Subject: Cylinder Heads

Affected engine models: All engine models:

- L 1700
- L 2000
- L 2400 EB, EE
- L 2400 DF, DT, EF, ET, DX, DS

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

Priority: At an operating time of 500 hrs.

Compliance:

1. Remove valve cover from cylinder head on both sides.
2. Remove rocker arm shafts from both sides (4 Nuts M8).
3. Position measuring device (P/N 803.001.130.000) as pictured over each valve. Measure the distance to the end of the valve with a depth gage.

<table>
<thead>
<tr>
<th>Type series</th>
<th>Valve shaft projection length for inlet and outlet valves</th>
<th>still acceptable*)</th>
<th>wear limit**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L 1700</td>
<td></td>
<td>24,50 mm</td>
<td>24,00 mm</td>
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<tr>
<td>L 2000</td>
<td></td>
<td>24,50 mm</td>
<td>24,00 mm</td>
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<tr>
<td>L 2400 EE, EB</td>
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<tr>
<td>L 2400 EF, DF</td>
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<td>23,80 mm</td>
<td>23,30 mm</td>
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<tr>
<td>L 2400 ET, DT</td>
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<tr>
<td>L 2400 DX, DS</td>
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</tbody>
</table>

*) Once the limit has been reached the valve shaft projection length must be checked every 100 hrs.

**) Once the wear limit has been reached, the cylinder head must be replaced.
4. Assembly in opposite sequence.

5. Apply sealing compound REINZOSIL SI 300 (P/N 708.413.070.000) to the sealingsurfaces of the support bosses for the rocker arm shafts before assembling. Torque M8 nuts (property class 10) to 25 Nm. Check valve clearance, adjust if necessary.

Caution: Once the wear limit has been reached, the cylinder head must be replaced!

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.

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).

If operating the engine in cruising flight speed and the cylinder head temperature is not within the specified limits, please contact your aircraft manufacturer. For temperature specifications, refer to the Operation and Maintenance Manual of the corresponding series.

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

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