

Eagle eye

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Laser rear axle alignment system

Thank you for purchasing the Eagle eye laser rear axle alignment system.

We hope this equipment will give you many years of service and live up to the name of R3 Racing for good product design at an affordable price.

The Eagle eye contains many novel features and design advantages.

Please take time to read and understand the instructions in order to get the best from this equipment.

What it can do.

Eagle eye enables the Twist, Bend and Crab to be measured on most types of Kart. It has the ability to fit axes ranging from 12.5 to 50mm (1/2 to 2 inches) diameter.

It is intended to be used in conjunction with our Front axle alignment system to provide a complete set-up arrangement.

Specification.

| | |
|--------------|---|
| Light source | : Class II solid state laser |
| Control | : Multi mode Microprocessor controlled beam either modulated or full beam |
| Power | : Lithium primary cell type CR2 (commonly available) |
| Battery life | : Sleep mode up to 5 years : Wake mode up to 70 hours continuous use |
| Operation | : Short press for LOW power, long press (1 sec) for FULL power : One press for OFF : Auto OFF after about 8.5 minutes |
| Axle sizes | : 12.5mm to 50mm (1/2 to 2 inches) |
| Material | : Aluminium alloy for body |
| Weight | : Each unit weighs approximately 0.49kg |

R3 Racing reserves the right to change specifications without notice

Maintenance.

Keep clean by removing excess oil and other materials.

Avoid water and keep from rain. This product is not waterproof.

Do not drop. (R3 Racing provide a recalibration service should this occur.)

To replace the battery remove the 4 screws surrounding the target. This exposes the battery which can be gently prised from its holder and replaced. Note carefully the polarity!!

Warranty.

This product is warranted against faulty materials and workmanship for 12 months.

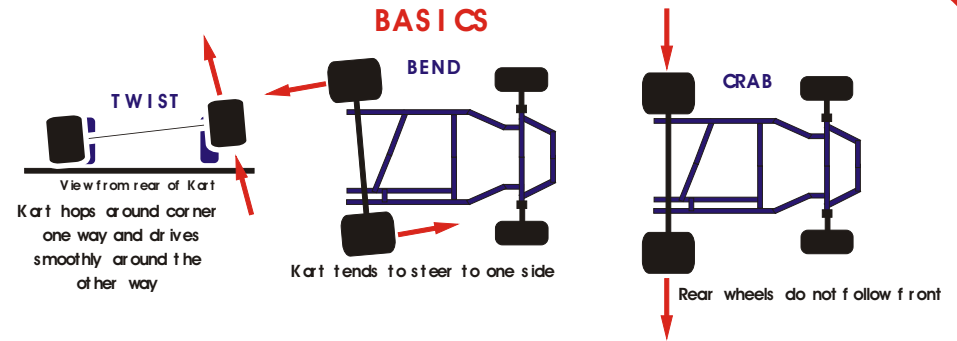
Applies to UK and NI only.

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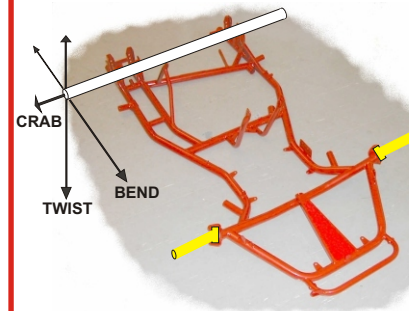
www.r3racing.co.uk Email: sales@r3racing.co.uk

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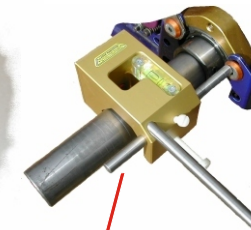


Before fitting and using the rear axle Eagle eye you must set up the front axles using the front axle Eagle eye .



Rear axle Eagle eye fitted to axle

Lock the brakes on with a bungee strap



Use distance bar to set Eagle eye from bearing hanger

Use other distance bar as a steady to help level the bubble



WHAT if I cannot get Camber to zero

Some Karts do not allow you to adjust for Camber. Strictly speaking to measure Bend the Camber should be set to zero. However this causes no problems on most Karts!

Do I need my Kart level?

No. Because all the measurements are relative! That means you are doing comparisons. You are comparing the front with the back and the left with the right etc. We level the bubbles so that the right and left hand units are level with each other - not with the Kart.

Of course there is no reason why you should not make your Kart level. You should support your Kart at 3 points. One in the centre at the front and one at each side at the rear. You should have the centre of the front axles level with the centre of the rear axles. **But remember, this can only be achieved if you have no Twist and zero Camber in the first place!!**

Setting the bubble

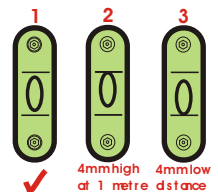
It is important to get the bubble in the centre of the 2 marks on the vial.

This is easily achieved by using one of the distance bars as shown in the photograph above.

With the bubble at the top line (2) the laser dot will be 4mm high and with the bubble at the bottom line (3) the laser dot will be 4mm low on the front target.

You should be able to achieve + or - 2mm with ease and + or - 1mm with practice.

These figures are at a nominal 1 metre (3ft 3in) distance from the front to the rear axle.



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