



## **2021 RKA F100 Regulations and Procedures**

### **Introduction**

RKA F100 is a Pre-2000 Historic Kart Race Series.

The RKA F100 race series will be strictly racing pre 2000 karts and engines & utilising Pre 2000 100cc direct drive air cooled reed or rotary valve engines. RKA is aimed at competitors who wish to race this era of kart. See below Technical Rules for Chassis, Engine & Carburettor eligibility of which all must be submitted & approved by RKA prior to racing. The emphasis is on competitive, safe, enjoyable and fair kart racing, and to re-live what we consider to be the greatest period in kart racing history.

### **Class Structure**

RKA F100 Light = 148kg    RKA F100 Heavy = 165kg

F100 Light and F100 Heavy will be run as separate classes when possible. These may be run together depending on entry numbers.

### **Administration**

RKA F100 will be utilising various different kart racing circuits to host the events. RKA F100 test and race days will be run within some of these circuit's normal race weekends. At other circuits, RKA F100 will be hiring the track, medical and safety personnel and will run the meeting themselves or in partnership with other karting groups.

Neither RKA nor kart clubs/circuits will tolerate the abuse (physical, verbal or written) of staff, competitors, volunteers or the general public at any race meeting. Any such abuse will be dealt with swiftly by RKA/Officials

Both RKA and the circuit owner/manager reserve the right to refuse entry to the circuit, or discharge persons from the circuit.

### **Event Procedures**

RKA do not require entrants to hold any licenses or medical certification from any other motorsport or non-motorsport organisations/associations. Individual circuits may and generally do, require licenses for race meetings. When this is the case RKA and its competitors must comply.

New/novice drivers may be required to start from rear of grid for their first meeting, depending on their level of experience. RKA reserves the right to instruct any driver/competitor to do so. This is for safety of both new/novice competitors and all other competitors.

## **Entries & Fees**

Entries can be made via the RKA online shop, [www.retrokartingaus.bigcartel.com](http://www.retrokartingaus.bigcartel.com)

Entries close one (1) week prior to the event date or the date set by the Race Secretary for each meeting. A late entry fee of \$60 may apply to entries beyond the date. Entry fees may alter for different events.

It helps us greatly if you can get your entries in early.

Note: Each entrant must have their chassis ID passed by RKA via the Facebook RKA F100 Owners Group. The entrant must pick a race number that is not being used by another member and supply the engine details. Race numbers are on a first in basis.

Please Note: You cannot race at an RKA F100 event without completing this procedure.

## **Scrutineering**

Scrutineering will be performed prior to the commencement of Drivers Briefing. Scrutineering forms will be made available at the track. Different tracks have different systems. RKA competitors must comply with those requirements.

## **Drivers Briefing**

Drivers Briefing will be held prior to the commencement of qualifying/racing. All drivers entered must attend the drivers briefing or be excluded from the event.

## **Qualifying**

All Karts MUST compete in qualifying. A driver and his/her kart must be present and on the grid for qualifying. Those karts that have had mechanical failures either during starting from the out grid or on track and prior to the completion of their first timed lap will start from the rear of the grid. In the case where there are several drivers starting from the rear of the grid, a random draw for their starting position in Heat 1 & 2 will take place.

Timing will be via an electronic transponder system; a transponder must be fitted to the kart and is the responsibility of the driver to make sure it is secure and fully charged. The fastest single lap for each driver will determine respective grid position. In the event of a tie the next fastest lap/laps will determine position. RKA can place a driver at rear of field for any safety concerns it may have or a driver may nominate to start from the rear of grid.

Exceptions to this rule MAY be granted by the RKA Board under exceptional circumstances ONLY.

## **System of Gridding**

The Grid Marshall shall call all competitors to the grid and allow 5 minutes for all grid positions to be filled. In the event of a grid position being left open at the end of those 5 minutes, the vacancy shall be filled by the next competitor.

During race day, it is each driver's responsibility to have a minimum of one pusher with them whilst on the dummy grid (even if they can start themselves). Failure to have a designated pusher with the kart/driver, as the Grid Marshall releases the competitors, causes delays and is extremely dangerous.

If a kart does not start before the designated baulk mark, the kart must be returned to the grid for restarting. The competitor is welcome to receive outside assistance, e.g. changing a spark plug or getting a push.

Once the lights go green and the race commences, outside assistance is strictly no longer allowed. Helpers and non-started drivers must retreat to a safe area with their kart immediately.

Drivers who do not cross the start line in their rightful grid position as the race starts will have the number of places gained added to their finishing position, and risk further penalties at the discretion of the Clerk of Course and/or Start Marshall.

If the competitor directly in front of you on the dummy grid oils up, retires, or does not start from the dummy grid, then you are permitted to fill that gap and form up behind the competitor that was directly ahead of the competitor that is missing. If the missing competitor appears during the rolling lap, then you must make space in front of your kart to enable them to take their rightful position. It is the driver's responsibility to make it back to their rightful position in a safe manner (hand up to show you are out of position and not making contact with anyone whilst coming through the field) before the last corner before the start straight. After this point, the driver out of position must not gain any more places.

If using circuit 'cut-throughs' to try and catch the pack on the rolling lap. This must be done at a slow pace, with a hand in the air and in a safe and responsible way, and you must not join in front or within the pack.

### **Racing Starting Positions**

All heat race starting positions are determined by qualifying position.

The Pre-Final starting positions are determined by a points system accrued during the heats. The points system used will be 0,2,3,4 etc.

Final starting positions are determined by the Pre-Final finishing order.

### **Starting**

A Driver must maintain his/her grid position until the starting signal has been given. Failure to do so may incur a penalty. The Starter will be in a position near the starting area. A driver not in his/her correct grid position should signal by raising his/her hand above his/her head. The field will complete approximately one or two full formation laps before the start signal will be given. It is the driver's responsibility to maintain his/her grid position and the Starter is not obligated to allow additional formation laps to allow a driver who lost his/her place to regain his/her position.

The practice of weaving to warm tyres during the first rolling lap is permitted.

The driver on pole position under direction of the Starter shall set the speed at which all competitors shall approach the starting area in anticipation of the start signal.

The Starter will give the start signal as soon as he is satisfied with the formation.

### **Re-Starting**

Under no circumstances is a driver permitted to re-start after the commencement of racing. This includes qualifying. Failure to adhere to this rule will result in exclusion from that qualifying session or race.

### **Racing**

RKA encourages hard but fair racing. Unnecessary contact will not be tolerated and will be penalised. Please always remember the many hours and dollars you have spent on your kart but also that of your fellow competitors. As we all know some original parts are nearly impossible to replace on karts of this era and we would all like to take our equipment home in the same manner it arrived. On track incidents will be dealt with by the Clerk of Course/RKA.

The RKA officials reserve the right to apply any penalty.

### **Change of Chassis**

Change of chassis shall be permitted if after the inspection by RKA the original chassis is deemed beyond repair.

## Clarifications

A driver whose kart fails to comply with the technical regulations after finishing a heat or final, is classified as a disqualification (DNF) for that race and may be subject to further penalties.

If a race is red flagged after 3/4 completed, finishing results will be taken from the last full lap completed.

Race day issues can be brought to the attention of the RKA appointed Clerk of Course. Under no circumstances are RKA organisers to be approached with race day issues by anyone other than staff appointed by RKA. If you have an issue on race day please see the Clerk of Course only. The Clerk of Course may approach RKA organisers if he/she sees fit.

Remember RKA organisers are racers too and want to enjoy racing.

## RKA F100 Series Points System

### Pre-Final

1<sup>st</sup> 50 2<sup>nd</sup> 46 3<sup>rd</sup> 43 4<sup>th</sup> 40 5<sup>th</sup> 37 6<sup>th</sup> 34 7<sup>th</sup> 32 8<sup>th</sup> 30 9<sup>th</sup> 28 10<sup>th</sup> 26 11<sup>th</sup> 24 12<sup>th</sup> 23 13<sup>th</sup> 22  
14<sup>th</sup> 21 15<sup>th</sup> 20 16<sup>th</sup> 19 17<sup>th</sup> 18 18<sup>th</sup> 17 19<sup>th</sup> 16 20<sup>th</sup> 15 and so on.

### Final

1<sup>st</sup> 150 2<sup>nd</sup> 138 3<sup>rd</sup> 129 4<sup>th</sup> 120 5<sup>th</sup> 111 6<sup>th</sup> 102 7<sup>th</sup> 96 8<sup>th</sup> 90 9<sup>th</sup> 84 10<sup>th</sup> 78 11<sup>th</sup> 72 12<sup>th</sup> 69 13<sup>th</sup> 66  
14<sup>th</sup> 63 15<sup>th</sup> 60 16<sup>th</sup> 57 17<sup>th</sup> 54 18<sup>th</sup> 51 19<sup>th</sup> 48 20<sup>th</sup> 45 and so on.

Points for the overall series are allocated from the finishing position of the Pre-Final & Final only at each event.

Combined points over all rounds will determine the RKA F100 Series champions in both Light and Heavy categories.

The green number 1 plate will be allocated to the Series Winner. The winners of the Series will be permitted to run the green number 1 plate for the following year. Winners have the choice, and may choose to run the green plate with their own number rather than the number 1.

DNF and DNS will receive 0 points.

RKA reserves the right to deduct points for various infringements.

## RKA F100 Technical Rules

Owners of F100 karts please note that we have considered all the opinions on the regulations regarding chassis. As a group we are allowing karts homologated or first manufactured in 1999. This extension of the rule outside the 90's allows us to attract a bigger range of available karts.

**A chassis can be repaired but must maintain the original main chassis rails and cross bars. Any attempt to re manufacture a chassis to use at an RKA event is forbidden.**

**The stub axles must maintain a maximum diameter of 17mm. The king pin diameter must be as per original size. The only permissible method of camber / castor adjustment is by eccentric sleeves on the king pin.**

One chassis is to be used at a race meeting, with the exception that another kart may be used in exceptional circumstances e.g. unavailable parts after a crash, or a broken chassis. It will be an 'ask the field' decision.

100cc air cooled reed and rotary valve kart engines 1999 and before, and must be homologated. Original stroke and number of ports must be maintained. **The reed block maximum size is 68mm (as per picture attached below)**



In addition to engine regulations, maximum of 103cc. It must be a homologated engine, and the only way it can be 103cc is by an increase in bore size due to its age. The formula used is 'bore x bore x .7854 x stroke'.

The carburettor must be 24mm maximum at the venturi, Butterfly operated, 2 or 3 jet, and be manufactured before 2000.

Weights. RKA F100 Light = 148kg and RKA F100 Heavy = 165kg.

**Any additional weight that is added to the kart must be attached to the Chassis (NOT Floor pan) or Seat ONLY and must be fixed using an 8mm bolt, washer and nylon lock nut. One bolt is required per 2kg of weight.**

A model kart that was homologated or manufactured prior to 2000 is acceptable, even if the manufacture date is after 1999.

Airbox or induction silencer is compulsory. The airbox must be 90's style unless the track is declared wet, then the airbox is free.

A chain guard to prevent finger injury is compulsory.

### **Brake Actuation**

- **By Hydraulic Hose (Hydraulic Brake System)** – MUST use Metallic Fittings
- **By Cable (Mechanical Brakes)** – the Cable MUST be a multi-strand steel wire of at least 2.25mm diameter.
  - Must be fastened by a machine swaged fitting; or
  - By a mechanically positive method which cannot cut or fray the wire.
  - Electrical type connectors used for this purpose are not permitted.
- **By Rod** – MUST be solid steel.
  - Must have a diameter of at least 6.0mm with cut threaded ends.
  - Must have a diameter of at least 5.0mm with rolled threaded ends.

- May include an aluminium joiner with a minimum diameter of 9.0mm

**- Redundancy - SAFETY CABLE**

Whatever form the brake actuation takes, a secondary safety cable between the pedal and the master cylinder must be fitted. A Safety Cable is mandatory and must be at least 1.7mm diameter.

- This secondary safety wire must allow emergency brake actuation in case of failure of the primary actuation method.

**TYRES**

Dry weather tyres are restricted to the **MG Yellow with the GREEN barcode.**

**(Please note that for the 2021 Season ONLY the MG Yellow with the White barcode may still be used also)**

**ONLY One set is allowed per race meeting.**



**MG Yellow with GREEN barcode to be used from the start of the 2021 series onwards**



**MG Yellow with WHITE barcode CAN still be used for the 2021 Series ONLY**

Wet weather tyres are restricted to MG White only and must be the new pattern as per pic below. One set per meeting. If the track is declared wet it is then the decision of the driver if he/she wishes to run wet weather tyres.



Side pods, nose cone and nassau panel are compulsory. Must be visually period correct. CIK 02 and before bodywork is requested to be used.

Brakes must be mounted in the original position. The disc must be original width and diameter. Brand and manufacture date are free.

Race numbers must be shown on the front and rear of the kart. Side numbers are optional.

Engines and carburettors will be checked and measured when possible depending on staff and individual race meetings. RKA reserves the right to check engines and carburettors at any time. Competitors are encouraged to use all original kart components where possible. While not enforced, we should all endeavour to maintain this series for the preservation and racing of 90's karts and the spirit of its intent.

Recording of data and dash instrumentation is free.

Exhaust system must be assembled using a header pipe and a muffler, and connected with flex.

## FUEL

**F100 fuel** - is restricted to an octane level no greater than RON 102, Oxygen content of 3.80% and must be either commercially available or fuels which have been developed specifically for Motorsport. These specialist fuels must be available for purchase without restriction via motorsport retail operations, or direct from wholesaler. --

### **NO METHANOL OR SPECIAL BLENDS ALLOWED**

#### **Leaded Fuel**

- The use of leaded fuels is now banned for use in all forms of motorsport in Australia.

#### **Pump Fuel RON 98**

- Purchased from retail petrol/service station bowzers of commercial fuel suppliers.

- For the avoidance of doubt this means the fuel must be available for sale on demand from a roadside bowser outlet in at least 4 Australian states or territories.

- Only fuels which have been approved by Retro Karting Australia and listed under the current technical regulations are permissible for use during an official RKA sanctioned event.

#### **Other Fuels**

- Fuels which have been developed specifically for Motorsport, and available for purchase without restriction.

- Only fuels which have been approved by Retro Karting Australia and listed under the current technical regulations are permissible for use during an official RKA sanctioned event.

- Additives including octane, oxygen or any performance boosting agents not specified in the manufacturers MSDS documentation are strictly prohibited.

#### **Lubricants**

- The use of 2-Stroke engine oils are to be used at Retro Karting Australia sanctioned events. It is suggested during an event engine oil being used should originate from the bottle which is labelled, and from packaging no greater than 2ltrs. 2-Stroke engine oil must be as supplied by the manufacturer.

## **Safety Apparel**

**Driver Requirements:** Drivers must wear the following protective apparel whilst operating a Kart:

Helmet                  Gloves                  Driving Suit                  Driving Boots

The use of the following items is highly recommended:

Neck Brace                  Rib and/or Chest Protectors                  Kidney Belt                  Ear Plugs

Long hair must always be securely retained, it cannot be retained within the Helmet. Retention within the following is permitted:

Hair Net                  Hood                  Balaclava                  Driving Suit

- Cool suits are permitted, however they must be fully sealed and self-contained wholly within the Driving Suit.

- The retention of any Weights, or item deemed by the Chief Scrutineer as Weights, within any protective apparel or attached to the driver's body is not permitted.

- The use of any type of glass in any apparel or item worn by the driver is not permitted.

- It is not permitted to wear any type of garment (other than wet weather protection) over a Driving Suit at any time whilst a Kart, including any Vintage Kart, is on a Race Track.

## **Helmets –**

- Helmets must be fitted and worn according to the manufacturer's instructions. At all times be fit for purpose and safe for use in Competition. Be of the 'Full Face' type and not use 'Chin Cups'. Not be used if they are more than ten (10) years after their date of manufacture. Bear a label indicating they comply with at least one of the following standards:

AS/ NZS1698 o ECE-2204                  ECE-2205 and ECER-2205                  Snell SA2010, SAH2010, K2010, SA2015 (Not permitted after 31/12/2023)                  Snell K2015                  Snell-FIA CMR2007, CMS2007, CMR2016, CMS2016                  SFI Specific 24.1                  FIA 8860-2004, (Not permitted after 31/12/2020)                  FIA 8860-2010, FIA 8859-2015

- Competitors are cautioned against using a helmet which has been damaged, or involved in an accident.
- Modification of any Helmet from its manufactured specification is not permitted, unless done in compliance with instructions approved and supplied by the manufacturer
- It is advised that painting or use of solvents on helmets could be potentially dangerous. Any decorations or stickers may damage the protective capacity of the Helmet and if applied should follow the manufacturer's guidelines and restrictions. e)
- Visors must be used and attached to the Helmet at all times, Be as supplied by the Helmet manufacturer, Protect the eyes and face at all times, Protect any prescription glasses or contact lenses, if these are needed by the Driver, Always be optically clear, Be either non-tinted or specifically a 'Night Visor', for any Competition conducted after official sunset. Visors may be modified to accept a spinning rain deflector.

#### **Driving Suit:**

- Driving suit must be a one-piece protective item of clothing, have full length sleeves and trousers and be adequately secured at the neck, wrists and ankles.
- Driving suits using leather, vinyl or abrasive resistant materials are highly recommended.
- Boiler suit type overalls with 'POP' type buttons are not permitted.
- Drivers must wear only one (1) driving suit at any one (1) time.
- When the Track has been declared 'Wet' by the Officials, clothing providing wet weather protection may be worn over an approved driving suit. Any such clothing must be adequately secured at the neck, waist, wrists and ankles, if applicable, and must not have any protrusions.

**Gloves** - Gloves must be securely fastened at the wrist. Provide full finger protection. Be resistant to abrasion.

**Shoes** - Shoes must be securely fastened and must cover and provide protection to the ankles. Shoes must also be resistant to abrasion.

**Pit Crew Apparel** - It is the Competitors responsibility to ensure any pit crew are suitably attired, including closed in shoes.

**Race clothing, race suit, helmet, race gloves and race boots must be worn during practice and racing. All race clothing should be designed for competition use and be in good condition.**

**A full-face helmet is compulsory, and must be in good condition with no visible damage. A clear visor must be used for racing under lights.**