Subject: Needle valves in carburettor models Stromberg Zenith 150 CD, 150 CD-3, and Zenith 28 RXZ

Affected engine models: All engine models:

- L 1700
- L 2000
- L 2400 EB, L 2400 EE

Background Information: On engines of the series mentioned above, excessive wear of the needle valves has been observed after 600 hours of operation.

Priority: At 500 hours operating time, 600 hours at the latest.

Compliance:

1. Carburettor Stromberg Zenith 150 CD, 150 CD-3
   Remove carburettor from engine, disassemble float chamber (6 screws). Remove float and replace needle valve with a new one. Adjust float level, assemble float chamber with new gaskets and mount carburettor using new gaskets also.
   In these carburettor types the 1.5 and 2.0 mm needle valves previously used will be replaced by a 1.75 mm inlet needle valve.

   Caution: Carburettors with a needle adjustment screw on the bottom of the float chamber need to be lubricated on the O-ring of the orifice bushing assy. The bushing retaining screw and the orifice adjusting screw do not have to be adjusted for this job.

2. Carburettor Zenith 28 RXZ
   Remove carburettor from engine, disassemble air inlet housing and float chamber. Remove float and replace needle valve with a new one (2 parts). Check float level. Assemble in opposite sequence. (Replace gaskets with new)

Ordering Information:

<table>
<thead>
<tr>
<th>Carburettor Zenith 28 RXZ</th>
<th>Part-No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle valve (1.75 mm)</td>
<td>170.132.022.000</td>
</tr>
<tr>
<td>Needle valve (2.5 mm)</td>
<td>175.132.025.000</td>
</tr>
<tr>
<td>Gasket set for carburettor</td>
<td>170.132.050.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carburettor Stromberg Zenith 150 CD</th>
<th>Part-No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle valve (1,75 mm)</td>
<td>170.131.010.000</td>
</tr>
<tr>
<td>Gasket set for carburettor</td>
<td>170.131.045.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carburettor Stromberg Zenith 150 CD-3</th>
<th>Part-No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle valve (1,75 mm)</td>
<td>170.131.010.000</td>
</tr>
<tr>
<td>Gasket set for carburettor</td>
<td>170.131.040.000</td>
</tr>
</tbody>
</table>

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.

Approval: This Technical Bulletin is approved in accordance with the procedures of the LBA approved development
Subject: Studs for cylinder heads

Affected engine models: All engine models:
- L 1700 E0 from S/No 1447 and factory overhauls after Aug. 16-th, 2001
- L 1700 EA from S/No 1891 and factory overhauls after Aug. 16-th, 2001
- L 1700 EB from S/No 1061 and factory overhauls after Aug. 16-th, 2001
- L 1700 EC from S/No 1089 and factory overhauls after Aug. 16-th, 2001
- L 1700 ED from S/No 1023 and factory overhauls after Aug. 16-th, 2001
- L 2000 E0 from S/No 1215 and factory overhauls after Nov. 10-th, 1987
- L 2000 EA from S/No 1125 and factory overhauls after Nov. 10-th, 1987
- L 2000 EB from S/No 1491 and factory overhauls after Nov. 10-th, 1987
- L 2000 EC from S/No 1007 and factory overhauls after Nov. 10-th, 1987

Background information: On abovementioned L 2000 engine models broken cylinder head studs were occasionally reported. These are traced back to excessive fatigue loads due to high-speed detonation.

Priority: without

Compliance: Studs, accompanied with threaded inserts according to Fig. 1 are replaced by those according to Fig. 2 by design, the new type studs have a superior fatigue strength. L 1700 series engines are also equipped with the new style cylinder head studs.

Remarks: The new type cylinder head studs cannot be retrofitted on older engines since the crankcase might be damaged when removing the threaded inserts. The new style studs require a different torque (see service literature).

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

Approval: This Technical Bulletin is approved in accordance with the procedures of the LBA approved development organization LBA.NSD.006.
Cylinder heads, which bear the following serial numbers, or which have been installed after 01.01. 1994 resp. have been repaired after this date, are modified already. The serial numbers are stamped into the cylinderhead next to the exhaust flange (to the side of the valve cover) and always start with „0“

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Serial Number</th>
<th>Serial Number</th>
<th>Serial Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>061</td>
<td>01348</td>
<td>03468</td>
<td>06985</td>
</tr>
<tr>
<td>0111</td>
<td>01465</td>
<td>03470</td>
<td>06987</td>
</tr>
<tr>
<td>0290</td>
<td>01468</td>
<td>04241</td>
<td>07038</td>
</tr>
<tr>
<td>0350</td>
<td>01565</td>
<td>04760</td>
<td>07054</td>
</tr>
<tr>
<td>0360</td>
<td>01568</td>
<td>04761</td>
<td>07110</td>
</tr>
<tr>
<td>0498</td>
<td>01709</td>
<td>05630</td>
<td>07289</td>
</tr>
<tr>
<td>0499</td>
<td>01723</td>
<td>05869</td>
<td>07290</td>
</tr>
<tr>
<td>0566</td>
<td>01846</td>
<td>05947</td>
<td>07348</td>
</tr>
<tr>
<td>0573</td>
<td>01895</td>
<td>05958</td>
<td>07374</td>
</tr>
<tr>
<td>0601</td>
<td>02101</td>
<td>06711</td>
<td>07412</td>
</tr>
<tr>
<td>0689</td>
<td>02425</td>
<td>06728</td>
<td>07413</td>
</tr>
<tr>
<td>0755</td>
<td>02474</td>
<td>06813</td>
<td>07485</td>
</tr>
<tr>
<td>0756</td>
<td>02477</td>
<td>06815</td>
<td>07486</td>
</tr>
<tr>
<td>0799</td>
<td>02488</td>
<td>06819</td>
<td>07492</td>
</tr>
<tr>
<td>01133</td>
<td>02607</td>
<td>06826</td>
<td>07588</td>
</tr>
</tbody>
</table>

Authorization: The work described herein may only be performed by the manufacturer or by authorized workshops

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:

23. Nov. 1994
Subject: Engine oils

Affected engine models: All engines models
L 1700
L 2000
L 2400

Background information: The engine oil specification released to date in accordance with API-SE or higher has repeatedly given cause for complaint. When inexpensive engine oils have been used, there has sometimes been cracking of the engine oil between valve shaft and valve guide of the exhaust valve. In extreme cases, this could lead to the valve sticking in the guide.

Priority: At next scheduled oil change

Compliance: Only quality engine oils mineral based or partially synthetic oils that comply at least with API-SG or API-SH specification may be used. These oils must also comply with Volkswagen standards VW 501 01 or VW 500 00. These modified specifications are to be entered by hand in operating manuals. These specifications will be integrated in the next revision of the operating manuals.

Remarks: Oils of the large mineral oil companies such as Agip, Aral, BP, Castrol, Dea, Elf, Esso, Mobil, Shell, Texaco and Veedol are to be understood as quality engine oils (Trademarks property of respective owners).

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

The german original of this Technical Bulletin has been authorized by the german aviation authority (LBA) on August 07, 1995.
Subject: Unleaded fuel

Affected engine models: All engine models:

- L 1700
- L 2000
- L 2400

Background information: Production stop of leaded automotive fuel.

Priority: None

Compliance: Series L 1700 and L 2400:

Engines of this series may be operated with immediate effect with unleaded fuel Super Plus unleaded, according to DIN EN 228. Other unleaded fuels may be used as long as they have a minimum octane rating of RON 98 and MON 87.

Series L 2000:

Engines of this series may be operated with immediate effect with unleaded fuel Super Plus unleaded according to DIN EN 228. Other unleaded fuels may be used as long as:
- they have a minimum octane rating of RON 98 and MON 87 and
- the engines of this series have been adapted pursuant to Technical Bulletin 42

General Remarks (all engine models):

The following should be taken into account:
1. The engine's fuel lines must be suited for unleaded fuel. On this, please check Technical Bulletin 50.
2. The airplane's fuel lines and tank must be suited for unleaded fuel. On this matter, please contact the airplane manufacturer or follow his instructions in this context.
3. Use brand name fresh fuel only. Storage of unleaded fuel is limited. Prolonged storage of fuel in open tanks may cause evaporation of light volatile components and a change in the fuel's properties. On addition, fuel properties are affected by seasonal changes.
4. The engine's temperature should be kept at the lowest possible level. Ideal is less than 180 °C in a climb. In this context see Technical Bulletin 44.
5. Use of additional additives is not permitted.
6. Mixing of lead and unleaded fuels is not advisable.
7. References in the manuals are to be added in handwriting.

Note: Technical Bulletin 40 is herewith invalid.

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

Approval: This Technical Bulletin is approved in accordance with the procedures of the LBA approved development organization LBA.NSD.006.
Subject: Cylinder

Affected engine models: All engine models:

L 1700

Background information: Reduction of engine weight.

Priority: without

Compliance: Engines of the above mentioned series, that were previously equipped with cast iron cylinders (P/N: 170.021.001.000) may now be equipped with aluminium cylinders (P/N: 170.021.006.000) optionally. With the use of aluminium cylinders the engine weight is reduced by 4 kg. Power ratings, operating limits and consumptions are not changed due to the measures above.

When converting to the new cylinder type, the baffles and deflectors of the cooling system must be adapted to the new cylinder contour according to technical bulletin 44.

Weight and balance must be performed on the aircraft due to the influence on the aircraft center of gravity.

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.

Approval: This Technical Bulletin is approved in accordance with the procedures of the LBA approved development organization I-EC 27.
Subject: Sealing compound CURIL-T, Part Number: 170.211.200.000

Affected engine models: All engine models:
- L 1700
- L 2000
- L 2400

Background information: Leaks on joints or threads that are sealed with CURIL-T, P/N: 170.211.200.000.

Priority: On occurrence of leaks, repairs, overhaul and manufacture of affected parts

Compliance: The sealing compound CURIL-T, P/N: 170.211.200.000 is replaced with ELASTOSIL N 189 sealing compound P/N: 708.413.004.000 in locations where previously CURIL-T was specified. Parts must be cleaned, dry, dust- and grease-free when assembled.

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.

Approval: This Technical Bulletin is approved in accordance with the procedures of the LBA approved development organisation LBA.NSD.006.
Revmaster sport aircraft engines have been developed through a thorough research and development program initiated in early 1968. Over the past several years the powerplant has evolved into a very reliable and economical propulsion system proven by thousands of accumulated hours powering hundreds of various sport aircraft in all parts of the world. Revmaster uses a combination of late model Volkswagen engine parts in conjunction with highly developed major components such as crankshaft, cylinders and pistons, etc. This ultimate combination results in the finest highly refined four cylinder engine for the international sport aircraft movement.

BEFORE YOU BUY A SPORT AIRCRAFT ENGINE CHECK THESE FEATURES.

- Specially designed crankshaft and flange
- Dual intake ports and dual ignition
- Crankshaft driven magneto
- Specially designed thrust bearing to change thrust load from No. 1 bearing to No. 3 bearing making this engine ideal for push or pull applications

$1642.00 FOB Chino, California

OPTIONAL FEATURES EXTRA

- 12 V. Starter & Ring Gear Assembly
- Solid State Alternator
- Turbo-Charger
- Oil Controlled Propeller
- Aluminum Finned Cylinders
- Oil Cooler
- Hydraulic Lifters and Sodium Filled Valves

FOR DETAILED INFORMATION
PACKET SEND $2.00 CHECK OR MONEY ORDER TO: Revmaster Aviation
Chino Airport
Chino, California 91710