

Service Bulletin

Periodic Inspection of the carburetor floater buoyancy for ROTAX Engine Type 912 (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

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Release date: October 10th 2014

Date of effect: immediately

Compliance: at the next scheduled maintenance event, within 25 operating hours or within 60 days from the release of ROTAX service bulletin SB-912-065, whichever occurs first. After that, periodically every 25 operating hours or after 60 days. In case of rough running engine, fuel odors, or fuel leaking from the engine, before next flight.

Release number: SB-009-ROTAX-carburetor-floater

Superseded notice: none

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- Referenced document: ROTAX Service Bulletin ROTAX SB-912-065/SB-912-065UL, latest issue available via download on www.flyrotax.com
- Models affected: G3/600, GX
- Affected S/N:
- Aircraft with engine serial no. as per referenced document
 - Aircraft with carburetor serial no. as per referenced document (might differ from affected engine S/N in case of carburetor replacement)
 - Aircraft with carburetor floaters part no. 861184 installed since Jul 1st 2012 at engine repair / general overhaul
- Reason: As per referenced document: “Due to a deviation in the manufacturing process some floaters could absorb more fuel and so have more weight. This leads to a loss of float buoyancy and wrong regulation of the fuel in the float chamber. Possible effects may be a rough engine running, especially at low speeds, engine stoppage and/or fuel leakage in the area of the carburetor.”
- Subject:
- Periodic inspection of the float buoyancy of ROTAX engine type 912 (Series)
- Time required:
- check for applicability approx. 20 min
 - check for floater buoyancy: approx. 45 min
 - weighing/replacing floaters: approx. 3 hours

2. Material Information

- Tools needed:
- As per referenced document and instructions of chapters 5 and 6
- Parts needed:
- As per referenced document and instructions of chapters 5 and 6

3. Compliance

- Schedule for inspection:
- At the next scheduled maintenance event, within 25 operating hours or within 60 days from the release of ROTAX service bulletin SB-912-065, whichever occurs first.
 - After that, periodically every 25 operating hours or after 60 days.
 - In case of rough running engine, fuel odors, or fuel leaking from the engine, before next flight.

◆ **NOTE:** As per referenced document: „the inspection must be continued even after a replacement of the float, until new and improved floater are available.“

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- Level of maintenance:
- check for buoyancy: line
 - weighing/replacing carb. floaters: 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 for carburetor floater buoyancy:
- owner/operator with Sport Pilot Licence (or higher)
 - LSA Repairman, or
 - A&P Mechanic, or
 - Part 145 Repair Station

- weighing/replacing carb. floaters:
- owner/operator with Sport Pilot Licence (or higher)
 - LSA Repairman
 - A&P Mechanic
 - Part 145 Repair Station

- License required:
(EASA-LSA)
- check for applicability:
- pilot / owner with appropriate pilot license
 - REMOS Aircraft GmbH Flugzeugbau or REMOS Service Center

- check for carburetor floater buoyancy:
- REMOS Aircraft GmbH Flugzeugbau or REMOS Service Center

- weighing/replacing carb. floaters:
- REMOS Aircraft GmbH Flugzeugbau or 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.

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Check floater replacement: Check the aircraft maintenance documentation if the carburetor or carburetor floater have been replaced. If the carburetor floaters have been replaced with floaters with part no. 861184 since July 1st 2012 then they are affected.

Check carburetor SN: In any case check whether the carburetor serial number falls into the affected S/N range specified in the referenced document. The carburetor serial number is engraved on the inner side of the carburetor casing.

Applicability: In case the engine and the carburetors are not affected by the referenced document, sign off aircraft and engine logbook by an authorized person as per section 3. Include engine SN and SN of the carburetors in the logbook entry.

In case the engine/carburetor is affected, the instructions in chapters 5 and 6 shall be complied with to the full extent.

5. INSTRUCTIONS for CHECK of CARBURETOR FLOATER BUOYANCY

5.1 Instructions: Follow the referenced document and instructions given below.

- ◆ 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.

5.2 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.

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5.3 Preamble:

The carburetor floaters have to be checked whether they have absorbed too much fuel. ROTAX defines a procedure for this in the referenced document.

5.4 Bill of Materials:

See referenced document

5.5 Preparation:

Remove both the upper and lower engine cowling

5.6 Procedures:

See instructions in referenced document

6. INSTRUCTIONS for WEIGHING or REPLACING CARBURETOR FLOATERS

6.1 Instructions:

Follow the referenced document and instructions given below.

◆ 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.

6.2 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.

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6.3 Preamble:

If the previous check revealed a buoyancy of one or more floaters outside the specified limits, they need to be removed from the engine, weighed and replaced if they exceed a weight margin specified in the referenced Document. For this purpose, the carburetors do not have to be removed from the aircraft but tilted outwards to allow access to the floater chambers. This procedure is specific to the REMOS installation of the engine and is described below.

6.4 Bill of Materials:

1 x M6 self-locking nut
cable ties
locking varnish

See referenced document for additional parts

6.5 Preparation:

Remove both the upper and lower engine cowling

6.6 Procedures:

6.6.1 Loosen the Airbox

Loosen the clamp holding the air filter cover with intake air duct on the airbox. Take the intake air duct off the air box, remove cable ties as required. Remove the nut fixing the lower support of the airbox, it is accessible from the left side of the engine.

6.6.2 Loosen the Carburetors

Loosen the hose clamp of the rubber tube stub connecting the carburetor to the airbox on the carburetor side. Loosen the hose clamp connecting the carburetor to the intake manifold.

6.6.3 Tilt the Carburetors

Now it should be possible to tilt the entire carburetor assembly with the bottom outwards. This gives access to the float chamber.



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6.6.4 Follow the ROTAX Instructions

See instructions in referenced document.
Steps 3.4) 1 and 3.6) 4 do not apply.

6.6.5 Refasten Carburetors and Airbox

After finishing the ROTAX instructions and having correctly reassembled the floater chamber, the carburetors need to be reinstalled properly.

First adjust the carburetors properly.

Refasten all hoses and mechanical connections that were loosened in steps 6.6.1 to 6.6.3 in reverse order. Where self locking nuts are used, replace them with new ones. Where lock varnish seals were broken, replace them. Where cable ties were cut, replace them.

7. DOCUMENTATION:

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

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