

**ALERT SERVICE BULLETIN****Inspection and re-torquing of oil spray nozzles for  
ROTAX® Engine Type 915 i A and 916 iSc B (Series)**

ATA System: 72-20-00 Crankcase

**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® engine types:

Engine type	Serial number
916 iSc B	S/N 9147078
915 iSc A	S/N 9127492, S/N 9127495, S/N 9127497, S/N 9127499

**1.2) Concurrent ASB/SB/SL and SL**

In addition to this Alert 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 have shown that in isolated cases, one or more of the crankcase oil spray nozzles may not have been torqued to final tightening torque. The potential failure effect is a sudden engine stoppage with subsequent engine damage without warning in advance.

**1.4) Subject**

Inspection and re-torquing of oil spray nozzles for ROTAX® Engine Type 915 i A and 916 iSc B (Series).

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## 1.5) Compliance

- On undelivered engines prior to delivery
- Before the initial installation of the engine
- Before the next flight

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

- Carry out this inspection on the engines listed in section 1.1, according to the instructions in section 3, but at the latest after 1 year (from the date of the initial issue of this Alert Service Bulletin)



**WARNING**

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 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
Disassembly, inspection, reassembly, engine test run and logbook entry as per Chapter 3 (per engine)	iRMT Maintenance Heavy*	14 h

To apply for labor credit, contact your ROTAX® Authorized Distributor or their independent Service Centers.

\*For a iRMT Maintenance Heavy rated maintenance technician in this specific case an approval by a ROTAX® Authorized Distributor or their independent Service Centers must be given to ensure that the maintenance facility is capable of such work.

## 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.

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## 1.11) References

In addition to this technical information refer to current issue of

- in general Illustrated Parts Catalog (IPC) and in particular:  
Chapter 72-20-00
- in general Installation Manual (IM)
- in general Maintenance Manual Line (MML)
- in general Maintenance Manual Heavy (MMH) and in particular:  
Chapter 72-20-00

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](http://www.flyrotax.com). Updates and current revisions can be downloaded for free.

None.

## 1.12) Other Publications affected

None.

## 1.13) Interchangeability of parts

None.

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### 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® Authorized Distributors or their independent Service Centers
- 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 per engine

Parts requirement:

Part no.	Qty/ engine	Description	Application
866718	8	TIE WRAP 94x2.5 MM	Spark plug connector
250646	4	SEALING RING A12x18	Fuel line assy.
842044	1	LOCK NUT M6	Airbox
827968	1	Washer 6.4	Airbox
850091	2	ISOLATING FLANGE	Intake manifold
250285	4	O-RING 105x2.5	Valve cover
430205	4	O-RING 6.4x1.8	Valve cover
927941	4	Washer 6.0/12/1	Valve cover
842950	8	LOCK NUT M8	Exhaust studs
230415	1	SEALING RING A6x10	Water pump
901442	4	HEX. NUT M5	Exhaust pipe clamps
250510	4	O-RING 87x2	Cylinder
845106	4	MONOHOOK CIRCLIP 20	Piston
431570	8	O-RING 10.82x1.78	Cylinder stud

#### 2.4) Material requirement per spare part

None.

#### 2.5) Rework of parts

None.

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

Price and availability will be supplied on request by ROTAX® Authorized Distributors or their independent Service Centers:

Part no.	Description	Application
877840*	Spring clamp pliers	Spring type hose clamp 28
876180*	Socket driver T30 ball head	Intake manifold screws
877263	Cylinder aligning tool	Cylinder head
876967	Piston ring spanner	Piston

\* or equivalent

**NOTICE**

If using these special tools observe the manufacturer’s specifications.

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## 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® - 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 ASB.
2	Check the engine logbook and maintenance documentation, if this ASB 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 Line (MML) for the respective engine type.

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

#### 3.5.1) Removal of engine components



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

#### 3.5.2) Inspection of engine components



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

See Fig. 1

Step	Procedure
1	Check if each oil spray nozzle is correctly torqued using a torque wrench with a T40 Torx socket set to 20 Nm (177 in. lb.).
2	If oil spray nozzles are correctly torqued, no further action is required. Proceed with section 3.5.3 Re-installation of engine components.

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- 1) Banjo bolt
- 2) T40 Torx socket

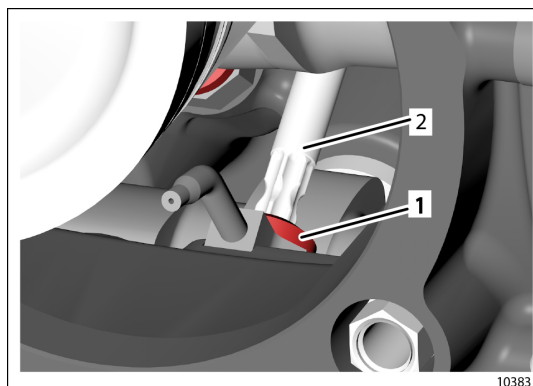


Fig. 1

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See Fig. 2 and Fig. 3

Step	Procedure
3	If a banjo bolt rotates before the set torque value is reached, remove the banjo bolt and oil spray nozzle. Carry out a visual inspection of the oil spray nozzle and banjo bolt spring and ball. Check for blockage and damages.

**NOTICE**

If any damage is found, contact and notify your ROTAX® Authorized Distributor or their independent Service Centers.

- 1) Banjo bolt
- 2) Oil spray nozzle

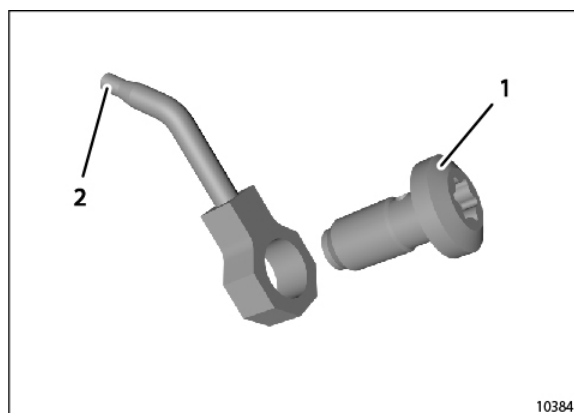


Fig. 2

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- 1) Banjo bolt
- 2) Spring
- 3) Ball

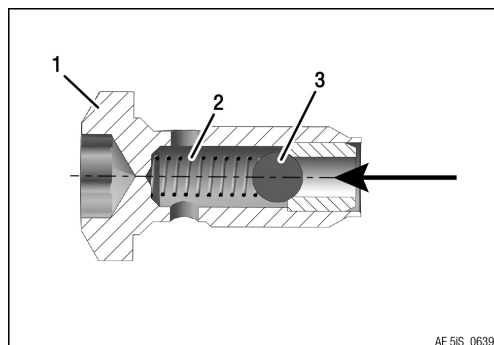


Fig. 3

See Fig. 4 and Fig. 5

Step	Procedure
4	Clean oil bore with break cleaner. Install the inspected or replacement oil spray nozzle and banjo bolt into the crankcase. Tightening torque 20 Nm (177 in. lb).

- 1) Oil spray nozzle with banjo bolt
- 2) Banjo bolt

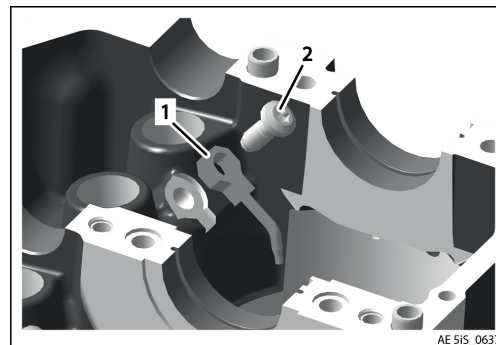


Fig. 4

- 1) Oil spray nozzle with banjo bolt

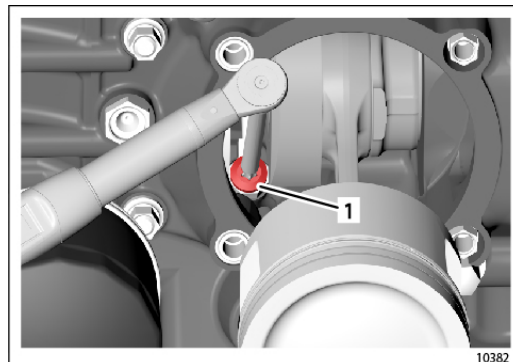


Fig. 5

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### NOTICE

The con rods can damage and bend the oil spray nozzles. Protect the oil spray nozzles during assembly. When oil spray nozzle is bent, the cooling of the piston crown is not given, therefore the whole oil spray nozzle must be replaced.

### 3.5.3) Re-installation of engine components



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

### 3.6) Finishing work

- Make an entry in the engine logbook stating the results of inspection and if necessary, corrective actions performed
- Perform oil purging procedure and verify that all air in the pressure side of the oil system has been vented. See Installation Manual (IM) Chapter 79-00-00, section Filling and Purging the oil system. See also Service Instruction SI-912-018 Purging of lubrication system. For engines that have not yet been installed, purging of the oil system will be performed after installation and before test run.

### 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.

### 3.7) Test run

Conduct test run.

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.

### 3.8) Summary

These instructions (section 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.

**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.

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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.

### 3.9) 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 or their independent Service Centers is provided on <https://dealerlocator.flyrotax.com>.

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### 4) Appendix

The following drawings/schematics/tables should convey additional information:

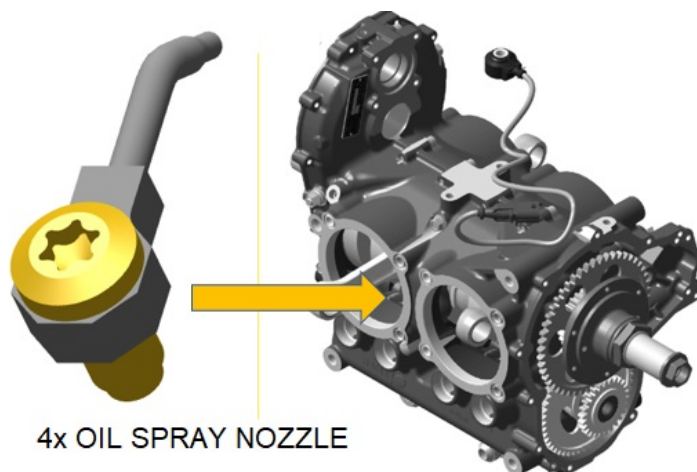


Fig. 6

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**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.