

## Grinding the cylinder head sealing surface



- Commercial available tools:
- Surface milling machine
  - Roughness measuring unit
  - Depth-measuring appliance



– W 01-05-01



The relevant manufacturer's specifications must be observed when working with the surface milling machine.

## Prepare cylinder head

- Remove valves.

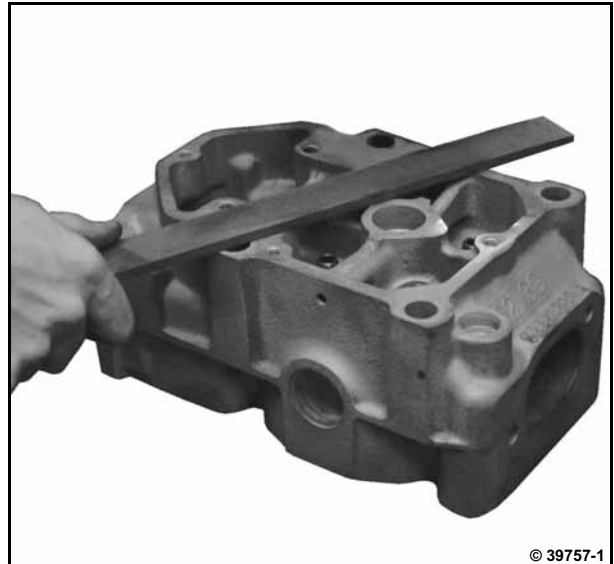


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- Deburr the upper face of the cylinder head.

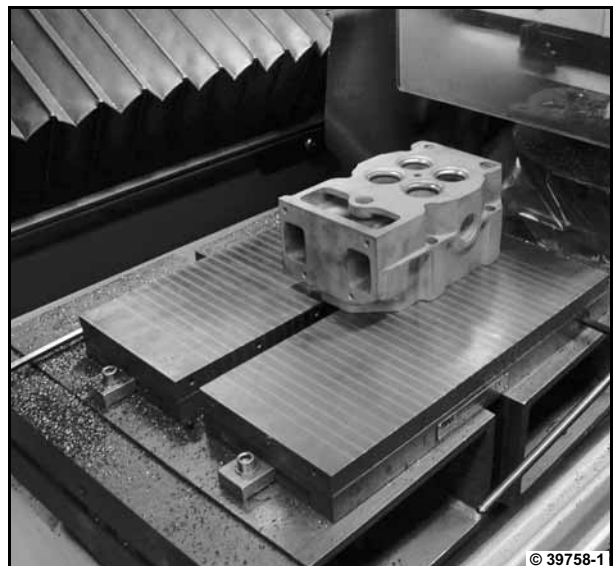


The upper face of the cylinder head must be burr-free and free of gasket remains to guarantee correct clamping of the cylinder head.



## Grinding cylinder head surface

- Clamp cylinder head on surface milling machine.
- Align cylinder head.
- Align tool of the surface milling machine with the cylinder head.



- Grind cylinder head sealing surface.
- Check the cylinder head sealing surface.



If the cylinder head sealing surface is not level, recognisable from differences in colour of the machined surface, the surface must be reground.

The adjustment range of the tool is a maximum 0.2 mm per grind.



### Checking the cylinder head sealing surface

- Visually inspect the cylinder head sealing surface.
- Visually inspect the combustion chamber surface.
- Measure the roughness of the cylinder head sealing surface with the roughness measuring instrument.



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If the measured value is out of tolerance, the cylinder head sealing surface must be remachined with different setting data for the surface milling machine.



- Measure cylinder head height with depth measuring appliance.

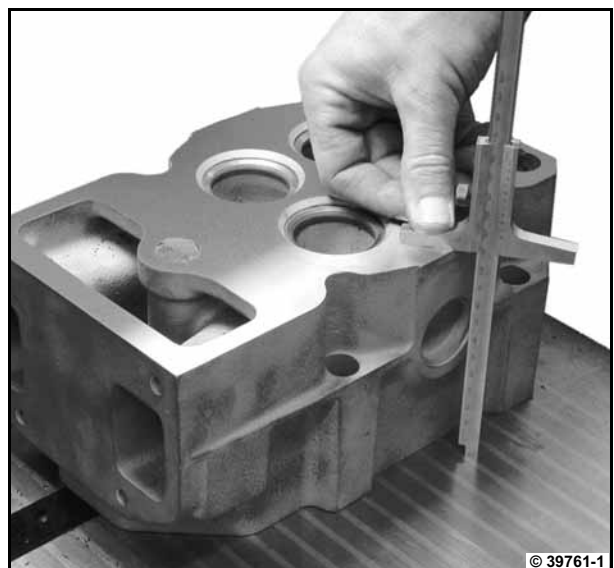


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P01 09



When the wear limit is reached, the cylinder head must be renewed.



- Remove cylinder head from the surface milling machine.



- Attach the repair date and company logo to the cylinder head.



**Attention!**

Do not mark identification on a sealing surface.



Mark the cylinder head after every repair.

- Install valves.



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## Removing and installing cylinder head



Commercial available tools:

- Socket wrench insert ..... 8016
- Rotation angle disc ..... 8190



- W 01-02-02
- W 01-04-09
- W 06-01-05 .....(A-bank)
- W 06-01-05 .....(B-bank)
- W 06-07-03 .....(A-bank)
- W 06-07-03 .....(B-bank)
- W 07-07-01

### Removing the cylinder head

- Remove charge air pipe (A-bank).  
 W 06-07-03
- Remove charge air pipe (B-bank).  
 W 06-07-03
- Remove exhaust line (A-bank).  
 W 06-01-05
- Remove exhaust pipe (B-bank).  
 W 06-01-05



- Remove rocker arm and rocker arm bracket.  
 W 01-02-02
- Removing fuel injectors.  
 W 07-07-01



Lay out components in the order in which they should be installed.

