



SERVICE BULLETIN

INSPECTION OF THE PROPELLER GEARBOX WHEN USING LEADED FUEL FOR THE ROTAX® ENGINE TYPE 912/914

SB-912-033

SB-914-020

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.

■ **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 gearbox of the engine type:

912 A3

912 F3

912 S3

914 F3

If the engines have been run more than 30 % of the complete period of operation on leaded fuel (e.g. AVGAS 100L).

1.2) Concurrent ASB/SB/SI and SL

Further to this Service Bulletin the following additional Service Instruction must be observed and complied with.
SI-18-1997 Selection of motor oil, current issue

1.3) Reason

When running the engine on leaded fuel (e.g. AVGAS) lead deposits could result in increased wear of components. Therefore additional periodical maintenance checks are required.

1.4) Subject

Inspection of the propeller gearbox after use of leaded fuel for Rotax® engine type 912/914.

1.5) Compliance

- At the 600 h Maintenance check;

or at the next 100 h check, if the TSN or TSO check of 600 h has already been passed.

◆ **NOTE:** The compliance refers to period of operation of the gearbox which may differ from engine operation time.

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

1.6) Approval

The technical content of this Service Bulletin has been approved by ACG.

1.7) Manpower

none

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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 the last issue of
- relevant Maintenance Manual (MM)

1.12) Other publications affected

none

1.13) Interchangeability of parts

All redundant parts which cannot be used must be returned to an authorized Rotax[®] 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

none

2.3) Material requirement per engine

Parts requirement:

item no.	New part no.	Qty.	Description	Old part no.	application
	XXXXXX*	1	gearbox assy.		engine
	842575	1	hex.nut M30 x 1,5 LH		drive gear
	845430	1	friction washer		drive gear
	950141	1	gasket ring		crankshaft locking

* depending on engine type

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

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

- parts requirement:

item no.	New part no.	Qty.	Description	Old part no.	remarks
	240880	1	crankshaft locking screw		crankcase
	877660	1	puller assembly		gearbox housing
	899784	NB	Loctite [®] 574		sealing surface gearbox housing
	897651	NB	Loctite [®] 243		hex. nut M30x15 LH

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.

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

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

3.1) Inspection of the propeller gearbox

■ **ATTENTION:** Proceed with the following work in accordance with the relevant Maintenance Manual of engine.

- Locking of crankshaft
- Checking of the overload clutch.

If the determined value should be out of the limits, the propeller gearbox must be removed in accordance with chapter 3.2 and subsequently sent to an authorized Rotax[®] distributor or to an authorized overhaul facility for inspection.

- Removal of crankshaft locking screw
- Reconnection of the aircraft battery

3.2) Removal / Installation of the propeller gearbox (if necessary)

■ **ATTENTION:** Proceed with the following work in accordance with the relevant Maintenance Manual of engine.

- Removal of propeller gearbox
- Installation of the verified propeller gearbox
- Reconnection of the 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.

3.4) Summary

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

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.