

AIRWORTHINESS DIRECTIVE

ENGINE FUEL AND CONTROL – FLOAT – INSPECTION/REPLACEMENT								
AD No: 2016-0002								
Issue Date: 07 September 2016								
Effective Date: 07 September 2016								
Type Approval Holder Name: BRP-POWERTRAIN GmbH & Co. KG	Type/Model Designation(s): Rotax 912 and 914 engines							
Related Mandatory Continuing Airworthiness Information Reference: EASA AD No: 2016-0144 , dated 19 July 2016 Rotax ASB-912-069ULR1 , dated 22 July 2016 Rotax ASB-914-051ULR1 , dated 22 July 2016								
Supersedure N/A								
Related EASA Service Information Bulletin reference: N/A								
Manufacturer(s): BRP-Powertrain GmbH & Co. KG								
Applicability: All engines of Series 912 UL, 912 ULS, 914 UL and 582 UL are affected, if at least one of the following criteria applies: Criterion A) Engine Serial Number: Rotax 912 UL, from S/N 6 772 132 up to S/N 6 772 135 incl. / from 6 772 144 up to 6 772 160 incl. Rotax 912 ULS, from S/N 6 786 001 up to S/N 6 786 013 incl. / from S/N 6 786 017 up to S/N 6 786 037 incl. Rotax 914 UL, from S/N 9 575 705 up to S/N 9 575 707 incl. / from S/N 9 575 709 up to S/N 9 575 720 incl. / from S/N 9 575 724 up to S/N 9 575 743 Rotax 582 UL, from S/N 9 618 523 up to S/N 9 618 557 inclusive / from S/N 9 618 569 up to S/N 9 618 572 inclusive / S/N 9 618 609 / S/N 9 618 610 Criteria B) Carburetors: The part numbers and serial numbers of the carburetors:								
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Carburetors</th><th>Cyl.</th><th>Serial Number</th></tr></thead><tbody><tr><td>912 UL</td><td>1/3</td><td>Part no. 892500 – from S/N 161138 up to S/N 161143 incl. / from S/N 161483 up to S/N 161490 incl. / from S/N 161493 up to S/N 161507 inclusive / from</td></tr></tbody></table>	Carburetors	Cyl.	Serial Number	912 UL	1/3	Part no. 892500 – from S/N 161138 up to S/N 161143 incl. / from S/N 161483 up to S/N 161490 incl. / from S/N 161493 up to S/N 161507 inclusive / from		
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		S/N 161516 up to S/N 161518 incl. / S/N 161526
	2/4	Part no. 892505 – S/N 162193 / S/N 162194 / from S/N 162196 up to S/N 162199 incl. / S/N 162205
912 ULS	1/3	Part no. 892530 - from S/N 161528 up to S/N 161531 incl. / S/N 161534 / S/N 161535 / S/N 161537 / S/N 161542 / S/N 161558 / S/N 161560 / S/N 161567 / S/N 161568 / S/N 161570 / from S/N 161937 up to S/N 161939 / from S/N 161941 up to S/N 161951 incl. / from S/N 161953 up to S/N 161980 incl. / from S/N 161982 up to 161989 incl. / from S/N 161992 up to S/N 162042 incl. / from S/N 162044 up to S/N 162051 incl. / from S/N 162053 up to S/N 162055 incl. / from S/N 162235 up to S/N 162250 incl. / from S/N 162252 up to S/N 162275 incl. / from S/N 162277 up to S/N 162282 incl. / S/N 162294 / S/N 162298
	2/4	Part no. 892535 - S/N 161583 / from S/N 161585 up to S/N 161587 incl. / from S/N 161837 up to S/N 161868 incl. / from S/N 161870 up to S/N 161873 incl. / from S/N 161875 up to S/N 161919 incl. / from S/N 161921 up to S/N 161936 incl. / from 162102 up to S/N 162120 / from S/N 162122 up to S/N 162143 incl. / S/N 162145 / S/N 162146 / from S/N 162400 up to S/N 162411 incl. / from S/N 162413 up to S/N 162430 incl. / from S/N 162432 up to S/N 162435 incl. / from S/N 162437 up to S/N 162440 incl. / S/N 162442 / S/N 162444 / S/N 162445 / S/N 162449 / S/N 162450
914 UL	1/3	Part no. 892520 - from S/N 161412 up to S/N 161426 / S/N 161428 / S/N 161430 / from S/N 161637 up to S/N 161662 / from S/N 161664 up to S/N 161680 incl. / from S/N 161800 up to S/N 161814 / from S/N 161816 up to S/N 161819 incl. / from S/N 161821 up to S/N 161824 incl. / from S/N 161826 up to S/N 161829 incl. / from S/N 161834 up to S/N 161836 incl.
	2/4	Part no. 892525 - from S/N 161681 up to S/N 161700 / from S/N 161702 up to S/N 161706 incl. / S/N 161708 / S/N 161709 / from S/N 161711 up to S/N 161730 incl. / from S/N 161733 up to S/N 161736 / from S/N 161739 up to S/N 161761 incl. / S/N 161765 / S/N 161768 / S/N 161773 / S/N 161774 / S/N 161777 / S/N 161779

Criteria C) Spare parts:

Further all engines are affected, which have been equipped with floats with the part no. 861185 during engine repair, maintenance or general overhaul as of May 09, 2016.

NOTE: The carburetor and/or the float may have been removed from the initial engine and used on another one.

Engines and/or carburetors with S/N higher than mentioned in criterion A or B have already been equipped with tested floats. For relevant information, see the maintenance records and/or the logbook.

Note: The installation of these engines was either done by the respective **aeroplane manufacturer** or through modification of the aeroplane by Supplemental Type Certificate.

Justification:

Due to a quality escape in the manufacturing process of certain floats, Part Number (P/N) 861185, a partial separation of the float outer skin may occur during engine operation. Separated particles could lead to a restriction of the jets in the carburetor, possibly reducing or blocking the fuel supply to the affected cylinder.

This condition, if not detected and corrected, could lead to in-flight engine shutdown and forced landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, BRP-Powertrain published Alert Service Bulletin (ASB) [ASB-912-069UL/ASB-914-051UL](#) (single document, hereafter referred to as 'the ASB' in this AD), providing instructions for identification and replacement of the affected parts.

For the reasons stated above, this AD requires identification and replacement of the affected floats with serviceable parts.

Compliance:

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an affected engine is an engine having a serial number (S/N) or any other engine S/N, if equipped with a carburetor identified by P/N and S/N in Applicability section of this AD, or an engine that, after 08 May 2016, has had an affected float P/N 861185 installed in service.

Note 2: For the purpose of this AD, an affected float is float having P/N 861185, that has been initially delivered on a date between 09 May 2016 and 17 July 2016 (inclusive), and that does not have 3 dots. Certification documents (e.g., Form 1), delivery document or record of previous installation of the float are acceptable to determine an initial delivery on or before 08 May 2016. An example of a serviceable float having 3 dots is shown hereunder:



- (1) Within 25 flight hours (FH) or 30 days after the effective date of this AD, whichever occur first, inspect the engine to identify if it is affected (see Note 1 of this AD). A review of the engine maintenance records is acceptable in lieu of the inspection, provided that the engine configuration and maintenance history can be conclusively determined from that review.
- (2) For any affected engine, before next flight after the inspection as required by paragraph (1) of this AD, replace any affected float with a serviceable float (see Note 2) in accordance with the instructions of the ASB.
- (3) From the effective date of this AD, do not install on any engine an affected float, as defined in Note 2 of this AD.
- (4) From the effective date of this AD, it is allowed to install on any engine a carburetor equipped with a float P/N 861185 provided that, before installation, it is determined that the float is a serviceable part, as defined in Note 2 of this AD. A review of the applicable maintenance records is acceptable to accomplish this determination, provided that the maintenance history of the carburetor can be conclusively determined from that review.

Reference Publications:

[BRP-Powertrain ASB-912-069ULR1 and ASB-914-051ULR1](#) (published as a single document), dated 22 July 2016.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

[EASA AD No: 2016-0144](#), dated 19 July 2016

Remarks:

1. If requested and appropriately substantiated, TM CAD can approve Alternative Methods of Compliance for this AD.
2. Enquiries regarding this AD should be referred to the Airworthiness Inspectorate, Transport Malta Civil Aviation Directorate. E-mail: civil.aviation@transport.gov.mt.