

SERVICE LETTER

No flight operations permitted with maintenance equipment installed on ROTAX® Engine Type 912 and 914 (Series)

ATA System: 73-10-00 Intake Manifold

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
912 A, F, S certified aircraft engines	All
912 UL, ULS ASTM- compliant aircraft engines	All
914 F certified aircraft engines	All
914 UL ASTM- compliant aircraft engines	All

1.2) Concurrent ASB/SB/SI and SL

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

- Service Letter-SL-912 i-005 / SL-912-014 / SL-914-012 / SL-2St-008, "Non-approved modifications or use of ROTAX® unapproved engine components or accessories for ROTAX® aircraft engines", current issue
- Service Letter-SL-912 i-006 / SL-912-006 / SL-914-006, "Use of third party after-market piston kits in ROTAX® aircraft engines type 912 i, 912 and 914 (Series)", current issue

1.3) Reason

ROTAX® has been informed that third party after-market and non-genuine carburetor balance/synchronize kits are being used also during flight operations.

Third party carburetor balance kits are presently being marketed for use in maintenance on ROTAX® aircraft engines. Some manufacturer's instructions for these special tool kits indicate that the intake manifold fittings and other related equipment can be permanently attached also during flight operations.

WARNING

The permanent attachment of intake manifold fittings for carburetor balancing and use during flight operation is not approved by ROTAX® and may result in engine damage and/or engine failure resulting in personal injury and/or death.

1.4) Subject

No flight operations permitted with maintenance equipment installed on ROTAX® Engine Type 912 and 914 (Series).

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1.5) Compliance

Non - For Information Only.

WARNING

Non-compliance with these instructions could result in engine damage, 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

Estimated labor hours:

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

1.8) Mass data

Change of weight - - - unknown.

Moment of inertia - - - unknown.

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 that 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

None.

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2) Material Information

2.1) Material

None.

2.2) Company support information

- None.

2.3) Material requirement per engine

None.

2.4) Material requirement per spare part

None.

2.5) Rework of parts

None.

2.6) 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 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 Maintenance Manuals of the respective engine type.

General

All general inspection, maintenance and repair has to be carried out e.g. in accordance with relevant Advisory Circular AC 43.13 from FAA.

Advisory Circular

This Manual "Advisory Circular" AC describes maintenance methods, techniques and practice. These are recognized and authorized for inspection and repairs in non-pressurized areas for which there are no separate maintenance and repair instructions.

3.1) Information regarding carburetor balancing kits

Permanently attached components of special equipment like intake manifold fittings for connecting carburetor balance tool/gauges are not approved by the engine manufacturer for any kind of operation and may e.g. cause induction leaks leading to an excessively lean fuel/air mixture, rough engine running, potential power loss and engine damage.



Example of third-party carburetor balance kit intake manifold fittings.

Fig. 1

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3.2) Recommendation

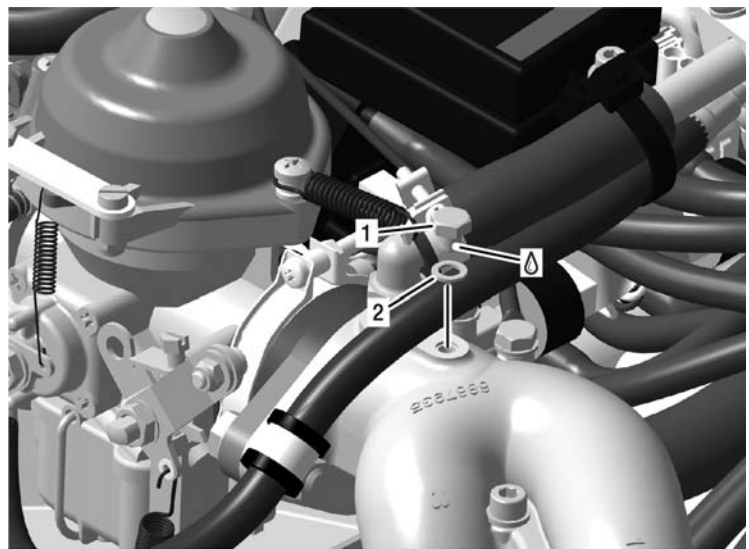
- Remove all carburetor balancing fittings from the engine before flight
- Fit original ROTAX® Hex. screw M6x6 part number 641071 with gasket A6x10 part number 230415 and LOCTITE 243. See current Illustrated Parts Catalog (IPC) and Maintenance Manual Heavy (MMH).

WARNING

The permanent attachment of fittings for carburetor balancing and use during flight operation is not approved by ROTAX® and may result in engine damage and/or engine failure resulting in personal injury and/or death.

1 Hex. screw M6x6
2 Gasket A6x10

Hex. screw M6x6 with
LOCTITE 243



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Fig. 2

3.3) Summary

- The permanent attachment of any carburetor balance kit or fittings for ROTAX® engines is NOT approved by ROTAX® and is very strongly discouraged
- Flight operation with permanent attachment of any carburetor balance kit or fittings may cause engine damage resulting in catastrophic engine failure
- Damages resulting from the permanent attachment of any carburetor balance kit or fittings will void the ROTAX® limited warranty on the engine

The execution of the Service Letter 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 (like e.g. Option 2) 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.

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.

3.4) Inquiries

Inquiries regarding this Service Letter 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.