

SERVICE INSTRUCTION

Maintenance task add-on for engine suspension frame assembly for ROTAX® Engine Type 916 i (Series), 915 i (Series), 912 i (Series), 912 and 914 (Series)

ATA System: 71-20-00 Engine suspension frame

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 are affected:

Engine type	Serial number
916 iSc A/C24	all
916 iS A/C24	all
916 iSc B	all
915 iSc A/C24	all
915 iS A/C24	all
912 iSc Sport	from S/N 7702185
912 iS Sport	from S/N 7705447
912 S	from S/N 9139580
912 A	from S/N 4411632
912 F	from S/N 4413181
912 UL	from S/N 9580827
912 ULS	from S/N 9574255
914 F	from S/N 4422245
914 UL	from S/N 9577506

NOTE: When installing an engine suspension frame on any engine type, instructions as per Chapter 3 must also be performed.

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1.2) Concurrent ASB/SB/SI and SL

None.

1.3) Reason

Due to the proximity of the crankcase mounting points for engine suspension frame to internal pressurized oil galleries and internal crankcase pressure, oil seepage may occur. Therefore, the use of LOCTITE 243 as an additional sealant has been introduced.

1.4) Subject

Maintenance task add-on for engine suspension frame assembly for ROTAX® Engine Type 916 i (Series), 915 i (Series), 912 i (Series), 912 and 914 (Series).

1.5) Compliance

NONE - For Information Only.

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

Labor time will depend on aircraft installation and therefore no estimate is available from the engine manufacturer.

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 Line (MML)
- Maintenance Manual Heavy (MMH)

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 parts are interchangeable.

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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

None.

2.3) Material requirement per engine

Part requirements:

Part number	Qty/ engine	Description	Application
945753	4	Lock washer A10	Engine suspension frame assy.

2.4) Material requirement per spare part

None.

2.5) Rework of parts

None.

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 number	Qty/engine	Description	Application
897651	as required	LOCTITE 243 BLUE, 10CC	M10 mounting bolts

NOTICE

If using these special tools or products, observe the manufacturers specifications and material safety requirements.

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

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 Maintenance Manuals of the respective engine type.

General

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

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

Advisory Circular

This Manual "Advisory Circular" AC describes maintenance methods, techniques and practice.

3.1) Illustrated Parts Catalog - related information

See Fig. 1 TYPICAL Engine suspension.



See relevant Illustrated Parts Catalog (IPC) for the respective engine type, Chapter 71-20-00.

3.2) Installation - related information



See current Installation Manual (IM) for the respective engine type and also Heavy Maintenance Manual (MMH) for engine suspension frame installation and assembly instructions Chapter 71-00-00.

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3.2.1) Additional task during installation

See Fig. 1.

Step	Procedure
1	All Allen screws M10x110, M10x50 and M10x35 must be secured with LOCTITE 243.

NOTE: Spacers may not be utilized and different screws lengths may be used, depending on the engine suspension frame and engine type!

NOTICE If the ROTAX® genuine engine suspension frame is not used for your application, please consult your Aircraft OEM for instructions on how this may be performed on an aircraft-installed engines.

- 1 Engine suspension frame
- 2 Allen screw M10x110
- 3 Lock washer A10
- 4 Allen screw M10x35
- 5 Allen screw M10x50
- 6 Thrust washer
- 7 Washer 10.5
- 8 Spacer 10.5/17/15

B LOCTITE 243

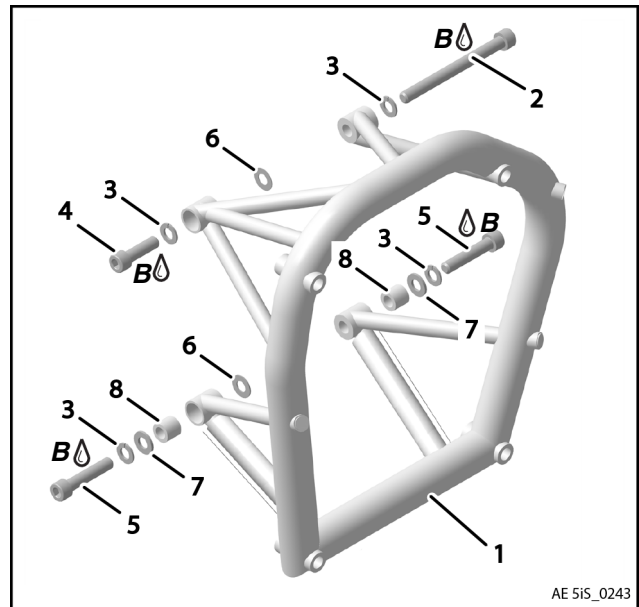


Fig. 1-TYPICAL

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.

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3.5) Maintenance (Heavy) - related information



See current Maintenance Manual Heavy (MMH) for the respective engine type, Chapter 71-00-00 section "Engine suspension frame inspection".

If oil seepage is found at engine suspension frame mounting points, the suspension frame to crankcase mounting bolts can be removed, cleaned and re-installed and secured with LOCTITE 243 as per section 3.1.1.

NOTICE

Consult your Aircraft OEM for instructions on how this may be performed on an aircraft installed engine.

3.6) Finishing work

- Restore aircraft to original operating configuration according to the instructions of the aircraft manufacturer

3.7) Test run

Conduct test run.

In case of uninstalled engines test run can be skipped as this is covered by the mandatory test run after installation.



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 Service Instruction 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® scope of responsibility.

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

3.9) Inquiries

Inquiries regarding this Service Instruction 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 www.flyrotax.com.

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.