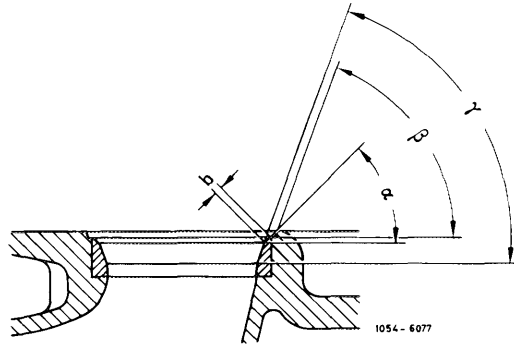


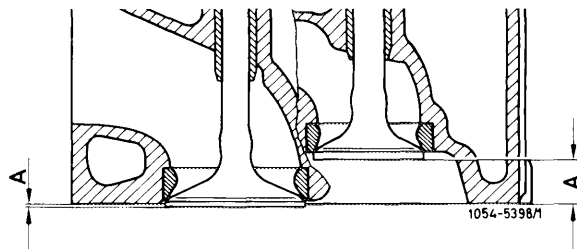
05–291 Machining valve seats

Data	Intake	Exhaust
Valve seat width b	1.8–3.0	1.5–2.5
Valve seat angle α	45°	
Correction angle top β	70°	
Correction angle bottom γ	70°	
Perm. runout of valve seat	0.05	



Valve distance in relation to cylinder head parting surface

Engines		115.923/926 115.938/939	115.951 115.954
Min. distance A with new valve seats and new valves	intake	-0.2	+0.1
	exhaust	-16	-16
Max. distance A with refinished valve seats and reground valves	intake	-1.5	-0.9
	exhaust	-17	-17




Special tools

Magnetic lift for valve cone halves  116 589 06 63 00

Pressure lever for valve spring  123 589 03 61 00

Plug gauge 9 mm dia. for intake valve guide  117 589 03 23 00

Plug gauge 11 mm dia. for exhaust valve guide  117 589 04 23 00

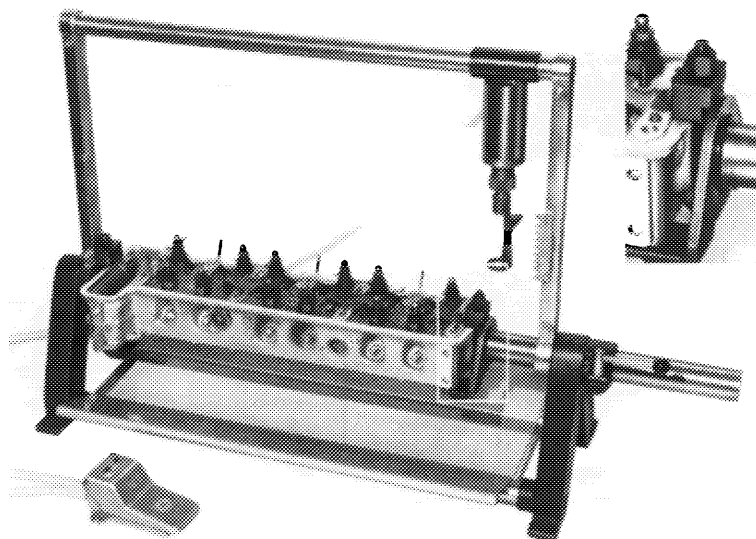
Conventional tools

Cylinder head clamping device	e.g. made by Rothenberger, D-6233 Kelkheim order No. 2.9900
Valve seat machining tool	e.g. made by Hunger, D-8000 München 70 type VDNSL 1/45/30 order No. 236.03.308
Test set for valve seats	e.g. made by Hunger, D-8000 München 70 order No. 216.93.300

Note

Clamp cylinder head for disassembly and machining into clamping device.

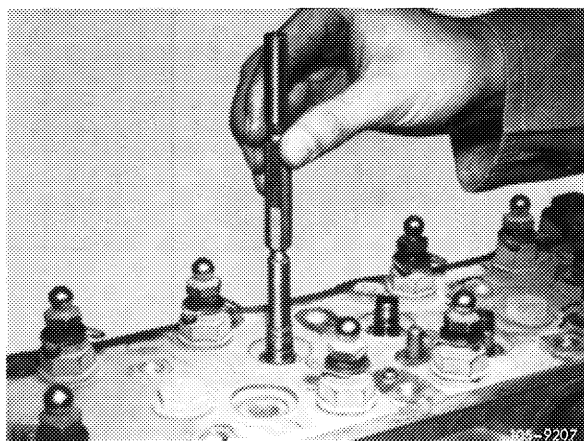
Refinish valve seats with valve seat machining tool, with valve seat grinder or with valve seat milling tool.



05-9470

Machining valve seats

- 1 Check valve guides and renew, if required (05-285).



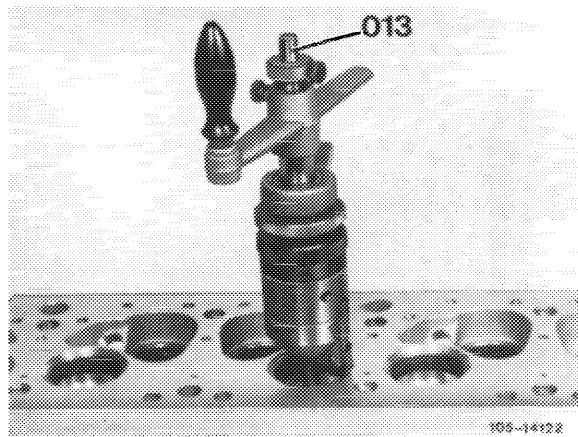
05-9207

2 Machine valve seat (45°) (refer to operating instructions of respective tool manufacturer).

Attention!

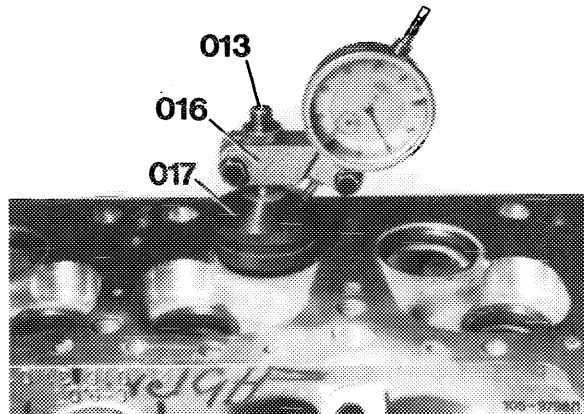
Loosen pilot (013) only after the runout of the valve seat has been checked.

3 Measure valve seat width b and correct to 70° at top and bottom, if required.



4 Check runout of valve seat.

For this purpose, slip check sleeve (017) with dial gauge holder (016) and dial gauge on pilot (013) and turn check sleeve. The permissible runout of 0.05 mm should not be exceeded.



013 Pilot
016 Dial gauge holder
017 Check sleeve

5 Introduce new valve and measure max. distance A .

If required, renew valve seat ring (05-290).

