



Service Bulletin

Periodic checking of the crankshaft journal (power take off side) for ROTAX Engine Type 912 and 914 (Series)

MANDATORY

Symbols:

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

- ▲ 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 aircraft / engine or could lead to suspension of warranty.
- ◆ NOTE: Information useful to implement the change more easily.

1. General

<u>Issued by:</u>	Remos Aircraft GmbH Flugzeugbau Franzfelde 31 D-17309 Pasewalk Web: www.remos.com - Telephone: +49-3973-225519-0
<u>Release date:</u>	October 10 th 2013
<u>Date of effect:</u>	immediately
<u>Compliance:</u>	during the next mandatory maintenance event, or at the next 100 hours of operation, or every 12 months
<u>Release Number:</u>	SB-008-ROTAX-crankshaft
<u>Superseded notice:</u>	none
<u>Referenced Document:</u>	ROTAX Service Bulletin ROTAX SB-912-064 / SB-912-064UL, latest issue available via download on www.flyrotax.com



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- Models affected: G3/600, GX
- Affected S/N: Aircraft with engine serial no. as per referenced document plus additional crankshafts with serial numbers as per referenced document which have been delivered as spare parts or installed at engine repair / general overhaul
- Reason: As per referenced document: "Due to a deviation in the manufacturing process some crankshafts may develop a crack on the power take off side. These cracks can cause breakage of the crankshaft in the support bearing during operation. In this case the function of the support bearings (consisting of 3 main bearings and 2 support bearings) is compromised. The operation reliability, however, is given until the next maintenance."
- Subject:
- Periodic checking of the crankshaft journal (power take off side) for ROTAX engine type 912 and 914 (Series)
- Time required:
- check for applicability: approx. 10 min
 - check of crankshaft journal: approx. 30 min

2. Material Information

- Tools needed:
- As per referenced document
- Parts needed:
- As per referenced document

3. Compliance

- Schedule for Inspection:
- during the next mandatory maintenance event, or at the next 100 hours of operation, or, if engine was operated less than 100 hours during one year, an inspection should also be performed every 12 months.
 - periodically every 100 hours of operation
 - up to a TSN of 1000 h this periodic checking must be performed

- ◆ **NOTE:** In the event of a sudden drop in oil pressure of at least 0.5 bar (7.3 psi) in the same operating point (also within operating limits) the checking of the crankshaft journal (power take off side) must be conducted as soon as possible. This sudden drop can be a symptom of a broken crankshaft journal.



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- Level of maintenance:
- check for applicability: none
 - check of crankshaft journal: line

▲ **WARNING:** As per referenced document: "Non-compliance with these instructions could result in engine damages, personal injuries or even fatal injuries."

- License required:
(US-LSA)
- check for applicability:
- owner/operator with Sport Pilot Licence (or higher)
 - LSA Repairman, or
 - A&P Mechanic, or
 - Part 145 Repair Station

- check of crankshaft journal:
- owner/operator with Sport Pilot Licence (or higher)
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- License required:
(EASA-LSA)
- check for applicability:
- Owner/Operator
 - REMOS Service Center

- check of crankshaft journal:
- Owner/Operator
 - REMOS Service Center

4. CHECK for APPLICABILITY

Check Engine SN: The engine serial number is named on the aircraft equipment list and on the engine data plate, which is found on the ignition cover, on the left, opposite the electric starter. See ROTAX Maintenance Manual (Line) for further information.

Check crankshaft SN: If crankshaft has been replaced before or delivered as spare parts, check documentation for respective serial number of the crankshaft.

Applicability: In case the engine is not affected by the referenced document, sign off aircraft and engine logbook by a licensed person. Include engine SN in the logbook entry.

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In case the engine is affected, the referenced document must be complied with to the full extent. Check off aircraft and engine logbook by licensed person after inspection or repair is accomplished.

5. CHECK of Crankshaft Journal

Instructions: Follow the referenced document.

- ◆ NOTE: Before maintenance, review the entire documentation to make sure you have a complete understanding of the procedure and requirements.
- ◆ NOTE: All work has to be performed in accordance with the relevant Installation Manual and Maintenance Manual.

Safety notice:

- ▲ WARNING: Proceed with this work only in a non-smoking area and not close to sparks or open flames. Switch off ignition and secure engine against unintentional operation. Secure aircraft against unauthorized operation. Disconnect negative terminal of aircraft battery.
- ▲ WARNING: Risk of scalds and burns! Allow engine to cool sufficiently and use appropriate safety gear while performing work.
- CAUTION: Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with new ones.
- CAUTION: Danger of cutting your fingers! Risk of injury due to sharp-edged components. Wear protective gloves.

Documentation: Execution of this Service Bulletin must be entered in both the aircraft and engine logbook by a licensed person. Include engine SN in the logbook entry.

**REMOS wishes you safe and fun flights!
Always check your aircraft before you fly!**