

Valve Clearance in Cold Engine in mm

Inlet valve	0.08
Exhaust valve	0.20

Tightening Torques in kpm

Hex. bolt for attaching cylinder head cover	0.5
Adjusting torque of Kamax adjusting screw for valve adjustment (assembled with tallow)	2–4

Special Tools

Valve gauge	0.08 and 0.20
Valve adjusting wrench 17 mm SW, 1/2" square	000 589 14 01 00
Socket spanner for cranking engine	000 589 61 09 00

Notes

Adjust valve clearance **with cold engine only** and check!

Measure valve clearance between **slide surface of rocker arm (41)** and **basic cam circle of camshaft (70)** (Fig. 1).

Inspection and Adjustment of Valve Clearance

1 For inspecting and adjusting the valves, set the camshaft cam for the pertinent valve in such a manner that the **tip of the cam** does not push on rocker arm but extends in the opposite direction and vertically to the sliding surface of the rocker arm (Fig. 1).

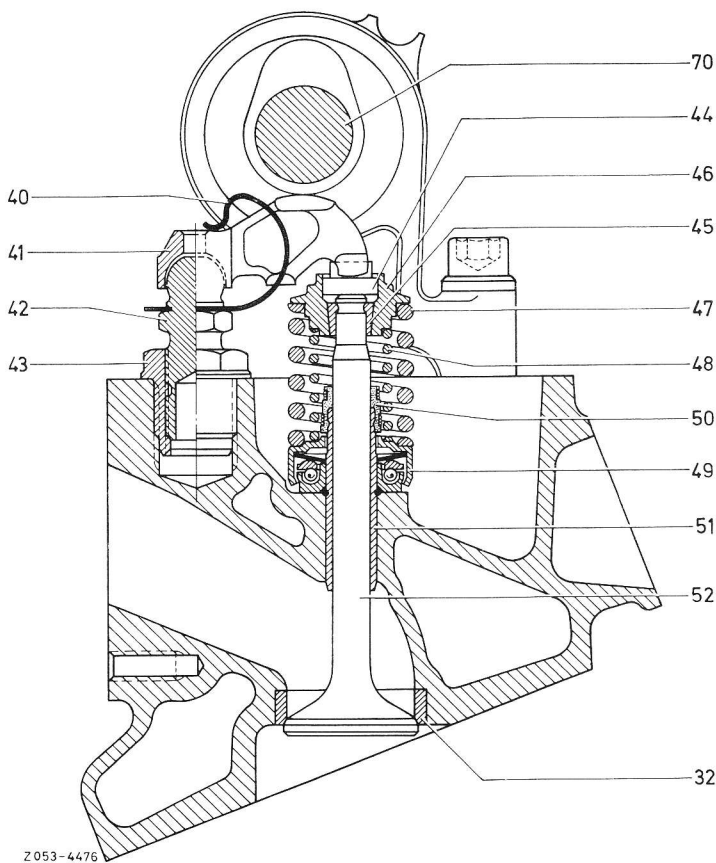


Fig. 1

- | | |
|--------------------------|-----------------------|
| Valve arrangement | 47 Outer valve spring |
| 32 Valve seat ring | 48 Inner valve spring |
| 40 Tensioning spring | 49 Rotocap |
| 41 Rocker arm | 50 Valve seal |
| 42 Adjusting screw | 51 Valve guide |
| 43 Threaded bushing | 52 Exhaust valve |
| 44 Thrust piece | 70 Camshaft |
| 45 Valve cone half | |
| 46 Valve spring retainer | |

05.1 Inspection and Adjustment of Valve Clearance

2 The crankshaft can be rotated as follows:

Coarse adjustment:

Crank engine with starting motor.

Fine adjustment:

a) Rotate engine with a mandrel of 8 mm dia. on vibration damper (Fig. 2).

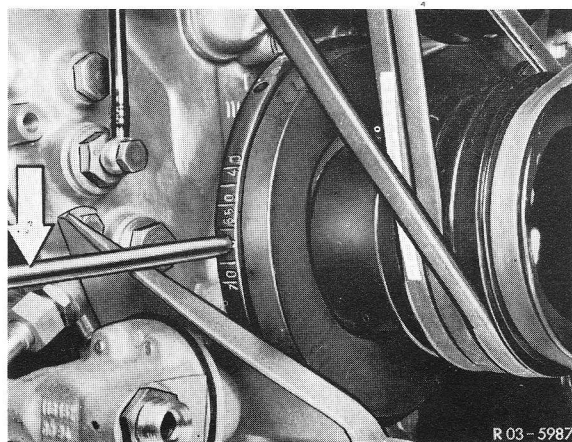


Fig. 2

b) Push cover out of pulley (crankshaft) with a screw driver. Then position tool combination (Fig. 3) against hexagon bolt of crankshaft and rotate engine.

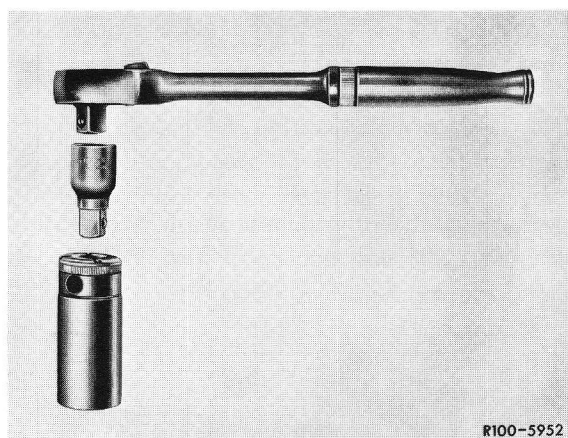


Fig. 3

Caution! Do not rotate engine on hex. bolt on camshaft gear and crank only in direction of engine rotation.

3 Measure valve clearance. Introduce tolerance strip for inlet and exhaust valves in between the sliding surface of the rocker arm and the basic cam circle (arrow in Fig. 4).

4 For adjustments, turn adjusting screw with valve adjusting and torque wrench.

Caution! If the adjusting torque is below 2 kpm, replace adjusting screw or threaded bushing.

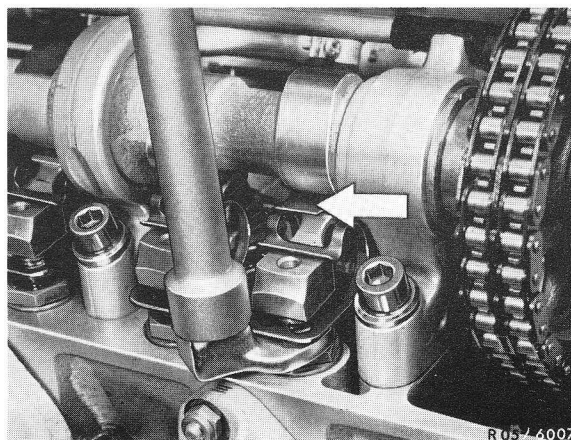


Fig. 4

The valve clearance is correctly adjusted when pulling of the tolerance strip requires some effort.

Caution! The location of the inlet and exhaust valves on cylinder 4 and 6 is unsymmetric (Fig. 5).

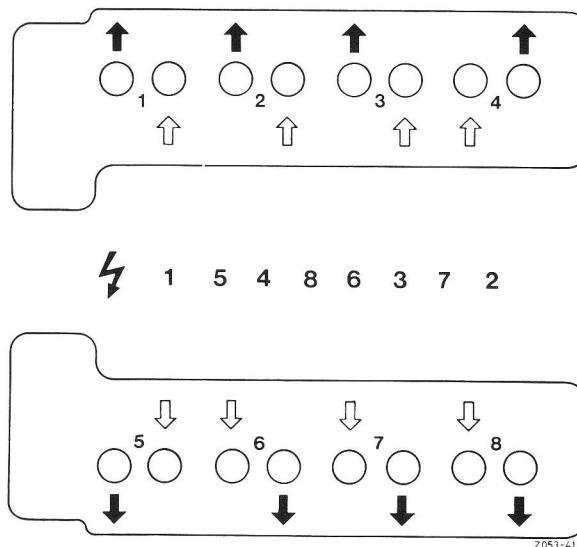


Fig. 5

Valve arrangement