



## INTERNATIONAL IAME EVENTS PROMOTED BY RGMMC 2024 - TECHNICAL REGULATIONS (MINI)

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

#### 1.1 Chassis

Art. 10.1 CIK/FIA KARTING TECHNICAL REGULATIONS. Chassis homologated CIK/FIA or having been homologated CIK/FIA.

#### 1.2 Group 3 Chassis Dimensions

Art. 10.1.1 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.3 Chassis characteristics

Art. 6.1 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.4 Rear shaft

According to Art. 10.2 CIK/FIA KARTING TECHNICAL REGULATIONS. CIK/FIA vignette not compulsory.

#### 1.5 Fuel tank capacity

Art. 10.3 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.6 Bumper

Art. 10.4 CIK/FIA KARTING TECHNICAL REGULATIONS. Bumpers homologated CIK/FIA or having been homologated CIK/FIA

#### 1.7 Front bumper

Art. 10.4.1 CIK/FIA KARTING TECHNICAL REGULATIONS. Front bumper CIK/FIA homologated or having been CIK/FIA homologated

#### 1.8 Side bumper

Art. 10.4.2 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.9 Bodywork

Art. 10.5 CIK/FIA KARTING TECHNICAL REGULATIONS. CIK/FIA homologated bodywork or having been CIK/FIA homologated

#### 1.10 Material

Art. 10.5.1 CIK/FIA KARTING TECHNICAL REGULATIONS

#### 1.11 Front fairing

Art. 10.5.2 CIK/FIA KARTING TECHNICAL REGULATIONS. CIK/FIA homologation in progress compulsory.

#### 1.12 Front panel

Art. 10.5.3 CIK/FIA KARTING TECHNICAL REGULATIONS. Front panel CIK/FIA homologated or having been CIK/FIA homologated

#### 1.13 Lateral bodywork

Art. 10.5.4 CIK/FIA KARTING TECHNICAL REGULATIONS. Side bodywork CIK/FIA homologated or having been CIK/FIA homologated.

#### 1.14 Rear wheel protection

Art. 10.5.5 CIK/FIA KARTING TECHNICAL REGULATIONS. Rear wheel protection CIK/FIA homologated or having been CIK/FIA homologated.

#### 1.15 Brakes

Art. 10.6 CIK/FIA KARTING TECHNICAL REGULATIONS. Brakes CIK/FIA homologated or having been CIK/FIA homologated.

#### 1.16 Wheels

Art. 10.7 CIK/FIA KARTING TECHNICAL REGULATIONS

### 2. ALLOWED EQUIPMENT



**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 Technical Control, if it is in the opinion of the Technical Control that it is not practical to repair in time, a replacement chassis of the same make and model as the damaged chassis may be authorized 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 Water Swift**

**3.1** Only the IAME X30 WATERSWIFT 60cc RL TaG engine, original and strictly compliant with the manufacturer's data sheet (Technical characteristics, dimensions, weights, diagrams with the tolerances prescribed by the manufacturer) is permitted.

**3.2** The pictures on the original homologation forms are also valid to identify the engine and the spare parts.

**3.3** Any modification or addition to the engine and its accessories, unless expressly authorised, is prohibited. IAME considers as modifications any action modifying the initial appearance and dimensions of an original part.

**3.4** 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 adjustments are not allowed.

**3.5** No heat treatment or surface treatment is allowed. The competitor is responsible for the conformity of his own equipment.

**3.6** Engines must be supplied with their original serial number. No modification, improvement, polishing, addition or deletion of material to any part of the engine is permitted.

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

**3.8** The tolerances indicated on the tech form are necessary to provide all machining, assembly and settling tolerances. Nevertheless, the competitor is absolutely not authorised to intervene on the engine, even if the characteristic dimensions after his intervention remain within the prescribed tolerances.

**3.9** The tolerances indicated on the homologation form are necessary to understand all machining, assembly and settling tolerances. Any preparation 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 FIA Karting.

**3.10 Diagrams and volume chart:** refer to engine data sheet

### **4. CYLINDER HEAD**

**4.1** Strictly original

**4.2** The body of the spark plug clamped to the cylinder head must not protrude from the upper part of the dome of the combustion chamber.

**4.3** The minimum squish value must be in accordance with the engine tech form. The Squish Control will be carried out with a  $\emptyset$  1.5mm tin/lead wire, according to the method described in appendix 12 of the international technical regulations.

**4.4** The original IAME gauge n. 10215 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 gasket plane.

### **5 CYLINDER**

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

**5.2** Polishing, sanding, trimming or adjustments are not allowed. Only reboring is allowed. In case of doubt, the shape and the height of the transfers must be compared to the cylinder of the standard engine. No additional heat treatment or surface treatment is allowed.



**5.3** Adjustment of the diagram is permitted only by means of cylinder base gasket replacement. The number of cylinder base gaskets is not limited. Only original gaskets are allowed.

**5.4** Gaskets between cylinder and cylinder head are not permitted. In addition to measuring the opening angles, the original IAME gauge cod. ATT-005 is the reference for checking the distance between the upper edge of the ports and the cylinder head plane.

## **6 CRANKCASE, CRANKSHAFT, CONNECTING ROD, CRANK PIN**

**6.1** Only original parts are allowed, without any modification.

**6.2** Only the original connecting rod cage (IAME B-10431), the original washers (IAME E-38436) and the original small end (IAME A-60440) are authorised.

**6.3** Original oil seals and mounted as original, the hollow side must face inside the crankcase.

## **7 BEARINGS**

**7.1** Strictly original: IAME 10400-D (6204 C4) crankshaft ball bearings.

**7.2** Ball bearings with angular contacts are prohibited.

**7.3** Only bearings with steel balls and rings are permitted. (Ceramic prohibited).

**7.4** Bearings which do not have the correct and clearly visible classification number as described in the regulations are expressly prohibited.

**7.5** The bearings must be fitted with the balls visible from inside the housing.

**7.6** In order to obtain the correct axial play, the use of spacers behind the bearings is permitted.

**7.7** All internal engine parts must be original from the Manufacturer, in the same number supplied by the Manufacturer and fitted in the prescribed position.

## **8 PISTON, PISTON RING AND PIN**

**8.1** Strictly original without any modification, and in accordance with the engine tech form.

## **9 CARBURETTOR**

**9.1** Only the Tillotson HW-31A carburettor supplied with the engine in its original configuration (same brand, same model, same reference) is permitted.

**9.2** Only the accessories supplied with the original carburettor are authorised

**9.3** The needle valve spring is free.

**9.4** The positioning of the carburettor (i.e. with the pump in the upper or lower position) is free.

**9.5** All carburettor spacers and gaskets are mandatory and must comply and in the same order as shown on the tech form.

**9.6** If in doubt, the carburettor should be compared to the sample carburettor.

## **10 INLET SILENCER**

**10.1** Strictly original inlet silencer, as supplied with the engine (same brand, same model, same reference), i.e. the IAME MINI SWIFT with CSAI 01 / SA / 14 approval.

**10.2** The intake trumpets must have an internal diameter of 23mm maximum.

**10.3** Protective grilles are optional.



**10.4** The rubber sleeve connecting the intake silencer to the carburettor is mandatory. It must be installed and conform to the tech form.

**10.5** The sponge filter element, if used, must be intact.

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

## **11 CLUTCH**

**11.1** The engine is supplied with a dry centrifugal clutch system.

**11.2** Any intervention aimed at prolonging the slip of the clutch hub beyond the prescribed limit is strictly prohibited.

**11.3** The centrifugal clutch must engage at 4,500 rpm maximum, moving the kart with the Driver on board and in race conditions.

**11.4** The clutch should be fully engaged at 6,500 RPM maximum in any condition.

**11.5** This measurement can possibly be checked with appropriate instruments.

**11.6** Each Driver is responsible for the state of wear of the clutch lining material and the cleaning of the friction parts.

**11.7** The proper operation of the clutch can be checked at any time during the event, and even after each phase.

**11.8** The UniLog clutch control system produced by Unipro can be used. In this case, the Competitor/Driver must be supplied with the cable/bracket kit while the instrument is supplied in use by the Promoter.

## **12 IGNITION**

**12.1** Original ignition only, SELETTA IAME A-61951 and IAME A-61955 coil without any modification.

**12.2** The battery must be fixed to the chassis and always connected to the ignition system.

## **13 SPARK PLUG AND SPARK PLUG CAP**

**13.1** Only NGK B9EG - B10EG - BR9EG - BR10EG are authorised, strictly original without any modification.

**13.2** The spark plug must be installed with its original gasket.

**13.3** The porcelain must not protrude beyond the body of the spark plug and the length of the spark plug base must be 18.5 mm maximum. (Appendix 7 of the CIK/FIA technical regulations).

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

## **14 EXHAUST SYSTEM**

**14.1** Only the original exhaust muffler is authorised as delivered with the engine and must be kept in accordance with the tech form, therefore no modification of structure or dimensions is authorised.

**14.2** The exhaust manifold must comply with the tech form at any time.

**14.3** The use of one original exhaust gasket is mandatory.

**14.4** The complete sealing of the exhaust gases between the cylinder and the exhaust manifold must be guaranteed at all times. The exhaust gas sealing check can be carried out at any time through to the occlusion of the outlet hole of the exhaust manifold, the filling of the exhaust manifold with liquid through the exhaust port and checking for leaks.

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

**14.6** Exhaust temperature sensors are not permitted.



## **15 COOLING**

**15.1** The cooling system must be in its original configuration: only one original IAME radiator (T-8601), only one single original IAME water pump (black / blue plastic or aluminium) is authorised and in compliance with the engine tech from.

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

**15.3** The use of the original water pump pulley activating the water pump through the O-rings is mandatory. The type of O-rings is free.

**15.4** Only IAME original simple 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.

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

**15.6** IAME original water hoses, blue, as delivered with the engine.

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

## **16 STARTER**

**16.1** The engine is equipped with an on-board electric starter. The original on-board starting system must be installed with all of its components and properly connected.

## **17 SPROCKETS**

**17.1** Original IAME. Z10 or Z11 only.

## **APPENDIXES**

The following appendixes are integral part of the regulations:

**APPENDIX 1:** Homologation form n. 364F IAME X30 WATERSWIFT 60cc