ROTAX MAX LITHUANIAN CHALLENGE
Technical Regulations 2017

1. Categories:

Karts used in the **ROTAX MAX LITHUANIAN CHALLENGE (RMLC)** is divided into the following groups:

- ROTAX 125 Micro MAX (cylinder capacity 125 cc)
- ROTAX 125 Mini MAX (cylinder capacity 125 cc)
- ROTAX 125 Junior MAX (cylinder capacity 125 cc)
- ROTAX 125 MAX (cylinder capacity 125 cc)
- ROTAX 125 MAX DD2 (cylinder capacity 125 cc, 2-speed)

2. Amount of equipment:

For each race event (from non-qualifying practice to the final) maximum following amount of equipment is allowed:

1 chassis
1 set of dry tires + 1 spare tire
1 set of wet tires + 1 spare tire
2 engines

3. Kart:

3.1 Chassis:

125 MicroMax

For RMBC`s any chassis sanctioned by an authorized ROTAX distributor is allowed.
Chassis tubing: round tubing only;
Maximum diameter of round tubing is 28,0 (+ / - 2 mm);
Minimum wheelbase 850 mm and maximum 970 mm;
Rear axle diameter 25 mm or 30 mm, minimum wall thickness 4,9 mm.
Maximal width: 1130 mm;
Overall length:1500 mm;

125 MiniMax

For RMBC´s any chassis sanctioned by an authorized ROTAX distributor is allowed.
Chassis tubing: round tubing only;
Maximum diameter of round tubing is between 28,0 mm to 32,0 mm;
Minimum wheelbase 1010 mm and maximum 1040 mm;
Rear tire minimum extension 1200 mm;
Rear axle diameter 30 mm - 40 mm, minimum wall thickness according to CIK-FIA rules.

125 Junior MAX and 125 MAX classes

For RMBC's any chassis sanctioned by an authorized ROTAX distributor is allowed.
Chassis tubing: round tubing only;
Maximum diameter of rear axle diameter 50 mm, minimum wall thickness according to CIK-FIA rules;
Chassis ROTAX Junior MAX and ROTAX MAX classes must have a CIK-FIA homologation;
Any brake system must have a valid CIK-FIA homologation;

Front brakes are not allowed In the 125 Junior MAX and 125 MAX classes.

125 MAX DD2 and MASTER classes

For RMBC`s 125 MAX DD2 classes, chassis approved by BRP-ROTAX only are allowed to be used (approved chassis will be listed at the web page: (http://www.rotax-kart.com/Max-Challenge/MAX-Challenge/Approved-Chassis-125-MAX-DD2).
Chassis must be designed according to CIK-FIA rules for shifter classes (front- and rear brakes mandatory).
Any brake system must have a valid CIK-FIA homologation.
ROTAX Rear Tire Protection System is mandatory to be used. Either old 2 tube version or latest 3 tube version, third tube might be mounted above or below the 2 main tubes. No part shall be added or removed from original content (except safety wire as well as number plate with support).
Only orange or red ROTAX original tire-protection rollers are allowed to be used.

3.2 Bodywork

MicroMax and MiniMax
In accordance with regulation of national Federations

125 Junior MAX and 125 MAX classes
In accordance with regulations of CIK-FIA homologation.

125 MAX DD2 and MASTERS class
In accordance with regulations of CIK-FIA homologation.

3.2.1 Bodywork

The usage of new CIK-FIA Homologated front spoiler “Front Fairing Mounting Kit” is compulsory!

4. Tires:

At all RMBSC following tires only are allowed:

MicroMax					
Dry (slick) tires:	MOJO	Type:	C-2		
		Front:	4.0 x 10.0 - 5	Rear:	5.0 x 11.0 - 5
Wet tires:	MOJO	Type:	W-3		
		Front:	4,5 x 10.0 - 5		4,5 x 10.0 -5
MiniMax					
Dry (slick) tires:	MOJO	Type:	D-2		
		Front:	4.5 x 10.0 - 5	Rear:	6.0 x 11.0 - 5
Wet tires:	MOJO	Type:	W-3		
		Front:	4.5 x 10.0 - 5	Rear:	6.0 x 11.0 - 5
125 Junior MAX					
Dry (slick) tires:	MOJO	Type:	D-2		
		Front:	4.5 x 10.0 - 5	Rear:	7.1 x 11.0 - 5
Wet tires:	MOJO	Type:	W-3		
		Front:	4.5 x 10.0 - 5	Rear:	6.0 x 10.0 - 5
125 MAX					
Dry (slick) tires:	MOJO	Type:	D-3		
		Front:	4.5 x 10.0 - 5	Rear:	7.1 x 11.0 - 5
Wet tires:	MOJO	Type:	W-3		
		Front:	4.5 x 10.0 - 5	Rear:	6.0 x 11.0 - 5
125 DD2/Masters					
Dry (slick) tires:	MOJO	Type:	D-3		

		Front:	4.5 x 10.0 - 5	Rear:	7.1 x 11.0 - 5
Wet tires:	MOJO	Type:	W-3		
		Front:	4.5 x 10.0 - 5	Rear:	6.0 x 11.0 - 5

Strictly no modifications or tire treatment allowed.
Recommend equipment to detect tire treatment is Mini-RAE-Lite.
Marked direction of rotation must be adhered to for all tires.
Threshold value of maximum 4 ppm is recommended.

5. Data acquisition:

This system, with or without memory, may permit only the reading/recording of the engine revs (by induction on the sparkplug HT cable), two indications of temperature, the speed of one wheel, an X/Y acceleration, lap times, position (via GPS system) and steering wheel angle sensor.
Connection of the data acquisition system to the original Rotax battery is allowed.
During free practice also telemetry system are allowed.

6. Composite materials:

Composite materials (carbon fiber etc.) are banned except for the seat and the floor tray.
Alloys from different metals/substances are not considered as composite materials.

7. Safety of equipment:

For RMBC article 3 of CIK-FIA technical regulations apply.
For RMBC overalls, helmets, kart shoes, gloves and other kind of driver protection must comply with the regulations of the national ASN`s.

8. Petrol and oil:

Unleaded commercial quality from petrol station, maximum 98 octane.
Mandatory oil- ROTAX XPS KARTTEC 2T Kart Racing Oil (Part no. 297461).

9. Engines:

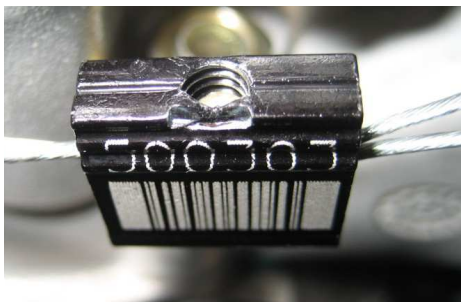
No sponsor stickers (except ROTAX, BRP, MOJO, XPS) allowed on the engine or at any other ROTAX engine accessories!

At RMLC races,only engines which are confirmed to the following technical specification, are legal to be used.

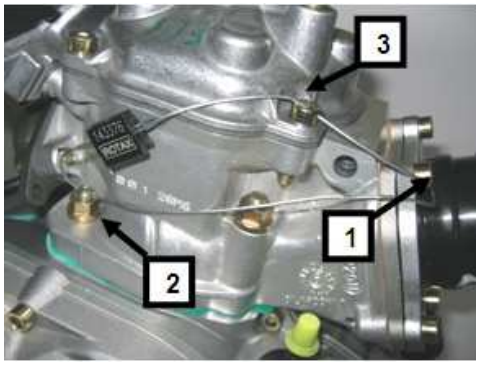
For RMLC's,only those engines are allowed to be used , which have been checked and sealed by the ROTAX Authorized Distributor of this territory or one of the Service Centers appointed by the Authorized Distributor.
For RMLC's the ROTAX Authorized Distributor of this territory has to publish the lists of Service Centers which are legal to check and seal engines.

The sealing of Rotax engine costs 5 €. Additional fee will be added for verification of engines according to Rotax Max Lithuania technical regulations. Engine verification cost will be according to Rotax Service Center pricelist and is calculated by the time spent on engine control.

The engines have to be sealed with specific ROTAX engine seals (black anodized aluminum seal with "ROTAX " logo and a 6 digit serial no. see attached picture).



By means of the steel cable the engine must be sealed on one Allen screw (1) of the intake flange, on one stud screw (2) of cylinder and one Allen screw (3) of the cylinder head cover (see attached picture).

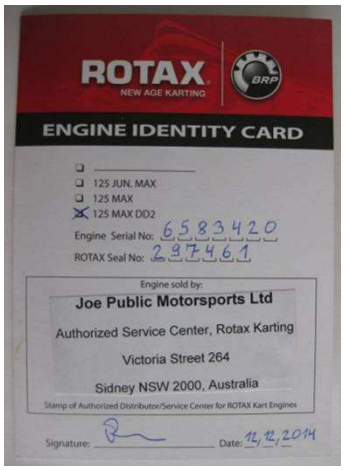


After sealing the engine seal thread must me squeezed using Rotax caliper (part no. 276110).
It is not allowed to pass the end of sealing wire through the seal a second time (only as in a above picture).

At every new sealing of an engine the authority (ROTAX Authorized Distributor or their Service Centers) that checks and seals an engine is responsible for following indications at the Engine Identity Card which belongs to the owner of the engine.

- Serial no. of the engine
- Serial no. of the engine seal

- Stamp and signature of the company to be able to detect at scrutineering which authority has checked and sealed the engine.



At scrutineering the driver has to present:

- the engine(s) with the undamaged engine seal(s)
- the Engine Identity Card(s), showing the matching engine serial no.(s), the matching engine seal no.(s) and the stamp(s) and signature(s) of the authority(ies) that has (have) checked and sealed the engine(s).

  During a RMBC ROTAX Authorized Distributors and their Service Centers are not allowed to re-seal an engine between scrutineering and the final.

The sealing of engines helps to reduce the times for scrutineering at races as during the race event just the accessories (carburetor, exhaust, radiator…..) must be checked.

Of course scrutineers can request to open and re-check an engine according to the Technical Specification, before or after a race or in case of a protest. If an engine seal has been broken (for which reason ever), the engine has to be checked completely according to the Technical Specification and must then be re-sealed by an ROTAX Authorized Distributor or one of its Service Centers.
All components outside the seal are part of the responsibility of the competitor to be in line with the technical regulations.

9.1.Modifications:

Neither the engine nor any of its ancillaries may be modified in any way. "Modified" is defined as any change in form, content or function that represents a condition of difference from that originally designed. This is to include the addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these rules. The adjustment of elements specifically designed for that purpose shall not be classified as modifications, i.e. carburetor and exhaust valve adjustment screws.
The repair of thread on the crankcase (maximum of three thread hole per crankcase) using a “heli-coil” or similar is allowed.Exception: the threads located under the crankcase to fix the crankcase on the engine mount may be repaired as needed.
The repair of a thread cylinder(maximum of three threaded holes per cylinder) using a "heli-coil" or similar are allowed.

Genuine ROTAX components only, that are specifically designed and supplied for the 125 MicroMax, 125 MiniMax, 125 Junior MAX, 125 MAX and 125 MAX DD2 engine are legal, unless otherwise specified.

ANYTHING WHICH IS NOT EXPRESSILY ALLOWED IN THE TECHNICAL REGULATIONS IS FORBIDDEN.

9.2.Internal additions:
No additional material may be added except in the case of engine repairs and shall only restore the engine or components to original specifications.

The use of thermal barrier coatings/ceramic coatings on or in the engine and on or in the exhaust system is prohibited.
The use of anti-friction coatings in or on the engine/engine components is prohibited.

9.3.Legal additions:
Chain guard, engine mount, temperature gauge and tachometer/hour meter, inline fuel filter, catch cans for liquids with mounting brackets and supplementary bracket for DENSO ignition coil (only allowed if the original mounting position of the DENSO ignition coil is in conflict with chassies component).
Customizing the cylinder head cover painting is legal.
Sensor for exhaust gas temperature (see exhaust systems) is legal.

9.4.Non-tech items:
Non-original fasteners, circ lips, washers, throttle cable housing, fuel and pulse line (type and size) as well as length of coolant hoses are allowed unless otherwise specified.
9.5.Measurements:
When taking any dimensional reading, of the following technical regulation, in the order of accuracy of 0,1 mm or even more precise, the temperature of the part must be between +10°C and +30°C.
Before taking any decision based on this regulation a check for available bulletins is mandatory.
They can be found under www.maxchallenge-rotax.com

To avoid excessive noise and exhaust emissions ravving the kart in the servicing park is not allowed (except a short function test-5 seconds maximum).

It is the responsibility of the competitor to check his equipment is in line with the technical specification below!

9.6. MicroMax engine
9.1.1. Allowed to use Rotax FR 125 MicroMax engine (tech.specif. no.30.0125.137/7 kw). Attachment no.1.
9.1.2. Engine must be "downgrade" by below mentioned restrictor:
Exhaust restriction 18,00 mm ;+0,20 mm(Rotax part no.293192) for lower performance.
9.1.3. Squish cap minimum is 2,4 mm.
9.1.4. Only one exhaust systems are legal to be used with 21.00 mm cover (Rotax part no.273132).

9.7. MiniMax engine
9.2.1. Allowed to use Rotax FR 125 Junior engine (tech.specif. no.30.0125.130/15 kw) Attachment no.1.
9.2.2. Engine must be “downgrade” by below mentioned restrictor:
Exhaust restriction 20,00 mm ; +0.20mm (Rotax part no. 273194) for lower performance.
9.2.3. Squish cap minimum is 2,4mm.

9.8. Gear ratio
9.3.1. Allowed to use in Rotax MicroMax classes gear ratio only 14/70-72.
9.3.2. Allowed to use in Rotax MiniMax classes gear ratio only 13/73-75.
9.3.3. Rotax JuniorMax, Rotax Max, Rotax DD-2 and Rotax DD-2 Masters classes gear ratio

are free.
9.3.4. In case of rainy weather conditions, it is allowed to use a lower gear ratio by 1. Rotax Micromax class gear ratio 13/70-72, Minimax 12/73-75.
The final gear ratio will be specified no later than 04.04.2017.

Attachments:
1. Technical Specification (within the engine seal) for ROTAX kart engines Rotax 125 Junior Max (15 kw),Rotax 125 MAX (21 kw) and Rotax 125 Max DD-2 (24kw).
2. Appendix for Rotax 125 MicroMax and Rotax 125 MiniMax engines.