

Change of fuel pressure limit for ROTAX_® Engine Type 916 i B and 915 i (Series)

ATA System: 73-00-00 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_® engine types:

Engine type	Serial number	
916 iSc B	all	
915 iSc A	all	

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.
- SI-PAC-020, "Optional fuel pressure damper assy.", current issue

1.3) Reason

Installation experience from our OEMs revealed that the upper fuel pressure limit of max. 3.1 bar (45 psi) showed the need to increase the limit to 3.2 bar (46 psi) and should be aligned with the 3.2 bar (46 psi) limit of the $ROTAX_{\odot}$ 912 i Series. This change does not show a significant increase of fuel consumption. Engine performance and engine parameters remain unchanged and remain unaffected.

NOTE:

According to the relevant Operators Manual (OM) the peak pressure limit is 3.5 bar (51 psi) for 3 seconds. Hence, no impact on fuel system parts (hoses, tubes, injectors,...) is given.

1.4) Subject

Change of fuel pressure limit for ROTAX_® Engine Type 916 i B and 915 i (Series).

1.5) Compliance

If necessary for aircraft operation the change of the fuel pressure limit for the aircraft, Production Organizations (POA) and its instrumentation must be amended and corrected in consultation with the aircraft manufacturer.

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.

None.

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 Operators Manual (OM) and in particular:
 Chapter 2 section Operating limits
- in general Installation Manual (IM) and in particular: Chapter 73-00-00 - section Hydraulic interfaces

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

- Not affected

2) Material Information

2.1) Material

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

2.2) Company support information

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

None.

2.4) Rework of parts

None.

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

None.

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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_® 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 Line Maintenance) are entitled to carry out this work
- Persons with type-specific training



All work has to be performed in accordance with the relevant $ROTAX_{\mathbb{R}}$ Instructions for Continued Airworthiness (ICA) 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.

Advisory Circular

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

3.1) Illustrated Parts Catalog - related information



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

3.2) Installation - related information



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

3.3) Operation - related information



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

Operating limits

The upper fuel pressure limit (max.) was increased from 3.1 bar (45 psi) to 3.2 bar (46 psi).

Parameter	Min.	Max.
Fuel pressure at fuel rail	2.9 bar (42 psi)	3.2 bar (46 psi)
Acceptable Fuel pressure exceedance (max. 3 sec.)	2.5 bar (35 psi)	3.5 bar (51 psi)
DTE: Fuel pressure exceedance only allowed after power setting change.		

3.4) Maintenance (Line) - related information



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

3.5) Maintenance (Heavy) - related information



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

3.6) Finishing work

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

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 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 $ROTAX_{\text{\tiny IR}}$ 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 Bulletin should be sent to the $ROTAX_{\circledR}$ Authorized Distributor of your area.

A list of all ROTAX® Authorized Distributors or their independent Service Centers is provided on https://dealerlocator.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.