

SERVICE BULLETIN

CHECKING OR REPLACEMENT OF THE EXHAUST MUFFLER OF REDUCED NOISE EMISSION PART NO. 979 405

MANDATORY FOR ROTAX® ENGINE TYPE 914 F SB-914-015

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.

■ **ATTENTION:** 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

All versions of the engine type:

914 F (Series) beginning with S/N 4,420.002 to S/N 4,420.244

◆ **NOTE:** The stated engines are only affected, if the exhaust muffler of reduced noise emission ROTAX® part no. 979 405 was already delivered with engine or retrofitted.

1.2) Concurrent ASB/SB/SI and SL

none

1.3) Reason

Occurrence of cracks in exhaust muffler of reduced noise emission part no. 979 405.

1.4) Subject

Checking or replacement of the exhaust muffler of reduced noise emission part no. 979 405 for ROTAX® engine type 914 F

1.5) Compliance

a) Within the next 3 hours of operation check the exhaust muffler of reduced noise emission as per the following instructions chapter 3.1, if the Alert Service Bulletin ASB-914-015 has not been carried out yet.

b) Within the next 25 hours of operation check or replace the exhaust muffler of reduced noise emission as per the following instructions 3.2, if the Alert Service Bulletin ASB-914-015 has not been carried out yet.

c) Check every 50 hours of operation the exhaust muffler of reduced noise emission as per the following instructions chapter 3.1.

1.6) Approval

The technical content of this Service Bulletin is approved by ACG.

1.7) Manpower

- estimated man-hours for exhaust change (if necessary):
engine installed in the aircraft - 1 h per unit.

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 the Operator's Manual (OM)
- current issue of the Illustrated Parts Catalog (IPC)
- Maintenance Manual (MM)

1.12) Other publications affected

none

1.13) Interchangeability of parts

At exchange of the exhaust muffler of reduced noise emission take care of the following

- If necessary, remove the exhaust muffler of reduced noise emission as per the following instructions and send to a ROTAX[®] authorized distributor or Service Center.

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

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 born or reimbursed by ROTAX[®].

2.3) Material requirement per engine

For the replacement of the exhaust muffler of reduced noise emission the following parts are required:

- ◆ NOTE: This new part is only required, if cracks in exhaust muffler were detected (see chapter 3.2).

item no.	New part no.	Qty.	Description	Old part no.	application
	979405	1	exhaust muffler assy.		ROTAX [®] 914

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 Center
- Persons with 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.
- Disconnect negative terminal of aircraft battery.

3.1) Inspection of the exhaust muffler:

see fig. 4

- Visually inspect exhaust system
- Inspection of the exhaust system of existing cracks

◆ **NOTE:** Particular inspection for cracks in the area as shown in fig. 4.

3.2) Checking or replacement of exhaust muffler:

see fig. 1, 2 and 3

3.2.1) Disassembly of exhaust muffler

- Disassembly of the exhaust muffler has to be done in accordance with the relevant Maintenance-Manual.

3.2.2) Assembly of the exhaust system

- Attach muffler (1) with washers and M8 nuts (2) on turbine housing.
- Secure the support plate (3) with washers and hex. hd. screws (4) M8x35 on turbine housing.
- Tighten muffler attachment nuts M8 (2) to 25 Nm (220 in.lb).
- Place spacer (5) 10,5/17/15 part no. 847 840 into left arm of engine suspension frame and attach muffler bracket (6) with washer and Allen screw (7) M10x50 on crankcase.
Tightening torque of the M10 screws = 35 Nm (310 in.lb).
- Re-establish attachment (8) muffler bracket - engine suspension frame (not in supply volume of engine).
Tightening torque as specified by the aircraft builder.
- The muffler will be attached by clamp (9).
 - **ATTENTION:** Place clamp (9) in position such that the tension free zone (10) comes to rest on edge of muffler bracket. See fig. 2.
 - **ATTENTION:** Doublecheck that the muffler is assembled free of stress. If an assembly free of stress is not possible rework the muffler bracket at the position of the Allen screw (7) and the attachment (8) muffler bracket - engine suspension frame into the stress free direction to get a elongated hole. Rework elongated hole with a metall-file only as required. Max. 3mm (0,12 in).
- Disconnect negative terminal of aircraft battery.

3.3) Test run

Start engine. Conduct test run including ignition check and leakage test in accordance with the current Maintenance Manual of the respective engine type.

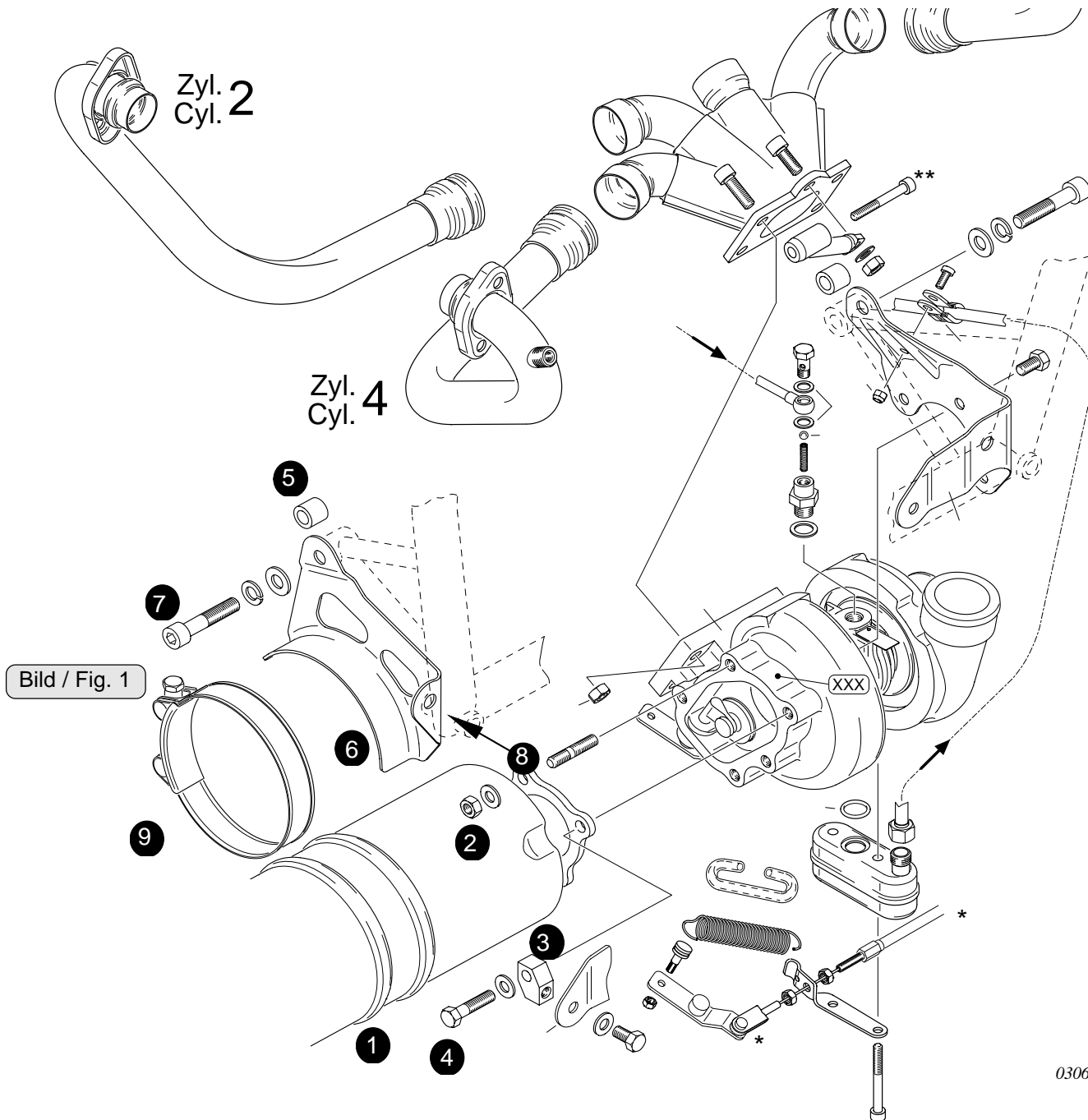
3.5) Summary

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

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

4) Appendix

The following drawings should convey additional information:



03064

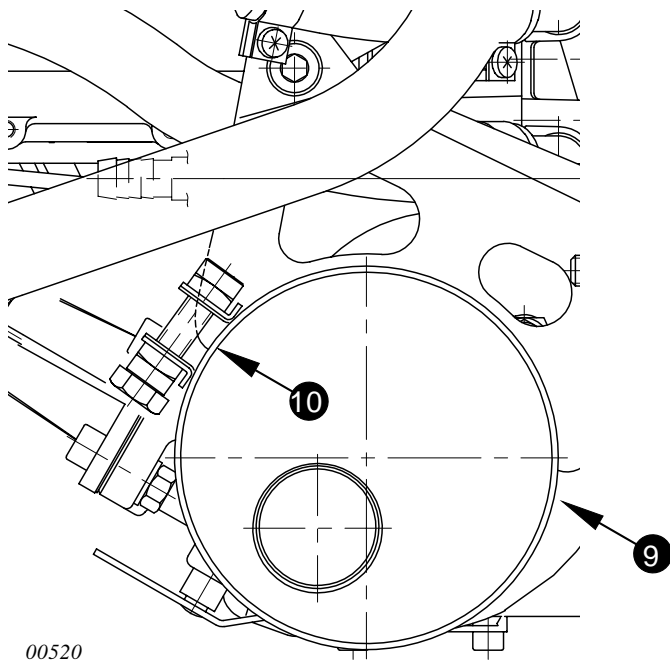


Bild / Fig. 2

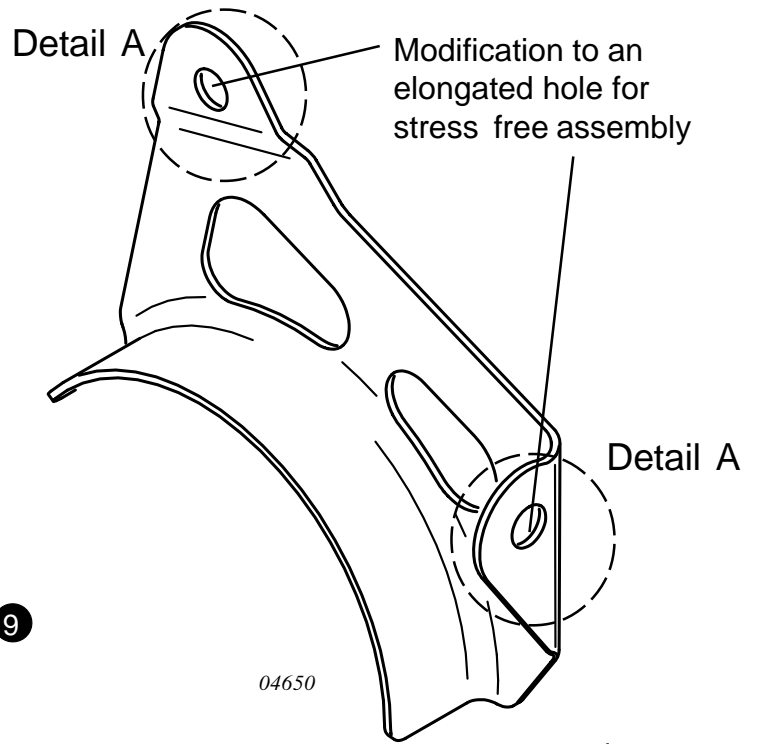


Bild / Fig. 3

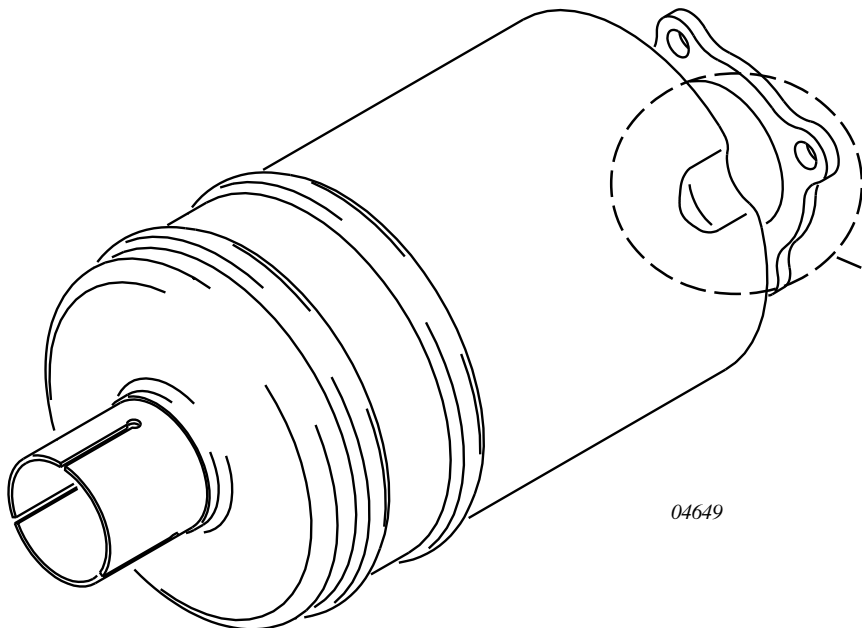
max. 3 mm (0,12 in)
in one direction only

10,5 mm (0,42 in)

Detail A

max. 3 mm (0,12 in)
in one direction only

04651



Inspect this area for cracks!

Bild / Fig. 4