

## TECHNICAL REGULATIONS IWF22

Registered by the FFSA Competition Service at 07/06/2022 with Reference CK 2022/26

### 1 GENERAL

The FIA Karting technical regulations apply to "IWF22". The French language is the official version. The organizer of the events, Victory Concept, following the agreement of the ASN presenting the event, reserves the right to issue additional information concerning the Technical Regulations. These declarations will be sent to all registered competitors by means of Competitors' Bulletins during the events, or sent to the (email) address detailed on the registration form for the event, or written on the official website of the series [www.iamekarting.com](http://www.iamekarting.com).

### 2 TECHNICAL CONTROLS

**2.1** The technical controls on the engines will be carried out by the technical Scrutineers of the Sporting Authority, with the possible help of personnel appointed by the promoter. Controls can be carried out on the engines, in race conditions, at any time during the event.

**2.2** In case of persistent doubt on the originality and conformity of an element distinct from the others, the incriminated element must be compared to the same part belonging to the sample engine, in the possession of the delegate of IAME S.p.A.S.U.

**2.3** The Scrutineers have the right to carry out technical controls on the parts to the point of rendering them unusable. Following an inspection that renders a part unusable, this part will only be reimbursed if it is declared compliant.

**2.4** All parts rendered unusable following technical inspections and considered non-compliant will not be reimbursed.

**2.5** The Promoter, while guaranteeing the perfect efficiency and proper functioning of the equipment provided, cannot under any circumstances be held responsible for any malfunction occurring as a result of the replacement.

**2.4** A mandatory check is carried out before the start of qualifying practice. It must be possible to identify the homologated equipment by the technical descriptions (drawings, dimensions, etc.) on the homologation forms.

**2.5** In the event of extremely controversial events during the scrutineering of the engines, the scrutineers may decide to send the part concerned, duly sealed, to IAME S.p.A.S.U for a precise inspection at the factory in the presence of the representatives of the Competitor and the Sporting Authority (ASN).

**2.6** The technical forms constitute the main reference of comparison for the Technical inspectors. Each competitor must be able to submit the homologation forms relating to the equipment used.

**2.7** In case of doubt on the conformity of the engine parts, the comparison with the "standard" engine will be the definitive element of verification.

**2.8** At any time, the technical inspectors have the right to replace any part, any accessory or even the entire engine.

### 3 COMPLAINTS

In the event of a dispute, the competitor may submit a complaint in accordance with the regulations of the national sporting authority of the place of the event.

### 4 MODIFICATIONS TO THE REGULATIONS

In order to ensure the smooth running of IWF22 and/or in the event of force majeure, the Promoter reserves the right to modify the articles of the technical regulations as it deems necessary, at any time, subject to the authorization of the national sports authority of the venue of the event.

## 5 FUEL, LUBRICANT, FUEL TANK

5.1 The official fuel for the event is specified in Appendix 6 and in the supplementary regulations.

5.2 The fuel must not contain any additives other than the approved lubricant.

5.3 Oil mixing rate: 4-6%

5.4 The only authorized lubricant is Wladoil K2-T, CIK approved.

5.5 The only lubricant authorized in Z-I must be one from the list of CIK-approved oils.

5.6 The tank must be of the removable type and have a minimum capacity of 8 liters (3 liters in X30 Mini).

5.7 The recovery tank for excess cooling water and fuel is mandatory.

5.8 At all times, the volume of fuel in the tank must be greater than or equal to 1.5 liters.

5.9 The Scrutineers may at their discretion replace the fuel in the tanks at any time. In this case, the Driver is invited to enter the assistance park with an empty and clean tank. Gasoline and oil imposed will be provided free of charge. The replacement petrol and oil will be the same as those specified in the event's supplementary regulations.

5.10 On-track fuel evaluation can be performed using any or all of the following tests:

- 1) Dielectric constancy test (Digatron DT-47) or others
- 2) Specific mass test
- 3) Water solubility test

5.11 If non-compliance is found, other tests may be carried out and the cost will be invoiced to the Driver / participant. The cost will be indicated in the specific regulations of the event.

## 6 TYRES

### X30 Mini

Front

Rear

### X30 Junior/KA100

Front

Rear

### X30 Senior/X30 Master/Z-I

Front

Rear

### Slick

KOMET K1D-M 10 x 4,00-5

KOMET K1D-M 11 x 5,00-5

KOMET K2H 10 x 4,60-5

KOMET K2H 11 x 7,10-5

KOMET K2M 10 x 4,60-5

KOMET K2M 11 x 7,10-5

### Wet

KOMET K1D-W 10 x 4,00-5

KOMET K1D-W 11 x 5,00-5

KOMET K1W 10 x 4,20-5

KOMET K1W 11 x 6,00-5

KOMET K1W 10 x 4,20-5

KOMET K1W 11 x 6,00-5

6.1 Maximum number of tires authorized for the official phase:

Slick : 4 tyres front + 4 tyres rear

Wet : 4 tyres front + 4 tyres rear

6.2 Any modification of a tire is prohibited. Heating and cooling tires by any method and/or remolding or treating tires with any chemical substance is prohibited.

6.3 The MiniRAE Lite measuring device from "RAE Systems Inc. (USA)" is used during the qualifying sessions, the qualifying heats and the final phase to check that the tires comply with the regulations.

Tire VOC measurement must not exceed the maximum ppm limit (5) under any circumstances.

6.4 Tire pollution, e.g. with chain grease, should be avoided as this can cause the limit value to be exceeded.

**6.5** If the check in the "Start" service park establishes that one or more tires do not comply with the regulations, the Driver concerned will not have access to the pre-grid. If the check is carried out at the "Arrival" Service Park and one or more tires do not comply with the regulations, the Driver is disqualified from the race. Appeals against this procedure are not allowed.

**6.6** In case of a damaged, non-repairable tyre, the competitor may request its substitution with a worn tyre, of the same model as the one presented, with the approval of the scrutineers. In any case, the tire can only be replaced if the damage prevented the competitor from completing the session preceding the presentation of the damage.

**6.7** In the event of a defective tyre, the Driver must submit the defective tire to Technical Control and request replacement with a tire from the organiser, at the discretion of the Technical Controls.

**6.8** In both cases, the decision to accept the substitution is at the discretion of the scrutineers.

**6.9** In the event of a Wet Race and/or for safety reasons, the Sporting Commission may apply modifications to the limitations on the use of tyres, authorizing the use of one or more additional tyres.

## **7 RACE NUMBERS AND IDENTIFICATION OF DRIVERS ON KARTS**

### **7.1 Article 12 FIA Karting Specific Prescriptions**

**7.2** Numbers should be black on a light yellow background and should be at least 15cm high, 2cm thick and presented in Arial type or similar font. The competition number must be delimited by a yellow background of 1 cm minimum. They must be fitted before the free practice session and must be clearly visible throughout the race weekend (Damaged numbers and identification must be replaced regularly) at the front and at the rear as well as on both sides towards the rear of the body. The plates located at the back of the kart must be flat and have rounded corners (diameter of the rounded corners 15 to 25 mm) with sides of 22 cm. The plates must be flexible and made of opaque plastic material, and they must always be visible (fixation without displacement possible).

**7.3** The name of the Driver as well as the flag of his nationality (origin of the licence) must appear in the front part of the side bodywork. The minimum height of the flag and the letters of the name must be 3 cm.

**7.4** The Driver must ensure, at all times, that the required numbers and identifications are clearly visible to officials, timekeepers and marshals.

## **8 EQUIPEMENT EXCHANGE**

**8.1** Exchange of registered equipment between Drivers is not permitted.

## **9 DRIVER EQUIPMENT**

### **9.1 Helmets**

Art. 7.1 CIK/FIA KARTING TECHNICAL REGULATIONS

### **9.2 Overalls**

Art. 7.2 CIK/FIA KARTING TECHNICAL REGULATIONS

### **9.3 Gloves**

Art. 7.3 CIK/FIA KARTING TECHNICAL REGULATIONS

### **9.4 Shoes**

Art. 7.4 CIK/FIA KARTING TECHNICAL REGULATIONS

### **9.5 Karting body protection**

**9.5.1** All categories: the use of body protection in accordance with art. 7.5 TECHNICAL REGULATIONS OF KARTING CIK/FIA is recommended

**9.5.2** X30 Mini: body protection and neck brace mandatory

## 10 ENGINES

- 10.1** Category X30 Junior : IAME - X30 125cc RL TaG - (125cc- embrayage centrifuge à sec, refroidissement liquide-TaG)  
**10.2** Category X30 Senior : IAME - X30 125cc RL TaG - (125cc- embrayage centrifuge à sec, refroidissement liquide-TaG)  
**10.3** Category X30 Master : IAME - X30 125cc RL TaG - (125cc- embrayage centrifuge à sec, refroidissement liquide-TaG)  
**10.4** Category KA100 : IAME - Reedjet 100cc - (100cc- embrayage centrifuge à sec)  
**10.5** Category Z-I : Engines IAME CIK / FIA Karting homologated for KZ categories (valid or expired homologation)

## 11 APPENDICES

The following appendices are an integral part of the regulations

- 1 - Tech Form 364F IAME X30 WATERSWIFT 60cc
- 2 - Tech Form 254W IAME X30 125cc
- 3 - Tech Form 348B Carburettor Tillotson HW27A
- 4 - Tech Form 401A IAME Reedjet 100cc
- 5 - Exhaust Silencer
- 6 - Timing and squish control procedure
- 7 - Official Fuel
- 8 - Tire Supply Regulations

All technical regulations, technical forms and appendices are available at: [www.iamekarting.com](http://www.iamekarting.com)

## IWF22 - TECHNICAL REGULATIONS X30 MINI

### 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 authorized 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 authorized 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 authorized 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 joint 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 heat treatment or surface treatment is allowed

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

**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 authorized.

**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 authorized

**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 22mm 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, SELETTRA 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 authorized, 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 authorized spark plug caps are NGK TB05EMA, PVL 401 222, Selettra 5KOhm (IAME ref. 10543 or 10544).

## **14 EXHAUST SYSTEM**

**14.1** 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.

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

**15.2** The number of radiator supports, black or chrome, is not limited. Machined supports 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 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.

**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.

## IWF22 – TECHNICAL REGULATIONS X30 JUNIOR / X30 SENIOR / X30 MASTER

### 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 authorized 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 authorized to continue the event.

**2.3** Each Driver is authorized 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 from (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 authorized 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 authorized. 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 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 center 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 authorized.
- 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 authorized. 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 authorized.
- 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 original manufacturer, 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 authorized.

**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** Fiberglass petals (minimum thickness 0.30mm), marked and IAME original authorized

**10.2** Carbon fiber petals (minimum thickness 0.24mm), marked and IAME original authorized

**10.3** Mixing fiberglass 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 22mm 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 authorized, 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 organizer 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 authorized 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 authorized, 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 authorized spark plug caps are NGK TB05EMA, PVL 401 222, Selettra 5KOhm (IAME ref. 10543 & 10544).

### 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 authorized.

**16.2** Drilling and welding operations on the muffler are only authorized 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 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.

**16.10** 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 (aluminum or black/blue plastic) is authorized and in compliance with the tech form.

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

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

**17.4** Only original IAME single 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.

**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 aluminum water pumps with plastic or aluminum 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.

## IWF22 - RÈGLEMENTS TECHNIQUES Z-I

### 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. Side bumpers CIK/FIA homologated or having been CIK/FIA homologated

#### 1.8 Bodywork

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

#### 1.9 Hardware

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 front 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:

4WP in KZ2 class.

#### 1.15 Wheels

Art. 9.7 CIK/FIA KARTING TECHNICAL REGULATIONS

## 2. EQUIPMENT ALLOWED (CHASIS)

**2.1** Each Driver is authorized 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 of the 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 authorized to submit to scrutineering and to use only two (2) engines per Driver and per category.

## 3 ENGINES

**3.1** Only IAME engines are allowed, single-cylinder type with valve intake and with valid or expired CIK / FIA Karting homologation for the KZ categories.

**3.2** Only IAME original parts are authorized.

**3.3** The original parts of the homologated engine must always conform and be similar to the photos, drawings, materials and sizes described on the Homologation Form.

**3.4** All modifications to the homologated engine are authorized except:

a) Inside the engine:

- The stroke,
- The bore (over the maximum limits),
- The distance between centers of the connecting rod,
- The number of transfers and intake ports in the cylinder and the crankcase,
- The number of ports and exhaust channels,
- The restrictions provided for in the specific regulations.

b) Outside the engine:

- Number of carburetors and their venturi diameter,
- The external appearance of the mounted engine.

**3.5** The following are not considered modifications to the exterior of the engine:

- changing the color of parts, cutting out cooling connections, and altering attachment patterns (including but not limited to carburetor, ignition, exhaust, clutch, or engine itself), provided that their homologated position is not modified.

### 3.6 Powertrain

The engine and the gearbox must be inseparable. The crankcase must consist of 2 parts (vertical or horizontal) only. Only inserts for the crankshaft bearings and fixing elements (tapping, centering pin) are authorised.

**3.7** Single-cylinder engine with valve intake, water-cooled, with a single circuit, homologated by the CIK-FIA.

**3.8** Maximum displacement: 125 cm<sup>3</sup>.

**3.9** Reed valve (dimensions and drawing) in accordance with the Homologation Form.

**3.10** Reed valve cover: free.

**3.11** Dell'Orto VHSH, Ø 30 mm, aluminum carburettor bowl with "venturi" round diffuser with a maximum diameter of 30 mm.

**3.12** The carburettor must remain strictly original.

**3.13** The only authorized adjustments are those of: the gas valve, the needle, the floats, the tank, the needle well (Spray), the nozzles and the needle kit, on the condition that all the interchanged parts are original Dell 'Orto. The incorporated fuel filter and trim (Part no. 28 of technical drawing no. 7 in the appendix) can be omitted; If they are kept, they must be original.

**3.14** Gearbox: homologated by the CIK-FIA (including the primary torque). 3 gears minimum and 6 gears maximum. Control of gears with graduated disk with a minimum diameter of 200 mm or digital encoder; the decimals of a degree shown on the Homologation Form must be mentioned in tenths of a degree and not in minutes. For the homologation of the gearbox, the Manufacturer(s) as well as the model and the type must appear on the Homologation Form.

**3.15** Manual and only mechanical gearbox control, without assistance system.

**3.16** Any kind of ignition cut-off system is prohibited.

**3.17** Total exhaust opening angle of 199° maximum, independently of the value indicated on the homologation form (Reading by digital device).

**3.18** Volume of the combustion chamber: Minimum 11 cm<sup>3</sup>, measured according to the method described in Appendix n°1a.

**3.19** Spark plug free make (major production and must remain strictly original). The spark plug base (electrodes not included), clamped to the cylinder head, must not protrude above the upper part of the combustion chamber dome. Threaded Spark Plug Well Dimensions - Length: 18.5mm; pitch: M 14 x 1.25.

**3.20** Identifiers: slots of 30 mm x 20 mm machined and flat for setting up self-adhesive identifiers:

- At the front of the cylinder,
- On the upper part of the reed valve housing for the crankcase halves.

**3.21** It is permitted to add a mass to the ignition rotor, fixed by at least 2 screws, without modifying the homologated rotor.

**3.22** Exhaust: only the exhaust homologated with the engine can be used. The thickness of magnetic steel sheet should be 0.75mm minimum.

**3.23** Exhaust silencer: homologated, mandatory use. Fitting of the exhaust and the silencer according to Technical Drawing N°20.

**3.24** Intake silencer CIK/FIA Karting homologated with maximum 30mm intake tubes

**3.25** Ignition: CIK/FIA Karting homologated, analogue type.

**3.26** Any variable ignition system (progressive advancement and retardation system) is prohibited.

**3.27** Engines must be provided with the original serial number.

## IWF22 - TECHNICAL REGULATIONS KA100

### 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. Bumpers homologated CIK/FIA or having been homologated CIK/FIA

#### 1.7 Side bumpers

Art. 8.4.2 CIK/FIA KARTING TECHNICAL REGULATIONS. Side bumpers CIK/FIA homologated or having been CIK/FIA homologated

#### 1.8 Bodywork

Art. 8.5 CIK/FIA KARTING TECHNICAL REGULATIONS. CIK/FIA homologated bodywork 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 front 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. EQUIPMENT ALLOWED (CHASIS)**

**2.1** Each Driver is authorized 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 of 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 authorized to continue the event.

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

## **3. ENGINE IAME Reedjet 100 – KA100**

**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 adjustments are prohibited.

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

**3.4** Only the IAME Reedjet 100cc, original and strictly compliant with the manufacturer's tech form (Technical characteristics, dimensions, weights, diagrams with the tolerances prescribed by the manufacturer) is admitted.

**3.5** The pictures on the original engine tech form are valid for identifying the engine and the parts.

**3.6** Engines must be provided with the original serial number.

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

**3.8** Each internal or external part of the engine must be installed 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. However, it is absolutely forbidden to carry out any intervention on the engine and/or its accessories, even if the dimensional characteristics fall within the limits prescribed by the tolerances.

**3.10** The competitor is absolutely not authorized to intervene on the engine, even if the characteristic dimensions after his intervention 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 templates described in the engine tech form and available to the Scrutineers must be considered as valid instruments and certified by the Manufacturer in order to determine the conformity of the part for which they are designed.

**3.14** Decorative stickers prohibited on all parts of the engine.

## **4 CYLINDER HEAD**

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

**4.2** Only the thread repaired by means of a helicoil M14 x1,25 of the same length as the original thread is authorized. The spark plug body clamped to the cylinder head should not protrude from the upper part 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 Control 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-063/1 is the reference for checking the conformity of the cylinder head profile. The shape of the template must correspond at all points to the profile of the dome, from the squish area to the gasket plane.

**4.6** The original IAME template ATT-063/2 is the benchmark for volume control of the combustion chamber "in the cylinder head".

**4.7** The insert CIK tight on the cylinder head must not protrude from the upper part of the dome of the combustion chamber. The original IAME template ATT-063/2 is the reference for the control of the volume of the combustion chamber in the cylinder head.

## **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 shapes and the height of the ports can be compared to the cylinder of the sample engine.

**5.4** Heat treatments or additional surface treatments are prohibited.

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

**5.6** The number of cylinder sgaskets is not limited. Only original gaskets are allowed.

**5.7** Original cylinder head gasket.

**5.8** The original IAME template n. ATT-063/3 and ATT-065/5 are the references for ports control.

**5.9** The original IAME template n. ATT-063/CL is the reference for carrying out a visual inspection of the cylinder liner.

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

**6.1** Strictly original and without any modification.

**6.2** Only original connecting rod big end cage (X30125431), connecting rod small end cage (E-10440 or E-10441) and washers (X30125436 or X30125437) are authorized.

**6.3** 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 6205 TNH C4 crankshaft bearings are authorized.

**7.2** Oblique contact prohibited.

**7.3** Ceramic balls prohibited.

**7.4** The bearings must be mounted with balls visible inside the crankcase

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

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

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

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

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

**8.2** The original IAME ATT-063/4 template acc is the reference for checking the shape of the piston dome and the height of the piston skirt.

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

**9.1** Strictly original without any modification.

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

**9.3** Only original reed valve conveyor without modification is allowed.

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

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

#### **10. REED PETALS**

**10.1** Are authorized fiberglass petals (minimum thickness 0.25mm) or carbon fiber petals (minimum thickness 0.22mm), marked and of IAME origin.

**10.2** Prohibition to modify the original shape

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

#### **11. CARBURETTOR**

**11.1** Only the Tillotson HW-33A carburettor supplied with the engine in its original configuration (same brand, same model, same reference) is authorised.

**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 orientation of the carburettor (Pump upwards or downwards) is free.

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

**11.6** The original IAME templates ATT-63/8 and ATT 063/9 are the only references to check the shape of the carburettor intake duct. The shape of the duct must correspond in all points and over its entire length to the profile of the template.

**11.7** The original IAME template ATT 047/5d is the only reference to check the screw holes.

#### **12. INLET SILENCER**

**12.1** The inlet silencer (Ref. IAG-90000G) must be identical to the original one supplied with the engine (same brand, same model, same reference).

**12.2** Protective grilles are optional.

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

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

**12.5** In the event of rain, only the IAME reference IAG-90000-W protection device preventing water from entering directly into the inlet silencer 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 as well as for cleaning the friction parts. (Upholstery and drum material)

**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 prescriptions will be banned from starting.

In the event of a check on arrival, any Driver who does not comply with the prescriptions will be subject to a report of technical non-compliance.

**13.5** The gauge must not enter the clutch drum when inserted perpendicular to the axis of the clutch drum.

#### **14. IGNITION**

**14.1** Only the original Selettra analog 2-pole ignition is authorized, 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 organization cannot be held responsible for any possible breakdown occurring after the replacement.

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

**14.5** The original IAME ATT-063/10 gauge is the reference for checking the correct position of the phase reference mark on the rotor.

**14.6** The battery (free) must be fixed to the frame and always connected to the wiring harness.

#### **15. SPARK PLUG**

**15.1** Only NGK BR10EG – BR11EG spark plugs are authorized, 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 authorized spark plug caps are NGK TB05EMA, PVL 401 222, Selettra 5KOhm (IAME ref. 10543 or 10544).

#### **16. EXHAUST PLANT**

**16.1** Only original exhaust muffler and exhaust manifold and in compliance with the engine tech form are authorized. No modification of structure or dimensions is authorized.

**16.2** Drilling and welding operations on the muffler are only authorized 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** At least one original gasket between the cylinder and the exhaust manifold is mandatory.

**16.7** The use of a spacer between the exhaust manifold and the cylinder is prohibited.

**16.8** The use of the exhaust silencer described in appendix n°5 is compulsory at all times.

**16.9** IAME template ATT.063/7 and ATT.063/6 will be used to check the exhaust manifold.

**17. STARTER**

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

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

**18. SPROCKETS**

**18.1** Only IAME original Z10 and Z11 sprockets are authorized.