



ROTAX MAX Challenge Technical Regulations 2018

Appendix for 125 Mini MAX and 125 Micro MAX – U.S.A.

(The Technical Regulations 2018 replaces the Technical Regulations 2017)

Version April 12th, 2018

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

In this appendix just the deviations for 125 Micro MAX and 125 Mini MAX from the standard Technical Regulation for the 125 Junior MAX engine are defined.

1. Micro – Mini Class

For USA, at the National level, Micro MAX and Mini MAX will be merged as one class. For club races, organizations may prefer to have two different classes.

1.1. Ages 8 – 13 years old

Driver must be born in 2005, 2006, 2007, 2008, 2009 or 2010.

1.2. Technical regulation

All technical regulation for Mini-MAX applies to this class.

2. Chassis

Cadet karts used in the Rotax MAX Challenge (RMC) and International Rotax Mojo MAX Challenge Events (IRMCE) are divided into the following classes:

125 Micro MAX

125 Mini MAX

1.3. Grand Finals

| Classes | 125 Micro MAX | 125 Mini MAX |
|-------------------|---------------|--------------|
| Chassis wheelbase | 950 mm | 950 mm |
| Dry tires | Mojo C2 | Mojo C2 |
| Wet tires | Mojo CW | Mojo CW |

1.4. For USA – 125 Micro MAX AND 125 Mini MAX

- 1.4.1. Only Cadet chassis type are authorized;
- 1.4.2. Maximum wheelbase: 950 mm +/- 20 mm;
- 1.4.3. Maximum over all width including all bodywork: 1270 mm;
- 1.4.4. CIK axle wall thickness requirements are not applicable;
- 1.4.5. Front brakes are forbidden;
- 1.4.6. Rear protection mandatory;
- 1.4.7. The highest point at the center of the seat back shall be no lower than 30.5 cm from the tracks surface.

2. Rear Protection

Rear protection must be made of plastic or magnetic steel and must not present any danger as regards safety.

The unit must be attached to the frame in at least 2 points by supports made of plastic, steel or aluminium (possibly by a supplemental system) on the 2 main tubes of the chassis, or on the currently used bumper (upper bar and anti-interlocking bar, Article 2.5.2 or the CIK-FIA technical regulation).

Steel industry standard is also accepted, with closed loop “elephant ear” design also accepted. In this case, Bottom bar between frame rails is required, Top Bar may not be located lower than the height of the rear axle, nor higher than the plane of the rear tires minimum bar outside diameter is 16 mm.

Rear protection must cover at least 50% of each wheel/tire assembly at all times measured at the centre-line of the tire.

Rear protection must have an overall width not exceeding the rear width of the kart at any time, measured outside the rear wheels or tires, whichever is the greater.

3. Tires for USA

Dry tires: Mojo D2: Front and Rear Slicks: 4.5 x 10.0 – 5;

Wet tires: Mojo W3: Front and Rear

Rim dimensions (slick & wet): Minimum width: 128 mm; maximum width : 135 mm

Maximum mounted tire width of 145 mm;

No bead locks required.

4. Bodywork

4.1. Side pod protection must be used as supplied from chassis manufacturer and may not be modified to allow “narrow track width”. Extension devices may be used, no other modification of factory design is accepted

4.2. Side pods may not protrude past the outer edge of the rear wheels in all conditions, including “Wet Conditions”.

4.3. Cadet nose cone may be of full design with maximum outboard protrusion of 40 mm per side.

5. Gearing

5.1. Micro MAX

All participants must use an original 14 tooth front sprocket with a 73 tooth rear sprocket. The supplemental regulations of the event or Championship regulations may specify a different gear ratio (front and rear sprockets) for all participants.

5.2. Mini MAX

Gearing ratio (front and rear sprockets) is open.

6. Section 5 of the Rotax MAX Challenge Technical Regulation 2017 applies with the exception below:

5.1. Squish gap

125 Mini-MAX & Micro MAX = 2,40 mm

To achieve the defined minimum squish gap, a spacer (ROTAX part no. 626 420, same shape as a cylinder base gasket) in combination with at least two cylinder base gaskets (one below the spacer and one above the spacer) must be used.

The squish gap must be measured with a certified slide gauge and by using a 3 mm tin wire (Rotax part no. 580 132).

7. Ignition system:

Spark plug: NGK GR8DI

For USA: Denso Iridium IW 24, IW 27, IW 29, IW 31 or IW 34 is also legal.

Electrode gap (maximum): Filler gage 1,20 mm must not fit between the two electrodes.

Dellorto ignition system

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

125 Micro MAX and Mini MAX: "666815".

The ECU tester must show following result:

125 Micro MAX and 125 Mini MAX categories

- ① 666815MAX
- ② !! Test OK !!

8. Carburetor for the 125 Micro MAX Class

6.10. Carburetor:

For the 125 Micro MAX class (to achieve best performance characteristic) it is recommended and allowed to adjust the accelerator stop for an opening of the carburetor slide in the range from 22 to 26 mm (measured from closed position).

To fit a stop sleeve in the carburetor to limit the carburetor slide opening is an allowed addition of material.

The extend of carburetor slide opening is free and not part of the technical scrutineering.

9. Radiator for the 125 Micro MAX Class

6.12 Radiator:

a) A specific radiator must be used for the 125 Micro MAX engine (ROTAX part no. 295 924 –version 1 or 295 923-version 2).

b) Radiator must be mounted with all components similar to the illustration version 2 or 3 for the 125 MAX engine.

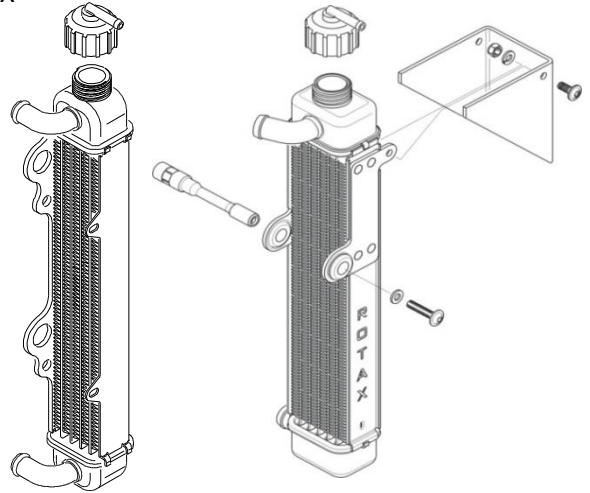
c) Cooling area:

height = 280 - 300 mm

width = 58 - 62 mm

thickness of radiator = 30 - 34 mm

d) No additional non-original-cooling-device is allowed.



For version 1 and 2, tape applied around the radiator is the only allowed air flow control. Tape may not be removed from the radiator during operation on the track. All other means of air flow control through the radiator are prohibited (except of the original plastic flap for version 2). Only none-printed tape (no advertising) is allowed. Removal of the original flap on version 2 is an acceptable configuration

10. Exhaust system for the 125 Micro MAX class

6.14. Exhaust system

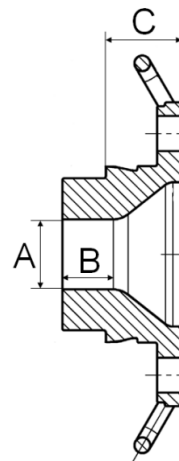
a) The exhaust restrictor (ROTAX part no. 273 972) must be used instead of the original exhaust socket (fitted to the cylinder).

b) The exhaust restrictor must show an inner diameter not bigger than:

Micro MAX: 18,2mm

Mini MAX: 20,2mm

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



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

Fit the template (Micro MAX “18 mm”, Mini MAX “20 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.

125 Micro MAX exhaust

- a) A specific exhaust system has to be used for the 125 Micro MAX.
- b) The inner diameter of the elbow outlet at the silencer end cover has a minimum of 21 mm.
- c) The exhaust cover (Rotax part. No 273098) outlet must be installed as supplied by ROTAX. . The exhaust cover can be turned that the 90° elbow outlet of the silencer shows either downwards towards the asphalt (preferred version for lowest noise emissions) or towards the back.
- d) Exhaust must be installed firmly to the chassis using a rigid pipe mount. The exhaust pipe must be mounted to the rigid pipe mount using 2 ROTAX silent blocks. (part 660920 and or 260657 allowed). The deflection of the 2 silent blocks is the only pipe movement allowed. The pipe must be mounted in a neutral position with no stress on the 2 silent blocs.

