

# Inspection and/or installation of lock washer A6 for ROTAX<sub>®</sub> Engine Type 915 i A (Series) and 912 i (Series)

ATA System: 24-20-00 Ignition housing

# **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<sub>®</sub> engine types 915 i A and 912 i Sport Series are affected:

Engine type	Serial number
915 iSc A	from S/N 9127492 up to S/N 9127496 inclusive
912 iSc Sport	from S/N 7702198 up to S/N 7702199 inclusive

NOTE: On engines with S/N higher than those listed above, inspection have already been completed during serial production.

#### 1.2) Concurrent ASB/SB/SI and SL

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

 in general all relevant Alert Service Bulletins (ASB), Service Bulletins (SB), Service Instructions (SI), Service Letters (SL), Service Instruction - Parts and Accessories (SI-PAC) with relevance to perform this maintenance, repair or overhaul task.

#### 1.3) Reason

Internal quality checks revealed that in isolated cases, the lock washer between Allen screw M6x20 and cable clamps was not installed. This may lead to loosening of the Allen screw M6x20.

#### 1.4) Subject

Inspection for and/or installation of lock washer A6 for  $ROTAX_{@}$  Engine Type 915 i A (Series) and 912 i (Series).

#### 1.5) Compliance

- On undelivered engines prior to delivery
- Before the initial installation of engine
- Carry out this inspection on the engine listed in section 1.1, according to the instructions in section 3 at the next ROTAX<sub>®</sub> scheduled maintenance event, but at the latest after 200 days (from the date of the initial issue of this Service Bulletin)



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

These maintenance instructions shall be considered at any maintenance events, retrofitting, repair and overhaul.

#### 1.6) Approval

The technical content of this document is approved under the authority of the 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
Inspection, installation of parts and log- book entry as per Chapter 3 (per engine)	iRMT Maintenance Line	0.7 h

To apply for labor credit, contact your ROTAX<sub>®</sub> 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

- in general Illustrated Parts Catalog (IPC) and in particular: Chapter 24-20-00
- in general Operators Manual (OM)
- in general Installation Manual (IM)
- in general Maintenance Manual Line (MML)
  in general Maintenance Manual Heavy (MMH) and in particular:
  Chapter 24-20-00 Internal Generator

NOTE:

The status of the Manuals can be determined by checking the table of amendments. The 1<sup>st</sup> 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 parts are interchangeable

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#### 2) Material Information

#### 2.1) Material

Price and availability will be provided on request by  $ROTAX_{\text{\tiny ®}}$  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<sub>®</sub> Authorized Distributors or their independent Service Centers

#### 2.3) Material requirement per engine

Parts requirement:

Fig.no.	New part no.	Qty/ engine	Description	Application
1, 2	945831	1		Engines types 915 i A and 912 i Sport (Series)

#### 2.4) Material requirement per spare part

None.

#### 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 maintenance, 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<sub>®</sub> Airworthiness representatives
- 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
- Persons with type-specific training

NOTE: Indicates supplementary information which may be needed to fully complete or understand an instruction.



All work has to be performed in accordance with the relevant  $ROTAX_{@}$  Instructions for Continued Airworthiness (ICA) of the respective engine type.

#### General

Further material on general inspection, maintenance and repair can also be found in relevant Advisory Circular AC 43.13 from FAA.

# Advisory Circular

The Advisory Circular (AC) contains maintenance methods, techniques and practices.

Step	Procedure
1	Check the criteria given on page 1, section 1.1, if the aircraft engine is affected by this SB.
2	Check the engine logbook and maintenance documentation, if this SB has already been accomplished.

#### 3.1) Illustrated Parts Catalog - related information



See current Illustrated Parts Catalog (IPC) for the respective engine type.

### 3.2) Installation - related information



See current Installation Manual (IM) for the respective engine type.

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#### 3.3) Operation - related information



See current Operators Manual (OM) for the respective engine type.

#### 3.4) Maintenance (Line) - related information



See current Maintenance Manual (MML) for the respective engine type.

#### 3.5) Maintenance (Heavy) - related information



See current Maintenance Manual Heavy (MMH) for the respective engine type.

#### 3.5.1) Inspection for lock washer

See Fig. 1.

Step	Procedure
1	Check Allen screw M6x20 (1) at the generator wiring clamps for the presence of lock washer A6 (2).
2	If a lock washer A6 is found installed, proceed to 3.5.3).
3	If no lock washer A6 is present, proceed to section 3.5.2).

1 Allen screw M6x20 2 Lock washer A6

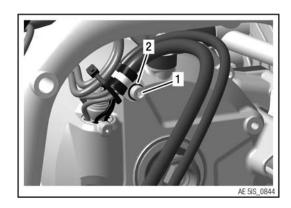


Fig. 1

#### 3.5.2) Installation of lock washer

See Fig. 2.

Step	Procedure
1	Remove Allen screw M6x20 (1).
2	Reinstall Allen screw M6x20 with a new lock washer A6 (2) part no. 945831. Reinstall 2 cable clamps 8/M6 (3).

NOTE: The bends of the cable clamps must be installed in diametrically opposed manner (back to back).

Step	Procedure
3	Adjust cables. Tighten Allen screw M6x20 (1). Tightening torque 10 Nm (89 in. lb).

1 Allen screw M6x20 2 Lock washer A6 3 Cable clamp

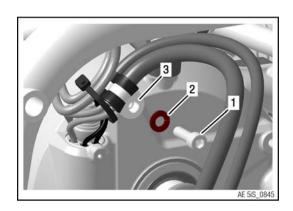


Fig. 2

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

#### 3.5.3) Engine log entry

Step	Procedure
1	Make an entry in the engine logbook stating the results of inspection and if necessary, corrective actions performed.

## NOTICE

If engine is still within its original packaging the (blue) plastic bag must be carefully re-sealed after performing this inspection.

The plastic bag contains a Volatile Corrosion Inhibitor (VCI) essential to maintain appropriate storage conditions.

#### 3.6) Test run

Conduct test run in course of the ROTAX<sub>®</sub> scheduled maintenance event.

In case of uninstalled engines test run is accomplished with the mandatory test run after installation into aircraft.



See Chapter 12-20-00 of the latest Maintenance Manual Line (MML) for the respective engine type.

#### 3.7) Summary

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

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

NOTE:

Work on EASA certified parts might affect the EASA Form 1 and does require appropriate documentation by authorized persons. Repairs must be entered into the engine logbook and also do apply for the EASA Form 1.

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  $ROTAX_{\mathbb{R}}$  scope of responsibility.

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

#### 3.8) Inquiries

Inquiries regarding this Service Bulletin should be sent to the  $ROTAX_{\circledR}$  Authorized Distributor of your area.

A list of all ROTAX<sub>®</sub> Authorized Distributors or their independent Service Centers is provided on <a href="https://dealerlocator.flyrotax.com">https://dealerlocator.flyrotax.com</a>.

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.

Exploded views are **not technical drawings** and are for reference only. For specific detail, refer to the current documents of the respective engine type.

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