# Valve Guide - Ream (one) (valve removed) (21 233 4)

### **Special Tools**

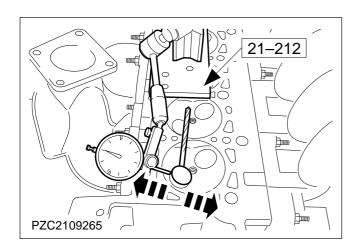


### **Proprietary Tools**

Adjustable reamer Ø 7 - 7,5 mm

#### **Workshop Equipment**

Gauge with magnetic	
mounting	

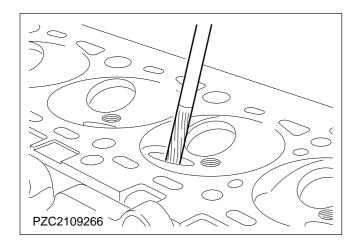


## Re-machining

- 1. Attach mounting plate 21-212 and the dial indicator.
- 2. Insert a 7,0 mm drill bit between the valve seat insert and the valve head.
- 3. Measure valve stem/valve guide clearance.
- Permissible valve stem clearance, measured at the valve head: intake 0,06 - 0,21 mm, exhaust 0,12 - 0,29 mm.

**NOTE:** The gauge must be at 90° to the valve stem.

- Place the feeler of the gauge on the edge of the valve head.
- Determine the valve stem clearance by moving the valve to and fro.
- If necessary, renew the valve and/or re-machine the valve guide as described in relevant step.
- 4. Remove gauge and clamping plate, remove drill.



CAUTION: After reaming the valve guide, re-mill the valve seat insert as described in Operation 21 231 9 and renew valve.

**NOTE:** Lubricate with drilling oil.

5. Ream valve guide.

**NOTE:** The specified clearance must be achieved to prevent valve sticking.

 Ream valve guide with adjustable reamer in several steps to the appropriate oversize (see Technical Data).