

SERVICE INSTRUCTION

OIL LEVEL CHECK

FOR ROTAX[®] ENGINE TYPE 912 AND 914 (SERIES)

SI-27-1997 R1

Repeating symbols:

Please, pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ **WARNING:** Identifies an instruction, which if not followed, may cause serious injury or even death.
- **CAUTION:** Denotes an instruction, which if not followed, may severely damage the engine or could lead to suspension of warranty.
- ◆ **NOTE:** Information useful for better handling.

1) Planning information

1.1) Engines affected

All versions of the engine type:

- 912 A (series)
- 912 F (series)
- 912 S (series)
- 912 UL (series)
- 912 ULS (series)
- 912 ULSFR
- 914 F (series)
- 914 UL (series)

1.2) Concurrent ASB/SB/SI and SL

Further to this Service Bulletin the following additional Service Bulletins and Service Instructions must be observed and complied with:

- SB-912-040 Introduction of a new oil dipstick, current issue.
- SB-914-026 Introduction of a new oil dipstick, current issue.
- SI-04-1997 Venting of lubrication system, current issue.
- SI-18-1997 Selection of motor oil and general operating tips, current issue.
- SI-27-1997 Oil level check, current issue.
- SI-912-010 Oil change, current issue.
- SI-914-011 Oil change, current issue.

1.3) Reason

Additional and detailed information regarding the checking of the oil level on ROTAX[®] engines of type 912 and 914 are considered to be necessary.

Incorrect oil level readings are being caused by incorrect oil level check procedures.

1.4) Subject

Oil level check.

1.5) Compliance

At the pre-flight check or the next maintenance event.

1.6) Approval

Not required

1.7) Manpower

None

d01997

1.8) Mass data

change of weight - - - none.
moment of inertia - - - unaffected.

1.9) Electrical load data

no change

1.10) Software accomplishment summary

no change

1.11) References

In addition to this technical information refer to current issue of

- Operator's Manual (OM)
- Engine data sheet
- Power, torque and fuel consumption curves
- Illustrated Parts Catalog (IPC)
- Installation Manual (IM) and Inspect List
- All relevant Service Bulletin (SB)
- All relevant Service Instructions (SI)
- Maintenance Manual (MM)

1.12) Other publications affected

none

1.13) Interchangeability of parts

Not affected

2) Material Information

None

3) Accomplishment / Instructions

Accomplishment

All the measures must be taken and confirmed by the following persons or facilities:

- ROTAX[®] - Airworthiness representative
- ROTAX[®] - Distributors or their Service Centers
- Persons approved by the respective Aviation Authority

▲ WARNING: Proceed with this work only in a non-smoking area and away from sparks or open flames. Switch off ignition and secure engine against unintentional operation. Secure aircraft against unauthorized operation.

▲ WARNING: Risk of scalds and burns! Allow engine to cool sufficiently and use appropriate safety gear while performing work.

▲ WARNING: Should removal of a locking device (namely lock tabs, self-locking fasteners) be required when undergoing disassembly/assembly, always replace with a new one.

◆ NOTE: All work has to be performed in accordance with the relevant Maintenance Manual.

3.1) Instructions

Proceed as follows for

- checking the oil level
- replenishing of oil level

▲ **WARNING:** Assure both ignition circuits are "Off" (grounded) before cranking the propeller. Anchor the aircraft and ensure the cockpit is occupied by a competent person who will be in control of aircraft operation.

Risk of burns by hot oil and engine parts exists, use appropriate safety measures! Handle propeller with extreme care and secure engine against unintentional operation!

3.1.1) Oil level check:

a) check for oil leaks:

If leaks are evident, check cause of failure and rectify before flight.

b) check of oil quantity:

- Level aircraft for accurate reading.

Prior to oil level check, remove the oil tank cap and turn the propeller by hand in the direction of normal rotation to transfer all the oil from the engine crankcase to the oil tank.

▲ **WARNING:** Propeller may not be turned in reverse of the normal direction of rotation.

The process is finished when crankcase air can be heard being forced back to the oil tank. This will be noticed as a gurgle sound, coming from the oil tank with the cap removed, verifying the crankcase is purged of residual oil.

The oil level in the oil tank should be between the two marks (max./min.) on the dip-stick, but must never fall below the min. mark.

- Remove the oil dipstick and clean it.
- Return the oil dipstick to the tank.

◆ **NOTE:** Hold dipstick a few seconds in position to allow an accurate reading.

- Pull out dipstick and check the oil level.

3.1.2) Replenishing of oil quantity:

For normal engine operation maintain the oil level midway between the two marks.

■ **CAUTION:** For longer flights replenish oil to max. mark to warrant more oil reserve.

Do not overfill oil tank, as an excessive oil level over the "max." mark will allow oil to escape via the venting. Difference between "max." and "min." = 0,45 l (0.95 lig.pts). If engine is equipped with the genuine ROTAX[®] oil dipstick part no. 956151. Check compliance with Service Bulletin SB-912-040, SB-914-026, "Introduction of a new oil dipstick", current issue to verify your engine has the proper dipstick.

▲ **WARNING:** Non-compliance with this recommendations could result in engine damage, personal injury or death!

- Restore aircraft to original operating configuration.

3.2) Test run

Conduct test run including ignition and oil/coolant leak checks.

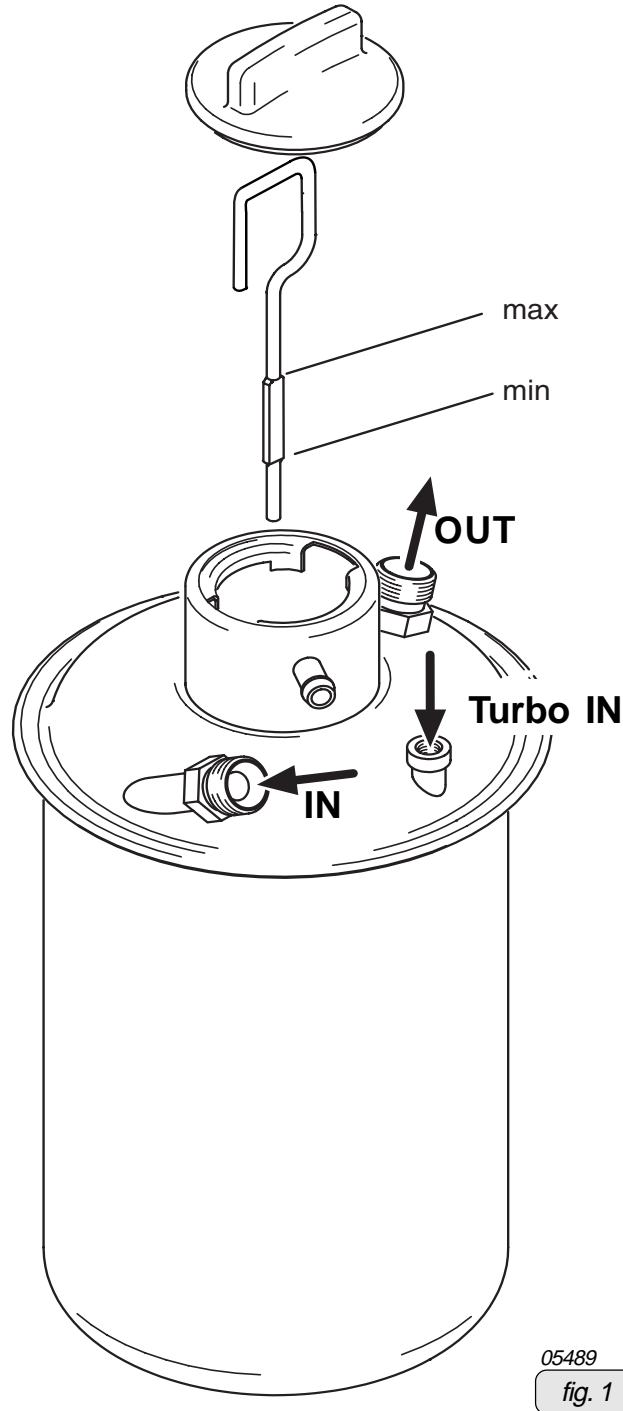
3.3) Summary

These instructions (section 3) have to be conducted in compliance with section 1.5.

Approval of translation to best knowledge and judgment - in any case the original text in the German language and the metric units (SI-system) are authoritative.

4) Appendix

the following drawings should provide additional information:



◆ NOTE: The illustrations in this document show the typical construction. They may not represent full detail or the exact shape of the parts which have the same or similar function. Exploded views are **not technical** drawings and are for reference only. For specific detail, refer to the current documents of the respective engine type.