

GLOBAL Rotax MAX Challenge Technical Regulation 2022

Bulletin no.: 06

Valid as of: 2022 07 19

Addendum/changes (highlighted in yellow) to Global RMC Technical Regulation 2022, Edition 2021 10 12

6.16. Exhaust system

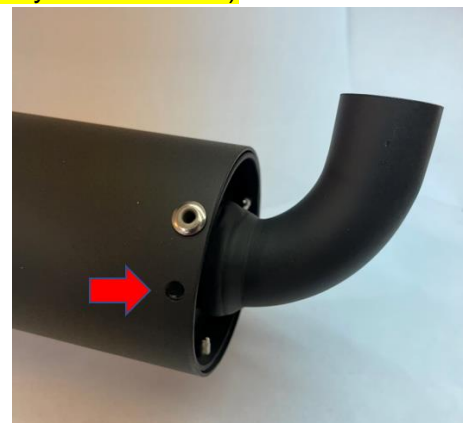
The use of maximum 4 pieces of original Rotax exhaust springs, to fix the exhaust system to the cylinder is allowed.
(a “safety wire” in the exhaust flange or silencer area is not allowed).

Original exhaust system as supplied by Rotax is mandatory to be used for the relevant class.

Welding at the exhaust system is only allowed in the case of a repair. Only repairs that return the components to its original shape or form are allowed.

Allowed modifications on the original exhaust systems are:

- Replacing the original rivets of the silencer end cap by 4 mm metric screws and corresponding locking nuts. 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)
- If the event requires the Exhaust / Perforated tube to be sealed, 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.
- Replacing the isolating mat (just one original isolating mat may be fitted) inside the silencer and the silencer end cap with perforated tube by original Rotax spares parts.



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125 Micro MAX	ROTAX part number 297982
125 Mini MAX	ROTAX part number 297985
125 JNR MAX	ROTAX part number 297982
125 SNR MAX	ROTAX part number 297982
125 DD2 MAX	ROTAX part number 297982

Note: For post-race technical scrutineering checks on the exhaust isolating mat, only the used weight is to be controlled.

The exhaust isolating mat new size and weight specifications can only be applied for pre-race / event technical checks against new material prior to installation and sealing of the exhaust system, if specified by the event /series organizer.

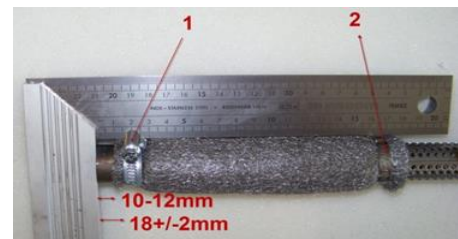
- Welding a socket (in a distance of 50-80 mm from the ball joint) on the top of the exhaust system for measuring the exhaust gas temperature.
- Addition extra elements after the original silencer for further noise reduction.
- Additional to the standard isolation mat a steel isolation mat (Rotax part no. 297 983) with the square dimension of 165 +10 mm is legal for use in the JNR / SNR and DD2 category's only (not mandatory) to be assembled underneath the standard isolation mat according to the illustration.

Clamp (1) must be fitted at a distance of 18+/-2mm, measured from the end of the tube.

Clamp (2) must be fitted at the end area of the steel isolation mat.

The measurement 10-12 mm from the end of the perforated tube to the beginning of the steel isolating mat is a specification for assembly purpose only!

Both clamps (1 and 2) are mandatory to be fitted and tightened.



6.17. 125 Micro MAX:

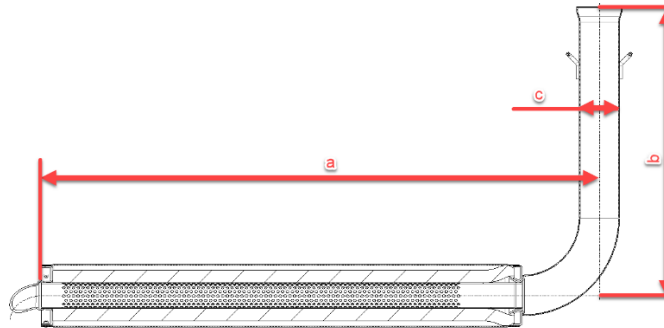
A specific Exhaust system has to be used for the 125 Micro MAX engine.
ROTAX Part number 273136

The Exhaust external body is a common component to Mini MAX, but with alternative internal components (Inserts).

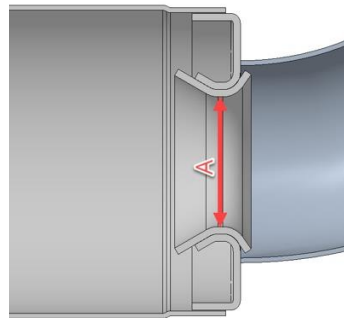
The silencer must be mounted in a position where the direction of the 90° elbow outlet (direction of the hot exhaust gasses) does not harm any component of the chassis. **The exhaust must be mounted and secured in such a way to ensure a full sealing around the exhaust socket and the gasket ring.**

The measurements in the diagram below are as follows:

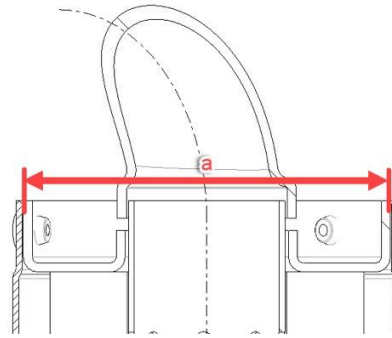
- (a) 580 mm +/- 5mm
- (b) 299 mm +/- 5mm
- (c) 42 mm +/- 3mm



A steel ball with a 28.0mm diameter **must not** pass through Section "A" 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.
(Internal exhaust components must first be removed)



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



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

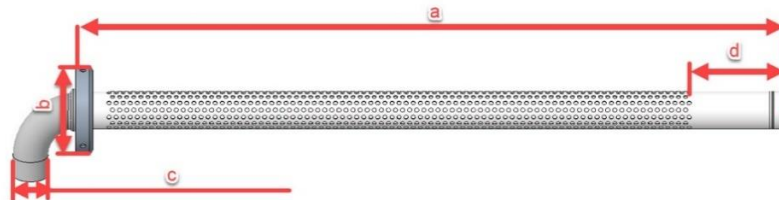
The Exhaust must be installed firmly to the chassis using a rigid mount/s.
The Exhaust must be mounted to the rigid mount/s using 2 ROTAX silent blocks.
(part 660920 and or 260657 allowed).
The deflection of the 2 silent blocks is the only Exhaust movement allowed.
The Exhaust must be mounted in a neutral 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 61mm
- (c) maximum outside diameter of 26mm
- (d) minimum length 63mm



The measurements in the diagram below are as follows:

- (a) minimum outside diameter of 26.0mm



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

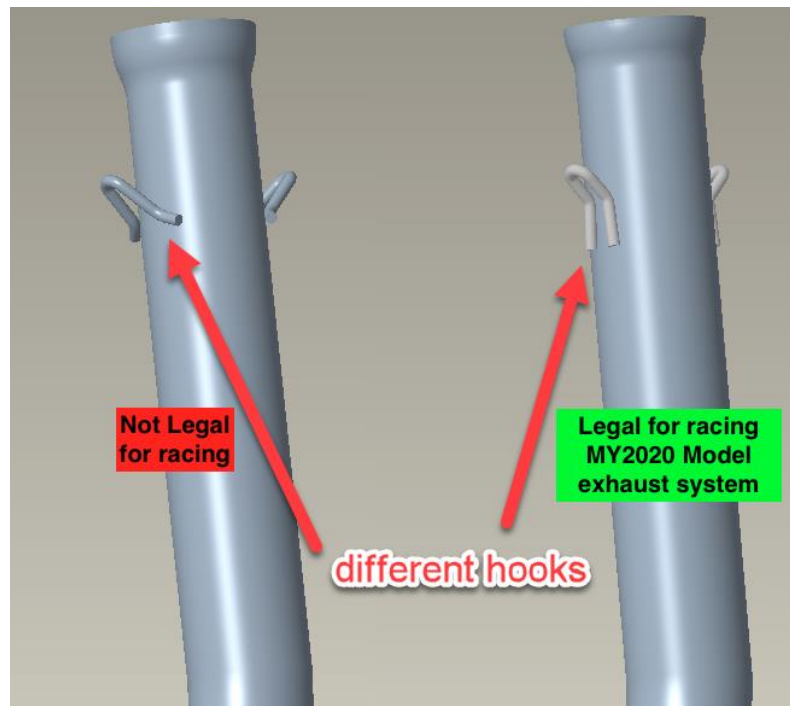
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NOTE:

The only exhaust system allowed for racing in the 125 Micro and 125 Mini MAX category's is the MY2020 version.

The exhaust has 3 clear visual differences to identify the MY2020 version.

1. Exhaust hooks
2. Connecting socket / ball joint connect at manifold
3. Wall thickness of the exhaust system is 1.0mm (older exhaust system which is not allowed for racing has a wall thickness of 1.5mm)



6.18. 125 Mini MAX:

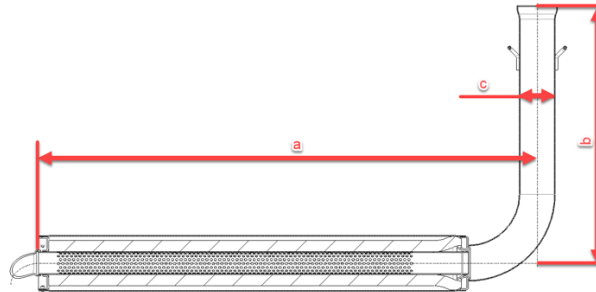
A specific Exhaust system has to be used for the 125 Mini MAX engine.
ROTAX Part number 273137

The Exhaust external body is a common component to Micro MAX but with alternative internal components.

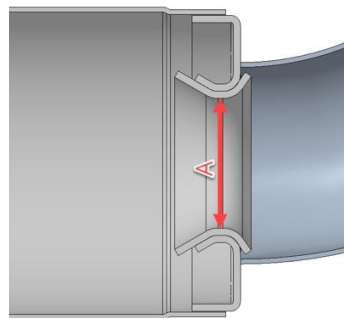
The silencer must be mounted in a position where the direction of the 90° elbow outlet (direction of the hot exhaust gasses) does not harm any component of the chassis. **The exhaust must be mounted and secured in such a way to ensure a full sealing around the exhaust socket and the gasket ring.**

The measurements in the diagram below are as follows:

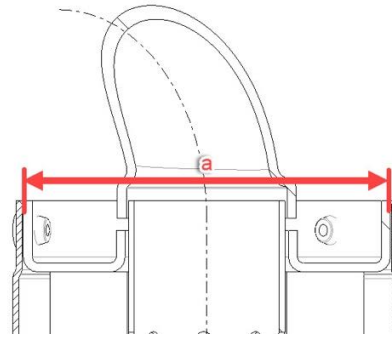
- (a) 580 mm +/- 5mm
- (b) 299 mm +/- 5mm
- (c) 42 mm +/- 3mm



A steel ball with 28.0mm diameter **must not** pass through Section “A” and a steel ball with 26.0mm diameter must be able pass through Section “A” in the below diagram from the inlet and through the 90-degree elbow completely.
(Internal exhaust components must first be removed)



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



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

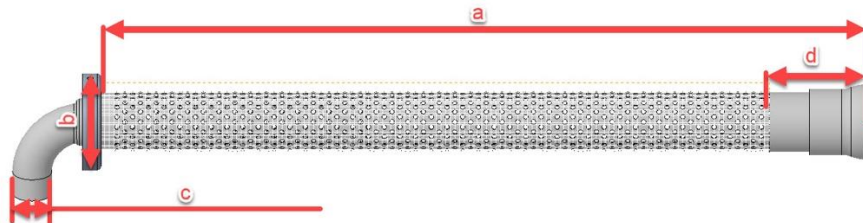
The Exhaust must be installed firmly to the chassis using a rigid mount/s.
The Exhaust must be mounted to the rigid mount/s using 2 ROTAX silent blocks.
(part 660920 and or 260657 allowed).
The deflection of the 2 silent blocks is the only Exhaust movement allowed.
The Exhaust must be mounted in a neutral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

125 Mini MAX Perforated tube

ROTAX Part number 273211

The measurements in the diagram below are as follows:

- (a) at least 482 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 " X " visible externally.



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

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