



## Safety Alert

### Replacement of the carburetor floater 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

<u>Issued by:</u>	Remos AG Franzfelde 31 D-17309 Pasewalk Web: <a href="http://www.remos.com">www.remos.com</a> - Telephone: +49-3973-225519-0
<u>Release date:</u>	July 20 <sup>th</sup> 2016
<u>Date of effect:</u>	immediately
<u>Compliance:</u>	Before next flight.
<u>Release number:</u>	SA-007-engine-carburetor-float-replacement
<u>Superseded notice:</u>	None
<u>Referenced documents:</u>	ROTAX Alert Service Bulletins ROTAX ASB-912-069 / ASB-912-069UL, latest issues available via download on <a href="http://www.flyrotax.com">www.flyrotax.com</a>
<u>Models affected:</u>	G3/600, GX



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- Affected S/N:
- Aircraft with engine serial no. as per referenced documents
  - 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. 861185 installed since May 9<sup>th</sup> 2016 at engine repair / general overhaul

Reason: As per referenced document: “Due to a deviation in the manufacturing process a partial separation of the outer skin because of resonance vibrations during engine operation may occur. These separated particles might lead to a restriction of the jets in the carburetor. As a consequence the fuel supply to the affected cylinder bank may be reduced or blocked. Possible effects may be a rough engine running behavior with reduced fuel flow, up to a major power loss or engine shut down with blocked fuel flow on the affected carburetor.

- Subject:
- Exchange of floats of ROTAX engine type 912 (Series)

- Time required:
- check for applicability                      approx. 20 min
  - replacing floaters:                              approx. 1...2 hours

### 2. Material Information

- Tools needed:
- If carburettor or engine S/N is not affected: None
  - If carburettor or engine S/N is affected: Standard metric tools

- Parts needed:
- If carburettor or engine S/N is not affected: None
  - If carburettor or engine S/N is affected: As per referenced document and chapter 5.4

### 3. Compliance

- Schedule for inspection:
- Before next flight

- Level of maintenance:
- check for applicability:                      line
  - replacing carb. floaters:                      line

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



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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

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

replacing carb. floaters:

- REMOS Aircraft GmbH Flugzeugbau or REMOS Service Center

#### 4. CHECK for APPLICABILITY

Check engine SN:

The engine serial number is given 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 floater replacement:

Check the aircraft maintenance documentation if the carburetor or carburetor floater have been replaced recently. If the carburetor floaters have been replaced with floaters with part no. 861185 since May 9<sup>th</sup> 2016 then they may be affected.

Check carburetor SN:

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 crank case facing side of the carburetor casing.



NOTE: The carburetor and/or the floats may have been removed from the initial engine and used on another one. Engines and/or carburetors with serial numbers higher than the affected range of serial numbers are equipped with tested floats. These floats are marked as described in section 3.3 of the referenced ROTAX SB and can be used safely.

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.



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In case the engine, carburetor or floats are affected, the instructions in chapter 5 shall be complied with to the full extent.

### 5. INSTRUCTIONS for REPLACING CARBURETOR FLOATS

#### 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.

#### 5.3 Preamble:

If the carburetor floats fall within the criteria stated above and in ROTAX document SB-912-067, they need to be replaced by floats, that are approved and marked by ROTAX. 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.



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### 5.4 Bill of Materials:

1 x M6 self-locking nut  
cable ties  
locking varnish

See referenced document for additional parts

### 5.5 Preparation:

Remove both the upper and lower engine cowling

### 5.6 Procedures:

#### *5.6.1 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.

#### *5.6.2 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.

#### *5.6.3 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.

#### *5.6.4 Follow the ROTAX Instructions*

See instructions in referenced document.  
Steps 3.2) 2 and 3.4) 4 do not apply.

#### *5.6.5 Refasten Carburetors and Airbox*

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



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First adjust the carburetors properly.

Refasten all hoses and mechanical connections that were loosened in steps 5.6.1 to 5.6.3 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.

### **6. 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.

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