mating surface must not be machined otherwise the basic bores of the camshaft bearings will be altered.
If cracking is suspected (internal loss of coolant), the cylinder head must be pressure-tested (01-4200).

Facing

- 1 Measure reference sizes H1 and H2 and note.
- 2 Face cylinder head mating surface. Deburr sharp edges at edge of combustion chamber.
- 3 Again measure reference sizes H1 and H2. Determine stock removal and note.
- 4 Re-position valve seats by the same amount of the stock removal at the cylinder head (05-2910).
- 5 Measure reference size (T) between end of valve stem and base of camshaft bearing.

Note

To do this, insert \varnothing 6 mm round bar in the middle of the base of the camshaft bearing and measure size "T" with caliper gage.



If the size obtained is less than the size "T", it is no longer possible to achieve correct valve clearance compensation; replace valve seat ring or cylinder head.

6 Check timing (05-2150).



It is not permitted to rework the valves. If the valve seat has to be reworked, the valve should be replaced.