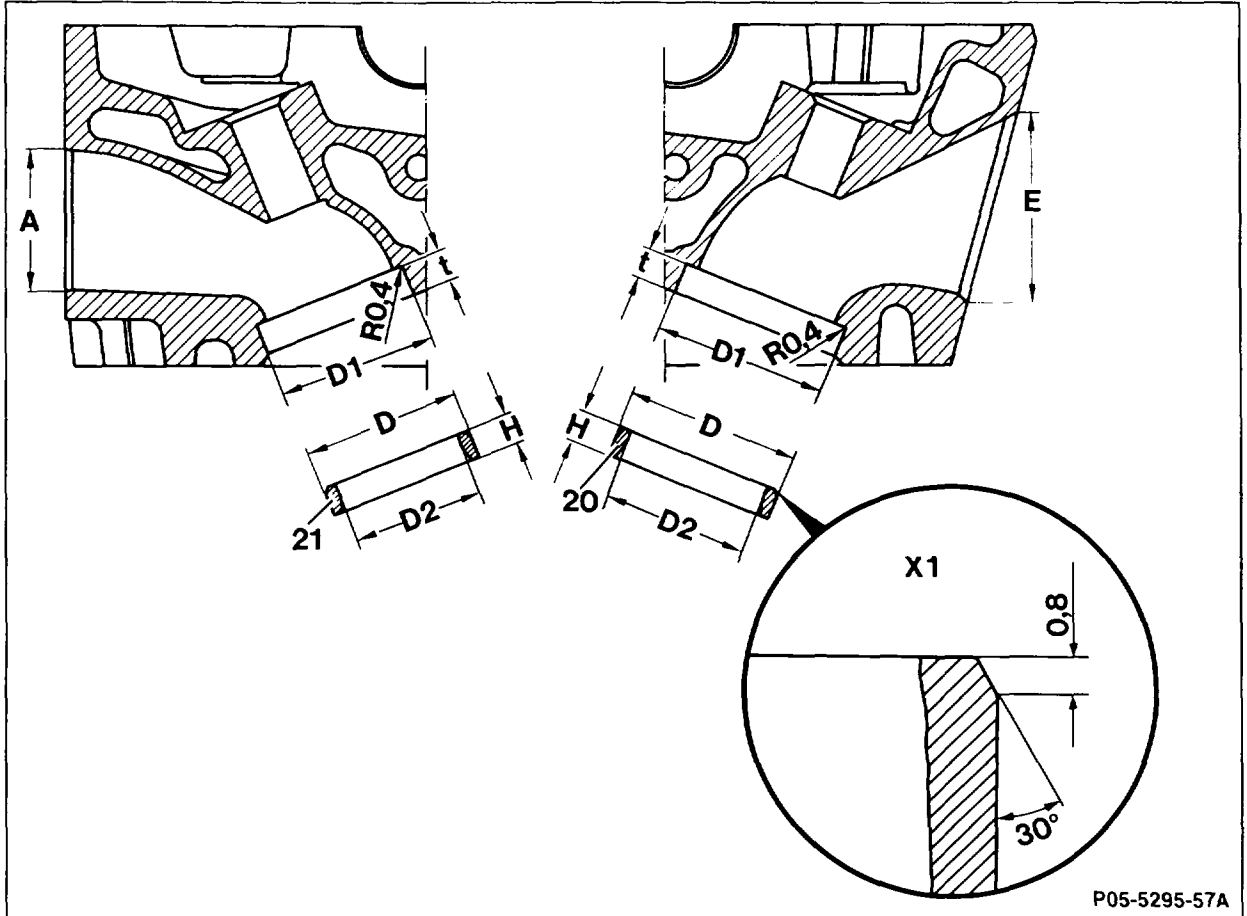


05-2900 Replacing valve seat rings

Preceding work:

Valve guides checked (05-2130)



Valve seat rings (20 and 21)	remove with ring seat turning tool.
Operating instructions of tool manufacturer	note.
Basic bore dia. (D1)	measure with internal measuring instrument.
Valve seat rings (normal size or repair size)	select according to overlap.
For repair size	machine basic bore.
For repair size	machine valve seat rings according to basic bore in cylinder head, pay attention to overlap.
For repair size	turn chamfer (X1) on valve seat rings.
Valve seat ring	cool with liquid nitrogen and knock in with suitable drift.
Valve seats	machine (05-2910).

Engine		103.94		103.98	
		Inlet	Exhaust	Inlet	Exhaust
D1	Standard size	42.50 – 42.52	37.50 – 37.52	45.50 – 45.52	41.50 – 41.52
D	Standard size	42.59 – 42.60	37.59 – 37.60	49.59 – 45.60	41.59 – 41.60
Overlap of valve seat rings in cylinder head		0.07 – 0.10		0.07 – 0.10	
H		8.12 – 8.20		8.12 – 8.20	
t		7.8 – 8.2		7.8 – 8.2	
D2		36.2	31.2	39.2	35.2

Commercially available tools

Cylinder head clamping device	eg. Hunger, D-81375 München Order no. 221.60.000
Ring seat turning tool (size 2)	eg. Hunger, D-81375 München Order no. 220.03.110
Valve seat turning tool	eg. Hunger, D-81375 München Type VDSN 1/45/30, Order no. 236.03.308
Test kit for valve seats	eg. Hunger, D-81375 München Order no. 216.93.300
Internal measuring instrument (range 35 – 100 mm)	
External micrometer (range 25 – 50 mm)	