ROTAX RMC SOUTH AFRICA

MOTORSPORT SOUTH AFRICA

2023

MSA SARMC NATIONAL KARTING

Technical Regulations

V6 – 13.09.2023

Ref: 162936

ROTAX® RACING

REVIEW AND AMENDMENTS

Amendments and updates to the rules will be recorded in the Amendment Record, detailing the amendments, date applicable and a short summary of amendments.

AMENDMENT RECORD

Modified SSR / ART	*Date applicable*	*Date of Publication*	*Clarifications*
ART 8	13.09.2023	13.09.2023	Regulation amendment
ART 5	23.06.2023	23.06.2023	Regulation amendment
ART 13	06.04.2023	06.04.2023	Regulation added
ART 11	23.02.2023	23.02.2023	Regulation added
ART 12	23.02.2023	23.02.2023	Regulation added
ART 4.1	09.02.2023	09.02.2023	Regulation amendment

SARMC SUPPLEMENTARY TECHNICAL REGULATIONS 2023

These regulations are to be read in conjunction with the Global RMC Technical Regulations 2023

Version 6 – 13.09.2023

The 2023 Global RMC Technical regulations (www.rotax-kart.com) apply with only the exceptions or additional regulations and clarifications being specified herein.

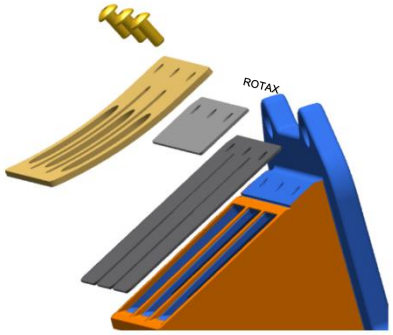
1. **Chassis**
   Any CIK or Rotax DD2 approved chassis. All previously homologated chassis used in South Africa prior to 2023 are still eligible to race subject to the bodywork and bumpers conforming to current specifications.

2. **Engines**
   Global RMC Technical Specification of ROTAX engine type 125 MAX and DD2 for 2023 apply as published on www.kart.co.za or www.rotax-kart.com. Long periods between engine rebuilds allows an effective sealing system for 125 MAX engines. Only engines sealed by the "Authorized Southern African ROTAX Distributor" (Ed Murray Racing cc) and their Authorized "ROTAX Service Centers" are allowed in SARMC events. These engines are sealed after carefully checking the engine according to the 'Global RMC Technical Regulations for the ROTAX 125 MAX' engine which you can find on our homepage www.kart.co.za. Special ROTAX seals (black anodized aluminum seal with "ROTAX" logo and a 6-digit number/barcode) with a steel cable must be used. At scrutineering the driver must present the engine with an undamaged seal. This procedure helps to reduce scrutineering times at races. Nevertheless, it is possible to open and re-check the engines by Scrutineers before or after the race in case of a protest and reseal the engine after checking it step by step by staff of the "Authorized ROTAX Service Centre or Distributor" according to

the “Technical Specification”.

3. **Only engines** imported by EMR and those registered by agreement with EMR before 1 January 2013 will be permitted.

4. **For 125 Micro MAX and 125 Mini MAX only.**
   4.1. It is mandatory to add 2 x 104535 EMR Distance Plates or 2 x 910224380 Rotax Distance Plates. These plates are to be installed between the reed petal and the reed stopper. This must be fitted to all Micro Max and Mini Max motors but is not permitted in any other classes. Please remember to remove this when upgrading an engine to ~~Mini~~ Junior Max or other class.



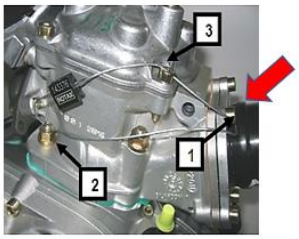
   4.2. The “distance plates” must be secured tightly between the reed petals and the curved stopper plate on both sides of the reed assy. and in the order as show in the diagram. The ROTAX markings must be facing the stopper plate as shown in the diagram.
   4.3. It is allowed to install up to 2 gaskets between the reed block assy. and the cylinder.

For Information only / non-tech item:

The assembly should utilize only oval head screws M3x6

(ROTAX Part number 240351).

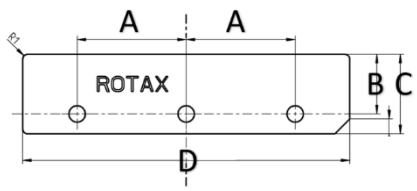
The use of tap tight fixings is not recommended for this application.



For identification purposes that the distance plates are installed, a M6 washer should be placed under the bolt which is secured with the seal in position 1, as indicated in the picture.

The 2 x distance plates must be engraved ROTAX (as per the drawing below) with the part number 910224380 visible on the plate. EMR Reed Ballasts already installed without any marking but comply with the dimensions are also acceptable.

The plate must be flat with no curvature, when held against a straight edge no crack of light should be visible between the two surfaces, and meet the below specification.



	Measurement	Tolerance
A	22,00 mm	+0,2 mm -0,2 mm
B	10,00 mm	+0,3 mm -0,3 mm
C	16,00 mm	+0,3 mm

D	66,00 mm	-0,3 mm +0,7 mm -0,7 mm
Distance plate thickness	0,70 mm	+0,08 mm -0.08 mm
Location holes	3,3 mm	+0.2 mm -0,2 mm

5. **Pick up**
   For 125 Micro MAX and 125 Mini MAX

   The only engines allowed to be used without ~~2 x~~ 1x additional gaskets in the pick-up area assembly are engines with the following combination of crankcases casting codes:

   6211885 (ignition sensor side) and 6211893 (clutch side)

   These crank cases are supplied with original machined surfaces for the pick-up sensor.

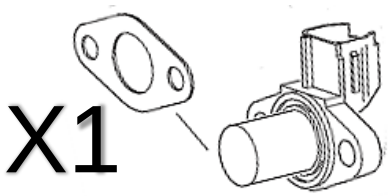
   NB! A Rotax no go gauge will be used to check for any post manufacture machining.

   All other crankcases must have with the pick-up assembled with ~~2 x~~ 1x Additional gaskets.

   (Rotax 431500), gasket thickness = 0,8 mm each

   Fitting Position of the additional ~~2 x~~ 1x gaskets:

   Crankcase – rubber sealing ring – ~~2 x~~ 1x additional gaskets – pick-up.



   Note: For all RMC International or Zone in 2024 the only crankcases allowed for racing in the 125 Micro MAX and 125 Mini MAX categories will be the original machined pick-up flange type with casting codes 6211885 (ignition sensor side) and 6211893 (clutch side).

6. **Cylinders**
   6.1. **New style 3D digitally printed core type cylinders (all classes)**
   Only cylinders stamped and registered by EMR are legal.
   6.2. **Older Junior Max Cylinder**
   Old Cylinders - only Rotax cylinders with alphabet lettered markings are permitted. Cylinders with markings showing the year of casting are no longer permitted. There will be no exceptions.

7. **Squish measurements**
   Should any dispute over the accuracy of a minimum squish measurement as per international rules arise, the following method will be used to make a final decision: the squished solder is to be measured using a cylinder type micrometer after trimming the burr from the squished solder. This measurement is taken at a point 1mm from the trimmed end. The average of the two readings (left and right side) taken this way will be final and no tolerance will be allowed.

8. **Mini and Micro Max**
   Rear track Micro Max: The maximum overall width is **110cm** measured to the outermost face of the rims or tyres, whichever is the greater.

   Rear track Mini Max: The maximum overall width is **115cm** measured to the outermost face of the rims or tyres, whichever is the greater.

   The permitted width of rims shall be: - (maximum measurement to inside of rim flange, minimum measurements to inside of rim flange): Front Maximum **11.5 cm** / Rear Maximum **15.0cm** Minimum **13.0cm**

9. **Gearing**

	Micro Max	**Mini Max**
EL / iDube / PE / Zwartkops	14:74-76	13:79-81
Cape Town / FK / Vereeniging	14:69-71	13:74-76

10. **Tyres**
    Junior Max, Senior Max, DD2 and DD2 Masters will race on Vega XH3 CIK Option.
    Wet weather tyres for all classes - Mojo W2, W3 and W5 are permitted.

    It is permitted in Micro Max to use a heat gun or other means to remove rubber in between races. This may not be abused to pre-heat tyres before a race and any competitor presenting on the prerace grid with hot tyres will not be permitted to start until sufficient water has been poured over the tyres to cool them down. The onus is on the competitor to cool the tyres to the satisfaction of the officials. NB the organizers at various circuits have limited power supply so you are urged to bring your own generator if you intend using a heat gun.

11. **Micro Max Exhaust:** In addition to the regulations in Article 6.17 the following changes/additional regulations in RED are applicable with effect from the 3rd of March 2023:
    1) A steel ball with a 28.0mm diameter or solid flat plate measuring 28.0mm and 1.5mm thick must not pass through Section “A” in any orientation and a steel ball with a 26.0mm diameter must be able pass-through Section “A” in the below diagram from the inlet and through the 90- degree elbow completely. All exhaust gases must pass through section “A”
    2) Under 125 Micro Max perforated tube: a stainless-steel mesh 430 x 92mm (60 mesh 0.17 wire) must be tightly wrapped around the perforated pipe and firmly fixed, by means of 5 off 4.6 mm stainless steel cable ties, prior to wrapping with new isolation matting 297982.

    3) The exhaust must be sealed by means of a Rotax seal through a fourth hole drilled near one of the baffle-fixing screws, by a Rotax Service Centre.
    4) The condition and volume of the isolation matting may be compared to that of any three, randomly selected, other sealed Micro Max exhausts, should a dispute over this arise. The TC’s decision is final and may not be protested.
    5) The COC or Stewards can call for the replacement of any competitors exhaust with a sealed Micro Max exhaust provided by EMR Rotax at any stage during an event.

12. **Mini Max Exhaust:** In addition to the regulations in Article 6.18 the following changes/additional regulations in RED are applicable with effect from the 3rd of March 2023:
    1) A steel ball with a 28.0mm diameter or solid flat plate measuring 28.0mm and 1.5mm thick must not pass through Section "A" in any orientation and a steel ball with a 26.0mm diameter must be able pass-through Section "A" in the below diagram from the inlet and through the 90- degree elbow completely. All exhaust gases must pass through section "A"
    2) After fitting a new matting 297985, the exhaust must be sealed by means of a Rotax seal through a fourth hole drilled near one of the baffle-fixing screws, by a Rotax Service Centre.
    3) The condition and volume of the isolation matting may be compared to that of any three, randomly selected, other sealed Mini Max exhausts - should a dispute over this arise. The TC's decision is final and may not be protested.
    4) The COC or Stewards can call for the replacement of any competitors exhaust with a sealed Mini Max exhaust provided by EMR Rotax at any stage during an event.

13. **Batteries:** The following two batteries are allowed in addition to those specified in the 2023 RMC Global Technical Regulations.
    1) The Motobatt MB7U
    2) The Topline Yuasa YT7B-BS

    EMR and ROTAX recommend the original part for durability and reliability and for this reason will no longer allow the parts listed in point 13.1 and 13.2 in 2024.