

SERVICE INFORMATION NO. SI 20E-010

NOTE: Sl's are used **only**:

1) To distribute information from DAI to our customers.

2) To distribute applicable information / documents from our suppliers to our customers with additional

information.

Typically there is no revision service for Si´s. Each new information or change of that will be send

along with a new SI.

I. TECHNICAL DETAILS

1.1 Airplanes affected:

all DV 20 E airplanes

1.2 Subject:

EASA Emergency Airworthiness Directive No. EAD 2019-0253-E Engine fuel and Control – Fuel Pump Assembly – Replacement

Rotax Alert Service Bulletin No. ASB-912 i-011, Replacement of Fuel Pump Assy for Engine Types 912 i and 915 i A (Series)

ATA-Code: 73-00

1.3 Reason:

Rotax has issued Alert Service Bulletin ASB-912i-011 mandating the replacement of fuel pump assy for Rotax Engine Type 912 i and 915 iA (Series) for specified fuel pump assembly numbers.

EASA has issued Emergency Airworthiness Directive No. 2019-0253-E mandating compliance with the Rotax ASB-912i-011.

1.4 Information:

For detailed technical information refer to EASA EAD 2019-0253-E and Rotax Alert Service Bulletin No. ASB-912i-011 which are applicable without any further additions or restrictions.

II. OTHERS

EASA Emergency Airworthiness Directive 2019-0253-E and Rotax Alert Service Bulletin No. SB-912i-011 are attached to this Service Information.

In case of doubt contact BRP-Rotax GmbH & CO KG.

EASA AD No.: 2019-0253-E



Emergency Airworthiness Directive

AD No.: 2019-0253-E

Issued: 11 October 2019

Note: This Emergency 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: Type/Model designation(s):

BRP-ROTAX GmbH & Co KG Rotax 912 and 915 engines

Effective Date: 15 October 2019

TCDS Number(s): EASA.E.121

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA Emergency AD 2019-0055-E dated 18 March 2019,

including its correction dated 19 March 2019

ATA 73 – Engine fuel and Control – Fuel Pump Assembly – Replacement

Manufacturer(s):

BRP-Rotax GmbH & Co KG, formerly BRP-Powertrain GmbH & Co. KG, Bombardier-Rotax GmbH & Co. KG, Bombardier-Rotax GmbH

Applicability:

Rotax 912 iSc2 Sport, 912 iSc3 Sport and Rotax 915 iSc3 A engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, various general aviation aeroplane types and models. The installation of these engines was either done by the respective aeroplane manufacturer, or through modification of the aeroplane 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-912 i-011 / ASB-915 i A-008 (single document).

Affected part: Fuel pump assemblies, having part number (P/N) 889696 (part of assembly P/N 889697) or P/N 889698 (part of assembly P/N 889699), and having an s/n from 180500 to 192699 inclusive.



EASA AD No.: 2019-0253-E

Serviceable part: Any fuel pump assembly which is not an affected part.

Groups: Group 1 engines are those that have an affected part installed. Group 2 engines are those that do not have an affected part installed.

Reason:

Deviations in manufacturing process have been reported, which could lead to malfunction of fuel supply. Subsequent investigation identified the batch of affected fuel pumps.

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

To address this potential unsafe condition, BRP-Rotax issued the ASB, providing instructions to replace affected parts.

Previously, EASA issued Emergency AD 2019-0055-E, requiring, for some of the fuel pumps affected by the unsafe condition addressed by this AD, inspections and, depending on findings, replacement.

For the reason described above, this AD supersedes EASA Emergency AD 2019-0055-E and requires replacement of the affected parts and prohibits further (re)installation thereof.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) For Group 1 engines: Before next flight after the effective date of this AD, replace each affected part with a serviceable part in accordance with the instructions of the ASB.

Part(s) Installation:

(2) For Group 1 and Group 2 engines: From the effective date of this AD, do not install on any engine an affected part, as defined in this AD.

Ref. Publications:

BRP-Rotax ASB-912 i-011 / ASB-915 i A-008 (single document) original issue dated 10 October 2019.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
- Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.



EASA AD No.: 2019-0253-E

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.



Replacement of fuel pump assy. for ROTAX_® Aircraft Engine Type 915 i A and 912 i (Series)

ATA System: 73-10-00 Fuel system

MANDATORY

1) Planning information

To obtain satisfactory results, procedures specified in this publication must be accomplished with accepted methods in accordance with prevailing legal regulations.

BRP-Rotax GmbH & Co KG cannot accept any responsibility for the quality of work performed in accomplishing the requirements of this publication.

1.1) Applicability

All versions of $ROTAX_{\circledR}$ engine types 915 i A and 912 i (Series) are affected, if being operated with genuine $ROTAX_{\circledR}$ accessory fuel pump assy. part no. 889697 (UNF, packaged) or 889699 (METRIC, packed), which includes part no. 889696 (UNF) and 889698 (METRIC) with S/N listed below (whether the fuel pump assy. was delivered with the engine or as an accessory):

| Fuel pump assy. | Description | Serial number |
|-----------------|---|--|
| Part no. 889697 | Fuel pump assy. UNF packaged (889696 + 3x 850620 + packaging) | from S/N 180500 up to S/N 192699 inclusive |
| Part no. 889699 | Fuel pump assy. METRIC packaged (889698 + 3x 850620 + packaging) | from S/N 180500 up to S/N 192699 inclusive |

See Fig. 1 on information how to find the part no. and S/N on the fuel pump assy.

NOTE: Fuel pump assemblies with serial number lower or higher than the range listed above are not affected.



Please also contact the aircraft manufacturer for possible further aircraft related information and requirements related to this accessory part.

1.2) Concurrent ASB/SB/SI and SL

In addition to this Alert Service Bulletin the following Alert Service Bulletin and Service Instructions must be observed and complied with:

Alert Service Bulletin - ASB-912 i-010/ASB-915 i-006, title "Inspection and/or replacement of fuel pump assy.", current issue.

Service Instructions - SI-912 i-019/SI-915 i-005, title "Introduction of revised fuel pump assy.", current issue.

1.3) Reason

Due to deviations in the manufacturing process of the electric fuel pump, a malfunction of fuel supply may occur. Possible effects might be rough engine running, unusual engine operating behavior and possible power reduction or engine stoppage.

1.4) Subject

Replacement of fuel pump assy. for ROTAX® Aircraft Engine Type 915 i A and 912 i (Series).

1.5) Compliance

Fuel pump assy. installed in aircraft: Carry out this replacement of the fuel pump assemblies listed in section 1.1., according to the instructions in Chapter 3 before next flight, but at the latest by October 31st, 2020

NOTE: Any further operation (such as ferry flight) is at the operator's and/or aircraft manufacturer's own discretion/risk.

Fuel pump assy. not installed in aircraft / spare parts:
 Before the initial installation of the fuel pump assy., but at the latest by October 31st, 2020



Non-compliance with these instructions could result in engine damages, personal injuries or death.

1.6) Approval

The technical content of this document is approved under the authority of DOA ref. EASA.21J.048.

1.7) Labor time and credit

A labor credit will be provided for work performed by a technician with current applicable iRMT rating.

| Work performed | iRMT rating required | Labor credit |
|---|------------------------|-----------------|
| Replacement as per Chapter 3 on engine and already installed. | iRMT Maintenance Heavy | 1.5 hour |

To apply for labor credit, contact your $ROTAX_{@}$ Authorized Distributor or their independent Service Centers.

1.8) Mass data

Change of weight - - - none.

Moment of inertia - - - unaffected.

1.9) Electrical load data

No change.

1.10) Software modifications

No change.

1.11) References

In addition to this technical information refer to current issue of

- Illustrated Parts Catalog (IPC)
- Installation Manual (IM)
- Maintenance Manual Heavy (MMH)
- Maintenance Manual Line (MML)

NOTE: The status of the Manuals can be determined by checking the table of amendments. The 1st column of this table shows the revision status. Compare this number to the one listed on the ROTAX website: www.flyrotax.com. Updates and current revisions can be downloaded for free.

1.12) Other Publications affected

None.

1.13) Interchangeability of parts

 All fuel pump assemblies affected and removed fuel pump assy. cannot further be used and must be marked unserviceable. These parts must be returned FCA (Free CArrier) to ROTAX® Authorized Distributors or their independent Service Centers

2) Material Information

2.1) Material

Price and availability will be provided on request by $ROTAX_{@}$ Authorized Distributors or their independent Service Centers.

2.2) Company support information

- Any possible support by BRP-Rotax will be provided on request by $ROTAX_{\circledR}$ Authorized Distributors or their independent Service Centers
- Exchanged parts must be returned FCA (Free CArrier) to ROTAX® Authorized Distributors or their independent Service Centers
- This exchange program and cost sharing is valid until December 31st, 2020. Up to this date limited reimbursement of costs can be applied for
- Shipping costs, downtime costs, loss of income, telephone costs etc. or costs of conversion to
 other engine versions or additional work, as for instance simultaneous engine overhauls are
 not covered in this scope and will not be borne or reimbursed by ROTAX_®

2.3) Material requirement and credit per engine

None.

2.4) Material requirement per spare part

Parts requirement in case of replacement:

| part no. | | Description |
|--------------|--------|---------------------------------|
| 889697 | | Fuel pump assy. UNF packaged |
| consists of: | | |
| | 889696 | Fuel pump assy. UNF |
| | 850620 | Connector gasket (x3) |
| | | |
| 889699 | | Fuel pump assy. METRIC packaged |
| consists of: | | |
| | 889698 | Fuel pump assy. METRIC |
| | 850620 | Connector gasket (x3) |

2.5) Rework of parts

None.

2.6) Special tooling/lubricants-/adhesives-/sealing compounds

None.

3) Accomplishment/Instructions

- ROTAX® reserves the right to make any amendments to existing documents, which might become necessary due to this standardization, at the time of next revision or issue.

NOTE: Before accomplishment, review the entire documentation to make sure you have a complete understanding of the procedure and requirements.

Accomplishment

All measures must be implemented and confirmed by at least one of the following persons or organizations:

- ROTAX® Authorized Distributors or their independent Service Centers
- Persons approved by the respective Aviation Authorities
- Persons with approved qualifications for the corresponding engine types. Only authorized persons (iRMT, Level Heavy Maintenance) are entitled to carry out this work



All work must be performed in accordance with the relevant Maintenance Manual.

3.1) General

| Step | Procedure |
|------|---|
| 1 | Check the engine logbook and maintenance documentation, if this ASB has already been accomplished. |
| 2 | Check the criteria given in section 1.1, if the aircraft/engine/fuel pump assy. is affected by this Alert Service Bulletin. |

3.2) Replacement of affected fuel pump assy.



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.



During work on the fuel distribution system/fuel pump there is a risk of injury due to pressure and fuel! Before starting repair work on the fuel system, ensure that it is no longer pressurized!

ENVIRONMENTAL NOTE

All the operating fluids and cleaning agents can damage the environment if not disposed of properly. Dispose of operating fluids in an eco-friendly manner!

Preparation

Drain fuel according to the relevant aircraft Maintenance Manual

| Step | Procedure |
|------|---|
| 1 | Replace fuel pump assy. with a new one, which is not affected by this ASB as per S/N range. |



Replacement must be carried out according to the relevant aircraft Maintenance Manual.

- Restore aircraft to original operating configuration
- Connect negative terminal of aircraft battery

3.3) Test run

In case of uninstalled fuel pump assemblies, test run can be skipped as this is covered by the mandatory test run after installation.



Conduct test run. See Chapter 12-20-00 of the latest Maintenance Manual Line for the respective engine type.

3.4) Summary

These instructions (Chapter 3) have to be followed in accordance with the deadlines specified in section 1.5.

The execution of the mandatory Alert Service Bulletin must be confirmed in the logbook.

A revision bar outside of the page margin indicates a change to text or graphic.

Translation into other languages might be performed in the course of language localization but does not lie within ROTAX_® scope of responsibility.

In any case the original text in English language and the metric units are authoritative.

3.5) Inquiries

Inquiries regarding this Alert Service Bulletin should be sent to the ROTAX® Authorized Distributor of your area.

A list of all ROTAX® Authorized Distributors and their independent Service Centers is provided on www.flvrotax.com.

4) Appendix

The following illustrations shall provide additional information:

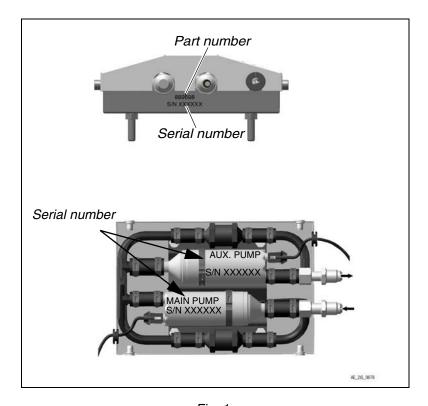


Fig. 1

NOTE:

The illustrations in this document show the typical construction. They may not represent full detail or the exact shape of the parts which have the same or similar function.