

**Subject:** Cylinder Heads

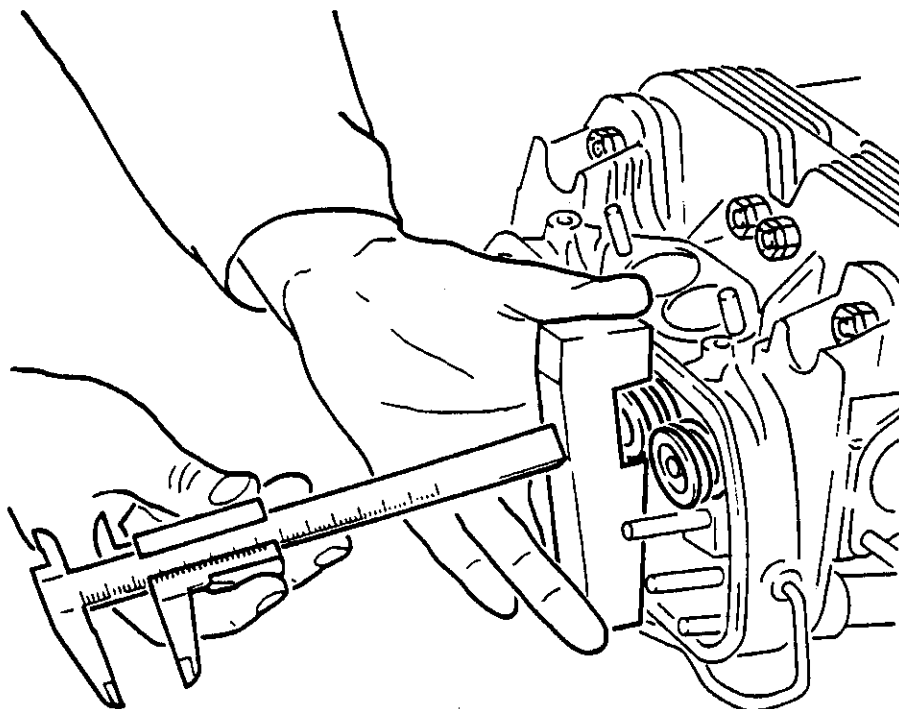
**Affected engine models:** All engine models:

- L 1700
- L 2000
- L 2400

**Background information:** After engine operating times between 500 - 600 hrs. cases of excessive wear on the sealing surfaces of the valves and valve seats has been observed occasionally.

**Priority:** At an operating time of 500 hrs.

- Compliance:**
- 1 Remove valve cover from cylinderhead on both sides.
  - 2 Remove rocker arm shafts from both sides. (4 Nuts M8)
  - 3 Position measuring device (P/N 803.001.130) as pictured over each valve. Measure the distance to the end of the valve with a depth gage. The minimum allowable distance is 24.0 mm for intake and exhaust valves. Replace cylinder heads if out of limits.
  - 4 Assembly in opposite sequence.
  - 5 Apply sealing compound CURIL-T (T/N 170.211.200) to the sealing surfaces of the support bosses for the rocker arm shafts before assembling.  
Torque M8 nuts (property class 10 l) to 25 Nm. Check valve clearance, adjust if necessary.



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**Caution:** If still within limits, but the distance measured already smaller than 24.5 mm, the check must be repeated every 100 hrs.

**Remarks:** Valve seat wear, as described above, cannot yet be completely explained. An important portion of the wear however is fuel dependant. At certain temperatures aggressive lead- and bromine compounds are produced, which act corrosive as well as abrasive. These symptoms are more prominent when using AVGAS rather than MOGAS<sup>1</sup>.

Till date there is no complete understanding on how to completely avoid valve wear. Our observations however show, that the wear rate is lower at lower operating temperatures. We recommend to carefully inspect the baffle system and to replace defective or insufficient baffles immediately. In addition it is recommended to install a cylinder head thermometer (CHT)<sup>2</sup>.

If it is not possible to maintain temperatures lower than 160 °C in cruise condition, please contact your aircraft manufacturer.

This document has been translated to the best of our knowledge. In case of doubt however only the German original shall be considered authoritative.

LBA approved:



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1 This is not a recommendation for the use of either AVGAS or MOGAS.

2 See Customer Information No. 1.

Bearb.: Stolinski

Replaces Edition from: 26.11.90

Page: 2

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of 2 Pages