

<p>Safety precautions</p> <ul style="list-style-type: none"> <input type="checkbox"/> Engine stopped <input type="checkbox"/> Shut-off starting air <input type="checkbox"/> Shut off cooling water <input type="checkbox"/> Shut off fuel oil <input type="checkbox"/> Shut-off cooling oil <input type="checkbox"/> Stop lub. oil circulation <input type="checkbox"/> Press Blocking - Reset <p>Short Description</p> <p>Inspection and honing of cylinder liner with honing brush.</p> <p>Starting Position</p> <p>Piston and connecting rod is removed 506-01.00</p> <p>Related Procedure</p> <p>Mounting of piston and connecting rod 506-01.20 Replacement of cylinder liner 506-01.40 Grinding of seal face on cylinder head and cylinder liner 506-01.45</p> <p>Qualified Manpower</p> <p>Duration in h : 1/2 Number : 1</p> <p>Data</p> <p>Data for pressure and tolerance (Page 500.35) Data for tightening torque (Page 500.40) Declaration of weight (Page 500.45)</p>	<p>Special tools</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Plate No.</th> <th style="text-align: left;">Item No.</th> <th style="text-align: left;">Note</th> </tr> </thead> <tbody> <tr> <td>52006</td> <td>488</td> <td></td> </tr> <tr> <td>52006</td> <td>511</td> <td></td> </tr> <tr> <td>52006</td> <td>606</td> <td>275-300 mm</td> </tr> </tbody> </table> <p>Hand Tools</p> <p>Drilling machine 60 - 180 rpm Honing oil Gas oil</p> <p>Replacement and wearing parts</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Plate No.</th> <th style="text-align: left;">Item No.</th> <th style="text-align: left;">Quantity</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Plate No.	Item No.	Note	52006	488		52006	511		52006	606	275-300 mm	Plate No.	Item No.	Quantity			
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Measurement of Cylinder Diameter

While the piston is removed from the cylinder, the latter is measured to record the wear. The measurements are taken by means of an inside micrometer, with measuring points at TDC-position for uppermost piston ring, halfway down and at the bottom of the cylinder liner, see fig. 1.

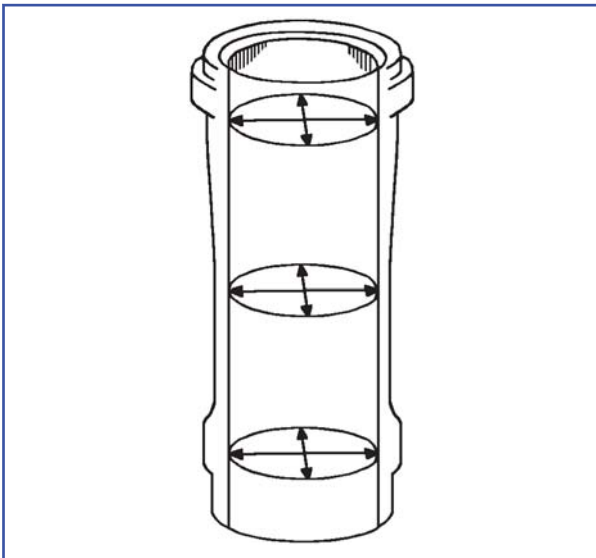


Figure 1: .

The measurements should normally be taken intransverse as well as in longitudinal direction.

When measuring, take care that the measuring tool has the approximately same temperature as the liner. When the wear of a cylinder liner exceeds the value indicated on page 500.35, i.e. when it becomes too troublesome to maintain satisfactory service conditions, the cylinder liner in question should be exchanged.

Honing the cylinder liner

The renovation can be made either with dismantled liner in the workshop or with liner mounted in the engine frame and by the use of the belonging funnel.

Prior to the honing, deposits of coke and possible wear edges in the top of the liner must be removed by scraping.

If the cylinder is of the flame ring type, the used flame ring has to be cleaned in water. Subsequently, the flame ring is remounted in the cylinder before carrying out the honing process.

Note: After the honing process has taken place the used flame ring is discarded. A new flame ring is always mounted in the cylinder when replacing a piston ring.

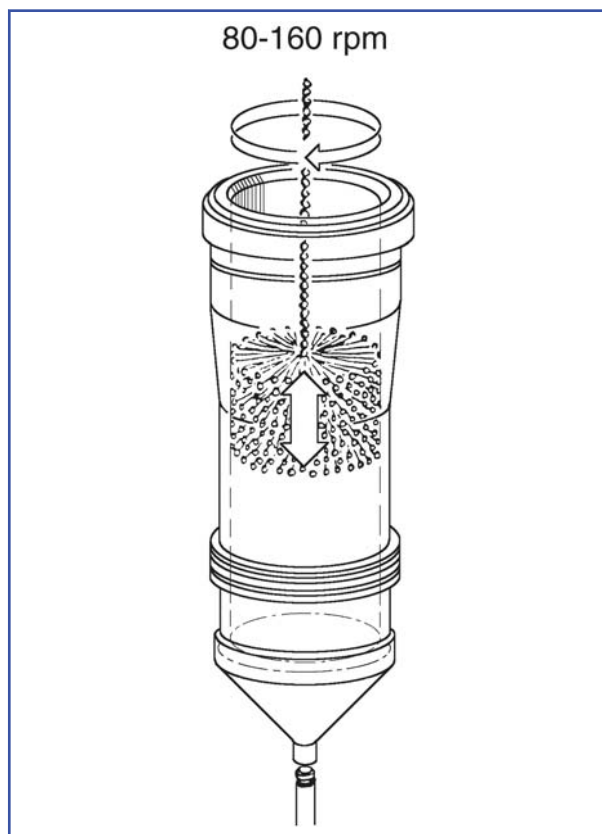


Figure 2: .

The honing is made by means of a flexhoner with finess grains 80-120. A revolution speed between 80 and 160 rpm is chosen.

In order to achieve the required angle between the honing grooves, see fig. 2, the vertical speed is adjusted to about 1 m/sec. which corresponds to about 2 sec. for one double movement (the flex honer is lead from below up and down in 2 sec.)

The procedure is to be continued until the cylinder wall is covered by honing grooves and the surface has a slight matt appearance and without any signs of glaze .

During the honing it is important to lubricate freely with honing oil or cutting oil.

After the honing, the liner is carefully cleaned with gas oil, and make sure that all abrasive particles have been removed.

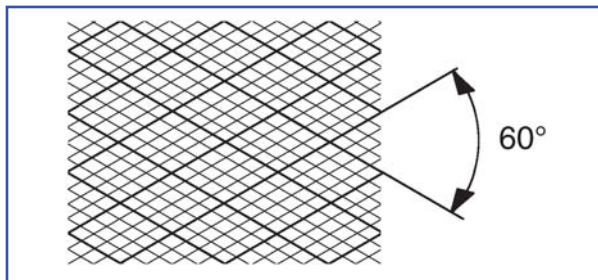
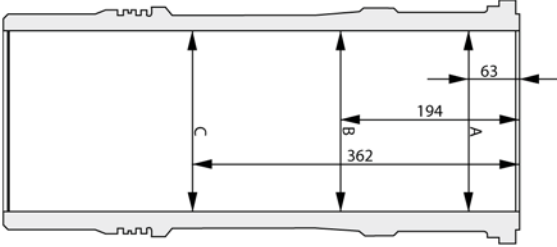


Figure 3: .

<p>506-01.35 Edition 01</p>	<p>Inspection and Honing of Cylinder Liner</p>	<p>Work Card Page 4 (4)</p>
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Measurement of Cylinder Liner							
Plant	Cyl. No.	Cylinder ident.No.	Running hours	Engine type	Report No.		
				Engine No.	Encl. No.		
				Running hours	Insp. date		
				Fuel	Sign.		
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
				<p>Liner temp. °C</p> <p>Remarks...</p>			
L							
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g							
t							
h							
i							
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e							
C							
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