

Issue 17/01/2002

Survey of modifications for ROTAX engines type FR 125 MAX, engine configuration 37.125.1301 and FR 125 Junior MAX, engine configuration 30.0125.130		
Engine serial no.	Modification	Reason for modification
As of 533 534	Mounting of: ignition coil 265 572	To reduce risk of piston seizures due to critical ignition timing – new ignition coil with less critical ignition timing
As of 533 572	Mounting of: starter gear 634 907 clutch drum 659 152 sprocket 13 t. 236 416	Failures of 6 mm pins of starter gear, improvement of fixation of sprocket – starter gear with 10 mm pins, improved fixing between sprocket and clutch drum.
As of 534 849	Mounting of: VERTEX piston 295 485 with ELKO piston ring 215 545	To reduce risk of piston ring failures – new improved piston ring
As of 535 106	Mounting of: ELKO piston 296 290	To improve the quality of piston – new supplier for the piston.
As of 535 865	Introduction of: Ventilation hole in the gearbox	To avoid oil leakage of gearbox – introduction of a new ventilation hole
As of 536 123	Including of following parts to the accessory kit: Support bracket 224 660 and 224 670	Following the requirements of the market.
As of 536 232	Mounting of: main bearing 932 583	To reduce risk of failures of main bearings – new main bearing with reduced tolerances
As of 536 536	Introduction of: New carburetor 295 992 New exhaust system 273 072	Following the requirements of the market. Customers have been claiming operation of engine at low and high rpm. – introduction of a new carburetor and exhaust system with improved function.
As of 537 061	Introduction of: ERGO sealant 897 655	Following the requirements of the market. Including ERGO to the accessory kit.
As of 537 404	Introduction of: Chain guard 260 770	Following the market requirements.
As of 537 716	Introduction of die cast crankcase 295 911 Introduction of new style crankshaft (part no. 295 870 remains unchanged) ATTENTION: new type crankshaft fits also sandcast crankcase, but not vice versa.	To keep quality at high production numbers. To fit die cast crankcase 295 911.
As of 538 018	DENSO Iridium IW 31 spark plug	Less failing at idle speed

As of 765 285	Introduction of balance shaft 237 949 with reduced weight, but same balance factor. Interchangeable with balance shaft 237 945.	To reduce the load on balance drive and out of this to reduce failures on balance drive.
As of 765 600	ERGO sealant packed with 90° elbows	Customer cannot forget to put sealant on 90° elbows
As of 769 718	Exhaust system 273 072 is replaced by the identical exhaust system 273 073 with black painting.	To reduce and prevent corrosion of the exhaust system.
As of 769 965	Following additional parts have been included in the accessory kit: 1 x 251 122 battery box 2 x 251 250 pipe clamp (for battery box) 1 x 660 220 battery cover (for battery box) 1 x 265 147 battery charger as required 1 x 266 010 adapter "EURO" as required 1 x 266 012 adapter "UK" as required 1 x 266 014 adapter "USA" as required 1 x 266 016 adapter "Australia" as required 1 x 266 018 adapter "ROW" 1 x 251 260 supporting rod (for radiator) At the same time the cable harness 265 550 will be replaced by the cable harness 265 552 with additional connector for the battery charger.	Customers require a better fixation for the battery as well as a more simple procedure of charging of the battery.
As of 770 241	The support bracket (part no. 224 660) for the radiator is packed in the engine box instead of the accessory box.	If the authorised distributor is sealing the engine, the engine box only must be opened.
As of 771 563	New material for balance gears 234 431	To improve reliability of the engine
As of 772 108	New balance shaft	To improve machining process safety
As of 772 180	Longer pick up screws 941 250 M6 X 20 instead of 240 580 M6X16	To avoid assembly quality problems (seizing of thread)
As of 772 425	Modification of piston. Cut away for the boost port at the bottom of the piston will be eliminated.	To reduce risk of piston cracks in this area. Weight of the piston will stay the same. This modification has no influence on the performance of the engine.
As of 772 737	Warning label on intake flange	To avoid misuse at break in procedure
As of 773 165	1 x 932 026 piston pin bearing instead of 932 028	To improve reliability of the engine
As of 774 190	1 x 251 252 pipe clamp kit instead of 251 250 . 251 252 is not including the bottom clamp 251 360 bottom clamp (steel) are available separately	To improve reliability / safety at battery fixation

Introduces as of approx. engine serial no. 775 000	Part number remains unchanged	To improve idling behaviour
As of 775 040	2 x 832 592 steel cage bearing instead of 932 583 plastic cage.	To improve reliability of the engine
As of 775 132	Drive gear 634 421 in configuration steel will be replaced by a configuration in plastic 635 850	Reduction of production costs
As of 776 328	Con rod with forged number "213" has been replaced by new developed con rod for forged number "365"	To increase the life time of the con rod and to increase the safety against con rod failures if the engine is operated under critical circumstances (temperature and rpm).
<i>Planned introduction for approx. mid of 2002</i>	<i>Introduction of new cylinder head cover with integrated thermostat 45°C. Replace of aluminium bent sockets 922 620 by bent rubber hoses</i>	<i>Automatic system for more constant coolant temperature – therefore less critical with calibration of the carburettor and less critical against piston seizures at "cold" temperatures.</i>