



LE MANS 24HR

Pro Karts – Technical Regulations

Teesside Karting Le Mans 24-hour owner driver Pro Kart Regulations. This event will operate in accordance with the rules and regulations as laid out and the sporting rules supplied as an accompanying document.

Kat Franklin
Race Organiser

Teesside Karting Le Mans 24-hour owner driver Pro Kart Regulations. This event will operate in accordance with the rules and regulations laid out in this document. Any changes that are made to this document will be published by means of supplementary regulations that will be posted in the event noticeboard.

General notes.

1. Pro Kart – A manufactured kart chassis purpose built to run with two Honda GX200 Extreme sealed engines that have been supplied [solely] by RPM.
2. Weights – Pro Karts must meet a minimum weight limit as defined in these regulations – this is the weight for the kart plus the driver and equipment at any time.
3. Class regulations – The regulations for the Pro Kart Class and the additional sub-classes will be laid out and approved by the Motorsport UK.
4. Technical Regulations – 2022 regulations as laid out in this document have been agreed with Teesside Karting and Motorsports UK Karting for 2022.
5. Measurements – where tube dimensions are quoted in metric units, the imperial equivalent is also acceptable.

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| P.1.0 | Group | Pro Kart |
| P.1.1 | Class | Pro Kart |
| P.1.2 | Affiliation | RPM Race Engines |
| P.1.3 | Introduction | This class aims to offer affordable high performance racing kart racing class combined with low running cost and low noise levels. The class has evolved over the last 30 years and will continue to evolve to ensure the safety of drivers, fairness of competition, economy and the wishes of the competitors. |
| P1.4 | Chassis | |
| P1.4.1 | | Wheelbase 1040-1080mm |
| | P1.4.1.1 | Chassis must be manufactured by a recognised manufacturer |
| | P1.4.1.2 | Chassis must be in good condition with no cracks |
| | P1.4.1.3 | Chassis must be of a one-piece construction |
| P1.4.2 | | All chassis will be inspected and sealed during pre-race scrutineering |
| P1.4.3 | | Teams may only scrutineer ONE chassis for the race. If damage occurs, the chassis may be substituted at the discretion of the scrutineer, provide the second chassis passes scrutineering. |
| P1.4.4 | | Body Work. All chassis must be fitted with side pods, nassau panel, nose cone and rear bumper. |
| P1.4.4.1 | | Side pods should not be filled with any medium |
| P1.4.4.2 | | If body work becomes damaged during an event, the scrutineer may require that it be repaired or replaced before continuing to race. |
| P1.4.4.3 | | Number Plates must be fitted to the nassau panel, side pods and the rear of the kart and be always clearly visible to officials. Numbers and backgrounds will not be supplied by the organisers. Numbers should not form part of a design and be clear and contrasting against the background. Colours for both numbers and backgrounds is defined in the competition regulations. |
| P1.4.4.4 | | Competitors may decorate bodywork and apply sponsors names, there are no restrictions on this as long as it does not cause offense or break advertising rules. |
| P1.4.5 | | An extended width rear bumper is mandatory. The bumper is to be constructed from a minimum 25 mm nominal diameter 14g magnetic steel tube. The bumper must form an extended loop of 180 mm +/- 10 mm centres with the bottom loop centre 60 mm +/- 10 mm from the ground in dry configuration. The horizontal rails must be wider than the outer chassis rails. The bumper must be supported in a minimum of two places from the chassis and be of such a construction to withstand substantial impact. Inside view the bumper will be in the vertical plane. The overall width of the bumper must not exceed the rear width of the kart at any time; The measurement to be taken at the outside of the rear wheel or tyre, whichever is the greater and must cover a minimum of 50% of each rear wheel/tyre at all times. Adjustable width bumpers are not permitted. (Illustration available from organisers). |

- P1.4.5.1 The organisers will allow a new “lightweight plastic bumper” CIK RS3 which is fitted inside chassis rails with rubbers.
- P1.4.6 The front bumper must also be of strong construction. A Nassau of suitable construction and fixing must be attached.
- P1.4.7 The type and construction of the seat is free so long as it is mounted in the originally intended position, of sound and rigid construction and securely mounted, with seat washers if required.
- P1.4.8 Special modifications will be permitted to allow use of hand controls to enable disabled drivers to compete.
- P1.5 **Engine** GX200 RPM Extreme engines must be sealed by RPM, this seal must be placed at all times if the seal is tampered with or missing this will render the engine illegal.
- P1.5.1 2022 engines regulations all engines to come with one seal and an electronic logbook, that is accessible at all times by the scrutineer.
- P1.5.2 Seal number will be required on a scrutineering card along with the engine number. Engines will be verified where required, by the supplier, and only the supplier or scrutineer can remove seal for inspection purposes.
- P1.5.3 Substitution or complete removal of the renewable paper/foam air filter. All of these modifications are clarified in the RPM Honda GX200 Technical Regulations.
- P1.5.4 Separate return springs must be fitted to each carburettor and to the throttle pedal, each acting independently. A linkage may be manufactured to actuate the standard Honda throttle. This may include fitting additional return springs.
- P1.5.5 It is the team’s responsibility to ensure that all plastic, rubber and nylon engine and fuel components are in good condition and operating in the manner for which they were designed.
- P1.5.6 Integral fuel tanks are not permitted, a floor mounted 7.5l fuel MUST be fitted
- P1.6 **Modifications** Neither the engine or its ancillaries may be modified in any way. “Modified” is defined as any change in form, content or function that represents a condition of difference from that originally designed. This is to include the additional and/or omission of parts and/or material from the engine assembly. UNLESS IT STATES THAT YOU CAN DO IT, YOU CANNOT!! Filing, grinding, polishing, surface treating, machining, or lightening of any component is forbidden unless otherwise stated. The addition of material to any component is not allowed unless otherwise stated.
- P1.7 **Carburettor.** As supplied by the engine builder
- P1.8 **Fuel Pump** – a pulsed pump[s] must be fitted.
- P1.8.1 Fuel pipe must not be no more than 5.3mm in diameter and must take direct route to the carburettor and be safely secured. One engine may have an extra loop of fuel pipe no more than 20cm longer than the direct route and/or return to the feed to the fuel tank.
- P1.8.1 One in-line fuel filter of nominal capacity may be fitted per engine.
- P1.9 **Exhaust System** Standard as supplied with the engine, the addition of an exhaust cover is allowed as supplied by RPM.
- P1.10 **Cooling system** – air cooled
- P1.11 **Spark Plug** – as supplied from RPM
- P1.12 **Axel.** 30mm hollow or solid magnetic metal only.
- P1.12.1 No differential of any type is permitted.
- P1.12.2 Unless two securing bolts are fitted to the hubs on the rear axle, a circlip must be fitted on each axle end to prevent accidental loss of the hub. Any hub with an overall length, excluding wheel studs, of less than 60mm must not overhang the rear axle
- P1.13 **Brakes.** One hydraulic brake should be fitted to the rear axle only. The brake disc must be made of metal but can be vented and drilled / slotted. A calliper with a maximum of four pistons may be used. Additional air ducting to the rear brake is permitted but must be securely attached.
- P1.14 **Gearing.** Gearing will be: 20/22 tooth clutch with axle sprocket size(s) being specified in SRR’s or final instructions. Clutch MUST be a Noram Magnum Clutch.
- P1.14.1 Drive is via a 219-pitch chain – one from each engine.
- P1.14.2 **Sprocket.** Only one sprocket may be fitted to the rear axle for each engine. All chains must be adequately protected at all times. The top of the clutch, the chain and axle

- sprocket and gear must be covered from above down to the centre line at the rear axle sprocket. Sprocket protectors may be used but not have additional teeth.
- P1.15 **Tyres.** Only DUNLOP SL1A SLICKS tyres will be allowed, Front 4.5 x 10 x 5, Rear 7.1 x 11 x 5. The competition tyres to be supplied by the designated agent.
- P1.15.1 All tyres will be supplied with a barcode number which **MUST** be recorded on your scrutineering card. These will be allocated via a tyre draw and scanned, tyres can be checked/scanned at any point during the race.
- P1.15.2 **Tyre allowance.** 3 sets of four tyres are allowed. This includes the tyres used for qualifying and the duration of the race.
- P1.16 **General**
- P1.16.1 **Weight** – 185kg – kart plus driver [including equipment] at all times.
- P1.16.2 Minimum weight of kart and driver must not be less than that stated, at any time. This will be checked during both qualifying and race.
- P1.16.3 Ballast may be added to the kart, with no more than 6kgs per weight post. A maximum of 12 kg on 2 posts is allowed per side of the seat with each piece of ballast must be restrained by at least 1 retainer.
- P1.16.3.1 Any ballast carried in the seat up to a maximum of 4kgs must be restrained with a minimum of 1 heavy-duty nylon cable ties. Where a smaller seat is inserted into the main seat, it must also be retained with a minimum of 1 heavy-duty nylon cable tie at the top of the fixed seat. Sheet ballast in excess of 4kg (and up to a maximum of 15kg including inner seat) must be fixed to the rear of an inner seat in such a way that its shape follows the contour of the inner seat and does not impede the fitting of the inner seat to the outer seat. The sheet ballast must be firmly and permanently fixed to the inner seat at the top, centre, and bottom of the ballast sheet.
- P1.16.3.2 Any other arrangements for ballast fixing must be to the scrutineer's satisfaction.
- P1.16.4 **Kart illumination** – any lights fitted are subject to consultation with the scrutineer or COC. If lights are fitted, they must not flash or in any other way be distracting to other drivers and have a secure fitment. No rear lights are permitted. Lights must not be Yellow/Red or Green.
- P1.17.3 **Number Plates** – Sub-classes – Elite Yellow background with black numbers
Pro Red background with white numbers, Club Black background, and white numbers. Numbers must not form part of a design and must be of the recognised size and shape for karting.
- P1.18.4 **Age.** The minimum age for this event is 16 years old and above.
- P1.19.5 **Non-Technical Items** – All fuel is supplied by the organiser and No additives are permitted.
Timing is by way of a transponder fitted to the kart, this must be fitted to the back of the seat by way of a bracket or a minimum of two nylon cable ties
- P1.20 **Data logging** – a data logger maybe fitted to the kart steering wheel; this must be fitted in a way that is secure. An RPM lead maybe fitted to the switch or spark plug of one engine an magnetic pick up may also be fitted to the floor tray.
- P1.21 **Radios** Drivers are permitted to be used however, CLIP ON / STICK ON ONLY and NO BOLT ON's are allowed.
- P1.22 No camera maybe fitted to the kart or driver unless supplied by the organiser

Additional Information

- AI 1. Karts must be recognised Pro Karts and have originated as a Pro Kart, by the manufacturer's definition and specification.
- The kart must satisfy the scrutineer that it is safe, is of a construction strong enough, and has brakes, wheels and steering adequate for speeds likely to be attained.
- The kart should not include any components of a temporary character, nor present any undue hazard to its driver or other competitors.
- The chassis must be of one-piece construction, either brazed or welded. It must be constructed from magnetic steel tubing whose cross section is free. No form of chassis

frame control such as pivots, dampers or similar devices is permitted. Except for those required for seat fixing, no additional holes may be drilled in the rolling chassis, whether for lightening or any other purpose.

A1.2 Fuel caps and systems will be checked during scrutineering and/or refuelling and if found to be loose or defective must be replaced/repared before the team is permitted to race.

A1.3 Any kart damaged or that breaks down on the circuit during an event MUST be returned to the designated pit area for repair and MUST be checked before being allowed to re-enter the race.

On being removed from the racing circuit, the kart must be weighed and presented to scrutineers before proceeding to pit for repairs. Repairs may only be carried out within the designated pit area. This will be identified at the event during drivers briefing.

Such checks will place emphasis on the safety of the kart in respect of securely fitted bumpers, seat and other equipment, such as bodywork etc.; freedom from sharp protrusions which could cause injury or damage; and correct operation of the brake/throttle/steering.

A1.4 At the discretion of the scrutineer, a team may replace a chassis in the event that the kart is beyond reasonable repair. Please note that teams will only be permitted to use another chassis once the scrutineer has inspected the damaged kart and confirmed that the replacement chassis is in fact a 'bare' chassis. Please report all changes, this remains the sole responsibility of the team manager. Failure to do so will result in exclusion.

A1.5 Engine Buy Back will not be in play at this event; however; the race organisers reserve the right to remove any engine that performs outside of the normal 'expected' parameters for this class. This engine will then be taken away and scrutineered by the engine builder in the presence of the organiser. Any discrepancies will be rectified at the cost of the team. The engine will not be returned until any balance is settled.