

Cylinder Bores

Type	M 116, M 117
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Repair Stages

Standard	92.000
	92.022
Repair stage 1	92.500
	92.522
Repair stage 2	93.000
	93.022

Piston Clearance

Piston clearance	0.02
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Machining Limits

Perm. runout	0.013
Perm. conicity	0.013
Perm. deviation vertical to crankshaft axis, in relation to cylinder height	0.05
Perm. roughness	0.003–0.005
Perm. undulation	50 % of roughness

Maximum Wear Limit in Repair Cases

In driving or cross wise direction	0.10 mm
Runout and conicity	0.05 mm

Special Tool

Internal measuring instrument 50–100 mm dia.	000 589 04 19 00
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03.0 Measuring, Boring and Honing Cylinder Bores

Scope

- 1 Clean cylinder bores and measure wear with internal measuring instrument at three different spots (top, center and bottom lengthwise and crosswise) (Fig. 1), then determine repair stage resulting from wear.
- 2 Bore cylinder bores. For honing, the material allowance should not exceed 0.05 mm.
- 3 Hone cylinder bores.
- 4 Then clean crankcase and pressure-test, if required.

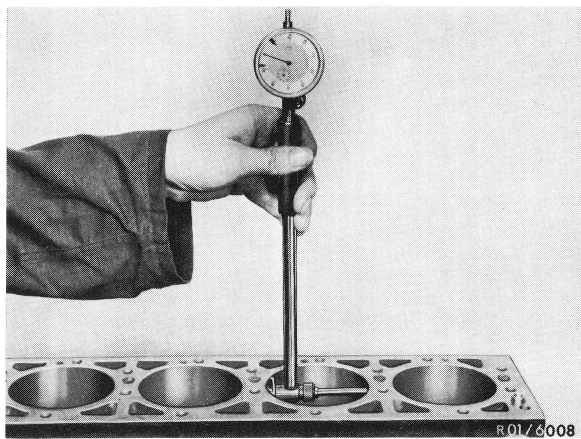


Fig. 1