

Optional mounting kit for AC-DC Converter for ROTAX® Aircraft Engines

ATA System: 24-00-00 Electric Power

1) Planning information

“PAC” Service Instruction Documents provide detailed information on ROTAX® Aircraft Engine Parts and Accessories. Depending on the engine type used, the referenced parts and accessories may be provided with or without EASA certification or ASTM compliance. Certification / Compliance of referenced Parts and Accessories must in such cases 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 of your specific engine type:

NOTICE

The optional mounting brackets may be declared as part of the electric system on aircraft-side and so might not be a part of the Engine Type Design. Such a PAC part has been then tested and released by BRP-Rotax, but it might not be certified for the relevant engine type.

In such a case the correct function in conjunction with the entire system 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 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).

1.3) Reason

In the course of continuous development and standardization, a mounting kit for AC-DC Converter has been introduced as an optional extra part.

1.4) Subject

Optional mounting kit for AC-DC Converter 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.

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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 Illustrated Parts Catalog (IPC) and in particular:
 - Chapter 76-10-00
- in general Operators Manual (OM)
- in general Installation Manual (IM)
- in general Maintenance Manual Line (MML) and in particular:
 - Chapter 12-20-00
- in general Maintenance Manual Heavy (MMH) and in particular:
 - Chapter 76-10-00

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

- 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

Parts requirement:

Fig.no.	New part no.	Qty/en-gine	Description	Application
1	481495	(1)	AC-DC Converter mounting kit - packaged	28 V AC-DC Converter
consist of:				
	951045	2	Mounting bracket	
	901253	4	Allen screw M5x16	
	927573	4	Washer 5.3	
	842033	4	Lock nut M5	

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.



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

General

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

Advisory Circular

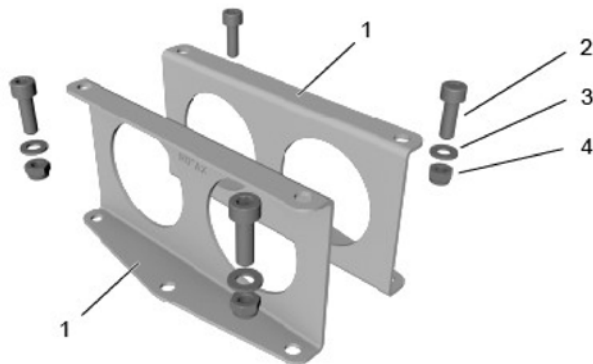
The Advisory Circular (AC) contains maintenance methods, techniques and practices.

3.1) Illustrated Parts Catalog - related information

See [Fig. 1](#).



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



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Fig. 1

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Pos.	Description	Part no.	Pos.	Description	Part no.
1	Mounting bracket	951045	3	Washer 5.3	927573
2	Allen screw M5x16	901253	4	Lock nut M5	842033

3.2) Installation - related information



WARNING

Non-compliance with these instructions could result in engine damages, personal injuries or death.

Danger of damage to engine! There is a risk of short circuits and cable fires during work on the electric system.

All installation work on the electric system should be carried out with the engine switched "OFF" and the battery (negative terminal) disconnected. Ignition main and LANE selector switches must be "OFF".



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

See Fig. 2.

Step	Procedure
1	Attach a mounting bracket to each side of the AC-DC Converter with Allen screws M5x16, washer 5.3 and lock nut M5. Tightening torque 5 Nm (44 in.lb).

- 1 Mounting bracket
- 2 Allen screw M5x16
- 3 Washer 5.3
- 4 Lock nut M5

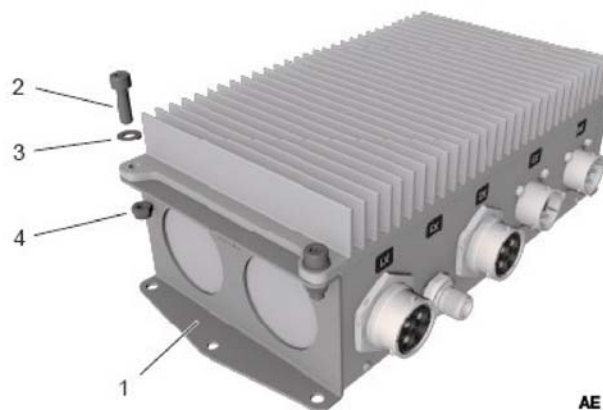


Fig. 2

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Step	Procedure
2	Attach the mounting brackets to the airframe, according to airframe manufacturer's instructions. NOTE: Installation position must ensure adequate cooling. See Installation Manual (IM), Chapter 24-00-00 for details on maximum component temperature measurement.

3.3) Operation - related information



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

3.4) Maintenance (Line) - related information

Points of inspection	Interval Operating hours	Chapter Reference
	100 h	
Visual inspection of the 28 V AC-DC Converter assy.. Check mounting brackets for cracks or damage. Check mounting hardware for tightness and security.	X	See relevant Maintenance Manual Line (MML) for the respective engine type and its periodical maintenance information.

3.5) Maintenance (Heavy) - related information



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

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

3.6) Test run

In case of uninstalled engines test run is accomplished with the mandatory test run after installation into aircraft.



Conduct test run and perform leakage check.
See Chapter 12-20-00 of the latest Maintenance Manual Line (MML) for the respective engine type.

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3.7) Summary

The execution of the Service Instruction - PAC 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.

3.8) 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 <https://dealerlocator.flyrotax.com>.

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4) Appendix

The following drawings should convey additional information:

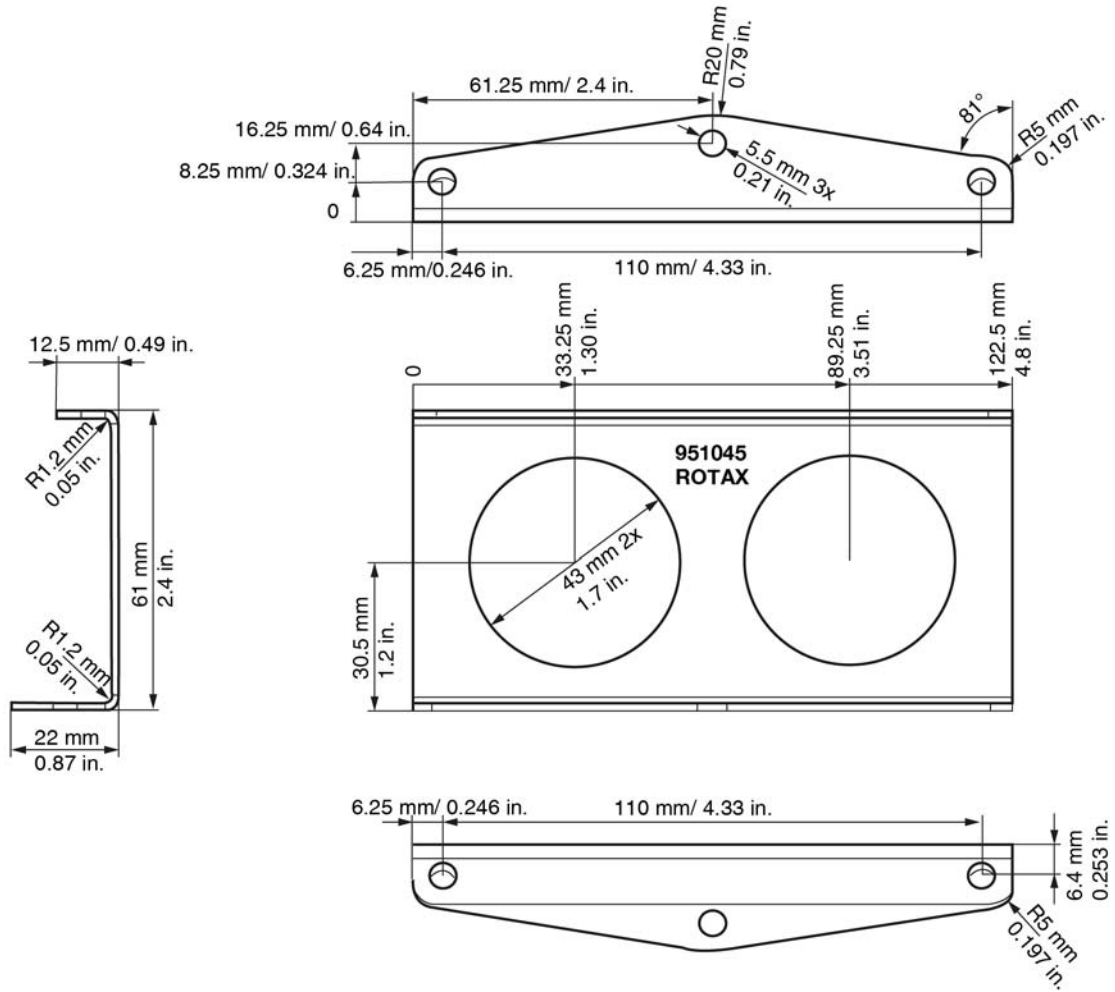


Fig. 3
Mounting bracket

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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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