Airworthiness Directive

AD No.: 2018-0265R1
[Correction: 10 January 2019]

Issued: 09 January 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
BRP-ROTAX GmbH & Co KG

Type/Model designation(s):
Rotax 914 and 915 engines

Effective Date:	Revision 1: 09 January 2019 Original issue: 11 December 2018
TCDS Number(s):	EASA.E.121 and EASA.E.122
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2018-0265-E dated 07 December 2018.

ATA 72 – Engine – Exhaust Valve – Replacement

Manufacturer(s):
BRP-Rotax GmbH & Co KG, formerly BRP-Powertrain GmbH & Co. KG; Bombardier-Rotax GmbH & Co. KG; Bombardier-Rotax GmbH

Applicability:
Rotax 915 iSc3 A, 915 iSc3 B engines and Rotax 914 F2, 914 F3 and 914 F4 engines, all serial numbers.

These engines are known to be installed on, but not limited to, the aeroplane types and models as listed in Appendix 1 of this AD. The installation of these engines was either done by the respective aeroplane manufacturer, or through modification of the aircraft by Supplemental Type Certificate (STC).

Definitions:
For the purpose of this AD, the following definitions apply:

The ASB: BRP Rotax Alert Service Bulletin (ASB) ASB-915 i A-003 / ASB-915 i B-003 / ASB-914-054 (single document).

Affected exhaust valve: Exhaust valve part number (P/N) 854113 with a production lot number 0317 or 0517.

Serviceable exhaust valve: Exhaust valve which is not an affected exhaust valve.

Groups: Group 1 engines have an affected exhaust valve installed. Group 2 engines do not have an affected exhaust valve installed.

Reason:

A broken exhaust valve has been reported on a non-certified Rotax 914 UL2-01 engine. Subsequent investigation identified deviation in the manufacturing process of the affected exhaust valve.

This condition, if not corrected, could lead to in-flight shut down, possibly resulting in a forced landing with consequent damage to the aeroplane and injury to occupants.

Due to similarity of design, this condition may affect also Rotax 915 iSc3 A, 915 iSc3 B engines and Rotax 914 F2, 914 F3 and 914 F4 engines.

To address this potential unsafe condition, BRP-Rotax issued the ASB, later revised, providing applicable instructions, and EASA issued AD 2018-0265-E requiring replacement of affected exhaust valves, and prohibiting installation thereof on an engine.

Since that AD was issued, it has been determined that only exhaust valve P/N 854113 of certain lot numbers are affected, and BRP-Rotax revised the ASB accordingly (now at revision 2).

This AD is revised to reduce the scope of the definition of affected exhaust valve.

This AD is republished to correct the header, as it is no longer an Emergency AD.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Modification:

(1) For Group 1 engines: Within 10 flight hours or 3 months, whichever occurs first after 11 December 2018 [the effective date of the original issue of this AD], replace each affected exhaust valve with a serviceable exhaust valve, in accordance with the instructions of the ASB.

(2) [MERGED WITH PARAGRAPH (1) OF THIS AD].

Part(s) Installation:

(3) Do not install on any engine an affected exhaust valve as required by paragraph (3.1) or (3.2) of this AD, as applicable.

(3.1) For Group 1 engines: After modification of that engine as required by paragraph (1) of this AD.

(3.2) For Group 2 engines: From 11 December 2018 [the effective date of the original issue of this AD].

Ref. Publications:

BRP Rotax ASB-915 i A-003 / ASB-915 i B-003 / ASB-914-054 (single document) original issue dated 04 December 2018, revision 1 dated 06 December 2018, or revision 2 dated 21 December 2018.

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

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.

3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system.

5. For any question concerning the technical content of the requirements in this AD, please contact: BRP-Rotax GmbH & Co KG, Telephone: +43 7246 601 0, Fax: +43 7246 601 9130, E-mail: airworthiness@brp.com, Website www.flyrotax.com.

Appendix 1 – List of Aircraft known to have Rotax engine(s) installed,
either done by the respective aircraft manufacturer or through modification of the aircraft by Supplemental Type Certificate

Type Certificate Holder / Manufacturer	Type/model
3XTRIM SP.Z.O.O	3XTRIM
AAC AMPHIBIAN AIRCR. OF CANADA	TANGO, XP RFS
AEROSPOOL, SPOL. S.R.O.	DYNAMIC WT 9, WT10 ADVANTIC
ALPI AVIATION	PIONEER 300
Aquila Aviation GmbH	Aquila AT01
AUSTRALIAN AIRCRAFT COMPANY	HORNET
AUTOGYRO	CAVALON, MTO SPORT
AVIATION ARTUR TRENDAK & SON	TAURUS, TERCEL
COMCO IKARUS	IKARUS C 22
Costruzioni Aeronautiche TECNAM S.r.l.	P2006T
Diamond Aircraft Industries GmbH	H 36 “Dimona”, HK 36 “Super Dimona”, HK 36 TTS, HK 36 TTC, HK 36 TTC-ECO
Diamond Aircraft Industries Inc.	DA20-A1 “Katana”
DYN AÉRO	MCR 01 UL, MCR-4S
ELA AVIACION	ELA-07
Flight - Design	CTLS-ELA
HANSA	HANSA-3
HELI SPORT SRL	CH-7 ANGEL
HOFFMANN AIRCRAFT	H36 DIMONA
JMB AIRCRAFT SRO	VL-3 EVOLUTION
RAINER KORFF LUFTFAHRT	TAIFUN 17E
M&D Flugzeugbau GmbH & Co. KG	AVO 68 aeroplanes “Samburo”
MAGNI GYRO	M-18 SPARTAN, M-24
MARC-INGEGNO	PARROT
PRO.MECC	01 SPARVIERO
ROTORSPORT UK LTD	CAVALON
Scheibe Aircraft GmbH	SF 25 C
SKYETON AIRCRAFT	K-10 SWIFT
Stemme AG	S10-VT, S12, S15-1, S6
Textron Aviation (formerly Cessna Aircraft Company)	150 and A150 aeroplanes (and Reims F150 and FA150), modified by various STC
TL ULTRALIGHT	TL 2000 STING
ZENITH AIRCRAFT (ZENAIR)	ZODIAC CH 601 XL