



2023 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

F100 Light = 148kg F100 Heavy = 165kg

F100 Light & 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 **both practice days** and 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 are to be made via the link provided in the Supplementary Regulations.

Entries close one week prior to the event date or the date set by the Race Secretary for each meeting. A late entry fee of \$50 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. 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 contact the Race Secretary at racesec@retrokartingaus.com.au to see if the number you wish to use is available. For all Chassis ID and registration please contact Aaron Jackson via email at kartid@retrokartingaus.com.au or please check our website at www.retrokartingaus.com.au

Please Note: You cannot race at an RKA 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 risk being excluded from the event.

Qualifying

All Karts MUST compete in qualifying. A driver and their 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.

If “Force Majeure” and qualifying is to be cancelled, then grid positions will be determined by either Series Points to date or via Random Grid Draw.

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 Committee & Stewards 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' (when allowed) 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 or **"Force Majeure" rule if needed.**

The Pre-Final starting positions are determined by a points system accrued during the heats.

The points system used for the heats will be 1st 0 Points, 2nd 2 Points, 3rd 3 Points, 4th 4 Points etc.

The driver with the lowest total points scored from the heats will start the Pre-Final from Grid position 1 and so on. Should competitors have equal points after the heats, their Pre-Final grid position will be determined by the competitor with the faster qualifying time.

Starting positions in the Final will be determined by the Pre-Final finishing order.

Trophies/Prizes to be awarded based on the finishing order of the Final (Pending any Penalties that may be applied)

Starting

A Driver must maintain their 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 their correct grid position should signal by raising their hand above their head. The field will complete one or two full formation laps before the start signal will be given. It is the driver's responsibility to maintain their grid position and the Starter is not obligated to allow additional formation laps to allow a driver who lost their place to regain their 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 **(Approximately 50% of Race 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 Stewards. The RKA officials/Stewards reserve the right to apply any penalty.

Change of Chassis

Change of chassis shall **only** be permitted if after the inspection by the RKA **Committee** the original chassis is deemed beyond repair **or damaged components cannot be changed/sourced**.

Clarifications

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

If a race is red flagged after 3/4 **race distance has been** completed, the finishing results will be taken from the last full **racing** 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 they see fit. Remember RKA organisers are racers too and want to enjoy racing.

Track declared "WET":

If the track is declared wet it is then the decision of the driver if they wish to run wet weather tyres. Wet weather tyres are restricted to the MG White only and must be the new pattern (See Tyres). Only one set of wets per meeting can be used.

If the track is declared wet, an external cover/guard (ie. Bucket) may be fitted over the airbox in a manner to prevent/reduce water ingestion.

If the track is declared wet, Hot Rods **MAY** be used but **ONLY** when wet weather tyres are fitted to the kart.

RKA Series Points System

Attendance Points: Each round a driver competes in will attract 50 bonus points per round and per class

Qualifying: The fastest qualifier in each class will receive 5 bonus points.

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

Pre-Final

1st 100 2nd 92 3rd 86 4th 80 5th 74 6th 68 7th 64 8th 60 9th 56 10th 52 11th 48 12th 46 13th 44
14th 42 15th 40 16th 38 17th 36 18th 34 19th 32 20th 30 and so on.

Final

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

Points for the overall series are allocated from the attendance points & finishing position of the Heats, Pre-Final & Final at each event. In this 5-round series, a Drivers 4 best round results will be added together along with their attendance points from ALL five rounds to determine the RKA Series champions in the Light & Heavy categories. If you attend all 5 rounds you keep the attendance points from all 5 rounds even though the race points will be from your 4 best rounds.

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.

Each DNF, DNS & DSQ will receive 0 series points.

RKA reserves the right to deduct points for various infringements.

RKA F100 Technical Rules

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.

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

Only 100cc air cooled reed and rotary valve kart engines **manufactured in 1999 or before are to be used**, and must be homologated. Original stroke and number of ports must be maintained.

Maximum capacity is 103cc, and the formula used to calculate this is 'bore x bore x .7854 x stroke'.

For reed valve engines, the reed block maximum length is 68mm (as per picture attached below)



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

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.

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

Airbox or induction silencer is compulsory. The airbox must be 90's style.

A chain guard to prevent finger injury is compulsory.

Stub Axle/Steering:

The stub axles must maintain a maximum **shaft** diameter of 17mm. If front hubs are fitted the maximum bearing size is to be 17mm and the hubs are to be non-adjustable. **Stub Axles can be remanufactured but MUST be to original specifications.**

The king pin diameter must be as per original size. The only permissible method of camber/caster adjustment is by eccentric adjusters that are fitted to the C section (**No modern Tony Kart style multi-hole adjusters**). Top and bottom adjusters are allowed. Lower adjusters can be fitted to karts that don't have them to be able to make karts handle on modern day tyres. No other form of caster / camber adjustment is allowed within the stub axle. For karts with the C section as part of the stub axle the adjusters may be fitted as per original and lower adjusters can be fitted.

A Steering Column safety locking ring is mandatory.

Brakes:

- Brakes must be mounted in the original position and be acting on the rear axle only.
- Self-adjusting brakes are NOT permitted unless they were fitted to the specific chassis by homologation/manufacture. Period style brakes are requested.
- The disc must be original width and diameter. Brand and manufacture date are free.
- 4 spot callipers may ONLY be used on karts that originally had them fitted. If a kart came out with 2 spot brake callipers, then a 4-spot calliper CANNOT be fitted.

Brake Actuation

- **By Hydraulic Hose (Hydraulic Brake System)** - MUST use Metallic Fittings
The brake 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
- **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.
- **Redundancy - SAFETY CABLE** - secondary safety cable between the pedal and the master cylinder (hydraulic brake), or the pedal and calliper (mechanical brake) 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 (SM)

ONLY One set is allowed per race meeting.



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 they wish 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.

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

Recording of data and dash instrumentation is open.

Weights. RKA F100 Light = 148kg 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.

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.