



SERVICE BULLETIN

INSPECTION OF EXHAUST MUFFLER PART NO. 979402 / 979404 FOR ROTAX® ENGINE TYPE 914 (SERIES) SB-914-028 R1

MANDATORY

Repeating symbols

Please, pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ **WARNING:** Identifies an instruction, which if not followed, may cause serious injury or even death.
- **CAUTION:** Denotes an instruction which if not followed, may severely damage the engine or could lead to suspension of warranty.
- ◆ **NOTE:** Information useful for better handling.

1) Planning information

1.1) Engines affected

Group A)

All versions of the engine type:

- 914 F (Series) from S/N 4,420.372 to S/N 4,420.406
as long as the engine was upon delivery equipped with a genuine or retrofitted ROTAX® exhaust muffler part no. 979402. In case of doubt contact your aircraft manufacturer.

On engine with S/N higher than the one listed above, the exhaust muffler part no. 979402 was already fitted in serial production and is therefore accordance to group A not affected.

Following engines were already retrofitted and accordance to group A are not affected:

- 914 F (Series): 4,420.372 / 4,420.375 / 4,420.377 / 4,420.392 / 4,420.395 / 4,420.398

all parts

- exhaust muffler part no. 979402 from S/N 02.0001 to S/N 02.0322 and from S/N 03.0001 to S/N 03.0108 installed on the engine or supplied as spare part.

Following exhaust muffler part no. 979402 accordance to group A are not affected:

03.0001 / 03.0003 / 03.0004 / 03.0006 / 03.0007 to 03.0010 / 03.0012 to 03.0014 / 03.0016 / 03.0018 to 03.0027 / 03.0030 to 03.0036 / 03.0039 / 03.0041 to 03.0049 / 03.0051 to 03.0068 / 03.0070 / 03.0071 / 03.0074 to 03.0077 / 03.0079 / 03.0087 / 03.0091 / 03.0102 / 03.0104 to 03.0107

Group B)

All versions of the engine type:

- 914 F (Series) from S/N 4,420.407 to S/N 4,420.436
as long as the engine was upon delivery equipped with a genuine or retrofitted ROTAX® exhaust muffler part no. 979402 or part no. 979404. In case of doubt contact your aircraft manufacturer.

all parts

Following exhaust muffler part no. 979402 accordance to group B affected:

03.0001 / 03.0003 / 03.0004 / 03.0006 / 03.0007 to 03.0010 / 03.0012 to 03.0014 / 03.0016 / 03.0018 to 03.0027 / 03.0030 to 03.0036 / 03.0039 / 03.0041 to 03.0049 / 03.0051 to 03.0068 / 03.0070 / 03.0071 / 03.0074 to 03.0077 / 03.0079 / 03.0087 / 03.0091 / 03.0102 / 03.0104 to 03.0107

- exhaust muffler part no. 979404 from S/N 03.0200 to S/N 04.0799 installed on the engine or supplied as spare part.

All exhaust mufflers begin with S/N 04.0800 are modified and not further affected.

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1.2) Concurrent ASB/SB/SI and SL

none

1.3) Reason

Occurrence of cracks on original ROTAX[®] exhaust muffler part no. 979402 / 979404.
Modification of original ROTAX[®] exhaust muffler part no. 979404 from S/N 04.0800.

1.4) Subject

Inspection of exhaust muffler part no. 979402 / 979404 for ROTAX[®] engine type 914 Series.

1.5) Compliance

- Every 50 hours of operation, inspect the exhaust muffler as per the instruction provided for in section 3 of this Service Bulletin.

▲ **WARNING:** Non-compliance with these instructions could result in engine damage, personal injury or death!

1.6) Approval

The technical content is approved under the authority of DOA Nr. EASA.21J.048.

1.7) Manpower

Estimated man-hours:

engine installed in the aircraft - - - manpower time will depend on 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 accomplishment summary

no change

1.11) References

In addition to this technical information refer to current issue of

- Illustrated Parts Catalog (IPC)
- Maintenance Manual (MM)

1.12) Other publications affected

none

1.13) Interchangeability of parts

- All old parts are stopped for further use and must be returned F.O.B. to Authorized ROTAX[®] Distributors or their Service Centers.

- Furthermore, all exhaust mufflers part no. 979402 to S/N 03.0108 in the replacement parts store are stopped for further use and must be returned F.O.B. to authorized ROTAX[®] Authorized Distributors or their Service Centers. Following mufflers part no. 979402 accordance to group A are not affected, there these already a reweld flange exhibit and therefore must be not returned.

03.0001 / 03.0003 / 03.0004 / 03.0006 / 03.0007 to 03.0010 / 03.0012 to 03.0014 / 03.0016 / 03.0018 to 03.0027 / 03.0030 to 03.0036 / 03.0039 / 03.0041 to 03.0049 / 03.0051 to 03.0068 / 03.0070 / 03.0071 / 03.0074 to 03.0077 / 03.0079 / 03.0087 / 03.0091 / 03.0102 / 03.0104 to 03.0107

2) Material Information

2.1) Material - cost and availability

Price and availability will be supplied on request by ROTAX[®] Authorized Distributors or their Service Center.

2.2) Company support information

- Changed parts must be returned F.O.B. to a ROTAX[®] Authorized Distributor or Service Center.

- Shipping cost, down time, loss of income, telephone costs etc. or cost of conversion to other engine versions or additional work, as for instance simultaneous engine overhaul, is not covered in this scope and will not be borne or reimbursed by ROTAX[®].

2.3) Material requirement per engine

There is the following parts requirement for exhaust muffler replacement:

- ◆ NOTE: This new part is only required, if cracks in the exhaust muffler were detected (see chapter 3.1). For further action you will need to contact the nearest ROTAX[®] Authorized Distributor or their Service Centers (see also our official ROTAX-Web-Site: www.rotax-aircraft-engines.com).

| Item no Desig. no. | New P/N | Qty / Engine | Description | Old P/N | Application |
|-----------------------|--------------------|-----------------|-----------------------|------------|------------------------|
| | 979404* | 1 | Exhaust muffler assy. | | ROTAX [®] 914 |
| | * from S/N 04.0800 | | | | |

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

none

3) Accomplishment / Instructions

Accomplishment

All the measures must be taken and confirmed by the following persons or facilities:

- ROTAX[®] -Airworthiness representative
- ROTAX[®] -Distributors or their Service Centers
- Persons approved by the respective Aviation Authority

▲ WARNING: Proceed with this work only in a non-smoking area and not close to sparks or open flames. Switch off ignition and secure engine against unintentional operation. Secure aircraft against unauthorized operation.

▲ WARNING: Carry out work on a cold engine only.

▲ WARNING: Should removal of a locking device (namely lock tabs, self-locking fasteners) be required when undergoing disassembly/assembly, always replace with a new one.

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

3.1) Inspecting exhaust muffler part no. 979402 / 979404

3.1.1) Inspecting exhaust muffler part no. 979402 / 979404 in accordance section 1.1 group A

- CAUTION: Inspection in the area (exhaust flange) in the fillet and exhaust bottom visual for exterior traces of smoke or existing cracks as shown in fig. 1 and fig. 2.

3.1.2) Inspecting exhaust muffler part no. 979402 / 979404 in accordance section 1.1 group B

- CAUTION: Inspection in the area (exhaust bottom) visual for exterior traces of smoke or existing cracks as shown in fig. 2.
- If exterior traces of smoke or cracks are detected, then you need to replace the exhaust muffler in accordance with the current issue MM 914F.
- Restore aircraft to original operating configuration.

3.2) Test run

Conduct test run including ignition inspect and leakage test.

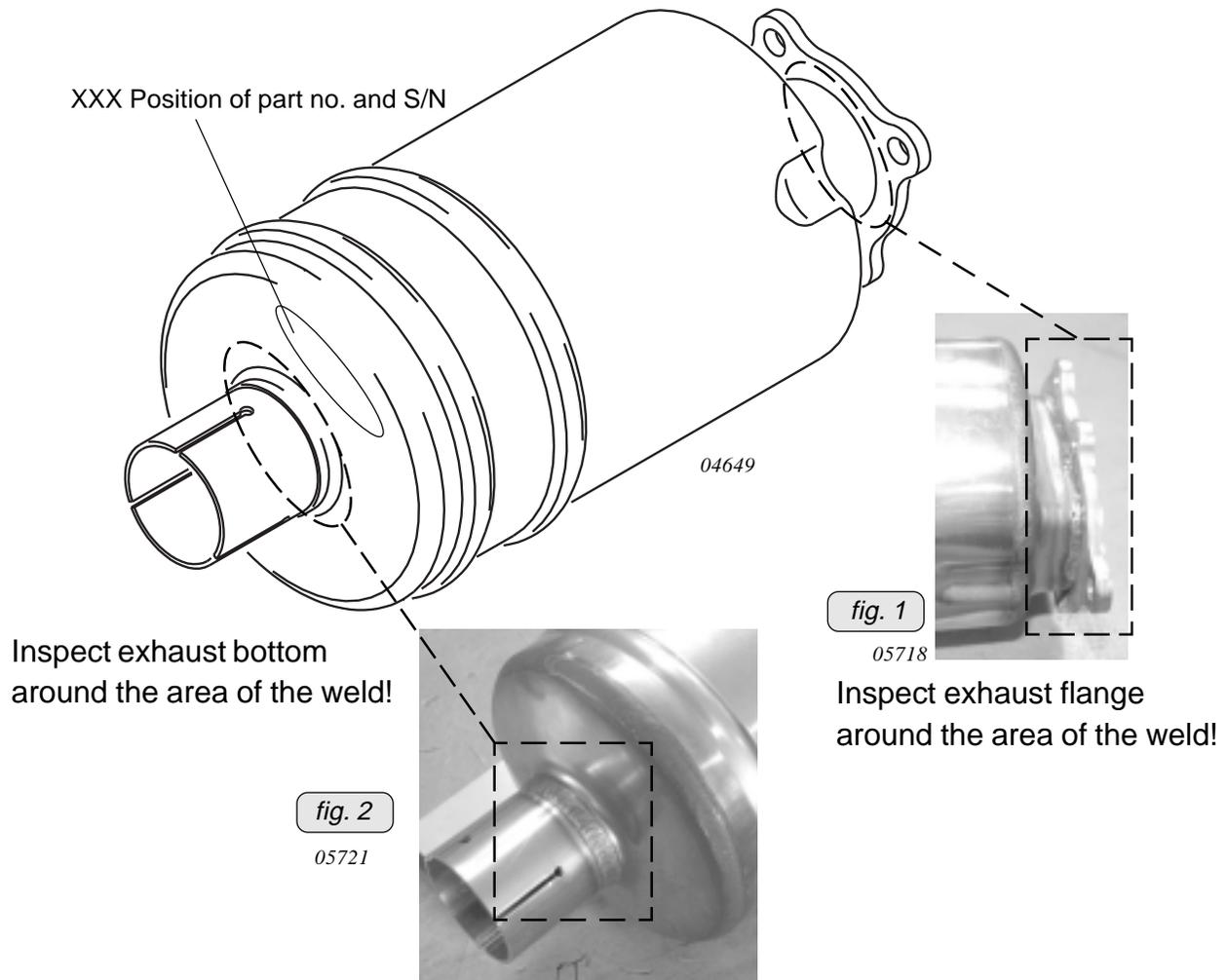
3.3) Summary

These instructions (section 3) have to be conducted in compliance with section 1.5.

Approval of translation to best knowledge and judgment - in any case the original text in the German language and the metric units (SI-system) are authoritative.

4) Appendix

The following drawing should convey additional information:



◆ 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.