



ROTAX
KARTING



125 MAX

EVO ENGINE SERIES

AUSTRALIA 2015

Introduction

Rotax have announced that the highest selling kart engine in the World is receiving a comprehensive upgrade to some of its key components.

All engines produced in December 2014 onwards will be identified as the 125 MAX EVO Engine Series, and will come standard with new components. These new components can all be fitted & installed to existing engines.

The intention of these product upgrades is to:

- Improve the durability and reliability of the engine and its components
- Make it simpler for the user to get race winning performance from the engine
- Make the product easier to use

IKD needs to control and implement these changes into the Australian market as seamlessly as possible. Please read this document carefully, paying particular attention to the sections that apply to your class.

So....what is changing???

Carburettor

The new model carburettor will be called VHSB34 "XS"

It is still a Dellorto fixed jet style carburettor and looks the same on the outside, but internally it has been completely redesigned, specifically for the engine.

Benefits are:

- Significantly improved throttle response for the driver
- No longer necessary to apply the throttle slowly
- More user friendly for beginners
- Experienced Rotax drivers will have less advantage over beginners
- Carburettor is far less sensitive to changing atmospheric conditions

In Junior Max, Senior Max and DD2 classes, it is not compulsory to run the new Carburettor - the choice is yours!

Battery Holding Unit & Switches

Engines will now be supplied with a new Battery Holding Unit and Switches.

Benefits are:

- Easier to install & operate
- Improved durability of the OFF/ON/START switch and starter relay, meaning lower cost for the user and more reliability
- No more risk of the driver leaving the ignition switch turned on and potentially draining the battery (the OFF/ON/START switch has to be turned to the off position by the driver, in order to stop the engine)

This upgrade is not compulsory - the choice is yours!



New Ignition System

A totally new Dellorto ignition system will be introduced.

All engines within the range use the same ignition system, however there will be different “Electronic Boxes” specific to each engine to give optimum performance & usability.

- Micro Max / Mini Max / Senior Max all use the same Electronic Box
- Junior Max has a specifically programmed Electronic Box to improve the engine in the RPM range between 12,000 to 14,000 RPM (this will result in less performance variation from engine to engine)
- DD2 has a specifically programmed Electronic Box to improve the reliability of the engine (detonation issues should be no longer).

In Junior Max, Senior Max and DD2 classes, it is not compulsory to run the new Ignition System - the choice is yours!

This new Electronic Ignition System allows Senior Max and DD2 to run an Electronic Power Valve!

Electronic Power Valve

The Power Valve will now be operated electronically and will open at an exact RPM irrespective of engine condition, temperature, carburation, condition of exhaust matting etc...

The driver can choose between two different RPM settings for when the Power Valve will open:

- Senior Max 7,600 or 7,900 RPM
- DD2 8,800 or 9,100 RPM

This system will be far easier to use and requires less technical assistance for the proper functioning of the Power Valve.

At Engine Start-Up / Idle the Power Valve is OPEN...meaning it will start and idle easier. The Power Valve then closes at 3,000RPM and re-opens at the exact RPM chosen. Upon return to the in-grid the engine will continue to idle once below 3,000RPM again, and the Power Valve returns to the open position.

In Senior Max and DD2 classes, it is not compulsory to run the new Electronic Power Valve - the choice is yours!

Please Note: You cannot run the Electronic Power Valve if you do not run the new Ignition System

Exhaust System

The new Exhaust System will be more durable, lower noise and slightly lower weight.

It is no secret, the current exhaust system is no longer up to the task and we have far too many failures.

Exhaust Socket

The new Exhaust Socket provides more accurate sealing of the exhaust system. It is easier to fit & install for all different types of chassis. There are different types specific to each engine.

- Micro Max 18mm Exhaust Socket (compulsory to use)
- Mini Max 20mm Exhaust Socket (compulsory to use)
- Junior Max, Senior Max, DD2 Unrestricted Exhaust Socket

In Junior Max, Senior Max and DD2 classes, it is not compulsory to run the new Exhaust Sockets - the choice is yours!

New Piston

The profile of the piston is being changed slightly.

Benefits are:

- Reduced running-in period (only one session)
- Reduced wear rate meaning longer life between rebuilds for the user.

Rotax only recommend upgrading to this component at your next engine rebuild.

New Conrod

New Hardening Procedure enables a new light weight design and two lubrication slots. This technology comes from the Sea-Doo sector and results in far greater life of the Conrod.

Rotax only recommend upgrading to this component at your next engine rebuild.

Optimised Crankshaft

New engines will be supplied with sliding seats for the Main Bearings. This means there will be no need to get a new engine pulled apart by an engine tuner to get the bottom end 'freed up'. A new engine will have race winning performance out of the box.

Rotax only recommend / advise that you upgrade in case of failure of your existing crankshaft.

Engine Appearance

The new 125 MAX EVO Engine Series will feature Black Coating on the crankcases and Red Coating on the Cylinder Head. These are strictly visual changes only & have no effect on performance / reliability etc...

So how do these changes effect each category specifically???

Micro Max

For Micro Max, Rotax are taking the opportunity to adjust the performance of the engine as well as make it easier to use and scrutineer. The changes are:

- Min. Squish Gap 2.40mm.
- There will no longer be a restrictor in the carburettor.
- The size of the Exhaust Socket Restrictor will be 18mm.
- The exhaust pipe is the same BUT will have a new perforated tube (stinger) inside the pipe with a 22mm outlet.

Implementation

As 2015 is the first year for Micro Max in Australia, we are implementing the new components from Day 1 and will not allow the existing components in the class (excluding Piston, Conrod and Crankshaft).

To facilitate this change, all Micro Max Engines sold by IKD in 2014 will be given the following components FREE OF CHARGE:

- Carburettor
- 18mm Exhaust Socket Restrictor
- Gasket for Exhaust Socket
- New Exhaust Perforated Tube (Stinger)
- New Ignition System (including Electronic Box).

Note: Rotax do not recommend / advise that competitors need to upgrade the Piston, Conrod & Crankshaft unless required at your next engine rebuild.

*** The new specification Squish, Carburettor, Exhaust Socket, Exhaust Perforated Tube & Ignition System will be compulsory at Round 1 of the 2015 Rotax Pro Tour.**

To Do List

- Have your engine tuner reset the squish gap on your engine to minimum 2.40mm
- Get the free replacement parts from your dealer when they become available (mid to late December) and fit them to your engine (removing old components in the same process).

If you are planning to race Micro Max in 2015 and still do not have an engine, don't stress, order one today and you will be given the following upgrade parts FREE OF CHARGE when they become available:

- Carburettor
- 18mm Exhaust Socket
- Gasket for Exhaust Socket
- New Exhaust Perforated Tube (Stinger)
- New Ignition System (including Electronic Box)



Mini Max

For Mini Max, Rotax are also taking the opportunity to adjust the performance of the engine as well as make it easier to use and scrutineer. The changes are:

- Min. Squish Gap 2.40mm
- There will no longer be a restrictor in the carburettor
- The size of the exhaust socket restrictor will be 20mm

Implementation

Because 2015 is the first year for Mini Max in Australia, we are implementing the components that dictate the performance output of the engine from Day 1.

- * **The new specification Squish, Carburettor & Exhaust Socket will be compulsory at Round 1 of the 2015 Rotax Pro Tour.**
- * **Remaining new components will be eligible from Round 2 of the 2015 Rotax Pro Tour.**

To facilitate this change IKD will credit all 2014 sales of Mini Max exhaust and intake restrictors to dealers. Retail customers should see their dealer and arrange for them to order the new components and work out the credit with the dealer for the old restrictors so that you only pay the difference.

To Do List

- Have your engine tuner reset the squish gap on your engine to minimum 2.40mm.
- See your dealer and arrange to purchase the following components before Round 1 of the 2015 Rotax Pro Tour:
 - Carburettor (at special introductory price)
 - 20mm Exhaust Socket
 - Exhaust Socket Gasket

*** After Round 1 of the Rotax Pro Tour all other items become legal to use but you are not obligated to use them. Do not forget that most new components have a special introductory price until May 31st, 2015**

If you are planning to race Mini Max in 2015 and still do not have an engine, don't stress, order one today and you will be given the following upgrade parts FREE OF CHARGE when they become available:

- Carburettor
- 20mm Exhaust Socket
- Gasket for Exhaust Socket
- Exhaust
- New Ignition System (including Electronic Box)



Junior Trophy Class

Rotax cannot guarantee that we will have enough components to update every driver's engines for Round 1 of the 2015 Rotax Pro Tour. Therefore:-

- * **No new components at all are eligible for Round 1 of the 2015 Rotax Pro Tour.**
- * **All new components will be eligible for Round 2 of the 2015 Rotax Pro Tour.**

Engines that still belong to IKD via our Lease Program will be given the following components FREE OF CHARGE well before Round 2 of the 2015 Rotax Pro Tour:

- Carburettor
- Exhaust Socket
- Gasket for Exhaust Socket
- Exhaust
- New Ignition System (including Electronic Box)

Drivers with Lease Program engines must return the following old / used components to IKD:

- Carburettor
- Exhaust Socket
- Exhaust
- Ignition Coil & Wiring Loom

People who already own their own engines can choose to buy the new components at special introductory prices until May 31st 2015.

If you are planning to race the Junior Trophy Class in 2015 and still do not have an engine, don't stress, order one today and you will be given the following upgrade parts FREE OF CHARGE when they become available:

- Carburettor
- Exhaust Socket
- Gasket for Exhaust Socket
- Exhaust
- New Ignition System (including Electronic Box)

To Do List (if you have a Lease Engine)

When the new components become available, you will receive them FREE OF CHARGE as per above.

To Do List (if you own your engine)

No new components can be installed on your engine until Round 2 of the 2015 Rotax Pro Tour. IKD will inform the market when the new components are available. It is then up to you to decide what upgrade components you wish to fit to your engine.



Junior Max

Rotax cannot guarantee that we will have enough components to update every driver's engines for Round 1 of the 2015 Rotax Pro Tour. Therefore:-

- * **No new components at all are eligible for Round 1 of the 2015 Rotax Pro Tour.**
- * **All new components will be eligible for Round 2 of the 2015 Rotax Pro Tour.**

People who already own their own engines can choose to buy the new components at special introductory prices until May 31st 2015.

If you are planning to race Junior Max in 2015 and still do not have an engine, don't stress, order one today and you will be given the following upgrade parts FREE OF CHARGE when they become available as per above:

- Carburettor
- Exhaust Socket
- Gasket for Exhaust Socket
- Exhaust
- New Ignition System (including Electronic Box)

To Do List

No new components can be installed on your engine until Round 2 of the 2015 Rotax Pro Tour. IKD will inform the market when the new components are available. It is then up to you to decide what upgrade components you wish to fit to your engine.

Senior Max

Rotax cannot guarantee that we will have enough components to update every driver's engines for Round 1 of the 2015 Rotax Pro Tour. Therefore:-

- * **No new components at all are eligible for Round 1 of the 2015 Rotax Pro Tour.**
- * **All new components will be eligible for Round 2 of the 2015 Rotax Pro Tour.**

People who already own their own engines can choose to buy the new components at special introductory prices until May 31st 2015.

If you are planning to race Rotax Light or Rotax Heavy in 2015 and still do not have an engine, don't stress, order one today and you will be given the following upgrade parts FREE OF CHARGE when they become available as per above:

- Carburettor
- Exhaust Socket
- Gasket for Exhaust Socket
- Exhaust
- Electronic Power Valve
- New Ignition System (including Electronic Box)

To Do List

No new components can be installed on your engine until Round 2 of the 2015 Rotax Pro Tour. IKD will inform the market when the new components are available. It is then up to you to decide what upgrade components you wish to fit to your engine.

DD2 / DD2 Masters

Rotax cannot guarantee that we will have enough components to update every driver's engines for Round 1 of the 2015 Rotax Pro Tour. Therefore:-

- * **No new components at all are eligible for Round 1 of the 2015 Rotax Pro Tour.**
- * **All new components will be eligible for Round 2 of the 2015 Rotax Pro Tour.**

People who already own their own engines can choose to buy the new components at special introductory prices until May 31st 2015.

If you are planning to race DD2 or DD2 Masters in 2015 and still do not have an engine, don't stress, order one today and you will be given the following upgrade parts FREE OF CHARGE when they become available as per above:

- Carburettor
- Exhaust Socket
- Gasket for Exhaust Socket
- Exhaust
- Electronic Power Valve
- New Ignition System (including Electronic Box)

To Do List

No new components can be installed on your engine until Round 2 of the 2015 Rotax Pro Tour. IKD will inform the market when the new components are available. It is then up to you to decide what upgrade components you wish to fit to your engine.

Pricing for the 125 MAX EVO Engine Series

- * The 125 MAX EVO Engine are expected to arrive in Australia late January 2015.
- * All 125 MAX EVO Engines will be sent out on a 'FIRST IN FIRST SERVED' basis.
- * All 125 MAX EVO Engines will be payment upfront. So your Dealer may ask for payment prior to the delivery of your new engine.

<u>Engine</u>	<u>Price</u>
• Micro Max	\$2799.00
• Junior Max	\$3450.00
• Senior Max	\$3599.00
• DD2	\$4650.00

Pricing for 2014 Spec Engines (while stocks last)

These will continue to be sold at the current 2014 pricing with the following products supplied FREE OF CHARGE once they are available:

- Micro Max Carburettor, 18mm Exhaust Socket Restrictor, Gasket for the Exhaust Socket, New Exhaust Perforated Tube, New Ignition System (including Electronic Box).
- Junior Max Carburettor, Exhaust Socket, Gasket for the Exhaust Socket, New Exhaust System, New Ignition System (including Electronic Box).
- Senior Max Carburettor, Exhaust Socket, Gasket for the Exhaust Socket, New Exhaust System, New Ignition System (including Electronic Box), Complete Electronic Power Valve Kit.
- DD2 Carburettor, Exhaust Socket, Gasket for the Exhaust Socket, New Exhaust System, New Ignition System (including Electronic Box), Complete Electronic Power Valve Kit.



Introductory Prices for 2015 Upgrade Parts

* Valid only until May 31st 2015

These prices are only possible due to Rotax, IKD and your Australian Dealer collectively discounting the parts to help you through the implementation phase as much as possible.

Part No.	Description	Price	Micro	Mini	Junior	Senior	DD2
Z295060	Carburettor VHSB34XS - Main Jet 130	\$285.00	•	•	•	•	
Z295062	Carburettor VHSB34XS - Main Jet 145 (DD2)	\$285.00					•
Z481250	Upgrade KIT 1 - Ignition System	\$265.00	•	•	•	•	•
Z481252	Upgrade KIT 2 - Ignition System	\$38.00	•	•	•	•	
Z481254	Upgrade KIT 2 - Ignition System (DD2)	\$45.00					•
Z666812	Electronic Box (MICRO / MINI / SENIOR)	\$150.00	•	•		•	
Z666814	Electronic Box (JUNIOR)	\$150.00			•		
Z666816	Electronic Box (DD2)	\$150.00					•
Z481260	Upgrade Kit - Electronic Power Valve	\$160.00				•	•
Z273190	Exhaust Socket (JUNIOR / SENIOR / DD2)	\$23.00			•	•	•
Z273192	Exhaust Socket 18mm (MICRO)	\$27.00	•				
Z273194	Exhaust Socket 20mm (MINI)	\$27.00		•			
Z450360	Gasket for Exhaust Socket	\$12.00	•	•	•	•	•
Z273098	Perforated Tube with Elbow 22mm	\$15.00	•				
Z273078	2015 Exhaust System (MINI / JUNIOR / SENIOR)	\$290.00		•	•	•	
Z273180	2015 Exhaust System (DD2)	\$300.00					•

* **Z481250** Upgrade KIT 1 is the Ignition System (not including Electronic Box & Mounting Accessories)

* **Z481252** Upgrade KIT 2 contains the Mounting Accessories (Nuts & Bolts) specific for your engine.

