



## INTERNATIONAL IAME EVENTS PROMOTED BY RGMMC 2024 - TECHNICAL REGULATIONS (JNR/SNR)

The CIK/FIA Karting Technical regulation applies for the IAME International events organised by RGMMC. The ENGLISH language is the authentic version. The Organizer of the event RGMMC GMBH, following the agreement of the ASN presenting the event, reserves the right to issue additional statements concerning the Technical Regulations. Such statements are issued to all registered competitors by way of Competitors' Bulletins at the race meetings, or posted to the address (email) detailed on the event registration form, or written on the official website of the series

### 1. CHASSIS

Art. 9.1 CIK/FIA KARTING TECHNICAL REGULATIONS. Chassis homologated CIK/FIA or having been homologated CIK/FIA

#### 1.1 Chassis dimensions

Art. 9.1.1 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.2 Chassis characteristics

Art. 9.1.2 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.3 Rear shaft

According to Art. 9.2 CIK/FIA KARTING TECHNICAL REGULATIONS. CIK/FIA vignette not compulsory.

#### 1.4 Fuel tank capacity

Art. 9.3 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.5 Bumper

Art. 9.4 CIK/FIA KARTING TECHNICAL REGULATIONS. Bumpers homologated CIK/FIA or having been homologated CIK/FIA

#### 1.6 Front bumper

Art. 8.4.1 CIK/FIA KARTING TECHNICAL REGULATIONS. Front bumper CIK/FIA homologated or having been CIK/FIA homologated

#### 1.7 Side bumpers

Art. 8.4.2 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.8 Bodywork

Art. 8.5 CIK/FIA KARTING TECHNICAL REGULATIONS. Bodywork CIK/FIA homologated or having been CIK/FIA homologated

#### 1.9 Material

Art. 4.10.2 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.10 Front fairing

Art. 8.5.2 CIK/FIA KARTING TECHNICAL REGULATIONS. CIK/FIA homologated fairing

#### 1.11 Front panel

Art. 8.5.3 CIK/FIA KARTING TECHNICAL REGULATIONS. Front panel CIK/FIA homologated or having been CIK/FIA homologated

#### 1.12 Lateral bodywork

Art. 8.5.4 CIK/FIA KARTING TECHNICAL REGULATIONS. Side bodywork CIK/FIA homologated or having been CIK/FIA homologated

#### 1.13 Rear wheel protection

Art. 8.5.5 CIK/FIA KARTING TECHNICAL REGULATIONS. Rear wheel protection CIK/FIA homologated or having been CIK/FIA homologated.

#### 1.14 Brakes

Brakes CIK/FIA homologated or having been CIK/FIA homologated

The following types of brakes must be used:

2WP in OK/OK-Junior classes

#### 1.15 Wheels

Art. 9.7 CIK/FIA KARTING TECHNICAL REGULATIONS



## **2. EQUIPEMENT ALLOWED**

**2.1** Each Driver is authorised with only one (1) chassis and with valid CIK-FIA homologation or having been CIK/FIA homologated.

**2.2** In the event of damage to a chassis, after examination by the Scrutineers, if it is in the opinion that it is not practical to repair in time, a replacement chassis of the same make and model as the damaged chassis may be authorised to continue the event.

**2.3** Each Driver is authorised to submit to scrutineering and to use only two (2) engines.

## **3 ENGINE IAME X30 125cc**

**3.1** Any modification to the engine and its accessories is strictly prohibited, unless expressly authorised.

**3.2** IAME considers as modifications any action modifying the initial appearance and dimensions of an original part. Any modification and/or installation resulting in the modification of a dimension and/or its possibility of control is strictly prohibited. Polishing, sanding, trimming or machining are prohibited.

**3.3** Any heat treatment or additional surface treatment is prohibited. The competitor is responsible for the conformity of his own equipment.

**3.4** Only the IAME X30 125cc, original and strictly in accordance with the manufacturer's technical form (Technical characteristics, dimensions, weights, diagrams with the tolerances prescribed by the manufacturer) is allowed.

**3.5** The pictures on the original engine tech form are also valid to identify the engine and the parts.

**3.6** The engines must be provided with their original serial number.

**3.7** No modification, improvement, polishing, addition or removal of material from any part of the engine is allowed

**3.8** Each internal or external part of the engine must be mounted in its original position and function according to the original design specifications.

**3.9** The machining, assembly and adjustment tolerances indicated on the engine tech form refer exclusively to the manufacturing tolerances.

**3.10** The competitor is absolutely not authorised to intervene on the engine, even if, after his intervention, the characteristic dimensions remain within the prescribed tolerances.

**3.11** Any tuning is prohibited. The maximum and minimum values allowed and the volume of the combustion chamber must be measured in accordance with the technical regulations of the CIK/FIA Karting.

**3.12** Diagrams and volume chart: see the engine tech form

**3.13** All the gauges described in the engine homologation form are considered as valid means and certified by the Manufacturer to check the conformity of the part for which they were designed.

## **4 CYLINDER HEAD**

**4.1** The cylinder head must be strictly original.

**4.2** Only the thread repair by means of a Helicoil M14 x1,25 of the same length as the original thread is authorised. The spark plug clamped to the cylinder head should not protrude above the top of the combustion chamber dome.

**4.3** The squish (distance between the piston and the cylinder head) must comply, in all respects, with the engine tech form.

**4.4** The Squish measurement will be carried out with a  $\varnothing$  1.5mm tin/lead wire, according to the method described in appendix 12 of the international IAME technical regulations.



4.5 The original IAME template ATT-025/1 is the reference for checking the conformity of the cylinder head profile. The shape of the gauge should match the profile of the dome, the squish area and the joint plane.

4.6 The CIK insert tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome.

## 5. CYLINDER

5.1 Strictly original and supplied with the original safety pin and IAME markings.

5.2 Polishing, sanding, deburring or adjustments are prohibited.

5.3 Only reboring is allowed. In case of doubt, the shape and the height of the ports will be compared to the cylinder of the sample engine.

5.4 No heat treatment or additional surface treatment is allowed.

5.5 Adjustment of the diagram is permitted only by means of cylinder gasket replacement.

5.6 The number and thickness of cylinder gaskets is not limited. Only original gaskets are allowed.

5.7 No cylinder head gasket is permitted.

5.8 The original IAME gauge n. ATT-025/2 is the reference for measuring the height of cylinder ports.

5.9 The original IAME gauge n. ATT-035/1 is the reference for carrying out a visual inspection of all the ports.

5.10 Only the straight water connection on the bottom of the cylinder can be replaced by an elbow connection.

## 6. CRANKCASE - CRANKSHAFT - CONNECTING ROD - CRANK PIN

6.1 Strictly original and without any modification.

6.2 The original IAME ATT-035/3 template is the reference for checking the gasket plane of the reed valve block.

6.3 The original IAME ATT-035/4 template is the reference for checking the centre distance of the cylinder indexing pins.

6.4 The original IAME ATT-035/5 template is the reference for checking the height of the crankcase base plane.

6.5 Only original connecting rod roller cages (X30125431), connecting rod small end roller cages (E-10440/E-10441) and washers (X30125436/X30125437) are authorised.

6.6 Crankcase/crankshaft oil seals must be installed correctly with the hollow side inboard of the crankcase and not filled with any material. Under no circumstances can they be modified.

## 7. BEARINGS

7.1 Only crankshaft bearings 6206 set C4 and SKF roller bearings BC1-3342 B are authorised. It is forbidden to mix ball bearings and roller bearings on the same motor. Only balance shaft bearings 6202 C3/C4/C4H and 6005 C3/C4 with steel ball bearings and polyamide cage are authorised.

7.2 Bearings with oblique contact prohibited.

7.3 Ceramic balls prohibited.

7.4 The bearings must be mounted with balls visible from the inside of the crankcase.

7.5 All bearings that do not have the correct and clearly visible reference number, as described in these regulations, are expressly prohibited.



**7.6** The use of spacers behind the bearings is allowed, in order to obtain the correct axial play.

**7.7** All the internal parts of the engine must be the original manufacturer's, the same number as the assembly of the factory and mounted in the same direction.

#### **8. PISTON – PISTON RING – PISTON PIN**

**8.1** Strictly original without any modifications and in compliance with the technical form of the engine.

**8.2** The original IAME ATT-035/2 template is the reference for checking the shape of the piston dome.

#### **9. REED VALVE**

**9.1** Strictly original without any modification.

**9.2** No machining of gasket planes is authorised.

**9.3** Original reed valve cover without modification.

**9.4** The thickness of the reed valve/housing gasket is 1mm (allowed tolerance +/- 0.3mm).

**9.5** The thickness of the conveyor/housing gasket is 0.8 mm (allowed tolerance +/- 0.3 mm).

#### **10 REED PETALS**

**10.1** Fibreglass petals (minimum thickness 0.30mm), marked and IAME original authorised

**10.2** Carbon fibre petals (minimum thickness 0.24mm), marked and IAME original authorised

**10.3** Mixing fibreglass and carbon petals is prohibited.

**10.4** Prohibition to modify the original shape

#### **11 CARBURETTOR**

**11.1** Only the Tillotson HW-27A carburettor supplied with the engine in its original configuration (same brand, same model, same reference) is permitted.

**11.2** Only the accessories supplied with the original carburettor and shown on the carburettor data sheet are authorised.

**11.3** The spring and the fork are free.

**11.4** The mounting of the carburettor is free. (Pump up or down)

**11.5** The thickness of the carburettor gasket is 1 mm (Admitted tolerance +/- 0.3mm).

**11.6** The original IAME template ATT-035/2 is the only reference to check the shape of the carburettor inlet duct. The shape of the duct must correspond in all respects and over its entire length to the profile of the template.

#### **12 INLET SILENCER**

**12.1** The inlet silencer (ref. X30125740) must be identical to the original one supplied with the engine (same brand, same model, same reference) with intake tubes of 23mm maximum diameter.

**12.2** Protective grilles are optional.

**12.3** The rubber sleeve with air filter connecting the inlet silencer to the carburettor is mandatory, it must be installed and comply with the homologation form.



**12.4** Any injection and/or spray system is prohibited.

**12.5** In the event of rain, only the inlet silencer protection device reference SKE005-PN-IAME is authorised.

### **13. CLUTCH**

**13.1** The centrifugal clutch must engage at 4,000 rpm maximum and begin to move the kart with the Driver in racing conditions.

**13.2** The clutch should be fully engaged at 6,000 rpm maximum in any condition, this measurement can be checked with the appropriate hardware if necessary.

**13.3** Each Driver will be responsible for the state of wear and cleanliness of the clutch and the friction parts (Friction material and bell).

**13.4** The proper functioning of the clutch can be checked at any time during the event, and even after each phase. The original IAME ATT-047/4 gauge is the reference for checking the clutch drum. In the event of a pre-grid check, any Driver who does not comply with the prescribed value will be prevented from starting. In the event of a check on arrival, any Driver who does not comply with the prescribed value will be subject to a report of technical non-compliance.

**13.5** The tool must not enter the clutch housing in a perpendicular position with respect to the axis of the clutch housing.

### **14. IGNITION**

**14.1** Only the original ignitions, Selettra Digital "K" or Selettra Digital "S" are authorised, without any modification.

**14.2** The Scrutineers may request the replacement of the entire ignition system or part at any time during the meeting.

**14.3** The organiser cannot be held responsible for any possible breakdown occurring after the replacement.

**14.4** Only the electronic box/coil the type "C" (16000 rpm) are authorised and must be fixed to the frame or to the engine.

**14.5** The markings on the electronic box/coil are mandatory and must be clearly visible without dismantling the electronic box/coil. Covering them with adhesive tape is prohibited.

**14.6** Modifications to the stator mounting, shape and thickness of the rotor key, rotor keyways and crankshaft are prohibited.

**14.7** The original IAME ATT-035/7 gauge is the reference to check the correct position of the phase reference marking on the rotor.

**14.8** The battery must be secured to the frame and connected to the wiring harness.

### **15. SPARK PLUG**

**15.1** Only NGK B9EG - B10EG - BR9EG - BR9EIX - BR10EG - BR10EIX - R6252K-105 - R6254E-105 spark plugs are authorised, strictly original and without any modification.

**15.2** The spark plug must be fitted with its original gasket.

**15.3** The porcelain insulator must not protrude from the spark plug base and the length of the spark plug base (gasket included) must be 18.5 mm. maximum (Appendix 7 of the CIK technical regulations).

**15.4** The only authorised spark plug caps are PVL 401 222 / Selettra 6000721001 5KOhm, (IAME ref. 10544) or NGK TB05EMA (IAME ref. 10543).

### **16 EXHAUST PLANT**

**16.1** Only the original muffler and exhaust manifold delivered with the engine are authorised, strictly original and compliant with the tech form. No modification of structure or dimensions is authorised.

**16.2** Drilling and welding operations on the muffler are only authorised for the installation of a temperature probe.



**16.3** The complete sealing of the exhaust gases between the cylinder and the exhaust manifold must be guaranteed at all times.

**16.4** The exhaust gas sealing check can be carried out at any time by plugging the outlet of the exhaust pipe and filling it through the exhaust port with liquid in order to check the sealing.

**16.5** The proper sealing of the exhaust system is the responsibility of the Driver.

**16.6** A minimum of one original gasket between the cylinder and the exhaust manifold is permitted.

**16.7** The use of the original IAME X30125375 spacer (thickness 3 mm +/- 0.5) for adjusting the exhaust length is authorised.

**16.8** X30 Junior: the use of the original exhaust manifold with the restrictor of 22.7mm as described in the tech form is compulsory. No modifications allowed.

**16.9** The use of the exhaust silencer described in appendix n.5 is mandatory at all times.

**19.10** Exhaust manifold reference template: ATT-035/9

## **17 COOLING SYSTEM**

**17.1** The cooling system must be in its original configuration: a single IAME original radiator (T-8000B or T-8001), a single IAME original water pump (aluminium or black/blue plastic) is authorised and in compliance with the tech form.

**17.2** A single IAME original water pump pulley (aluminium or black/blue plastic) is authorised and in compliance with the tech form form.

**17.3** The number of radiator supports, black or chrome, is not limited. Machined supports are prohibited.

**17.4** Only original IAME single or bypass thermostats are authorised and their use is optional. The housing containing the two-way thermostat can also be installed without the thermostat capsule inside and function as a fitting.

**17.5** Only water without any other additives is allowed for cooling.

**17.6** Radiator shields, adhesive or mechanical, are permitted but must not be removable while the kart is in motion.

**17.7** Original blue water hoses supplied with the engine.

**17.8** The type of water pump drive belt is free.

**17.9** The use of the pulley with the belts in position is mandatory.

**17.10** The combination of plastic or aluminium water pumps with plastic or aluminium water pump pulleys is permitted.

**17.11** All heaters or heater connection systems on the water circuit are strictly prohibited.

## **18 STARTER**

**18.1** The engine is fitted with an on-board electric starter.

**18.2** The original on-board starting system must be installed with all its components, properly connected and in working properly.

## **19 SPROCKETS**

**19.1** Only IAME original Z10 / Z11 / Z12 / Z13 sprockets are allowed.