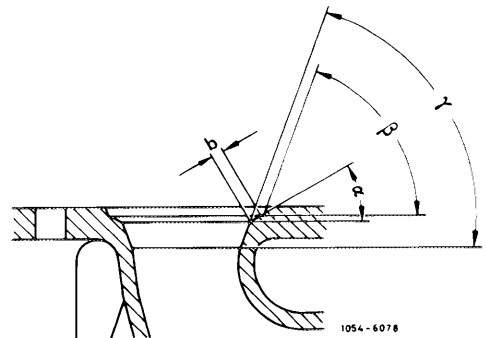


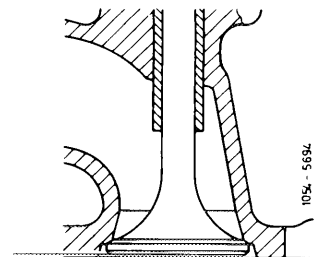
05—155 Refacing valve seats

Data	Intake	Exhaust
Valve seat width $b$	1.3–1.6	2.5–2.9
Valve seat angle $\alpha$	30°	
Correction angle top $\beta$	60°	
Correction angle bottom $\gamma$	acc. to shape of casting	
Permissible runout of valve seat	0.03	



Minimum distance "a" with new valves and new valve seats

Intake	+0.03 to -0.43
Exhaust	-0.38 to -0.78



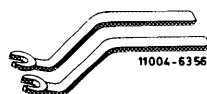
Maximum distance "a" with new valves and refaced valve seats

Intake	-1.5
Exhaust	

The maximum distance drops by the same amount as the cylinder head parting surface is refaced.

Special tools

Valve adjusting wrench 14 mm (two)



615 589 00 01 00

Holding wrench for valve spring cap



615 589 00 03 00

Installer for valve stem seals, intake and exhaust



617 589 00 43 00

Plug gauge 10 mm dia. for intake and exhaust valve guides



615 589 00 21 00

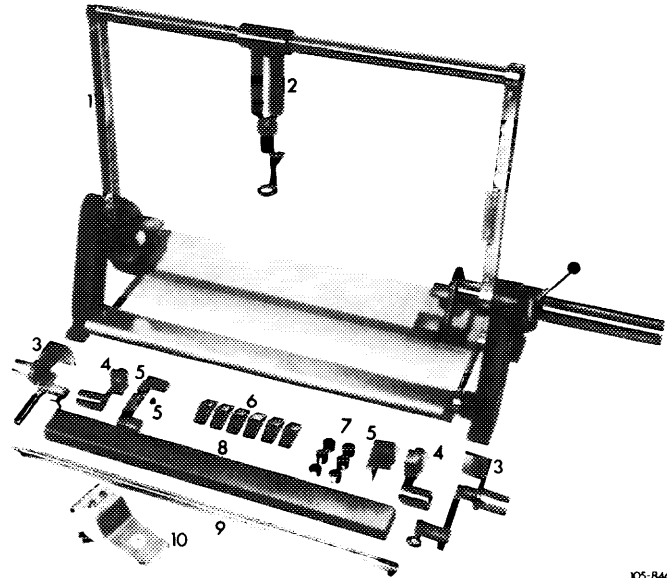
## Commercially available tools

Cylinder head clamping fixture	e. g. Christ, 6801 Neckarhausen order No. DBK 60-2
Valve seat borer	e. g. Hunger, 8000 München type VDNSL 1/45/30, order No. 236.03.308
Tester for valve seats	e. g. Hunger, 8000 München order No. 216.93.300

## Note

Mount cylinder head in clamping fixture for disassembly and treatment.

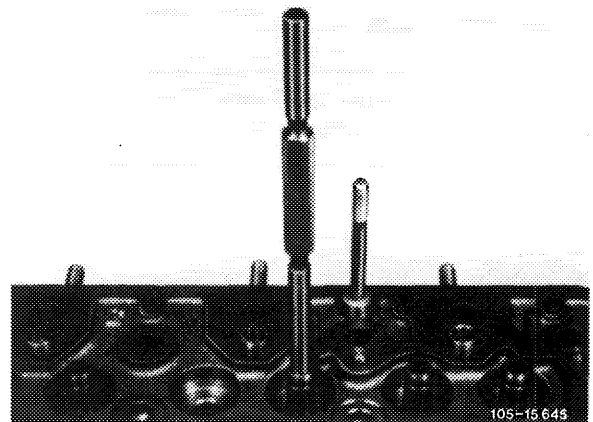
Reface valve seats with valve borer, valve grinder or valve cutter.



105-8466

## Refacing valve seats

- 1 Check valve guides, replacing if necessary (05-135).



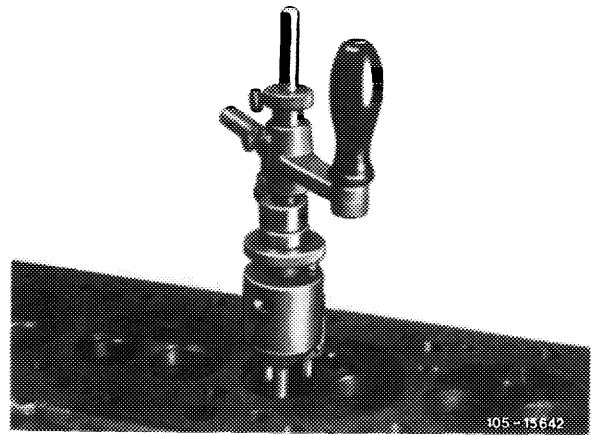
2 Reface valve seat ( $30^\circ$ ) (see tool maker's directions for use).

**Caution:**

Do not release pilot (013) until valve seat runout has been checked.

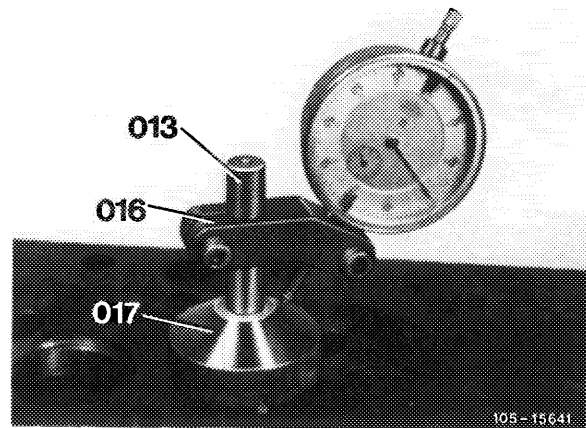
3 Measure valve seat width  $b$  and, if necessary, correct angle at bottom in accordance with shape of casting.

If necessary, additionally increase undercut ( $\beta$ ) at  $60^\circ$ .



4 Check valve seat runout.

For this purpose slip testing sleeve (017) onto pilot (013), together with dial gauge holder (016) and dial gauge. Now turn testing sleeve, making sure that permissible runout of 0.03 mm is not exceeded.



013 Pilot  
016 Dial gauge holder  
017 Testing sleeve

5 Insert new valve and measure maximum distance "a".

