



Rule Changes from the Executive

Issue #2016-10 Published 22-12-16

Updates underlined:

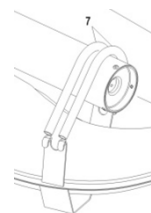
Revised Rotax Max Upgrades Implementation Date and Corrections

Rule N12 Rotax FR125 Max Engine

Replace the respective Rules and/or sections of Rules with the following:

N12.3 EXHAUST SYSTEM:

Version 2: tuned pipe and silencer are one piece. The silencer is welded to the 180° elbow. Two springs fix the silencer to the tuned pipe (bottom illustration). Following measurements are valid for version 1 and 2:
Silencer end cap, diameter of hole: 21,0 mm (maximum).
Length of inlet cone: 592 mm +/-5 mm (measured on outside from beginning of exhaust pipe until beginning of cylindrical part).
Length of cylindrical part of exhaust pipe: 125 mm +/-5 mm.
Length of end cone: 225 mm, +/-5 mm.
Version 1 and 2 can also use the perforated tube and silencer end cap with the 90 degree elbow.
Outside diameter of 180° bent tube: 41mm +1,5 mm/-1,0 mm (measured at beginning and end of bend).



N12.8 SPARK PLUG: DENSO Iridium IW 24, 27, 29, 31 or 34 or the NGK equivalent only or NGK GR9DI-8. Shank length shall be 20mm maximum. Original washer must be used. Spark plug cap must be black in colour and marked with "NGK TB05EMA" or red in colour and marked "NGK".

N12.9.4 Dellorto Ignition System (EVO): Removing black coating of the gearbox cover in specific areas defined by Rotax (for mass connection between cable harness and engine) is a legal modification. Ignition coil with separate electronic box
ECU: Only units marked 666814 or 666815 are permitted. Ignition coil and electronic box have to be fitted by means of the corresponding brackets and components according to either of the illustrations below.



The ground cable of the cable harness has to be connected to the lower rubber buffer of the support plates or via the starter motor for a 2017 harness.

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 labeled with two stickers, "BRP 666820" and "NIG 0105". The ignition coil is still legal to be used also if one or both stickers disappeared.



The FR125 Max electronic box is labelled with sticker "666814 or 666815 125 MAX evo" and is still legal if the sticker has disappeared.
Full EVO loom including start/stop buttons must be used.

N12.16 CYLINDER: Light-alloy-cylinder with GILNISIL-plating. Any re-plating of cylinder is not allowed. Cylinder with one main exhaust port and exhaust valve. Maximum bore of cylinder = 54.035 mm (measured 10 mm above the exhaust port). Cylinder has to be marked with the "ROTAX" logo. Cylinder with pneumatic timed exhaust valve. Cylinders with 2-letter casting codes are legal to be used for all competition.



Cylinders marked with number casting codes and identification codes 223 993, 223 996 or 223 997 are legal to be used for all competition, except as noted below.

From 1-1-2017 cylinders with number casting codes will not be permitted at the following events:

- NZ Sprint Championships
- NZ SuperKart Championships and Grand Prix
- Island SuperKart Championships and Grand Prix
- Island Sprint Championships
- NZ Schools Championships
- Rounds of the NZ Rotax Max Challenge Series

Implementation: 10-2-17

Reason: Updates from Rotax. Implementation date delayed due to supply issues.

Rule N14 Rotax FR125 Junior Max Engine

Replace the respective Rules and/or sections of Rules with the following:

N14.3 EXHAUST SYSTEM:

Version 2: tuned pipe and silencer are one piece. The silencer is welded to the 180° elbow. Two springs fix the silencer to the tuned pipe (bottom illustration).

Following measurements are valid for version 1 and 2:

Silencer end cap, diameter of hole: 21,0 mm (maximum).

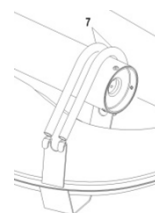
Length of inlet cone: 592 mm +/-5 mm (measured on outside from beginning of exhaust pipe until beginning of cylindrical part).

Length of cylindrical part of exhaust pipe: 125 mm +/-5 mm.

Length of end cone: 225 mm, +/-5 mm.

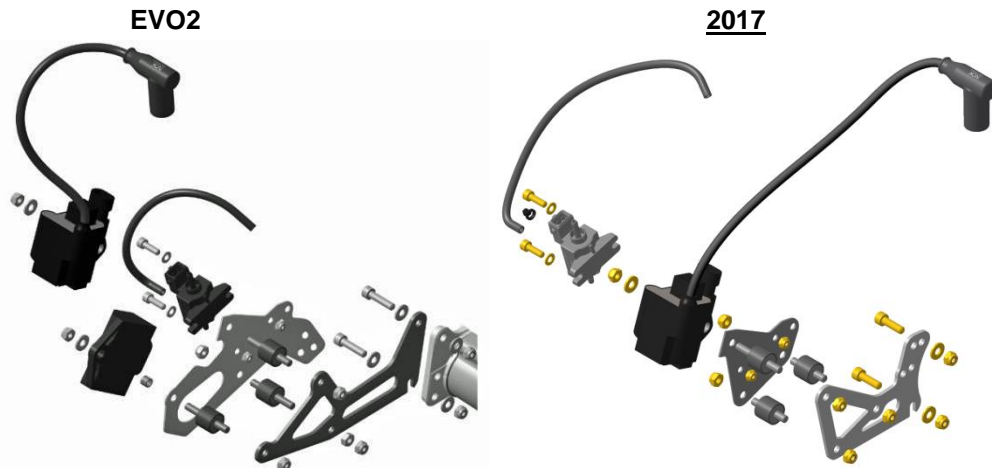
Version 1 and 2 can also use the perforated tube and silencer end cap with the 90 degree elbow.

Outside diameter of 180° bent tube: 41mm +1,5 mm/-1,0 mm (measured at beginning and end of bend).



N14.8 SPARK PLUG: DENSO Iridium IW 24, 27, 29, 31 or 34 or the NGK equivalent only or NGK GR9DI-8. Shank length shall be 20mm maximum. Original washer must be used. Spark plug cap must be black in colour and marked with "NGK TB05EMA" or red in colour and marked "NGK".

N14.9.4 Dellorto Ignition System (EVO): Removing black coating of the gearbox cover in specific areas defined by Rotax (for mass connection between cable harness and engine) is a legal modification. Ignition coil with separate electronic box
ECU: Only units marked 666812 or 666813 are permitted. Ignition coil and electronic box have to be fitted by means of the corresponding brackets and components according to either of the illustrations below. Only the EVO2 loom, brackets and components are permitted from 1-5-16.



The ground cable of the cable harness has to be connected to the lower rubber buffer of the support plates or via the starter motor for a 2017 harness.

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 labeled with two stickers, "BRP 666820" and "NIG 0105". The ignition coil is still legal to be used also if one or both stickers disappeared.



The FR125 Junior Max electronic box is labelled with sticker "666812 or 666813, 125 Junior MAX evo" and is still legal if the sticker has disappeared. Full EVO loom including start/stop buttons must be used.

N14.16 CYLINDER: Light-alloy-cylinder with GILNISIL-plating. Any re-plating of cylinder is not allowed. Cylinder with one main exhaust port. Maximum bore of cylinder = 54.035 mm (measured 10 mm above the exhaust port). Cylinder has to be marked with the "ROTAX" logo. Cylinders with 2-letter casting codes are legal to be used for all competition.



Cylinders marked with number casting codes and identification codes 223 994, 223 998 or 223 999 are legal to be used for all competition, except as noted below.

From 1-1-2017 cylinders with number casting codes will not be permitted at the following events:

- NZ Sprint Championships
- NZ SuperKart Championships and Grand Prix
- Island SuperKart Championships and Grand Prix
- Island Sprint Championships
- NZ Schools Championships
- Rounds of the NZ Rotax Max Challenge Series

N14.16.2: Cylinder Surfaces: All transfer ports and passages have cast finish surface except some removal (done by the manufacturer) of cast burr at the inlet passage, exhaust port and passages. All ports have chamfered edges to prevent ring snagging. Any additional machining is not permitted.

The top edge of exhaust port may show some pre-existing machining from the manufacturer. The sealing flange for the exhaust socket may show signs of machining from the manufacturer.

All ports have chamfered edges.

Any additional machining is not permitted.

Cylinders marked 223 993, 223 994 and 613 933 the upper edge of the central boost port may show factory machining.

The flange for the exhaust socket may show either cast finish or machined surface.

Machined surface can be either flat or show a circular sealing bump.

The top edge of the exhaust port may show either just a 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).



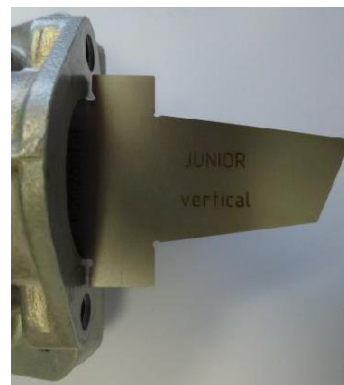
The exhaust port may show partial manual grinding done by the manufacturer to eliminate minor casting defects and to eliminate the NIKASIL burr at the end of the NIKASIL plating.

2017 Cylinders marked 223 994 will show a fully CNC machined exhaust port and CNC machined central boost port.



Plus letter "J" in the intake port.

The horizontal and vertical dimensions of the exhaust port of 2017 cylinder 223 994 has to be checked by means of the template (Rotax 676 240). The template has to be moved in horizontal and vertical position as far as possible into the exhaust port. In both directions, the template must not touch the exhaust socket flange (see pictures).



N14.17 EXHAUST PORT TIMING: The "exhaust port timing" (distance from the top of the cylinder to the top of the exhaust port) has to be checked by means of the template (ROTAX 277 397). Insert the template into the cylinder ensuring that the template is touching the cylinder wall and that the finger of the template is located in the middle of the exhaust port (highest point). Move the template upwards, until the finger is touching the top edge of the exhaust port. Insert a feeler gauge between the top of the cylinder and the template. It must not be possible to fit the feeler gauge specified

FR125 Junior MAX:

Cylinders 223999 and 223998 0.90mm

Cylinder 223994 1.10mm

2017 Cylinder showing Part Number 223 994 has to be checked by means of the template (ROTAX 277 402).

Insert the template (take care to use the correct JUNIOR gauge) into the cylinder and move the template (at the highest point of the exhaust port) as far as possible into the exhaust port. In this position the template must not touch the cylinder wall.



Implementation: 10-2-17

Reason: Updates from Rotax. Correction to 2017 cylinder number (it is still marked 223994). ECU/2017 barrel deployment aligned with other countries. Implementation date delayed due to supply issues.

Rule N16 Rotax 125 Max DD2 Engine

Replace the respective Rules and/or sections of Rules with the following:

N16.3 EXHAUST SYSTEM:

Version 2, tuned pipe and silencer are one piece. The silencer is welded to the 180° elbow. Two springs fix the silencer to the tuned pipe (bottom illustration).

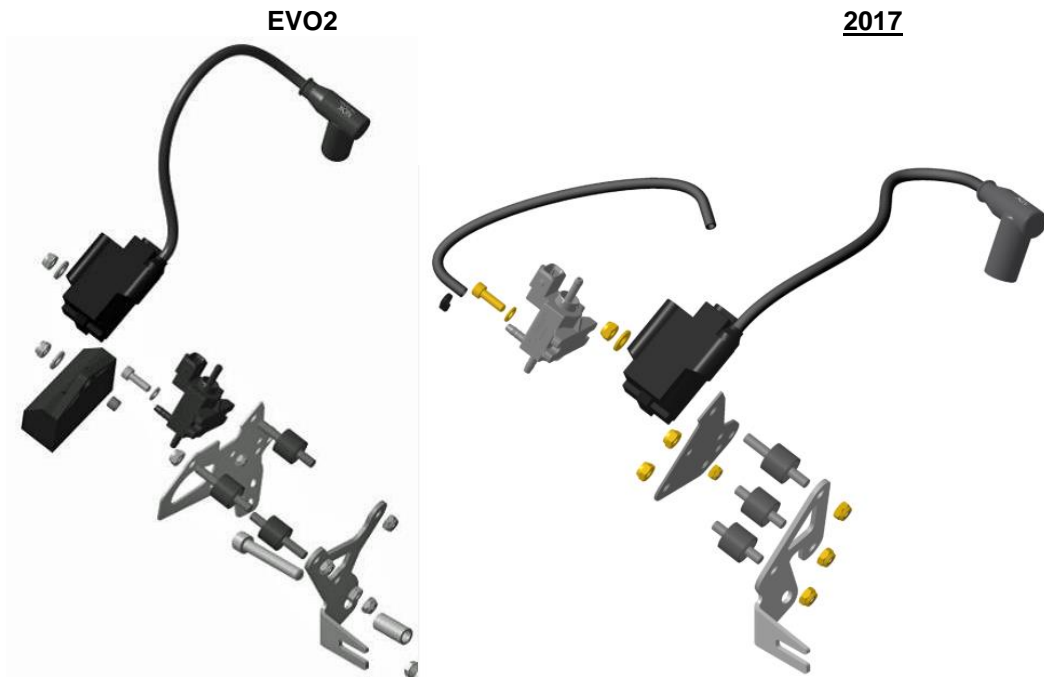
Following measurement is valid for version 1 and 2:

Silencer end cap, diameter of hole: 19.6 +/-0,2 mm.

This silencer end cap (without 90° elbow) may be used for version 1 and 2 only. Version 1 and 2 can also use the perforated tube and end cap with the 90 degree elbow.

N16.8 SPARK PLUG: DENSO Iridium IW 24, 27, 29, 31 or 34 or the NGK equivalent only or NGK GR9DI-8. Shank length shall be 20mm maximum. Original washer must be used. Spark plug cap must be black in colour and marked with "NGK TB05EMA" or red in colour and marked "NGK".

N16.9.4 Dellorto Ignition System (EVO): Removing black coating of the gearbox cover in specific areas defined by Rotax (for mass connection between cable harness and engine) is a legal modification. Ignition coil with separate electronic box (ECU, specific for every engine). Ignition coil and electronic box have to be fitted by means of the corresponding brackets and components according to either of the illustrations below. Only the EVO2 loom, brackets and components are permitted from 1-5-16.



The ground cable of the cable harness has to be connected to the lower rubber buffer of the support plates or via the starter motor for a 2017 harness.

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 labeled with two stickers, "BRP 666820" and "NIG 0105". The ignition coil is still legal to be used also if one or both stickers disappeared.



The DD2 electronic box is labelled with sticker "666816, 125 MAX DD2 evo" and is still legal if the sticker has disappeared.

Full EVO loom including start/stop buttons must be used.

Implementation: 10-2-17

Reason: Updates from Rotax. Implementation date delayed due to supply issues.