

SERVICE INSTRUCTION - PAC

Shock Mount Set for ROTAX® Aircraft Engines

ATA System: 71-20-00 Engine suspension frame

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 shock mount set is not a part of the Engine Type Design. The shock mount has been tested and released by BRP-Rotax, but it is not certified. The correct function in conjunction with the entire system is the responsibility of the aircraft manufacturer. The certification of the shock mount set is the responsibility of the aircraft manufacturer and must be carried out jointly with the aircraft.

1.2) Concurrent ASB/SB/SI and SL

None.

1.3) Reason

In the course of continued development and our commitment to product improvement, a shock mount set has been introduced.

1.4) Subject

Shock mount set for ROTAX® Aircraft Engines.

1.5) Compliance

NONE - For Information Only.

1.6) Approval

None.

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.

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1.10) Software modifications

No change.

1.11) References

In addition to this technical information refer to current issue of:

- Operators Manual (OM)
- 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

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

2.3) Material requirement and credit per engine

Parts requirement:

Fig.no.	Part no.	Qty/ engine	Description	Application
1	860695	1	Shock mount set (pos. 2, 3)	Engine suspension
consist of:				
1	944240	8	Cup washer	Engine suspension
1	860690	8	Shock mount	Engine suspension

NOTICE

Distance tube/strut (1) is not supplied as part of the shock mount set. See the current version of the applicable engine Installation Manual (IM) Chapter 10-10-00 for detailed instructions.

2.4) Material requirement per spare part

None.

2.5) Rework of parts

None.

2.6) Special tooling/lubricant- /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 with approved qualifications for the corresponding engine types. Only authorized persons (iRMT, Level Heavy Maintenance) are entitled to carry out this work

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

3.1) Spare Parts - related information

Refer to the latest Illustrated Parts Catalog Manual (IPC) of the respective engine type. See also Chapter 2) Material information.

3.2) Operation - related information

See the instructions of continued airworthiness of the aircraft manufacturer.

3.3) Installation - related information

See Fig. 1

Refer to the latest Installation Manual (IM) of the respective engine type.

NOTICE

The length of the distance tube/strut (1) will affect how the shock mounts perform. To ensure optimum vibration isolation, perform vibration test as per Service Letter SL-912-010.

NOTICE

The rubber shock mounts and all engine suspension components not in the scope of delivery must be ground run tested at the specified loads and tested for vibration behavior.

NOTICE

Certification to the latest regulations, such as EASA or ASTM compliance must be conducted by the aircraft manufacturer.

The spring rates (K) of Shock mount part no. 860695 are:

	Static	Dynamic
K radial	800 lbs/inch	990 lbs/inch
K axial	4100 lbs/inch	5080 lbs/inch
Loss factor	0.09	
	Radial	Axial
Estimated limit load	600 lbs	1000 lbs
Estimated limit deflection	0.035 inch	0.025 inch
Snubbing	± 0.25 inch	

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3.4) Maintenance (Line) - related information



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

NOTE: The rubber shock mount set should be replaced every 5 years.

Points of inspection	Interval Operating hours	Chapter reference
	100 h	
Inspect the rubber shock mount set for cracks, deformation or deterioration.	x	12-20-00

3.5) Maintenance (Heavy) - related information

See the instructions of continued airworthiness of the aircraft manufacturer.

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 and perform leakage check. 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.

I 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 drawings should convey additional information:

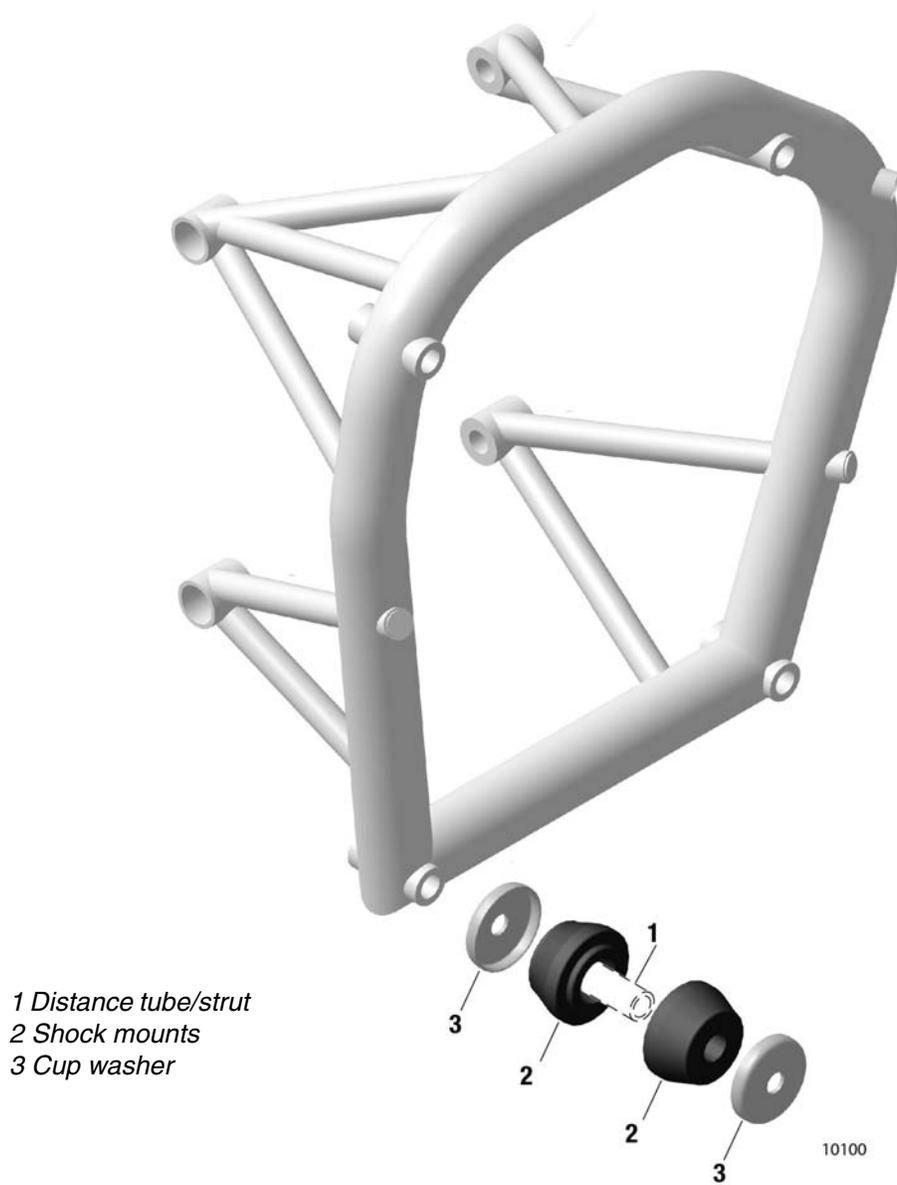


Fig. 1
Shock mount set

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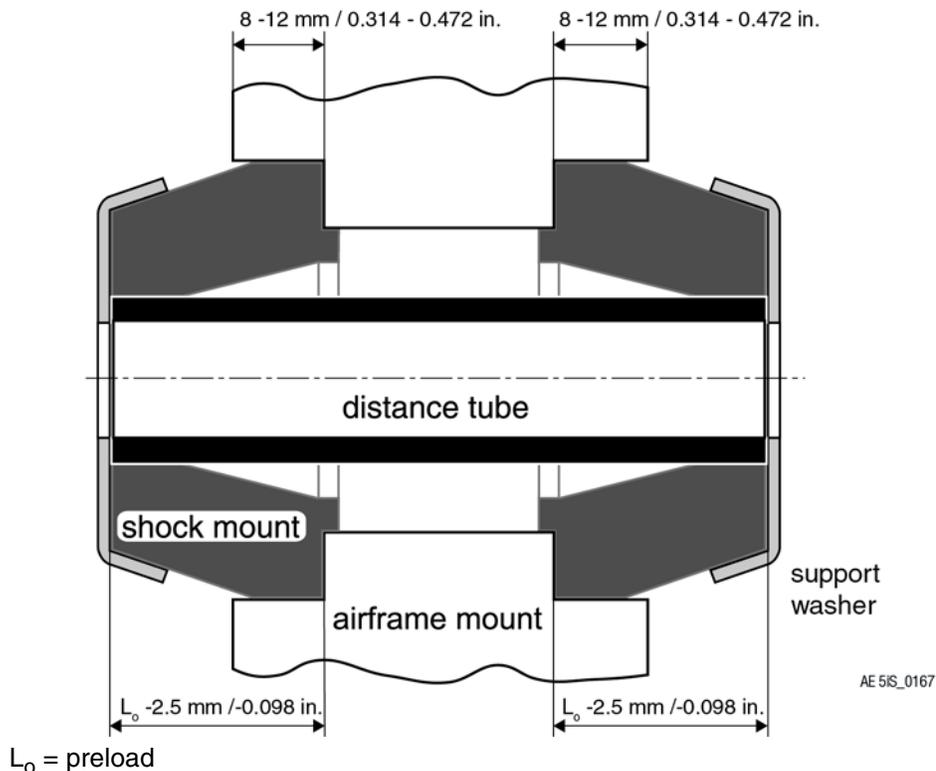


Fig. 2
Damping element engine suspension

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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