

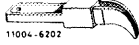

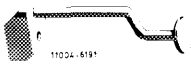
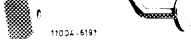
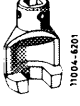
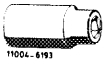
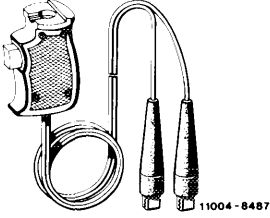
05–270 Replacement of valve stem seals

Valve clearance	with engine cold (approx. 20 °C)	with engine warm (60 °C ± 15 °C)
Intake	0.10 ¹⁾	0.15 ¹⁾
Exhaust	0.20	0.25

¹⁾ 0.05 mm higher during lasting outside temperatures below –20 °C.

Tightening torques	Nm
Nuts for cylinder head cover	15
Valve adjusting screws	20–40

Special tools

Magnetic lifter for valve cone halves		116 589 06 63 00
Pressure lever for valve spring		123 589 03 61 00
Assembly mandrel for valve stem seals intake 9 mm dia.		116 589 00 43 00
Assembly mandrel for valve stem seals exhaust 11 mm dia.		116 589 01 43 00
Valve adjusting wrench 17 mm, 1/2" square		110 589 00 01 00
Socket 27 mm, 1/2" square, for rotating engine		001 589 65 09 00
Contact handle for rotating engine (component of compression pressure recorder (compressometer) 001 589 46 21 00)		001 589 46 21 08

Conventional tool

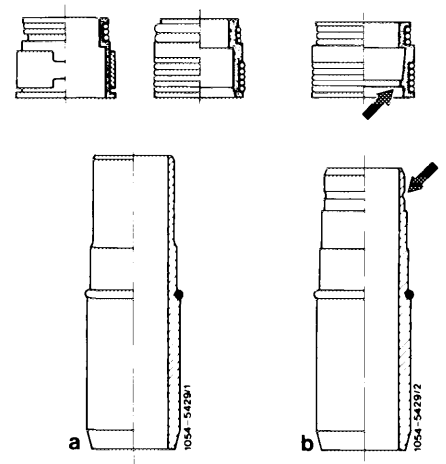
Cylinder leak tester	e.g. made by Bosch, EFAW 210 A and by SUN, CLT 228
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Note

Valve stem seals including assembly sleeves are supplied in repair kit.

Exhaust valve guides which are worn out at holding groove for valve stem seal must be replaced (arrows).

a Intake
b Exhaust

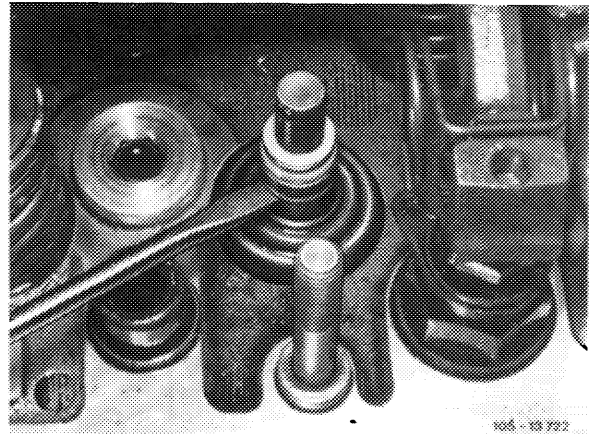


Renewing

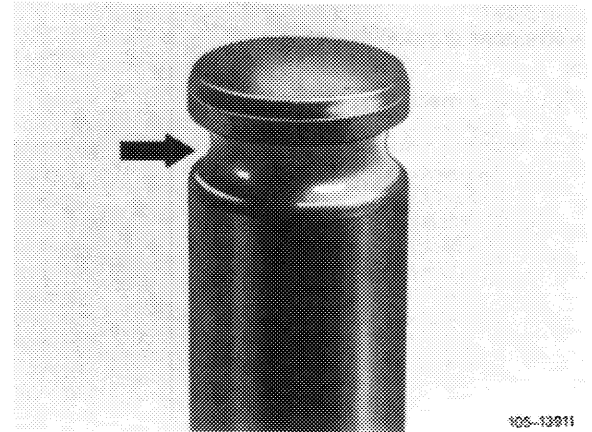
- 1 Remove valve springs (05–250).
- 2 Press off valve stems by means of a screw driver or pull off by means of pliers.

Attention!

Do not damage valve stem and valve guide.



- 3 Deburr valve stem at groove (arrow).
- 4 Renew worn out valve cone halves, spring retainers and thrust pieces.



- 5 Lubricate valve stem seals and mount by means of assembly mandrel.

For this purpose, place assembly sleeve on valve stem.

- 6 Install valve springs (05–250).
- 7 Adjust valve clearance (05–210).

