

DRS

DANIEL RICCIARDO SERIES

DANIEL RICCIARDO KART

SET UP & GET STARTED GUIDE



AXLE ASSEMBLY

The DRS Ricciardo karts are fitted with a **40mm axle for DRS125 and DRS100.**

Only the original inscribed Ricciardo DRS axle may be used as supplied with absolutely no modifications allowed.

It is important to ensure that you periodically check the tightness of the axle grub screws as if they come loose your axle can move off- centre . This normally results in the brake disc binding on your brake and your karts speed will be drastically reduced by up to 1 to 2 seconds per lap. You also risk the axle sprocket going out of line and this could result in your chain coming off.



SEAT TYPE & SEAT POSITIONS

The seat position and type are critical to ensure a good chassis set-up. The position for DRS125 is taken in the traditional way i.e. from axle to middle of top centre of the seat is 18- 21cms for the rake angle and then on the front of the seat to the front of the floor tray is brake side 61cms, engine side 62cms.

The type of seat is also important as a comfortable driver should give better performance!

The standard Freeline seat supplied with DRS Ricciardo karts will give good performance; however we can also recommend from the Tillett range of seats the models T5, T7, T8, T9 , T10 T11 or T12 for DRS100 and DRS125 in standard rigidity.

No carbon or Kevlar or VG or stiffer seats may be used.

For DRS62 seat position of 47cms to 48cms with a rake measurement of 23/24cms in the middle of the seat. The grip of the kart will change depending on the seat position. The seat positions quoted are the standard positions. It's important to run the setup of your DRS Ricciardo kart in the standard set up.

Sometimes depending on the track design or level of grip your kart may not handle so well. The biggest influence on a kart is the seat position. If you move the seat further forward from the standard position quoted by 1.5cms more grip in the front of the chassis will be achieved. If your kart is not turning in and under steering a lot the most effective thing to stop this is by moving the seat forwards.

If your move the seat back 1.5cms from the standard position quoted then more grip in the rear of the chassis will be achieved. If your kart is sliding around a lot through a corner the most effective thing to stop this is by moving the seat backwards, it will also improve the stability of the braking - move it back too much though and you could risk under-steering - it's a fine balancing act !

WHEEL CONFIGURATION "DRY" SET UP

The standard configuration for dry set up is measured overall (outside of one wheel to the outside of the other wheel) and related to use with DRS aluminium rims FL

130mm/210mm for DRS100 and DRS125.

These are the only wheel types to be used in the dry in the Daniel Ricciardo Series DRS.

STANDARD SET UP:

DRS100 and DRS125: Front track width: 40 spacers. Rear track width 138cms.

For all DRS Ricciardo karts:

If the front dimension is increased this will increase grip and turn in. If the rear dimension is increased this will give less grip in the back. The wider the width in the rear track the more stable the kart will become under braking. Too wide though and the rear of the kart will slide - this is called "oversteer"

TYRE PRESSURE:

DRS100 and DRS 125: Minimum 8 psi • Maximum 12 psi

Higher tyre pressure will make the tyres grip quicker but may overheat causing sliding. Too low and the tyres will take to long to grip. Every track and day is different so pay close attention to your pressures. We recommend that all four tyres are set to the same pressure.

We advise you work within the above pressure parameters quoted to achieve your optimal setting. A good indication that your tyres are working correctly is that at the end of a session the tyre pressure should be taken whilst the tyre is still warm.

A natural gain of pressure of 2 psi per tyre indicates the pressure and the balance of the kart is correct. A pressure gain of only 1psi indicates that the tyre pressure needs to be higher, A pressure gain of 3psi or 4 psi means a tyre is being over worked and could be too higher tyre pressure or an incorrect set up of your kart.



FRONT CHROME TORSION BAR

Normally we would suggest that the front torsion bar is left in, however if the grip in the track is low or a better balance from front to rear is required in the kart then by removing it will allow more movement in the chassis and better balance, this can be best seen in winter conditions.

Warning: if you run without the torsion bar in an accident your chassis frame could encounter more damage.



SEAT STAYS

Chrome seat stays are usually used the entire time one on each side maximum as per DRS rules.

In general conditions two seat stays bolted tight will make the chassis slide to begin with but will generate tyre temp and therefore increase lateral grip. In high grip conditions especially in sticky rubber two stays loosened will make the kart have more traction on the exit of corners.

In the wet no stays at all give better grip in the rear and good traction

STEERING & GEOMETRY

The tracking of the wheels should be set at zero. On the DRS100 and DRS 125 the black track rod 255mm are used.

The camber of the kart if measured from top to bottom should be open at the bottom + or - 3mm. If this is not the case, a bent king pin or stub axle are to blame. Older chassis can show signs of negative camber of up to 8mm to 10mm, at this point a new DRS Ricciardo frame should be considered as the chassis may be deteriorating.

You can also increase the grip of the kart in the front and create better turn in if you set the tracking with some "toe out" You can measure the tracking either with tracking discs or some kart lasers. Toe out means that the dimension of the front of the tyres is wider than the edge of the rear of the tyres. This creates more contact on the surface and more grip,

Toe out can be used in the dry but more commonly in the wet when more turn is required. The down side to toe out is increased tyre wear. "Toe in" will reduce turn in and grip and can be used to reduce turn in.



WHEEL CONFIGURATION "WET" SET UP

The standard configuration for WET set up is measured overall and related to use with DRS aluminium rims 120mm/180mm for DRS100 and DRS125

These are the only wheel types to be used in the WET in the Daniel Ricciardo Series

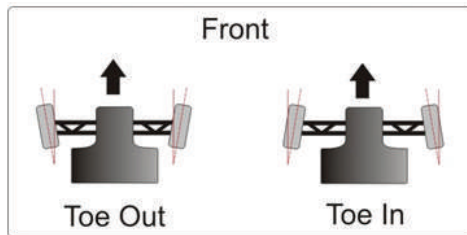
STANDARD SET UP:

DRS100 and DRS125: Front track width: 45 spacers
Rear track width: 135cms for Senior. For Junior 133cms to 134cms.

If the front dimension is increased more grip is achieved

If the rear dimension is reduced more traction grip is achieved. Wider gives less traction but better braking. The set up above will give a good balance to the kart. However if more grip is required in the rear the following tips can help:

No Chrome seat stays gives more traction.



If more grip is needed in the front then you could consider adjusting toe out to a maximum of 10mm. Make sure that the balance of the kart is not upset too much if you do this though.

Normally the water on the track must be very wet before toe out is used

WET TYRE PRESSURE:

Very Wet: **22psi** • Wet: **18psi** • Greasy: **13psi** • Damp: **9psi**

Tyre pressures in the wet are critical. Too low and the tyre doesn't get warm and the water will not pass efficiently through the tread. Too high and the tyre can overheat and work the tyre tread too much losing grip.

A natural tyre pressure gain of 1 psi in your wets is a good indication that it is working well. If the track looks like it's going to dry fit your slicks or you could burn your wets out!



FUEL MIX

DRS Ricciardo karts are 2 stroke and therefore requires oil to be pre mixed in the fuel before you add the fuel to your kart.

The only oil allowed is the EK Exced.

Only super Unleaded Petrol should be used 97-99 RON

You must not use octane booster or any friction reducing additives. EK Exced has a unique finger print agent and we can test fuel for any impurities. All DRS engines ignitions are pre set and not adjustable.

Fuel Ratio Mix: 20:1

Therefore for every 5ltrs of unleaded petrol you mix in 250ml oil EK Exced = 20:1

During a race weekend DRS100 and DRS125 will use up to 20 ltrs of fuel.

SPARK PLUGS

If your DRS Ricciardo kart ever stops or won't start from the pits it may be that the engine is flooded. Replace the plug with a new one and you will find it starts straightaway.

Once a spark plug has fouled or oiled up it won't work again even if you try to clean it.

PERMITTED SPARK PLUG FOR DANIEL RICCIARDO SERIES:

Freeline Spark Plug

***NO OTHER MAKE OR TYPE OF SPARK PLUGS ARE ALLOWED
IN THE DANIEL RICCIARDO SERIES***



DRS RICCIARDO KART CARBURETTOR

The carburettor is very important as it has a great effect on your karts performance and can also determine possible damage to your engine if not set or maintained correctly.

We would advise that the gasket set inside the carburettor is changed at least every two DRS events.

DRS offer a carburettor service for a labour fee of £30.00 + VAT plus parts.

DRS125

TRYTON CARBURETTOR

Low Jet: 1hr 15mins High Jet: 1hr 20mins

DRS100

Low Jet: 2hrs 0mins High Jet: 1hr 50mins

Settings can be + or - 5mins on each jet for an optimised set up

LOCATION OF YOUR CHASSIS NUMBER

This unique six-figure chassis number is stamped on the rear of the brake side-bearing hanger or on later chassis on the rail behind the seat.

The model number is also stamped here as RY30 for DRS100 and DRS125

This model number should not be used on your scrutineering card- always quote your unique 6 figure chassis number.

Your chassis number is important as it is combined with your engine number and held on the DRS Ricciardo database. If you ever sell your DRS Ricciardo kart you must de register yourself as the owner via www.danielricciardoseries.com website and the new owner must also register themselves.

The Chassis and engine numbers kept on the DRS Ricciardo kart database ensures that your DRS Ricciardo kart is eligible for the Daniel Ricciardo Series.

LOCATION OF YOUR ENGINE NUMBER

The engine number can be found on the rear of the crankcases just above starter motor.

Remember a DRS engine can never be separated from its paired chassis, if the engine number and chassis number do not match your DRS Ricciardo kart is illegal and not eligible to race in the Daniel Ricciardo Series.

Thank you for choosing the Daniel Ricciardo Series and remember to always check www.danielricciardoseries.com website, Facebook page or Instagram account for further updates or developments.

**To order DRS Ricciardo kart spare parts or for more technical assistance call the DRS offices on
01527 889595 or Whatsapp 07437 012985**