

SERVICE LETTER

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KODIAK RESEARCH LTD. NASSAU, BAHAMAS

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Use of Third Party After-market Piston Kits in Rotax 912 / 914 Series Engines

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(A) **INTRODUCTION**

THIS INFORMATION IS INTENDED TO ASSIST THE AIRCRAFT DESIGNER, MANUFACTURER AND BUILDER/OPERATOR TO ACHIEVE CORRECT OPERATING CONDITIONS AND ASSEMBLY FOR THE ENGINE AND CONSEQUENTLY OPTIMUM PERFORMANCE AND RELIABILITY.

(B) **TECHNICAL DATA AND GENERAL INFORMATION**

IN ADDITION TO THIS INFORMATION PLEASE REFER TO:

OPERATORS MANUAL
ENGINE DATA SHEET
POWER, TORQUE AND FUEL CONSUMPTION CURVES
SPARE PARTS LIST
ENGINE INSTALLATION MANUAL
ENGINE MAINTENANCE MANUAL

IMPORTANT INFORMATION

SUBJECT

Installation of non – approved, third party pistons in Rotax 912 / 914 series engines

ENGINES AFFECTED

All Rotax 912 / 914 series engines

REASON

At least one replacement 'high performance' piston kit for the 912 UL engine is now being marketed. The manufacturers of these piston kits claim up to a 15 HP increase in performance when installed in the standard 81 HP 912 UL engine. **The use of any third party after-market replacement pistons is not approved by Rotax and may result in engine damage and / or engine failure resulting in personal injury and / or death.**

In addition, the manufacturers of these piston kits are suggesting that replacement of the pistons in the 912 UL engine is a task that can be easily undertaken by owners / operators. The proper removal and replacement of the pistons in the 912 UL engine should only be carried out by a fully trained and properly equipped Service Center or Repair Station.

SERVICE INFORMATION

The use of pistons not manufactured and supplied by Rotax in any 912 / 914 series engine is not recommended and is strongly discouraged.

No factory testing has been done with engines equipped with these after-market 'high compression' pistons, therefore the effects on engine performance, reliability and serviceability cannot be predicted.

SERVICE INFORMATION continued...

The design, materials, workmanship of third party after-market pistons has not been verified. Defects in piston design, materials or construction may result in engine damage and / or catastrophic engine failure.

Use of third party 'high compression' replacement pistons may result in some, or all, of the following:

- crankshaft or connecting rod failure
- damage to crankcase
- lean mixture operating conditions resulting in rough running and / or valve burning
- damage from detonation or pre-ignition
- hard starting
- damage to the gear reduction unit.

The manufacturers of some third party piston kits are also supplying instructions for the removal and replacement of pistons in the Rotax 912 UL engine. These instructions may not be complete and may lead to engine damage during disassembly or re-assembly of the engine. Engine damage may also occur due to incorrect re-assembly of the engine or by the improper reuse of parts such as O-rings and seals.

Removal and replacement of pistons in the 912 UL engine is a procedure that requires the correct tools and proper training, and should not be attempted outside of an authorized Service Center or Repair Station.

Use of any third party pistons will void the Rotax engine warranty.

Kodiak Research Ltd. authorized Service Centers and their authorized Repair Stations may, at their option, refuse to examine or repair engines equipped with third party after-market pistons.

SUMMARY

- The use of any third party, after-market replacement pistons for 912 / 914 series engines is **NOT** approved by Rotax and is very strongly discouraged.
- Use of any third party replacement piston may cause engine damage resulting in catastrophic engine failure.
- Use of any third party replacement pistons will void all Rotax engine warranties.

WARNING!
FAILURE TO COMPLY WITH THESE RECOMMENDATIONS COULD RESULT IN
ENGINE DAMAGE AND PERSONAL INJURY OR DEATH!