

SERVICE INSTRUCTION

Information on regulator B modifications for ROTAX® Engine Type 912 i (Series)

ATA System: 76-10-00 Fuse box

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® engines types:

Engine type	Serial number
912 iS Sport	from S/N 7704296 and higher.

NOTE: On engines with S/N lower than the ranges listed above, the regulator B M6 AC GND (airframe ground) connections can be modified for exchange or repair on fuse boxes with M4 studs and therefore no modifications on the rectifier regulator B part no. 864395 are necessary at a maintenance, repair or operation (MRO) event as per section 3.

NOTE: It is NOT mandatory to retrofit engines with old style regulator B with original M6 ring terminal.

NOTE: This Service Instruction does also not apply if the fuse box assy. (and with it together the regulator B) was changed for the new fuse box assy. with M6 AC GND (airframe ground) studs.

1.2) Concurrent ASB/SB/SI and SL

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

- Service Instruction-SI-912 i-020, "Information on fuse box assy. modifications for ROTAX® Engine type 912 i (Series)", current issue.

1.3) Reason

In the course of further development and standardization a new regulator B part no. 864395 has been introduced. The new regulator B incorporates larger diameter ring terminals to match the larger M6x1 stud on fuse box grounding plate (AC GND).

As the old regulator B part no. 864393 is not available as a spare part from ROTAX®, it might become necessary to rework regulator B part no. 864395 from M6 ring terminals to M4 ring terminals.

1.4) Subject

Information on regulator B modifications for ROTAX® Engine Type 912 i (Series).

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1.5) Compliance

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



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 DOA ref. EASA.21J.048.

1.7) Labor time and credit

Estimated labor hours:

Engine installed in the aircraft - - - labor time will depend on airframe 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 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

- All parts are interchangeable

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2) Material Information

2.1) Material- cost and availability

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

parts requirement:

New part no.	Qty/ engine	Description	Old part no.	Application
864395	1	REGULATOR B-CONNECTOR GREY*	864393	Engine type 912 iS /iS Sport
	3**	M4 ring terminals		REGULATOR B-CONNECTOR GREY

* Please contact your aircraft manufacturer for further support on material and instructions for possible further aircraft related modifications.

** A quantity of 3 M4 ring terminals is added to each shipment of the rectifier B assy. part no. 864395 for this modification (The third ring terminal is added as a spare).

2.4) Material requirement per spare part

None.

2.5) Rework of parts

None.

2.6) Special tooling/lubricant-/adhesives-/sealing compound/price and availability

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

Description	Qty/engine	Part no.	Application
e.g. Crimp tool (e.g. KNIPEX MultiCrimp)*	1	n.a.	crimping of M4 ring terminals

* or equivalent

NOTICE

If using these special tools observe the manufacturers 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 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 Authority
- Persons with approved qualifications for the corresponding engine types. Only authorized persons (iRMT, Level Service) are entitled to carry out this work.
- Persons with type-specific training

NOTE: All work has to be performed in accordance with the relevant Maintenance Manual.

NOTE: Please contact your aircraft manufacturer for further support on material and instructions for this modification.

Safety notice



WARNING

Identifies an instruction which, if not followed, may cause serious injury or even fatal injury.



CAUTION

Identifies an instruction which, if not followed, may cause minor or moderate injury.

NOTICE

Identifies an instruction which, if not followed, may severely damage the engine or could void any warranty.

ENVIRONMENTAL NOTE

Environmental notes give you tips on environmental protection.

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

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3.1) Installation-related information

Pay attention to the specifications of the latest version of the Installation Manual (IM) for the respective engine type, Chapter 24-00-00 section (Engine wiring harness) and Chapter 76-10-00 section (Fuse box assembly).

When retrofitting the new regulator B (part no. 864395) to an older engine, the connection to the AC GND plate must have its ground connectors replaced with smaller M4 ring terminal.

See Fig. 1.

NOTE: Use of a proper “double crimp” tool suitable for “PIDG ring terminals” type crimp connectors (like e.g. KNIPEX MultiCrimp no. 97-39-06) might be necessary for secure connections of M6 ring terminals.

3.2) Maintenance-related information

Pay attention to the specifications of the latest version of the Maintenance Manual Line (MML) and Heavy (MMH) for the respective engine type, Chapter 05-20-00 (Scheduled maintenance checks), Chapter 76-10-00 section (Fuse box installation) and Chapter 76-50-00 (Wiring harness).

For the modification from M6 to M4 ring terminals the following assembly steps do apply:

Step	Procedure
1	Cut off the M6 ring tongue with a standard wire cutter.
2	Strip off 6 mm of the wire's insulation with a standard wire stripper.
3	Crimp the M4 ring terminals with the crimping tool.

3.3) Test run

Conduct test run. See Chapter 12-20-00 of the latest Maintenance Manual Line for the respective engine type.

3.4) 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.

| 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.

3.5) Inquiries

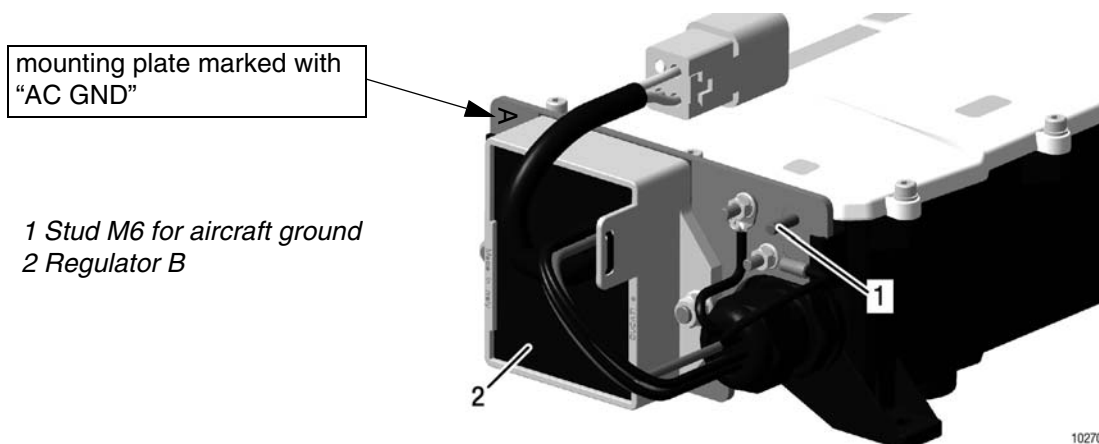
Inquiries regarding this Service Instruction should be sent to the ROTAX® Authorized Distributor of your area.

A list of all ROTAX® Authorized Distributors or their independent Service Centers is provided on www.FLYROTAX.com.

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4) Appendix

The following drawings should convey additional information:

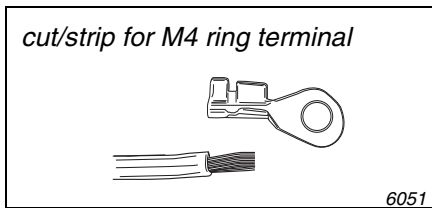
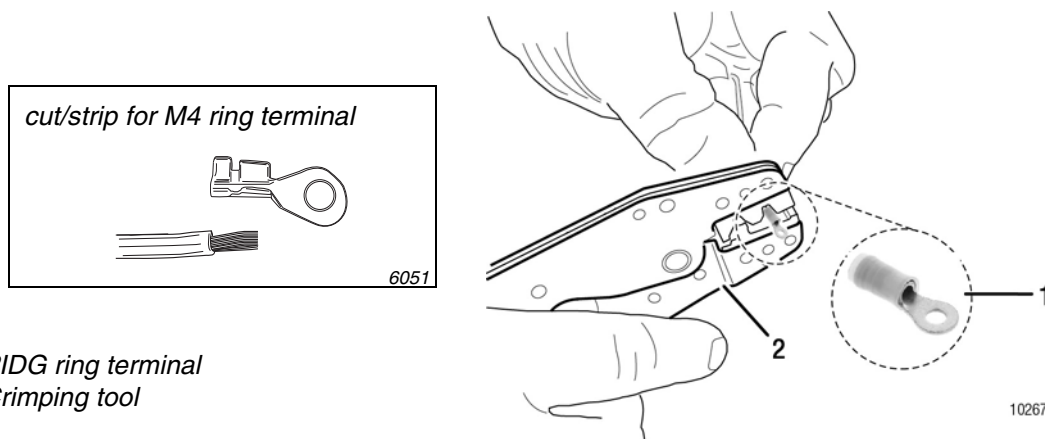


mounting plate marked with
"AC GND"

1 Stud M6 for aircraft ground
2 Regulator B

10270

Fig. 1
Fuse box view onto regulator B



1 PIDG ring terminal
2 Crimping tool

10267

Fig. 2
Crimping tool and PIDG ring terminal

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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