

Kart Technical Exception Class Approval

Ref: **KTE-2014-224**

The MSA can confirm that Kart Grand Prix UK Ltd has been granted permission to run the Formula KGP Junior Class in the UK. Class Regulations will be reviewed by the MSA on a yearly basis.

Details:

Class Regulations as attached.

Date Approved: 09 January 2014

MSA Stamp & Signature:



MSA

JOE HICKERTON
MSA Technical Administrator

Group: Junior TAG

Class : Formula KGP Junior

Affiliation: Commercial: Kart Grand Prix UK Ltd Lissone House, Harris Business Park, Bromsgrove, Worcestershire, B60 4DJ. Tel: 01527 **889595**

Introduction:

Junior Kart Grand Prix is a single make engine class. The engine is manufactured by BMB srl using their 2 stroke TAG 125cc BMB HAT engine. The engine produces around 23HP and is unsealed. The engine can be tuned in line with the engine fiche. Being unsealed it gives the competitor the possibility to carry out their own maintenance and keep their running costs low.

In line with the MSA regulations the class will run at club level for the first three years.

Formula KGP Junior is a restricted version of the senior version of the engine.

When a KGP Junior driver is eligible in age to progress to the senior version of Formula KGP, only the carburetor restrictor, carburetor and exhaust and exhaust spacer must be changed in order to meet the senior engine fiche. It is designed to be a simple and low cost way of helping to feed the KGP Junior drivers into the senior version of Formula KGP in the future. At the same time an existing KGP senior engine may be used in KGP Junior by adding the carburetor restrictor and changing to a Junior carburetor and KFJ exhaust and exhaust spacer.

1.0. Chassis:

Any chassis conforming to MSA direct drive regulations.

2.0 Engine:

The only engine eligible for competition is the BMB 125cc HAT imported into the U.K by KGP UK Ltd. Each engine will be registered with KGP UK Ltd at the point of purchase and the serial number held on the KGP UK database. KGP UK Ltd reserve the right and without compensation to remove any engine from the database or any engine component from the KGP Junior class at any point due to non compliance. The engine is a 2 stroke 125cc single cylinder, re-boreable cast iron liner, water cooled and reed valve induction.

2.1 Modifications:

The engine may be tuned in line with the engine fiche. Filing, grinding, polishing and machining of the cylinder, liner, cylinder head and crankcases is allowed providing the engine complies with dimensions stated in the BMB HAT engine fiche. Adding material to any part of the engine is strictly forbidden. The Piston, exhaust pipe, ignition and clutch systems must be used in original state without any modification and comply with the engine fiche at all times. Repairs to damaged threads with heli-coils or inserts are allowed with the exception of the spark plug thread in the Cylinder head where it is not permitted to be repaired. Starter Motors are also allowed to be repaired / serviced

3.0 Carburetor: Tillotson HL384A or HL397A with the official KGP logo. The carburetor has a fixed main jet with an adjustable low jet and must remain as manufactured. No modification allowed.

The Carburetor and intake passages must be completely standard, no polishing or matching allowed. Only original Tillotson diaphragm gasket kit DG1 or Gasket repair kit RHL 117 can be used, multiple gaskets prohibited.

A carburetor throttle bracket and aluminum bell mouth may be added but must remain as OE supplied by KGP UK

The only Tillotson fulcrum /pressure spring allowed is part 24B-299X and must remain in original length and must not be stretched or altered in any way.

Only the following carburetor high jets will be allowed: 83, 85 and 87

No modification to the main jet or the low jet is allowed.

4.0 Transmission:

Direct from the engine to the rear axle via a single length of 219 chain. The original KGP clutch may not be modified in any way and the engine must engage before 5000 rpm. A rubber o ring may be used behind the clutch roller cage to help prevent possible grease contamination to the clutch.

5.0 Radiator and water pipes:

The only radiators permitted are

Freeline M radiator assembly part no 3425.00.01

Freeline L radiator assembly part no 3425.00.02

lame radiator assembly part no T-8000A

Ridolfi Righetti Radiator part no : K547F

Minor repairs to radiators are permitted.

The radiator must be fitted on the brake side of the kart. Only one radiator may be used at any time.

Make of water pipes : free

T pieces (make free) to fit water temp probe allowed.

5.1 Inline water thermostat: may be used type and make free.

6.0 Water pump: must be driven via the rear axle type and make free.

7.0 Spark Plug : The only spark plugs permitted for use are:

BMB Brisk L10s, BMB Brisk L08s or NGK spark plug models : NGK R7282-10, NGK B10EGP, NGK B10 EGV, NGK B9 EGV These must be unmodified and have a sealing washer in place at all times. It is permitted to replace the spark plug cap with a different type if the original cap fails.

8.0 Air box: The only air box permitted is the Freeline B23R foam filtered air box part number: 6680.00.01ro. Both current and expired CIK versions are allowed.

9.0 Exhaust system: CIK KFJ numbers CIK 07 TO 15 unmodified and must conform to the drawing in the engine fiche at all times. The exhaust **cannot** be painted and the use of any other coatings or plating is not permitted. An exhaust temp probe may be fitted in the mounting place provided on the exhaust.

10. Electronic unit/ on/off button and engine starter battery:

The electronic panel must be used as supplied and using the mounting bracket supplied with the engine be mounted underneath the front Nassau panel.

The loom and wiring may not be altered in any way and must be in original state at all times. The on/off button and led circuit light must also be mounted on the front Nassau panel or on later versions on the bracket which can be mounted underneath the steering wheel.

A blue triangle sticker must be applied next to the on/off button to aid marshals in the event of an incident.

To comply with MSA regulation 18.5.3 and 18.5.4 the engine starter battery must now only be mounted on the left hand side of the seat. (Opposite the engine). Only the new Freeline power extension cable and connector part number 10.11133.00 should be used which is manufactured to the correct length to reach the battery on the left hand side of the seat

11.0 Brakes: Hydraulic disc brake operating on rear wheels only.

12.0 Tyres:

DRY: VEGA SL8 sizes: 10x4.50-5 front: 11x7.10-5 rear.

WET: VEGA W5 CIK marked "KGP" sizes: 10x4.20-5 front: 11x6.00-5 rear

13.0 Fuel:

The fuel used must be Petrol: Motor Gasoline of the type on sale to the general public as per MSA regulations page 59 "The terminology" sub section pump fuel.

13.1 Oil

The only 2 stroke oil permitted is the "Kart Grand Prix oil" made by Exced and distributed by KGP UK Ltd mixed at a ratio of 20:1 (5%) For example 250mls of KGP oil to 5 ltrs of petrol.

14.0 Age:

Year of 13th birthday to 31st December of the year of 17th birthday. Drivers who have not reached their 13th birthday must provide evidence that they have held a National A licence for at least 12 months prior to competing in this class

A Junior may transfer to the senior version of Formula KGP at any time during the year that he/she achieves the sixteenth birthday, subject to U15.2.1.of the Competitors Yearbook. Having moved into the senior class he/she may not revert back to a Junior class.

15.0 Weight

The minimum weight limit for Junior KGP is **148 KGS** including driver at all times.

The minimum driver weight as per MSA regulation U17.29.6 – **42kg**.

16. Number plates

Number plates must be shown on all four sides of the kart as per MSA technical regulation, U17.27.4.

Formula KGP Junior: Yellow number plates with black numbers.

Novice's number plates should be black with white numbers as per MSA regulation U17.25.1 to 17.25.4

17. Data Logging:

Devices for recording and displaying of data are limited to engine rpm, speed, exhaust gas temperature, water temp, lap times, G lateral forces, and engine hours. Devices can download data to a laptop for analysis while the kart is stationary but cannot use telemetry (wire-less transmission from the kart directly to the pits or anyone else while the kart is running. This data and information must be made available to any scrutineer upon request.