



GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: HK-36 TT Serial No's. 36.511 up to & incl. 36.734. DV-22 Serial No's. 22.001 and 22.002. DA-40 Serial No. 40.001V1

SUBJECT: Inspection of Exhaust Muffler Part No. 979402 fitted to Rotax 914 series engines.

BACKGROUND: Cracks have occurred in Muffler part No. 979402, which is not certified for use in the HK-36, DV-22 or DA-40 aircraft.

DOCUMENTATION: Alert Service Bulletin No.ASB-914-028R1 is attached and forms part of this AD.

ACTION REQUIRED: Visually inspect the muffler for exterior signs of smoke or cracks, particularly in the Mounting Flange and weld fillet areas. If exterior traces of smoke or cracks are detected the aircraft must immediately be grounded and the appropriate Rotax service center contacted. There is a website: www.rotax-aircraft-engines.com

WEIGHT AND BALANCE: No change.

IMPLEMENTATION: Before next flight, and at every Daily inspection. Inspection to be carried out in accordance with Section 3 of the Alert Service Bulletin.

COMPLIANCE: The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:

John G King

SENIOR TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION
OF AUSTRALIA

**TECHNISCHE INFORMATION NR.
SERVICE INFORMATION NO.
SI36-026
SI22-008
SI40V1-009**

I. TECHNISCHE ANGABEN**1.1 Betroffene Flugzeuge**

HK 36 TT-Serie Werknummern 36.511 bis 36.734
DV 22 Werknummern 22.001 und 22.002
DA 40 Werknummer 40.001 V1

1.2 Gegenstand

ATA Code: 72-00
Motor

1.3 Anlaß

Alert Service Bulletin ASB-914-028 R1 der Firma Rotax betreffend die Kontrolle des Auspufftopfes TNR. 979402 bei Rotax Motoren Type 914 (Serie).

1.4 Information

1. Der Auspufftopf TNR. 979 402 ist für keines der unter Pkt. 1.1 genannten Flugzeuge zugelassen und wurde von Diamond Aircraft Industries serienmäßig nie eingebaut.
2. Derzeit zugelassene Auspufftöpfe von Rotax sind TNR. 979 405 und 979 401.

II. SONSTIGES

Dieser Service Information ist das Alert Service Bulletin ASB-914-028 R1 der Firma Rotax in englischer und deutscher Sprache beigelegt.

I. TECHNICAL DETAILS**1.1 Airplanes affected**

HK 36 TT-series Serial numbers 36.511 up to and incl. 36.734
DV 22 Serial numbers 22.001 and 22.002
DA 40 Serial number 40.001 V1

1.2 Subject

ATA code: 72-00
Engine

1.3 Reason

Alert Service Bulletin ASB-914-028 R1 from Rotax concerning the inspection of the exhaust muffler part no. 979402 on Rotax engines type 914 (series).

1.4 Information

1. The exhaust muffler part no. 979 402 is not certified for any airplane mentioned under item 1.1 and was never factory-installed by Diamond Aircraft Industries.
2. At the time certified exhaust mufflers by Rotax are part numbers 979 405 and 979 401.

II. OTHER INFORMATION

The Alert Service Bulletin ASB-914-028 R1 from Rotax in English and German languages is attached to this Service Information.



ALERT SERVICE BULLETIN

INSPECTION OF THE EXHAUST MUFFLER PART NO. 979402 FOR ROTAX® ENGINE TYPE 914 SERIES ASB-914-028R1

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

a.) All versions of the engine type:

- 914 F (Series) from S/N 4,420.372 to S/N 4,420.406

- 914 UL (Series) from S/N 4,418.263 to S/N 4,418.605

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 not affected by this Alert Service Bulletin.

Following engines were already retrofitted and are not affected:

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

- 914 UL (Series): 4,418.267 / 4,418.268 / 4,418.475 / 4,418.488 / 4,418.512 / 4,418.515 / 4,418.523 / 4,418.526 / 4,418.534 / 4,418.550 / 4,418.555 / 4,418.564 to 4,418.569 / 4,418.579 to 4,418.584 / 4,418.586 / 4,418.597 / 4,418.601 / 4,418.603

b.) all parts

- all 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 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

1.2) Concurrent ASB/SB/SL and SL

none

1.3) Reason

Cracks occurred on genuine ROTAX® exhaust muffler part no. 979402

1.4) Subject

Inspection of the exhaust muffler part no. 979402 for ROTAX® engine type 914 Series

1.5) Compliance

- Before the next flight and at every daily inspection, a "Inspection of the exhaust muffler" must be conducted according to the following instructions in section 3.

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1.6) Approval

The technical content of this document is approved under the authority of MOT, DOA Nr. MOT - JA 03.

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

- Installation Manual (IM)
- Operator's Manual (OM)
- Illustrated Parts Catalog (IPC)
- Maintenance Manual (MM)

1.12) Other publications affected

none

1.13) Interchangeability of parts

At exchange of the exhaust muffler take care of the following

- If necessary, remove the exhaust muffler as per the following instructions and send to a ROTAX_® authorized distributor or their Service Centers.

2) Material Information

2.1) Material - cost and availability

Price and availability will be supplied on request by ROTAX_® Authorized Distributors or their Service Centers.

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, the following parts are required:

- ◆ 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.	New part no.	Qty.	Description	Old part no.	application
	979402*	1	exhaust muffler assy.		ROTAX _® 914

* from S/N 03.0109

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
- *Persons with type-specific training (applicable only for non-certified engines)*

▲ **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) Inspection of the exhaust muffler

see fig. 1

- Visually inspect exhaust system (without turbocharger) in accordance with the MM 914F section 13.5.2.
- Visually inspect of the exhaust muffler for exterior traces of smoke or existing cracks.

◆ **NOTE:** Particular inspection in the area (exhaust flange) for exterior traces of smoke or existing cracks in the fillet (weld inlying) (as shown in fig. 1).

- If exterior traces of smoke or cracks are detected, do not operate the aircraft and immediately contact the nearest ROTAX_® Authorized Distributor or their Service Centers for further action. (see also our official ROTAX-Web-Site: www.rotax-aircraft-engines.com).

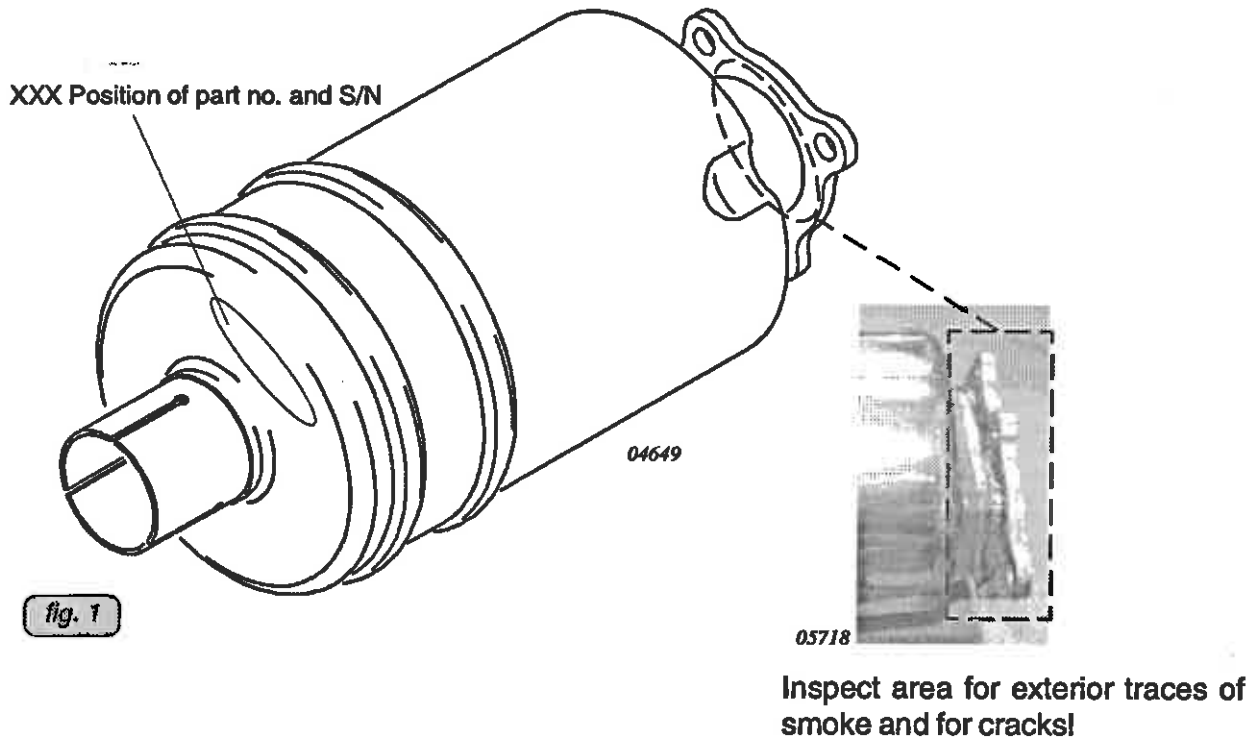
3.2) Summary

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

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 drawings 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 **no** technical drawings and are for reference only. For specific detail, refer to the current documents of the respective engine type.