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MANUAL FOR ORGANIZING A K4A EVENT

Mono class (corporate) racing for Sprint and Endurance races.

CONCEPT

IN THIS DOCUMENTS

An introduction into mono class racing and some practical info on: how to organize an event, how to do a technical chassis and engine control, what to tell in a drivers briefing and so on.

INTRODUCTION

WHAT IS K4A

K4A is a new concept of Karting meant for the people that have some interest into motorsport but don't want to suffer and struggle maintaining their kart or lack the budget to drive. This concept is suitable for racing, sport, leisure and family activity.

WHAT IS A MONO CLASS? (ENDURANCE, SPRINT OR CORPORATE)

A mono class is a racing class where every kart is equal. Meaning the chassis, tires and engine all have to be exactly the same. Or in other words everybody has the same odds of winning the race.

WHY K4A AS A MONO CLASS KART?

K4A developed a kart which has a great basic set-up, little chassis adjustments are possible thus keeping it simple for everyone to set up their kart, by only adjusting one of the three sprockets, tire pressure and width of the kart. The K4A engine is based on power scooter/ATV technics, specially modified for karting purposes. Meaning this engine is also easy to maintain.

WHY ORGANIZING A MONO CLASS RACE? (from a dealer point of view)

YES INDEED, nothing is more profitable than a loaded KF / KZ driver spending lots of money for your services and facilities **BUT** In general, most of these drivers change team before the end of the season. Because that is the reason why they did not win the championship, is it not? Or they simply quit after a few years because karting was more expensive than they thought.

K4A is **THE** solid base for a steady and higher income. Not depending on a few demanding drivers but on a whole group of drivers using tires, materials and advice. Drivers which are racing to have a good time. Benefits for dealers/organizers by selling economic karts, easy to handle and easy to maintain are summarized below (your clients want to drive, not too work, suffer and struggle to keep their kart running).

- Profit on sales of karts and parts
- Profit on sales of accessories and equipment
- Payments for organizing small (or big) events
- Eventual income through transfers to higher (2-stroke) classes
- People bring friends who also want to drive
- More visibility
- Possibilities to rent K4A karts (arrive & drive)
- More money through volume
- Very few special tools needed

HOW AND WHERE TO START

Our suggestion would be you need to find at least 3 people who want to buy the kart, at a reduced rate if necessary. These people should be given the certainty that there will be an affordable mono class with at least 6 people available at the pre-mentioned dates. After finding these 3 people you can invite potential customers to join a K4A race free of charge. In other words you have to provide the kart for the people you invite. After convincing them to buy the kart they drive you have your foundation of your very own mono-class. From there it is on upwards.

TIME SCHEDULE SUGGESTION

We recommend to keep the races at off-peak hours. For example Friday evening from 18:00 till 21:00

+ Most people are available at those times.

+ People still have time in the midday to spend at; school, work or with their families.

+ Tracks can generate additional profit through catering in off-peak hours.

+ Evenings make the perfect environment for a good after race-party, people have a lot to talk about.

SPRINT RACE

18:00 - 19:00 Free practice.

19:00 - 19:15 Start-up (grid) lottery

19:30 - 19:45 Race 1

20:00 – 20:15 Race 2 (reversed grid)

20:30 – 20:45 Final (Race 1 + Race 2 divided by 2 = starting position)

ENDURANCE

18:00 - 18:30 Free practice.

18:30 - 18:45 Start-up (grid) lottery

19:00 - 20:00 Endurance race

or, when more than 2 drivers per team

19:00 – 21:00 Endurance race

STARTING POSITION

Put numbers from, 1 - 'number of competitors', into a box. Let every driver pick one ticket. The number someone draws equals his starting position in the first race. The second race will be a reversed starting grid of the tickets drawn. The third race starting position will be (race 1 + race 2 divided by 2). Upon equal starting position the lowest ticket number takes the best position.

NB for an endurance race the starting position does not matter too much.

RACE DAY RANKING

Sum the outcome of the race and divided it by the number of heats you have raced during 1 day. The best score wins the race (e.g. P1 + P2 + P1 = 4 points divided by 3 heats = 1,3 average). Upon equal scores the best ticket number takes the best position.

TIMING

Laps can be registered manually tally each kart that passes the finish (it can even be split in 1 person counting even and 1 person counting odd numbers). Then stop the winner right after the race and appoint his position plus the others that follow. Be sure you take the one with the most laps first.

Fortunately most tracks now days have digital timing systems available. This is highly recommended when having more lots of drivers. If you are not yet in possession of a timing system contact us for advice.

CHAMPIONSHIP

Championships can be easily organized by summing all race day results – 1 or 2 bad day results. The number of races withdrawn should depend on the number of participants throughout the year and the number of race days organized. It should at all times remain possible to loan out a kart to someone for a race and after still participate in the championship

TECHNICAL

The strength of a K4A mono class is everybody is equal and have the same odds of winning the race. Every intervention of a tuner, other kart brand of engine is of high risk to the existence of you class. Keep your class as equal thus affordable, understandable and easy accessible as possible.

1) THIRD PARTY SUPPORT

In order to maintain your mono-class successful we strongly recommend you, not to have 'tuners' or 'equipment optimizers' into your mono-class events. This in order to not have any unnecessary cost increase and to maintain equalness of the equipment.

2) KEEP YOU CHASSIS & TIRES ORIGINAL

Other than timing systems, cameras and stickers **no external devices** should be mounted to the K4A kart. All parts which could have influence on the kart handling have to be **originally K4A branded**, without any modifications in shape, pattern, thickness or position.

CHECKLIST KART MODIFICATIONS (*example*)

- K4A Exhaust support bar (torsion)
- K4A Floor tray (torsion)
- K4A Front stubs axle (may not be bend, handling)
- K4A Front stub axle washers and bearings (against caster and camber adjustments)
- K4A Rear hubs (torsion)
- K4A, 4 aluminum rims. (heat transfer)
- Tires should be Maxxis SLH (+/- 10 hours) or Maxxis SLR (+/- 4 hours) or Maxxis SLW (Rain tire)
- K4A Steering column (handling)
- K4A Tire rods (handling)
- K4A rear axle (torsion)
- K4A brake system and disc (hydraulic or mechanic)
- K4A rear bumper (torsion)
- K4A chrome supports for front bumper (torsion)
- K4A bearing cages (heat transfer)
- K4A seat (hardness)
- K4A plastic (Aero dynamics)
- No modification to the original chassis height, front or rear. (handling)

3) ENGINE HAS TO BE STOCK

To keep the class equal and affordable engine tuning or optimization is extremely prohibited. No fuel addition or any other speed or accelerating increasing tools or tricks are aloud. Everything has to be stock K4A. K4A can provide you with tips and tools on how to seal of your engines. **An engine control kit** which measures the engine timing can be bought at K4A or at www.K4Adealer.com.

CHECK LIST ENGINE (*example*)

- clutch drum has to be 13 teeth. Item no. K4A12014A
- clutch have to be original. Item no. K4A12002A
- with the original clutch springs. Item no. K4A12005A
- Muffler has to be original K4A without any addition or removal from the inside. K4A13002
- Exhaust pipes have to be original and without modifications. Item no. K4A13008
- The carburetor has to be stock and without modifications. Item no. K4A04001
- The carburetor inlet pipe has to be stock and without modifications. Item no. K4A04004A
- Spark plug NGKCR8E or NGKCR7E Item no. K4A02025/8 and K4A02025/7
- K4A air filter Item no. K4A04009A
- CDI has to be original as Item no. K4A15001
- All parts are equal to your reference engine
- Fuel is to be from an ordinary consumer fuel station, without any additions.
Or high octane level boosters

4) SAFETY

- Additional security brake cable at least 2mm thick.
- Bolts and nuts at the bottom of the chassis should be reduced to a minimum length.
- A good helmet
- Arms and legs should be covered, a goof karting suite is preferred.

5) WEIGHT RECOMMENDATION

Depending on the experience level of your drivers you can decide to enter a weight limit. Weight can either be measured as total; driver + kart; or as individual on an average weighing scale.

For the light class we would suggest a total weight of 145 kg or a minimum person weight of 60 kg.

For medium class we would suggest a total weight of 165 kg or a minimum person weight of 80 kg.

*Depending on the number of entries you might split up the class in juniors and seniors

PUNISHMENTS

Drivers who do not honor the rules of an equal mono class are of great danger to the future of your class and efforts. Driver who void one of the rules as summarized below should receive an official warning.

- 1) Increasing the speed or acceleration of the engine in any way. Also known as tuning
- 2) Using non-stock K4A parts or tires which could reduce the karts equalness.
- 3) Avoiding any rule according to safety

Drivers who void your warnings multiple times should be reported to the K4A organization which keeps track of a **black list**. This black list ensures that verified cheaters cannot join any other K4A competition for 12 months. Direct punishing suggestions for you to consider are.

- 1) Race-day disqualification
- 2) Championship disqualification
- 3) Race ban from the K4A mono class for 1, 2 or 3 years

FLAG RULES



Start and Finish flag

This flag shows that the race starts and finishes. Upon finishing driver have to drive carefully and slow into the pit lane.



Red flag

Something dangerous has happened on the track. The race is being (temporary) shut down. Stop your engine in front of the person who is waving this flag.



Blue flag

You are being lapped make room for the overtakes.



Yellow flag

There has been a racing accident. Moderate your speed and be extra cautious. When the yellow flag is out, overtaking is prohibited.



Black/white flag

First warning because of participating or creating a dangerous situation. You are obliged to make a drive through (at footpace), without refueling or changing drivers.



Black flag

You are disqualified leave the track immediately.

SAFETY BRIEFING

Next to the flag signals there are some more safety aspects to karting as mentioned below. Be sure to take any necessary measurements if these rules are not honored.

- 1) Never leave your racing line, also not for passing drivers. Accidents often occur when drivers estimate the distance wrong and instead of making way, they bump into each other. NEVER LEAVE YOUR RACING LINE.
- 2) Do not bump into each other on purpose.
- 3) Always look over your shoulder when entering the track. See if no one is coming. Always raise your hand when exit the track.
- 4) Never get out of your kart during traffic.
- 5) Always drive at footpace in the pit lane.
- 6) Always turn off your engine when stepping out of the kart. Not doing so may cause fatal injury to yourself and fellow drivers.
- 7) Also explain the signs below which are also displayed at each K4A kart sold. Be sure to regular check of the safety stickers are still visible.



ADDITIONAL ENDURANCE RACE TIPS

TEAM RACING

When having an endurance race take the following guidelines into consideration:

- Force a minimum number of driver changes to take place. So every team, big or small, has the same chances at winning the race
- When exchanging drivers the engine has to be switched off.
- Force people to drive at footpace in the pit lane by letting a team member walking besides the driver. Walking means 1 foot at the ground. One could even use a half broom stick to link the driver with the pedestrian.
- Refueling should be done with the engine being switched off and without any driver in the kart.
- Make a team responsible for their own driver changes and tank sessions. Make it a part of their strategy instead a part of your problem.

REFUELING

The K4A kart uses 5,5L of fuel an hour. Meaning each hour the kart should be refueled at a safe fueling place. Never put too much fuel into the tank, keep 1-2L margin, or otherwise the tank will overflow causing irritation to the driver's skin.

LUBRICATING THE KART

The kart chain should be lubricated very well at least every 30 minutes. Not lubricating the chain causes the kart to fall out. We recommend Xeramic kart spray, K4A76028. We also provide KMC chains with a removable chain link in order to quickly assemble an new chain.

COMMERCIAL TIPS

- 1) Always have a kart available for rent. So someone can try/join before they buy.
- 2) Put one VERY BIG trophy on display in your bar/restaurant and start explaining people how they can win it by joining your mono class race.
- 3) Contact the newspaper and let them join or experience the race to get them convinced to publish the race result in the local or regional newspaper. Local people are most likely to join the karting madness at your track.
- 4) Make clear descriptions on how, who and when people can race and what it would cost to participate. Publish this in newspapers, at you cash desk, at your website or anywhere you can.
- 5) Boost your mono-class's image, dress up your bar, track and podium, make the driver feel like he is participating in something nicely organized.

PROMOTION TIPS

A well-dressed karting track not only looks nice but also makes the customer feel special, a sense of belonging to something. A good positive customer is a loyal customer and probably makes good word of mouth advertisement.

K4A offers a wide variety of promotional products to up dress your track. These promotional items can be borrowed, bought or earned. At the end of this topic is explained how one can receive promotional items **free of charge!**



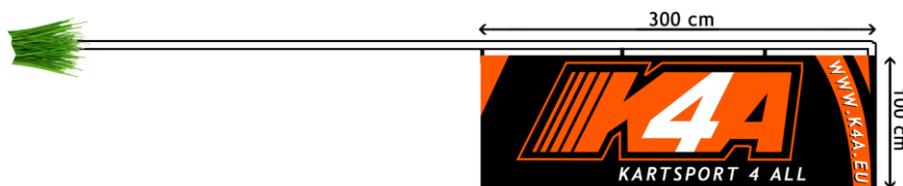
Dress up the track in no-time by placing these 12 meter long PVC banners behind each other. Eyelets let you easily attach the banners onto any fence.

1 banner costs €25,- or can be borrowed by only paying for transport and damage



Emphasize the statement you are trying to make with K4A. Eyelets let you easily attach the banners onto any fence.

1 banner costs €15,- or can be borrowed by only paying for transport and damage



Having flag poles available? These flags are available for sale at.

1 flag costs €25,- 3 flags costs €60,- or can be borrowed by only paying for transport and damage



Having no flag poles available? Use the beach wings complete with heavy tri-pod and beach mast. These beach wings can be used outdoors and are reusable.

1 flag costs €60,- 3 flags costs €150,- or can be borrowed by only paying for transport and damage

FREE PROMOTION MATERIAL

For every €1000 euro spend at K4A B.V. (limited) one earns the right to order €20 of promotion material free of charge. Or when the promotion material is bought in advance one has the right of a refund. This proposal is only valid for the current year and has to be applied by the buyer.

FREE PROMOTION DESIGN

All logo's, flags and banner designs are available for free on request.