

2. Perform an endoscopic inspection of the combustion chambers every 100h. Heavy deposits may cause mechanical contact between cylinder head and the piston.
3. Perform an endoscopic inspection of the valve seats every 100h for deposits and/or burn marks caused by leaking valves.
4. Perform an endoscopic inspection of the intake and exhaust ports in the cylinder heads every 100h for excessive deposits, which may cause a reduction in cross-section, especially in the intake port.
5. Check spark plugs every 50h for excessive deposits, replace if necessary.
6. In case it is determined that the valve clearance has become larger, the cylinder heads must be dismantled and must be replaced or repaired.
7. All findings shall be noted and forwarded to the engine manufacturer to review the inspection intervals.

Remarks: The endoscopic inspection may be carried out by inserting an endoscope (borescope) into the spark plug hole. To view all areas the engine can be rotated slowly by hand. Take care not to damage the spark plug threads, the piston and/or the cylinder head while performing the inspection.

Note: Technical Bulletin 53.2 is herewith invalid.

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Approval: This Technical Bulletin was approved according to the procedures of the EASA Design Organisation No.: EASA.21J.270

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.

Subject: Fuels**Affected engine models:**

All engine models:

L 1700**L 2000****L 2400****Background information:**Production stop of leaded automotive fuels.
Use of leaded aviation fuels**Priority:** None**Compliance: Use of unleaded automotive fuels:****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.

Use of leaded aviation fuels:**Series L 1700, L 2000 and L 2400:**

Engines of the abovementioned series may be operated with AVGAS 100LL

Other fuels (high lead content) with a lead content of more than 0.56 g/l (ca. 0.8 g/kg) and a minimum of 98 RON and 87 MON may be used under the following conditions resp. restrictions:

1. Use of high lead content fuels is not allowed in L 2400 DF, DT, EF and ET series engines.