



EASYKART SET UP AND GET STARTED FOR:

Easykart Cadet 60cc, Easykart Junior 100cc, Easykart Senior 125cc.

The EasyKart 60cc is based on the L28 Birel cadet chassis and is made from 28mm tubing. The Easykart 60cc Chassis can only be run with the rear plastic pod.

The EasyKart 100cc / 125cc is based on the highly successful Birel R30. The chassis has a mixture of 30/32mm tube, which enables the kart to excel through a wide spectrum from low grip to medium grip conditions.

Axle Assembly:

The Easykart chassis are fitted with a 40mm axle for Senior, a 30mm for Junior and a 25mm axle for the cadet. Only the original inscribed EasyKart 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 and Seat Positions:

The seat position and type are critical to ensure a good chassis set-up. The position is taken in the traditional way i.e. from axle to middle of top centre of the seat is 21-23cms for the rake angle and then on the front of the seat to the front of the floor tray is brake side 59cms, engine side 60cms.



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

The standard Freeline seat supplied with the EasyKart will give good performance; however we can also recommend from the Tillett range of seats the model T11 or T12 for Senior and Junior in standard rigidity only whilst for smaller juniors or cadets T10 CD or T8CD

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

For the Cadet a 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 set up of your Easykart 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 you 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 Freeline aluminium rims 130mm/210mm for Easykart Junior and Senior. For Easy cadet the Freeline aluminium rims are 115mm/150mm.

These are the only wheel types to be used in the dry in Easykart.

Standard set up:

Easykart Junior and Senior:

Front track width: 110cms

Rear track width 138cms for Senior and 137cms for Junior.

Easykart Cadet:

Front track width: 94cms Rear track width: 110cms

For all Easykarts:

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:

Minimum 8 psi Maximum 16 psi Cadet Min 12psi max 20psi

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.

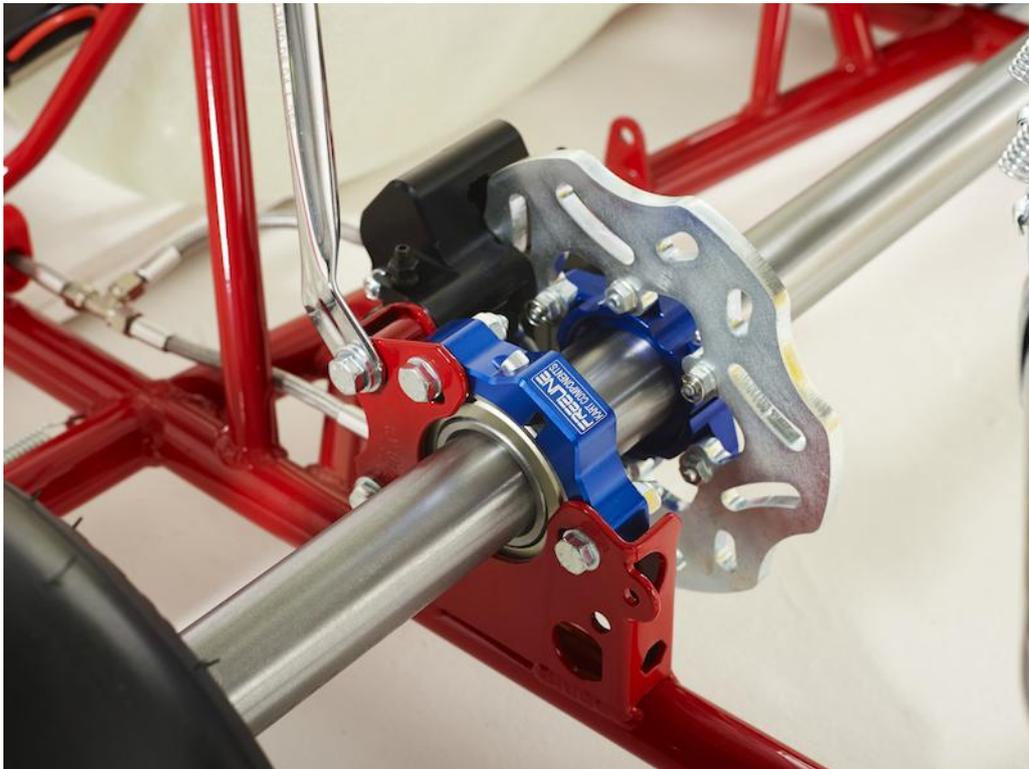
We advise you work within the above pressure parameters quoted to achieve your optimal setting. A good indication that your tyres are working correctly is that at the end of a session the tyre pressure should be taken whilst the tyre is still warm. A natural gain of pressure of 2 psi per tyre indicates 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: (not applicable for cadet)

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: (not applicable for cadet)

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

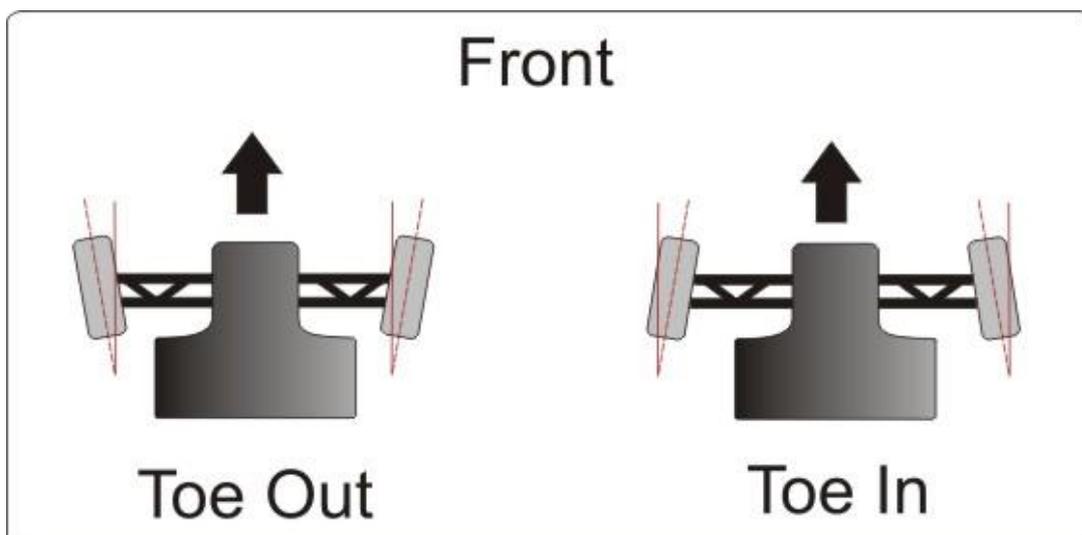


Steering and Geometry.

The tracking of the wheels should be set at zero. On the Junior and Senior Easykart the gold HQ track rods 255mm are used. The Easykart cadet use HQ 215mm gold track rods. 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 Easykart 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 Freeline aluminium rims 120mm/180mm for Easykart Junior and Senior.

For Easykart Cadet the Freeline aluminium rims are 115mm/150mm.

These are the only wheel types to be used in the WET in Easykart.

Standard set up:

Easykart Junior and Senior:

Front track width: 111cms

Rear track width: 135cms for Senior. For Junior 133cms to 134cms.

Easykart Cadet:

Front track width: 96cms Rear track width: 110cms

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.

Higher position in seat for driver we recommend the Tillett Rain meister cushion.

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 Pressures:

V. Wet 22 psi Wet: 18 psi Greasy: 13 psi Damp: 9 psi

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:

The Easykart is a 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 EasyKart Oil.

Only standard 95 ron unleaded petrol should be used.

You must not use super unleaded fuel or octane booster or any friction reducing additives.

Easykart Oil has a unique finger print agent and we can test fuel for any impurities.

Some Super unleaded fuels have additives that do not mix well with the Easykart oil and break down the viscosity of the oil.

This can lead to fuel detonation, seizure of your piston and damage will occur to your engine.

All Easykart engines ignitions are pre set and not adjustable.

Easykart engines work best with standard 95 unleaded fuel.

Fuel Ratio Mix: 20:1

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

During a race weekend Junior and Senior's will use up to 20 ltrs of fuel whilst Cadets will use round 10 ltrs of fuel.

Spark Plugs:

In cold and wet conditions the spark plug NGK 9 EGV may be used as it is hotter and will prevent oiling up and flooding.

If your Easykart 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 plugs for Easykart:

Freeline/BMB Spark Plug for dry warm weather to use in day temperatures of 10c to 40c

NGK 9 EGV Spark Plug for wet / cold weather to use in day day temperatures of 0c to 10c

No other make or type of Spark Plugs are allowed in Easykart.



Easy Kart Carburettor and set up:

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 easy kart meetings.

ACR offer a carburettor service for a labour fee of £9.95 + VAT plus parts.

Senior 125cc

The recommended carburettor setting for the UK is the fixed main jet Number 87 and the adjustable low speed jet set between no less than 45 mins out (lean setting), to a maximum of 65mins out (rich setting).

The 88 jet that comes as a spare will make the engine run much richer, this jet is recommended in hotter countries and circuits on sea level.

Please note if the low speed adjustable jet is set at less than 45 mins you do run the risk of piston seizure and engine damage.

Always start a day on a rich setting of at least 60mins and make adjustments through a day to find the optimum setting.

Junior 100cc

The recommended carburettor setting for the UK is the main fixed jet Number 83 and the adjustable low speed jet set between no less than 40 mins out (lean setting), to a maximum 60 mins out (rich setting).

The 85 fixed jet will make the engine run much richer, this jet is recommended in hotter countries and circuits on sea level.

Please note if the low speed jet is run at less than 40 mins you do run the risk of piston seizure and engine damage.

Always start a day on a rich setting of at least 60mins and make adjustments through a day to find the optimum setting.

Cadet 60cc

The recommended carburettor setting for the UK is the fixed main jet number 74.

The adjustable low speed jet should be set between a minimum of 35mins out (lean setting) to a maximum of 70 mins out (rich setting).

If engine performance is good to begin with then fades during a session its probable that the engine needs to be set on a richer setting.

If the performance is good but at the end of the straights the engine exhaust pipe is smoking and the engine holds back with a rough noise – this means it is too rich with too much fuel. If this happens you can change the fixed main jet to a leaner size 73 or even 72.

In cadets carburetion is more difficult as the engine is not so powerful but you cannot damage your engine in the 60cc, they are very reliable and almost impossible to seize.

Always start a day on a rich setting of at least 65mins and make adjustments through a day to find the optimum setting.

Location of your chassis number:

This unique six-figure chassis number is stamped on the rear of the brake side-bearing hanger.



The model number is also stamped here as RY30 for Junior and Senior or L28 for the cadet. 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 Easykart database. If you ever sell your Easykart you must de register yourself as the owner via our the Easykart kart website and the new owner must also register themselves

Visit: <http://www.easykart.co.uk/karts/register-my-kart/>

The Chassis and engine numbers kept on the Easykart database ensures that your Easykart is eligible for the Easykart Championship.

Location of your Engine Number:

On older Easykarts 2007 to 2009 the unique engine number is stamped on the front lower left part of the crankcase of the engine below the ignition unit.

On newer karts 2010 > the engine number can be found on the rear of the crankcases just to the left side of the gold starter motor.

Remember an Easykart engine can never be separated from its paired chassis, if the engine number and chassis number do not match your Easykart is illegal and not eligible to race in the Easykart Championship.

Thank you for choosing Easykart and remember to always check the Easykart.co.uk website and Easykart UK Face Book or Twitter pages for further updates or developments.

To order Easykart spare parts or for more technical assistance call the offices of Easykart UK: 01527 889595

