

SERVICE INSTRUCTION - PAC

Regulator connector brackets for ROTAX® Aircraft Engines

ATA System: 76-20-00 Fuse Box

1) Planning information

“PAC” Service Instruction Documents provide detailed information on non-certified ROTAX® Aircraft Engine Parts and Accessories. Referenced parts and accessories are provided without EASA certification or ASTM compliance. Certification / Compliance of referenced Parts and Accessories must be completed by the aircraft OEM.

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

Refer to the latest issue of the relevant Illustrated Parts Catalog.

NOTICE

The regulator connector bracket assemblies are not a part of the Engine Type Design. The regulator connector bracket assemblies have been tested and released by BRP-Rotax, but they are not certified.

The certification of the connector bracket assemblies is the responsibility of the aircraft manufacturer and must be carried out jointly with the aircraft.

1.2) Concurrent ASB/SB/SI and SL

In addition to this Service Instruction - PAC the following Service Instruction should be considered: SI-915 i-006, Introduction of a new connector for regulator B for ROTAX® Engine Type 912 i, 915 i A and 915 i B (Series)“, current issue.

1.3) Reason

In the course of continuous development and standardization, regulator connector brackets have been introduced as an optional extra part.

Connector bracket part no. 951983 is designed to retain DEUTSCH® connectors, while connector bracket part no. 951981 is designed to retain Amphenol® connectors.

1.4) Subject

Regulator connector brackets for ROTAX® Aircraft Engines.

1.5) Compliance

None - for information only.

1.6) Approval

None.

1.7) Labor time

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

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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)
- Operators Manual (OM)
- 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

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

- Any possible support by BRP-Rotax will be provided on request by ROTAX® Authorized Distributors or their independent Service Centers

2.3) Material requirement per engine

Fig.no.	Part no.	Qty/ engine	Description	Application
1, 2	951983	AR	Connector bracket assy. DEUTSCH®	Fuse Box
1, 3	951981	AR	Connector bracket assy. Amphenol®	Fuse Box

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 Authority
- Persons with approved qualifications for the corresponding engine types. Only authorized persons (iRMT, Level Minimum Line Maintenance) are entitled to carry out this work.



All work has to be performed in accordance with the relevant Maintenance Manuals of the respective engine type.

3.1) Spare parts - related information



See relevant Illustrated Parts Catalog for the respective engine type.

3.2) Installation - related information

NOTICE

Installation must be carried out according to the aircraft manufacturer's and to the specifications of the Installation Manual.



See relevant Installation Manual for the respective engine type.

NOTE: The regulators' female Deutsch® connector housing (Black for regulator A, part no. 864392, Gray for regulator B part no. 864395) already have a molded clip that attaches securely to the new regulator connector bracket assembly part no. 951983. Regulator B part no. 864397 is equipped with an Amphenol® connector housing which attaches to regulator bracket part no. 951981, see [Fig. 3](#).

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3.3) Operation - related information

3.3.1) Operating instruction



See relevant Operators Manual for the respective engine type.

3.4) Maintenance (Line) - related information



See relevant Maintenance Manual (Line) for the respective engine type and its periodical maintenance information.

Points of inspection	Interval Operating hours		Chapter Reference
	100 h	200 h	
Visual inspection of the wiring harness, connectors and brackets for secure fit, damage and signs of wear.	x		12-20-00 section Check of wiring

3.5) Maintenance (Heavy) - related information

See [Fig. 2](#) and [Fig. 3](#).

To install this optional extra part(s), the following steps need to be performed:

Step	Procedure
1	Remove lock nut M6 (1).
2	Remove washer 6.4 (Amphenol connector bracket only).
3	Install the new regulator connector bracket (Fig. 2 , pos. 2 or Fig. 3 , pos. 4) and position correctly.
4	Fasten regulator to the fuse box with lock nut M6 (Amphenol bracket: with washer) again. Wrench size: A/F 10. Tightening torque: 6 Nm (53 in. lb). NOTE: Tighten the two lock nuts M6 alternately to ensure a smooth seat of rectifier regulator on the regulator plate.

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3.6) Test run

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



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

3.7) Summary

The execution of the Service Instruction - PAC must be confirmed in the logbook. These instructions (section 3) have to be followed in accordance with the deadlines specified in section 1.5.

| 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.

3.8) Inquiries

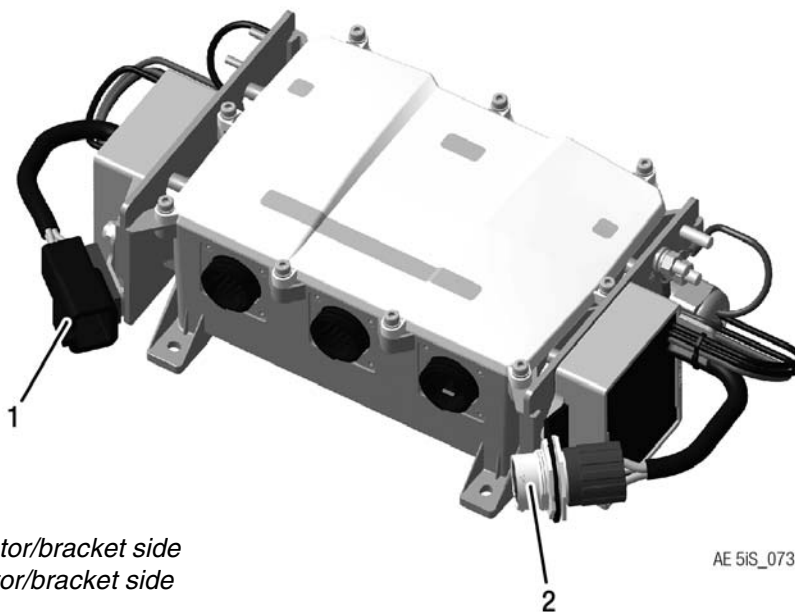
Inquiries regarding this Service Instruction - PAC should be sent to the ROTAX® Authorized Distributor of your area.

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

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4) Appendix

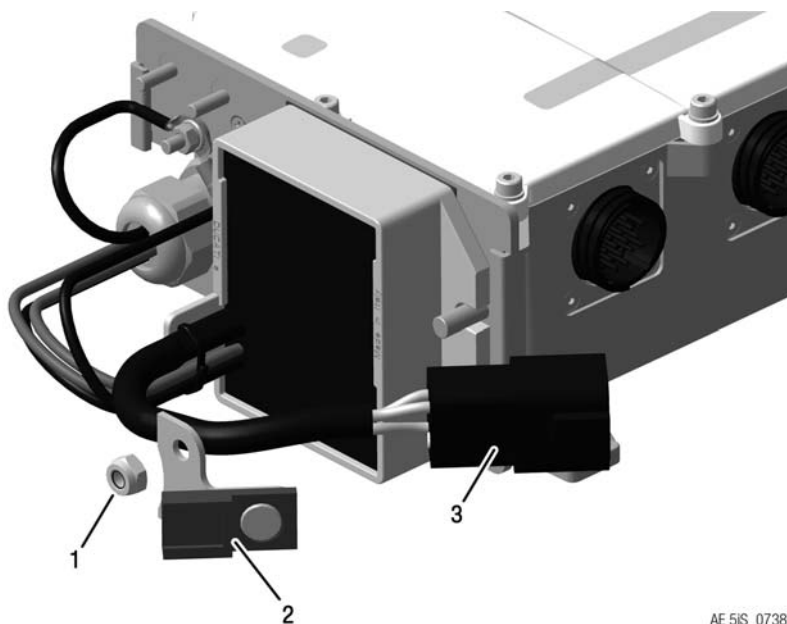
The following figure should convey additional information:



- 1 DEUTSCH®- connector/bracket side
- 2 Amphenol® - connector/bracket side

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Fig. 1



- 1 Lock nut M6
- 2 Connector bracket (DEUTSCH)
- 3 DEUTSCH connector

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Fig. 2

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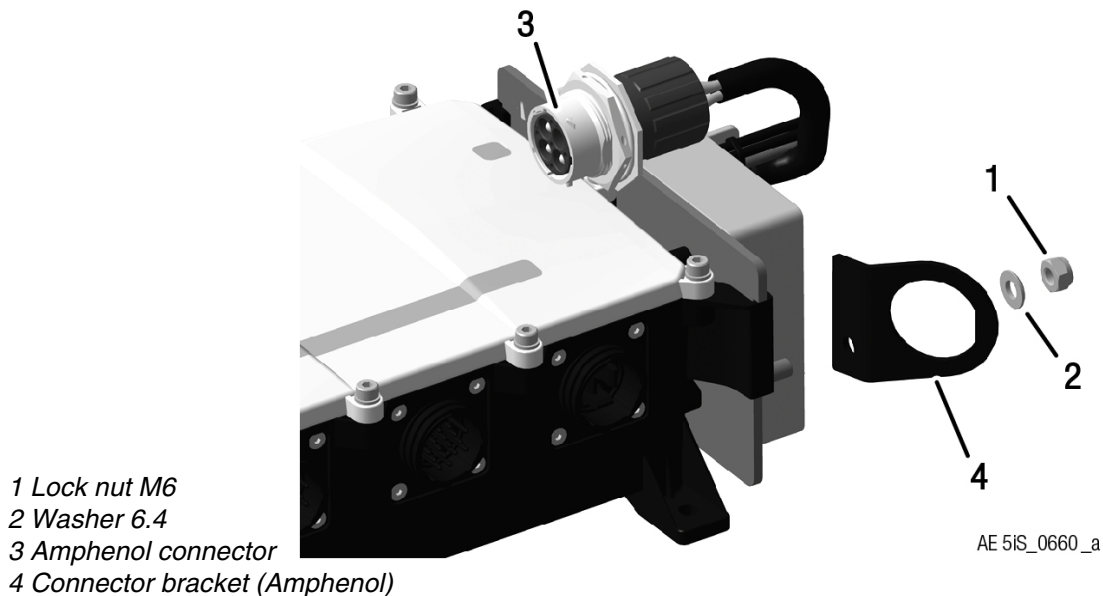


Fig. 3

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.