

Rotax Max jetting chart explained. [download charts here](#)

You can ask

questions anytime by email ... [email us](#)

The Rotax Max series of engines use a float bowl type carburetor with fixed jets. To a karter this seems odd after using carbs with jets that can be adjusted 'on the run', but to a newcomer or a motorcycle racer a fixed jet carb is quite a reasonable idea.

The difficulty with all racing engines is to keep them tuned to an optimal setting, and to do this with fixed jet carbs you need to know prior to a race what settings you will need so you can make the change in the pits and not out on the track. There are many software programs that can accomplish this for you, along with the use of a weather station. And specific to the Rotax Max engines the factory supplies a colourful jetting chart to do the same at minimal cost.

In years past a calculator was used to put on paper a large chart of jet settings to cover all of the variables you might encounter at any given track or under any type of weather for one engine and carb setup. Put simply, the jet size is dependant on the weather conditions, and jet sizes can be mathematically calculated from an original size to a new size as required for any variable in the weather. This is where the chart supplied today by Rotax is of a great help in simplifying the process as the calculations have all been done - but it is not going to be perfect for everybody as it is supplied. The chart was made with one driver in mind, at his weight and altitude and in his chosen Rotax Max engine, be it a senior or junior or whatever. Luckily all of the Rotax Max racing worldwide is done with engines that are not modified all that much from their standard settings, so the fuel requirements of the engine can be expected to remain the same from one day or one race meeting to the next, and every driver can expect to have close to the same jetting requirements as any other driver.

But the tuning variables rely on you having a good base setup to start with, and then using the chart as a guide to show which direction the jet changes need to be made to suit the prevailing conditions. This can only be done by trial and error in the first instance, you just drive your kart and swap the jets around to find what is the "best" for you. Then if you look at the original Rotax supplied jetting chart and compare where you have your carb set versus their suggestion, invariably it will be different. So this then requires a change in the alignment of the jetting chart to make it match your kart, at your weight and altitude and fuel and oil all the rest of the small things that can affect jetting. If you look at the 3 pages of the sample jetting chart we have supplied there is the original chart as supplied by Rotax, and an expanded chart that covers a wider range of temperatures for Australian conditions. Then the third chart has the vertical column (for barometric pressure) moved to suit a particular driver and his own application. This can be seen as quite different to the original but gives an insight into just what any driver might expect when adjusting the chart to suit themselves.

An advanced version of the charts is available with macros included to make altering the chart simpler and faster ... [download macro enabled charts here](#)

Back to **Technical Info** page

If you have any other queries, please call **Email us**