



**IWF'24 TECHNICAL REGULATIONS PART 2**

**(110724)**

**TECHNICAL REGULATIONS IAME X30 MINI**

**ART. 1 – CHASSIS.**

**ART. 2 – ALLOWED EQUIPMENT.**

**ART. 3 – ENGINE IAME X30 WATER SWIFT**

**ART. 4 – CYLINDER HEAD**

**ART. 5 – CYLINDER**

**ART. 6 – CRANKCASE, CRANKSHAFT, CONECTING ROD, CRANK PIN**

**ART. 7– BEARINGS**

**ART. 8 – PISTON, PISTON RING AND PIN**

**ART. 9 – CARBURETTOR**

**ART. 10 – INLET SILENCER**

**ART. 11 – CLUTCH**

**ART. 12 – IGNITION**

**ART. 13– SPARK PLUG AND SPARK PLUG CAP**

**ART. 14 – EXHAUST SYSTEM**

**ART. 15 – COOLING**

**ART. 16 – STARTER**

**ART. 17 – SPROCKETS**

**TECHNICAL REGULATIONS IAME X30 JUNIOR / X30 SENIOR / X30 MASTER**

**ART. 1 – CHASSIS.**

**ART. 2 – ALLOWED EQUIPMENT.**

**ART. 3 – ENGINE IAME X30 125cc**

**ART. 4 – CYLINDER HEAD**

**ART. 5 – CYLINDER**

**ART. 6 – CRANKCASE, CRANKSHAFT, CONECTING ROD, CRANK PIN**

**ART. 7– BEARINGS**

**ART. 8 – PISTON, PISTON RING AND PIN**

**ART. 9 – REED VALVE**

**ART. 10 – REED PETALS**

**ART. 11 – CARBURETTOR**

**ART. 12 – INLET SILENCER**

**ART. 13– CLUTCH**

**ART. 14 – IGNITION**

**ART. 15 – SPARK PLUG**

**ART. 16 – EXHAUST PLANT**

**ART. 17 – COOLING SYSTEM**

**ART. 18 – STARTER**

**ART. 19 – SPROCKETS**

## IWF'24 TECHNICAL REGULATIONS IAME X30 MINI

### ART. 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

### ART. 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.

### ART. 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

#### **ART. 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  $\varnothing$  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.

#### **ART. 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.

#### **ART. 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.

#### **ART. 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.

#### **ART. 8 – PISTON, PISTON RING AND PIN**

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

#### **ART. 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.

#### **ART. 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.

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

#### **ART. 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.

#### **ART. 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.

#### **ART. 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).

#### **ART. 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.

#### **ART. 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 form.

**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.

**ART. 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.

**ART. 17 – SPROCKETS**

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

## IWF'24 TECHNICAL REGULATIONS IAME X30 JUNIOR / X30 SENIOR / X30 MASTERS

### ART. 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

### ART. 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 Scrutineers, if it is in the opinion that it is not practical to repair in time, a replacement chassis of the same make and model as the damaged chassis may be authorised to continue the event.

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

### ART. 3 – ENGINE IAME X30 125cc

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

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

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

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

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

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



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

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

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

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

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

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

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

#### **ART. 4 – CYLINDER HEAD**

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

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

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

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

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

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

#### **ART. 5 – CYLINDER**

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

**5.2** Polishing, sanding, deburring or adjustments are prohibited.

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

**5.4** No heat treatment or additional surface treatment is allowed.

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

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

**5.7** No cylinder head gasket is permitted.

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

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

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

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

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

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

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

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

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

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

#### **ART. 7 – BEARINGS**

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

**7.2** Bearings with oblique contact prohibited.

**7.3** Ceramic balls prohibited.

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

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

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

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

#### **ART. 8 – PISTON, PISTON RING AND 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.

#### **ART. 9 – REED VALVE**

**9.1** Strictly original without any modification.

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

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

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

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

#### **ART. 10 – REED PETALS**

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

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

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

**10.4** Prohibition to modify the original shape

#### **ART. 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.

#### **ART. 12 – INLET SILENCER**

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

**12.2** Protective grilles are optional.

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

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

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

#### **ART. 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.

#### **ART. 14 – IGNITION**

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

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

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

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

**14.5** The markings on the electronic box/coil are mandatory and must be clearly visible without dismantling the electronic box/coil.

Covering them with adhesive tape is prohibited.

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

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

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

#### **ART. 15 – SPARK PLUG**

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

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

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

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

#### **ART. 16 – EXHAUST PLANT**

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

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

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

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

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

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

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

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

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

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

#### **ART. 17 – COOLING SYSTEM**

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

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

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

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

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

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

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

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

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

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

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

#### **ART. 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.

#### **ART. 19 – SPROCKETS**

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

