

# SERVICE INSTRUCTION - PAC

## Coolant overflow bottle for ROTAX® Aircraft Engines

ATA System: 75-00-00 Cooling system

### 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 overflow bottle is part of the cooling system on aircraft-side and not a part of the Engine Type Design. The Overflow bottle has been tested and released by BRP-Rotax, but it is not certified.

The correct function in conjunction with the entire system and the certification of the overflow bottle 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 product maintenance and expansion of our spare parts program for ROTAX® Aircraft Engines.

#### 1.4) Subject

Coolant overflow bottle 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 - - - 0.13 kg (0.29 lb).

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)

NOTE: The status of the Manuals can be determined by checking the table of amendments. The 1<sup>st</sup> column of this table shows the revision status. Compare this number to that listed on the ROTAX website:  
[www.FLYROTAX.com](http://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 per engine

Parts requirement:

Fig.no.	Part no.	Qty/ engine	Description	Application
2	922327	1	Overflow bottle with cap	Cooling system
1	242213	1	Hex. nut M6 (optional)	Overflow bottle cap vent
1	940557	1	Hose nipple M6 (optional)	Overflow bottle cap vent

### 2.4) Material requirement per spare part

None.

### 2.5) Rework of parts

None.

### 2.6) Special tooling/lubricants- /adhesives- /sealing compounds

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

Description	Qty/engine	Part no.	Application
LOCTITE® 243 Green	as required	899789	Overflow bottle cap vent
Drill bit 6 mm (0.236 in.)	1	-	Overflow bottle cap vent

## 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® - 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
- Persons with type-specific training



All work must be performed in accordance with the relevant Maintenance Manuals for the respective engine type.

### 3.1) Instructions

An OPTIONAL hose nipple connection for overflow vent, can be installed by completing the following steps:

See [Fig. 1](#) and [Fig. 2](#).

Step	Procedure
1	Drill out the existing cap vent hole from 2.5 mm (0.04 in.) as supplied to 6 mm (0.236 in.).
2	Apply LOCTITE® 243 to the threads of the hose nipple (3).
3	Insert hose nipple (3) into the cap vent hole.
4	Install nut (1) onto the hose nipple (3). Tightening torque 5 Nm (44 in.lb).
5	Screw the cap (2) onto the overflow bottle.
Steps to attach the hose:	
6	Attach the hose (5) with a hose clamp (4).
7	Make sure the hose (5) has no kinks. Rout it overboard and secure.

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

#### NOTICE

Refer to the relevant Installation Manual (IM) for overflow bottle installation instructions and appropriate hose selection for use between the overflow bottle and the expansion tank.

#### WARNING

Non-compliance can result in serious injuries or death!  
A soft-walled hose is not suitable as it may collapse and cause cooling system failure.

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## 3.2) 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.

## 3.3) 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.

## 3.4) Inquiries

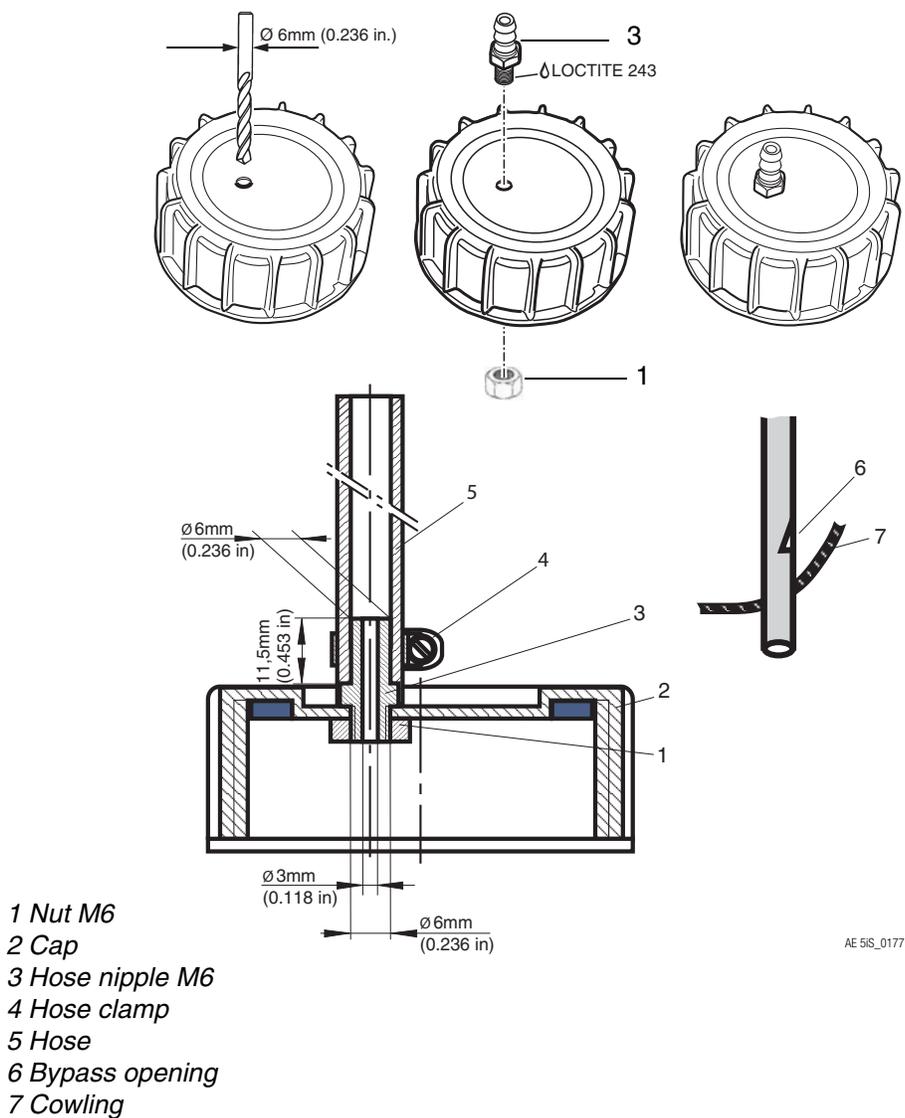
Inquiries regarding this Service Instruction - PAC should be sent to the ROTAX® Authorized Distributor of your area.

A list of all ROTAX® Authorized Distributors or their independent Service Centers is provided on [www.FLYROTAX.com](http://www.FLYROTAX.com).

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## 4) Appendix

The following drawings should convey additional information:



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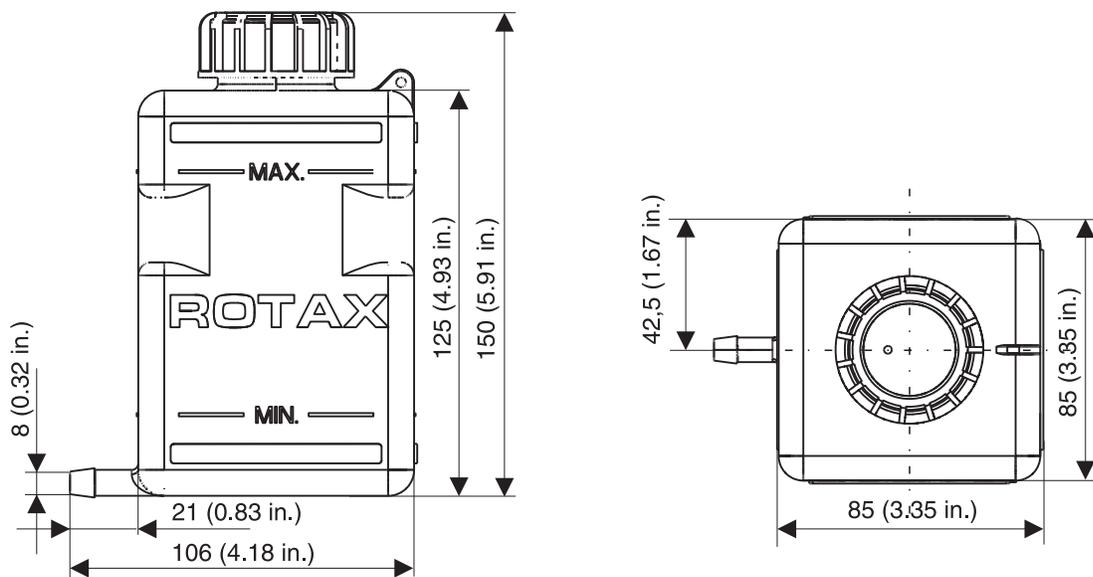


Fig. 2  
Overflow bottle dimensions

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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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