Karting 101 courtesy Comet Kart Sales Website;

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## Karting 101

Karting is truly a family sport. You'll see dads and moms and grandparents enjoying a day at the track, mom or dad might race as well as the kids. It's not unusual to see a family of four all racing together on any given weekend. It's a great way to spend a day with your family as well as teaching a lot of life lessons such as sportsmanship and mechnical know how.

The great part about karting is that even though it's a good work out you can be 5 or 75 and still drive a kart! It's aerobic for sure but you don't have to have any special physical talents to enjoy and excel at karting. Even a bum knee that sidelined your jogging or a shoulder injury, as an example, is rarely an issue driving a kart.

Deciding what to buy -

The most important thing to decide before buying anything is knowing where you are going to run your kart and what class you want to run in. Until you know those two answers you might end up buying a bunch of equipment that you can't run against anyone. Go to the local kart track and walk around, ask racers questions, most are very friendly and love to talk to new people interested in getting started in this great sport! Visit a local kart shop or two and check out all the equipment. Do you want new, used? Are you going sprint racing on a road course or oval dirt racing? The kart you would use on one is completely different than the other. Doing a little homework before you buy will save you a lot of trouble and money later.

What is Sprint Kart Racing?

Definition of a sprint kart

Sprint karts are special built racing chassis' designed to turn both left and right on asphalt tracks up to one mile in length. Most tracks are between one-half mile to one mile in length. Sprint karts are also raced at large "street races", tracks setup in parking lots of shopping centers or tracks setup on city streets. Some street races are very successful; the Rock Island Grand Prix in Illinois has over 20,000 spectators every year with a few hundred entries!

How karting classes are broke down

Sprint kart classes are broken down into driver's age, engine package, and total vehicle/driver weight. Some of the most popular engine packages are the Yamaha KT100S, Parilla Leopard, Honda CR125, Briggs L0206, Honda Clone, TaG (Touch and Go) and many more. Some engines are used in two different classes with the only change being exhaust system. The KT100S Yamaha is a perfect example, in Senior classes the KT100 or "Yamaha" is run with either a spec "can" exhaust or a "tuned pipe" exhaust. The difference in performance is around 5 hp! The pipe class is known as Yamaha Light or Heavy (depending on the classes weight) or with the "can" it's known as Sportsman Can or Senior Super Can. Different regions and clubs call the same class a different name even if the package is identical.

Karting is open to people of all ages

Kid Kart classes are purpose built karting chassis that use a spec 50cc Comer C-51 Engine or Honda GXH50. The Kid Kart competitors are aged 5 years to 7 years. The spirit and intent of this class is to allow kids to become accustomed to driving a kart and driving with other competitors on a track. Most clubs just offer this class as an exhibition class with all competitors receiving the same trophy, some clubs run it as a class with winner awards and a year end points champion.

Junior Sportsman or Cadet classes are offered for kids ages 8-12. In these classes the engines range from KT100 Yamahas, Briggs 4 cycle engines, Vortex Mini Rok and more. Local rules and classes offered should be checked into before deciding on a package.

The Junior classes are open to kids 12-15 years old. Junior classes are faster than the cadet and rookie classes and some classes are as fast as the senior classes. Once again classes can range from Yamaha Junior Can to TaG and 4 cycle classes, check local rules and classes offered in your area.

Senior classes are for drivers 15 and up. Senior classes are offered in a wide range of classes including a "Masters" class at some tracks for drivers aged 35 and up (typically). There are usually a lot of senior classes offered in every region with different engine packages and weights depending on the class.

Four Cycles - Low cost and big fun has been the name of the game for the past few years in Four Cycle sprint racing. The Clone engine is a very popular class, a 6.5hp OHV engine is the typical "Clone" engine. Another class that has gained popularity is the Briggs Gas Classes like the LO206. It is a sealed OHV engine that restricts the amount of changes that engine builders can make to the engines as well as running on gasoline instead of methanol.

Two Cycles - From Yamaha classes that have 15hp to 30hp TaG (Touch and Go electric start) engines and 45 hp Shifter Kart Engines with front wheel brakes.

One class that has taken off in the last few years are the TaG classes which stands for Touch and Go because of the onboard starter. TaG is a 125cc water cooled 2 cycle with an onboard starter and a signle speed clutch, it is not a shifter engine. The TaG class has been very popular with recreational karters and at the club and national level. Karting classes can be regional (popular at one club and non-existent at another club) so check your local clubs and tracks to see what classes are offered and popular in your region.

The Yamaha KT100 has been aroud since the 80's and offers great racing at an affordable price. The engines are air cooled, parts are relatively inexpensive and the racing is very competitive. A number of racers that ventured into TaG and Shifters have migrated back to Yamaha because of it's great value!

New Karters should also check out our Blog section for more in-depth technical and setup information on sprint karting.

What is Oval Kart Racing?

Definition of an oval kart

Oval Karts are purpose build racing chassis' designed to turn left hand corners on oval shaped tracks. The karts are designed to sacrifice right hand corner speed to improve left hand corner speed. Increasing the ability to raise the vehicles left side weight percentage and offsetting the driver to the left of the chassis, as well as offsetting the left rear frame rail to the right of the left front frame rail accomplish this. Besides the frame being offset the kart is ran with "stagger" in the front and rear tires. The right

side tires are larger than the left side tires. This helps increase the karts ability to turn left; you can produce this same effect by putting a Styrofoam cup on a table and rolling it. The cup will "steer" towards the side with the smaller radius.

## Asphalt or Dirt

Oval karts are ran on a variety of tracks and surfaces. Dirt tracks are extremely popular; they range from tracks that are flat to steeply banked and from 1/10 mile in length to ¼ mile or bigger tracks. The surface can also be loose soft dirt to hard packed clay to even sandy surfaces.

Asphalt tracks are also popular but are not as numerous as dirt tracks. Asphalt tracks can range from little indoor bullrings to wide-open ¼ mile or larger stockcar tracks with steep banking and drafting playing an important key. Most asphalt tracks are in between these two extremes.

## **Oval Kart Classes**

Classes are broken down by drivers age, weight, and engine package. By far the most popular engine in oval racing are 4 cycle engines like the Briggs Raptor, Briggs Animal and Honda Clone. These engines range from true "box-stock" classes to the extremely popular stock blueprinted classes with around 9hp to unlimited and open classes producing over 20 hp.

Just like sprint karting the Kid Kart classes are purpose built karting chassis' that use a spec 50cc Comer C-51 Engine or Honda GXH50 engines though some clubs also offer Kid Kart classes with different engine packages like the Briggs LO206. The Kid Kart competitors are aged 5 years to 7 years. The spirit and intent of this class is to allow kids to become accustomed to driving a kart and driving with other competitors on a track. Most clubs just offer this class as an exhibition class with all competitors receiving the same trophy.

The Junior classes are broken down by age. Engine packages vary depending on the series but popular engines include the Briggs Raptor, Briggs Animal and the Honda Clone. Engine horsepower is typically regulated by a restrictor plate between the carburetor and the engine block to restrict the amount of air and fuel that the engine can receive. Younger drivers in lower age groups typically run a smaller restrictor and as they move up classes the restrictor plate hole increases in size to compensate for

