



ŠPORT

**TEHNIČNI PRAVILNIK
DRŽAVNEGA PRVENSTVA AMZS IN
POKALNEGA PRVENSTVA**



**V KARTINGU
ZA SEZONO 2020**

| | | |
|---------------|--------------|----------------------------|
| Razred | DP/SP | Rotax- JUNIOR |
| Razred | DP/SP | Rotax- MAX |
| Razred | DP/SP | Rotax- DD2 +Masters |

**DODATEK IN SPREMEMBE TEHNIČNEGA PRAVILNIKA RMC
KI VELJAJO ZA DRŽAVNO PRVENSTVO AMZS IN
POKALNO PRVENSTVO SSC SPORTSTIL CUP
V KARTINGU 2020**

ZA RAZREDE ROTAX JUNIOR, ROTAX MAX, ROTAX DD2+MASTERS

1. V SSC Sportstil prvenstvu za »Ticket GF« lahko sodelujejo imetniki licenc, izdanih pri zvezah v naslednjih državah:

- Slovenija
- Hrvaška
- Srbija
- Bosna
- Črna Gora
- Makedonija

1.1. Prvenstvo SSC Sportstil Cup razpisuje sledeče kategorije:

- 50 MINI Intrepid driver programa
- Rotax Micro Max
- Rotax Mini Max
- Rotax Junior Max
- Rotax Max
- Rotax DD2 + Masters
- KZ2

V kategorijah Rotax Micro Max in Rotax Mini Max se na vsaki dirki žreba motorje z uplinjači. Motorji so last organizatorja, ki je odgovoren za vzdrževanje le-teh.

Žreb je obvezen za vse voznike.

V kolikor je udeleženi več kot 34 voznikov, organizator določi kateri voznik žreba motor.(glej posebni pravilnik dirke)

Najem motorja 150,00 EUR.

V kolikor tekmovalec zavrne žrebanje motorja, ne more sodelovati na prireditvi.

1.2. TEKMOVALEC LAHKO UPORABLJA (na vsaki posamezni dirki)

- 1 set Slick gum MOJO
- dežne pnevmatike MOJO W5

2.9. OLJA IN MAZIVA

- Gorivo kupljeno na bencinski črpalki, maksimalno 98 oktanov
- Za 2% zmes se sme uporabljati samo olje Rotax XPS DYE
- V menjalnikih se sme uporabljati olje XPS- kart – tec kart gear oil kat.št. 25113. Za Rotax Micro, Mini, Junior, Senior Max.
Olje za DD2 pa olje z oznako XPS kart tec DD2 kart gear oil kat.št. 25474

3. MOTORJI

Lahko se uporabljajo

- A. Rotax MAX prve generacije z uplinjačem Dellorto VHSB 34 SX + EVO Kit elektro inštalacija in izpušni sistem
- B. Rotax MAX EVO
- C. Rotax DD2 Open – dovoljena uporaba motorjev prve in druge generacije s pripadajočo opremo

3.1. Za sodelovanje na tekmovanju SSC mora imeti motor ID karton z žigom uvoznika (Sportstil Kart d.o.o.), veljavno plombo in avtorizacijo za tekoče tekmovalno leto (potrjeno s strani pooblaščenega servisnega centra).

Uporabljajo se lahko samo motorji kupljeni pri pooblaščenem uvozniku – Sportstil Kart d.o.o. Plombirani in servisirani samo pri pooblaščenem servisnem centru uvoznika (glej seznam servisnih centrov na www.rotax.si)

Plombo lahko odstrani samo pooblaščenec uvoznika motorja (odstranitev plombe nepooblaščene osebe se smatra kot kaznivo dejanje).

6.10 UPLINJAČ

Dovoljen samo uplinjač VHSB 34 XS, kupljen pri organizatorju tekmovanja Sportstil Kart d.o.o.

Vsi uplinjači morajo biti avtorizirani, pregledani in plombirani s strani organizatorja

Vsakršna dodelava, poseg v uplinjač ali odstranitev plombe je prepovedano ! (diskvalifikacija).

V razredu Rotax Junior in Senior je dovoljena šoba minimum 130 (kaliber) .

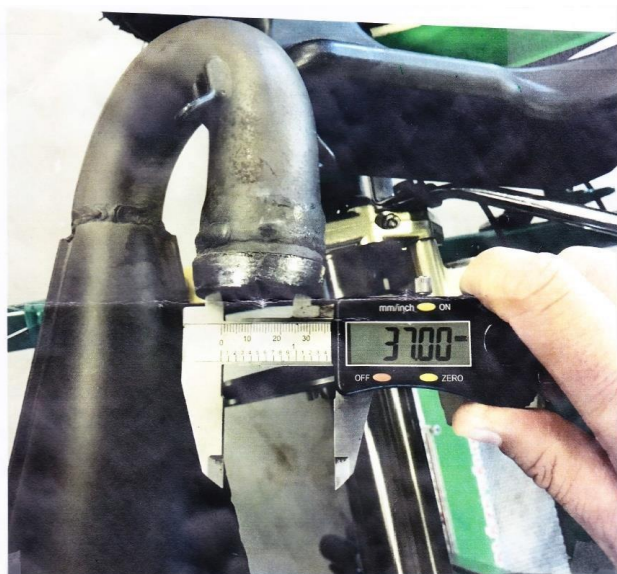
Vsak ID karton motorja mora vsebovati tudi številko plombe uplinjača.

6.14 IZPUŠNI SISTEM

* Izpušni sistem EVO:

- Junior
- MAX

Premer izhoda pri kontroli kolena je 37,00 mm +/- 1,0 mm (glej sliko)



* Verzija ena (stari tip) izpušnega sistema je dovoljena samo za razred DD2 Open

**DODATEK IN SPREMEMBE ŠPORTNEGA PRAVILNIKA RMC KI VELJAJO ZA
DRŽAVNO PRVENSTVO AMZS IN POKALNO PRVENSTVO SPORTSTIL
CUP (SSC) V KARTINGU 2020**

ZA RAZREDE ROTAX JUNIOR, ROTAX MAX, ROTAX DD2+MASTERS

DODATEK: OKVIR

Tekmovalec lahko na tekmovanje prijavi samo 1 okvir, ki je homologiran oz. s pretečeno homologacijo, vendar ne več kot eno homologacijsko obdobje .

Pri razredu Rotax MAX je uporaba sprednjih zavor prepovedana.

V kategoriji DD2, obvezna uporaba homologiranega zadnjega spojlerja.

DODATEK: PRAVILNIKA RMC

4.3 MINIMALNA TEŽA

- DD2** - Minimalna dovoljena teža **170 kg** (Vozilo z voznikom, merjeno po dirki)
- DD2 Masters** - Minimalna dovoljena teža **180 kg** (Vozilo z voznikom, merjeno po dirki)

GLOBAL Rotax MAX Challenge Technical Regulation 2020

Edition 2019 12 20
Version 3

Content

| | |
|--|----|
| 1. General | 7 |
| 2. Equipment | 7 |
| 3. Engine sealing, Scrutinizing | 10 |
| 4. Engine modifications, repairs and additions | 12 |
| 5. Technical Specification within the engine seal for Rotax MAX kart engines..... | 12 |
| 6. Technical Specification outside the engine seal for Rotax MAX kart engines..... | 20 |



1. General

The RMC Technical Regulations 2020 replace the RMC Technical Regulations 2019.

Anything which is not expressly allowed in the technical regulations is forbidden.

The English language is the authentic version.

1.1. Categories

Karts used in the Rotax MAX Challenge (RMC), and International Rotax MAX Challenge Events (IRMCE) are divided into the following classes:

- 125 Micro MAX
- 125 Mini MAX
- 125 Junior MAX
- 125 Senior MAX and Senior MAX Masters
- 125 MAX DD2 and MAX DD2 Masters

Note: The 125 Junior MAX engine is the basis for the engine configurations 125 Micro MAX and 125 Mini MAX. Only the deviations for 125 Micro MAX and 125 Mini MAX from the standard Technical Regulation for the 125 Junior MAX engine are defined.

The 125 Senior MAX engine is the basis for the engine configurations in the 125 Senior MAX Masters class with regards to all the component related regulations, except for class weight and drivers age.

The 125 MAX DD2 engine is the basis for the engine configurations in the 125 MAX DD2 Masters class with regards to all the component related regulations, except for class weight and drivers age.

1.2. Amount of equipment

For each RMC race event (from qualifying practice to the final) the following maximum amount of equipment is allowed:

- 1 chassis
- 1 set of dry tires *
- 1 set of wet tires*
- 2 engines

*In the event of a race tire being damaged (Slick or Wet), the technical scrutineer may allow the competitor to nominate a "USED" tire of similar wear from the drivers registered practice tires as a replacement. The damage must be reported to the scrutineer immediately after the on-track action where the damage occurred, and prior to leaving the parc ferme / scale area.

2. Equipment

2.1. Chassis 125 Micro MAX, 125 Mini MAX

For IRMCE or National RMC's any chassis sanctioned by an authorized Rotax distributor or with a valid CIK-FIA homologation is allowed with a wheel base of 950 mm. Front brakes are not allowed.

2.2. Chassis 125 Junior MAX and 125 Senior MAX/Masters

Front brakes are not allowed.

For national RMC's any chassis sanctioned by an authorized Rotax distributor is allowed. Maximum diameter of rear axle = 50 mm, minimum wall thickness according to CIK-FIA rules.

At IRMCE chassis with a valid CIK-FIA homologation only are allowed. Any brake system must have a valid CIK-FIA homologation.

2.3. Chassis 125 MAX DD2/DD2 Masters

At IRMCE listed on the CIK International / Zone Calendar the following material must hold a valid CIK homologation:

- Chassis
- Brakes
- Bodywork and Bumpers
- Rear wheel protection

Note: At IRMCE listed on the CIK International / Zone Calendar only a Chassis or Rear wheel protection system holding a valid CIK homologation is valid for use.

For all national RMC 125 MAX DD2/Masters classes, chassis approved by Rotax (see <http://www.rotax-kart.com/Max-Challenge/MAX-Challenge/Approved-Chassis-125-MAX-DD2>) are allowed to be used.

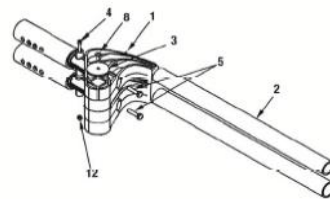
Chassis must be designed according to CIK-FIA rules for shifter classes (front- and rear brakes mandatory).

Any brake system must have a valid CIK-FIA homologation.

Rotax rear tire protection system (according to illustration) is optional for national RMC's.

No part shall be added or removed from original content (except safety wire or bolt connection between pos. 1 and pos. 2 as well as number plate with support).

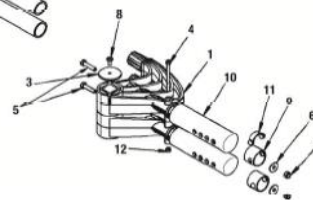
Rotax original (orange or red) only are allowed to be used.



protection rollers

2.4. Chassis Protection

It is permitted to attach chassis chassis rails left, right and material permitted is plastic. wear must satisfy the event.



protectors to the front. The only The installation and scrutineers of the

2.5. Bodywork 125 Micro MAX, MAX, 125 Junior MAX and 125 Senior MAX

In accordance with regulations of national Federations or CIK-FIA.

At IRMCE bodywork with current CIK-FIA homologation validity only is allowed.

2.6. Bodywork 125 MAX DD2/Masters

In accordance with regulations of national Federations or CIK-FIA.

At IRMCE listed on the CIK International / Zone calendar only bodywork with a current and valid CIK-FIA homologation is allowed, CIK Homologated Rear wheel protection only is allowed.

2.7. Tires

At all RMC and IRMCE following tires have to be used

| | | Front tyre | Rear tyre |
|-------------------------------|----------------------|------------|------------|
| 125 Micro MAX | | | |
| Dry | Mojo C2 CIK Mini | 4.0/10.0-5 | 5.0/11.0-5 |
| Wet | Mojo CW CIK Mini | 10x3,60-5 | 11x4,50-5 |
| 125 Mini MAX | | | |
| Dry | Mojo C2 CIK Mini | 4.0/10.0-5 | 5.0/11.0-5 |
| Wet | Mojo CW CIK Mini | 10x3,60-5 | 11x4,50-5 |
| 125 Junior MAX | | | |
| Dry | Mojo D2XX CIK Option | 4,5/10.0-5 | 7.1/11.0-5 |
| Wet | Mojo W5 CIK | 10x4,50-5 | 11x6,00-5 |
| 125 Senior MAX/Masters | | | |
| Dry | Mojo D5 CIK Prime | 4,5/10.0-5 | 7.1/11.0-5 |
| Wet | Mojo W5 CIK | 10x4,50-5 | 11x6,00-5 |
| 125 MAX DD2/Masters | | | |
| Dry | Mojo D5 CIK Prime | 4,5/10.0-5 | 7.1/11.0-5 |
| Wet | Mojo W5 CIK | 10x4,50-5 | 11x6,00-5 |

Strictly no modifications or tire treatment allowed.

Recommended equipment to detect tire treatment is Mini-RAE-Lite.

Threshold value of maximum 4 ppm is recommended.

Tires must be mounted according to the sense of rotation defined on the tire.

2.8. Data acquisition

Systems which permit the reading/recording of following data only are allowed:

Lap time

Engine rpm (by induction on the high-tension cable)

Two indications of temperature

The speed of one wheel

Acceleration in X/Y direction

Position (via GPS system)

Steering wheel angle sensor

Connection of the data acquisition system to the original Rotax battery is allowed.

During free practice also, telemetry systems are allowed.

2.9. Composite materials

Composite materials (carbon-fiber etc.) are banned except for the seat and the floor tray.

Alloys from different metals/substances are not considered as composite materials.

2.10. Safety equipment

For RMC overalls, helmets, kart shoes, gloves and other kind of driver protection must comply with the regulations of the national Federation or CIK-FIA.

For IRMCE article 3 of CIK-FIA technical regulations apply.

2.11. Fuel / Oil

Unleaded fuel 95 - 98 octane.

For IRMCE, Continental (Zone) and National RMCs events ROTAX recommends

XPS DYE, fully synthetic 2T, KART RACING OIL.

Fuel will be checked in the fuel tank with INOVA X5 led light.

The led light must show the fuel coloured in green.

XPS KART TEC, fully synthetic 2-stroke oil.

2.12. Advertising on engines

No sponsor stickers are allowed on the engine and engine accessories, except ROTAX, BRP, Mojo, XPS, Original SODI KART badges and the following plates attached to the cylinder.



3. Engine sealing, Scrutinizing

At RMC and IRMCE, engines which conform to the following technical regulation only, are legal to be used.

For national RMC's, engines which have been checked and sealed by the Authorized Rotax Distributor of this territory or one of the Service Centres appointed by the Authorized Distributor, are allowed to be used only.

For IRMCE all Authorized Rotax Distributors and their Service Centres only are allowed to check and seal engines.

Authorized Distributors and Service Centres which are legal to check and seal engines are listed at <http://www.rotax-kart.com/Find-a-Dealer>.

By sealing an engine, the ROTAX Authorized Distributors and their Service Centres take over the responsibility for the conformity of the engine with according to the valid Technical Regulation. Also, a brand-new engine must be checked according to the Technical Specification before sealing.

The engines have to be sealed with specific ROTAX engine seals (black anodized aluminium seal with "ROTAX"-logo and a 6-digit serial number and a barcode). Further legal seals

are:

aluminium seals with "JAG"-logo and 6 digit serial

Red anodized aluminium seals with "JAG"-logo and 6

Red anodized seals with "KORRIDAS" and 6 digit serial

Blue anodized seals with 6 digit serial number (Kombikart)



Black anodized number digit serial number number

By means of the steel cable the engine must be sealed on one Allen screw (pos. 1) of the intake flange, on 2) of cylinder and one Allen screw (pos. 3) of cover (see attached pictures).

engine seal thread must be squeezed using 276110 (see picture of engine seal).

pass the end of the sealing wire through the (as shown in picture only).



be sealed on one one stud screw (pos. the cylinder head After sealing the calliper ROTAX It is not allowed to seal a second time

At every new sealing of an engine the ROTAX or Service Centres that checks and seals an for following indications at the Engine Identity Card which belongs to the owner of the engine.

Serial no. of the engine

Serial no. of the engine seal

Stamp and signature of the Authorized

ROTAX
NEW AGE KARTING

ENGINE IDENTITY CARD

125 JUN. MAX
 125 MAX
 125 MAX DD2

Engine Serial No: 6583420
 ROTAX Seal No: 297461

Engine sold by:
Joe Public Motorsports Ltd
 Authorized Service Center, Rotax Karting
 Victoria Street 264
 Sydney NSW 2000, Australia

Stamp of Authorized Distributor/Service Center for ROTAX Kart Engines

Signature: [Signature] Date: 10/12/2014

Authorized Distributor engine is responsible

Distributor/Service Center.

At scrutineering the driver has to present:

The engine(s) with the undamaged engine seal(s)

The Engine Identity Card(s), showing the matching engine serial no.(s), the matching engine seal no.(s), the stamp(s) and signature(s) of the Authorized Distributor or Service Center that has (have) checked and sealed the engine(s).

The ROTAX authorized Distributor organizing a national RMC may appoint before every RMC race a neutral Service Center which will be the only one allowed to re-seal an engine between scrutineering and the final in the case of an engine failure.

During an IRMCE ROTAX Authorized Distributors and their Service centers are not allowed to re-seal an engine between scrutineering and the final.

The sealing of engines helps to reduce the times for scrutineering at races as during the race event just the accessories (carburettor, exhaust, radiator.....) must be checked.

Of course, scrutineers can request to open and re-check an engine according to the Technical Specification, before or after a race or in case of a protest. If an engine seal has been broken (for which reason ever), the engine has to be checked completely according to the Technical Specification and must then be re-sealed by an ROTAX authorized Distributor or one of its Service Centres.

FOR ALL COMPONENTS OUTSIDE THE ENGINE SEAL, THE COMPETITOR IS RESPONSIBLE TO ASSURE THE CONFORMITY WITH THE TECHNICAL REGULATIONS.

4. Engine modifications, repairs and additions

4.1. Modifications

Neither the engine nor any of its ancillaries may be modified in any way. "Modified" is defined as any change in form, content or function that represents a condition of difference from that originally designed. This is to include the addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these rules. The adjustment of elements specifically designed for that purpose shall not be classified as modifications, i.e. carburettor and exhaust valve adjustment screws.

The repair of a thread on the crankcase (maximum of three threaded holes per crankcase) using a "heli-coil" or similar is allowed.

Exception: The threads located under the crankcase to fix the crankcase on the engine mount may be repaired as needed.

The repair of a thread on the cylinder (maximum of three threaded holes per cylinder) using a "heli-coil" or similar is allowed.

Genuine ROTAX components only that are specifically designed and supplied for the 125 Micro MAX, 125 Mini MAX, 125 Junior MAX, the 125 Senior MAX and the 125 MAX DD2 engine are legal, unless otherwise specified.

ANYTHING WHICH IS NOT EXPRESSLY ALLOWED IN THE TECHNICAL REGULATIONS IS FORBIDDEN.

4.2. Internal additions

No additional material may be added except in the case of engine repairs and shall only restore the engine or components to original specifications.

The use of thermal barrier coatings/ceramic coatings on or in the engine and on or in the exhaust system is prohibited.

The use of anti-friction coatings in or on the engine/engine components is prohibited.

4.3. Legal additions

Chain guard, engine mount, temperature gauge and tachometer/hour meter, catch cans for liquids with mounting brackets.

Customizing the cylinder head cover by painting is legal.

Sensor for exhaust gas temperature (see exhaust systems).

4.4. Non-tech items

Non-original fasteners, circlips, washers, throttle cable housing, fuel and pulse line (type and size) as well as length of coolant hoses are allowed unless otherwise specified.

4.5. Measurements

When taking any dimensional reading, of the following technical regulation, in the order of accuracy of 0,10 mm or even more precise, the temperature of the part must be between +10°C and +30°C. Before taking any decision based on this regulation a check for available Bulletins is mandatory.

They can be found under <http://www.rotax-kart.com/Max-Challenge/MAX-Challenge/Regulations>
To avoid excessive noise and exhaust emissions revving the engine in the servicing park is not allowed.

5. Technical Specification within the engine seal for Rotax MAX kart engines

5.1. Squish gap

The crankshaft must be turned by hand slowly over top dead center to squeeze the tin wire. The squish gap must be measured on the left and right side in the direction of the piston pin. The average value of the two measurements counts.

125 Mini MAX, 125 Junior MAX, 125 Senior MAX, 125 MAX DD2:

125 Mini MAX minimum = 1,20 mm
 125 Junior MAX minimum = 1,20 mm
 125 Senior MAX minimum = 1,00 mm
 125 MAX DD2 minimum = 1,30 mm

The squish gap must be measured with a certified slide gauge and by using a 2 mm tin wire (Rotax 580130).

125 Micro MAX:

125 Micro MAX minimum = 2,40 mm

The squish gap must be measured with a certified slide gauge and by using a 3 mm tin wire (Rotax 580132).

To achieve the defined minimum squish gap one spacer (Rotax 626420, with same shape as cylinder base gasket) in combination with at least two cylinder base gaskets (one below the spacer and one above the spacer) must be used.

5.2. Combustion chamber insert

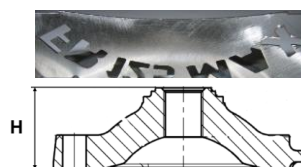
Cast identification code has to be "223389" or "223389 1" "223389 2" or "223389 2/1" or "223389 2/2". "ROTAX" and/or "MADE IN AUSTRIA" must be shown. Height of combustion chamber insert has to be

mm (H).

The profile of the combustion chamber insert has to be template (ROTAX 277390). The crack of light between the profile of the combustion chamber insert must be whole profile.



or
 Casted wording
 28,80 mm +/- 0,2



checked with a
 the template and
 the same over the

5.3. Piston with ring assembly

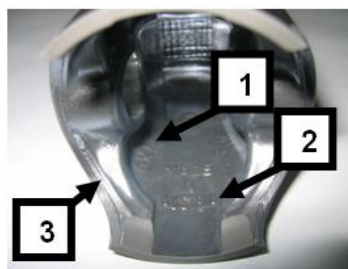
Original, coated, aluminium, cast piston with one piston has to show on the inside the cast wording "MADE IN AUSTRIA" (2).

are: Top end of piston, outside diameter, groove for bore for the piston pin, inside diameter at bottom some pre-existing factory removal (3) of flashing at piston skirt. All other surfaces are not machined and Any mechanical treatment or rework of the piston is forbidden, (Altering the pistons profile by reworking carbon build-up is forbidden, if carbon is removed it must be consistently removed across the entire surface without altering the profile of the piston itself).

Example, selectively removing carbon in the squish areas is forbidden.

Original, magnetic, rectangular piston ring.
 +/- 0,02 mm.

marked either with "ROTAX 215547", "ROTAX 215548", "ROTAX 215548 X" or "I ROTAX 215548 X". The piston ring is legal also if just parts of the marking are still visible.



piston ring. The "ELKO" (1) and Machined areas the piston ring, end of piston and the cut out of the have cast surface.

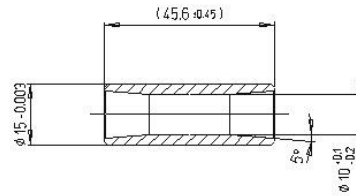


measurement

Ring height : 0,98
 Piston ring is

5.4. Piston pin

Piston pin is made out of magnetic steel.
 be according to the drawing.
 weight of the piston pin must not be lower than



Dimensions must
 The minimum
 31,00 grams.

5.5. Cylinder

Light-alloy-cylinder with GILNISIL-plating.
 Any re-plating of cylinder is not allowed.
 Maximum bore of cylinder = 54,035 mm (measured 10 mm above the exhaust port).

5.5.1. Cylinder has to be marked with the "ROTAX" logo (see pictures below).

**125 Mini MAX
 and 125 Junior MAX:**
 main exhaust port and without exhaust valve.
 with identification code 223994 only are legal to be



125 Micro MAX,
 Cylinder with one
 Cylinders marked used.

125 Senior MAX:
 Cylinder with one main exhaust port and exhaust valve.
 Cylinders marked (cast or machined) with identification code 223993 only are legal to be used.

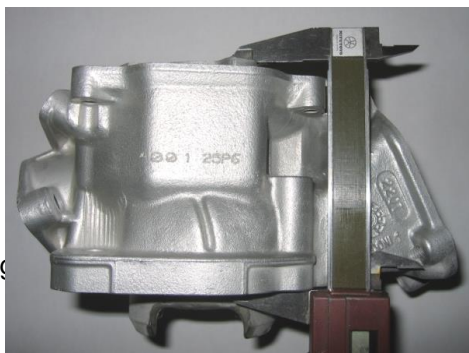


125 MAX DD2:
 Cylinder with one main exhaust port and two side exhaust ports and
 exhaust valve.
 Cylinder has to be marked with identification code 613933.



5.5.2. Height of

Measured



cylinder

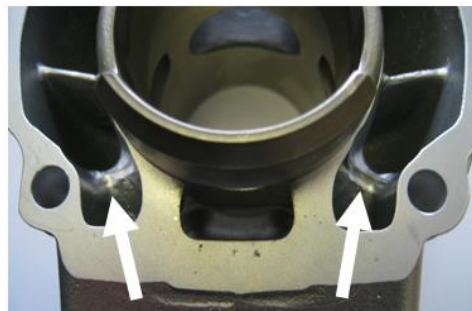
with a digital calliper min. length 200 mm.

| | |
|--|------------------------|
| 125 Micro MAX, 125 Mini MAX: | 87,00 mm -0,05/+0,1 mm |
| 125 Junior MAX, 125 Senior MAX: | 87,00 mm -0,05/+0,1 mm |
| 125 MAX DD2: | 86,70 mm -0,05/+0,1 mm |

5.5.3. Cylinder surfaces

All transfer ports and passages have cast finish surface except some removal (done by the manufacturer) of cast burr at the inlet port and passages. All ports have prevent ring snagging. Any additional permitted. exhaust port may show some pre-existing manufacturer. The sealing flange for the show signs of machining from the

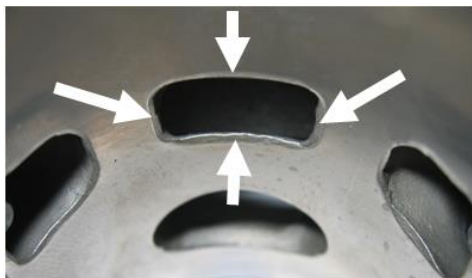
All ports have chamfered edges. machining is not permitted.



passage, exhaust chamfered edges to machining is not The top edge of machining from the exhaust socket may manufacturer.

Any additional

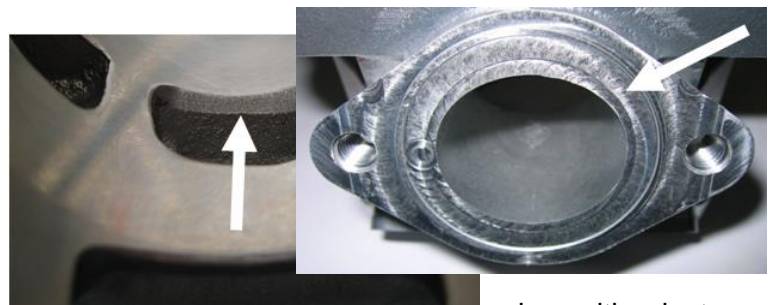
Cylinders marked 223993, 223994 and edge of the central boost port may show



613933 the upper factory machining.

exhaust socket may show either cast surface. Machined surface can be either flat or show a circular sealing bump.

The flange for the finish or machined



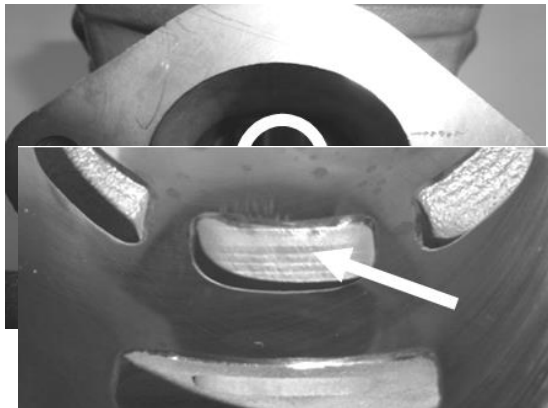
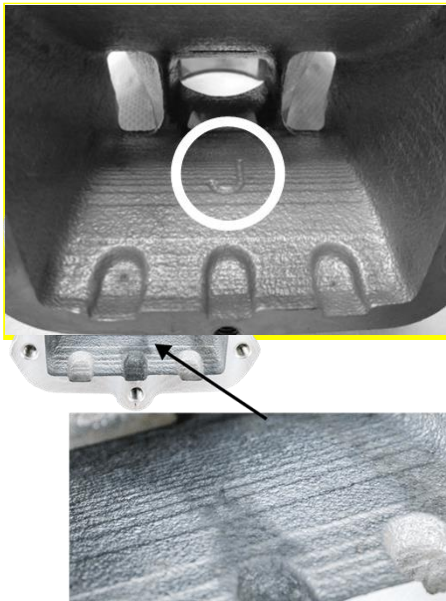
The top edge of the exhaust port may cast finish surface (left picture) or signs of a CNC machining (central picture) or signs of CNC machining in combination with signs of manual grinding (right picture). show either just a



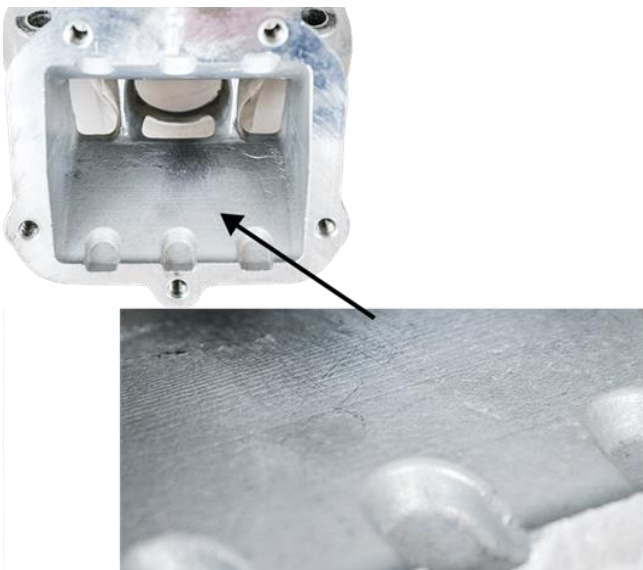
The exhaust port may show partial manual grinding done by the manufacturer to eliminate minor casting defects and/or to eliminate the NIKASIL burr at the end of the NIKASIL plating (see above right picture).

Single Core Cylinder:

Cylinders marked 223994 and 223993 may show in the inlet port a linear texture.
 Cylinders marked 223994 and 223993 with linear texture in the inlet port show a fully CNC machined exhaust port and a fully CNC machined top edge of the central boost port.
 Cylinders marked 613933 may show in the inlet port a linear texture.



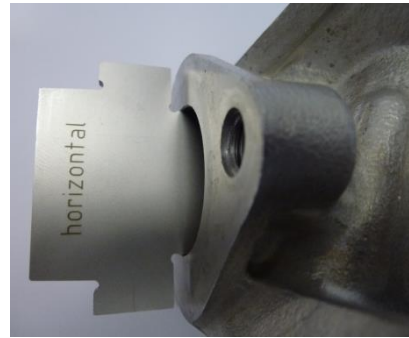
Single Core Cylinder:
 linear structured cast finish surface



5.5.4. Exhaust port shape

Cylinder 223994 with fully CNC machined
The horizontal and vertical dimensions of the be checked with the template, Rotax 676240.

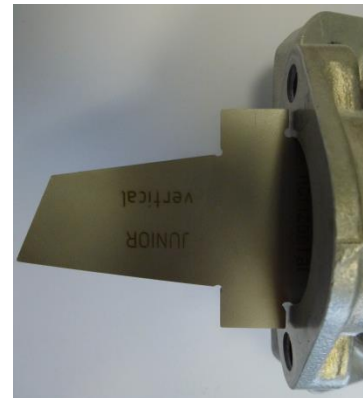
Cylinder 223993 with fully CNC machined
The horizontal and vertical dimensions of the be checked with the template, marked with



exhaust port only:
exhaust port have to

exhaust port only
exhaust port have to 676245*.

The template has to be moved in horizontal and far as possible into the exhaust port. the template may not touch the flange for the



vertical position as
In both directions,
exhaust socket.

5.5.5. Exhaust port timing

The "exhaust port timing" (distance from cylinder to the top of the exhaust port) has means of the template (ROTAX 277402). into the cylinder, and move the template of the exhaust port) as far as possible into In this position the template may not touch



the top of the
to be checked by
Insert the template
(at the highest point
the exhaust port.
the cylinder wall.

Take care to use the correct gauge for:
- Junior MAX (Junior template to be used MAX and Mini MAX)
- Senior MAX
- MAX DD2

for Micro

5.6. Inlet system

5.6.1. Reed valve assy.

The reed valve assy. is equipped with 2 petal stops and 2 reeds, each having 3 petals. The thickness of the reeds is 0,6 mm +/- 0,10 mm.

5.6.2. Inlet manifold

Some factory flash removal may be present at the inside contour and the carburettor stop mounting manual trimming operation consisting of a small less than 3 mm in width. No additional grinding or permitted.



conjunction of the
face. This is a
corner break of
machining is

125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX:

Inlet manifold marked with the identification code "267915" and the name "ROTAX" or just "267916".

125 MAX DD2:

Inlet manifold marked with the identification code "267410" and the name "ROTAX" or just "267411".

5.7. Crankshaft

5.7.1. Con rod

Stroke 54,5 mm +/-0,1 mm
Con rod has to show forged numbers "213", "365", "367" or "362" on shaft.
Shafts of con rods "213", "365" and "367" are not machined and are copper plated.
Shaft of con rod "362" is not copper plated and is blank (grey/brown).
Grinding or polishing of shaft of con rod is not permitted.



5.7.2. Ignition signal on crankshaft

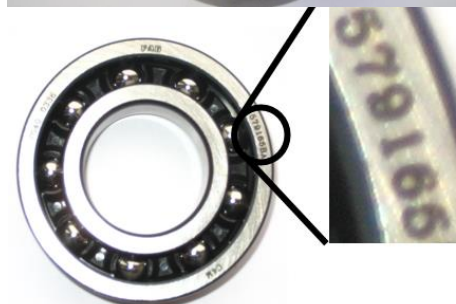
Fit the template (Rotax 277391) on the crankshaft.
Align the hole in the template for the big end pin of the crankshaft.
The two edges of the signal machining on be in line (+/-0,5 mm) with the (MAX or DD2) of the template.



crankshaft.
end pin with the big
the crankshaft must
corresponding edges

5.7.3. Crankshaft main bearings

Crankshaft main bearing 6206 from FAG (must be marked with code 579165BA or



is allowed only.
Z-579165.11.KL

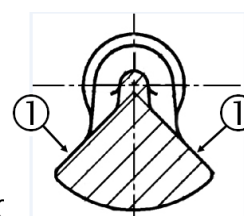
5.8. Balance Shaft

Balance shaft and balance gears must be installed.

125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX:

Balance shaft must show casting code 6237948 or (1).

Surface (1) is not machined and must show cast surface. of the dry balance shaft must not be lower than: 255



6237949 on surface
The minimum weigh
grams.

5.9.2-speed gearbox (for 125 MAX DD2 only)

Primary shaft with 19 teeth for 1st gear and 24 teeth for 2nd gear.

Idle gear for 1st gear has to have 81 teeth.

Idle gear for 2nd gear has to have 77 teeth

5.10. Crankcase

As supplied by the manufacturer.

No grinding/polishing is permitted in the two main transfer passages as well as in the crank area.

For IRMCE, Continental (Zone) and National RMCs only black coated crankcases are legal to be used.

For all other events uncoated or black coated crankcases are legal to be used.

6. Technical Specification outside the engine seal for Rotax MAX kart engines

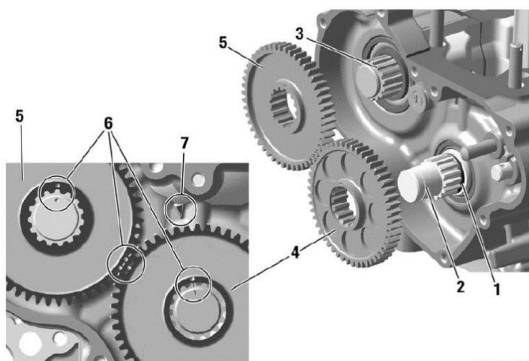
It is the responsibility of the competitor to check his equipment (all components outside the engine seal as mentioned below), to assure that his equipment is conforming to the technical specification below!

6.1. Balance drive

125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX:

Steel balance gears only (minimum width = 8,8 mm) are legal to be used.

Balance gears must be installed and must be aligned according to the instruction in the repair manual.



125 MAX DD2:

Balance drive gear must be fitted on crank shaft.

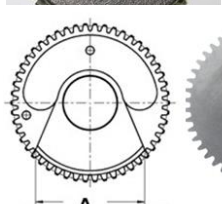
Balance gear must be fitted on primary shaft and must be aligned with the balance drive gear according to the instruction in the repair manual.

Version 1:
balance gear must show cast surface



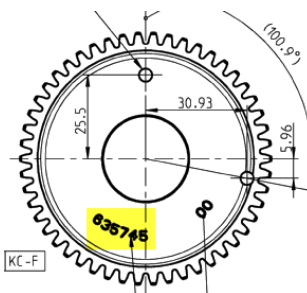
Fly weight of

Version 2:
balance gear can show machined surface.
(widest part of balance weight) must be 53,0 mm +/- 0,5 or 57,0 mm +/- 0,5
weight of a dry balance gear including be lower than 240 grams.



Fly weight of
Dimension A
either
The minimum
bearing must not

Version 3:
ROTAX part number 635745 (visible on the gear)
Fly weight of balance gear can show machined surface.
The minimum weight of a dry balance gear including be lower than 255,0 grams.



bearing must not

6.2. Centrifugal clutch

6.2.1. Components

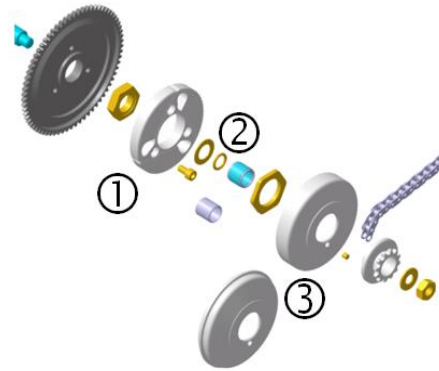
125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX:

speed of centrifugal clutch at maximum 4.000 (the kart without driver must start to move). clutch (item 1, with and without holes) are legal to be used.

Both versions are marked with the wording O-ring (item 2) must be fitted and must assure sealing between the clutch drum and the bearing.

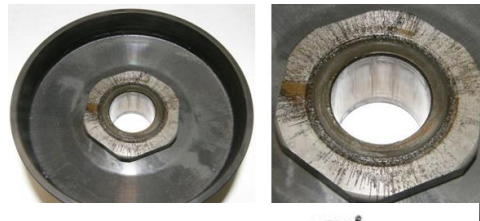
clutch drum (item 3) are legal to be used. Both versions are marked with the wording

of grease from the needle/plain bearing into the clutch drum may not exceed the Contact area between clutch and clutch dry at any time – no lubrication allowed.



Engagement rpm
Two versions of

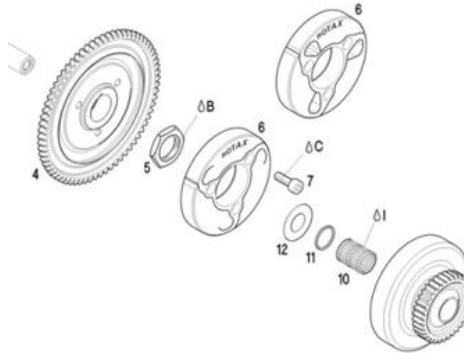
“ROTAX”.
an appropriate needle/plain
Two versions of
“ROTAX”.
Signs of emission



picture beside.
drum has to be

125 MAX DD2:

of centrifugal clutch at maximum 4.000 driver must start to move). clutch (item 6, with and without holes) are O-ring (item 11) must be fitted.



Engagement speed rpm (the kart without driver must start to move). Both versions of legal to be used.

6.2.2. Clutch dimensions

shoe (A):

All MAX Engines Minimum = 24,10 mm

be done at the 3 open ends of the clutch, 5 - 10 mm groove (all clutch shoes must be completely closed at gap).

Height of clutch (B):

125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX: Minimum = 11,45 mm



Thickness of clutch

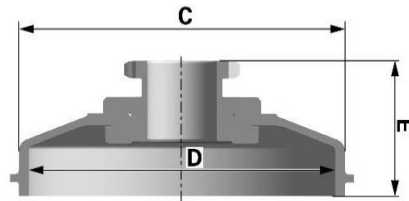
Measurement must from the machined measurement - no

125 MAX DD2:

Minimum = 14,45 mm

Clutch drum Outer diameter (C):

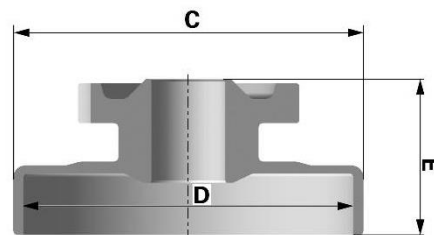
Minimum = 89,50 mm
measured with a sliding calliper just beside the shoulder (not at the open end of the clutch



Diameter must be radius from the drum).

Clutch drum Inner diameter (D):

Maximum = 84,90 mm
measured with a sliding calliper. The must be done in the middle of the clutch contact area between clutch and clutch



Diameter must be measurement drum (in the drum).

Clutch drum Height (E) with sprocket/primary

gear

**125 Micro MAX, 125 Mini MAX,
125 Junior MAX, 125 Senior MAX:**

Minimum = 33,90 mm

125 MAX DD2:

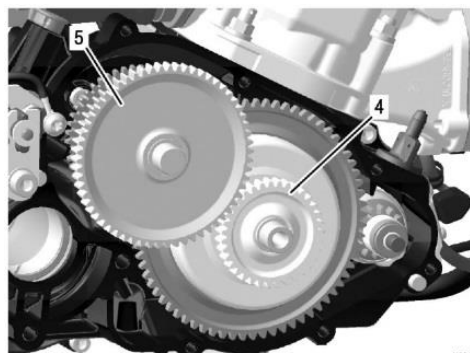
Minimum = 39,50 mm

6.3. Primary drive (125 MAX DD2):

Original primary drive gears (4+5) of following gear ratio options must be used only. Following combinations are legal to be used.

| Drive gear | Driven gear |
|------------|-------------|
| 32 | 65 |
| 34 | 63 |
| 36 | 61 |
| 38 | 59 |

gear ratio may be determined for each "Bulletin".



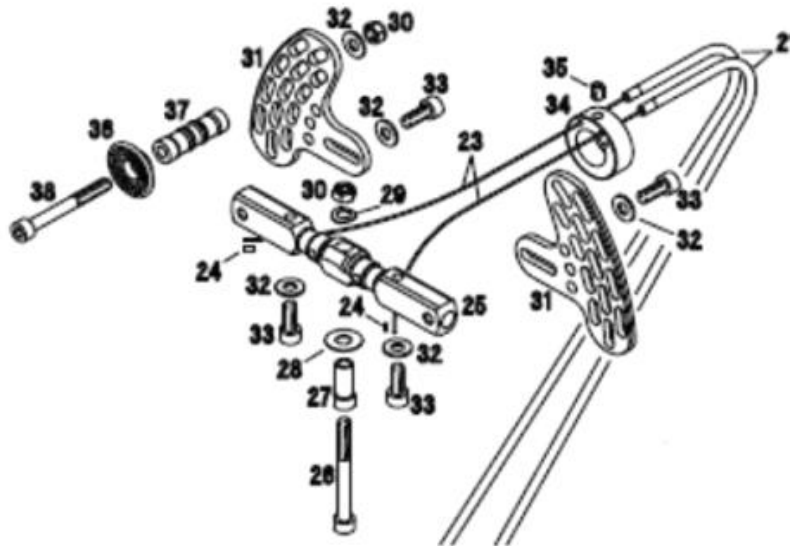
| | |
|----|----|
| 33 | 64 |
| 35 | 62 |
| 37 | 60 |

A specific primary race event by a

6.4. Gear shifting (125 MAX DD2)

The 2-speed gearbox has to be operated from the steering wheel via two bowden cables.

Aluminium shift paddles:



Cutting of the original aluminium shift paddles or adding of non-original parts is not allowed. Mounting the shift paddles (item 31) on the bottom or top side of the whip (item 25) is an allowed adjustment.

Optional parts (items 36-38) can be mounted on the shift paddle (item 31) in any position. Bending the aluminium shift paddles to align them to the steering wheel is an allowed adjustment. The whip (25) offers two connections for the cables (23) on each side for short travel or long travel. Both connections are legal to be used. To change the connections of the cables (23) to the whip (25) from left to right and right to left is an allowed adjustment.

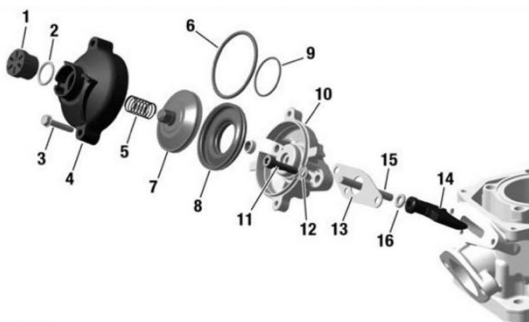
6.5. Combination of ignition system, carburettor and exhaust system

The combination of components is limited to following specification per engine type.

| Component \ MAX Engine | Micro Mini | Junior | Senior | DD2 |
|---------------------------------|------------|--------|--------|-----|
| Ignition system Dell'orto | ✓ | ✓ | ✓ | ✓ |
| Exhaust valve, electronic timed | - | - | ✓ | ✓ |
| Carburettor XS | ✓ | ✓ | ✓ | ✓ |
| Exhaust system, evo | ✓ | ✓ | ✓ | ✓ |

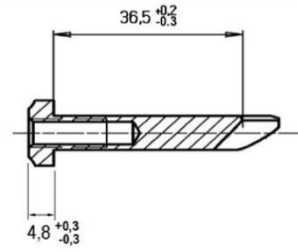
6.6. Exhaust valve (125 Senior MAX and 125 MAX DD2)

System must be used with all components fitted as shown in the illustration below. Bellow (8) must have green colour.



6.6.1. Exhaust valve

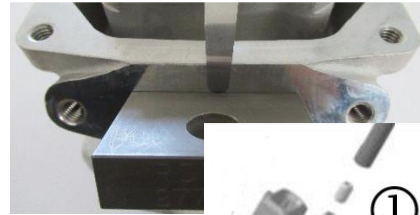
Length of the exhaust valve (item 2):
mm/-0,30 mm.
Width of collar:



36,5 mm +0,20
4,8 mm +/-0,3 mm

6.6.2. Distance of exhaust valve flange at piston

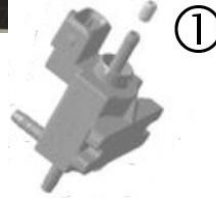
Turn crankshaft until the piston just closes the exhaust port.
Insert the exhaust valve gauge (Rotax 277030) as shown in the picture until it stops at the flange.
At the circular contact area between flange of the cylinder, a feeler gauge 0,25 between the gauge and the flange.



cylinder to
exhaust valve and the mm may **not** fit

6.6.3. Impulse nozzle:

Fitting an original impulse nozzle ❶ into the is an allowed adjustment.
The direction of the impulse nozzle inside free.



pressure hose
the pressure hose is

6.6.4. Exhaust valve settings

The electronic timed exhaust valve offers two (A or B) for the opening of the exhaust valve.

- (A)...additional ground cable not connected
- (B)...additional ground cable connected

Both settings are legal to be used.



different settings (A or

6.7. Ignition system

Digital battery ignition system, variable ignition timing, no adjustments possible.

6.7.1. Spark plug

125 Micro MAX and 125 Mini MAX:

Spark plug: NGK GR8DI or NGK GR9DI
Electrode gap (maximum): Filler gauge 1,20 mm must not fit in between the two electrodes.

125 Junior MAX, 125 Senior MAX:

Spark plug: NGK GR8DI or NGK GR9DI
Electrode gap (maximum): Filler gauge 1,00 mm must not fit in between the two electrodes.

For the 125 MAX DD2:

Spark plug: NGK GR8DI or NGK GR9DI

Electrode gap (maximum): Filler gauge 1,00 mm must not fit in between the two electrodes.

6.7.2. Spark plug caps

One version of the spark plug cap is legal to be used.

Red, marked NGK. ROTAX 866707



Version 1.

6.7.3. Pick-up

The marking of the pick-up must show the the first line 029600-0710. 3-5 mm) placed on circular surface of the the center of the circular surface.

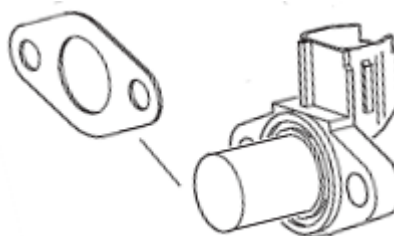


following numbers in
A steel ball (diameter
sensor must stay in

Mounting the pick-up to the crankcase with a gasket additional to the original rubber sealing ring of the pick-up, is a legal specification.

Additional gasket, Rotax 431500, gasket
Maximum two gaskets (Rotax 431500) are
Fitting position of the additional gasket(s):
Crankcase – rubber sealing ring –
pick-up.

necessary to install any additional gasket/s
the rubber sealing ring on crankcases with
surface for the pick-up sensor.



thickness = 0,8 mm
allowed to be fitted.

additional gasket(s) –

Note: It is not
with the exception of
the machined sealing

6.7.4. Ignition System

Dellorto ignition system is legal to be used only.

Race officials may request at any time that the competitor replaces the electronic box (ECU) with another unit provided by the race administration.

The visual appearance of the ignition coil must be identical with the pictures.

Ignition coil must show 2 pins at the terminal.
The ignition coil is labelled with two stickers,
“BRP 666820” and “NIG 0105”.

The ignition coil is still legal to be used also if
one or both stickers disappeared.

Minimum length of the high tension cable of
the ignition coil is 210 mm (from outlet of
ignition coil to outlet of spark plug connector



= visible length of cable.

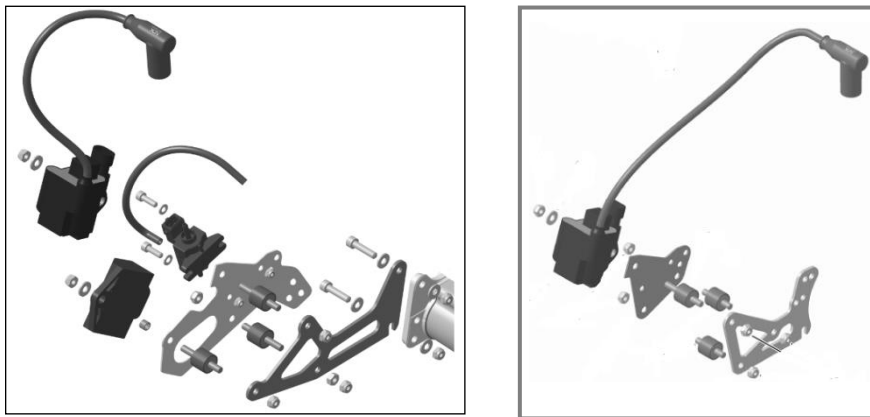
Ignition coil (same for all engines) with separate electronic box (ECU, specific for every engine). Ignition coil and ECU (and magnet valve, for 125 Senior MAX and 125 MAX DD2 only) must be fitted with all components according to the illustrations below.

Two different mounting versions (left illustration and right illustration) are legal.

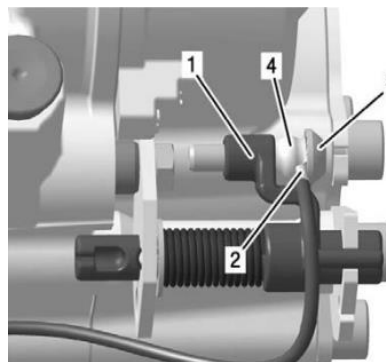
125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX:

In case the mounting bracket (125 Micro MAX, 125 Mini Max, 125 Junior MAX and 125 Senior MAX only) is in conflict with a chassis component, the additions of 2 spacers, one per mounting hole, with a maximum thickness of 20 mm between the mounting bracket and the gearbox cover is allowed.

Removing the black coating of the gearbox cover (125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX) in specific areas defined by Rotax (for mass connection between cable harness and engine) is a legal modification.

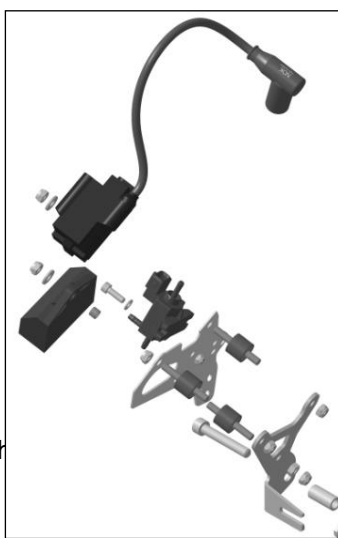


125 DD2 MAX / Masters: The electrical contact at the shift assembly must be connected, as per the picture below.

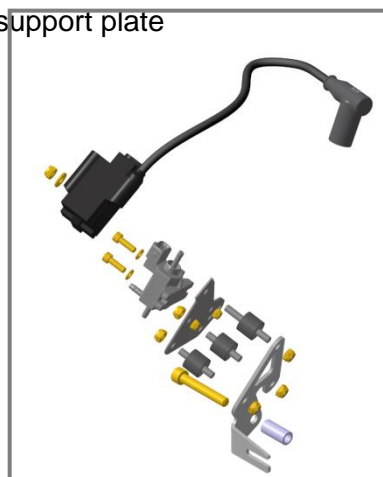


125 MAX DD2:

At cable of the



the mounting versions as shown in the left illustrations, the ground of the cable harness must be connected to the lower rubber buffer support plate



6.7.5. ECU

The electronic control unit (ECU) is labelled still legal also if the sticker is unreadable or

- 125 Micro MAX: "666815"
- 125 Mini MAX: "666818"
- "666813"
- "666815"
- 125 MAX DD2: "666816"

checked with the ECU tester (Rotax to following procedure.
 cable harness from ECU.
 tester cable harness to ECU.
 cable of ECU tester cable harness with the of engine cable harness.

At every connection with the battery the the ECU tester will be indicated on the 2 seconds.

The software version indicated on the 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.

The ECU tester must indicate following results:

125 Micro MAX category-

- ① 666815MAX

125 Mini MAX category-

- ① 666818MINIMAX

category

- 666813JNRMAX

125 Senior MAX category-

- ① 666815MAX
- ② !! Test OK !!

125 MAX DD2 category



with stickers and is disappeared.

- 125 Junior MAX:
- 125 Senior MAX:

The ECU must be 276230) according
 Disconnect engine
 Connect ECU
 Connect energy charging connector

software version of display for approx.

display must be



- ② !! Test OK !!

- ② !! Test OK !!

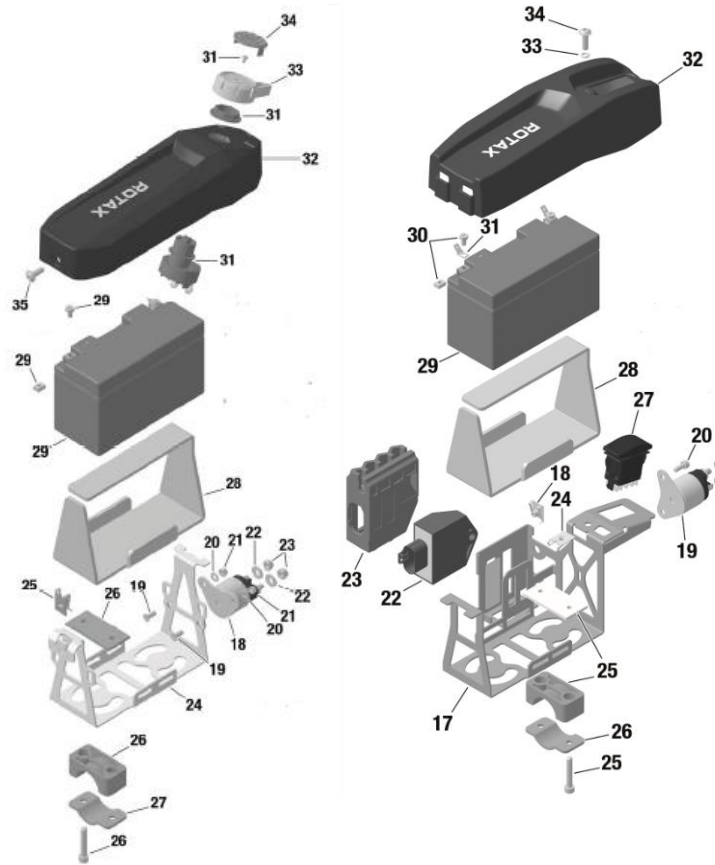
125 Junior MAX

- ①
- ② !! Test OK !!

- ① 666816MAXDD2
- ② !! Test OK !!

6.8. Battery, battery fixation

Original batteries with specification only are YUASA YT7B-BS (with Rotax branding) 12B or RX7-12L (lithium type)
 Battery must be fitted with battery clamp and battery (according to illustration be fixed to the chassis clamps (all 4 screws). Battery clamp must be left side of the Chassis,



following legal to be used. and without ROTAX RX7-iron phosphate

the original cover below) and must with both

mounted on the next to the seat.

6.9. Intake silencer

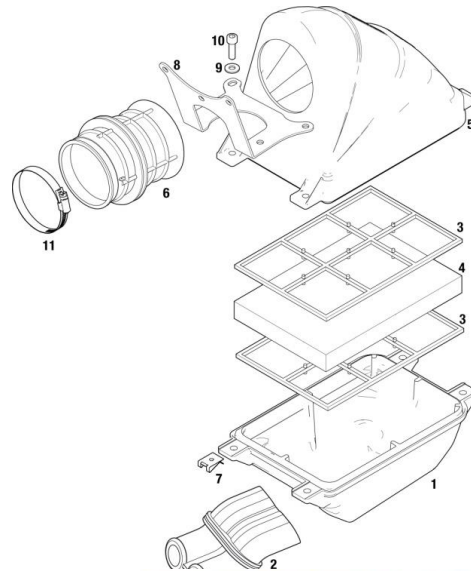
125 Micro MAX , 125 Mini MAX, 125 Junior MAX and 125 Senior MAX

Intake silencer with integrated, washable used with all parts as shown at the to be mounted on the support bracket with and wet condition).

Intake silencer tube (pos 2) and carburettor marked with the wording "ROTAX". Intake silencer case, top is marked on the "225025".

Two versions of original air filters (pos.4) used.

filter (green/orange), double layer air filter marked "Twin Air". Depending on the lubrication colours may alter slightly or the stained (see examples).

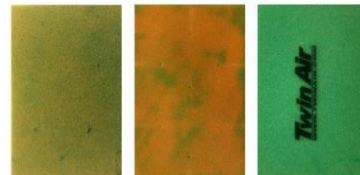


air filter must be illustration and has two screws (in dry

socket (pos 6) are Intake silencer case "225015". inside with

are legal to be

Double layer air (green/dark green) degree of oil-surface becomes



Pos. 4, legal air filter executions

illustration

Air filter (pos 4) must be installed as shown in the

between the two holders (pos 3) and must complete area of the intake silencer case (pos1).

cover the bottom

During wet condition, it is not allowed to attach anything to the air box to protect the air inlet from water spray.

125 MAX DD2:

Intake silencer with integrated washable air filter as shown in illustration.

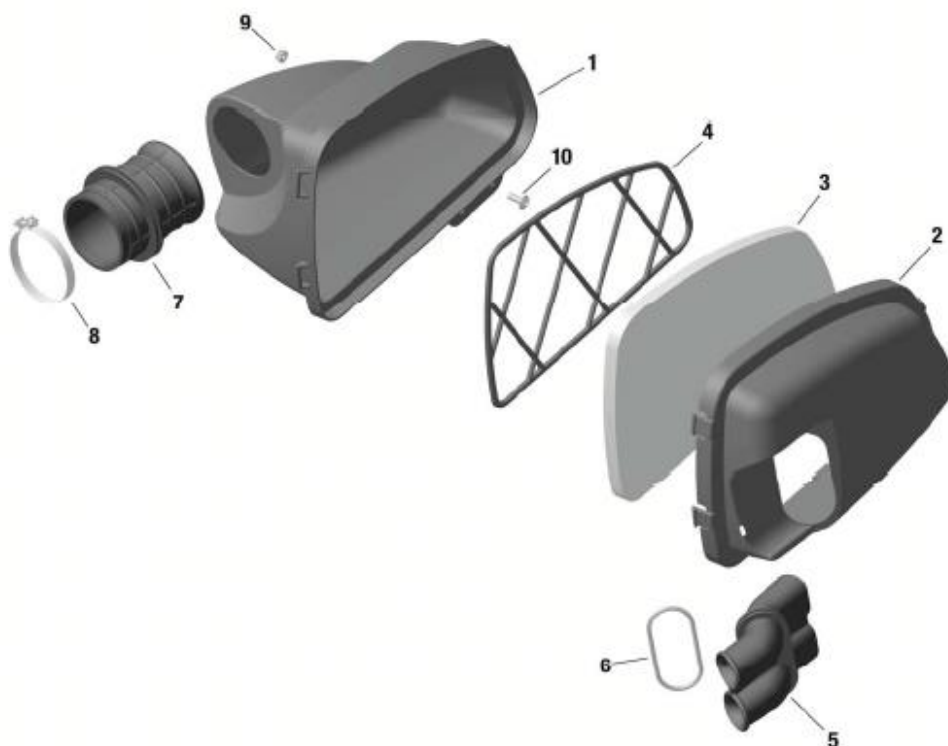
The intake silencer case (pos 1) is marked on the inside with "225012" (4 clips) or "225013" (5 clips).
The intake silencer cover (pos 2) is marked on the inside with "225022" (4 clips) or "225023" (5 clips).

Two versions of air filters (pos 3) are legal to be used.

Version 1, with integrated steel frame.

Version 2, with separate plastic frame (pos 4).

The air filter must be assembled between the intake silencer case and the intake silencer cover that the whole area of the intake silencer case is covered.



At intake silencer cover (pos. 2, Rotax 225022), it is mandatory to fit the O-ring (pos. 6) on the intake silencer tube (pos. 5). Intake silencer tube (pos 5) and carburettor socket (pos 7) are marked with the wording "ROTAX". Sealing the top of the intake silencer using adhesive tape is an allowed modification. During wet condition, it is not allowed to attach anything to the air box to protect the air inlet from water spray.

6.10. Carburettor

Dellorto carburettor, housing must show the cast wording "VHSB 34"

Carburettor housing is stamped with "XS".

The complete inlet bore of the carburettor must show cast surface.

Optional carburettor plug screw marked "ROTAX" (ROTAX part no. 261 030) is legal to be used.

The two vent fittings must be connected with the original air vent hose min 155 mm (Rotax 260260).

The location of the opening has to be placed at the rear side of the carburettor

Settings of the carburettor adjustment screws (idle and idle air) are free.

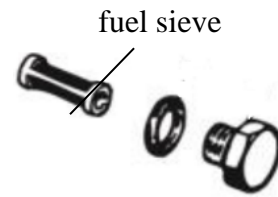
The position of the jet needle is free.

All jets must be correctly seated and securely fitted at any time (tightened)!

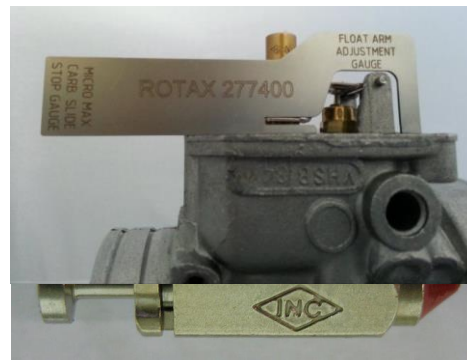
A minimum required size of main jet may be determined for each race event by a "Bulletin".



The complete inlet bore of the carburettor housing must show cast surface.
 The venturi hole of the carburettor insert can show signs of a CNC control machining.
 Carburettor can be used with and without fuel sieve in the carburettor housing.



arms of the float lever must be within the carburettor gauge (Rotax 277400) by their measured at carburettor housing without upright position.



The height of the two slot of the normal weight gasket in reverse

assembly stamped "150"
 Needle of needle valve marked with "INC" only.
 Start jet is stamped with the digits "60".

Needle valve
 diamond symbol

Any Dellorto main jet number even if not offered from Rotax is legal to be used.

Carburettor slide shows digits "45" in casting.

Jet needle must be stamped with "K57".

"4,0 gr" are legal to be used only
 Needle jet
 "DP267"
 +/- 0,5 mm



Two floats marked
 Stamped with
 Total length: 51,0

Length of bottom section: 33,0 +/- 0,45 mm



Top bore diameter 2,67 +/- 0,10 mm



Idle jet
 Idle jet has to be stamped with 60.



Plug gauge 0,65 mm may not enter the bore
(use jet gauge set Rotax part no. 281 920).

Idle emulsion tube
Idle emulsion tube has to be stamped with 45.
Plug gauge 0,50 may not enter the central bore.
(use jet gauge set Rotax part no. 281 920)



Atomizer
Remove atomizer from carburettor body by means
venturi tool set (Rotax part no. 676 034);
Atomizer, total length: 23,75 +/- 0.35 mm



of

Atomizer, length of cylindrical part:
15,75 +/- 0,25 mm



Atomizer, dimension of cutaway: 5,8 +/- 0,3 mm



Atomizer, dimension of cross bore: 5,0 +/- 0,15 mm



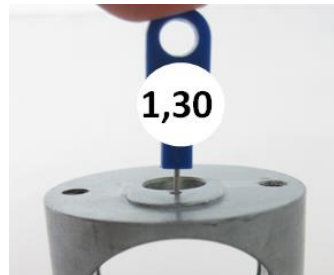
Carburettor insert must show stamping
"12,5"



Angular bore of carburettor insert
Plug gauge 0,60 may not enter the bore
(use jet gauge set Rotax part no. 281 920).



Vertical bore of carburettor insert
Plug gauge 1,30 may not enter the bore
(use jet gauge set Rotax part no. 281 920).

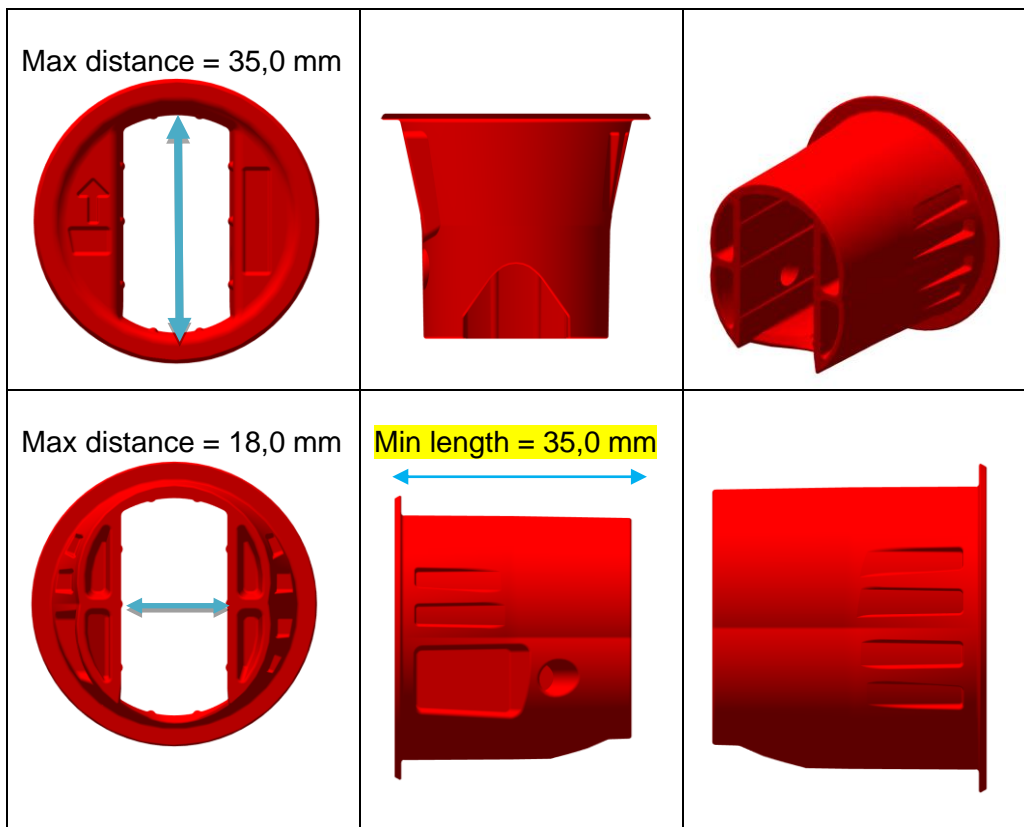


125 Micro MAX and Mini MAX:

The throttle body restrictor must be installed in the rear of the carburettor and in the correct orientation at all times (see picture 1 below for reference).

ROTAX part number: 267536

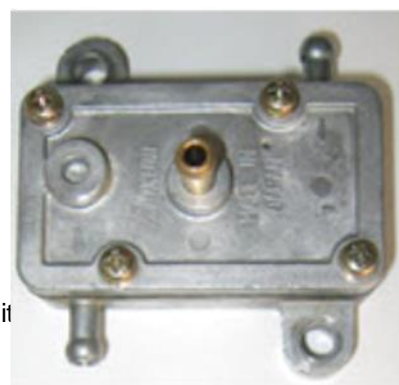
No modifications are allowed, the ribbed surface on the inlet is to help ensure dimensions have not been modified.



Picture 1.



6.11. Fuel pump, fuel filter



MIKUNI diaphragm pump, (see picture) must be used and must be mounted as shown in the illustration.

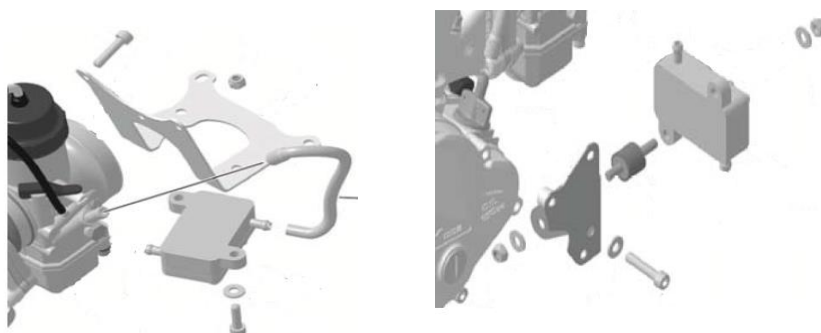
125 Micro MAX, 125 Mini MAX, 125 Junior MAX and 125 Senior MAX:

Fuel pump must be mounted on the bottom side of the support bracket for the intake silencer (left illustration).

125 MAX DD2:

Fuel pump must be mounted on the support bracket, marked 651055 or 651056, attached to the clutch cover (right illustration).

Mounting the fuel pump with the two original rubber buffers to the chassis is an allowed option. In this case the fuel pump must be mounted below the inlet center line of the carburettor.



6.12. Fuel

Fuel filter

Two versions of original fuel filter are legal to be used (see pictures).

The fuel filter must be mounted between the fuel tank and the fuel pump.

Except the fuel line, the fuel pump and the original fuel filter no additional parts are legal to be mounted between fuel tank and carburettor.



6.13. 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.

Tape may not be removed from the radiator during operation on the track.

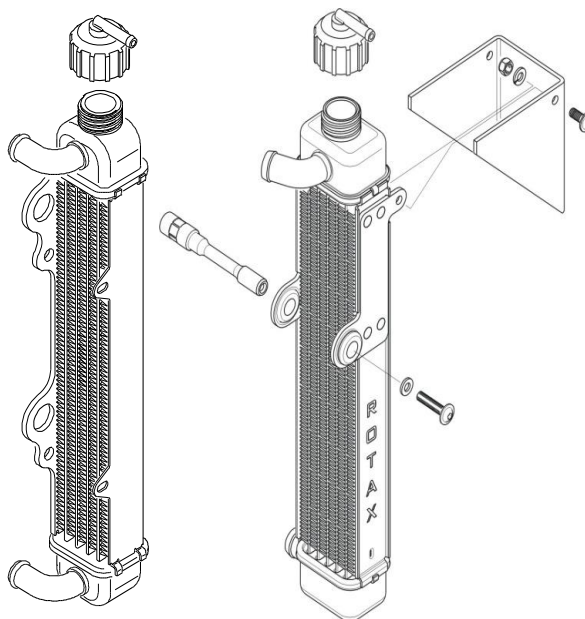
Any other non-original device to control the air flow through the radiator is prohibited.

125 Micro MAX and 125 Mini MAX:

Two different versions as shown in the illustrations are 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 an allowed modification.

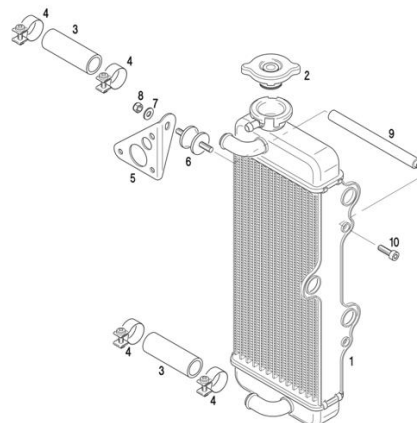


125 Junior MAX and 125 Senior MAX:

The radiator must be mounted on the right side of the engine.
 Three different versions as shown in the illustrations are legal to be used.

Version 1

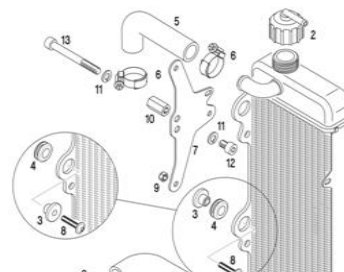
Cooling area:
 Height: 290 mm
 Width: 133 mm
 Thickness of radiator: 32 mm



Version 2

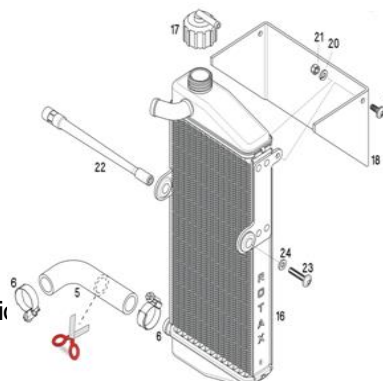
Cooling area:
 Height: 290 mm
 Width: 133 mm
 Thickness of radiator: 32 mm

The support plate (pos. 7) enables two different mounting positions (height) of the radiator. Both mounting positions are legal to be used.



Version 3

Cooling area:
 Height: 290 mm



Width: 138 mm
 Thickness of radiator: 34 mm

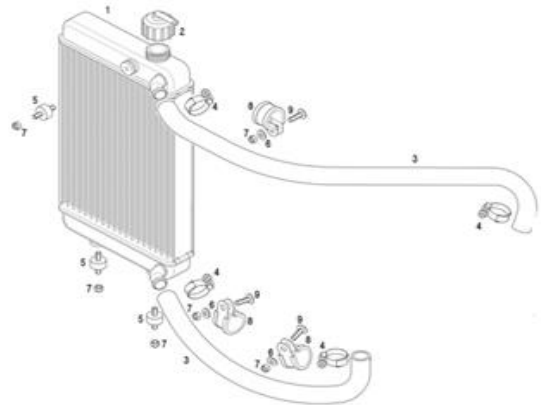
Radiator must be stamped on the side with the wording "ROTAX".
 To remove the original flap is an allowed modification.

125 MAX DD2:

The radiator has to be mounted on the left side of the driver seat.
 The highest point of the radiator with cap may not be higher than 400 mm above the main tube of the kart chassis.
 Two different versions as shown in the illustrations are legal to be used.

Version 1

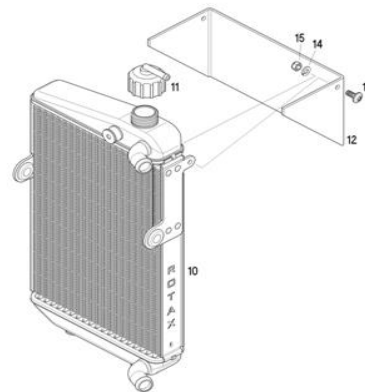
Cooling area:
 Height: 284 mm
 Width: 202 mm
 Thickness of radiator: 32 mm



Version 2

Cooling area:
 Height: 290 mm
 Width: 196 mm
 Thickness of radiator: 34 mm

To remove the original flap is an allowed modification.



6.14. Engine coolant

Plain water without any additives has to be used.

6.15. Exhaust socket (Restrictor)

125 Micro MAX and 125 Mini MAX :

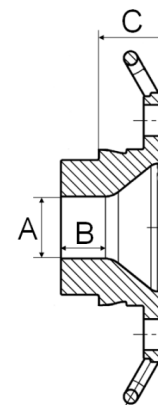
Just exhaust sockets with gasket ring are legal to be used.

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

Maximum inner diameter (A) of exhaust sockets are:

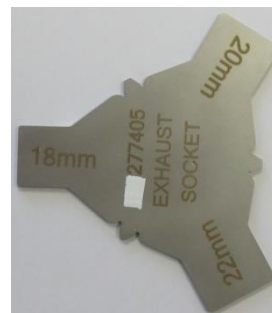
125 Micro MAX: 18,20 mm (Rotax part no. 273 192)
125 Mini MAX: 22,20 mm (Rotax part no. 273 196)

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 (**125 Micro MAX** “18 mm”, **125 Mini MAX** “22 mm”) as possible into the exhaust socket (without gasket, removed). There has to be a constant crack light of the exhaust socket and the profile of the template.

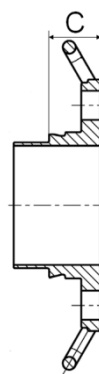


MAX “22 mm”) as far carbon deposits between the profile

125 Junior MAX, 125 Senior MAX, 125 MAX DD2:

Only Rotax part no. 273 190 is allowed to be used.

The measurement (C) must be at least 15,5 mm.



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 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.

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.
- 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.

| | |
|---------------------|---------------------------------|
| 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 |

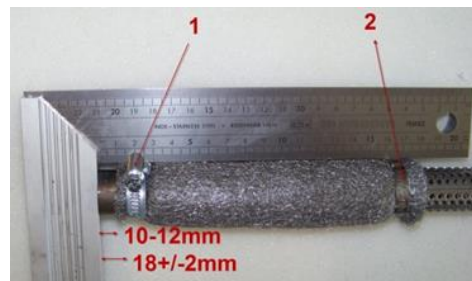
- Welding a socket (in a distance of 50-80 mm from the ball joint) on the top of the exhaust system for measuring the exhaust gas temperature.
- Addition extra elements after the original silencer for further noise reduction.
- Additional to the standard isolation mat a steel isolation mat (Rotax part 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:

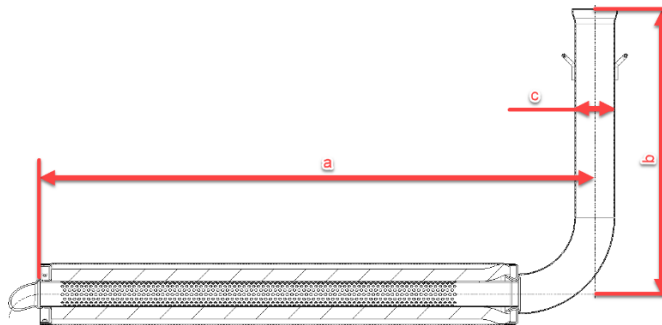
A specific Exhaust system has to be used for the 125 Micro MAX engine.
ROTAX Part number 273136

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.

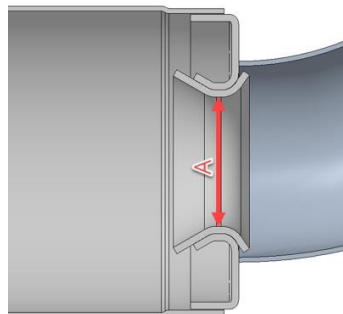
The measurements in the diagram below are as follows:

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

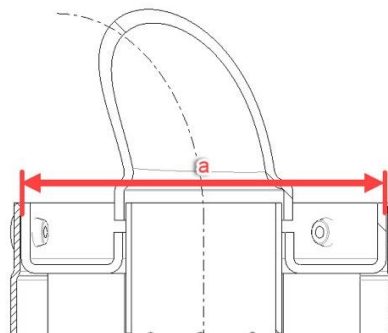


A steel ball with a 28.0mm diameter **must not** pass through Section "A" and a steel ball with a 26.0mm diameter must be able pass through Section "A" in the below diagram from the inlet and through the 90-degree elbow completely.

(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.

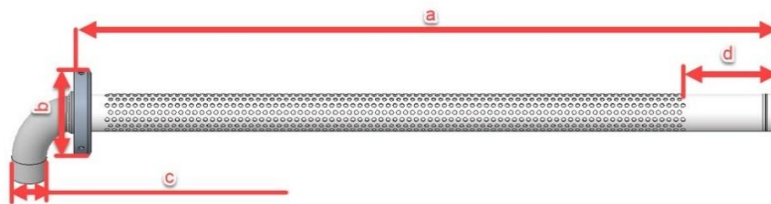
The Exhaust must be mounted in a neutral position with no stress on the 2 silent blocks.

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)

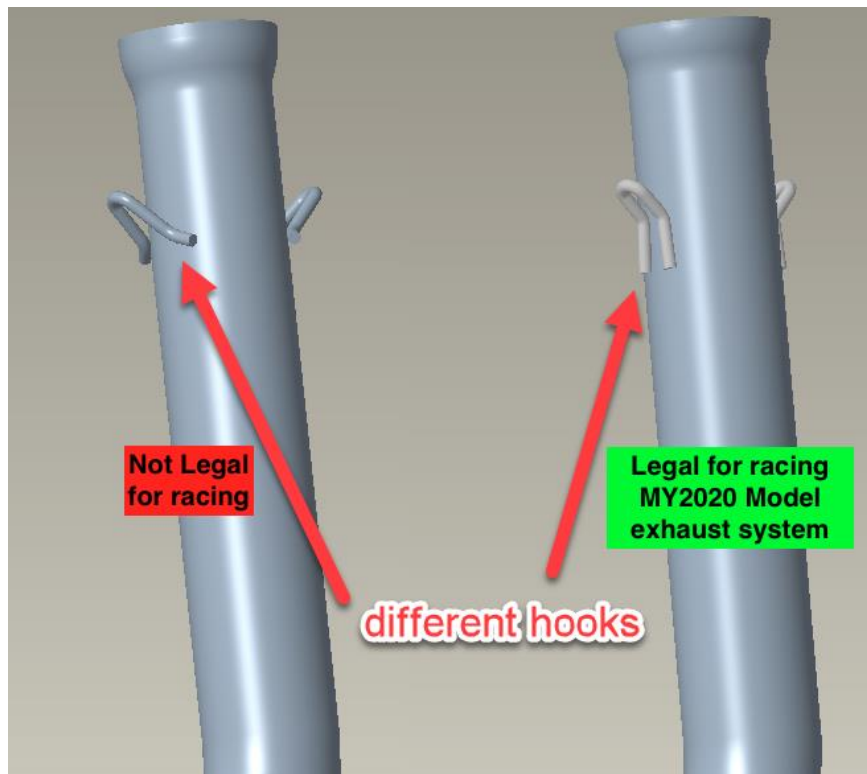
Used weight minimum 140g

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:

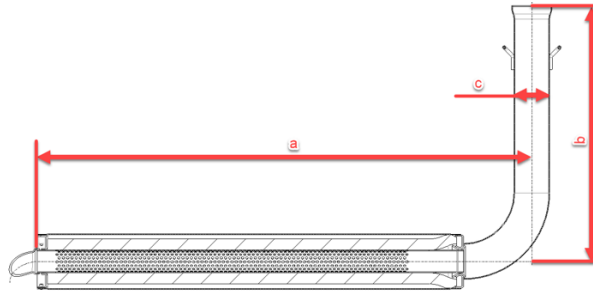
A specific Exhaust system has to be used for the 125 Mini MAX engine.
ROTAX Part number 273137

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.

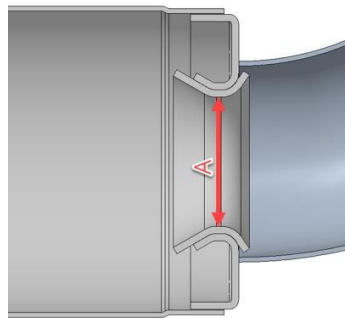
The measurements in the diagram below are as follows:

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

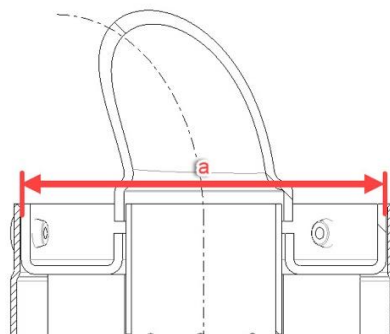


A steel ball with 28.0mm diameter **must not** pass through Section “A” and a steel ball with 26.0mm diameter must be able pass through Section “A” in the below diagram from the inlet and through the 90-degree elbow completely.

(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.

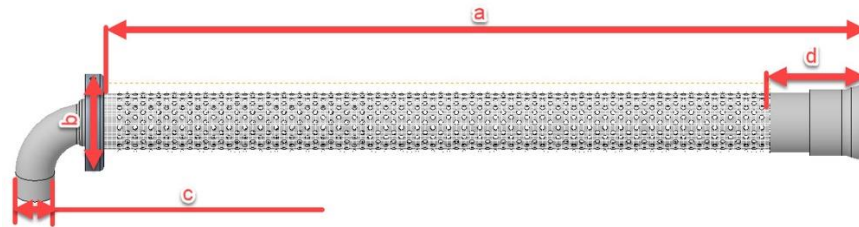
The Exhaust must be mounted in a neutral position with no stress on the 2 silent blocks.

125 Mini MAX Perforated tube

ROTAX Part number 273211

The measurements in the diagram below are as follows:

- (a) at least 484 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.



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

6.19. Junior MAX and 125 Senior MAX:

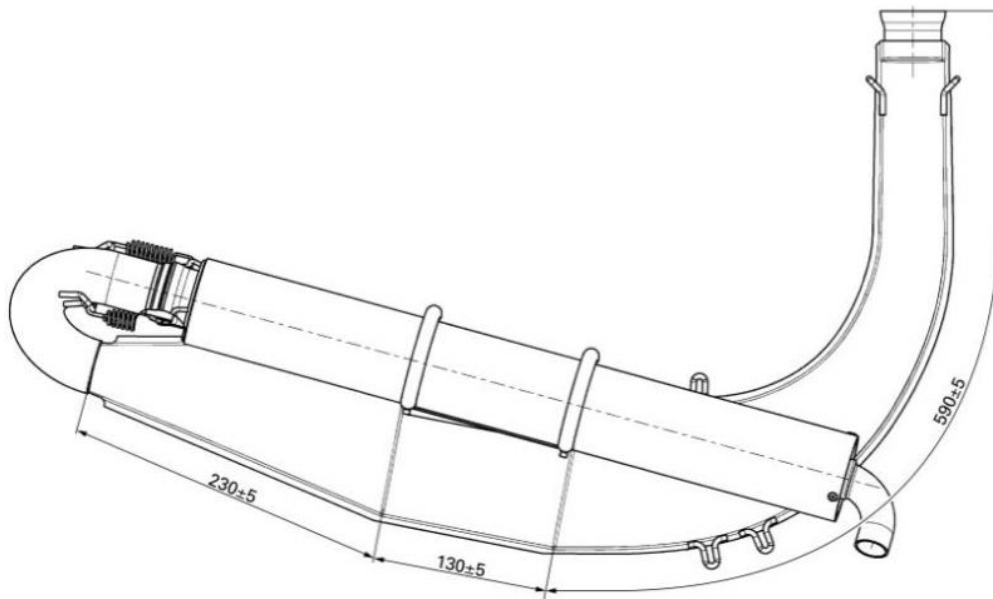
A steel ball with 27,5 mm diameter must pass through the tuned pipe from the inlet and through the 180-degree elbow completely (silencer disconnected).

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.

Dimensions to be checked:

Length of inlet cone: 590mm +/-5mm

Length of cylindrical part of exhaust pipe: 130mm +/-5mm
 Length of end cone: 230mm +/-5mm



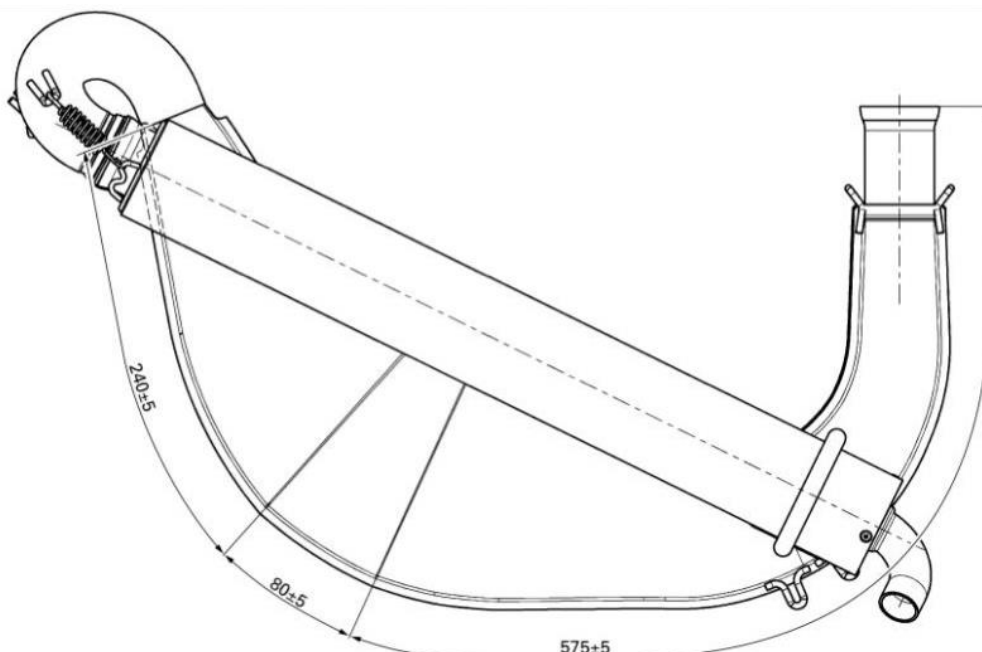
(176g – 238g)
 Used weight minimum 140g

The only legal Isolation matting for 125 Junior and 125 Senior MAX is: ROTAX part number 297982

New size minimum 480 x 270mm (+/-10mm)
 New weight 207gr

6.20. 125 DD2 MAX:

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.



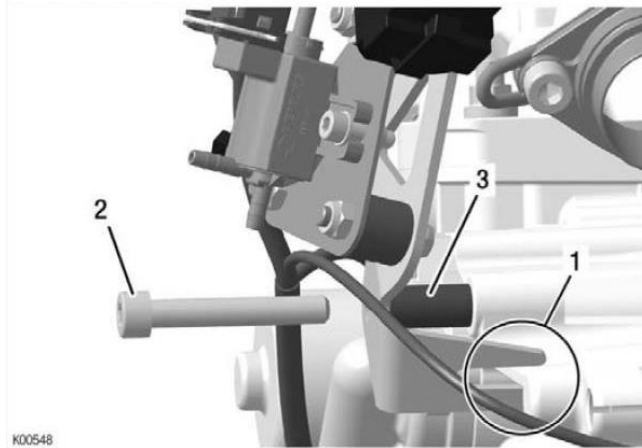
Dimensions to be checked:
 Length of inlet cone: 575mm +/-5mm
 Length of cylindrical part of exhaust pipe: 80mm +/-5mm
 Length of end cone: 240mm +/-5mm

The only legal Isolation matting for 125 DD2 MAX is:
ROTAX part number 297982

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

6.21. Additional seat support (125 MAX DD2)

On the engine side, maximum one additional seat support can be used. The additional seat support must be fastened to the engine using the Allen screw (2). The distance sleeve (3) may be removed for this purpose.



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