



## INTERNATIONAL IAME EVENTS PROMOTED BY RGMMC 2024 - TECHNICAL REGULATIONS (MINI) (210125)

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

Drivers will be allowed one chassis only, however if damage occurs to the chassis, which has been scrutinized for the meeting, and if in the opinion of the Chief Scrutineer following a decision of the stewards it is not practical to repair in time, one alternative chassis of the same make and model as the damaged chassis may be scrutinized, in order to continue the meeting.

1.1 Wheelbase 950mm

1.2 Axle: 30 mm

1.3 Rims size: The rear rims must not be wider than 150 mm (Maximum 150 mm), the front rims must not be wider than 115 mm (Maximum 115 mm)

1.4 Rims Material: Aluminum and/or Magnesium

1.5 The max rear width over the rims or tyres whichever is the greatest must not be greater than 1100 mm

### 2. DEFINITION OF THE CHASSIS

2.1 Traditional chassis with a valid 2021 National / CIK-FIA or Manufactures Homologation form / fiche of the chassis must be provided to Scrutineers for technical control and include but not limited to the following information.

- a) Manufacture name
- b) Model
- c) Category
- d) Valid from
- e) Measurement
- f) Tube data
- g) Rear axle data

### 2.2 CIK-FIA FRONT FAIRING MOUNTING KIT

a) The use of a homologated front fairing and of the homologated front fairing mounting kit of the bodywork homologation period 2015 – 2020 is mandatory. As from the Qualifying Heats until the Final, each Driver must enter the "Start" Servicing Park – Assembly Area with the front fairing detached from their kart. The Mechanic or the Driver himself must mount the front fairing in the "Start" Servicing Park – Assembly Area under the supervision of a scrutinizier. During Qualifying Heats and Final, it is only allowed to install the front fairing to the correct position in the Start Servicing Park

b) Correct installation of the "Front Fairing" The front fairing (using the front fairing mounting kit) must be in the correct position at all times during a competition (see CIK-FIA Technical Drawing No. 2c and 2d).

c) The black flag with an orange disc will not be shown to a driver if his front fairing is no longer in the correct position. If the judge of fact reports that the front fairing on one or more karts was no longer in the correct position when the "black and white cheered flag" was waved and the kart(s) concerned crossed the finish line, in all situations a time penalty of 5 seconds will be imposed automatically on the driver(s) concerned. This time penalty is not susceptible to appeal.

d) When the Scrutinizer /Judges of Fact send the reports regarding the incorrect position of the front fairing, the Stewards will automatically apply the decisions. The Entrants concerned shall not be invited to sign the decision documents.

e) Should a Driver or a third party be found/proved to have intentionally replaced a front fairing which is not installed correctly during the last lap or after the "black and white cheered flag" was waved this will lead to a disqualification from the competition. As from the moment the "Last Lap" panel is presented to the Drivers the Repair Area will be closed.



### 3. MINIMUM WEIGHT

The minimum weight of the Kart with driver, in racing conditions, must be: 110 Kg.

### 4. TYRES

**4.1** Slick Tires Front: Komet K1D-M (10x4.00-5) Rear: Komet K1D-M (11x5.00-5)

**4.2** Wet Tires Front: Komet K1D-W (10x4.00-5) Rear: Komet K1D-W (11x5.00-5)

### 4.3 MODIFICATION OF TIRES

Any modification of a tire is forbidden, in all categories, the heating and cooling of tires by any method, and/or remolding or treating the tires with any chemical substance is forbidden.

**4.4** Should the check at the "Start" Servicing Park establish that one or more tires are not in conformity with the regulations, the relevant Driver will not be allowed access to the Pre-Gird. Should the test be carried out at the "Finish" Servicing Park and one or more tires result not in conformity with the regulations, the driver will be reported to the stewards. Protests against this procedure are not admitted. Any appeal lodged in this regard does not have a suspensory effect.

### 5.14. FUEL, FUEL TANK, LUBRICANT

Panta fuel is the only fuel allowed as described in the specific regulations of the event.

The oil must be CIK-FIA approved / homologated 2-stroke oil, which must be stated on the scrutineering card/passport upon completing technical check. The fuel tank must be detachable and have a minimum capacity of 3 liters. A recovery tank for fuel tank and water-cooling system breathers must be installed on the chassis.

### 5.15 FUEL & OIL

**5.15.1** Fuel will be none "Parc-Ferme" status. Unleaded commercial quality fuel from petrol station.

**5.15.2** It will be each competitor's responsibility to purchase their own petrol from free practice until the end of the race weekend on Sunday. The official fuel supplier to the event shall be Panta Fuel. It is mandatory to order your fuel 2 weeks prior to the event.

**5.15.3** The requirements specified in these regulations are intended to ensure the use of fuels predominantly composed of compounds normally found in commercial fuel, and to prohibit the use of specific power-boosting chemical compounds.

**5.15.4** At any time including end of race the volume of fuel in the tank must be over or equal to 1 liter.

**5.15.6** The oil mixture ratio shall be 4-6 %

**5.15.7** The Scrutineer/Organization, following a decision of the Stewards, has the right to change/replace any driver's petrol at his discretion and at any time, the organizer may charge 3€ per liter.

**Case 1** - Should this be the case the Drivers will be asked to enter servicing park without petrol in his/her petrol tank, where the fuel will be added.

**Case 2** - Petrol will be changed without warning. Changed/Replaced petrol will be the petrol as stated in the supplementary regulations of the event. It is recommended that evaluation of fuels at the racetrack be conducted using one or all of the following tests.

a) Digatron DT- 47 Fuel Meter Test.

b) Specific Gravity Test

c) Water Solubility Test

### 6. TECHNICAL CONTROLS / SCRUTINEERING

**6.1** The technical forms are the main comparison reference for Scrutineers. In case of doubts on the engine parts conformity, the comparison with the sample engine will be the definitive probating element. In case of extremely controversial events, the Stewards can decree the delivery of the concerned parts, duly sealed, to IAME Spa. which will proceed with an accurate inspection at the factory with the presence of one representative of the Competitor and one of the Sporting Authority (ASN).



**6.2** The engine technical inspection is performed by the technical scrutineer. The technical scrutineer has the right to inspect any part to the point that it can no longer be employed. If this is the event, the inspected part found in compliance with the regulations will be replaced to the driver at no cost. Any part found as not in compliance with the regulations, will not be refunded.

**6.3** It is the duty of every Entrant to prove to the Scrutineers and to the Stewards that his kart integrally complies with the Regulations throughout the event

**6.4** A mandatory check will be carried out before the non-qualifying practice. It must be possible to identify the homologated equipment by the technical descriptions (drawings, dimensions, etc.) on the Homologation Form.

For any used equipment, which has been homologated, every competitor shall be able to submit the relevant Homologation Forms. For identification and control it must be possible to identify the homologated equipment.

A scrutineering (technical passport) report must be completed the entrant is responsible that the card is completed and correct.

**6.5** The Scrutineer, following a decision of the Stewards has the right to impound any part of the Engine including but not limited to carburetor, exhaust, electronic ignition and petrol at his discretion. Should this be the case the parts impounded will be replaced with new original manufactured parts at the expense of the Entrant / Driver (At IAME Official Recommended Retail Price List)

## **7. APPEALS**

Appeals can be made according to the rules of the ASN hosting the event.

## **8. MODIFICATIONS TO THE REGULATIONS**

The Organizer of the series reserves the right to issue additional statements concerning the Technical Regulations (previously approved by the ASN proposing the series and the CIK-FIA) from time to time following the agreement of the ASN presenting the series and the CIK-FIA, and all such statements will be issued to all registered competitors by way of Competitors' Bulletins at the race meeting, or posted to the address detailed on the event registration form.

## **9. SAFETY EQUIPMENT**

Drivers safety equipment must apply to each ASN, regulations which can vary from country to country and change with short notice.

## **10. RACING NUMBERS AND DRIVERS IDENTIFICATION**

**10.1** The numbers shall be black (without shadow and color stripes) on a clear Yellow Back-Ground, and they shall be at least 14 or 15 cm high and have a 2-cm thick stroke and represented with an Arial type or similar font. The competition number shall be bordered by a yellow background of 1 cm minimum. They must be fitted before free practice and must be clearly visible during the hole race event (damaged numbers and id must be replaced regularly) on both front and rear and on both sides towards the rear of the bodywork. The number plates fitted at the back of the kart shall be plane and have rounded corners (diameter of rounded corners 15 to 25 mm) with 22 cm sides. The plates shall be flexible and made of opaque plastic, and they shall always be visible (fixation without a possible displacement).

**10.2** Driver's name shall be in the fore part of the lateral bodywork. The minimum height of the letters of the name shall be 2 cm minimum. Driver is responsible at all times for ensuring that the required numbers and I.D. are clearly visible to Officials, Timekeepers and Marshals.

**10.3** Karts not apply to article 10 may be refused entry to Free-Practice, Time-Qualifying, Qualifying Heats, Super Heats or Final Race.

## **11. ENGINE IAME X30 WATER SWIFT 60cc**

**11.1** 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.

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

**11.3** 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.

**11.4** 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.

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



**11.6** 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.

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

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

**11.9** 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.

**11.10 Diagrams and volume chart:**

Refer to engine data sheet

**12. CYLINDER HEAD**

**12.1** Strictly original

**12.2** 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.

**12.3** 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.

**12.4** 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 joint plane.

**13. CYLINDER**

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

**13.2** 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 heat treatment or surface treatment is allowed

**13.3** A single cylinder gasket of 0.40 mm +/- 0.10 thickness is permitted. No cylinder head gasket is permitted.

**13.4** 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.

**13.5** Cylinder heat shields are allowed as long as they can't be removed when the vehicle is in motion.

**13.6** Starting from serial number 011150 included, only the cylinders with markings as described in the tech form of the engine can be employed.

**14. CRANKCASE, CRANKSHAFT, CONNECTING ROD, CRANK PIN**

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

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

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

**15. BEARINGS**

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

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



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

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

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

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

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

## **16. PISTON, PISTON RING AND PIN**

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

## **17. CARBURETTOR**

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

**17.2** Only the accessories supplied with the original carburettor are authorized

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

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

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

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

## **18. INLET SILENCER**

**18.1** 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.

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

**18.3** Protective grilles are optional.

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

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

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

## **19. CLUTCH**

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

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

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

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

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

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



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

**19.8** 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.

## **20. IGNITION**

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

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

## **21. SPARK PLUG AND SPARK PLUG CAP**

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

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

**21.3** 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).

**21.4** The only authorized spark plug caps are PVL 401 222 / Selettra 6000721001 5KOhm, (IAME ref. 10544).

## **22. EXHAUST SYSTEM**

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

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

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

**22.4** 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.

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

**22.6** Exhaust temperature sensors are permitted only on exhaust mufflers provided with the OEM temperature sensor probe.

## **23. COOLING**

**23.1** 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 aluminum) is authorized and in compliance with the engine tech from.

**23.2** The number of radiator supports, black or chrome, is not limited. Only machined supports allowed are IAME p.n.: T-8730NL-C.

**23.3** 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.

**23.4** Only IAME original simple or bypass thermostats are authorized 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.

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

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

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



#### **24. STARTER**

**24.1** 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.

#### **25. SPROCKETS**

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

#### **APPENDIXES**

The following appendixes are integral part of the regulations:

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