



REGISTRATION

SPORT
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ROTAX
RMC
GRAND FINALS

**SARNO,
ITALY**

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internazionale

OCT 19-26, 2024

25 YEARS RMCGF - 25 YEARS RMCGF - 25 YEARS RMCGF - 25 YEARS

TECHNICAL REGULATIONS

MICRO MAX | MINI MAX



TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR

A. 125 MICRO MAX / 125 MINI MAX CLASSES.....	3
1. EQUIPMENT	3
2. MODIFICATIONS, LEGAL ADDITIONS, NON-TECH ITEMS, MEASUREMENTS.....	5
3. TECHNICAL SPECIFICATIONS (OUTSIDE THE ENGINE AND CARBURETOR SEAL) FOR ROTAX KART ENGINES	5
4. PERMITTED ADJUSTMENTS TO THE CHASSIS, ENGINE, CARBURETTOR AND DRIVE TRAIN OPTIONS.....	11

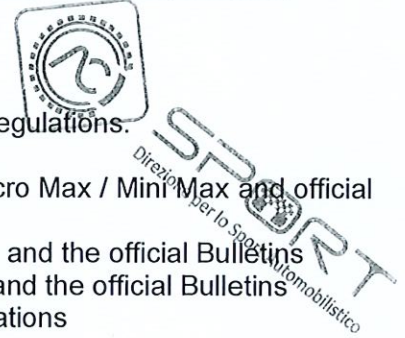


FISA
 Fédération Internationale de Sport Automobile



TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR



The chapter A refers to the 125 Micro MAX and 125 Mini MAX Technical Regulations.

The Competition shall be run in accordance with these RMCGF 2024 – Micro Max / Mini Max and official Bulletins and:

- ROTAX MAX CHALLENGE GRAND FINALS 2024 Technical Regulations and the official Bulletins
- ROTAX MAX CHALLENGE GRAND FINALS 2024 Sporting Regulations and the official Bulletins
- ROTAX MAX CHALLENGE GRAND FINALS 2024 Supplementary Regulations
- CIK/FIA Karting Technical Regulations and official Bulletins

The Organizer of the event reserves the right to issue modifications to the Technical Regulations, that will be published as Official Bulletins.

The English language is the official version.

Headings in this document are for ease of reference only and do not form part of these Technical Regulations.

A. 125 MICRO MAX / 125 MINI MAX CLASSES

1. EQUIPMENT

The only equipment – complete kart and tyres – allowed during the event will be provided on a loan basis, by the organizer and must be in accordance with these Regulations and its Appendices.

1.1. AMOUNT OF EQUIPMENT

According to Article 2.1 of the RMCGF2024 Technical Regulations.

1.2. CHASSIS, BRAKE SYSTEM, BODYWORK

1.2.1. According to Article 2.2. of the RMCGF2024 Technical Regulations.

1.2.2. Single brand chassis per category, defined by tender. The brand for each class is:

125 Micro MAX: IPKarting Formula K

125 Mini MAX: BirelART

1.2.3. Front fairing

- The use of a homologated Front Fairing and of the homologated Front Fairing Mounting Kit of the bodywork homologation is mandatory for all categories, in accordance with CIK Specific Prescriptions, article 31 and CIK Technical Drawing No 3.2. and 3.2.1.
- Appropriate fairings and mounting kits will be provided to Entrants/Drivers with each kart and are the only components which may be used.
- The provisions of CIK General Prescriptions, article 2.3.3 regarding mounting, installation, checking, reporting of breaches and application of penalties will be applied in full.

1.3. TYRES

1.3.1. Type

Dry	Mojo C2 CIK Mini	front 4.0 x 10.0 – 5	rear 5.0 x 11.0 – 5
Wet	Mojo CW CIK Mini	front 3.6 x 10.0 – 5	rear 4.5 x 11.0 – 5

1.3.2. Quantity for each category

1. Dry tyres:

Micro Max

- 1 set for the whole event (non parc fermé status). However, Stewards may decide, at any time, to keep the tyres in Parc Fermé.

Mini Max

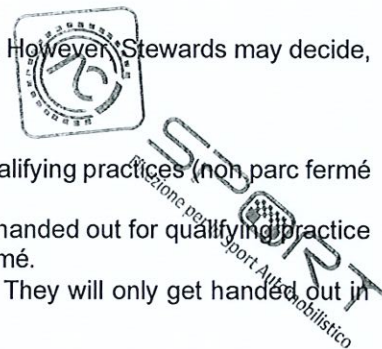
- 1 set is for non-qualifying practices (non parc fermé status).



TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR

- 1 set is for qualifying up to and including finals (non parc fermé status). However, Stewards may decide, at any time, to keep the tyres in Parc Fermé.
2. Wet tyres:
- Maximum one set of MOJO CW CIK Mini will be handed out for non-qualifying practices (non parc fermé status).
 - Organizer keeps the right to decide if a second set of wet tyres will be handed out for qualifying practice up to and including final. This set will be mounted and kept in parc fermé.
 - Maximum 2 sets are available for the whole event for each category. They will only get handed out in case of rain.
3. Distribution and usage of tyres:
- The first set of slick tyres will be handed out after the chassis raffle. This set shall be used during the event for all non-qualifying practices.
 - A certain number of used tyres from the first set (depending on the category) will be kept in parc fermé.
 - After the last session of the non-qualifying practice each driver will receive a new set of slick tyres, which has to be used for the qualification phase up to and including the final. Each tyre of this set is marked with a barcode and the starting number and must be kept in the parc fermé.
 - Each driver is responsible for checking that the marking of the starting number is visible outside, otherwise the tyre has to be presented in parc fermé for remarking.
 - If there is a reasonable risk for rain, wet tyres together with rims will be handed out in time. Each tyre of these sets is marked with a barcode and the starting number.
 - In case of mechanical failure of a tyre, each driver may exchange maximum 1 front and 1 rear tyre (each wet and dry), except if failure has been caused on purpose/misuse. In case of a mechanical failure of a tyre, the technical scrutineer will determine if the failure was due to material defect or has been caused on purpose/misuse. The technical scrutineer's decision will be final and not subject to protest or appeal.
 - If the failure has not been caused on purpose/misuse the following rule will apply:
 - In all categories a new tyre will be provided as replacement during Non Qualifying Practice or before Qualifying. During Qualifying Heats, Pre-finals and Final a used tyre (with similar wear rate) will be provided as replacement.
- 1.3.3. All tyres are marked with barcode and can only be used by the assigned driver.
- Being proven that a tire barcode sticker is not the original or it was manipulated, Driver will be excluded from the event.
 - At the entrance to the Start Servicing Parc, a Scrutineer will check the barcode stickers, and if there is any kind of suspicion that the barcode sticker was manipulated or changed, he will report immediately this fact to the Chief Scrutineer. From this moment on, the Driver and his kart are not allowed to access the Start Servicing Parc, until a final decision from the Chief Scrutineer.
 - If during the Sporting Checks, after the Qualifying Practice or races, a kart is found that a tire has one non original barcode sticker, he will be disqualified from the event.
 - At the entrance of the Start Servicing Parc a Driver who presents with his/her kart with one or more tyres not corresponding to those assigned to him for the race, will not be allowed to enter until he/she presents his kart with the right tyres, and as long as he/she will be within the stipulated time, defined on the official time schedule of the event, for access of his/her group to the Service Park In.
- 1.3.4. Tyres are assigned (on a loan basis for the time of the event) to drivers, registered and routinely checked/scanned by means of the Rotax EMS (Event Management System).
- 1.3.5. Strictly no modifications or tyre chemical treatment is allowed. Tyre check with "tyre sniffer" Mini-RAE-Lite: Maximum value = 4ppm. Over this value there will be a second check. If the value remains over the 4ppm, Driver will be disqualified from the event.
- 1.3.6. Tyres must be mounted in accordance with the rotation markings defined on the tyre.



1.4. ENGINES

According to Article 2.4. of the RMC GF 2024 Technical Regulations.

The 125 Junior MAX engine is the basis for the engine configurations 125 Micro MAX and 125 Mini MAX.



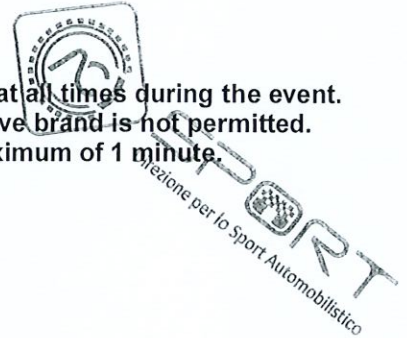
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TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR

Note: A minimum volume of 50ml of gear oil must be able to be sampled at all times during the event. Oil as supplied must be used and changing of the gear oil for an alternative brand is not permitted. The measured oil must be extracted via the port for this purpose in a maximum of 1 minute.



1.5. RETURN OF EQUIPMENT

According to Article 2.5. of the RMCGF2024 Technical Regulations.

1.6. DATA ACQUISITION

According to Article 2.6. of the RMCGF2024 Technical Regulations.

1.7. SAFETY EQUIPMENT

According to Article 7, CIK-FIA technical regulations.

1.8. FUEL/OIL

Pre-mixed fuel will be provided via Parc Fermé for the whole event.

1.9. ADVERTISING ON ENGINES

No sponsor stickers except ROTAX, BRP, MOJO, XPS are allowed on the engine and engine accessories.

2. MODIFICATIONS, LEGAL ADDITIONS, NON-TECH ITEMS, MEASUREMENTS

According to Article 3. of the RMCGF2024 Technical Regulations.

3. TECHNICAL SPECIFICATIONS (OUTSIDE THE ENGINE AND CARBURETOR SEAL) FOR ROTAX KART ENGINES

For all components outside the engine and carburetor seal, the competitor is responsible to assure the conformity with the RMCGF2024 Technical Regulations.

3.1. IGNITION SYSTEM

According to Article 4.6. of the RMCGF2024 Technical Regulations.

3.1.1. The electronic control unit (ECU) is labelled with stickers and is still legal also if the sticker is unreadable or disappeared.

125 Micro MAX: "666815"

125 Mini MAX: "666818"

The ECU must be checked with the ECU tester (Rotax 276230) according to following procedure.

Disconnect engine cable harness from ECU.

Connect ECU tester cable harness to ECU.

Connect energy cable of ECU tester cable harness with the charging connector of engine cable harness.

At every connection with the battery the software version of the ECU tester will be indicated on the display for approx. 2 seconds.

The software version indicated on the display must be 2V00.

Start the test by pressing the button "✓" on the ECU tester.

After approx. 3 second the type of ECU ① that is actually tested will be indicated in the second line of the display.

After approx. 30 seconds the result ② of the test will be indicated in the first line of the display.

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The ECU tester must indicate following results:

125 Micro MAX category

① 666815MAX

② !! Test OK !!

125 Mini MAX category

① 666818MINIMAX

② !! Test OK !!

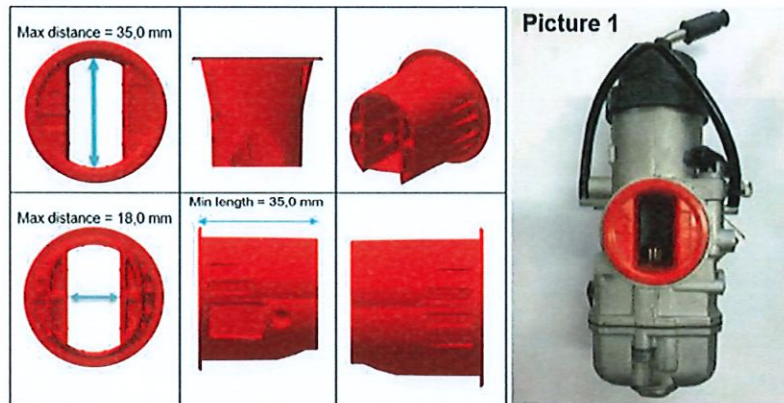
3.2. CARBURETTOR

According to Article 4.9. of the RMC GF 2024 Technical Regulations.

3.2.1. For the 125 Micro MAX and 125 Mini MAX classes, the throttle body restrictor must be installed in the rear of the carburettor and in the correct orientation (see picture 1 below for reference).

ROTAX part number: 267536

No modifications are allowed, the ribbed surface on the inlet is to help ensure dimensions have not been modified.



3.3. RADIATOR

The removal of the thermostat from the cylinder head cover is an allowed modification.

Radiator must be mounted with all components as shown in the respective illustration.

To apply tape (neutral tape without advertising only) around the radiator is an allowed modification to control the air flow through the radiator.



TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR

Tape may not be removed from the radiator during operation on the track.
Any other non-original device to control the air flow through the radiator is prohibited

Only version as shown in the illustration is legal to be used.

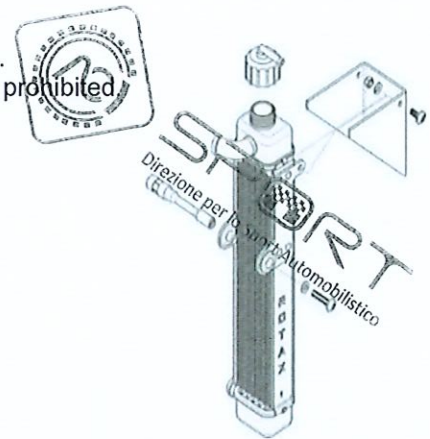
Cooling area:

Height: 280 – 300 mm

Width: 58 – 62 mm

Thickness of radiator: 30 – 34 mm

To remove the original flap is NOT allowed.



3.4. EXHAUST SOCKET

Just exhaust sockets with gasket ring are legal to be used.

Diameter (A) must apply for a length (B) of at least 12 mm.

Maximum inner diameter (A) of exhaust sockets:

125 Micro Max: 18,30 mm (Rotax part no. 273 192) Marked " Micro "

125 Mini Max: 22,20 mm (Rotax part no. 273 196) Marked " Mini "

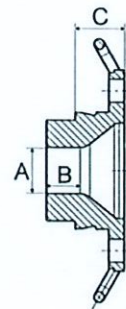
The measurement (C) must be at least 18,5 mm.

It is strictly forbidden to change or modify the exhaust socket in anyway.

ROTAX or the technical scrutineers retains the right to check or exchange the exhaust socket or any of its components at any time during the event.

The internal profile of the exhaust socket has to be checked with the template, Rotax 277 405.

Fit the template (125 Micro MAX "18 mm", 125 Mini MAX "22 mm") as far as possible into the exhaust socket (without gasket, carbon deposits removed). There has to be a constant crack light between the profile of the exhaust socket and the profile of the template.



3.5. EXHAUST SYSTEM

- The exhaust will be sealed by ROTAX prior to the event.
- It is forbidden for the competitor to break the seal or modify the exhaust or any of its components in any way.
- ROTAX or the technical scrutineers retains the right to check or exchange the exhaust or any of its components at any time during the event.
- The 3 x fixations (rivets, bolts and locking nuts) must be always secured tight to ensure a sealing between the perforated tube and exhaust system.
- The perforated tube must be fully inserted into the exhaust system (see top, right picture for reference) External protrusion of the outer sealing ring of the perforated tube is forbidden. (Indicated by the red arrow).





TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR

- The seal must be passed through a 4th hole (maximum 4mm diameter). The hole must be in a position that avoids the leaking of exhaust gasses as indicated in the picture on the right. The perforated tube must be always secured tightly to the exhaust at 3 points.

A specific exhaust system must be used for:

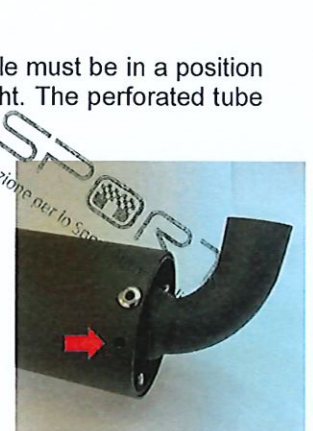
125 Micro Max: Rotax part no. 273 136

125 Mini Max: Rotax part no. 273 137

The Exhaust external body is a common component in both versions. The difference is in the internal components.

The silencer must be mounted in a position where the direction of the 90° elbow outlet (direction of the exhaust gasses) does not harm any component of the chassis.

The exhaust must be mounted and secured in such a way to ensure a full sealing around the exhaust socket and the gasket ring.

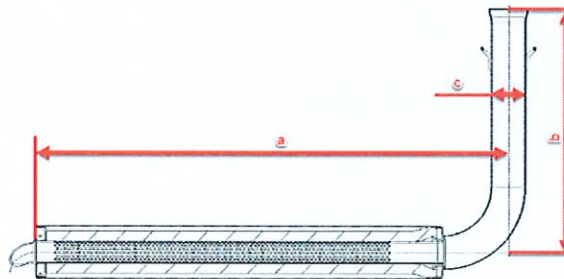


The measurement in the diagram below are as follows:

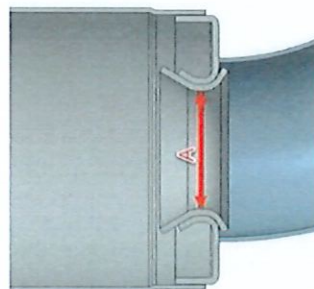
(a) 580 mm +/- 5mm

(b) 299 mm +/- 5mm

(c) 42 mm +/- 3mm



A solid flat plate measuring 28.0mm and 1.5mm thick must not pass through Section "A" (Internal exhaust components must first be removed) 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"

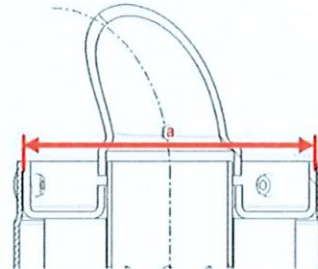


The inner measurement of the exhaust system silencer end (a) in the below diagram must be a maximum of 63.0 mm.

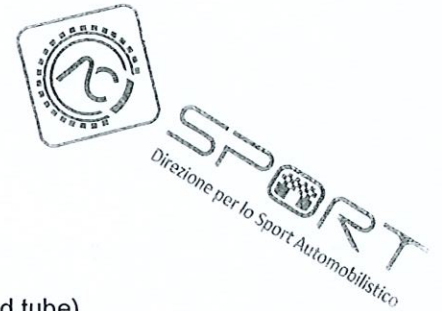


TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR



(Note: this is not a measurement of the perforated tube)

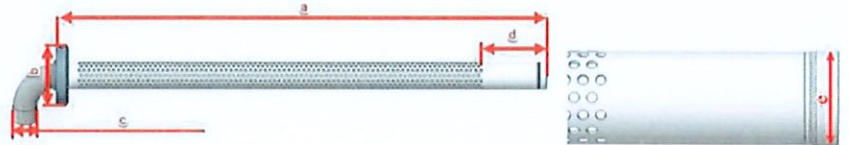


The Exhaust must be installed firmly to the chassis using a rigid mount/s.
 The Exhaust must be mounted to the rigid mount/s using 2 ROTAX silent blocks (part 660920 and or 260657 allowed).
 The deflection of the 2 silent blocks is the only Exhaust movement allowed.
 The Exhaust must be mounted in a neutral position with no stress on the 2 silent blocks.

125 Micro MAX Perforated tube ROTAX part number: 273212

The measurements in the diagram below are as follows:

- (a) at least 498 mm
- (b) minimum outside diameter of 61 mm
- (c) maximum outside diameter of 26 mm
- (d) minimum length 63 mm
- (e) minimum outside diameter of 26.0 mm



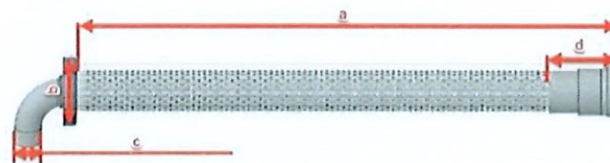
The only legal Isolation matting for 125 Micro MAX is:
 ROTAX part number 297982

New size minimum 480 x 270mm (+/-10mm)
 New weight 207gr (176g – 238g)
 Used weight minimum 140g
 Used weight maximum 350g

125 Mini MAX Perforated tube ROTAX Part number 273211

The measurements in the diagram below are as follows:

- (a) at least 481 mm
- (b) minimum outside diameter of 61 mm
- (c) maximum outside diameter of 26 mm
- (d) at least 63 mm



Note:

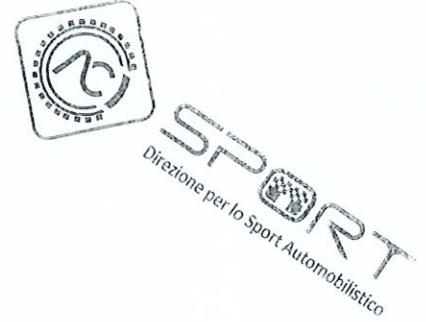
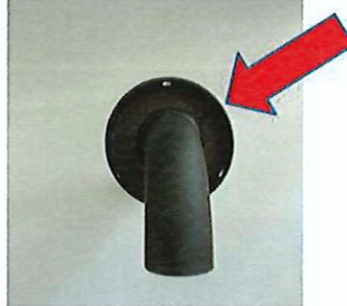
Mini MAX perforated tube has a stamped ID marker "O" visible externally.





TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR



The only legal Isolation matting for 125 Mini MAX is:
ROTAX part number 297985

- New size minimum 490 x 180mm (+/-10mm)
- New weight 141g (119g – 163g)
- Used weight minimum 110g
- Used weight maximum 350g



TECHNICAL REGULATIONS

MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR



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4. PERMITTED ADJUSTMENTS TO THE CHASSIS, ENGINE, CARBURETTOR AND DRIVE TRAIN OPTIONS

4.1. 125 Micro MAX – Formula K by IP Karting

No.	Item	Specification
1	Carburation and gearing mandatory for the 1 st free practice.	118 Main Jet must be installed. Front sprocket 14, Rear sprocket 64 teeth. Please note: you will need to install the correct main jet
2	Carburation and gearing options for the 2 nd free practice through to the Finals	Any main jet from the kit supplied can be used. (105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119 & 120) Front sprocket 14, Rear sprocket 63, 64 or 65 teeth.
	Spark plug type and gap	NGK GR8DI. Filler gauge 1,20 mm must not fit in between the two electrodes.
3	Chain length and type	Only chains as supplied at the event by the manufacturer are legal to be used. 102 chain length.
4	Ride height	Front : All settings allowed Rear : All settings allowed
5	Camber and Castor	Camber : All settings allowed Castor : 0, 0,5, 1 & 2deg allowed. All adjustments must be made using the top castor pill, the bottom must remain standard as supplied.
6	Ackerman settings	All settings allowed
7	Seat fixing	All fixing must be tightly secured. Seat plates as supplied by IPK must be installed between the seat and all supports.
8	Rear bumper	It's allowed to move horizontally but not vertically
9	Optional parts	Adjustable steering wheel hub or 1 Piece hub. Slanted additional plate / adjustable footrest system / Side protection kit for the seat.

From the 2nd free practice ROTAX Recommends: Jet 115, needle position 4, 1,15mm spark plug gap and 85°C engine temperature

Note: Only standard components as supplied at the event by the manufacturer for the specific category may be used in accordance with the RMCGFs 2024 Technical regulations and its appendices.



TECHNICAL REGULATIONS

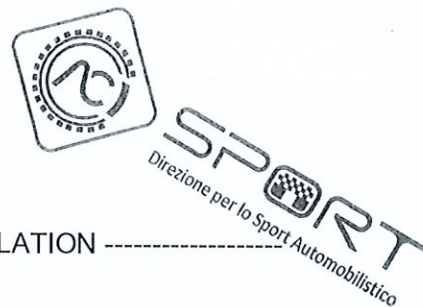
MINI MAX / MICRO MAX / E20 SENIOR / E20 JUNIOR

4.2. 125 Mini MAX – BirelArt

No.	Item	Specification
1	Carburation and gearing mandatory for the 1 st free practice.	118 Main Jet must be installed. Front sprocket 14, Rear sprocket 74 teeth. Please note: you will need to install the correct main jet
2	Carburation and gearing options for the 2 nd free practice through to the Finals	Any main jet from the kit supplied can be used. (105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119 & 120) Front sprocket 14, Rear sprocket 73, 74 and 75 teeth.
3	Spark plug type and gap	NGK GR8DI. Filler gauge 1,20 mm must not fit in between the two electrodes.
4	Chain length and type	Only chains as supplied at the event by the manufacturer are legal to be used. 100 chain length.
5	Ride height	Front: As supplied (middle) or chassis high Rear: As supplied – No adjustments allowed
6	Camber and Castor	0, 0,5, 1 & 2deg allowed. All adjustments are allowed. (only 1 kit of 2 or 1.5deg castor is allowed to be used)
7	Ackerman settings	As supplied or in the 3 rd position
8	Seat fixing	Upper mountings must always be tight, the front lower supports can be loosed.
9	Other notes	Additional shim 10deg to angle the steering wheel is allowed
10	Rear Bumper	It's allowed to move vertically but not horizontally

From the 2nd non-qualifying practice ROTAX recommends: Jet 118, needle position 4, 1,15mm spark plug gap and 65°C engine temperature.

Note: Only standard components as supplied at the event by the manufacturer for the specific category may be used in accordance with the RMC GF Technical Regulations 2024 and its appendices.



----- END OF TECHNICAL REGULATION -----