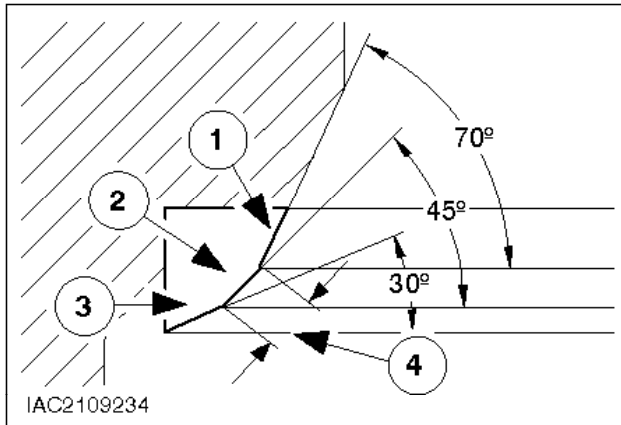


Valve Seat - Cut (One) (Valve(s) Removed) (21 231 9)

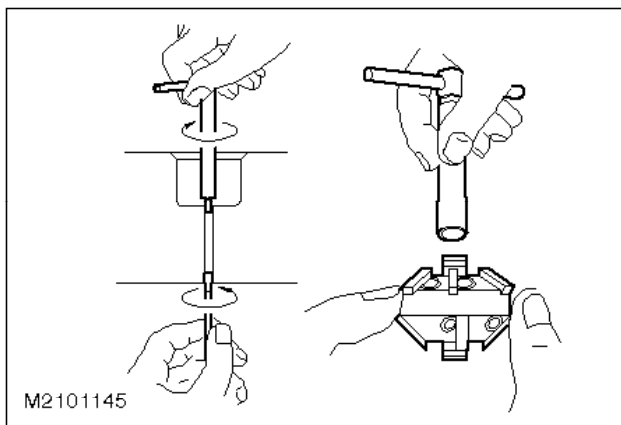
Proprietary Tools

Valve seat cutter (fixed in the valve guide)
30°, 45° and 70° cutters



Rework

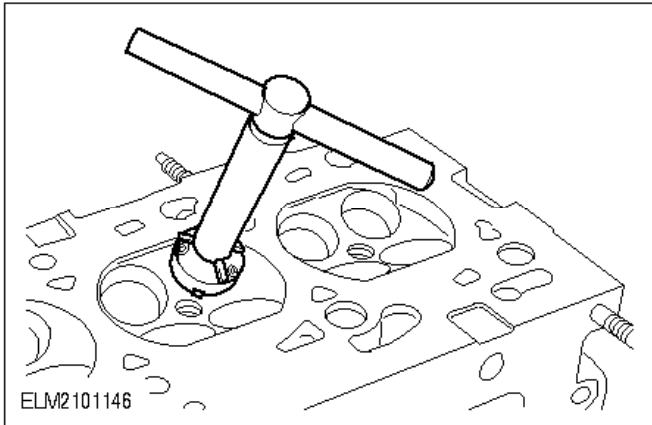
1. Location of the angle on the valve seat.
 - 1 Upper correction angle (70°).
 - 2 Valve seat angle (45°).
 - 3 Lower correction angle (30°).
 - 4 Valve seat width.



Note:
Only use tools which can be firmly fixed in the valve guide.

Note:
The procedure is shown using a proprietary tool. Follow the tool manufacturer's instructions.

2. Insert a locating pin in the valve guide and tighten it.
3. Attach the turning handle to the valve seat cutter.



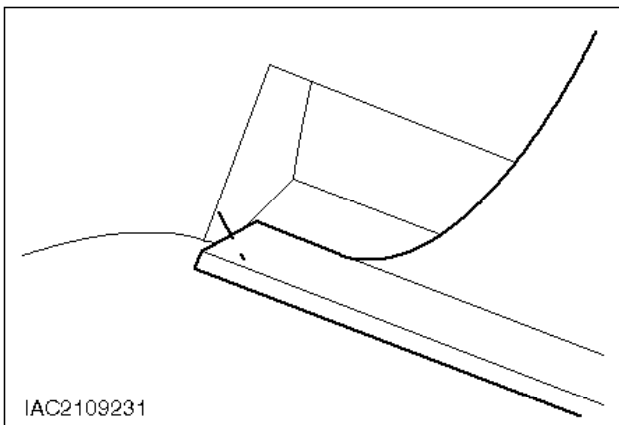
Note:

Avoid making chatter marks.

Note:

Do not cut away more than 0,1 mm of material, otherwise the cylinder head must be renewed.

4. Cutting process.
 - Attach the 45° cutter with the turning handle to the guide pin and turn it smoothly in the clockwise direction, applying light pressure of approx. 2 kg.
 - Repeat this process until an even seat face is obtained.
5. Check the valve seat width and check for good valve contact.
 - Make four evenly spaced pencil lines on the valve seat ring.
 - Insert the valves and turn them through 90°.
 - The valve seat width, the area of contact of the valve seat face on the valve, and the evenness of the contact face can be determined according to how the pencil lines have blurred.
 - If necessary, repeat the cutting process.



6. Correct the position and width of the valve seat face.

Note:

The seat face of the valve should rest centrally on the seat face of the valve seat ring.

- The seat width and the position of the contact surface can be changed by reworking the

- correction angle (see previous step).
- If the lower correction angle (30°), is recut, the valve seat face is narrowed and displaced in the direction of the valve stem.
 - If the upper correction angle (70°) is recut, the valve seat face is narrowed and displaced in the direction of the valve head.
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