

SERVICE INFORMATION

RELEASED BY AUTHORIZED DISTRIBUTOR:
KODIAK RESEARCH LTD. NASSAU, BAHAMAS

IMPORTANT INFORMATION

CONFIGURATION CHANGES TO ROTAX 912 VERSION UL AND A*

1 KUL 95

ISSUE DATE March 1995

(A) **INTRODUCTION**

THIS INFORMATION IS INTENDED TO ASSIST THE AIRCRAFT DESIGNER, MANUFACTURER AND BUILDER 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 CHECK LIST

1. Changes Relevant For Installation

- a) 912 UL and A will be supplied in the future, scheduled for production from February 1995 onwards:
- starting with engines no 4.153.100 on 912 UL DCDI, model 94; and
 - starting with engine no. 4.380.600 on 912 A DCDI, model 95
- will incorporate the following changes.

2. Oil Tank of Increased Capacity

See also diagrams supplied on pages 4 and 5. In view of the planned serial production of the engine type 914, changes in the oil tank 956 137/956 139 used up to now, will be necessary regarding capacity as well as connection of oil lines.

At the start of serial production in February 1995, the new oil tank 956 500/501, suitable for use on ROTAX 912 UL and A, and on Rotax 914 UL, will be supplied as standard equipment with the engine.

The new oil tank 956 500/501 differs as per the following:

- total height 327 mm (was 304 mm)
- standard equipped with baffle plates
- all oil lines connected on tank cover
- connection of oil return line on tank cover M 18 x 1.5
- connection of oil supply line on tank cover M 18 x 1.5
- connection of oil return line for turbo ROTAX 914 on tank cover M 8 x 1 (plugged for use with ROTAX 912 UL/A).
- the new oil tank 956 501 differs only in material composition on bottom (0.5 mm stainless) and has no impact on installation.

3. Further Changes, Generally Irrelevant for Engine Installation

- a) All ignition housings will be specially machined with the start of serial production in September 1994 to allow installation of a supplementary drive for mechanical rev. counter without great effort.
- b) The cam shaft will be furnished with worm gear 834 180 in serial production.
- c) Opening in ignition housing for rev. counter drive will be closed by cover 810 620.
- d) Transmission ratio of electric starter will be changed from 24:16 to 26:15 to improve cold start behaviour of engine.
- e) Reduction ratio of electric starter will be changed from 44:14 to 50:11 to improve cold start behaviour of engine.
- f) The nipple connection of the oil supply line in oil pump housing will be changed from M 12 x 1.5 to M 14 x 1.5.
- g) Oil line connections on oil cooler are changed as follows:
inside thread: from M 12 x 1.5 to M 14 x 1.5
outside thread: from M 20 x 1.5 to M 22 x 1.5

This oil cooler with the new connections is supplied under part no. 886 027.

- h) Due to change to 912 UL DCDI, mod. 94, and 912 A DCDI, mod. 95, oil hose type TCH 12 x 19, length 1.5 m part no. 956 391, with an inner diameter of 12 mm is now introduced as of serial no.: 4153100 in UL and 4380600 in A series.

- i) For connection of oil hose 956 391 on oil cooler 886 027 and on oil pump (with M 14 x 1.5) hose nipples 840 445 and angular tube 924 218 are changed with introduction of the new models into series and are supplied under following part numbers:

hose nipple: part no. 840 449
angular tube: part no. 924 583

- j) With serial production starting Feb. 95 the following minor changes in the gear cover 911 745 will be included too:

- the oil seal 230 137, size 40 x 52 x 7, will be exchanged for oil seal 950 470 of size 40 x 55 x 7
- hex. head screws M 6 x 16, 241 145 and washer 827 300 will be exchanged for hex. head screws M 7 x 16, 941 760 and washer 944 320 (lock washer 945 751 dropped), for better fixation of the ball bearing 832 235
- new gear cover assy will be available as spare part with part no. 911 749.
- new style gear cover assy no longer includes mag. plug. Existing mag. plug on crankcase will remain to serve same function.

We are asking you to advise your customers, service and technical departments and authorities about the changes relevant for engine installation.

4. Warning:

If you do not understand a section of this information or if you are not otherwise able to carry out the requested checks or repair, please contact your nearest authorized Rotax aircraft engine distributor.

DANGER!

FAILURE TO COMPLY WITH THIS RECOMMENDATION COULD RESULT IN ENGINE DAMAGE AND PERSONAL INJURY!

NOTES:

- * "UL" designation refers to non-certified aircraft
- "A" designation refers to JAR 22 certified aircraft
- "F" designation refers to FAR 33 certified aircraft



