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Karting Yearbook

2022

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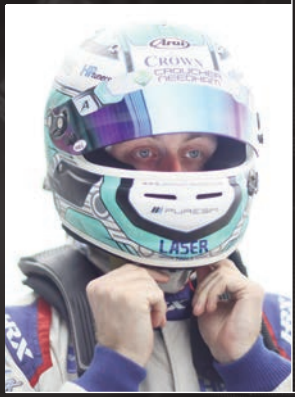

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Motorsport UK Karting Yearbook 2022

25th EDITION

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Introduction

Welcome to the twenty-fifth (2022) edition of the Motorsport UK Karting Yearbook. We hope that all users will find it helpful and informative. This yearbook is reviewed and revised each year and with an agreed intention towards an inbuilt stability. Regulation changes from the previous year are shaded. Hard copies may be obtained from Motorsport UK at £19.00 each including postage and a digital copy can also be downloaded from www.motorsportuk.org. We welcome all practical suggestions for the next issue which should be directed to Motorsport UK.

How to use this book

General competition, technical and safety regulations remain in the Motorsport UK Yearbook (Blue Book) which must be referred to in conjunction with the regulations herein and which takes precedence. Full details of international regulations are contained in the FIA Yearbook of Karting Sport which should also be referred to for applicable classes. Competitors intending to enter International events or classes should familiarise themselves with the FIA Yearbook of Karting Sport, which can be accessed at www.fiakarting.com, and ensure up to date compliance.

This document has been compiled using the best available information. Motorsport UK accepts no responsibility for any errors or omissions.

General notes

1. **Silencing**. Sound level requirements for karting in the UK are constantly under review. Competitors should ensure that their equipment conforms to the levels defined in the Blue Book or as amended by venue local requirements. Where appropriate, additional regulations are given in Appendix 3.

2. **Weights**. All classes show minimum weights and these are defined as the minimum weight for the kart plus driver and equipment (race condition) at any time (see (U)17.29). If Motorsport UK approval is given on application for a Kart Technical Exception (KTE), then Clubs may amend class weight limits upwards in accordance with (U)17.29.

3. **Class Regulations**. Queries on the class regulations should be sent in the first instance to the class owner, as shown in the 'Affiliation' section of each class.

Clubs must apply to Motorsport UK for the issue of a KTE for any proposed changes to the published class regulations. The addition of a sub-class within a class is also subject to the approval of Motorsport UK by issuance of a KTE.

All clubs must specify the classes they offer in their supplementary or championship regulations with a reference to the Motorsport UK Karting Yearbook and any other association's regulations, and have a reference to the source of the class regulations if found elsewhere e.g.

"TECHNICAL REGULATIONS. Motorsport UK 2022 specific karting technical regulations apply together with the 2022 (insert association) regulations within the 2022 Motorsport UK Karting Yearbook and the SRs for the meeting.

"ELIGIBLE CLASSES: All Motorsport UK Karting Yearbook classes plus 'xx' and 'yy' are offered, except that Formula 'zz' is not offered. The regulations for all classes offered may be found in the 2022 Motorsport UK Karting Yearbook. Additionally, Formula '??' is offered under Motorsport UK Yearbook regulation U1.1.3, the class regulations are available from: (name and address of class promoter).'

4. **Measurements**. Where tube dimensions are quoted in metric units, the imperial equivalent is also acceptable.

5. Categories and Classes ('Box Structure'). The table below details kart race categories and the classes available within those categories.

Classes appearing in the same box (right-hand column) may be combined or run together on the same grid. However, it is stressed that where a class is to be run off the same grid as another (for example due to low entry), the classes closest in performance should always be chosen and the class with slower lap times should always form the rearmost part of the grid.

Important note: The ages in the table are lower and upper limits for each category. Individual class regulations will define the specific age and licence requirements for entry and exit points within these limits.

Category	Age	Classes	
Non-Gearbox:			
Bambino	6-8	Comer Bambino	
Cadet	8-12	Honda Cadet IAME Cadet	
Mini	11-14	IAME X30 Mini X Rotax Mini Max	Junior TKM
Junior	13-16	IAME X30 Junior Formula Libre* Rotax Junior Max	
Senior	15+	IAME X30 Senior Formula Libre* Rotax Senior Max Senior TKM Extreme	
Gearbox:			
Junior	13-17	Junior Gearbox*	
Senior	15+	125 Open* 210 National* Superkart 250 Mono 450 4-stroke* KZ2	

** Class regulations as KTE (motorsportuk.org/resource-centre/#technical-kart).*

The following do not have their class regulations included in this publication, but are recognised by Motorsport UK as permitted kart classes. Class regulations can be found on the Motorsport UK website at motorsportuk.org/resource-centre/#technical-kart, or by contacting the relevant organisation as detailed. Details in many cases are included in the table above (*) to enable clubs to amalgamate with other classes. Where required, clubs and/or associations must ensure that the Motorsport UK Kart Technical Exception (KTE) approval is in place for the current year before including these classes in event regulations. Competitors should obtain confirmation from the event organising club that this approval is in place before submitting an entry.

Kart Clubman – contact Motorsport UK ☎ 01753 765000. motorsportuk.org/resource-centre/#technical-kart
Regulations as published, or Club to apply for a KTE for any variation.

Formula Libre – contact Motorsport UK ☎ 01753 765000. motorsportuk.org/resource-centre/#technical-kart
Regulations as published, or Club to apply for a KTE for any variation.

Classic (Formula Libre) – contact Motorsport UK ☎ 01753 765000. motorsportuk.org/resource-centre/#technical-kart
Regulations as published, or Club to apply for a KTE for any variation.

Junior Gearbox – contact Motorsport UK ☎ 01753 765000. motorsportuk.org/resource-centre/#technical-kart

210 National – contact 210 Challenge (www.the210challenge.co.uk)

6. Motorsport UK Karting Yearbook inclusion criteria.

Classes to be included in future editions of this publication will be required to comply with the following:

1. Core classes will be included (Appendix 6).
2. Participation at a minimum of 6 different circuits with a minimum of 4 different Championships (Club or other) in the preceding year
   and
3. Minimum of 50 unique competitors in the preceding year.
   and
4. Current Motorsport UK kart class homologation.

Notes:

- Classes eligible for inclusion in the Motorsport UK Karting Yearbook are eligible for special plates under U17.28.
- Motorsport UK reserves the right to include additional classes.
- Gearbox: A 125cc category and a 250cc (with 4-stroke options if available) will be included until further notice.

THE ROAD TRAFFIC ACT 1988/91

From 1 July 1992, the offences of dangerous, careless and inconsiderate driving of a mechanically propelled vehicle on a road (sections 1, 2 and 3 of the Act as amended by the Road Traffic Act 1991) also apply to a public place. The extension of road traffic law to public places has important consequences for those who take part or organise events involving motor vehicles in fields, parks or other areas where the general public is admitted either free of charge or on payment of an entrance fee.

The above offences do not apply to those taking part in 'authorised' motoring events when driving in a public place other than a road, provided they are driving in accordance with the appropriate authorisation for that event. Section 13A allows for the 'disapplication of sections 1 to 3 for authorised motoring events' and provides powers for The Motor Vehicles (Off-Road Events) Regulations 1995 which introduces a system for authorising events.

Motorsport UK is an 'Authorising Body' under these Regulations.

It is not illegal to organise or take part in an unauthorised motoring event in a public place, but drivers and riders should be aware that they are liable to prosecution if they drive dangerously or carelessly.

There are many kinds of motoring events. Different rules are appropriate to minimise risk to participants, spectators and other members of the public who may be present.

A precise definition of 'event' or 'public place' cannot be given. If there is any doubt organisers are advised to seek legal advice. Authorising bodies should consider whether the event requires drivers to drive dangerously. It is not the purpose of the Regulations to legitimise unnecessary dangerous driving, nor is it desirable to authorise an activity which is likely to be regarded as an event as this could give drivers a false sense of security.

It is not foreseen that courts would regard purpose built stadiums, where the public have no access to the place where the event is staged, as a public place.

Copies of the Road Traffic Act 1988 and 1991 and The Motor Vehicles (Off-Road Events) Regulations 1995 are available online at www.legislation.gov.uk

A1.0 Group Bambino

A1.1 Class Bambino

Affiliation Motorsport UK

A1.2 Introduction. Pre-Race training in Time Trial (TT) and Race (with experience) format for 6 to 8 year olds. Held on circuits specifically licensed by Motorsport UK for Bambino. Drivers must hold a Kart Clubman (Bambino) licence for Time Trial, or Kart Interclub (Bambino) for Race, which they can obtain from their 6th birthday and may continue in Bambino until the end of the year of their 8th birthday. Karts must comply with the Technical Regulations of the current Motorsport UK Yearbook section (U), except where detailed below. These Regulations are subject to periodic review and possible alteration. Organisers are urged to download the latest version prior to organising any Bambino Kart Event.

A1.3 Chassis. Motorsport UK registered Bambino chassis only, see Appendix 1 or motorsportuk.org/resource-centre/#technical-kart

A1.3.1 Materials. Carbon fibre, Kevlar, Magnesium, Ceramic and Titanium components are prohibited anywhere on the complete kart.

A1.3.2 Bodywork & Bumpers. As registered with the chassis. Fitment of the CIK detachable front fairing mounting kit is not a requirement. Bodywork must not be modified in any way, the fitment of a Go-Pro mount on the Nassau panel is permitted where regulations allow their use.

A1.3.3 Dimensions. At all times the rear bumper must not exceed the overall width measured to the outside of the rear wheels or tyres (whichever is greater), and the side pods may not be located outside of the plane passing through the outer edge of the rear wheel or tyre (whichever is greater). At all times there must be a minimum gap of 10mm between the sidepod and the engine starter cover.

The rear bumper must cover at least 50% of each wheel/tyre at all times.

Overall width at the rear: Maximum 1100mm.

A1.3.4 Steering. Camber/caster adjustment by any means is not permitted.

A1.4 Engine. Comer C50, the engine as raced must at all times conform in all aspects with the Motorsport UK homologation fiche. Compliance with the fiche may be checked at any time during an event. The engine numbers and seal numbers must match the information held on the UK agent's database and on the engine's official log book. All parts must be standard genuine Comer parts as listed on the parts list. The engine must be used with the exhaust cover fitted at all times.

To comply with Euro Environmental Regulations a new specification of engine will be available called C50Green (C50G) identified by green cylinder and crankcase seals and new parts in the Motorsport UK homologation fiche. The C50G package of cylinder, piston, crankshaft and exhaust can be fitted to existing C50 engines. All 4 C50G components must be used (except that C50G exhaust on its own can be used on C50 engine) and C50 crankcase must be fitted with a minimum of 1.00mm base gaskets. For C50G crankcase base gasket sizes are free. C50G engines identified by green seals cannot be fitted with C50 spec cylinder, piston, crankshaft and exhaust. The new C50G exhaust can be fitted to both C50 and C50G spec engines.

No addition of, or other change of material is permitted. No modifications, tuning or rectification to fiche for whatever purpose is allowed except as listed below or where expressly permitted by Motorsport UK:

(i) Repair of damaged threads with helicoils is permitted. The repair of the cylinder spark plug thread and/or coil mounting threads is not permitted.

(ii) The spark plug cap may be replaced by parts of other commercial manufacture and which must be directly equivalent.

(iii) The only spark plugs permitted are shown below; they must be unmodified and as supplied by the manufacturer, with sealing washer in place unless a temperature sensor is fitted, the minimum thickness for the temperature sensor is 1.4mm. The spark plug sealing washer must also have a minimum thickness of 1.4mm.

Permitted spark plugs: Bosch WS5F*; Bosch WSR7F; and Champion RCJ7Y.

* Bosch WS5F spark plugs with the colour green banding and lettering on porcelain casing of the spark plug are not permitted.

(iv) Gaskets may be trimmed for alignment of parts.

(v) If the meeting is declared wet, then a wet box (part no. ZED002) attached to the engine or chassis is permitted. The air box cannot be modified in any way to aid in the attachment of the wet box. The wet box may be modified on the open end to align with the engine contour and provide clearance for ancillaries. The wet box must be mounted in the vertical plane. In addition to the wet box a flat plastic plate of a size no greater than 22 x 22 x 0.5cm may be mounted on the chassis rails. This plate must not protrude rearward past the front engine mount. The plastic plate cannot be used without the wet box also being fitted.

(vi) The maximum length of fuel pipe from tank to carburettor is 260mm with a max OD of 9.75mm.

(vii) C50 and C50G engines must comply to a maximum ignition timing of 4.5mm before top dead centre measured with a DTI gauge. See Motorsport UK homologation fiche for measurement alignment point. The fly wheel key can be modified to achieve maximum timing.

A1.4.1 Carburettor. Dell'Orto SHA 12/14 L as per the current homologation fiche. The carburettor must remain unmodified and conform in all aspects to the official homologation fiche.

An intake restrictor, part no: C050-071, must be fitted at all times, as detailed on the current homologation fiche.

A1.4.2 Engine Lubrication. Any oil specified in the current CIK-FIA list of homologated lubricants, which can be found at www.fiakarting.com.

A1.4.3 Engine Price. The retail price of the engine, when new, including carburettor, ignition, drive sprocket, clutch, ignition, intake restrictor and exhaust, when sold in the U.K. will be £573.70 + VAT. This price may be subject to a yearly increase as agreed with Motorsport UK.

A1.5 Transmission. Direct from the engine to the axle via a single length of chain. Only an 80 tooth rear sprocket may be used, unless a single other size of sprocket is specified in SRs. The internal running surface of the clutch must remain dry and free of grease, lubricant or any additional substance.

A1.5.1 Axle. As registered with the chassis. Must be fitted with circlips on the ends of the axle.

A1.5.2 Chain/Sprocket Guard. A chain/sprocket guard complying with U18.8.5 must be fitted.

A1.6 Brakes. As registered with the chassis. Mechanical system with solid disc acting on the rear axle only. Interruptions on the brake surface (drilling, grooves, slots, etc.) are permitted, radially vented discs are not permitted. A dual-linkage (secondary cable) must be fitted at all times.

A1.6.1 Brake Disc Protector. Where required by the regulation, a brake disc protector in accordance with U16.10.10 must be fitted.

A1.7 Tyres. Le Cont MSA 04, all-weather tyres.

Front: 10 x 4.00 x 5, Rear 11 x 5.00 x 5.

Maximum tyre circumference: Front 820mm, rear 840mm.

The minimum tyre treads depth is 1mm at any point.

A1.7.1 Wheels. Widths measured from outside edges:

Front: 100mm min. and 115mm max.

Rear: 140mm ± 2mm.

The stub axle must not protrude beyond the outside edge of the front wheel.

A1.8 General.

A1.8.1 Age. From 6th birthday to 31st December of the year of 8th birthday, subject to the conditions of U1.7 for TT and U1.7.1 for Racing. Having moved to the Cadet Category, a Competitor may not revert to Bambino.

A1.8.2 Weight. Minimum 69kg, including the driver for TT events.

Minimum 71kg, including the driver for Race events.

A.1.8.3 Number Plates. Black with white numbers (see U17.27). The numbers must be of the 'Classic' type described in U17.27.3. Exceptionally, competitors registered with Motorsport UK Bambino Championship (time trial or race) may use plates complying with those Championship Regulations.

A.1.8.3.1 Side pod number plates/stick-on panels must be a minimum of 16.5cm high by 7.8cm wide, with a minimum 1cm space on all sides of the numbers. Numbers must be a minimum of 13cm high, and minimum 1.5cm stroke width. They must be displayed in accordance with drawing U17.25 of Motorsport UK Yearbook section U.

A.1.8.4 Data Logging. The use of data acquisition is forbidden apart from the collection of engine RPM and temperature, GPS and lap time data only. Any sensors not permitted by these regulations must be removed from the kart.

B1.0 Group Cadet

B1.1 Class **Cadet** (general regulations)

Affiliation Motorsport UK

B1.2 Introduction. Racing class from 8 years of age – or year of 8th birthday with defined experience – with maximum retail prices for basic chassis and engine. Chassis, brakes and engine are homologated with Motorsport UK. Details of homologation requirements are available from Motorsport UK.

B1.3 Chassis. Motorsport UK homologated Cadet chassis only. The chassis must remain as homologated in all respects and may only be subject to Motorsport UK approved modifications for safety reasons. A chassis manufacturer will be permitted to homologate one chassis model for any three year period and homologations will last for a total of three successive periods (nine years). The current homologation period for chassis and brakes commenced 1.1.2020; the next period will commence 1.1.2023. A full list of current homologated chassis is included in Appendix 1.

B1.3.1 Modifications. The only additions permitted, along with modifications solely concerned with their fitment are: Seats, Nassau Panels, Front Fairing and Ballast to achieve the required weight or for repair purposes. Any non-homologated part, except as stated above, may not be added. Any additional or alternative welded on components not shown on the Motorsport UK chassis homologation are not permitted.

B1.3.2 Prohibited Materials. The following materials are specifically prohibited anywhere on the kart: Kevlar, carbon fibre (except for seats and floor tray), ceramic, magnesium and titanium.

B1.3.3 Dimensions.

Wheelbase:	900mm ± 5mm
Overall Length:	1730mm (max.)
Overall Width:	Min: 2/3 wheelbase
	Max: 1200mm
Steering:	Camber/caster adjustment is permitted by means of a single, solid eccentric on the top face of each yoke. It is permissible to use up to 2 fixing screws per adjuster to maintain its position. The offset of the king pin from its standard position must not exceed 2mm therefore the diameter of the hole in the yoke may not exceed a size 4mm greater than the king pin.

B1.3.4 Floor Tray. There must be a rigid, flat floor from the seat to the front and side chassis members, secured to them so as to prevent the driver's feet from sliding off. The rear-most point of the floor tray must not project beyond the middle of the chassis cross rail located under the front of the seat. Any perforation of the floor other than for the attachment of ballast and other applicable accessories must be a production feature. If perforated, the holes must not have a diameter exceeding 10mm.

B1.3.5 Bodywork and Bumpers. All Cadet karts must be fitted with bumpers and bodywork providing front, rear and side protection, as detailed in the regulations below and in Drawing Number 6 in Section U of the Motorsport UK Yearbook. Use of the complete CIK-FIA homologated detachable front fairing mounting kit is mandatory (U17.1.6). CSAI homologated Minikart front and side bodywork and bumpers may only be used if fully compliant with all relevant parts of the following regulations (1.3.6-1.3.11).

CIK-FIA homologated Minikart bodywork and bumpers may be used - including a Rear Protection System (RPS) in lieu of a rear bumper (1.3.7) – and where any elements are used they must be fitted fully in accordance with the relevant CIK-FIA Technical Regulations and Drawings. The relevant parts of the following regulations (1.3.6-1.3.11) do not apply in this case (e.g. if CIK-FIA homologated Minikart side bumpers and pods are fitted, then 1.3.8 and 1.3.9 do not apply).

A Motorsport UK (previously MSA) registered RPS may be used in lieu of a rear bumper (1.3.7) but only until 31.12.2022, an up-to-date list of Motorsport UK/MSA registered RPS can be found at motorsportuk.org/resource-centre/#technical-kart.

B1.3.6 Front Bumper. Must comply with U17.2.1-17.2.3 and the following:

- Have the four attachment points welded to the chassis-frame. These points must be as homologated.
- The lower bar must be constructed from magnetic steel tubing with minimum outside diameter of 18mm and a minimum wall thickness of 1.4mm and comprise a D-shape extension to the chassis-frame. It must be a minimum width of 250mm, and be 80mm ± 30mm above the ground with the kart in dry configuration.
- The upper bar must be constructed from magnetic steel tubing with minimum outside diameter of 15mm and a minimum wall thickness of 1.4mm. It must be a minimum width of 300mm, and be 200mm ± 50mm above the ground with the kart in dry configuration.
- No part of the lower or upper bar may be modified from original manufacture. Filing, grinding or any additional material in the area of the front fairing mounting kit attachment is prohibited. This includes any device preventing the free movement of the front fairing being pushed back.

B1.3.7 Rear Bumper. Must comply with U17.8.4-17.8.9, and the following:

- Consist of two horizontal tubes. The upper having outer extension forming a closed loop, with two link tubes to the chassis anchorage points (as per Drawing 5, Diagram 2 in Appendix 1 of Section U) at least 450mm apart at any point. The radius of the outer extensions is free but it should not be less than 2.5 times the tube outside diameter.
- Have the upper bar and outer loops constructed from magnetic steel tubing with a minimum outside diameter of 18mm and a minimum wall thickness of 1.4mm.
- Have the lower bar constructed from magnetic steel tubing with a minimum outside diameter of 15mm and a minimum wall thickness of 1.4mm.
- Have the upper tube and uppermost extension element 225mm ± 25mm above the ground in dry configuration.
- Have the lower tube connected between the two uprights and a maximum height of 100mm above the ground in dry configuration and a minimum height level with the centreline of the chassis rail.
- Have the fixings secured at all times. The contact area of the fixing must not protrude inside the rear of the chassis rail by more than 100mm.

B1.3.8 Side Bumpers. The side bumpers must (please note U17.9 does not apply):

- Comprise a minimum of a single tube constructed from magnetic steel tubing with minimum outside diameter of 18mm and a minimum wall thickness of 1.4mm (minimum diameter of 20mm recommended).
- Be securely attached to chassis by a minimum of two points on each side of the chassis, as homologated.
- Allow for the attachment of the mandatory side pods.
- Side bumpers must be compatible with existing bodywork and include side support.

B1.3.9 Side Pods. Must comply with U17.10 and the following:

- Include on the outer side a vertical surface with a minimum height of 70mm and a minimum length of 250mm located immediately above the ground clearance.
- Not include holes or cuttings except those necessary for their attachment and those in the inside and top plastic face for fitments (maximum M8 diameter). A hole may also be drilled for starter access, even if not in use.
- Not cover any part of the driver seated in their normal driving position.
- Not be designed to hold back water, gravel or any other substance.
- Have a clearance of between 25mm and 60mm above the ground in dry configuration (see Section U, Drawing 6).

B1.3.10 Front Fairing. Must comply with U17.5.1-17.5.3 and the following:

- Have a width of 850mm ± 150mm.
- Have a front overhang of 530mm maximum.
- Have a clearance of between 25mm and 60mm above the ground in dry configuration (see Section U, Drawing 6).
- Comprise on its front face a centrally located vertical surface minimum 250mm x 70mm.

B1.3.11 Front (Nassau) Panel. Must comply with U17.6.1, 17.6.2, 17.6.4, 17.6.5, and the following:

- Have a maximum width of 300mm.
- Be fixed behind the front bumper and must not protrude past the front face of the front fairing.

B1.3.12 Torsion Bars. Karts homologated with rear torsion bars must be raced with the bars in place and locked at all times. Front and side torsion bars are not permitted.

B1.3.13 Seat. Seat is free. Additional bolt on seat stays/mountings are permitted to a maximum of one per side, position is free. Bolt fixings must be used at each end of the seat stays.

B1.3.14 Eligibility. The complete chassis in its homologated form, with accessories and equipment as homologated and the engine as supplied by the manufacturer (or importer where applicable) are the only combination which will be allowed to race. The registered manufacturer may apply for changes to accessories, such as brakes, on the grounds of safety. Such changes will only be acceptable with the written approval of Motorsport UK.

B1.4 Engine. See class specific regulations following.

B1.4.1 Engine Modifications. The use of a single in-line fuel filter is permitted.

B1.4.2 Performance Restrictions. Motorsport UK reserves the right at any time to vary any performance restriction in any Cadet Class.

B1.5 Transmission. Direct from the engine to the axle via a single length of chain. All methods of chain oiling and greasing while the kart is in motion are forbidden. A guard must be fitted covering the transmission in compliance with Motorsport UK Yearbook regulations (see U18.8.4 and U18.8.5).

B1.5.1 Axle. A solid magnetic steel axle of 25mm diameter OR a hollow magnetic steel axle of 25mm diameter and minimum 4.5mm wall thickness. In each case split quick release bearing mountings are not permitted. Must be fitted with circlips on the ends of the axle.

B1.6 Brakes. Motorsport UK homologated Cadet brake system. Mechanical or hydraulic operation, solid disc, operating on the rear axle only. Interruptions on the friction surface (drilling, slots etc.) are permitted on homologated systems only and must be specified on the homologation form. Radially vented discs are not permitted. The brake linkage must be duplicated.

B1.7 Wheels. Wheels may be of two piece or mono aluminium construction, i.e. spun aluminium, diecast aluminium or sandcast aluminium. Hubs may be separate or integral. In accordance with U16.8.6, any hub with an overall length (excluding wheel studs) of less than 60mm must not overhang the ends of the rear axle, measurement to be taken from the wheel-to-hub mating surface.

B1.7.1 Tyres.
Dry – 'Dunlop SL3-MSUK' Front 10 x 3.6 x 5, Rear 11 x 5 x 5. Barcoded.
Wet – 'Dunlop KT3' Front 10 x 3.6 x 5, Rear 11 x 4.5 x 5. Barcoded.

B1.8 General. The practice of lifting karts on the dummy grid or start line while the engine is running is prohibited.

B1.8.1 Retail Prices. All prices will be subject to an agreed yearly increase as determined by the Motorsport UK Kart Technical Advisory Group. The retail price of the new assembled kart chassis as homologated, including chain guard, tank, bumpers, bodywork and wheels (excluding tyres) must not exceed £2,300 + VAT. The retail price of a new bare (painted) chassis-frame must not exceed £977.50 + VAT.

B1.8.2 Weight. Minimum driver weight as per U17.29.6 is 27kg. See class specific regulations below for minimum class weights.

B1.8.3 Number Plates. See class specific regulations below.

B1.8.4 Age. From the 8th birthday to the 31st December of the year of the 12th birthday. Exceptionally, a driver with the required Motorsport UK Bambino experience may enter the class from the year of their 8th birthday subject to U15.1 and provided they meet a minimum height of 125cm (without helmet).

B2.0 IAME GAZELLE UK SPECIFIC REGULATIONS

Affiliation Motorsport UK

B2.1 Engine. IAME Parilla Gazelle 60cc U.K. two-stroke engine equipped with recoil starter, ignition, centrifugal clutch, carburettor, inlet silencer and exhaust system. The power unit, as raced must conform in all aspects with the official Motorsport UK homologation fiche and must bear the relevant official IAME markings as shown in the Motorsport UK homologation fiche. The machining of ANY surface is strictly prohibited. Compliance with the Motorsport UK homologation fiche may be checked at any time during an event, with the technical checking tools supplied by IAME. No addition of, or other change of material is permitted. No modification or tuning for whatever purpose is allowed, except for that listed in the following regulations, or where expressly permitted by Motorsport UK. Where specific dimensions are not given for the engine and its supplied accessories in the Motorsport UK homologation fiche, the dimensions will be checked against a control engine held by Motorsport UK. Procedures for taking measurements and details of measuring gauges are defined in the 'Measurement Guidelines' document available from Motorsport UK on request. Any engine used must have its individual identification number registered with John Mills Engineering Ltd (JME).

B2.1.1 Engine Replacement Parts. The only replacement parts allowed are those supplied by IAME and listed on their parts list for the Motorsport UK homologated engine. Replacement parts must carry the manufacturers part number and/or marking where applicable.

B2.1.2 Spark Plug. The only spark plugs permitted are shown below; they must be unmodified and as supplied by the manufacturer, with sealing washer in place unless a temperature sensor is fitted. Permitted spark plugs:

NGK: B8EG, B9EG, B10EG, BR8EG, BR9EG, BR10EG, BR8EIX, BR9EIX, BR10EIX

DENSO: IW24, IW27, IW29, IW31

B2.1.3 Bearings. Main bearings part number 6204 C4 must be unmodified, complete with 8 steel balls and plastic cage. Only ORS can be used.

B2.1.4 Engine Lubrication. The only oils permitted are those specified in the current CIK-FIA list of homologated lubricants. The current list can be found on the CIK-FIA website at www.fiakarting.com

B2.1.5 Engine Management. Engine management equipment/systems are prohibited.

B2.1.6 Engine Sealing. All engines will remain unsealed in their normal use. However, a Motorsport UK licensed scrutineer appointed to the meeting may reserve the right to seal any engine at any time during an event for further inspection at a later date or at their convenience.

B2.1.7 Engine Modifications. The engine must be raced in standard form as manufactured and supplied by IAME unless otherwise stated. Fixtures and fittings are free. Filing, grinding, polishing, surface treating, machining, adding or removal of material or lightening of any component, including for repair purposes, is not permitted unless otherwise stated in these regulations or unless expressly permitted by Motorsport UK.

The following minor repairs/modifications/additions are permitted:

(i) Repair of damaged threads in the crankcase and/or cylinder with helicoils or timeserts.

(ii) A wet-box or splash-guard attached to the IAME inlet silencer, provided that it in no way modifies the shape or size of the inlet trumpet or creates a ram effect. The IAME inlet silencer cannot be modified to aid in the attachment of a wet-box or splash-guard and the attachment must be of a non-permanent type, e.g. tape or cable ties.

(iii) Decals applied on the engine side covers (part no: A-61880-C / A-61881-C) and on the inlet silencer.

(iv) Modification of the chain guard upper edge to prevent fouling on the chain.

(v) Deleted.

(vi) Deleted.

(vii) The addition of protective material to the HT-lead.

(viii) Use of a maximum of two base gaskets (part nos: EBP-85045, EBP-85046 or EBP-85046-A) and/or a maximum of two head shims (part nos: A-61047 or A-61048), in any combination.

(ix) Honing of the cylinder.

(x) Shortening of the HT lead, but the length of the lead must not be less than 230mm. Cutting and re-joining of the lead is not permitted.

The following repairs/modifications/additions are specifically not permitted:

(i) Painting of the cylinder head or cylinder.

(ii) Repair of the cylinder head spark plug thread.

(iii) Repair of any of the fins, however the engine can be used with any fins in their broken form.

(iv) Any device mounted on the kart to aid in the cooling of the engine is strictly prohibited, unless stated on the Motorsport UK homologation fiche.

B2.1.8 Engine Eligibility. The checking of the combustion chamber volume must be carried out as described in the Motorsport UK homologation fiche with TQF oil and using a digital burette. The checking of the squish must be done along the centreline axis of the gudgeon pin, at the smallest point, a maximum of three times.

B2.1.9 Engine Price. The retail price of the engine, when new, including the carburettor, ignition, clutch, engine sprocket and complete exhaust system when sold in the U.K. will be £1145 + VAT. The IAME Parilla Gazelle 60cc U.K. engine has a manufacturer's undertaking to be available until the end of 2022.

B2.1.10 Ignition unit. All parts, including the plug cap, must be unmodified as manufactured by Selettra, and as supplied by IAME. The rotor location key must be unmodified and have minimum thickness of 1.95mm. Scrutineers at any time during the Meeting have the right to request a part or full controlled ignition system to be fitted.

B2.2 Exhaust. Exhaust with part no. A-61715 must be used. The exhaust system and silencer must not be modified in any way and must comply at all times with the Motorsport UK homologation fiche. The use of a jubilee clip to secure the end silencer screws is permitted. The use of any coating or plating is not permitted.

B2.2.1 **Exhaust Restrictor**. The exhaust flange restrictor as defined in the Motorsport UK homologation fiche must be in place at all times. The restrictor must be as manufactured by IAME and supplied by JME and must comply with the Motorsport UK homologation fiche, no modifications are permitted. One single exhaust restrictor gasket (part no: A-60360) must be used. The use of any additional gasket is prohibited. All exhaust gases must pass through the restrictor. As per B1.4.2, the Motorsport UK reserves the right to amend the maximum diameter of the restrictor orifice during the year, with a minimum notice period of 4 weeks.

B2.3 **Carburettor**. Tillotson HW47A, laser marked 'IAME'. The carburettor must remain unmodified and conform in all aspects to the official Motorsport UK homologation fiche. Two inlet gaskets (part no: A-61822), one on each side of the thermal block, must be used. The use of any additional gasket is prohibited. Any parts fitted must be original parts as shown on the spare parts list in the Motorsport UK homologation fiche, and must remain unmodified. The only gasket set permitted is the orange type as supplied as new (part no: DG3HW or RK6HW). The paddle spring is free but must be the original Tillotson part and remain unmodified. Only one inlet tension spring may be fitted at any time and it must be an original Tillotson part as listed on the Motorsport UK homologation fiche and remain unmodified.

B2.3.1 **Inlet Silencer**. The inlet silencer (part no: A-61742) must be used unmodified as supplied by IAME for the Parilla Gazelle 60cc U.K. engine. The use of a gauze filter on the inlet trumpet is permitted.

B2.4 **Transmission**. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by IAME for the Parilla Gazelle 60cc U.K. engine and must comply at all times with the Motorsport UK homologation fiche. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. Use of O-ring seal (part no: A-60565) and needle cage (part no: B-55598) for the clutch assembly is mandatory

B2.5 **Weight**. Minimum 103kg, including the driver. Minimum driver weight as per U17.29.6 is 27kg (B1.8.2).

B2.6 **Plates**. Yellow with black numbers (see U17.27). The numbers must be of the 'Classic' type as described in U17.27.3.

B3.0 **HONDA SPECIFIC REGULATIONS**

Affiliation Motorsport UK

B3.1 **Chassis Modifications**. The floor mounted fuel tank may be removed if the integral Honda fuel tank is retained.

B3.2 **Engine**. One Honda engine of the 'GX160T1 QHQ4', 'GX160UT1 QHQ4', 'QHG4', 'GX160UT2-QHQ4' or 'GX160RT2-QHG4' designation or as subsequently modified, is to be fitted. Engine types must comply with the Honda GX160 Technical Regulations Version 17 of January 2022 or as subsequently modified, which are available at motorsportuk.org/resource-centre/#technical-kart

Honda will not accept warranty claims on engines used in any practice or racing capacity.

B3.2.1 **Engine Modifications**. Only modifications/additions in compliance with the Honda GX160 Technical Regulations Version 17 of January 2022 or as subsequently modified are permitted.

T1 Engine Regulations are in GX160 Technical Regulations v11a 2016.

As per B1.4.2, a performance restrictor plate of currently 16mm is to be fitted between the carburettor and insulator as per the Honda GX160 Technical Regulations. The restriction may be amended by Motorsport UK giving 4 weeks' notice of change during the year.

B3.2.2 **Fuel**. It is not permitted to have any additives or lubricant in the fuel, otherwise as U16.17.

B3.3 **Weight**. Minimum 103kg, including the driver. Minimum driver weight as per U17.29.6 is 27kg (B1.8.2)

B3.4 **Plates**. Yellow with red numbers (see U17.27). The numbers must be of the 'Classic' type as described in U17.27.3.

C1.0 Group Mini

C1.1 Class IAME X30 Mini X

Affiliation Commercial John Mills Engneering Ltd

C1.2 Introduction. This class endeavours to provide performance approaching that of the comparable current non-gearbox classes in the defined category, combined with low running costs and low noise levels, the engine can be changed from Mini to Junior/Senior by the way of a simple exhaust restrictor and different carburettor. It is expected that the class will continue to evolve and the promoters reserve the right, with the agreement of Motorsport UK, to alter the technical regulations to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from IAME agreed by Motorsport UK. Enquiries to John Mills Engineering Ltd PF International Kart Circuit, Brandon, Grantham, Lincolnshire NG32 2AY Tel:01636 626424 E: sales@iame.co.uk

C1.3 Chassis. Any chassis conforming to Motorsport UK Yearbook regulations. Must use a currently CIK-FIA homologated Rear Protection System.

C1.3.1 Rear axle bearings. Only two rear axle bearings may be mounted

C1.4 Engine. The only engine permitted in this class is the IAME X30. The Mini X30 adheres to the main IAME X30 fiche plus the Mini X supplement. Two-stroke engine equipped with electric starter, 16,000 rpm ignition, centrifugal clutch, carburettor, inlet silencer and exhaust system. The power unit, as raced must conform in all aspects with the official Motorsport UK homologation fiche and must bear the relevant official IAME markings as shown in the Motorsport UK homologation fiche. The machining of ANY surface is strictly prohibited. Compliance with the Motorsport UK homologation fiche may be checked at any time during an event, with the technical checking tools supplied by IAME. No addition of, or other change of material is permitted. No modification or tuning for whatever purpose is allowed, except for that listed in the following regulations, or where expressly permitted by Motorsport UK. Where specific dimensions are not given for the engine and its supplied accessories in the Motorsport UK homologation fiche, the dimensions will be checked against a control engine held under the control of Motorsport UK. Any engine used must have its individual identification number registered with John Mills Engineering Ltd (JME).

C1.4.1 Engine replacement parts. The only replacement parts allowed are those supplied by IAME and listed on their parts list for the Motorsport UK homologated engine. Replacement parts must carry the manufacturer's part number and/or marking where applicable.

C1.4.2 Spark plug. The only spark plugs permitted are shown below; they must be unmodified and as supplied by the manufacturer, with sealing washer in place unless a temperature sensor is fitted. Permitted spark plugs: NGK: B8EG, B9EG, B10EG, BR8EG, BR9EG, BR10EG, BR8EIX, BR9EIX, BR10EIX, R6252K-10, R6252K-105, R6254E-10, R6254E-105.

C1.4.3 Bearings. All the bearings part numbers X30125396A, X30125397, IMB-20100 and X30125746A must be unmodified, complete with steel ball or rollers, plastic cage and remain the same type as supplied by the manufacturer. The use of alternative SKF roller bearing part number X30125397 (BC1-3342B) is permitted.

C1.4.4 Engine lubrication. The only oils permitted are those specified in the current CIK-FIA list of homologated lubricants. The current list can be found on the CIK-FIA website at www.fiakarting.com.

C1.4.5 Engine management. Engine management equipment/systems are prohibited.

C1.4.6 Engine sealing. All engines will remain unsealed in their normal use. However, a Motorsport UK licensed scrutineer appointed to the meeting may reserve the right to seal any engine at any time during an event for further inspection at a later date or at their convenience.

C1.4.7 Modifications. Neither the engine nor any of 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 addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these regulations or the official Motorsport UK fiche. The adjustment of elements specifically designed for that purpose shall not be classified as modifications. The engine must be raced in standard form as manufactured and supplied by IAME unless otherwise stated. Filing, grinding, polishing, surface treating, machining, adding or removal of material or lightening of any component, including for repair purposes, is not permitted unless otherwise stated in these regulations or unless expressly permitted by Motorsport UK.

The following minor repairs/modifications/additions are permitted:

(i) Repair of damaged threads in the crankcase and/or cylinder with helicoils or timeserts.

(ii) A wet-box as supplied by IAME (part no. A-61700) may be attached to the inlet silencer; it may be adapted provided that it in no way modifies the shape or size of the inlet trumpet or creates a ram effect. The inlet silencer cannot be modified to aid in the attachment of a wet-box or splash-guard and the attachment must be of a non-permanent type, e.g. tape or cable ties.

(iii) Decals applied on the engine and on the inlet silencer.

(iv) Deleted.

(v) The addition of protective material to the HT-lead, and the HT-lead may be shortened, however cutting and re-joining of the lead is not permitted.

(vi) Use of a maximum of two base gaskets (part no. EBP-125045, EBP-125046 or EBP-125047) and in any combination.

(vii) Honing of the cylinder.

(viii) Deleted.

(ix) Use of a blanket on the front of the cylinder solely to assist in the prevention of freezing.

(x) Moderate repair to the crankcase due to component failure, this excludes welding or addition of any other material.

The following repairs/modifications/additions are specifically not permitted:

(i) Painting of the cylinder head or cylinder.

(ii) Repair of the cylinder head spark plug thread.

(iii) Repair of any of the cylinder, in any form.

C1.4.8 Ignition unit. All parts must be un-modified original digital Selettra ignition. Scrutineers have at any time during the race meeting the right to request part or full controlled ignition system to be fitted. Only CDI box marked 'C' (16,000) is permitted. The marking on the electronic box 'C' is mandatory and must be clearly visible without disassembling the CDI box. The battery must be fixed to the chassis and connected to the ignition system at all times. The rotor location key must be unmodified and have minimum thickness of 2.43mm.

C1.4.9 Engine eligibility. The checking of the combustion chamber volume must be carried out as described in the Motorsport UK homologation fiche with TQF oil and using a digital burette. The checking of the squish must be done along the centreline axis of the gudgeon pin, at the smallest point, a maximum of three times. The angular reading of the port is to be carried out by inserting a 0.2 x 5mm wide feeler gauge. For damaged ports the angular reading is max. 125° side transfer, 126° front transfer and 176.5° exhaust port, using a 1mm pin gauge at no more than 4 points in the port.

C1.5 Exhaust. Exhaust with part no. X30125715 must be used. The exhaust system and silencer must not be modified in any way and must comply at all times with the Motorsport UK homologation fiche. The use of a jubilee clip to secure the end silencer screws is permitted. The use of an exhaust temperature (EGT) sensor in the appropriate fitting on the exhaust is permitted.

C1.5.1 Exhaust silencer. The use of additional silencer part number X30125723-K is mandatory, and must be used as shown in the Motorsport UK homologation fiche with no modifications. All mountings and fittings are free.

C1.5.2 Exhaust restrictor. The exhaust restrictor as defined in the Motorsport UK homologation fiche must be in place at all times. The restrictor must be as manufactured by IAME and supplied by JME and must comply with the Motorsport UK homologation fiche, no modifications are permitted. The use of a spacer between the manifold and engine is permitted but must be as supplied by IAME. A maximum of two exhaust gaskets (part no. B-75360) may be used. The use of any additional gasket is prohibited. All exhaust gases must pass through the restrictor.

C1.5.3 **Timing gears**. All gears must be fitted in the correct direction. All timing marks must be in-line on the crank shaft, balance shaft and gears when the engine is at TDC, as shown in the Motorsport UK homologation fiche.

C1.6 **Carburettor**. Tillotson HW-34A laser marked 'IAME'. The carburettor must remain unmodified and conform in all aspects to the official Motorsport UK homologation fiche. One inlet gasket (part no. 10360-A) must be used between the carburettor and reed block. The use of any additional gasket is prohibited. Any parts fitted must be original parts as shown on the spare parts list in the Motorsport UK homologation fiche, and must remain unmodified. The only gasket set permitted is the red type as supplied as new (part no. DG3-HW). The paddle spring is free but must be the original part and remain unmodified. The only permitted needle valve is part no. 233-721P.

C1.6.1 **Reed block**. Both the reed block and cover must remain strictly original. Only fiberglass original IAME marked petals may be fitted.

C1.6.2 **Inlet silencer**. The inlet silencer (part no. X30125740) with 22mm trumpets must be used and must remain unmodified as supplied by IAME for the IAME X30 engine. The rubber manifold with air filter is mandatory and must conform to the homologation fiche. The use of a gauze filter on the inlet trumpet is permitted.

C1.7 **Cooling system**. The radiator part no. T-8000B or T-8001 must be fitted to the left-hand side of the kart, using standard hoses and connectors. The water pump – plastic or aluminium as supplied by IAME – must be mounted to the chassis driven via pulley from the rear axle. The use of the large size radiator as supplied by IAME is permitted.

The radiator, pump, axle pulley and radiator support brackets must be as supplied by IAME.

It is not mandatory to fit and/or use the thermostat within the water cooling system. It is permitted to delete this item. However, if the competitor elects to use it then it must only be used as supplied by IAME and must not be modified in any way.

Extra joints in the water hoses are permitted to aid fitment to the chassis. The use of a radiator blind or wind shield as supplied by Newline is permitted. The water pump drive belts are free.

C1.8 **Transmission**. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by IAME for the Parilla X30 engine and must comply at all times with the Motorsport UK homologation fiche. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. Only IAME original Z9, Z10, Z11, Z12 or Z13 sprockets can be used. Use of O-ring seal (part no. A-60565) and needle cage (part no. B-55598) for the clutch assembly is mandatory. The only clutch drum permitted is part number X30125550A.

C1.9 **Brakes**. Hydraulic disc brake operating on rear wheels only.

C1.10 **Tyres**. Dry: KOMET K2H 10 x 4.60-5 fronts. 11 x 7.10-5 rear

Wet: KOMET K1W 10 x 4.20-5 front. 11 x 6.00-5 rear

The previous Komet K1H dry tyres may be used at Club meetings (App 4 B14) only until 31.03.2022.

Tyres must be fitted with the correct direction of rotation.

Only tyres with rounded corner barcodes and prefix "K" are permitted.

C1.11 **Weight**. Minimum of 132kg including driver at all times. The minimum driver weight as per U17.29.6 is 37.5kg.

C1.12 **Number plates**. White with black numbers U17.27.1-4 apply.

C1.13 **Age**. From 11th birthday to 31st December in the year of 14th birthday (U15.2).

C1.14 **General**. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

C1.15 **Fasteners and attachments**. The use of alternative fasteners, washers, hose clips, fuel line is allowed unless otherwise specified. The use of an additional earth strap is allowed. The use of additional air box support brackets and/or radiator support brackets is allowed, providing the fitting of these does not necessitate modification of the original components.

C1.16 **Data logging**. Data logging is permitted, data logging systems with or without memory may be used. Global Navigation Satellite System reception is permitted. It is only permitted to take readings from a maximum of 5 channels. The rpm, may only be recorded via a sensor on the HT-lead to sense spark plug pulses. The HT-lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.

C2.0 **Group** **Mini**

C2.1 **Class** **Rotax Mini Max**

Affiliation Commercial: J.A.G. Engineering

C2.2 **Introduction**. A restricted version of the FR125 Junior Max to give the younger driver the opportunity to race Rotax Max. The promoters reserve the right, with the agreement of Motorsport UK, to alter the technical regulations to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from Rotax agreed by Motorsport UK. Enquiries to J.A.G. Engineering, Unit 6 Mid Sussex Business Park, Folders Lane East, Ditchling, Hassocks, Sussex BN6 8SE. Tel. 01444 243112.

C2.3 **Chassis**. Any chassis conforming to Motorsport UK Yearbook regulations.

C2.3.1 **Rear axle bearings**. Only two rear axle bearings may be mounted

C2.4 **Engine**. The only engine permitted in this class is the Rotax FR125 JUNIOR MAX with restrictors. The Junior Max adheres to the Senior Rotax FR125 Max fiche plus extensions for the Junior including the cylinder. The cylinder is to be of non-Power Valve type. The engine is a single cylinder, liquid cooled, reed valve two stroke. All engines must be sealed between cylinder, crankcases, cylinder head and the reed valve block with an official seal to prevent modification. All seals must be crimped with the official Rotax crimping tool part No.276 110. Each end of the sealing wire must only pass through the seal once.

All engines are issued with an official identity card. It is the competitor's responsibility to ensure the numbers inscribed on the engine and seal correspond with those on the identity card at all times. Only authorised dealers will be issued with seals for use during maintenance of the engines. The identity card must be filled in and signed by an authorised dealer. The engine must be presented at scrutineering with the official class seal intact and the identity card lodged with the scrutineer. The card must be collected by the competitor at the end of the race meeting. (At club race meetings it is not compulsory for competitors to lodge the identity card with the scrutineers. The identity card must be available for inspection by the scrutineers at any time during the race meeting.)

Should a seal become damaged, loose or lost during racing it must be reported to the meeting's scrutineer before leaving parc ferme. To allow the competitor to continue racing the scrutineer may at their discretion re-seal the engine with an official Motorsport UK seal. The new seal No. Must be entered in the engine's identity card and signed by the scrutineer. The engine must be taken to an official dealer with Motorsport UK seal intact to be re-sealed with an official class seal before competing at the next race meeting.

C2.4.1 **Modifications**. Neither the engine nor any of 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 addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these regulations or the official Motorsport UK fiche. The adjustment of elements specifically designed for that purpose shall not be classified as modifications, i.e. carburettor and exhaust valve adjustment screws.

UNLESS IT STATES THAT YOU CAN DO IT YOU CANNOT!!!

The engine must be raced in standard form as manufactured and supplied by Rotax unless otherwise stated. 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. All parts used in or on this engine must be of original manufacture or source as supplied by Rotax for the FR125 Max unless otherwise stated. The engine is to be used with air box, carburettor, fuel pump, radiator, wiring loom, ignition system and exhaust system as supplied by Rotax unless otherwise stated. Position and method of mounting the battery, wiring loom, exhaust system are free providing they are securely fixed to the satisfaction of the meeting's scrutineers and in accordance with Motorsport UK Yearbook regulations. Filing of crankcase to allow easy fitting of water connection is allowed. Fitting of helicoils and inserts to repair damaged threads is allowed, except for the spark plug thread in the cylinder head insert, providing such repairs are not used to derive any benefit other than rectification of damage.

Minor damage to the cylinder or crankcase may be repaired by welding but only to restore the component to the original specification.

The use of thermal barrier coatings/ceramic coatings on or in the engine or exhaust system is not allowed. Replacement connectors to repair wiring loom are permitted. Repairs to starter motor are also allowed.

C2.4.1.1 Exhaust and Inlet Throttle Restrictors. Exhaust restrictor must be in place at all times. Restrictor must be as supplied by J.A.G. and comply with the official fiche, no modifications allowed. Exhaust flange restrictor, 20.3mm maximum round bore, all exhaust gases must pass through this restrictor.

Inlet throttle restrictor must be in place at all times. Restrictor must be as supplied by J.A.G. and comply with the official fiche, no modifications allowed. The length of the inlet throttle restrictor must be 37.8mm minimum.

C2.4.2 Carburettor. Dell'orto VHSB 34 QD, QS or XS.

All parts of the carburettor including the body are to be unmodified and run as supplied by Rotax. The carburettor must have VHSB 34 (cast in body) QD, QS or XS (stamped on body). All parts must comply with the official fiche. The only adjustments allowed are the main jet, external air screw, throttle stop adjustment screw, and needle position on the five grooves provided.

QD and QS Carburettor: Needle jet atomiser FN 266. Choke jet 60. Idle jet 30, idle jet emulsion tube 30. Needle K27 or K98. Float needle valve 150. Slide 40. Floats 5.2gr. Atomiser Type 2. Alternative idle jet 60, idle jet emulsion tube 60, and 3.6gr floats may be used. Idle jets, idle jet emulsion tubes and floats may not be mixed and only used in one of the two following combinations: Combination 1: Idle jet 30, idle jet emulsion tube 30, floats 5.2gr; Combination 2: idle jet 60, idle jet emulsion tube 60, floats 3.6gr. The venturi must have 34 cast and 12.5 or 8.5 stamped on the top of the venturi.

XS carburettor: Needle jet DP267. Choke jet 60. Idle jet 60, idle jet emulsion tube 45. Needle K57. Float needle valve 150. Slide 45. Floats 4.0gr. The venturi insert must have 12.5 stamped on the top.

Dell'orto XS carburettor must be used in conjunction with EVO exhaust system and EVO Dell'orto ignition system.

Throttle cable and adjusters are free. It is permitted to use a single length of vent tube looped across the two air vents of the carburettor with a hole or slot cut in the side of the vent tube at the top of the loop.

FLOAT LEVER ARM HEIGHT: Using the ROTAX gauge (Part No:277 400), the float arms must both fit between the gauge slot without touching. The carburettor must be upside down on a horizontal flat surface. The gauge must sit on the metal body of the carburettor without gasket.

C2.4.3 Fuel Pump. Only Mikuni – Fuel Pump DF 44-210 may be used. The fuel pump must be fitted to the bottom or side of the standard air box bracket. Only a single length of pulse tube from crankcase connector to fuel pump may be used. Only a single length of fuel line from fuel pump to carburettor may be used. It is permitted to use an in-line fuel filter as supplied by Rotax between the fuel tank and fuel pump. An Internal fuel tank filter is also permitted. No restrictors, fuel returns or additional reservoirs are permitted.

C2.4.4 Intake Silencer. Only Type 2 may be used.

The Intake Silencer/Airbox must be used unmodified as supplied by Rotax for the FR125 Max engine with its filter and all component parts including support bracket in place.

The two halves of the airbox must be securely screwed together using 4 M6 screws. All 4 screws must be sufficiently tightened to securely clamp the two halves of the airbox together.

Intake silencer tube and airbox-to-carburettor socket must be marked with "ROTAX".

In all conditions the air box MUST be positioned with inlet trumpets to the bottom of the box. The air box must be securely fitted in a manner to prevent rotation.

C2.4.5 Exhaust System. Only Type B or EVO exhaust may be used. The exhaust system and silencer may not be modified in any way except for the pop rivets securing the silencer end plate may be replaced with screws. The use of a jubilee clip to secure the end plate pop rivets or screws is allowed. It is permitted to paint the exhaust system with black paint. The use of any other coating or plating is not allowed. It is permitted to make minor repairs by welding or brazing to the exhaust system providing there are no alterations to the original dimensions.

EVO exhaust system with separate silencer with 90° elbow outlet. EVO silencer must use perforated silencer tube and end plate with 90° elbow outlet. Gasket ring must be fitted between exhaust system and silencer. Type B exhaust system must use perforated silencer tube and end plate with straight outlet.

It is permitted to weld/braze a socket (at a distance of 50-80mm from the ball joint) on the top of the exhaust system for measuring the exhaust gas temperature.

C2.4.6 Radiator. The radiator must be fitted to the right hand side of the engine using standard hoses and connections as supplied by Rotax. Engines using the thermostat cooling system must use the system in its entirety which comprises of thermostat head cover, radiator, radiator cap, radiator hoses, steel crankcase water hose connecting tube and radiator bracket. It is permitted to use the thermostat cooling system with or without the thermostat in place. The use of alternative hose clips and screw fixings are permitted. Blanking of the radiator is free providing it does not necessitate the modification of the original components other than simple attachment. Minor repairs to the radiator are allowed.

C2.4.7 Ignition Unit. DENSO digital battery ignition, variable timing with no adjustment. Ignition coil must have "129000-" and "DENSO" moulded on the case. The ignition coil must have three pin connection. The ignition coil must be mounted by means of two original rubber mounting blocks or equivalent to the gearbox cover. In the case of chassis component interference with the original mounting position it is permitted to relocate the ignition coil by the use of an extension bracket. The extension bracket must be attached to the original gearbox cover mounting holes. The minimum length of HT lead permitted is 210 mm from outlet of cable at ignition coil to outlet of cable at spark plug connector (= the visible length of wire). Spark plug cap must be marked with "NGK TB05EMA" or alternative red rubber version marked "NGK" or "ROTAX", as described on the official Motorsport UK fiche. Ignition switch can be either On-Off type or Automatic fuse type. Any make of lead acid battery is permitted provided it is of the same specification as supplied by Rotax for the FR125MAX 12v/6.5Ah, 12V/7.2Ah or 12v/9Ah. FIAMM-GS type FG20651, FG20722, FGHL20722, FGH20902, YUASA, YT7B-BS and ROTAX BATTERY FX7-12B. ONLY the ROTAX lithium iron phosphate battery RX7-12L or RX-12B may be used as an alternative to lead acid batteries. The ignition pick up must be marked with the numbers 029600-0710, followed by a variable production code on the 2nd line.

EVO Dell'orto ignition system: Ignition coil with separate ECU. The minimum length of HT lead permitted is 210mm from outlet of cable at ignition coil to outlet of cable at spark plug connector (= the visible length of wire). Spark plug cap must be marked with "NGK TB05EMA", or alternative red rubber version marked "NGK", as described on the official Motorsport UK fiche.

Engines using the EVO Dell'orto ignition system must use the system in its entirety which comprises of ignition coil, Senior ECU (Part no. 666 815), mounting brackets, wiring loom, battery clamp (battery box) and all its components as described in the Motorsport UK fiche. Battery clamp (battery box) must be mounted on the left side of the chassis, next to the seat. Only YUASA YT7B-BS (with and without Rotax branding) and ROTAX RX7-12B or RX7-12L (lithium-ion phosphate type) may be used with EVO Dell'orto ignition system.

EVO Dell'orto ignition must be used in conjunction with EVO exhaust system and Dell'orto XS carburettor.

C2.4.8 Spark Plug. The only spark plugs permitted are as listed and must be unmodified with sealing washer in place. The list of spark plugs is as follows:

Denso IW24, IW27, IW29, IW31.

NGK BR8 EG, BR9 EG, BR10 EG, B8 EG, B9 EG, B10 EG, B8 EGV, B9 EGV, B10 EGV, BR8 EIX, BR9 EIX, BR10 EIX, GR9D1-8, GR8D1-8.

Other makes/types may be added to this list by J.A.G.; details will be published in official bulletin.

C2.5 Transmission. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by Rotax for the FR125 MAX. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. The engine clutch must be triggered at 4000 rpm maximum and make the kart and Driver move forward. The clutch must be in direct drive (and 100% engaged) at 6,500 rpm. See U18.8. A bar test may also be used to test clutch engagement, parameters to be advised.

All sprockets must use a 15 x 19 x 17 needle cage bearing and O-ring seal except in the case of an 11 tooth sprocket. An 11 tooth sprocket must be fitted with a plain bearing and an O-ring seal.

C2.6 Brakes. Hydraulic disc brake operating on rear wheels only.

C2.7 Tyres.

Dry:	MOJO D2XX 'CIK-Option', with barcode 10.0 x 4.50-5 front. 11.0 x 7.10-5 rear.
Wet:	MOJO W5 'CIK Rain' with barcode 10.0 x 4.50-5 front. 11.0 x 6.00-5 rear.

Tyres must be fitted to run in the correct direction of rotation, as indicated by the arrow on the sidewall of the tyre.

C2.8 General. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

C2.8.1 Retail Price. Not applicable.

C2.8.2 Non-Technical Items. The use of alternative fasteners, washers, hose clips, fuel and pulse line is allowed unless otherwise specified. The use of additional and/or alternative earth straps is allowed. The use of additional air box support brackets, radiator support brackets, coil-mounting brackets, chain and clutch guards is allowed providing the fitting of these does not necessitate modification of the original components.

C2.8.3 Weight. Minimum of 132kg including driver at all times. Minimum driver weight as per U17.29.6 is 37.5kg.

C2.8.4 Number Plates. Yellow with black numbers. U17.27 applies.

C2.8.5 Age. From 11th birthday to 31st December in the year of 14th birthday (U15.2).

C2.8.6 Height. Minimum driver height 135cm.

C2.9 Data Logging. Data logging is permitted, data logging systems with or without memory may be used. Global Navigation Satellite System reception is permitted. It is only permitted to take readings of engine rpm, engine water temperature, exhaust gas temperature, speed of 1 wheel, an X/Y accelerometer, lap times and split lap times. The engine water temperature sensor may only be fitted in the position provided in the cylinder head cover for this attachment. The rpm, may only be recorded via a sensor on the HT lead to sense spark plug pulses. The HT lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.

D1.0 Group Junior

D1.1 Class IAME X30 Junior

Affiliation Commercial: John Mills Engineering Ltd.

D1.2 Introduction. This class endeavours to provide performance approaching that of the comparable current non-gearbox Junior classes, combined with low running costs and low noise levels, the engine can be changed from Junior to Senior by removal of a simple exhaust restrictor. It is expected that the class will continue to evolve and the promoters reserve the right, with the agreement of Motorsport UK, to alter the technical regulations to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from IAME agreed by Motorsport UK. Enquiries to John Mills Engineering Ltd PF International Kart Circuit, Brandon, Grantham, Lincolnshire NG32 2AY Tel:01636 626424 E: sales@iame.co.uk.

D1.3 Chassis. Any chassis conforming to Motorsport UK Yearbook regulations. Must use a currently CIK-homologated Rear Protection System.

D1.4 Engine. The only engine permitted in this class is the IAME X30. The Junior X30 adheres to the main IAME X30 fiche plus the Junior supplement. Two-stroke engine equipped with electric starter, 16,000 rpm ignition, centrifugal clutch, carburettor, inlet silencer and exhaust system. The power unit, as raced must conform in all aspects with the official Motorsport UK homologation fiche and must bear the relevant official IAME markings as shown in the Motorsport UK homologation fiche. The machining of ANY surface is strictly prohibited. Compliance with the Motorsport UK homologation fiche may be checked at any time during an event, with the technical checking tools supplied by IAME. No addition of, or other change of material is permitted. No modification or tuning for whatever purpose is allowed, except for that listed in the following regulations, or where expressly permitted by the Motorsport UK. Where specific dimensions are not given for the engine and its supplied accessories in the Motorsport UK homologation fiche, the dimensions will be checked against a control engine held under the control of the Motorsport UK. Any engine used must have its individual identification number registered with John Mills Engineering Ltd (JME).

D1.4.1 Engine replacement parts. The only replacement parts allowed are those supplied by IAME and listed on their parts list for the Motorsport UK homologated engine. Replacement parts must carry the manufacturer's part number and/or marking where applicable.

D1.4.2 Spark plug. The only spark plugs permitted are shown below; they must be unmodified and as supplied by the manufacturer, with sealing washer in place unless a temperature sensor is fitted. Permitted spark plugs:

NGK: B8EG, B9EG, B10EG, BR8EG, BR9EG, BR10EG, BR8EIX, BR9EIX, BR10EIX, R6252K-10, R6252K-105, R6254E-10, R6254E-105.

D1.4.3 Bearings. All the bearings part numbers X30125396A, X30125397, IMB-20100 and X30125746A must be unmodified, complete with steel ball or rollers, plastic cage and remain the same type as supplied by the manufacturer. The use of alternative SKF roller bearing part number X30125397 (BC1-3342B) is permitted.

D1.4.4 Engine lubrication. The only oils permitted are those specified in the current CIK-FIA list of homologated lubricants. The current list can be found on the CIK-FIA website at www.fiakarting.com

D1.4.5 Engine management. Engine management equipment/systems are prohibited.

D1.4.6 Engine sealing. All engines will remain unsealed in their normal use. However, a Motorsport UK licensed scrutineer appointed to the meeting may reserve the right to seal any engine at any time during an event for further inspection at a later date or at their convenience.

D1.4.7 Modifications. Neither the engine nor any of 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 addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these regulations or the official Motorsport UK fiche. The adjustment of elements specifically designed for that purpose shall not be classified as modifications. The engine must be raced in standard form as manufactured and supplied by IAME unless otherwise stated. Filing, grinding, polishing, surface treating, machining, adding or removal of material or lightening of any component, including for repair purposes, is not permitted unless otherwise stated in these regulations or unless expressly permitted by Motorsport UK.

The following minor repairs/modifications/additions are permitted:

(i) Repair of damaged threads in the crankcase and/or cylinder with helicoils or timeserts.

(ii) A wet-box as supplied by IAME (part no. A-61700) may be attached to the inlet silencer; it may be adapted provided that it in no way modifies the shape or size of the inlet trumpet or creates a ram effect. The inlet silencer cannot be modified to aid in the attachment of a wet-box or splash-guard and the attachment must be of a non-permanent type, e.g. tape or cable ties.

(iii) Decals applied on the engine and on the inlet silencer.

(iv) Deleted.

(v) The addition of protective material to the HT-lead, and the HT-lead may be shortened, however cutting and re-joining of the lead is not permitted.

(vi) Use of a maximum of two base gaskets (part no. EBP-125045, EBP-125046 or EBP-125047) and in any combination.

(vii) Honing of the cylinder.

(viii) Deleted.

(ix) Use of a blanket on the front of the cylinder solely to assist in the prevention of freezing.

(x) Moderate repair to the crankcase due to component failure, this excludes welding or addition of any other material.

The following repairs/modifications/additions are specifically not permitted:

(i) Painting of the cylinder head or cylinder.

(ii) Repair of the cylinder head spark plug thread.

(iii) Repair of any of the cylinder, in any form.

D1.4.8 Ignition unit. All parts must be un-modified original digital Selettra ignition. Scrutineers have at any time during the race meeting the right to request part or full controlled ignition system to be fitted. Only CDI box marked 'C' (16,000) is permitted. The marking on the electronic box 'C' is mandatory and must be clearly visible without disassembling the CDI box. The battery must be fixed to the chassis and connected to the ignition system at all times. The rotor location key must be unmodified and have minimum thickness of 2.43mm.

D1.4.9 Engine eligibility. The checking of the combustion chamber volume must be carried out as described in the Motorsport UK homologation fiche with TQF oil and using a digital burette. The checking of the squish must be done along the centreline axis of the gudgeon pin, at the smallest point, a maximum of three times. The angular reading of the port is to be carried out by inserting a 0.2 x 5mm wide feeler gauge. For damaged ports the angular reading is max. 125° side transfer, 126° front transfer and 176.5° exhaust port, using a 1mm pin gauge at no more than 4 points in the port.

D1.5 Exhaust. Exhaust with part no. X30125715 must be used. The exhaust system and silencer must not be modified in any way and must comply at all times with the Motorsport UK homologation fiche. The use of a jubilee clip to secure the end silencer screws is permitted. The use of an exhaust temperature (EGT) sensor in the appropriate fitting on the exhaust is permitted.

D1.5.1 **Exhaust silencer**. The use of additional silencer part number X30125723-K is mandatory, and must be used as shown in the Motorsport UK homologation fiche with no modifications. All mountings and fittings are free.

D1.5.2 **Timing gears**. All gears must be fitted in the correct direction. All timing marks must be inline on the crank shaft, balance shaft and gears when the engines is at TDC, as shown in the Motorsport UK fiche.

D1.6 **Carburettor**. Tillotson HW-27A laser marked 'IAME'. The carburettor must remain unmodified and conform in all aspects to the official Motorsport UK homologation fiche. One inlet gasket (part no. 10360-A) must be used between the carburettor and reed block. The use of any additional gasket is prohibited. Any parts fitted must be original parts as shown on the spare parts list in the Motorsport UK homologation fiche, and must remain unmodified. The only gasket set permitted is the red type as supplied as new (part no. DG3-HW). The paddle spring is free but must be the original part and remain unmodified.

D1.6.1 **Reed block**. Both the reed block and cover must remain strictly original. Either fiberglass or carbon original IAME marked petals may be fitted, but they may only be used in matching pairs.

D1.6.2 **Inlet silencer**. The inlet silencer (part no.X30125740) with 22mm trumpets must be used and must remain unmodified as supplied by IAME for the IAME X30 engine. The rubber manifold with air filter is mandatory and must conform to the homologation paper. The use of a gauze filter on the inlet trumpet is permitted.

D1.7 **Cooling system**. The radiator part no. T-8000B or T-8001 must be fitted to the left-hand side of the kart, using standard hoses and connectors. The water pump – plastic or aluminium as supplied by IAME – must be mounted to the chassis driven via pulley from the rear axle. The use of the large size radiator as supplied by IAME is permitted.

The radiator, pump, axle pulley and radiator support brackets must be as supplied by IAME.

It is not mandatory to fit and/or use the thermostat within the water cooling system. It is permitted to delete this item. However, if the competitor elects to use it then it must only be used as supplied by IAME and must not be modified in any way.

Extra joints in the water hoses are permitted to aid fitment to the chassis. The use of a radiator blind or wind shield as supplied by Newline is permitted. The water pump drive belts are free.

D1.8 **Transmission**. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by IAME for the Parilla X30 engine and must comply at all times with the Motorsport UK homologation fiche. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. Only IAME original Z9, Z10, Z11, Z12 or Z13 sprockets can be used. Use of O-ring seal (part no. A-60565) and needle cage (part no. B-55598) for the clutch assembly is mandatory. The only clutch drum permitted is part number X30125550A.

D1.9 **Brakes**. Hydraulic disc brake operating on rear wheels only.

D1.10 **Tyres**. Dry: KOMET K2H 10 x 4.60-5 fronts. 11 x 7.10-5 rear

Wet: KOMET K1W 10 x 4.20-5 front. 11 x 6.00-5 rear

The previous Komet K1H dry tyres may be used at Club meetings (App 4 B14) only until 31.03.2022.

Tyres must be fitted with the correct direction of rotation.

Only tyres with rounded corner barcodes and prefix "K" are permitted.

D1.11 **Weight**. Minimum of 148kg including driver at all times. The minimum driver weight as per U17.29.6 is 41kg.

D1.12 **Number plates**. Green with white numbers. U17.27.1-4 apply.

D1.13 **Age**. Year of 13th birthday to 31st December of the year of 16th birthday. Drivers who have not reached their 13th birthday must hold a minimum of a Kart National licence (U15.3).

D1.14 **General**. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

D1.15 **Fasteners and attachments**. The use of alternative fasteners, washers, hose clips, fuel line is allowed unless otherwise specified. The use of an additional earth strap is allowed. The use of additional air box support brackets and/or radiator support brackets is allowed, providing the fitting of these does not necessitate modification of the original components.

D1.16 **Data logging**. Data logging is permitted, data logging systems with or without memory may be used. Global Navigation Satellite System reception is permitted. It is only permitted to take readings from a maximum of 5 channels. The rpm, may only be recorded via a sensor on the HT-lead to sense spark plug pulses. The HT-lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.

D2.0 **Group** **Junior**

D2.1 **Class** **Rotax Junior Max**

Affiliation Commercial: J.A.G. Engineering

D2.2 **Introduction**. This class endeavours to provide an affordable high performance racing kart class combined with low running costs and low noise levels. It is expected that the class will continue to evolve and the promoters reserve the right, with the agreement of Motorsport UK, to alter the technical regulations to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from Rotax agreed by Motorsport UK. Enquiries to J.A.G. Engineering, Unit 6 Mid Sussex Business Park, Folders Lane East, Ditchling, Hassocks, Sussex BN6 8SE. Tel. 01444 243112.

D2.3 **Chassis**. Any chassis conforming to Motorsport UK Yearbook regulations.

D2.4 **Engine**. The only engine permitted in this class is the Rotax FR125 JUNIOR MAX.

The Junior Max adheres to the Senior Rotax FR125 Max fiche plus extensions for the Junior including the cylinder differences. The cylinder is to be of non-Power Valve type. The engine is a single cylinder, liquid cooled, reed valve two stroke. All engines must be sealed between cylinder, crankcases, cylinder head and the reed valve block with an official seal to prevent modification. All seals must be crimped with the official Rotax crimping tool (Part No: 276 110). Each end of the sealing wire must only pass through the seal once.

All engines are issued with an official identity card. It is the competitor's responsibility to ensure that the numbers inscribed on the engine and seal must correspond with those on the identity card at all times Only authorised dealers will be issued with seals for use during maintenance of the engines. The identity card must be filled in and signed by an authorised dealer. The engine must be presented at scrutineering with the official class seal intact and the identity card lodged with the scrutineer. The card must be collected by the competitor at the end of the race meeting. (At club race meetings it is not compulsory for competitors to lodge the identity card with the scrutineers. The identity card must be available for inspection by the scrutineers at any time during the race meeting.) Should a seal become damaged, loose or lost during racing it must be reported to the meeting's scrutineer before leaving parc ferme. To allow the competitor to continue racing the scrutineer may at their discretion re-seal the engine with an official Motorsport UK seal. The new seal No. must be entered in the engine's identity card and signed by the scrutineer. The engine must be taken to an official dealer with the Motorsport UK seal intact to be re-sealed with an official class seal before competing at the next race meeting.

D2.4.1 **Modifications**. Neither the engine nor any of 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 addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these regulations or the official Motorsport UK fiche. The adjustment of elements specifically designed for that purpose shall not be classified as modifications, i.e. carburettor and exhaust valve adjustment screws.

UNLESS IT STATES THAT YOU CAN DO IT YOU CANNOT!!!

The engine must be raced in standard form as manufactured and supplied by Rotax unless otherwise stated. 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. All parts used in or on this engine must be of original manufacture or source as supplied by Rotax for the FR125 Max unless otherwise stated. The engine is to be used with air box, carburettor, fuel pump, radiator, wiring loom, ignition system and exhaust system as supplied by Rotax unless otherwise stated. Position and method of mounting the battery, wiring loom and exhaust system are free unless otherwise stated providing they are securely fixed to the satisfaction of the meeting's scrutineers and in accordance with Motorsport UK Yearbook regulations. Filing of crankcase to allow easy fitting of water connection is allowed. Fitting of helicoils and inserts to repair damaged threads is allowed, except for the spark plug thread in the cylinder head insert, providing such repairs are not used to derive any benefit other than rectification of damage.

Minor damage to the cylinder or crankcase may be repaired by welding but only to restore the component to the original specification.

The use of thermal barrier coatings/ceramic coatings on or in the engine or exhaust system is not allowed. Replacement connectors to repair wiring loom are permitted. Repairs to starter motor are also allowed.

D2.4.2 Carburettor. Dell'orto VHSB 34 QD, QS or XS.

All parts of the carburettor including the body are to be unmodified and run as supplied by Rotax. The carburettor must have VHSB 34 (cast in body) QD, QS or XS (stamped on body). All parts must comply with the official fiche. The only adjustments allowed are the main jet, external air screw, throttle stop adjustment screw, and needle position on the five grooves provided.

QD and QS carburettor: Needle jet atomiser FN 266. Choke jet 60. Idle jet 30, idle jet emulsion tube 30. Needle K27 or K98. Float needle valve 150. Slide 40. Floats 5.2gr. Atomiser Type 2. Alternative idle jet 60, idle jet emulsion tube 60, and 3.6gr floats may be used. Idle jets, idle jet emulsion tubes and floats may not be mixed and only used in one of the two following combinations:- Combination 1: Idle jet 30, idle jet emulsion tube 30, floats 5.2gr; Combination 2: idle jet 60, idle jet emulsion tube 60, floats 3.6gr. The venturi must have 34 cast and 12.5 or 8.5 stamped on the top of the venturi.

XS carburettor: Needle jet DP267. Choke jet 60. Idle jet 60, idle jet emulsion tube 45. Needle K57. Float needle valve 150. Slide 45. Floats 4.0gr. The venturi insert must have 12.5 stamped on the top.

Throttle cable and adjusters are free. It is permitted to use a single length of vent tube looped across the two air vents of the carburettor with a hole or slot cut in the side of the vent tube at the top of the loop.

FLOAT LEVER ARM HEIGHT: Using the ROTAX gauge (Part No: 277 400), the float arms must both fit between the gauge slot without touching. The carburettor must be upside down on a horizontal flat surface. The gauge must sit on the metal body of the carburettor without gasket.

D2.4.3 Fuel Pump. Only Mikuni – Fuel Pump DF 44-210 may be used. The fuel pump must be fitted to the bottom or side of the standard air box bracket. Only a single length of pulse tube from crankcase connector to fuel pump may be used. Only a single length of fuel line from fuel pump to carburettor may be used. It is permitted to use an in-line fuel filter as supplied by Rotax between the fuel tank and fuel pump. An Internal fuel tank filter is also permitted. No restrictors, fuel returns or additional reservoirs are permitted.

D2.4.4 Intake Silencer. Only Type 2 may be used.

The Intake Silencer/Airbox must be used unmodified as supplied by Rotax for the FR125 Max engine with its filter and all component parts including support bracket in place.

The two halves of the airbox must be securely screwed together using 4 M6 screws. All 4 screws must be sufficiently tightened to securely clamp the two halves of the airbox together.

Intake silencer tube and airbox-to-carburettor socket must be marked with "ROTAX".

In all conditions the air box MUST be positioned with inlet trumpets to the bottom of the box. The air box must be securely fitted in a manner to prevent rotation.

D2.4.5 Exhaust System. Only TYPE B or EVO exhaust may be used. The exhaust system and silencer may not be modified in any way except for the pop rivets securing the silencer end plate may be replaced with screws. The use of a jubilee clip to secure the end plate pop rivets or screws is allowed. It is permitted to paint the exhaust system with black paint. The use of any other coating or plating is not allowed. It is permitted to make minor repairs by welding or brazing to the exhaust system providing there are no alterations to the original dimensions.

EVO exhaust system with separate silencer with 90° elbow outlet. EVO silencer must use perforated silencer tube and end plate with 90° elbow outlet. Gasket ring must be fitted between exhaust system and silencer. Type B exhaust system must use perforated silencer tube and end plate with straight outlet.

It is permitted to weld/braze a socket (at a distance of 50-80mm from the ball joint) on the top of the exhaust system for measuring the exhaust gas temperature.

D2.4.6 Cooling System. The radiator must be fitted to the right hand side of the engine using standard hoses and connections as supplied by Rotax. Engines using the thermostat cooling system must use the system in its entirety which comprises of thermostat head cover, radiator, radiator cap, radiator hoses, steel crankcase water hose connecting tube and radiator bracket. It is permitted to use the thermostat cooling system with or without the thermostat in place. The use of alternative hose clips and screw fixings are permitted. Blanking of the radiator is free providing it does not necessitate the modification of the original components other than simple attachment. Minor repairs to the radiator are allowed.

D2.4.7 Ignition Unit. DENSO digital battery ignition, variable timing with no adjustment. Ignition coil must have "129000-" and "DENSO" moulded on the case. The ignition coil must have three pin connection. The ignition coil must be mounted by means of two original rubber mounting blocks or equivalent to the gearbox cover. In the case of chassis component interference with the original mounting position it is permitted to relocate the ignition coil by the use of an extension bracket. The extension bracket must be attached to the original gearbox cover mounting holes. The minimum length of HT lead permitted is 210mm from outlet of cable at ignition coil to outlet of cable at spark plug connector (= the visible length of wire). Spark plug cap must be marked with "NGK TB05EMA", or alternative red rubber version marked "NGK" or "ROTAX", as described on the official Motorsport UK fiche. Ignition switch can be either On-Off type, or Automatic fuse type. Any make of lead acid battery is permitted provided it is of the same specification as supplied by Rotax for the FR125MAX 12v/6.5Ah, 12V/7.2Ah or 12v/9Ah. FIAMM-GS type FG20651, FG20722, FGHL20722, FGH20902, YUASA, YT7B-BS and ROTAX BATTERY FX7-12B. ONLY the ROTAX lithium iron phosphate battery RX7-12L or RX-12B may be used as an alternative to lead acid batteries. The ignition pick up must be marked with the numbers 029600-0710, followed by a variable production code on the 2nd line.

EVO Dell'orto ignition system: Ignition coil with separate ECU. The minimum length of HT lead permitted is 210mm from outlet of cable at ignition coil to outlet of cable at spark plug connector (= the visible length of wire). Spark plug cap must be marked with "NGK TB05EMA", or alternative red rubber version marked "NGK", as described on the official Motorsport UK fiche. Engines using the EVO Dell'orto ignition system must use the system in its entirety which comprises of ignition coil, ECU, mounting brackets, wiring loom, battery clamp (battery box) and all its components as described in the Motorsport UK fiche. Battery clamp (battery box) must be mounted on the left side of the chassis, next to the seat. Only YUASA YT7B-BS (with and without Rotax branding) and ROTAX RX7-12B or RX7-12L (lithium-ion phosphate type) may be used with EVO Dell'orto ignition system.

D2.4.8 Spark Plug. The only spark plugs permitted are as listed below and must be unmodified with sealing washer in place. The list of spark plugs is as follows:

Denso IW24, IW27, IW29, IW31.

NGK BR8 EG, BR9 EG, BR10 EG, B8 EG, B9 EG, B10 EG, B8 EGV, B9 EGV, B10 EGV, BR8 EIX, BR9 EIX, BR10 EIX, GR9D1-8, GR8D1-8.

Other makes/types may be added to this list by J.A.G.; details will be published in official bulletin.

D2.5 **Transmission**. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by Rotax for the FR125 MAX. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. The engine clutch must be triggered at 4000 rpm maximum and make the kart and Driver move forward. The clutch must be in direct drive (and 100% engaged) at 6,500 rpm. See U18.8. A bar test may also be used to test clutch engagement, parameters to be advised.

All sprockets must use a 15 x 19 x 17 needle cage bearing and O-ring seal except in the case of an 11 tooth sprocket. An 11 tooth sprocket must be fitted with a plain bearing and an O-ring seal.

D2.6 **Brakes**. Hydraulic disc brake operating on rear wheels only.

D2.7 **Tyres**. Dry: MOJO D2XX 'CIK-Option', with barcode
10.0 x 4.50-5 front. 11.0 x 7.10-5 rear.

Wet: MOJO W5 'CIK Rain' with barcode
10.0 x 4.50-5 front. 11.0 x 6.00-5 rear

Tyres must be fitted to run in the correct direction of rotation, as indicated by the arrow on the sidewall of the tyre.

D2.8 **General**. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

D2.8.1 **Retail Price**. Not applicable.

D2.8.2 **Weight**. Minimum of 148kg including driver at all times. Minimum driver weight as per U17.29.6 is 42.5kg.

D2.8.3 **Number Plates**. Red with white numbers. U17.27 applies.

D2.8.4 **Age**. Year of 13th birthday to 31st December of the year of 16th birthday. Drivers who have not reached their 13th birthday must hold a minimum of a Kart National licence (U15.3).

D2.8.5 **Non-Technical Items**. The use of alternative fasteners, washers, hose clips, fuel and pulse line is allowed unless otherwise specified. The use of additional and/or alternative earth straps is allowed. The use of additional air box support brackets, radiator support brackets, coil-mounting brackets, chain and clutch guards is allowed providing the fitting of these does not necessitate modification of the original components.

D2.9 **Data Logging**. Data logging is permitted; data logging systems with or without memory may be used. Global navigation satellite system reception is permitted. It is only permitted to take readings of engine rpm, engine water temperature, exhaust gas temperature, speed of 1 wheel, an X/Y accelerometer, lap times and split lap times. The engine water temperature sensor may only be fitted in the position provided in the cylinder head cover for this attachment. The rpm, may only be recorded via a sensor on the HT lead to sense spark plug pulses. The HT lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.

D3.0 Group Mini, Junior and Senior

D3.1 Class Formula TKM

Affiliation Commercial – Tal-Ko

D3.2 Introduction. The UK's own unique class catering for drivers of all ages from 10 upwards through to Juniors and Seniors. A commercial and cost efficient class with strict technical and cost controls. A Motorsport UK British Championship class.

The TKM Junior class is unique in enabling young drivers to go from Mini through to Junior all within one class and with one kart /engine. This is made possible by having five weight/restrictor size bands. The Seniors also have four weight/restrictor size bands. It is intended that normally all bands within a class will race together for the same trophies with same colour number plates. Where a club has sufficient numbers they may if they wish run different weight/restrictor bands of either class on separate grids. The Junior Extreme class is a potential premier championship class which may be introduced subject to sufficient interest. Note minimum height and weight for drivers in the Mini/Junior age class. Where appropriate TKM Junior 2 and 4-stroke classes may race together, and TKM Senior 2 and 4-stroke classes may race together. Full regulations for the TKM 4-stroke class are available at www.tal-ko.com, or on the Motorsport UK website motorsportuk.org/resource-centre/#technical-kart

The Clubman and Masters sub-classes may be used by clubs at their discretion where there is sufficient interest either within normal Extreme classes or extra to, according to numbers.

Classic TKM is aimed at the fast growing number of drivers who wish to race older karts to slightly modified regulations but which fully adopt the ethos of the class.

The classes allow optional use of clutches (mandatory for Junior Extreme) and TAG. All seniors should now be on Extreme 115cc class engines, though any that are not should race within the normal grid. The control of the class regulations rest with Tal-Ko who are the class owners and these regulations are printed with the permission of Tal-Ko. The regulations are the same as those published by Tal-Ko. Further copies of the full regulations are available from Tal-Ko, 54 Sunderland Road, Sandy, Bedfordshire SG19 1QY. Tel. 01767 682020. Email: info@tal-ko.com. Can be downloaded from www.tal-ko.com. Full engine details are contained in the TKM BT82 official fiche also available from Tal-Ko.

While long term stability is at the heart of the classes, in the interests of fairness, clarity, safety, and drivers, Tal-Ko reserves the right to agree with Motorsport UK clarifications and changes to regulations at short notice if required.

D3.3 Chassis.

D3.3.1 Rule no longer applies.

D3.3.2 Drivers may compete in any chassis conforming to Motorsport UK Yearbook regulations providing it meets all other requirements herein. TKM homologated karts must still display a TKM sequential plate if using modified old-style crash bars.

D3.3.3 Chassis to be constructed from magnetic steel tubing, cross section free. The method of welding/brazing is free but for all main chassis joins welding/brazing is obligatory – i.e. No clamping, sliding members or torsional and stiffness adjustments including additional bolt-in torsion and/or stiffness bars are permitted. The use of any type of hydraulic or similar damping device for any purpose is specifically prohibited.

D3.3.4 Engine must be mounted to the right hand side, driver seated facing to the front.

D3.3.5 The rear axle must be of parallel magnetic steel up to 50mm nominal diameter. The axle can be either solid or hollow. It must be supported in two bearings only, using any type of metal bearing and retention method including cassette type. Ceramic bearings are not permitted. No other bearings or stiffening devices may be attached to the rear axle for any purpose. It is permitted to use circular collars around the rear axle immediately next to the axle bearings to prevent axle movement. They must not exceed 21mm in width and must be fitted for the sole purpose of axle location. It is permitted to semi-drill the axle for grub screw location. It is permitted to make use of rear axle bearing mounts or bearing adaptors and flanges which allow wheelbase or height adjustment provided that it does not exceed Motorsport UK Yearbook dimensions permitted. It is permitted to fit internal inserts positioned in keyway and bearing areas for the specific use of extending life of axle with regards to cracking etc.

D3.3.6 Adjustable rear ride height permitted.

D3.3.8 The steering must have non-adjustable castor and camber angles.

The king pin bolts must be centrally positioned in both the frame stub axle mounts and stub axles. The position of the king pin holes must be non-adjustable and if required central neutral components must be used in place of adjustable ones.

D3.3.9 Front ride height adjustment is permitted.

D3.3.10 All karts must have the steering column mounted in such a way that even if the bottom retaining bolt is removed it cannot pull free from its lower bearing.

D3.3.11 Adjustable or removable rear, front and side torsion and/or stiffness bars are specifically banned. If a kart is manufactured with torsion and/or stiffness bar options each bar must either be removed or welded permanently in place. If welded in place the torsion and/or stiffness bars must be welded directly to the chassis permanently. Welding the clamps is not sufficient and it must be torsion and/or stiffness bar to chassis direct welding. Torsion bar clamps must be removed. Although the exact method of welding is free (mig, tig, braze, etc) tack welds are not sufficient. The welding must be nominally continuous around each joint and at a minimum cover 75 per cent of the circumference allowing for areas which may be difficult to access. The word permanent is stressed. The only additions permitted to chassis are items to meet latest Motorsport UK Yearbook safety regulations.

D3.3.12 Unless listed here for a specific purpose, use of the following materials for chassis/kart parts is specifically prohibited: Components made from Kevlar, Carbon Fibre, Titanium alloys, Magnesium alloys, Cobalt alloys, Tungsten Alloys and Beryllium Alloys, Metal Matrix Composites and Ceramics. The seat, floor tray and chain guard can be made from Plastic or similar materials, Fibre Glass, Aluminium, Kevlar or Carbon Fibre. It is permitted to use Magnesium Alloys for the following specific parts: wheels, front and rear wheel hubs, engine mount, brake disc hub, brake caliper mount, rear axle bearing mounts, sprocket carrier and steering wheel mounting boss. The use of plastic or similar materials for components such as wheels, wheel hubs/bosses, sprockets and brake disc carriers is expressly forbidden. Lubricants on kart only, excluding engine, are free.

D3.3.13 Additional bolt on seat stays/mountings are permitted position and style free.

D3.3.14 **Bodywork**.

(A) All karts: Use of CIK-FIA homologated crash tested bodywork consisting Side Pods, a Front Fairing and Nassau Panel is mandatory and must conform to Motorsport UK Yearbook regulations. A CIK-FIA Rear Protection System is NOT permitted. It is permitted to modify the bodywork mounting points on the chassis to accept CIK-FIA homologated bodywork but it must be undertaken in a professional manner. The combination of homologated bodywork elements of different makes or models is authorised, save and except that the two side bodywork elements must be used together as a set. Components from the same element cannot be mixed, i.e. side bars from one homologation cannot be used with side pods from another homologation. The Front Fairing and Nassau Panel, providing they compatibly connect with each other, may be from different makes and models. Side Pods may incorporate a suitable hole for starter shaft, even when clutch not fitted. When wet weather tyres are fitted, it is permitted for the wheels and tyres to be inside the Side Pods.

Use of the CIK-FIA homologated detachable front fairing mounting kit is mandatory (U17.1.6). A pre-2015 CIK-FIA homologation front fairing CANNOT be used with the CIK-FIA- detachable front fairing mounting kit. All karts MUST attach their dismountable front fairing/spoiler with the KG manufactured and homologated Front Fairing Mounting kit, Homologation number 1/CA/20.01/01/ET.

(B) Clubman karts only: TKM homologated karts for the period up to 2006 inclusive with old style diagonal bar fixing points may use side bumpers with a minimum of one tube with a minimum size of 18mm diameter (19/20mm recommended) and a wall thickness of 1.4mm minimum securely fixed to the chassis by a minimum of two points on each side and must allow for the attachment of mandatory side bodywork. Kart front bumper may be modified to allow fitment of a dismountable front fairing.

D3.3.15 The rear bumper must comply to Motorsport UK Yearbook regulations. It must not incorporate adjustable torsion and/or stiffness by its design and construction. The one piece main horizontal steel tube element of the rear bumper must be attached to its two bumper mounting points by welding only. The two upright supports of the rear bumper must also be welded to their bumper mounting points but can either be welded to or attached with bushes that can freely move on the one piece main horizontal steel tube element. No bolted or clamp-like joints permitted. A CIK-FIA rear protection system is NOT permitted.

It is fully permitted to use additional measures to ensure the bumper does not fall off in case of a breakage or failure through use of cable ties and wire type cable. A small bracket with bolts may be used with a maximum of one bolt on either side of the kart attaching next to or adjoining the mounting points on the bumper itself. This must be for security only.

It is permitted to use rubber pipe type material secured by cable ties or jubilee type clips to guard against the main horizontal steel tube element of the bumper where it meets the two upright supports, fracturing and falling off while on track. If jubilee clips they must be fitted with their tightening screw heads forward of the main horizontal steel tube element.

D3.3.16 Drivers may make use of tank tape, cable ties, thin wire or throttle cable type bowden cable in ensuring that items such as exhaust, bumpers, electrical wiring, chain guard, etc. do not come off during the course of racing. One or more fixings may be used, however the item used must only be there for secondary security and reliability purposes and must not be attached in such a manner that it affects torsion and/or stiffness adjustment of the kart or provides any other performance advantage.

D3.3.17 Seat type is free including material, subject to Motorsport UK Yearbook.

D3.3.18 Floor tray shape and material free but must comply to Motorsport UK Yearbook regulations (see U16.6). Must not have any sharp edges exposed.

D3.3.19 The fuel tank must be floor tray mounted beneath the steering column, forward of the driver. Type free. Fuel filter permitted either in-line or within the fuel tank or both. Maximum fuel tank capacity 9.25 litres. An overflow catch-tank must be used.

D3.3.20 Rule no longer applies.

D3.3.21 Rule no longer applies.

D3.3.22 On the grounds of safety the use of aluminium nuts and bolts is prohibited throughout the whole of the kart including the engine.

D3.3.23 Brake and throttle foot pedal position and type free.

D3.3.24 Rule no longer applies.

D3.3.25 Rule no longer applies.

D3.4 **Engine** – See also TKM BT82 Engine Fiche.

D3.4.1 TKM BT82 Piston Port two stroke engine fitted with a standard Walbro WB19 carburettor stamped TKM, carb spacer block marked TKM, ignition Motoplat 9600903-1 or PVL system marked TKM, TKM exhaust system complete with flex and standard TKM Carburettor induction box complete with original filter. The engine as raced, including induction box and ancillaries, must conform, in all respects with the latest TKM BT82 Homologation Fiche with its Extension and Amendments, as clarified and elaborated within these regulations and any official TKM technical bulletins.

D3.4.2 The engine and ancillary components such as carburettor, ignition, exhaust and noise induction box must be raced in standard condition as manufactured and/or supplied by Tal-Ko with no other brand or tuner identity added. Filing, grinding, machining, polishing, surface treating, surface coating, plasma metal spraying and lightening of any component including bearings is expressly forbidden. This expressly includes any chemical or other treatments intended to smooth the flow of air/fuel within the carburettor.

D3.4.3 The addition of materials to any component is not allowed. Black anodising of the head and barrel must remain, subject to fiche requirements. It is permitted to mark engine measurements and engine number on the barrel/head. Where components are found to be in breach of regulations and not capable of being rectified they may be marked prominently and permanently as such by Tal-Ko. External wear and tear such as accident damage causing fin breakage, or throttle spring rubbing, will be permitted.

D3.4.4 While it is accepted that a minimal amount of damage is permitted to the exterior of the induction/noise box system including its trumpets, any damage that affects the course of airflow into the engine is prohibited. This particularly applies to the shape of the inlet trumpets.

D3.4.5 **Old style noise induction boxes**. No longer permitted.

New style noise induction boxes. Mandatory for all classes. For full regulations see official TKM BT82 engine fiche. Note that for wet use it is permitted and recommended to use a protective device to prevent water being sucked into the air box inlet trumpets. Design free and may be fitted externally to the airbox using cable ties, tape etc provided no holes are drilled into the air/mixture internal path. May also be fitted to sidepod. May only be fitted when the official conditions set as wet or open.

D3.4.6 All parts used in or on this engine must be of original TKM manufacture or source, except where expressly allowed.

UNLESS IT STATES THAT YOU CAN DO IT YOU CANNOT!!!

D3.4.7 The following minor modifications are permitted:

- Drilling of a hole in a head or barrel fin to fit a throttle return spring.
- Modification to, and addition of, a slot in the Carburettor swivel assembly and Carburettor spacer to allow for ease of throttle cable fitment.
- Drilling holes in component mounting nuts and bolts to allow the fitting of locking devices.
- Extension to the high jet to ease adjustment while driving is permissible, providing the original jet is still used and the extension does not exceed 50mm in length. Extension to the low jet is not permitted.
- Drilling of scrutineer's sealing wire holes, one per component, in the fins of the head, barrel, and two crankcase halves. It is also permitted for authorised scrutineers at a race meeting to mark engines with paint.
- Where spring location holes in the TKM exhaust and manifold bend flex spring flanges have become worn through, it is permissible to re-drill additional holes further around the flanges solely for spring retention purposes. It is also permitted to repair broken spring holes and or cracked flanges with a local weld/braze repair.
- TKM manufactured brass main bearing shims may be used to facilitate correct crankshaft end float clearance.
- As an alternative to the standard black carburettor fuel pump diaphragm, it is permitted to use the beige colour fuel pump diaphragm as supplied in the Walbro WB19 repair kits, part nos. D10-WB and K10-WB.
- The small butterfly adjustment screw and spring screw which sets tickover on the Carburettor can be fitted either way round. It is beneficial to reverse it when setting up tickover on a clutch type engine.
- It is permitted to repair broken ignition wires providing original type connectors are used.
- It is permitted to mark the carburettor with personal identification marks like 1, 2 or A, B etc., but this must not interfere with the TKM logo or the model and batch number or have tuner recognition.

D3.4.8 It is permitted to paint the TKM manufactured exhaust silencer provided that only black paint is used and that the original TKM logo is still visible. It is expressly prohibited to use any other coating or plating or to use any colour other than black. It is also clarified that on all engine types, while the exhaust may be superficially cleaned and/or painted black on the external surface, it is not permitted to carry out extensive polishing and any accompanied weight reduction.

D3.4.9 Junior TKM (using 100cc TKM BT82 engine) and Junior Extreme (using 115cc TKM BT82 Extreme engine) must use a single TKM manufactured aluminium anodised carb restrictor plate between the carburettor and engine. This is a flat metal plate with a nominal minimum thickness of 3mm and a central parallel round bore of varying sizes and identifying colour according to driver weight through which all the mixture feeding the engine must pass. No blenders of any configuration are allowed. This part must not be modified or polished in any way and must be as made and supplied by Tal-Ko. It must display the genuine TKM logo. Coloured anodising must be intact. The Junior 100cc 148kg power band does not require a restrictor.

D3.4.10 Senior and Junior weight/restrictor sizes as follows, in each case the weight is total of driver as per U17.29.6 and kart as raced. Restrictor sizes quoted are maximum diameter permitted:

TKM Class	Colour	Restrictor
Junior 123	Black	19.5mm
Junior 128	Gold	20.5mm
Junior 135	Blue	22.0mm
Junior 142	Purple	24.0mm
Junior 148	No restrictor	
Senior Extreme & Clubman 132	Black	19.5mm
Senior Extreme & Clubman 139	Gold	20.5mm
Senior Extreme & Clubman 146	Blue	22.0mm
Senior Extreme & Clubman 152	No restrictor	
Senior Extreme Masters 160	No restrictor	

Tal-Ko reserve the right, with Motorsport UK approval, to amend restrictor size/minimum weight with one month's notice to correct any apparent advantage/disadvantage.

D3.4.11 Junior Extreme engine must use Purple anodised 24mm restrictor and TAG specification engine.

D3.4.12 Ignition timing is limited as detailed. When it is set it must be locked so that it cannot be adjusted by the driver with the kart in motion or by any mechanical and or vacuum/electronic device.

D3.4.13 On Motoplat Ignition, the timing must be set to between 2.0mm and 3.0mm before Top Dead Centre. On the PVL system, ignition timing must be set to between 1.5mm and 2.1mm BTDC. Ignition timing to be measured statically using a dial indicator on the piston crown and the original ignition timing lines. TAG engine has its own specifications as set out in the official TKM BT82 engine fiche.

D3.4.14 Engine management systems and additional fuel pumps are prohibited.

D3.4.15 Connection between the carburettor and throttle pedal to be of one bowden type cable. No other means of throttle actuation permitted except for hand throttles used as easy-start mechanism.

D3.4.16 For all engines it is mandatory to use the appropriate HT lead, spark plug cap and approved spark plug (with its original sealing gasket washer in place) all in unmodified form. Note for TAG engines the plug cap is PVL and black in colour and for non-TAG it is NGK and red in colour. The HT leads are also different and not interchangeable between TAG and non-TAG engines.

The only spark plugs permitted are:

DENSO – IW27 and IW 31

NGK – B9EG, B10EG, BR9EG, BR10EG, B9EGV, B10EGV, BR9EIX and BR10EIX.

D3.4.17 A minimal amount of machining is permitted to the cylinder head subject to stringent conditions, primarily intended to allow rectification of engines that have suffered head damage. This must be carried out in line with the drawings laid out in the official TKM BT82 engine fiche. Note that the squish angle face of 12 degrees plus or minus 1 degree must meet and intersect the liner mating face of the cylinder head at that angle, with no intermediary angles or curves throughout their full circumference. Any form of step, recess, groove or similar will render the cylinder head illegal since it will not follow the original shape.

The combustion chamber dome must at all times remain as a concave spherical shape throughout its entire diameter. At the point where it meets the squish band there must be only one nominal radius which must be a maximum of 3mm. Any fundamental shape change to the concave spherical dome introducing convex spherical shaping, more than one intermediary angle or radius at the point of meeting the squish band, or any change which makes its shape outside that stated, will render the cylinder head illegal.

D3.4.18 The cylinder head and/or liner mating face(s) must remain flat. If machining or any other operation is carried out on the cylinder head and/or liner mating face(s), the mating faces must always remain flat over the full extent of their original surface.

D3.4.19 It is permitted to use Helicoil type and Timesert thread replacements to repair all stripped threads on engine fixings on the crankcase and cylinder barrel. On the spark plug thread only a Helicoil type thread repair is permitted. Any other type of repair or insert is prohibited. Such repairs must not be used to derive any benefit other than rectification of damage. In the case of the spark plug thread, no portion of the Helicoil may protrude outside of the normal thread area. The coil must be inserted to the full length of the original thread and only one continuous coil to be used per repaired thread. In all cases the size of the repaired threads must remain as standard. On the carburettor, it is permitted to repair the non-metric threads with M3 or M4 threads providing they do not perform any other function.

D3.4.20 When measuring the inlet and exhaust port timing it is clarified that the maximum contact pressure on the official TKM 0.25mm thick x 6mm parallel nominal width feeler gauge (P/N: TFG025) should be only that achieved through finger and thumb pressure on either one of the crank nuts. The dial gauge and fixture block used for this purpose must be tightened down at 13lb/ft on each of the two nuts. The nuts/studs must have threads in good condition, lubricated, and with nuts which can be easily moved by finger-only pressure at the point of being tightened.

D3.4.21 All gaskets used in or on the engine must be of original TKM supply and must be fitted in accordance with the engine fiche. Only one gasket is permitted on any engine part with the exception of the barrel to crankcase mating face where it is permitted to use up to a total of any three of the standard 3 alternative thickness TKM supplied gaskets. Use of gasket sealer/grease is permitted.

D3.4.22 It is permitted to fit additional silencing where required by Motorsport UK or local club regulations, provided that the original complete TKM equipment is still used in unmodified form.

D3.4.23 Use of an exhaust end can is mandatory and must be that provided by Tal-Ko and marked with the TKM logo. It must be fitted with the three large exhaust exit holes 180 degrees opposite to the main exhaust tailpipe exit.

D3.4.24 When taking measurement of the cylinder head volume, the cylinder head must be fitted to the engine in the manufacturer's normal manner with the standard brass head nuts & TKM sealing nut tightened to 13lb/ft and the two small cap headed bolts tightened to 8lb/ft. The nuts/studs must have threads in good condition, lubricated, and with nuts which can be easily moved by finger & thumb-only pressure at the point of being tightened. If the engine is fitted with the optional EeziStart De-Comp valve, then this must be in the fully closed position and tightened to 13lbs/ft. The digital burette must be used with light grade oil which meets the specification:- Viscosity: 61 Centistokes at 20 C which is available from Tal-Ko.

The engine when measured must be as raced - e.g. with the same gaskets in position and with no carbon removed from the top of the piston, inside of the combustion chamber, etc. The engine can be hot from racing or at cold ambient temperature for measurements to be taken. Definitive sanctioned measurement must be at cold ambient temperature.

The cylinder head may only be removed for inspection in the presence of an authorised Motorsport UK eligibility scrutineer before being replaced for further head volume checks if required. Greasing of top & bottom ring is not permitted and all measuring oil thoroughly removed before a further head volume check is carried out.

Method of taking head volume measurement:

The engine must be in an upright stable position with the measuring plug in position and fully tightened down on spark plug washer face to 13lbs/ft. Rotate the engine over and lock into place with a wedge or feeler gauge placed between ignition rotor and stator with the piston as close to Top Dead Centre (TDC) as possible. Once the digital burette has been zeroed, insert the measuring oil into the engine to the permitted minimum required cc and then gently rotate the engine clockwise and anticlockwise a small amount to put the piston exactly at TDC. If the oil does not seep out of the measuring plug hole onto its top face surface, then it is legal. It is recommended that the insertion of the oil and TDC test to take no longer than 10 secs. If the oil seems to keep needing topping up, then a suspect illegal stuck top ring will need to be investigated.

CYLINDER HEAD VOLUME: Use of a Digital Burette and the official TKM measuring plug P/N 003 is the only definitive sanctioned method of measuring.

ENGINE	Engine fitted with EeeziStart	DIGITAL BURETTE	GLASS BURETTE (comparison guide only)
Jnr 100cc	Jnr 100cc	Digital: 10.6cc min.	Burette: 11.0cc min.
Snr & Jnr Extreme 115cc	Snr & Jnr Extreme 115cc	Digital: 11.6cc min.	Burette: 12.0cc min.
TAG Jnr 100cc	N/A	Digital: 9.6cc min	Burette: 10.0cc min.
TAG Snr & Jnr Extreme 115cc	N/A	Digital: 10.6cc min.	Burette: 11.0cc min.

D3.4.25 As part of TKM's commitment to noise reduction, it is mandatory to use effective heatproof webbing or similar sleeve material wrapped around the exhaust flex to help reduce noise. Make is free.

D3.4.26 The use of purpose designed TKM fin rubbers is mandatory as a noise reduction method. All new engines are fitted with noise reducing fin rubbers as supplied by Tal-Ko. These comprise 10 special rubbers all with TKM logo and either marked H or B to indicate whether for head or barrel. Competitors must use a full set of these rubbers, which may be fitted to older engines. The use of more than 10 rubbers is allowed but not advised. Only TKM rubbers permitted. Where fins have become broken on an engine it is permitted to remove excess sections of the rubbers at this point. At post race/qualifying scrutineering, loss of one rubber will be accepted provided it is then replaced before the next race.

D3.4.27 The use of one or more TKM manufactured with TKM logo special steel cylinder head retaining nuts with hole for sealing wire is permitted, even if sealing is not required. Use of such nuts may be mandatory at championship meetings as specified in their regulations.

D3.4.28 Piston rings must at all times remain predominately free (50% or more) to operate in the manner in which they were designed and supplied. It is the responsibility of the driver to ensure that the rings are not 'coked' in place with carbon or prevented from their normal 'spring' effect by other methods. The rings must be appropriate to the piston size used and have a maximum ring gap of 0.5mm when measured with the ring placed squarely 5-10mm down from the top of the cylinder bore. Only the standard unmodified earless type piston cir-clips as supplied by Tal-Ko must be used. The Extreme 115cc engine uses one piston ring, the Junior 100cc engine may use one or two piston rings. The bottom piston ring for the Junior 100cc engine can be removed for racing if required.

D3.4.29 Where specified, officially sanctioned and part numbered TKM gauges and measurement devices must always be used when checking engine measurements. In the case of any doubt or dispute, only these approved items must be used and the results taken as definitive and final. The engine and other test equipment should be at a cold (ambient) temperature of between –5C and +50C. Any readings taken within this temperature span will be accepted as definitive.

D3.4.30 It is permitted to use the optional TKM manufactured with TKM logo flex ring to help increase the life of the exhaust flex.

D3.4.31 Permitted Re-bore (Extreme Specification Engines Only). It is permitted to re-bore the barrel in order to take new TKM Extreme oversize pistons 54.25 – 54.75mm. This modification may be carried out to any age engine. It is also permissible to carry out minor machining to the cylinder head to match as detailed in the latest official TKM BT82 engine fiche additions. The pistons in these Extreme engines will have only one piston ring. In all other respects normal Formula TKM rules apply.

D3.4.32 A TAG on-board starter system engine and associated equipment may be used as supplied by Tal-Ko and detailed in the official TKM BT82 engine fiche. It is clarified that when using a TAG specification engine it is mandatory to always have the full system in place as applicable and connected to enable the starter to be used to start the engine. An external hand-held starter may be used to start the engine in case of any problem, but at any time before or after a race the driver may be required to demonstrate that the starter system with its on-board battery is fully fitted and functioning. Exceptionally at a race meeting if a fault occurs which means the starter cannot be used, with agreement of a scrutineer the engine may be started externally providing that all the components of the starter, battery etc. are in place. No test will then be required.

The only items which must be used on both the old and new style TAG ignition systems are:

Old Style: PVL Plug Cap, PVL HT Lead, PVL Coil, PVL Rotor, PVL Stator and the PVL CDI box.

New Style: PVL Plug Cap, PVL HT Lead, PVL Ignition Module, PVL Rotor & PVL Stator.

Various items listed as not mandatory such as Relays, Fuses & PVL wiring loom may be completely removed from the kart.

D3.4.33 When measuring and checking for the maximum permitted piston bore size in the cylinder barrel, the bore may be measured at any position within its full length where the circumference is continuous – i.e. not where there are port openings or con rod clearance cut outs. If the maximum permitted bore size is exceeded at any point then the cylinder barrel is illegal.

D3.4.34 The cylinder piston bore must be nominally perpendicular to the cylinder base and central to the cylinder liner. Out of centre and/or angled cylinder piston bores are not permitted.

D3.4.35 For the avoidance of doubt, where dimensions and tolerances are stated in the official TKM BT82 engine fiche these are for information only and it is stressed that unless specifically stated as permissible, it is NOT permitted to alter any component to the fiche dimensions.

D3.4.36 Use of the official TKM supplied optional EeziStart de-compressor valve is allowed across all engines except TAG in unmodified form with sealing washer in place. See official TKM BT82 Engine Fiche for details.

D3.5 Transmission.

D3.5.1 The drive must be direct, i.e. the crankshaft and rear axle are connected only by a single length of chain. No belt drive, reduction gears, etc., permitted. Engine sprocket to be 9, 10, or 11 tooth. On clutched engines 10 or 11 tooth only.

D3.5.2 Engines may be fitted with the optional Formula TKM Horstman dry clutch or 'V' clutch. If fitted these must carry the TKM markings and be used in unmodified form as manufactured or supplied by Tal-Ko. A clutch is mandatory for Junior Extreme.

D3.5.3 Engines fitted with a Horstman clutch must use the genuine TKM clutch safety cover in unmodified form. An effective and working ignition on/off switch must be fitted to the kart and clearly marked in the off position.

D3.5.4 On TAG engines the only permissible clutch assembly complete is the 'V' clutch as supplied by Tal-Ko with no modification and the TKM logo stamped on all of the three clutch shoe outer faces. It is not permissible to reline the clutch shoes or add substances to either the shoes or drum.

D3.6 Brakes.

D3.6.1 Brakes must be hydraulic disc brake operating on the rear wheels only – no ABS or similar systems.

D3.6.2 The brake disc must be made from cast iron or steel. Type free – may be ventilated floating, etc. The brake to consist of one calliper, with two pads. Twin master cylinders permitted. Disc carrier free. Any brake system may be used. Pads free.

D3.6.4 For the purposes of safety it is mandatory for all karts to make use of a dual connection between the brake pedal and master cylinder. The prime connection may be either solid or cable operated, with a secondary safety cable minimum 1.8mm nominal diameter set slightly looser to act as a back up in the case of failure.

D3.7 Wheels, Bearings and Tyres.

D3.7.1 The only tyres permitted are Maxxis with the word 'TKM' moulded in their sidewalls. Dry slick tyres will have green labels, wet tyres will have red with a white outline labels. They must not be modified in any way including hand or machine cutting. Note a new wet tyre has been in use from 01.01.2013. The older style wet tyres with labels in just red are no longer permitted.

Tyre sizes/types as follows:

Dry – TKM	Front 10x4.50-5,	Rear 11x7.10-5
Wet – TKM	Front 10x4.50-5,	Rear 11x6.00-5

D3.7.2 Heating of tyres by any artificial method, or their treatment by any chemical substance, is prohibited.

D3.7.3 Wheels are free but must not be made of plastic type material. Wheels must be of one moulding/casting. The use of wheels which have been cut and joined to increase or reduce width is expressly prohibited. Front wheels may have a separate detachable hub. It is permitted to use wheel balance weights affixed to the wheels. Front wheel bearings must be of metal type. Ceramic not permitted.

D3.7.4 Maximum wheel width should be a nominal 122mm front and 210mm rear as measured across the inside edge of the beads. Maximum permitted width across the outer edges of the rims to be 133mm at the front and 217mm at the rear.

D3.7.5 When wet weather tyres are fitted, it is permitted for the wheels and tyres to be inside the sidepods, so long as the sidepods have closed solid ends.

D3.8 General.

D3.8.1 Rule no longer applies.

D3.8.2 **Weight**. (On completion of any part of the event.) Driver weights subject to U17.29.6.

Junior TKM 123: min 123kg with driver. Minimum driver weight 37kg.

Junior TKM 128: min 128kg with driver. Minimum driver weight 42kg.

Junior TKM 135: min 135kg with driver. Minimum driver weight 49kg.

Junior TKM 142: min 142kg with driver. Minimum driver weight 59kg.

Junior TKM 148: min 148kg with driver. Minimum driver weight 67kg.

Junior TKM Extreme: min 138kg with driver. Minimum driver weight 46kg.

Senior TKM Extreme 132 & Extreme Clubman 132: min 132kg with driver. Minimum driver weight for drivers under the age of 16 as per U15.4.1 is 46kg

Senior TKM Extreme 139 & Extreme Clubman 139: min 139kg with driver. Minimum driver weight 44kg. Minimum driver weight for drivers under the age of 16 as per U15.4.1 is 46kg.

Senior TKM Extreme 146 & Extreme Clubman 146: min 146kg with driver. Minimum driver weight 50kg.

Senior TKM Extreme 152 & Extreme Clubman 152: min 152kg with driver. Minimum driver weight 60kg.

Senior TKM Extreme Masters: min 160kg with driver. Drivers must be aged 35 years or over, or the driver must weigh a minimum of 80kg.

D3.8.3 **Plates**. U17.27 applies.

Senior TKM Extreme – red with white numbers.

Senior TKM Extreme Clubman – white plates with black numbers.

Senior TKM Extreme Masters – red with white numbers and white line across top or bottom of plate.

Junior TKM – blue with white numbers.

Junior Extreme – white with black numbers.

D3.8.4 **Ages/Sizes**.

Junior TKM – From 11th birthday to 31st December of the year in which 16th birthday falls. However a driver with a Kart National licence, can race from the year of their 11th birthday. Minimum driver height wearing race boots but no crash helmet nominally 135cm. Minimum weight 37kg (U15.2 and U15.3).

Junior Extreme – From 13th birthday to 31st December of the year in which 16th birthday falls (U15.3).

Senior TKM Extreme – The Class is open to any driver from the year of their 16th birthday, subject to 3.8.2 and U15.3.1 of the Motorsport UK Yearbook. A holder of a Kart National licence may transfer to the Senior Class from their 15th birthday, subject to 3.8.2 and U15.4.1. Exceptionally, a holder of an International ITE licence may transfer to the Senior Class at any time (U15.4). Having moved into a Motorsport UK Senior Class he/she may not revert to a Junior Class.

TKM Extreme Clubman – TKM Extreme Clubman is a sub class which clubs may use if they wish with the karts either on the same grid as TKM Extreme or separate. It allows a lower cost factor. All current TKM Extreme regulations apply with the following modifications:

TAG engine and any engine with CNC barrel NOT permitted. All other TKM BT82 engines fitted with cast barrels permitted, with or without clutch.

Any type of kart chassis may be used, but must be a minimum of two years old. Driver must provide confirmation of kart age.

Where an older TKM homologated kart is being used, if it displays the TKM homologation plate it may be used with older style sidebars modified to take new style CIK-FIA bodywork, and may have front bumper modified to take approved dismountable front fairing. See rule 3.3.14 (C).

For the removal of uncertainty, it is clarified that TKM homologated karts may be upgraded to current regulations on items such as ackerman steering, brakes, stub axles, 50mm rear axle etc. as per full class regulations.

Gearing may be specified by a Club.

Tyres will be current spec Maxxis slick and wet. Clubs may specify restrictions on tyre age and/or depth.

TKM Extreme Masters – Same as normal senior class technical regulations. Driver must be 35 years and over or weigh a minimum of 80kg in full racegear, subject to U17.29.6.

D3.8.5 **Additional Notes**.

- On TAG and clutch engines we recommend the on-off switch should be mounted in the area of the steering wheel/Nassau panel.

- While taking part in racing or official practice a revolution counter/data logging device may be fitted provided it meets these criteria. It is permitted that this rev counter or another device may record lap times, split times, speed, revs and length of engine running time. If such equipment is fitted with temperature sensing capability/g-force sensors these connections must not be used. The information gathered may be downloaded when the kart is off the track into any type of memory equipment including a PC. It is not permitted to transmit a signal to another receiver whilst the kart is in motion. Any sensors not permitted must be removed from the kart for racing and official practice if this equipment does not comply. The only exception to this rule applies to the fitting of officially sanctioned cameras and other recording devices and to transponders and other equipment required as part of the organisers requirements for that race meeting. On-board still and motion cameras may be fitted subject to Motorsport UK Yearbook regulations.
- The use of "Easystart" wheels is permitted.
- Only the TKM BT82 name may be used under the heading "engine" in event programmes. No other names permitted.
- As class owners Tal-Ko reserve the right to have an engine complete with carburettor, noise box, exhaust system, etc. sealed by a Motorsport UK scrutineer for the purposes of checking that it conforms to the BT82 engine fiche and TKM rules and if required power testing on the manufacturer's approved dynamometer. The competitor and a Motorsport UK scrutineer will be invited to be present for such strip down and any required testing, which is carried out at the risk of the competitor.
- Tal-Ko have the right to clearly and permanently mark any component which is found to be in breach of regulations and not able to be rectified.
- It is permitted to add weight to the kart in order to meet minimum weight requirements provided that Motorsport UK Yearbook regulations are adhered to. Weights must be attached within the periphery of the main kart frame and must not be attached to the side pods and/or front nose cone. It is permitted to add weights to the seat but strongly recommended not to add more than a total of 2kg weight to the floor tray. No one single piece of ballast must be more than 5kg. All weights to be fixed using a minimum of two mechanical fixings, i.e. bolts with washers.
- In the event of any dispute the regulations and fiche with updates as published within the official Formula TKM Regulations and TKM BT82 engine fiche together with any appropriate Technical Bulletins will be taken as the definitive documents. It is the responsibility of each and every competitor to obtain these regulations and fully implement them. Ignorance of any rule will not be a defence.
- Tal-Ko reserves the right to refuse to serve any trader found to be carrying out modifications not permitted in the class regulations.
- Formation laps for a rolling start must be maintained as per U7.7 at a steady pace, neither too fast nor excessively slow. For the avoidance of doubt that speed relates to engine running between 5000 and 6000rpm once karts are starting to form into grid.
- The eligibility specialist to the TKM class is Paul Klaassen. In addition, Ernie Salmon is also a TKM eligibility specialist scrutineer with responsibility for the TKM British Class

All rules effective January 1, 2022.

A copy of the Formula TKM Regulations and Technical Guide 2022 engine homologation fiche is available free from Tal-Ko Racing at www.tal-ko.com.

D3.8.6 Classic TKM. This is a specific fully authorised class for those taking part in historic racing. Karts must be no newer than 2003, tyres are current Maxxis TKM specification and engines must make use of original parts and not have any modifications other than those specified.

Full details of the slightly revised regulations for the class are available at:
https://www.f100uk.co.uk/regulations

E1.0 Group Senior Non-Gearbox

E1.1 Class IAME X30 Senior

Affiliation Commercial: John Mills Engineering Ltd.

E1.2 Introduction. This class endeavours to provide performance approaching that of the comparable current non-gearbox Senior classes, combined with low running costs and low noise levels, the engine can be changed from Junior to Senior by removal of a simple exhaust restrictor. It is expected that the class will continue to evolve and the promoters reserve the right, with the agreement of Motorsport UK, to alter the technical regulations to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from IAME agreed by Motorsport UK. Enquiries to John Mills Engineering Ltd PF International Kart Circuit, Brandon, Grantham, Lincolnshire NG32 2AY Tel:01636 626424 E: sales@iame.co.uk.

E1.3 Chassis. Any chassis conforming to Motorsport UK Yearbook regulations. Must use a currently CIK-FIA homologated Rear Protection System.

E1.4 Engine. The only engine permitted in this class is the IAME X30. Two-stroke engine equipped with electric starter, 16,000 rpm ignition, centrifugal clutch, carburettor, inlet silencer and exhaust system. The power unit, as raced must conform in all aspects with the official Motorsport UK homologation fiche and must bear the relevant official IAME markings as shown in the Motorsport UK homologation fiche. The machining of ANY surface is strictly prohibited. Compliance with the Motorsport UK homologation fiche may be checked at any time during an event, with the technical checking tools supplied by IAME. No addition of, or other change of material is permitted. No modification or tuning for whatever purpose is allowed, except for that listed in the following regulations, or where expressly permitted by Motorsport UK. Where specific dimensions are not given for the engine and its supplied accessories in the Motorsport UK homologation fiche, the dimensions will be checked against a control engine held under the control of Motorsport UK. Any engine used must have its individual identification number registered with John Mills Engineering Ltd (JME).

E1.4.1 Engine replacement parts. The only replacement parts allowed are those supplied by IAME and listed on their parts list for the Motorsport UK homologated engine. Replacement parts must carry the manufacturer's part number and/or marking where applicable.

E1.4.2 Spark plug. The only spark plugs permitted are shown below; they must be unmodified and as supplied by the manufacturer, with sealing washer in place unless a temperature sensor is fitted. Permitted spark plugs:

NGK: B8EG, B9EG, B10EG, BR8EG, BR9EG, BR10EG, BR8EIX, BR9EIX, BR10EIX, R6252K-10, R6252K-105, R6254E-10, R6254E-105.

E1.4.3 Bearings. All the bearings part numbers X30125396A, X30125397, IMB-20100 and X30125746A must be unmodified, complete with steel ball or rollers, plastic cage and remain the same type as supplied by the manufacturer. The use of alternative SKF roller bearing part number X30125397 (BC1-3342B) is permitted.

E1.4.4 Engine lubrication. The only oils permitted are those specified in the current CIK-FIA list of homologated lubricants. The current list can be found on the CIK-FIA website at www.fiakarting.com

E1.4.5 Engine management. Engine management equipment/systems are prohibited.

E1.4.6 Engine sealing. All engines will remain unsealed in their normal use. However, a Motorsport UK licensed scrutineer appointed to the meeting may reserve the right to seal any engine at any time during an event for further inspection at a later date or at their convenience.

E1.4.7 Modifications. Neither the engine nor any of 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 addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these regulations or the official Motorsport UK fiche. The adjustment of elements specifically designed for that purpose shall not be classified as modifications. The engine must be raced in standard form as manufactured and supplied by IAME unless otherwise stated. Filing, grinding, polishing, surface treating, machining, adding or removal of material or lightening of any component, including for repair purposes, is not permitted unless otherwise stated in these regulations or unless expressly permitted by Motorsport UK.

The following minor repairs/modifications/additions are permitted:

(i) Repair of damaged threads in the crankcase and/or cylinder with helicoils or timeserts.

(ii) A wet-box as supplied by IAME (part no. A-61700) may be attached to the inlet silencer; it may be adapted provided that it in no way modifies the shape or size of the inlet trumpet or creates a ram effect. The inlet silencer cannot be modified to aid in the attachment of a wet-box or splash-guard and the attachment must be of a non-permanent type, e.g. tape or cable ties.

(iii) Decals applied on the engine and on the inlet silencer.

(iv) Deleted.

(v) The addition of protective material to the HT-lead, and the HT-lead may be shortened, however cutting and re-joining of the lead is not permitted.

(vi) Use of a maximum of two base gaskets (part no. EBP-125045, EBP-125046 or EBP-125047) and in any combination.

(vii) Honing of the cylinder.

(viii) Deleted.

(ix) Use of a blanket on the front of the cylinder solely to assist in the prevention of freezing.

(x) Moderate repair to the crankcase due to component failure, this excludes welding or addition of any other material.

The following repairs/modifications/additions are specifically not permitted:

(i) Painting of the cylinder head or cylinder.

(ii) Repair of the cylinder head spark plug thread.

(iii) Repair of any of the cylinder, in any form.

E1.4.8 Ignition unit. All parts must be un-modified original digital Selettra ignition. Scrutineers have at any time during the race meeting the right to request part or full controlled ignition system to be fitted. Only CDI box marked 'C' (16,000) is permitted. The marking on the electronic box 'C' is mandatory and must be clearly visible without disassembling the CDI box. The battery must be fixed to the chassis and connected to the ignition system at all times. The rotor location key must be unmodified and have minimum thickness of 2.43mm.

E1.4.9 Engine eligibility. The checking of the combustion chamber volume must be carried out as described in the Motorsport UK homologation fiche with TQF oil and using a digital burette. The checking of the squish must be done along the centreline axis of the gudgeon pin, at the smallest point, a maximum of three times. The angular reading of the port is to be carried out by inserting a 0.2 x 5mm wide feeler gauge. For damaged ports the angular reading is max. 125° side transfer, 126° front transfer and 176.5° exhaust port, using a 1mm pin gauge at no more than 4 points in the port.

E1.5 Exhaust. Exhaust with part no. X30125715 is mandatory. The exhaust system, manifold and silencer must not be modified in any way and must comply at all times with the Motorsport UK homologation fiche. The use of a jubilee clip to secure the end silencer screws is permitted. Use of a spacer between the manifold and engine is permitted but must be as supplied by IAME, maximum of 2 exhaust gaskets can be used. Painting black on the outside is allowed however, the use of any other coating or plating is not permitted. The use of an exhaust temperature (EGT) sensor in the appropriate fitting on the exhaust is permitted.

E1.5.1 Exhaust silencer. The use of additional silencer part number X30125723-K is mandatory, and must be used as shown in the Motorsport UK homologation fiche with no modifications. All mountings and fittings are free.

E1.6 Carburettor. Tillotson HW-27A laser marked 'IAME'. The carburettor must remain unmodified and conform in all aspects to the official Motorsport UK homologation fiche. One inlet gasket (part no. 10360-A) must be used between the carburettor and reed block. The use of any additional gasket is prohibited. Any parts fitted must be original parts as shown on the spare parts list in the Motorsport UK homologation fiche, and must remain unmodified. The only gasket set permitted is the red type as supplied as new (part no. DG3-HW). The paddle spring is free but must be the original part and remain unmodified.

E1.6.1 **Reed block**. Both the reed block and cover must remain strictly original. Either fiberglass or carbon original IAME marked petals may be fitted, but they may only be used in matching pairs.

E1.6.2 **Inlet silencer**. The inlet silencer (part no. X30125740) with 22mm trumpets must be used and must remain unmodified as supplied by IAME for the IAME X30 engine. The rubber manifold with air filter is mandatory and must conform to the homologation paper. The use of a gauze filter on the inlet trumpet is permitted.

E1.7 **Cooling system**. The radiator must be fitted to the left hand side of the kart, using standard hoses and connectors. The water pump must be mounted to the chassis and driven from the rear axle.

All cooling system components and mountings are free.

E1.8 **Transmission**. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by IAME for the X30 engine and must comply at all times with the Motorsport UK homologation fiche. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. Only IAME original Z9, Z10, Z11, Z12 or Z13 sprockets can be used. Use of O-ring seal (part no. A-60565) and needle cage (part no. B-55598) for the clutch assembly is mandatory. The only clutch drum permitted is part number X30125550A..

E1.9 **Brakes**. Hydraulic disc brake operating on rear wheels only.

E1.10 **Tyres**. Dry: KOMET K2M 10 x 4.60-5 fronts. 11 x 7.10-5 rear
Wet: KOMET K1W 10 x 4.20-5 front. 11 x 6.00-5 rear

Tyres must be fitted with the correct direction of rotation.

Only tyres with rounded corner barcodes and prefix "K" are permitted.

E1.11 **Weight**. Minimum of 162kg including driver at all times. Minimum driver weight for any driver under the age of 16 as per U15.4.1 is 53kg.

E1.12 **Number plates**. Yellow with black numbers. U17.27.1-4 apply.

E1.13 **Age**. The Class is open to any driver from the year that he/she achieves their 16th birthday, subject to 2.11 and U15.4.1. A holder of a Kart National licence may transfer to this Class from their 15th birthday, subject to 3.11 and U15.4.1. Exceptionally a holder of an International 'A' or 'B' kart licence may transfer to this Class at any time (U15.4). Having moved into a Motorsport UK Senior Class he/she may not revert to a Junior Class.

E1.14 **General**. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

E1.15 **Fasteners and attachments**. The use of alternative fasteners, washers, hose clips, fuel line is allowed unless otherwise specified. The use of an additional earth strap is allowed. The use of additional air box support brackets and/or radiator support brackets is allowed, providing the fitting of these does not necessitate modification of the original components.

E1.16 **Data logging**. Data logging is permitted, data logging systems with or without memory may be used. Global Navigation Satellite System reception is permitted. It is only permitted to take readings from a maximum of 5 channels. The rpm, may only be recorded via a sensor on the HT-lead to sense spark plug pulses. The HT-lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.

E2.0 Group Senior – Non-Gearbox

E2.1 Class Rotax Senior Max

Affiliation Commercial: J.A.G. Engineering

E2.2 Introduction. This class endeavours to provide an affordable high performance racing kart class combined with low running costs and low noise levels. It is expected that the class will continue to evolve and the promoters reserve the right to alter the technical regulations at short notice to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from Rotax agreed by Motorsport UK. Enquiries to J.A.G. Engineering, Unit 6 Mid Sussex Business Park, Folders Lane East, Ditchling, Hassocks, Sussex BN6 8SE. Tel. 01444 243112.

E2.3 Chassis. Any chassis conforming to Motorsport UK Yearbook regulations.

E2.4 Engine. The only engine permitted in this class is the Rotax FR125 MAX. This engine is a single cylinder, liquid cooled, reed valve two stroke. All engines must be sealed between cylinder, crankcases, cylinder head and the reed valve block with an official seal to prevent modification. All seals must be crimped with the official Rotax crimping tool part no. 276 110. Each end of the sealing wire must only pass through the seal once.

All engines must be sealed between cylinder and crankcases with an official seal to prevent modification. All engines are issued with an official identity card. It is the competitor's responsibility to ensure the numbers inscribed on the engine and seal correspond with those on the identity card at all times. Only authorised dealers will be issued with seals for use during maintenance of the engines. The identity card must be filled in and signed by an authorised dealer. The engine must be presented at scrutineering with the official class seal intact and the identity card lodged with the scrutineer. The card must be collected by the competitor at the end of the race meeting. (At club race meetings it is not compulsory for competitor's to lodge the identity card with the scrutineers. The identity card must be available for inspection by the scrutineers at any time during the race meeting). Should a seal become damaged, loose or lost during racing it must be reported to the meeting's scrutineer before leaving parc ferme. To allow the competitor to continue racing the scrutineer may at their discretion re-seal the engine with an official Motorsport UK seal. The new seal No. Must be entered in the engine's identity card and signed by the scrutineer. The engine must be taken to an official dealer with Motorsport UK seal intact to be re-sealed with an official class seal before competing at the next race meeting.

E2.4.1 Modifications. Neither the engine nor any of 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 addition and/or omission of parts and/or material from the engine package assembly unless specifically allowed within these regulations or the official Motorsport UK fiche. The adjustment of elements specifically designed for that purpose shall not be classified as modifications, i.e. carburettor and exhaust valve adjustment screws.

UNLESS IT STATES THAT YOU CAN DO IT YOU CANNOT!!!

The engine must be raced in standard form as manufactured and supplied by Rotax unless otherwise stated. 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. All parts used in or on this engine must be of original manufacture or source as supplied by Rotax except where expressly allowed. The engine is to be used with air box, carburettor, fuel pump, radiator, wiring loom, ignition system and exhaust system as supplied by Rotax for the FR125 Max unless otherwise stated. Position and method of mounting the battery, wiring loom and exhaust system are free unless otherwise stated providing they are securely fixed to the satisfaction of the meeting's scrutineers and in accordance with Motorsport UK Yearbook regulations. Filing of crankcase to allow easy fitting of water connection is allowed. Fitting of helicoils and inserts to repair damaged threads is allowed, except for the spark plug thread in the cylinder head insert, providing such repairs are not used to derive any benefit other than rectification of damage.

Minor damage to the cylinder or crankcase may be repaired by welding but only to restore the component to the original specification.

The use of thermal barrier coatings/ceramic coatings on or in the engine or exhaust system is not allowed. Replacement connectors to repair wiring loom are permitted. Repairs to starter motor are also allowed.

E2.4.2 Carburettor. Dell'orto VHSB 34 QD, QS or XS.

All parts of the carburettor including the body are to be unmodified and run as supplied by Rotax. The carburettor must have VHSB 34 (cast in body) QD, QS or XS (stamped on body). All parts must comply with the official fiche. The only adjustments allowed are the main jet, external air screw, throttle stop adjustment screw, and needle position on the five grooves provided.

QD and QS carburettor: Needle jet atomiser FN 266. Choke jet 60. Idle jet 30, idle jet emulsion tube 30. Needle K27 or K98. Float needle valve 150. Slide 40. Floats 5.2gr. Atomiser Type 2. Alternative idle jet 60, idle jet emulsion tube 60, and 3.6gr floats may be used. Idle jets, idle jet emulsion tubes and floats may not be mixed and only used in one of the two following combinations:- Combination 1: Idle jet 30, idle jet emulsion tube 30, floats 5.2gr; Combination 2: idle jet 60, idle jet emulsion tube 60, floats 3.6gr. The venturi must have 34 cast and 12.5 or 8.5 stamped on the top of the venturi.

XS carburettor: Needle jet DP267. Choke jet 60. Idle jet 60, idle jet emulsion tube 45. Needle K57. Float needle valve 150. Slide 45. Floats 4.0gr. The venturi insert must have 12.5 stamped on the top.

Throttle cable and adjusters are free. It is permitted to use a single length of vent tube looped across the two air vents of the carburettor with a hole or slot cut in the side of the vent tube at the top of the loop.

FLOAT LEVER ARM HEIGHT: Using the ROTAX gauge (Part No:277 400), the float arms must both fit between the gauge slot without touching. The carburettor must be upside down on a horizontal flat surface. The gauge must sit on the metal body of the carburettor without gasket.

E2.4.3 Fuel Pump. Only Mikuni – Fuel Pump DF 44-210 may be used. The fuel pump must be fitted to the bottom or side of the standard air box bracket. Only a single length of pulse tube from crankcase connector to fuel pump may be used. Only a single length of fuel line from fuel pump to carburettor may be used. It is permitted to use an in-line fuel filter as supplied by Rotax between the fuel tank and fuel pump. An Internal fuel tank filter is also permitted. No restrictors, fuel returns or additional reservoirs are permitted.

E2.4.4 Intake Silencer. Only Type 2 may be used.

The Intake Silencer/Airbox must be used unmodified as supplied by Rotax for the FR125 Max engine with its filter and all component parts including support bracket in place.

The two halves of the airbox must be securely screwed together using 4 M6 screws. All 4 screws must be sufficiently tightened to securely clamp the two halves of the airbox together.

Intake silencer tube and airbox-to-carburettor socket must be marked with "ROTAX".

In all conditions the air box MUST be positioned with inlet trumpets to the bottom of the box. The air box must be securely fitted in a manner to prevent rotation.

E2.4.5 Exhaust System. Only Type B or EVO exhaust may be used. The exhaust system and silencer may not be modified in any way except for the addition of brackets to allow easy fitting. The pop rivets securing the silencer end plate may be replaced with screws. The use of a jubilee clip to secure the end plate pop rivets or screws is allowed. These modifications are allowed providing there is no benefit in performance. It is permitted to paint the exhaust system with black paint. The use of any other coating or plating is not allowed. It is permitted to make minor repairs by welding or braising to the exhaust system providing there are no alterations to the original dimensions.

EVO exhaust system with separate silencer with 90° elbow outlet. EVO silencer must use perforated silencer tube and end plate with 90° elbow outlet. Gasket ring must be fitted between exhaust system and silencer. Type B exhaust system must use perforated silencer tube and end plate with straight outlet.

It is permitted to weld/braze a socket (at a distance of 50-80mm from the ball joint) on the top of the exhaust system for measuring the exhaust gas temperature.

E2.4.5.1 Exhaust valve. Pneumatic exhaust valve must only be used in conjunction with the Denso ignition system. The EVO electronic exhaust valve must only be used in conjunction with the EVO Dell'orto ignition system.

E2.4.5.2 Exhaust valve protection plate. The cylinder protection plate is optional. If cylinder protection plate is used it must be fitted between cylinder and exhaust valve gasket.

E2.4.6 Radiator. The radiator must be fitted to the right hand side of the engine using standard hoses and connections as supplied by Rotax. Engines using the thermostat cooling system must use the system in its entirety which comprises of thermostat head cover, radiator, radiator cap, radiator hoses, steel crankcase water hose connecting tube and radiator bracket. It is permitted to use the thermostat cooling system with or without the thermostat in place. The use of alternative hose clips and screw fixings are permitted. Blanking of the radiator is free providing it does not necessitate the modification of the original components other than simple attachment. Minor repairs to the radiator are allowed.

E2.4.7 Ignition Unit. DENSO digital battery ignition, variable timing with no adjustment. Ignition coil must have "129000" and "DENSO" moulded on the case. The ignition coil must have three-pin connection. The ignition coil must be mounted by means of two original rubber mounting blocks or equivalent to the gearbox cover. In the case of chassis component interference with the original mounting position it is permitted to relocate the ignition coil by the use of an extension bracket. The extension bracket must be attached to the original gearbox cover mounting holes. The minimum length of HT lead permitted is 210 mm from outlet of cable at ignition coil to outlet of cable at spark plug connector (= the visible length of wire). Spark plug cap must be marked with "NGK TB05EMA" or alternative red rubber version marked "NGK" or "ROTAX", as described on the official Motorsport UK fiche. Ignition switch can be either On-Off type, or Automatic fuse type. Any make of lead acid battery is permitted provided it is of the same specification as supplied by Rotax for the FR125MAX 12v/6.5Ah, 12V/7.2Ah or 12v/9Ah. FIAMM-GS type FG20651, FG20722, FGHL20722, FGH20902, YUASA YT7B-BS and ROTAX BATTERY FX7-12B. ONLY the ROTAX lithium iron phosphate battery RX7-12L or RX-12B may be used as an alternative to lead acid batteries. The ignition pick up must be marked with the numbers 029600-0710, followed by a variable production code on the 2nd line.

EVO Dell'orto ignition system: Ignition coil with separate ECU. The minimum length of HT lead permitted is 210mm from outlet of cable at ignition coil to outlet of cable at spark plug connector (= the visible length of wire). Spark plug cap must be marked with "NGK TB05EMA", or alternative red rubber version marked "NGK", as described on the official Motorsport UK fiche. Engines using the EVO Dell'orto ignition system must use the system in its entirety which comprises of ignition coil, ECU, mounting brackets, wiring loom, battery clamp (battery box) and all its components as described in the Motorsport UK fiche. Battery clamp (battery box) must be mounted on the left side of the chassis, next to the seat. Only YUASA YT7B-BS (with and without Rotax branding) and ROTAX RX7-12B or RX7-12L (lithium-ion phosphate type) may be used with EVO Dell'orto ignition system.

E2.4.8 Spark Plug. The only spark plugs permitted are as listed below and must be unmodified with sealing washer in place.

Denso IW24, IW27, IW29, IW31.

NGK BR8 EG, BR9 EG, BR10 EG, B8 EG, B9 EG, B10 EG, B8 EGV, B9 EGV, B10 EGV, BR8 EIX, BR9 EIX, BR10 EIX, GR9D1-8, GR8D1-8.

Other makes/types may be added to this list by J.A.G.; details will be published in official bulletin.

E2.5 Transmission. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by Rotax for the FR125 MAX. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. The engine clutch must be triggered at 4000 rpm maximum and make the kart and Driver move forward. The clutch must be in direct drive (and 100% engaged) at 6,500 rpm. See U18.8. A bar test may also be used to test clutch engagement, parameters to be advised.

All sprockets must use a 15 x 19 x 17 needle cage bearing and O-ring seal except in the case of an 11 tooth sprocket. An 11 tooth sprocket must be fitted with a plain bearing and an O-ring seal.

E2.6 **Brakes**. Hydraulic disc brake operating on rear wheels only.

E2.7 **Tyres**. Dry: MOJO D5 'CIK-Prime' with barcode
10.0 x 4.50-5 front. 11.0 x 7.10-5 rear.

Wet: MOJO W5 'CIK Rain' with barcode
10 x 4.50-5 front. 11 x 6.00-5 rear

Tyres must be fitted with the correct direction of rotation, as indicated by the arrow on the sidewall of the tyre.

E2.8 **General**. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

E2.8.1 **Retail Price**. Not applicable.

E2.8.2 **Weight**. Minimum of 162kg including driver at all times. Minimum driver weight for any driver under the age of 16 as per U15.4.1 is 52kg.

E2.8.3 **Number Plates**. Blue with white numbers. U17.27 applies.

E2.8.4 **Non-Technical Items**. The use of alternative fasteners, washers, hose clips, fuel and pulse line is allowed unless otherwise specified. The use of additional and/or alternative earth straps is allowed. The use of additional air box support brackets, radiator support brackets, coil-mounting brackets, chain and clutch guards is allowed providing the fitting of these does not necessitate modification of the original components.

E2.8.5 **Age**. The Class is open to any driver from the year that he/she achieves their 16th birthday, subject to 1.8.2 and U15.4.1. A holder of a Kart National licence may transfer to this Class from their 15th birthday, subject to 1.8.2 and U15.4.1. Exceptionally a holder of an International ITE kart licence may transfer to this Class at any time (U15.4). Having moved into a Motorsport UK Senior Class he/she may not revert to a Junior Class.

E2.9 **Data Logging**. Data logging is permitted, data logging systems with or without memory may be used. Global Navigation Satellite System reception is permitted. It is only permitted to take readings of engine rpm, engine water temperature, exhaust gas temperature, speed of 1 wheel, an X/Y accelerometer, lap times and split lap times. The engine water temperature sensor may only be fitted in the position provided in the cylinder head cover for this attachment. The rpm, may only be recorded via a sensor on the HT lead to sense spark plug pulses. The HT lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.

E2.10 ROTAX SENIOR MAX/177

Minimum weight limit of 177kg including driver at all times. The driver must, in full racing equipment, weigh a minimum of 80kg at all times, weighed in accordance with U17.29.6. In all other respects the class must follow Formula Rotax 125 Max regulations.

E2.10.1 **Number Plates**. Green plates with white numbers. U17.27 applies.

E2.11 ROTAX SENIOR MAX/177 MASTERS

Minimum weight limit of 177kg including driver at all times. The driver must be over 32 years of age. In all other respects the class must follow Formula Rotax 125 Max regulations.

E2.11.1 **Number Plates**. Green plates with white numbers and white stripe under the numbers. U17.27 applies.

F1.0 Group Senior – Gearbox

F1.1 Class KZ2

Affiliation Motorsport UK

F1.2 Introduction. This class mimics the CIK class KZ2 in all respects except for those listed below.

F1.3 Chassis. Must comply with Motorsport UK Yearbook regulations and must be currently CIK-FIA homologated for KZ2. A homologated chassis will remain valid for a further 6-year period after it's CIK-FIA homologation has expired. Alternatively, a manufacturer that does not have a CIK-FIA homologated chassis for KZ2 may register one chassis with Motorsport UK on an annual basis for use in the class (further details from Motorsport UK).

F1.3.1 Bodywork. As per CIK-FIA technical regulations and currently CIK-FIA homologated, except that the detachable front fairing option and mounting kit is not mandatory. Bubble alternative to Nassau panel not permitted.

F1.3.2 Bumpers. As per CIK-FIA technical regulations and currently CIK-FIA homologated. CIK-FIA homologated rear protection system or Motorsport UK Yearbook specification rear bumper for gearbox karts is permitted in this class.

F1.4 Engine.

F1.4.1 Carburettor. Dell'Orto VHSH 30 (CS) or (BS). The carburettor must remain strictly original except that the internal bore may be polished. The only settings allowed may be made to: the slide, the needle, the floats, the float chamber, the needle shaft (spray), the jets and the needle kit, subject to all the interchanged parts being of Dell'Orto origin. The incorporated petrol filter and the plate (part No. 28 on the technical drawing No. 7) may be removed; if they are kept, they must be original.

F1.4.2 Noise & Exhaust. Motorsport UK Yearbook noise limits apply and Appendix 3 regulations apply where applicable e.g. Section 2 Exhaust Silencers. CIK-FIA homologated silencer is mandatory.

F1.5 Transmission. Must be mechanical with no electrical, electronic, hydraulic or pneumatic operation or assistance. No form of ignition control to aid gear changing is permitted, for example continuous traction system (cts).

F1.5.1 Axle. In accordance with U18.8 and not required to be CIK-FIA homologated.

F1.6 Brakes. A brake disc protector is mandatory in accordance with Motorsport UK Yearbook and CIK-FIA regulations (U16.10.10).

F1.7 Tyres. This class is limited to 5" diameter wheels with a maximum tyre width of 7.1".

Dry: Le Cont SVC (CIK-FIA Prime homologated) with white UK sticker label
Front: 10 x 4.5 x 5. Rear: 11 x 7.1 x 5.

Wet: Le Cont SV1 (CIK-FIA homologated) with white UK sticker label
Front: 10 x 4.50 x 5. Rear: 11 x 6.50 x 5

F1.8 General.

F1.8.1 Weight. Minimum 180kg short circuit trim, including driver at all times.

F1.8.2 Plates. Yellow plates with black numbers. U17.27 applies.

F1.8.3 Age. The class is open to any driver aged 16 or over. A junior may transfer to the class at any time during the year of their 16th birthday, provided that they hold a minimum of a Kart National licence and have competed in a minimum of 10 Motorsport UK Kart Events across a minimum of 3 different venues. The class is also open to drivers aged 15 and over and who are in possession of an International ITE licence.

F1.9 KZ UK Class Variation if approved in championship regulations:

F1.9.1 Chassis: Any chassis complying with Motorsport UK Yearbook regulations for gearbox karts.

F1.9.2 Tuning Regulations: The mix and match of cylinder, cylinder head and crankcase from different homologation periods of the same manufacturer is permitted.

F1.9.3 Exhaust: See APPENDIX 3. Homologated exhaust is not mandatory, the magnetic steel sheet metal thickness must be 0.75 mm minimum. In all other respects the class must follow KZ2 regulations above.

F2.0 Group Senior – Gearbox

F2.1 Class Superkart 250 Mono

Affiliation Motorsport UK

F2.2 Introduction. This class is restricted to Motorsport UK registered single cylinder engines. Engines must be of a maximum of 250cc. Engines must be designed to have no more than five gears, or modified to have no more than five operational gears, and with piston and/or reed valve induction into the original induction tract.

Provided they are registered with Motorsport UK in the appropriate time period 'kit engines' are permitted, e.g. engines using donor parts from an existing engine or upgrade parts for an existing engine. Any replacement parts registered to fit an existing engine must be direct replacements without any requirement for machining of the original engine.

The Rotax 257 in five or six speed form is exceptionally permitted in short circuit unless championship regulations state otherwise. This class is the only large capacity (over 125cc) mono cylinder class recognised for short circuit and long circuit. A new registration period commenced 01.01.2022.

Registration of new engines into the class is on a three-year basis, the next permitted update of engines in these classes will be for the 2025 season.

See Appendix 2 for eligible engine list. So long as the silhouette of the crankcase, the sprocket output orientation position and bore and stroke of the engine remains unchanged, evolution model numbers are accepted if complying with 3.4. References to Section U refer to the Motorsport UK Yearbook.

F2.3 Chassis. Any chassis complying with Motorsport UK Yearbook regulations for gearbox karts. All chassis main parts must be firmly secured together on to the chassis frame. Flexible connections are only authorised for the conventional steering knuckle support, and for the steering system. All other devices with the function of one, two or three dimensional joints are forbidden. The chassis frame is the central and main supporting element of the entire vehicle. It must have the necessary strength in order to be able to absorb the loads which are produced when the vehicle is in motion. Any hydraulic, pneumatic or elastomeric elements for damping chassis oscillation are forbidden. Minimum wheelbase is 106cm.

F2.3.1 Bodywork. Bodywork and/or front fairing are not mandatory in this class.

F2.3.2 Front, rear and side protection is mandatory and must comply with the Motorsport UK Yearbook with the following exceptions:

F2.3.3 The front bumper must conform to U17.12. In Long Circuit racing trim, it must allow the attachment of the compulsory front fairing.

F2.3.4 Unless crash-tested bodywork is fitted conforming to Section U, side bumpers are mandatory and must conform to U17.15-17.17.

F2.3.5 In the case of a 'Wet Race' side bumpers or bodywork may not be located outside the plane passing through the outer edge of the rear wheels.

F2.3.6 Bubble shields conforming to U17.22 are permitted.

F2.3.7 Floortrays are permitted to extend rearwards beyond the central strut of the chassis frame as for karts in Long Circuit trim as defined in U17.24.

F2.3.8 Rear bumper must be fitted in accordance with U17.13. CIK Rear Protection System is not permitted.

F2.4 Engine. See Appendix 2 for the list of eligible engines.

F2.4.1 Tuning rules for engines.

Modifications to the engine are allowed, providing the following are not varied.

a) Stroke.

b Bore (outside maximum limits).

c) Connecting rod centre line. Connecting rod must be magnetic material only.

d) Crankshaft must be on the manufacturer's parts list or registered with Motorsport UK.

e) External appearance of the engine other than carburettor, ignition system, reed block, carburettor rubber mounting, clutch cover, engine mounting points. (The addition of a fuel pulse pump adapter is permitted.)

f) Number of carburettors (1 only). The material magnesium is not permitted.

g) All systems of injection and/or spraying of products other than permitted fuel are forbidden, unless specifically permitted by the engine registration approval.

h) No form of electronic carburetion system, unless specifically permitted by the engine registration approval.

i) The ignition system type is open but the electronic unit box and the coil must receive only one feeding energy source of the rotor/stator or of a battery and one crankshaft pick-up signal in order to set the ignition signal. The advance and cartography may under no circumstances be modifiable whilst the kart is in motion under normal racing conditions.

j) Replacement parts for an existing engine, which must be direct replacements without any requirement for machining of the original engine, are permitted if registered with Motorsport UK.

F2.4.2 **Silencing**. Intake – See Appendix 3.
Exhaust – See Appendix 3.

F2.5 **Transmission**. Gearbox – maximum of five gears except for the Rotax 257 as specified in 3.2. Gear ratios can be varied.

Axles greater than 40mm diameter must have minimum wall thickness of 2.9mm, see U18.8.1.

F2.6 **Brakes**. Brakes as U16.10.

F2.7 **Wheels and Tyres**. Limited to 5" diameter wheels with a maximum tyre width of 8". Listed control tyre(s) may be specified in Championship Regulations.

F2.7.1 Both rear outer rims must incorporate bead retention comprising three pegs at equidistant positions. This is applicable to both wet and dry tyres. Radial tyres are not permitted.

Slick: Dunlop DFH or DGH, or Vega XH3 (all CIK-FIA 'Option' homologated). Only complete sets of the same type of tyre is permitted. Only one set of slick tyres is permitted per race meeting (not including official practice) except where a tyre is damaged beyond use as determined by the Chief Scrutineer, one extra front and one extra rear may be allowed. It is the competitor's responsibility to make sure the Scrutineer inspects a faulty tyre before the kart leaves the track exit/weighing in area.

Wet: Any wet tyre CIK-FIA homologated from 2011 onwards from Dunlop or Vega. Only complete sets of the same type of tyre is permitted.

Motorsport UK or Championship organisers reserve the right to introduce control tyres in future years, and may specify particular types for championship meetings.

F2.8 **General**.

F2.8.1 **Weight**. Minimum weight with driver on the completion of any part of the event:

195kg short circuit (Appendix 4 D4.2) or 200kg if a wing is fitted with any other sidepod or sidebar combination, or 208kg when racing in long circuit trim (Appendix 4 D4.1).

F2.8.2 **Plates**. White number plates with black numbers. U17.25-U17.27 applies.

F2.8.3 **Age**. The class is open to any driver aged 16 or over on short circuits.

APPENDIX 1 – Homologated/registered chassis' and brakes

These lists are subject to change. For up to date lists please visit motorsportuk.org/resource-centre/#technical-kart.

Bambino Chassis Registration

Top Kart	Bambino	01/B(C)/10
CRG	Smurf	02/B(C)/11
OTK	Various	03/B(C)/11
Birel	RK Baby	04/B(C)/11
Wright	Bambino 1	05/B(C)/13
Tecno	P14	06/B(C)/14
Wright	Centaur	07/B(C)/14
Haase - Corsa	Minox - Ninjia	08/B(C)/14
MS Kart	Bambino	09/B(C)/14
Birel ART	Baby	10/B(C)/15
Ricciardo Kart	Baby	11/B(C)/15
Tecno	P15	12/B(C)/15
Synergy	Titanium	13/B(C)/15
Fullerton	TF Xenon	14/B(C)/16
Intrepid	Scout	15/B(C)/16
MS Kart	Bambino	16/B(C)/16
CRG	Baby	17/B(C)/16
Top Kart	Bambino	18/B(C)/17
Project One	Bambino P1	19/B(C)/18
Wright	Minotaur	20/B(C)/18
RCE	2020	21/B(C)/20
IPK	Baby	22/B(C)/21

Cadet Chassis

Note that 2011 homologated chassis are no longer eligible for use in Cadet.

2014 Homologation

Zip Kart	Eagle	01/CAD/22
Birel/RK	C28 UK	02/CAD/22
OTK	Various	03/CAD/22
CRG	Hero 900	04/CAD/22
Cobra Kart	B1 Cobra	05/CAD/22
Energy Corse	Storm	06/CAD/22
Shark	Strike	07/CAD/22
Praga/OK1	Pegasus	08/CAD/22
Gillard	TG2	09/CAD/22
Intrepid	Cadet UK	10/CAD/22
Project One	Raptor	12/CAD/22
Synergy	Chrome	13/CAD/22
Tecno	Freccia Rossa	14/CAD/22

2017 Homologation

Project One	Rossi	01/CAD/25
Zip Kart	Vanquish	02/CAD/25
Benik	Spitfire	03/CAD/25
Sodi	Delta 900 2T	04/CAD/25
OTK	Various	05/CAD/25
Xenon	Kaos	06/CAD/25
Synergy	Platinum	07/CAD/25
Top Kart	Blue Eagle	08/CAD/25
Wright	Vulcan	09/CAD/25
BRK	Atomic	10/CAD/25
Shark	Edge	11/CAD/25

2020 Homologation

Project One	P1	01/CAD/28
Zip Kart	Edge	02/CAD/28
Synergy	Carbon	03/CAD/28
OTK	Various	04/CAD/28
CRG	Black Mirror	05/CAD/28
BirelART	C28M	06/CAD/28
Wright	Phoenix	08/CAD/28

Cadet Brake

2014 Homologation

Freeline	FL CX – I 24	02/CAD(B)/22
OTK	BSM	03/CAD(B)/22
CRG	New Age Mk2	04/CAD(B)/22
Energy Corse	Storm	06/CAD(B)/22
Shark	Bite	07/CAD(B)/22
IPK	R3	08/CAD(B)/22
Intrepid	Evo 3-S	10/CAD(B)/22
Kelgate	KDET	12/CAD(B)/22
Freeline	1R – Easy 60 (Easykart)	13/CAD(B)/22
Tecno	FT 60 UK	14/CAD(B)/22

2017 Homologation

KC Brakes	KC30	01/CAD(B)/25
Benik	BK01	02/CAD(B)/25
Tekneex	F11	03/CAD(B)/25
OTK	BSM3	04/CAD(B)/25
Synergy	SRD1	05/CAD(B)/25
Top Kart	Blue Eagle	06/CAD(B)/25
Kelgate	KDET	07/CAD(B)/25

2020 Homologation

OTK	BSM6	02/CAD(B)/28
CRG	VEN12	03/CAD(B)/28
Alto	ACB2	04/CAD(B)/28
Wright	Phoenix Cadet	06/CAD(B)/28
Extension		
KAOS	HD1	04/C(B)/19

APPENDIX 2 – Eligible engines (gearbox)

Superkart Div 1 & 250E
In addition to current CIK-FIA Homologated engines, the Rotax 256 is also permitted for Motorsport UK events.

Superkart 250 Mono
Bombardier Rotax 257.
Honda CR250.
Kawasaki KX250.
KTM 544/545/546/548.
Moto TM Cross 250.
Suzuki RM250 Z to V (1982 - 1997 inclusive).
Yamaha YZ250.

So long as the silhouette of the crankcase, the sprocket output orientation position and bore and stroke of the engine remains unchanged, evolution model numbers are accepted if complying with F3.4.

Alternative parts:
DEA SK250 Single Pneumatic Exhaust Valve
Victory CR250R
PF Racing CR01

2013 Superkart 250 Mono registration
Engines: Gas Gas K250
DEA SK250 Single

Kit engines: THR Engineering THR02-14
THR Engineering SS250
Viper Racing UK SK250S
Viper Racing UK EVO250S

2016 Superkart 250 Mono registration
Engines: IAME X30 Super Shifter 175cc
Viper SK250S1

2019 Superkart 250 Mono registration
Engines: KTM SX250

2022 Superkart 250 Mono registration
TBC - see motorsportuk.org/resource-centre/#technical-kart

APPENDIX 3 – Silencing

1. Intake Silencers

1.1 CIK-FIA noise boxes conform to the following nominal specification:

a) The intake silencer must make a petrol tight fit with the carburettor interface.

b) The minimum volume of the silencer must be 1000cc.

c) The material must be non splinterable plastic.

d) Have a maximum of two openings for the air intake.

e) The air intakes must be unmodified and be a maximum of 23mm diameter for Direct Drive and Junior Gearbox karts and maximum of 30mm diameter for all other gearbox karts unless otherwise authorised via a Motorsport UK or previously ABKC approved design or otherwise stated in Class Regulations.

1.2 A CIK-FIA homologated box must not be modified with the exception of drilling holes in the mounting flange and drilling a maximum of two small airtight sealed holes in the box wall, for the sole purpose of mounting on gearbox karts (not applicable to the KZ classes). The carburettor adapter is free providing a petrol tight joint is made between the box and the carburettor.

All gearbox karts must have a CIK-FIA homologated or previously homologated intake box correctly fitted, or one that is approved by Motorsport UK or previously ABKC for that class or otherwise stated in Class Regulations.

1.3 In order to obtain Motorsport UK approval 10 boxes must be presented for inspection. The boxes must be professionally produced devices complete with production diagrams. During a noise test, which is made on an overhead microphone, static and on both sides of the kart, the box must give at least equal noise attenuation to a currently homologated CIK-FIA intake box fitted to the same engine. The lap times with the box on test must be comparable with lap times using a currently homologated CIK box. A sample of the box will be retained by Motorsport UK as a reference.

A Motorsport UK or ABKC approved box must be permanently marked with its approval code in order to be deemed legal for use.

1.4 The following intake boxes have been previously approved by the ABKC for use on all gearbox karts with the exception of the KZ classes:

Single Cylinder FIS/2RV Motivation Design and Development Filtered Induction Silencer System Assembly, side fitting for rotary valve gearbox class engines, fitted with Pipercross foam filter element. Approval expires 31/12/2022.

Twin Cylinder FIS/2T Motivation Design and Development Filtered Induction Silencer System Assembly, side fitting for rotary valve twin cylinder gearbox class engines, fitted with Pipercross foam filter elements. Approval expires 31/12/2022.

Single Cylinder FIS/2PR Motivation Design and Development Filtered Induction Silencer System Assembly, for reed valve or piston port induction single cylinder gearbox engines, fitted with Pipercross foam filter element. Approval expires 31/12/2022. It must be fitted with the intake trumpets facing towards the ground. Not applicable to 250E.

Note that the intake box designated GB1/94 is no longer approved

1.5 Formula 210. All air entering the carburettor must flow through either a K & N cylindrical filter, Part No. RU 0840, or a K & N conical filter, Part No. RU 9220, RC 5136 or RC 9640 or K & N filter Part No. 33-2826 which must be enclosed in a current or previously CIK-FIA homologated air box and sealed to the carburettor. These intake filters must only be used with an exhaust muffler conforming to 20.8.5.2. An air box conforming to the CIK-FIA specification or an air box approved by Motorsport UK or previously by ABKC may also be used.

1.6 **Formula 450 4-stroke Gearbox**. The KGR 13768 intake box is approved for this class.

1.7 In all classes all air entering the intake silencer must do so without the addition or proximity of any device that may direct an increased flow of air from the forward movement of the kart towards the inlet.

2. Exhaust Silencers

2.1 Unless specifically authorised exhaust lengths may not be varied whilst the kart is in motion. Any such system must be failsafe in operation, not present a hazard and incorporate a measurable reduction in sound level.

2.2 The following regulations 2.3 and 2.4 are mandatory for all gearbox classes, unless varied in class regulations. The following regulation 2.5 is mandatory for all gearbox classes except 210 National.

2.3 Karts shall be provided with an exhaust silencer lying approximately parallel to the rear axle of the kart, and fed by a gas-tight tubed link pipe of a minimum 300mm length from the exit of the expansion chamber to the entrance of the silencer/muffler. In Formula 250E at least one silencer must lie approximately parallel to the axle.

2.4 The link pipe must have a bend of approximately 180 degrees for engines exhaust ported to the rear. For engines exhaust ported to the front, the bend must be between approximately 45 degrees and approximately 180 degrees. Formula 250E is exempt from these bend angle requirements.

2.5 The muffler must have an external minimum cross-section 100mm and a minimum canister length of 380mm. The canister must be used with muffling material and/or baffling plates to be an efficient silencer. The exhaust exit diameter of the canister must be no greater than 38mm.

2.6 Formula 250E: Mufflers as above, two to be fitted.

2.7 Formula 210. All gasses leaving the engine must pass through a muffler with minimum active length 47.5cm, external minimum cross-section 100mm, with an inner tube 4.0cm which must have perforations over the majority of its complete length. The muffler must be connected to the exhaust tailpipe by a nominal 180 degree bend or if exhaust port is front facing then by a flexible or rigid pipe. The exhaust exit diameter of the canister must be no greater than 40mm.

3. General

3.1 The black and orange flag will be shown during a race to signify that a kart is exceeding the sound level limit for the class or circuit. Drivers must return to the pits and report to the Clerk of the Course. If the silencing system is broken during a race the driver must stop in a safe place as soon as is practical and not attempt to continue or return to the pits.

3.2 Attention must be given to silencing systems maintenance. With the published reductions to permitted levels it is important that flex connections and joints are checked regularly and made good. Exhaust silencers that are capable of being repacked, such as Rotax 125 Max, can suffer from declining performance and it is essential that repacking is carried out in accordance with manufacturer's instructions.

APPENDIX 4 – General Regulations applicable to all Kart Clubs

A. General

These regulations are applicable to all Motorsport UK permitted Kart Events.

B. General Regulations for all Classes

The general regulations relating to the organisation of a kart race meeting, as specified in the Motorsport UK Yearbook, govern a meeting organised to the Classes specified in this publication.

B.1 **Fuel**.

B.1.1 The use of power boosting or octane boosting additives by competitors in any fuel is prohibited. Some power/octane boosters are carcinogenic.

B.1.2 When control fuel is specified the fuel will be obtained through the appointed supplier and will conform to the current Motorsport UK Yearbook regulations. Any driver found to be using fuel that does not conform to the blueprint provided by the appointed supplier may be excluded from the Championship. All systems of injection and/or spraying of products other than fuel are forbidden unless specifically permitted in Class Regulations.

B.1.3 If a control fuel is specified for use in an event or championship series this must be specified in the Regulations for the event.

B.1.4 Recordings or video of any dialogue with an event official is not permitted unless written permission is first obtained.

B.2 The recognition of seeded numbers will take place immediately as the Championship results are no longer provisional.

B.3 Data Logging equipment is recognised as a device that will allow the downloading of information from the kart. A revolution counter that monitors maximum revs is not considered a Data Logging Device.

B.4 **Scrutineering**.

B.4.1 The host Club or Championship organiser will provide each driver with a Scrutineering document (see U7.1), which may be electronic.

B.4.2 The document will contain space for the numbers of the engines and chassis being used as appropriate for the competition, any seals applied and may ask for tyre barcode numbers or these may be recorded via a scanning device.

B.4.3 The Scrutineering document must be completed and, where relevant, signed by the driver prior to the commencement of the event. It is the responsibility of the driver to comply with the above but if the driver is under 18 years of age any signature on the Scrutineering document must be that of the driver's entrant.

B.4.4 At the completion of any part of the event, if the equipment being used, including the chassis and engine numbers, and barcodes if appropriate, does not conform in all respects to the data on the Scrutineering document or barcode system the driver may be excluded from the meeting.

B.4.5 All equipment recorded on the Scrutineering document must conform to the Class Regulations.

B.5 **Weight**.

B.5.1 Scales to Motorsport UK Yearbook (U3.1.8). (E4.1.4 does not apply.)

B.5.2 It is the responsibility of the entrant to ensure that their equipment conforms to the Class weight limits using the "scales of the day". There is no tolerance.

B.6 **Class sub-division**.

B.6.1 A Class may be sub-divided to suit a Club's requirements. Clubs may further divide Classes into experienced and inexperienced drivers using suitable names that indicate this division to drivers when entering an event.

B.7.1 Karts capable of self starting, either by means of a starter motor being fitted to the engine or by attaching a starter motor, or by means of a pull cord must conform to the following regulations:–

B.7.1.1 All karts fitted with a self-starting system must also be fitted with an operational on/off ignition switch clearly marked with the relevant positions.

B.7.1.2 The driver of a self-start kart must be in the seat when the engine is started if the kart is placed on the ground or when it is running on the dummy grid. It is recommended that the brake is applied during the starting procedure.

B.7.1.3 Engines that may be self-started must not be started on the dummy grid until the signal is given by the grid marshal. They must be given the opportunity to start before the rest of the karts are given the signal to move off from the dummy grid.

B.7.2 It is forbidden to lift the rear of the kart with the engine running with the purpose of revving the engine further and spinning the rear axle. It is further expressly forbidden to carry this out with the purpose of warming the rear tyres.

B.7.3 All karts MUST leave the grid in a safe manner at slow speed so as not to endanger pushers, other competitors, or any other personnel.

B.7.4 Once a practice or race session has started, karts may only be worked on in a designated place of safety (U12.5.5 e.g. pit lane). At no time can work be carried out on a kart while its engine is running (e.g. replacing a chain, exhaust etc.). Any engine fitted with an ignition switch must have this switched off.

B.7.5 Starts: A 'Yellow Line' (acceleration line) as per U7.5.1(ii) may be used whether or not the circuit utilises the 2m wide lanes at the start area and then the appropriate parts of U7.8 apply.

B.8 Tyre bead retention pegs are permitted in all classes.

B.9 Sprocket protectors are permitted in all classes but must not be metallic.

B.10 Clubs must use the sound level meter at a height of 3.6m unless a waiver has been given (U16.16.10) and recorded on the Track Licence.

B.11 **Noise Safety**. The following regulations are highly recommended and may become mandatory in subsequent years. Refer to Motorsport UK Yearbook (J5.17.1, 2 & 8) It should be noted that the HSE limits (The Control of Noise at Work Regulations 2005) for exposure to noise are summarised as follows and are available on www.legislation.gov.uk:

The lower exposure action values are a) a daily or weekly personal noise exposure of 80dBA, b) a peak spl of 135 dBC.

The upper exposure action values are a) a daily or weekly personal noise exposure of 85dBA, b) a peak spl of 137 dBC.

The exposure limit values are a) a daily or weekly personal noise exposure of 87dBA, b) a peak spl of 140 dBC.

An employer who carries out work which is liable to expose any employee to noise at or above a lower exposure action value shall make a suitable and sufficient assessment of the risk from that noise to the health and safety of those employees, and the risk assessment shall identify the measures which need to be taken to meet the requirements of these regulations etc.

B.11.1 **Officials**. Every official and helper who is located close to the track should be issued with ear protection. This can be either earmuff style or disposable foam plugs style.

B.11.2 **Competitors**. It is highly recommended that every competitor wear ear plugs at all times when driving a kart.

B.11.2.1 Competitors are forbidden to chew gum or consume any food substance whilst racing or practicing.

B.11.3 **Dummy Grid and after race collecting area**. It is recommended that all personnel in the pit area use ear protection.

B.11.4 **Dummy Grid, collecting area and Spectator Areas close to the track**. Signs are recommended advising that ear protection is recommended, and advising a source to purchase such protection.

B.11.5 **Ear plugs**. Clubs should have supplies of disposable ear plugs for officials and for sale to spectators and drivers.

B.12 **Fire Extinguishers**. All drivers must have present at race meetings a fire extinguisher to BSEN3 or EN3 standard with a minimum 55B rating. Environmental scrutineers will carry out spot checks in the paddock. (Note: Type B means for use with flammable liquids, and the 55 refers to the capacity. The actual extinguishant is not specified, but Halon is no longer legal in the UK). Fire extinguishers must be kept at the entrance to the competitors pit space at all times. It is recommended that competitors with enclosed awnings have a minimum of a 2kg foam or powder extinguisher, and if more than one private competitor is sharing the awning then a minimum of two 2kg extinguishers be available. Commercial enterprises should be aware of Health and Safety at Work legislation and provide a minimum of two 6kg foam or powder extinguishers to be placed at the entrance(s) of the awning.

B.13 Front fairings of the wedge or shovel nose type are ineligible in all classes except gearbox when in long circuit trim with effect from 1.1.2003, see Blue Book Section U.

B.14 A Club meeting is defined as a Kart Clubman or Kart Inter-Club status event or race which is not a round of a National or Regional multi-venue Championship, O or E plate, or any Kart National meeting, but may be part of the organising club's own single venue Club Championship.

B.15 Any competitor found to be using chemical treatment on tyres in contravention of Motorsport UK Yearbook regulations (U16.9.6 / D36), or using fuel or lubricants in contravention of Motorsport UK or Championship Regulations may, in addition to any other penalty, be referred to Motorsport UK for further action.

B.16 Pitting for repairs is permitted and outside help is allowed in designated pit or repair areas (See Motorsport UK Yearbook U7.8.4/Q13.1). The repair area along with the entrance and exit should be indicated in the programme or published track map.

C. Non-Gearbox Class General Regulations

C.1 A clutch is permitted in any class, subject always to the Class Regulations.

C.2 Rear view mirrors are forbidden.

C.3 The use of acoustic measures such as inserts between head and cylinder fins to reduce noise in air cooled classes is recommended unless prohibited by Class Regulations.

C.4 It is recommended that Clubs incorporate into their Supplementary Regulations that only one set of slicks be used during a race meeting, and these should be marked or barcode numbers logged at the beginning of competition. In Cadet it is recommended that regulations only permit one set of wets for the meeting. Clubs are strongly encouraged to take other measures to limit the use of tyres over one or more meetings e.g. limiting the number of tyres that may be used in a season.

D. Gearbox Class General Regulations

D.1 **Refer to the 'Box Structure' (pg 5) for information on mixing classes. All gearbox classes, except Junior Gearbox, may be raced together.**

D.2 Drive by wire and traction control devices are expressly forbidden.

D.3 Gear change in 210 National, 125 Open, KZ2, and Superkart 250 Mono (including 450cc 4-stroke) classes must be mechanical with no electrical, electronic, hydraulic or pneumatic operation or assistance. No form of ignition control to aid gear changing is permitted, for example continuous traction system (cts). Paddle change is permitted in any gearbox class for any disabled driver limited to hand use.

D.4 **Bodywork**.

D.4.1 Long circuit bodywork trim as per Motorsport UK Yearbook U17.19.

D.4.2 Short circuit bodywork trim as per Motorsport UK Yearbook U17.18.

D.4.3 No part of the kart other than the bolts or clamps fixing the floor tray, the engine, the seat and seat stays, or the brake discs, the front kingpin bolts, the sprocket, the wheels and the tyres, may protrude below the bottom of the main longitudinal chassis rails. The floor tray may be clamped direct to the lower edge of the main longitudinal chassis rails.

D.4.4 In long circuit races it is compulsory to have valve caps fitted to all four wheels at the start of a race or official practice session. Metal caps are recommended.

D.5 Kevlar and carbon fibre are not permitted in KZ2, 210 National or Superkart 250 Mono (including 450cc 4-stroke) except for seats, silencers, Nassau panels and instrument panels, Carbon fibre or Kevlar bodywork is specifically permitted in 125 Open, Superkart 250 Mono long circuit trim and Formula 250E.

Motorsport UK

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www.motorsportuk.org

E. Lap Scoring and Points Scheme Recommendations

After a survey of the procedures used by member Clubs when lap scoring and calculating the grids for the finals during a meeting the following suggestions are made to enable the drivers to understand the system.

E.1 System (A) The first placed driver in any heat will be given 0 points, 2nd place 2 points, 3rd place 3 points and so on until the last placed driver, or System (B), the first placed driver will be given the number of points equal to the maximum number on the grid plus two, the second placed driver the maximum less two, the third the maximum less three and so on.

E.2 (A) A driver who fails to start a race will take 1 point more than the number of drivers that started the race, or (B) 1 point less than the maximum number of starters.

E.2.1 If the grid is part of a meeting when drivers may not be racing in every grid used for that Class, then a non-finishing driver will take (A) 1 point more or (B) 1 points less, than the largest starting grid used in that Class.

E.2.2 Drivers who fail to finish will be given points according to their positions on the lap charts.

E.3 A driver who is excluded from a race will take (A) 1 point more, or (B) 1 point less, than the number of drivers that started a race, calculated in exactly the way as in 2.1. The C of C may decide to increase this penalty under certain circumstances (Motorsport UK Yearbook C2).

E.4 Lap scoring, when transponders are not being used, should take the form of at least three people independently observing the drivers, this is important should a dispute arise in order that a majority decision may be made. The practice of one person "calling" the drivers is not encouraged!

E.5 In order to enable the judicial procedures to proceed with the minimum of complication the lap scoring team are advised to include the following pieces of information on their lap scoring sheets:

a) Race start and finish times.

b) Number of starters and number of finishers.

c) Any other observations pertinent to the result of the race.

E.6 In accordance with Motorsport UK Yearbook (G6.2.7 & U5.1-5.2) the Chief Timekeeper or Chief Lap Scorer will be a judge of fact in respect of laps completed and finishing order. The Chief Timekeeper or Chief Lap Scorer must forward the race finishing order to the results team and the Clerk of the Course.

F. Transponder Lap Scoring

F.1 Transponder lap scoring is highly recommended. Transponders used must be on the Motorsport UK approved list and the type permitted must be designated in SRs or Championship Regulations. Every driver will be expected to own a transponder, although clubs may hold back up stocks for hire at a nominal cost for a weekend.

F.2 The transponder must be fitted in an approximately upright position (ie with the 'R' clip to the top) on the back of the seat fitted at a height from the ground at 25cm ±5cm measured to any point of the transponder.

F.2.1 Transponders must be mounted in accordance with the manufacturer's recommendations.

F.2.2 If transponder lap scoring is in use then at least one lap scorer must manually lap score each race as per U5.1. Transponder decoders must be a certified and approved type.

F.2.3 Where timing by transponder is permitted Kart Timekeepers must be Motorsport UK licensed.

G. Tyre Testing Guidelines

G.1 A photo-ionization detector (PID) with a calibration certificate for isobutylene at 100ppm issued in the preceding 24 months and calibrated prior to use may be used for testing for indication of chemical treatment of tyres.

G.2 A reading greater than 2ppm on a PID as described in G.1 with the sampling probe within 5mm of any part of the tyre or tread, where the reading is 50% greater than the average readings found on tyres from other competitors in the race may be deemed evidence of chemical treatment as per Motorsport UK Yearbook U16.9.6.

G.3 If chemical treatment of tyres is established before the race, using the above technique or any other, the competitor will not be allowed to race as chemically treated tyres may constitute a safety risk and contravenes the Motorsport UK Yearbook (U16.9.6). If the event regulations allow then the competitor may at the discretion of the Chief Scrutineer be given the opportunity to change tyre(s). No additional time will be allowed for this.

APPENDIX 4a – ABKC specific General Regulations

The Association of British Kart Clubs (ABKC) was formed in 1990 to act as an interface between kart clubs and the sport's governing body, Motorsport UK, with whom there is a high degree of discussion and co-operation. The clubs are represented by a Steering Group, which is elected each year during the ABKC AGM. ABKC is the Motorsport UK Regional Association for Kart Clubs.

All clubs affiliated to ABKC have agreed to use the regulations in the Motorsport UK Karting Yearbook including Appendix 4 for their race meetings unless otherwise agreed by Motorsport UK, and if applicable by ABKC. Without this co-operation it would be impossible for drivers to move from club to club during the racing season and find the same race Classes.

ABKC strongly recommends that all commercial teams hold suitable public liability insurance cover and holds an Entrants licence. Note that Motorsport UK may conform to changes in CIK-FIA regulations that occur after the publication of the Motorsport UK Karting Yearbook.

Motorsport UK will seek notice of proposed changes to class regulations in July each year, giving time for feedback before full ratification in the Autumn. New regulations, tyre changes, changes to Class weights etc will normally only come into effect from the 1st of January each year, but exceptionally changes due to force majeure (e.g. the cessation of manufacture of a part, or an urgent safety regulation) may be brought in from mid-season.

Regulations which contain numerals in brackets e.g. (U16.12) are references taken from the Motorsport UK Yearbook.

Definitions

The Motorsport UK Yearbook is hereafter called the "Blue Book".

The FIA Yearbook of Karting Sport is available on the FIA Karting website www.fiakarting.com

Senior officers of the Association –

Chairman Nigel Edwards email: chairman@abkc.org.uk

Secretary Graham Smith, 'Stoneycroft', Godsons Lane, Napton, Southam CV47 8LX.
☎ 01926 812177. email: secretary@abkc.org.uk

Treasurer Graham Smith, 'Stoneycroft', Godsons Lane, Napton, Southam CV47 8LX.
☎ 01926 812177. email: secretary@abkc.org.uk

Member Clubs (as at 01.10.21) are:

Bayford Meadow KC • British Historic KC • Buckmore Park KC • Camberley KC • Chasewater KRC • Clay Pigeon KC • Club100 • Cumbria KRC • East of Scotland KC • F100 • Forest Edge KC • FP4K • Fulbeck KC • Grampian KC • Hunts KRC • Jersey K&MC • Lydd IKC • Manchester & Buxton KC • Mansell KRC • NATSKA • North of Scotland KC • RAFMSA • Rissington KC • Shenington KRC • South Yorks KC • Total Karting Zero • Trent Valley KC • Ulster KC • Warden Law KC • West of Scotland KC • Whilton Mill KC.

ABKC member clubs will acknowledge the 1 to 10 number plates recognising the top ten finishers in the relevant approved Gearbox Championship and in the 210 Challenge, subject to a minimum number of registrations in the class (see U17.28). If the minimum is not reached, the 'seeded' numbers may be reduced, in which case the remaining numbers must remain unallocated. Winners of the Open Championships (O & E) and the winner of the 210 Challenge O Plate competition may use the "0" plate which will be acknowledged by member clubs. English, Scottish, Welsh and Northern Irish Championship winners number plates (e.g. E, S & C) in recognised Classes will be recognised by ABKC clubs, so long as the class is raced fully to the ABKC regulations, all subject to Motorsport UK

approval. The recognition of the above numbers will take place immediately as the Championship results are no longer provisional. It is a condition of the Club's acceptance of a driver's race entry that they, the driver, agrees to conform to the regulations contained within the regulations contained within this publication and subsequent amendments.

Any competitor found to be using chemical treatment on tyres in contravention of Blue Book (U16.9.6), or using fuel or lubricants in contravention of Motorsport UK or Championship Regulations may, in addition to any other penalty, be banned from racing at all ABKC Clubs for a minimum period of one year. Drivers may appeal any decision to the ABKC Steering Group.

APPENDIX 5 – FIA Karting regulations

Please refer to the definitive current regulations as published by FIA Karting on their website, www.fiakarting.com for up to date information.

APPENDIX 6 – Core class criteria (W1.5.6)

A Core class is defined as one that:

- Has been established for a minimum of 3 years from initial homologation (new classes homologated for the first time under (U)1.2.1 are only permitted 'Kart Club Championships' for the initial 3 year period but may be considered for a 'Regional Kart Championship' (W1.5.7) or 'Kart Championship held within a standard Club Meeting' (W1.5.8) in year three).
- Can demonstrate proof of regular participation in a minimum of 3 club championships at 3 different venues over the preceding 2 years with 10 regular competitors in each championship, and in 3 different regions.
- Has a minimum of 100 engines (or complete karts if applicable) sold into Motorsport UK racing.
- Held a 'Regional Kart Championship' ((W)1.5.7) in the preceding year, or a 'Kart Championship held within a standard Club Meeting' ((W)1.5.8) with a minimum of 5 rounds at different venues and a minimum of 2 regions in the preceding year, or having had approval for a British or National Championship in the preceding year. (Note that for non-gearbox only a 'Core Class' is permitted a National Championship).

Additionally:

- Classes conforming to, or based upon, a CIK-FIA International class (e.g. OK) may be approved notwithstanding non-conformance to the above.
- Motorsport UK reserves the right to include a class not fully conforming to the above criteria.

APPENDIX 7 – Recognised Kart associations/groups

Association of British Kart Clubs

Secretary: G M Smith, Stoneycroft, Godsons Lane, Napton, Southam, Warwickshire CV47 8LX.
☎ (h) 01926 812177. email: secretary@abkc.org.uk. www.abkc.org.uk

Member Clubs (as at 1.10.21) are:

Bayford Meadows KC • British Historic KC • Buckmore Park KC • Camberley KC • Chasewater KRC • Clay Pigeon KC • Club100 • Cumbria KRC • East of Scotland KC • F100 • Forest Edge KC • FP4K • Fulbeck KC • Grampian KC • Hunts KRC • Jersey K & MC • Lydd IKC •Manchester & Buxton KC • Mansell KRC • NATSKA • North of Scotland KC • RAFMSA • Rissington KC • Shenington KRC • South Yorks KC • Total Karting Zero • Trent Valley KC • Ulster KC • Warden Law KC • West of Scotland KC • Whilton Mill KC.

Northern Karting Federation

Secretary: Marion Fell, 50 Newton Road, Dalton-in-Furness, Cumbria, LA15 8NF.
☎ (h): 01229 463748. www.northernkartingfederation.co.uk

Member Clubs (as at 1.10.21) are:

Cheshire KRC • Cumbria KRC • Dragon KC • Fulbeck KC • Hunts KRC • Manchester & Buxton KC • Rissington KC • Shenington KRC • West of Scotland KC.

National Kart Racing Association

Secretary: Mrs J Shone, 125 Lane House Rocks Road, Weymouth, Dorset DT4 9HY.
☎ (h) 01305 774074. www.planetkarting.uk email: mail@planetkarting.co.uk

Member Clubs (as at 1.10.20) are:

Clay Pigeon KC • Forest Edge KC • Lydd International KC • Mansell KRC • Two Counties KC.

North of Ireland Karting Association

Secretary: Mr Keith Wilkinson, 44 Mill Cottage Park, Millisle, Co. Down, Northen Ireland, BT22 2FF.
☎ (m) 07779115414. Email info@nikarting.com www.nikarting.com

Member Clubs (as at 1.10.21) are:

500 Motor Racing Club of Ireland • Bishopscourt KC • Coleraine & District Motor Club (Kart Section) • Ulster KC.

Association of Scottish Kart Clubs

Secretary: Carol Blanchard, 16 Corrie Terrace, Muir of Ord, Ross-shire, IV6 7QR.
☎ 01463 870875. rocketron41@uwclub.net.

Member Clubs (as at 1.10.21) are:

East of Scotland KC • Grampian KC • North of Scotland KC • West of Scotland KC.

PUBLICATIONS, TECHNICAL PAPERS & CLUB EQUIPMENT

Subject to their availability the products and their prices listed below are correct at the time of going to press, but may be changed without further notice.

PUBLICATIONS (VAT zero rated)

Motorsport UK Yearbook £35.00
Motorsport UK Karting Yearbook £19.00

CLUB EQUIPMENT (VAT standard rated incl.)

Club Membership cards ..... 200 for £28.00
Signing-On Sheets – Competitors/Officials ..... FOC available on website
Signing-On Sheets – Media ..... FOC available on website
"Prohibited Area" rigid PVC warning signs ..... per pack of 5 £60.00
"Motor Sports Can Be Dangerous" rigid PVC warning sign ..... per pack of 5 £60.00

COMPETITORS EQUIPMENT (VAT standard rated incl.)

Motorsport UK Helmet Approval Sticker £2.50
Motorsport UK FHR Approval Sticker £2.50

TECHNICAL PAPERS (VAT zero rated, except † = standard rate)

Motorsport UK Rollcage Certificate – Official Copy ..... ‡each £30.00
Motorsport UK Historic Rally Vehicle Identity Form Registration ..... ‡£100.00
Motorsport UK Vehicle Passport (payable to Inspecting Scrutineer) £45.00
FIA Historic Technical Passport Application (excluding Registrars Fee) .... *‡each £408.00
FIA Current Homologation Papers for any UK car ..... ‡each £56.00
FIA Current Homologation Papers for any non UK car ..... ‡Price on application
FIA Lapsed Homologation Papers ..... ‡each £47.00
FIA Lapsed Homologation Papers for pre-1995 cars ..... ‡each £32.00

‡ Overseas orders are subject to an additional delivery charge.
* Excluding FIA fee.

For the above items, please address order(s) to:
Sales Dept, Motorsport UK, Bicester OX27 8FY

Purchase on-line from www.motorsportuk.org

APPENDIX 8 – Licensed Kart Tracks

Barton Stacey (Hampshire) near Andover, 2 miles from Barton Stacey village off A303. [SU 445 425]
Bayford Meadows (Kent) 1 mile east of Sittingbourne, ME10 3RY. [TQ 912 645]
Bishopscourt (Co. Down) 6 miles east of Downpatrick, Northern Ireland, BT30 7EY. [J 570 425]
Blackbushe (Surrey) off A30 at Blackbushe Airport and follow signs towards Sunday Market, GU17 9LG. [SU 802 593]
Boyndie (Banffshire) 4 miles west of Banff. [NJ 615 645]
Buckmore Park (Kent) Chatham, between J3 on M2 and J6 on M20, ME5 9QG. [TQ 742 632]
Clay Pigeon (Dorset) On A37 midway between Dorchester and Yeovil (10 miles to each), DT2 9PW. [ST 610 028]
Crail Raceway (Fife) A917 approx. 1 mile from Crail. [NO 627 094]
Darley Moor (Derbyshire) 2 miles South of Ashbourne on A515, DE6 2ET. [SK 173 423]
Fulbeck (Lincs) 8 miles east of Newark off A17 at Brant Broughton Cross Road. [SK 901 505]
Glan y Gors (Conwy) On A5, 1 mile west of Cerrigydrudion village, LL21 0RU. [SH 937 495]
Hooton Park (Wirral) Ellesmere Port, 2 miles off Junction 6 M53. [SJ 368 797]
Kimbolton (Cambs) 7 miles north-west of St Neots on B645. [TL 111 699]
Larkhall (Strathclyde) Summerlee Raceway, Merrydon Road off A72. 800m, off J7 of M74. [NS 759 527]
Littleferry (Sutherland) Golspie, off A9 Inverness to Thurso. [NH 819 979]
Llandow (Vale of Glamorgan) 9 miles from Cardiff, off B4270 between A48 and Llantwit Major, CF71 7PB. [SS 959 715]
Lydd Raceway (Kent) 20 miles from J10 of M20, TN29 9JH. [TR 044 190]
Mansell Raceway (Dunkeswell) (Devon) 6 miles north of A30 at Honiton, EX14 4LT. [ST 132 083]
Nutts Corner (N. Ireland) 3 miles east of Crumlin. [J 203 768]
P.F. International (Lincs) 10 miles east of Newark, 2 miles off A17 towards Stragglethorpe. [SK 897 499]
Rissington (Glos) RAF Station. Off the A429, 4 miles east of Bourton on the Water. [SP 218 186]
Rowrah (Cumbria) On the A5086 4 miles north-east of Frizington and 8 miles south-west of Cockermouth, CA26 3XU. [NY 068 183]
Rye House (Herts) J5 of M25 then A10, Rye Road, Hoddesdon, EN11 0EH. [TL 389 095]
Shenington (Oxon) 8 miles west of Banbury, off A422 Banbury-Stratford road, OX15 6NW. [SP 362 428]
Sorel Point (Jersey) off La Route du Nord, north of St John's village.
St. Sampsons (Guernsey) 1 mile from St. Peter port
Three Sisters (Lancs) 5 minutes off J25 of M6, WN4 8DD. [SD 582 014]
Warden Law (Sunderland) 2 miles east of Houghton-le-Spring, SR3 2PR.
Whilton Mill (Northants) 3 miles north of Weedon off the A5. From north M1 J18, from south M1 J16. [SP 622 646]

Additionally, most Race Circuits are licensed for Long Circuit Kart events.

APPENDIX 9 – ARKS Club examiners (as at 01.10.21)

500 MRCI
Evan Freeman
15 Cashiel Road
Macosquin, Coleraine
Co. Londonderry
Northern Ireland BT51 4PW
☎ 02870 352052

CAMBERLEY KC
Mike Carr
17 Simpson Road
Basingstoke
RG21 6AR
☎ 07502 359670

Lee Cobb
1 New Barn Farm Cottages
New Barn Lane
Crawley, Winchester
Hampshire, SO21 2PP
☎ 07947 422099

CHESHIRE KC
Bob Wilson
69 Delamere Park Way West
Delamere Park
Cuddington, Northwich
Cheshire CW8 2UL
☎ 01606 883956

COLERAINE & DMC
Evan Freeman
15 Cashiel Road, Macosquin,
Coleraine, Co. Londonderry
Northern Ireland BT51 4PW
☎ 02870 352052

CUMBRIA KRC
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50 Newton Road
Dalton in Furness
Cumbria LA15 8NT
☎ 01229 463748

DRS KC
Matthew Daniels
34 Aidan Road
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APPENDIX 10 – Kart Championships and co-ordinators (Provisional)

Motorsport UK British Kart Championships
Premier short circuit British Championships for Honda Cadet, IAME Cadet, IAME X30 MiniX, Rotax Minimax, Junior TKM, Rotax Junior Max, IAME X30 Junior, TKM Extreme, Rotax Senior Max, Rotax Senior Max 177, IAME X30 Senior and KZ. Contact: Motorsport UK. ☎ 01753 765000. www.britishkartchampionships.org

Motorsport UK Bambino Championship
Motorsport UK time trial and racing Championships for Bambino Karts. Contact: Zip Kart, Unit 41 BRDC Buisness Park, Silverstone Circuit, NN12 8TL. ☎ 01327 855310. grant@zipkart.com www.kartingukbambino.com

Northern Karting Federation
Includes Super 4 Championships for KZ UK and 250 National. Contact: Marion Fell, 50 Newton Road, Dalton-in-Furness, Cumbria LA15 8NF. ☎ 01229 463748. www.northernkartingfederation.co.uk

National Kart Racing Association
Clubmans Championship for most classes. Scotland, North of England, South of England regional championship and grand final combining all regions. For details and registration contact: Ron Shone, 125 Lanehouse Rocks Road, Weymouth, Dorset DT4 9HY. ☎ 01305 774074. mail@planetkarting.co.uk. www.planetkarting.co.uk

Scottish Super Series
Direct drive classes. Drivers must be a member of an ASKC club. For details and registration contact: Carol Blanchard, 16 Corrie Terrace, Muir of Ord, Ross-Shire IV6 7QR. ☎ 01463 870875. www.scottishkarting.co.uk

Super 4 National Gearbox Kart Championships
Championships for short circuit gearbox classes. For details and registration contact: Northern Karting Federation (see above).

210 Challenge
Details are available from Kate Bateman, The Villiers, 36 South Road, Aston Field, Bromsgrove, Worcestershire, B60 3EL. ☎ 01527 871075. www.the210challenge.co.uk.

Northern Ireland Kart Championship
Direct-drive, incorporating the Northern Ireland Superkart Championship on both long & short circuit. Drivers must be a member of a NIKA member club. For details and registration contact: Mr Keith Wilkinson, 44 Mill Cottage Park, Millisle, Co. Down, Northern Ireland BT22 2FF. ☎ 07779 115414. info@nikarting.com www.nikarting.com

APPENDIX 11 – Summary of main kart classes (with popular options)

Class	Number Plate/Number	Class weight (driver min. weight) kg	Ages	Tyres – Dry	Tyres – Wet	Comments
Bambino	White/Black	69 TT / 71 Race	6-8	Le Cont MSA04	Le Cont MSA04	Comer C50 Motorsport UK homologated
IAME Cadet	Yellow/Black	103 (27)	8-12^	Dunlop SL3-MSUK	Dunlop KT3	Parilla Gazelle 60cc UK engine with clutch
Honda Cadet	Yellow/Red	103 (27)	8–12^	Dunlop SL3-MSUK	Dunlop KT3	GX160 4-stroke engine, clutch
Junior TKM	Blue/White	123+ (37+)	11-16#	Maxxis Green 'F TKM'	Maxxis Red/White 'F TKM'	As TKM with restrictor, optional clutch, optional TAG
Rotax MiniMax	Yellow/Black	132 (37.5)	11-14	Mojo D2XX 'CIK'	Mojo W5 'CIK'	Restricted version of Rotax Junior Max
IAME X30 Mini X	White/Black	132 (37.5)	11-14	Komet K2H	Komet K1W	As IAME X30 Junior with alternative restrictor and carburettor
Rotax Junior Max	Red/White	148 (42.5)	13-16#	Mojo D2XX 'CIK'	Mojo W5 'CIK'	Junior version of Rotax Senior Max
IAME X30 Junior	Green/White	148 (41)	13-16#	Komet K2H	Komet K1W	As IAME X30 Senior but with exhaust restrictor
TKM Extreme	Red/White	132+ (u16 46+)	16+*	Maxxis Green 'F TKM'	Maxxis Red/White 'F TKM'	BT82 115cc piston port, optional clutch, optional TAG
Rotax Max	Blue/White	162 (u16 52) & 177 (80)	16+*	Mojo D5 'CIK'	Mojo W5 'CIK'	125cc d/drive commercial TAG class (electric start)
IAME X30 Senior	Yellow/Black	162 (u16 53)	16+*	Komet K2M	Komet K1W	125cc commercial TAG class with electric start
KZ2	Yellow/Black	180	16+[a]	Le Cont SVC 'CIK'	Le Cont SV1 'CIK'	125cc International gearbox class, with KZ UK option
Superkart 250 Mono	White/Black	195/200/208	16+	Various (CIK 2008+)	Various (CIK 2002+)	Motorsport UK registered engines up to 250cc

KEY: * Year of 16th, 15 with Kart National, or any international ITE licence holder.
Entry from the year of the corresponding birthday with a Kart National licence.
^ Year of 8th with required Bambino experience
[a] Year of 16th with Kart National + min. 10 Kart Events at min. 3 venues, or 15 with International ITE.

2022 PLANNER

January					
Mon	31	3	10	17	24
Tue		4	11	18	25
Wed		5	12	19	26
Thu		6	13	20	27
Fri		7	14	21	28
Sat	1	8	15	22	29
Sun	2	9	16	23	30

February					
Mon		7	14	21	28
Tue	1	8	15	22	
Wed	2	9	16	23	
Thu	3	10	17	24	
Fri	4	11	18	25	
Sat	5	12	19	26	
Sun	6	13	20	27	

March					
Mon		7	14	21	28
Tue	1	8	15	22	29
Wed	2	9	16	23	30
Thu	3	10	17	24	31
Fri	4	11	18	25	
Sat	5	12	19	26	
Sun	6	13	20	27	

April					
Mon		4	11	18	25
Tue		5	12	19	26
Wed		6	13	20	27
Thu		7	14	21	28
Fri	1	8	15	22	29
Sat	2	9	16	23	30
Sun	3	10	17	24	

May					
Mon	30	2	9	16	23
Tue	31	3	10	17	24
Wed		4	11	18	25
Thu		5	12	19	26
Fri		6	13	20	27
Sat		7	14	21	28
Sun	1	8	15	22	29

June					
Mon		6	13	20	27
Tue		7	14	21	28
Wed	1	8	15	22	29
Thu	2	9	16	23	30
Fri	3	10	17	24	
Sat	4	11	18	25	
Sun	5	12	19	26	

July					
Mon		4	11	18	25
Tue		5	12	19	26
Wed		6	13	20	27
Thu		7	14	21	28
Fri	1	8	15	22	29
Sat	2	9	16	23	30
Sun	3	10	17	24	31

August					
Mon	1	8	15	22	29
Tue	2	9	16	23	30
Wed	3	10	17	24	31
Thu	4	11	18	25	
Fri	5	12	19	26	
Sat	6	13	20	27	
Sun	7	14	21	28	

September					
Mon		5	12	19	26
Tue		6	13	20	27
Wed		7	14	21	28
Thu	1	8	15	22	29
Fri	2	9	16	23	30
Sat	3	10	17	24	
Sun	4	11	18	25	

October					
Mon	31	3	10	17	24
Tue		4	11	18	25
Wed		5	12	19	26
Thu		6	13	20	27
Fri		7	14	21	28
Sat	1	8	15	22	29
Sun	2	9	16	23	30

November					
Mon		7	14	21	28
Tue	1	8	15	22	29
Wed	2	9	16	23	30
Thu	3	10	17	24	
Fri	4	11	18	25	
Sat	5	12	19	26	
Sun	6	13	20	27	

December					
Mon		5	12	19	26
Tue		6	13	20	27
Wed		7	14	21	28
Thu	1	8	15	22	29
Fri	2	9	16	23	30
Sat	3	10	17	24	31
Sun	4	11	18	25	

2023 FORWARD PLANNER

January					
Mon	30	2	9	16	23
Tue	31	3	10	17	24
Wed		4	11	18	25
Thu		5	12	19	26
Fri		6	13	20	27
Sat		7	14	21	28
Sun	1	8	15	22	29

February					
Mon		6	13	20	27
Tue		7	14	21	28
Wed	1	8	15	22	
Thu	2	9	16	23	
Fri	3	10	17	24	
Sat	4	11	18	25	
Sun	5	12	19	26	

March					
Mon		6	13	20	27
Tue		7	14	21	28
Wed	1	8	15	22	29
Thu	2	9	16	23	30
Fri	3	10	17	24	31
Sat	4	11	18	25	
Sun	5	12	19	26	

April					
Mon		3	10	17	24
Tue		4	11	18	25
Wed		5	12	19	26
Thu		6	13	20	27
Fri		7	14	21	28
Sat	1	8	15	22	29
Sun	2	9	16	23	30

May					
Mon	1	8	15	22	29
Tue	2	9	16	23	30
Wed	3	10	17	24	31
Thu	4	11	18	25	
Fri	5	12	19	26	
Sat	6	13	20	27	
Sun	7	14	21	28	

June					
Mon		5	12	19	26
Tue		6	13	20	27
Wed		7	14	21	28
Thu	1	8	15	22	29
Fri	2	9	16	23	30
Sat	3	10	17	24	
Sun	4	11	18	25	

July					
Mon	31	3	10	17	24
Tue		4	11	18	25
Wed		5	12	19	26
Thu		6	13	20	27
Fri		7	14	21	28
Sat	1	8	15	22	29
Sun	2	9	16	23	30

August					
Mon		7	14	21	28
Tue	1	8	15	22	29
Wed	2	9	16	23	30
Thu	3	10	17	24	31
Fri	4	11	18	25	
Sat	5	12	19	26	
Sun	6	13	20	27	

September					
Mon		4	11	18	25
Tue		5	12	19	26
Wed		6	13	20	27
Thu		7	14	21	28
Fri	1	8	15	22	29
Sat	2	9	16	23	30
Sun	3	10	17	24	

October					
Mon	30	2	9	16	23
Tue	31	3	10	17	24
Wed		4	11	18	25
Thu		5	12	19	26
Fri		6	13	20	27
Sat		7	14	21	28
Sun	1	8	15	22	29

November					
Mon		6	13	20	27
Tue		7	14	21	28
Wed	1	8	15	22	29
Thu	2	9	16	23	30
Fri	3	10	17	24	
Sat	4	11	18	25	
Sun	5	12	19	26	

December					
Mon		4	11	18	25
Tue		5	12	19	26
Wed		6	13	20	27
Thu		7	14	21	28
Fri	1	8	15	22	29
Sat	2	9	16	23	30
Sun	3	10	17	24	31

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