ROTAX RMC SOUTH AFRICA

MOTORSPORT SOUTH AFRICA

2024

MSA SARMC NATIONAL KARTING

Technical Regulations

V3 – 05.04.2024

Ref: 163150

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 9	05.04.2024	05.04.2024	Regulation amendment
ART 8	24.01.2024	24.01.2024	Regulation amendment

SARMC SUPPLEMENTARY TECHNICAL REGULATIONS 2024

These regulations are to be read in conjunction with the Global RMC Technical Regulations 2024

Version 1 – 10.01.2024

The 2024 Global RMC Technical regulations (www.rotax-kart.com) apply with the following exceptions or additional regulations only as well as clarifications being specified herein.

1. **Chassis**
   Any CIK or Rotax DD2 approved chassis. All previously homologated chassis used in South Africa prior to 2024 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 2024 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.

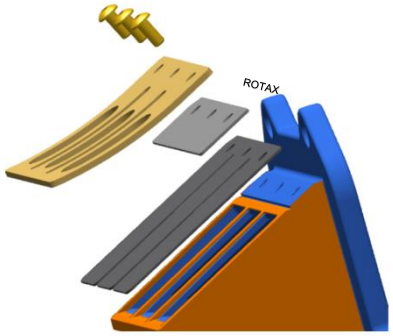
4. **Cylinders**
   4.1. **New cylinders with QR codes**
   Only cylinders stamped by EMR with QR codes registered to South Africa are allowed.
   4.2. **3D digitally printed core type cylinders (all classes)**
   Only cylinders stamped and registered by EMR are legal.
   4.3. **Older Junior Max Cylinder**
   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.

5. **For 125 Micro MAX and 125 Mini MAX only.**

5.1. 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 Junior Max or other class.

5.2. 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.



5.3. It is allowed to install up to 2 gaskets between the reed block assy. and the cylinder.

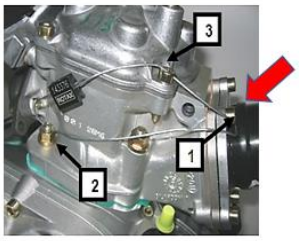
For Information only / non-tech item:

The assembly should utilize only oval head screws M3x6

(ROTAX Part number 240351).

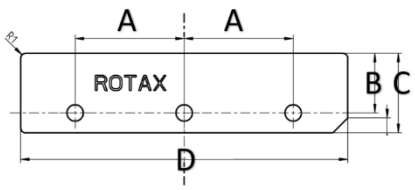
The use of tap tight fixings is not recommended for this application.

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 -0,3 mm
D	66,00 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

6. **Pick up**

For 125 Micro MAX, 125 Mini MAX, 125 Junior Max and 125 Senior Max

The only engines allowed to be used **without** at least 1x additional gasket in the pick-up area assembly are engines with the following combination of crankcases casting codes:

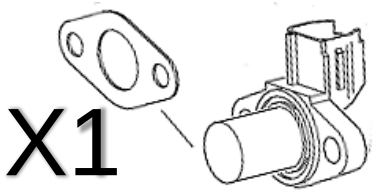
6211885 (ignition sensor side) and 6211893 (clutch side)

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 the pick-up assembled with 1x Additional gasket.

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



Fitting Position of the additional 1x gaskets:

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

7. **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 **113cm** 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**

8. **Fixed Gearing Applicable All Circuits**

MICRO MAX – BOTH 2023 AND 2024 SPEC ENGINES:
Engine Sprocket: 14t
Rear Sprocket: 75t

MINI MAX:
Engine Sprocket: 13t
Rear Sprocket: ~~80~~ 75t

9. **Tyres**

- Junior Max, Senior Max, DD2 and DD2 Masters will race on ~~Vega XH3 CIK Option until further notice~~. Mojo D5
- Wet weather tyres for all classes – Mojo W3 and W5 are permitted.

9.1. **Micro Max:** It is permitted in 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.

10. **Micro Max**

10.1. A Mini Max exhaust conforming with the Global Tech regs may be used with a Micro Max engine conforming to the 2024 regulations (**ONLY** using the 2024 Cylinder is eligible)

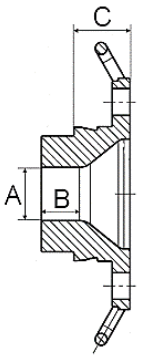
10.2. A Micro Max engine conforming to the 2023 SARMC regulations (including the Micro Max exhaust system) may also be used and must be used in the 2023 spec engines, i.e. not running the 2024

new cylinder.

11. **EXHAUST SOCKET (RESTRICTOR) MINI MAX AND MICRO MAX**
    Diameter (A) must apply for a length (B) of at least 12 mm.

    125 Mini MAX: 18,20 mm (Rotax part no. 273 192 as per Micro Max Spec)

    The measurement (C) must be at least 18,5 mm.



12. **EXHAUST / ISOLATING MATTING**
    All exhaust silencers must be sealed by either an authorised service centre or by the race organisers as set out below.

    The organisers reserve the right to carry out the following in any or all the classes racing in an African Open or National Championship event.

a) Each entrant must purchase a new isolation matting through the organisation during the registration (voucher system). During scrutineering all drivers, mechanics or entrant must come with a dismounted and disassembled (without isolation matting) exhaust to the scrutineer. The exhaust must be clean.
b) The exhaust will be controlled by the technical scrutineer in accordance with the RMC Global Technical Regulations prior to assembly.
c) The exhaust must be fitted with this new isolation matting provided by and in the presence of the technical Scrutineer.
d) Once the isolation matting is fitted, the exhaust will be sealed with a barcode seal by the technical scrutineer. Also, the race number of the driver will be marked on the exhaust.
e) An exhaust may be substituted at any stage by an organizers exhaust.

This exhaust is the only exhaust allowed to be used by the driver until the end of the event. *

* If during the event an exhaust becomes damaged, at the decision of the chief scrutineer the driver can exchange the exhaust for a replacement exhaust and repeat steps A, B, C and D as above prior to leaving the parc fermé area. The seal must be removed from the damaged exhaust and the exhaust must be checked in accordance with the RMC Global Technical Regulations prior to the replacement exhaust being sealed and used.

13. **OIL**
    Only ROTAX XPS SYNTHETIC 2S OIL part number 297461 is permitted for racing mixed at 50:1.

---------- END OF SUPPLEMENTARY TECHNICAL REGULATIONS ----------