IAME SERIES UAE TECHNICAL REGULATIONS
2025/2026 VER 1.0

TECHNICAL REGULATIONS PART 1 OF 2 (GENERAL) (ARTICLE 1-5)

The Appendix 1 of the Series Regulations applies for the IAME Series UAE. The English text is the authentic version. The Organizer of the series (RAK TRACK) reserves the right to issue additional statements concerning the Technical Regulations from time to time following the agreement of the ASN. All such statements will be issued to all registered competitors by way of Competitors' Bulletins posted on the official notice board and/or on the official website.

1. CLASSIFICATION AND DEFINITION

1.1 Classification: Article 26.1 of Appendix 1

1.2 Definitions: Article 26.2 of Appendix 1

2. GENERAL PRESCRIPTION

2.1 General: Article 26.3 of Appendix 1

3. KART AND DRIVER SAFETY EQUIPMENT

3.1 Kart Safety: Article 26.2.2 of Appendix 1

3.2 Driver Safety Equipment: Article 26.6 of Appendix 1

4. GENERAL PRESCRIPTION FOR GROUPS 1 & 2 KARTS

4.1 Chassis: Article 26.7 and 26.8 of Appendix 1

5. ORGANIZER'S SUPPLEMENTARY PROVISIONS

5.1 Scrutineering
A mandatory check will be carried out before the start of Practice at every Round. It must be possible to identify the homologated equipment using the technical descriptions (drawings, dimensions, etc.) on the homologation form. For any used equipment, which has been homologated, each competitor shall be able to submit the relative homologation forms to identify the homologated equipment. For identification and control it must be possible to identify the homologated equipment.

5.1.1 Each Driver will be entitled to submit to Scrutineering the following equipment:

5.1.1.1 One (1) chassis with a valid 2010 or newer FIA Karting / CIK-Homologation.
5.1.1.2 Two (2) engines of the same type per driver and category for the event.

5.2 Chassis Homologation
Chassis must have a valid 2010 or newer FIA Karting / CIK-Homologation. Front brakes are not allowed.

5.2.1 The use of the front fairing retaining system CIK / FIA Karting 2015-2020, as per TD No. 2.2/2.2.1 and 3.2/3.2.1, is mandatory. The technical committee reserves the right to refuse front fairings, front fairing retaining systems or other components that do not meet the required standards. The front fairing must be CIK / FIA Karting homologated and must remain in the correct position at any time of a competition (qualifying or races), as described in the TD N. 2.2/2.2.1 and 3.2/3.2.1.

The use of CIK/FIA homologated front fairings is mandatory in all classes.

5.2.2 Chassis for Mini class
Traditional chassis with a valid "MINI KART" homologation approved by ASNs members of the FIA Karting and in compliance with CIK prescriptions requirements (Appendix 1 – 26.8)

5.2.2.1 Definition of the chassis
Chassis must be in compliance with the following:

- Traditional chassis with a valid "MINI KART" homologation approved by ASNs members of the CIK-FIA and in compliance with FIA Karting prescriptions.
- Rear shaft max. diameter: 30mm
- Wheelbase 900/950mm (+/-5mm)
- Rear track width max. 115cm
- Ceramic ball bearings are forbidden
- Mechanical or hydraulic brakes
- Front brakes forbidden
- Steel or cast-iron brake discs (Aluminium/Ceramic/Carbon are forbidden)
- Aluminium or magnesium wheels allowed
- Rear wheel protection must be CIK homologated
- Full chain guard is mandatory
- Chassis protections are allowed as long as they are made of strong material and do not provide any advantage

5.3 Amount of Equipment (Chassis)
Drivers will be allowed one (1) chassis only. However, if damage occurs to a chassis previously scrutinized for the Event, and if in the opinion of the Scrutineer 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 Event.

5.4 Amount of Equipment (Engines)
Only 2 (two) engines are allowed for each driver and category for Scrutineering and use per event.

5.5 Fuel and Oil

5.5.1 Fuel will be non "Parc Ferme" status.

5.5.2 It will be each competitor's responsibility to purchase their own petrol from UAE petrol stations for free practice until the end of the race weekend. No racing fuels or additives are allowed.

5.5.3 The octane ratio will be stated in the Sporting/Supplementary Regulations of the event. It is mandatory to employ only the indicated fuel in all Official sessions.

5.5.4 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 forbid the use of specific power-boosting chemical compounds.

5.5.5 At any time the volume of fuel in the tank must be over or equal to 1.5 litres.

5.5.6 The petrol must be unleaded, maximum 98 octane.

5.5.7 The oil mixture ratio for Junior and above shall be 5% and for Mini 3%.

5.5.8 It is forbidden to add any liquid and/or power-boosting chemicals in the petrol.

5.5.9 The Scrutineer/Organizer, following a decision of the Stewards, have the right to change/replace any Entrant or Driver's petrol at his/her discretion and at any time.

5.5.9.1 Case 1 - Should this be the case, the Entrant / Drivers will be asked to enter servicing park without petrol in his/her petrol tank, here the fuel will be added, at no cost for the driver.

5.5.9.2 Case 2 - Petrol will be changed without warning, at no cost for the driver. 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

5.5.9.2.1 Digatron DT-64 Fuel Test
5.5.9.2.2 Specific Gravity Test
5.5.9.2.3 Water Solubility Test

5.5.10 The fuel test instrument will be Digatron DT-64.
The reference sample fuel test will be performed by the Scrutineer prior to Qualifying. This will be considered the reading of the day. Mixed reference sample fuel will be kept by the Scrutineer.
The difference in reading between the reference sample that is applicable for each class and competitor fuel reading may not be more or less than 5. This value may be changed by the Scrutineer of the event before Qualifying. Fuel testing can be done at any time during the event.
Any infraction found during a random control or before/after a race leads to the exclusion of the driver from the particular qualifying, heat or race.

5.5.11 Top 4 drivers after Qualifying, Heat and Pre-Final will be using controlled fuel in the respective next race (Heat, Pre-Final, Final). It is drivers' responsibility to collect their fuel from the Scrutineering Bay. Drivers who fail to report to scrutineering bay to collect their fuel will not be allowed to take the start of the race.
All karts running on controlled fuel can only leave Parc Ferme when instructed by the Scrutineers and must go directly to the dummy grid.

5.6 Lubricant
The official oil for the IAME Series UAE is the FIA Karting approved Wladoil K-2T.

5.7 Tyres

5.7.1 Dry Tyres – Junior Category
Komet Racing Tyres Model K3H
Size: Front: 10 x 4.60-5 / Rear: 11 x 7.10-5

5.7.2 Dry Tyres – Senior & Senior 170 Category
Komet Racing Tyres Model K3M
Size: Front: 10 x 4.60-5 / Rear: 11 x 7.10-5

5.7.3 Dry Tyres – Mini Category
Komet Racing Tyres Model K1D-M
Size: Front: 10 x 4.00-5 / Rear: 11 x 5.00-5

5.7.4 Wet Tyres
Mini: Komet Racing Tyres Model K1D-W
Junior, Senior, Senior 170: Komet Racing Tyres Model K1W

5.7.5 Tyres Availability
Tyres needed for free practice are available through RAK TRACK.

5.7.6 Tyres Checking Tool
The measuring device MiniRAE Lite of the company «RAE Systems Inc.» will be used in Qualifying Practice, Heats and final phase to check that the tyres are in conformity with the regulations.
The VOC measurement of the tyres may not exceed 4 ppm (maximum limiting value) under any circumstances.

Note: Pollution of the tyres, e.g. by chain spray, must be avoided since this can result in the limiting value being exceeded. Should the check establish that one or more tyres are not in conformity with the regulations, the relevant Driver will not be allowed access to the" Pre-Grid" and will consequently not participate in the corresponding part of the Competition (Qualifying Practice, Heat or final phase).
Protests against this procedure are not admitted. Protests and Appeals in this regard do not have a suspensive effect.

5.8 Racing Numbers

Racing numbers must comply with the provisions of Article 26.3.7 of Appendix 1.
Racing numbers must be black, in an Arial font on a yellow back- ground.
For short circuits, they must be at least 15 cm high and have a 2 cm thick stroke.
Racing numbers must be bordered by a yellow background of at least 1 cm.
They must be fitted before scrutineering, on the front panel, rear wheel protection or rear number plate, and on both sides towards the rear of the bodywork.
The driver is responsible for ensuring that the required numbers are clearly visible to Timekeepers and Officials.
The number plates must be made of flexible opaque plastic and be visible at all times. They must be fixed without possibility of removal.

5.9 Driver Name and Nationality (Optional)

Display of Driver Name is optional. Should the driver wish to display his name and nationality on the kart, the Driver's name and the flag of his nationality (The flag displayed must be as per the nationality of the License) shall be in the fore part of the lateral bodywork. The minimum height of the flag and the letters of the name shall be 3 cm.

5.10 Novice Drivers

The novice plate must be a 22cm square yellow sticker or yellow plastic plate (plastic plate must have rounded off corners as per CIK regulations) with a black "X" running from corner to corner (2-3cm stroke width). It must be displayed on the rear bumper alongside the regular race number plate.

TECHNICAL REGULATIONS PART 2 OF 2 (ENGINES) (ARTICLE 6-10)

6. ENGINES

The Appendix 1 of the Series Regulations applies for the IAME Series UAE. for the IAME Series UAE. The English text is the authentic version. RAK TRACK reserves the right to issue additional statements concerning the Technical Regulations (previously approved by the ASN proposing the series and the FIA Karting) from time to time following the agreement of the ASN presenting the series, all such statements will be issued to all registered competitors by way of Competitors' Bulletins posted on the official notice board and/or on the official website.

6.1 Technical Regulations

All Technical Regulations available on: www.iame.ae

7. IAME S125 RL TaG – SENIOR AND SENIOR 170 CATEGORIES

Any modification to the engine and its accessories is strictly prohibited, unless expressly authorised. 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. Any heat treatment or additional surface treatment is prohibited. The competitor is responsible for the conformity of his own equipment.

7.1 The following original homologation forms of the engine:

7.1.1 «409B » IAME S125 RL-N TaG

are an integral part of the technical regulations.

7.2 Only the IAME S125, 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. The pictures on the original engine tech form are also valid to identify the engine and the parts.

7.3 The engines must be provided with their original serial number. No modification, improvement, polishing, addition or removal of material of any engine part is allowed. Each internal or external part of the engine must be mounted in its original position and function, according to the original design specifications.

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

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

7.6 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.

7.7 Diagrams and volume chart: see the engine tech form

7.8 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.

7.9 Cylinder Head

7.9.1 The cylinder head has to be strictly original. 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 into the top of the combustion chamber dome.

7.9.2 The squish (minimum distance between the piston and the cylinder head) must comply, in all respects, with the engine tech form. The Squish measurement shall be carried out with a Ø 1.5mm tin/lead wire.
The original IAME template ATT-077-1 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.
The CIK insert tightened on the cylinder head must not protrude into the upper part of the combustion chamber dome.

7.10 Cylinder

7.10.1 Strictly original with the original safety pin and IAME markings. Polishing, sanding, deburring or adjustments are prohibited. 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. No heat treatment or additional surface treatment is allowed. Adjustment of the diagram is permitted only by means of cylinder base gasket replacement. The number and thickness of cylinder base gaskets is not limited. Only original gaskets are allowed.

7.10.2 Cylinder head gaskets are permitted. The number and thickness are not limited. Only original gaskets are allowed.

7.10.3 The original IAME gauge n. ATT-077-3 is the reference for measuring of the main and secondary transfer ports.
The original IAME gauge n. ATT-077-4 is the reference for measuring the exhaust main and secondary ports.
The original ATT-077-5 is the reference for checking shape and dimension of all the ports in the liner.

7.10.4 The cylinder block height is considered from the base plane of the cylinder to the top plane of the liner.

7.10.5 Cylinder thermal layers are allowed as long as they are not removable while the vehicle is in motion.

7.11 Crankcase, Crankshaft, Connecting Rod, Crank Pin
Strictly original and without any modification.

7.11.1 The original IAME ATT-077-7 template is the reference for checking the gasket plane of the reed valve block.
The original IAME ATT-077-8 template is the reference for checking the interaxle between the cylinder locating pins.
The original IAME ATT-077-9 template is the reference for checking the height of the cylinder base plane on the crankcase.

7.11.2 Only original connecting rod big end cage (TZC-50200), connecting rod small end cage (IFC-50350), crankpin (TZC-40200) and washers (TZC-70101) are authorised.

7.11.3 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.

7.12 Bearings
Only crankshaft roller bearings SKF BC1 1442 D (35398A) are authorised. Only balance shaft bearings 6202 C4, 6202 TN9/C4H, 6203 TN1 C4 and 6203 ETN9 / C4 with steel balls and polyamide cage, are authorised.

7.12.1 Bearings with oblique contact prohibited.

7.12.2 Ceramic balls and rollers prohibited.

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

7.12.4 The use of shims behind the bearings is allowed, in order to obtain the correct axial play.

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

7.13 Piston, Piston Ring, Piston Pin

Strictly original without any modifications and in compliance with the technical form of the engine.
The original IAME ATT-077-6 template is the reference for checking the shape of the piston dome.

7.14 Reed Valve

Strictly original without any modification.

7.14.1 No machining of gasket planes is authorised.
7.14.2 Original reed valve cover without modification.
7.14.3 Carburettor seat strictly original with no modifications.
7.14.4 The thickness of the conveyor/housing gasket is 0.8 mm (allowed tolerance +/- 0.3 mm).

7.15 Reed Petals

Carbon fibre petals (minimum thickness 0.24mm), marked and IAME original are authorised.
Modification to the original shape is not allowed.

7.16 Carburettor

Only the Tillotson HW-50A carburettor supplied with the engine in its original configuration (same brand, same model, same reference) is permitted. Only the accessories supplied with the original carburettor and shown on the carburettor data sheet are authorised.

7.16.1 The spring and the fork are free.
7.16.2 The mounting of the carburettor is free. (Pump up or down).
7.16.3 The thickness of the carburettor gasket is 1 mm (Allowed tolerance +/- 0.3mm).

7.16.4 The original IAME templates ATT-063/8 and ATT-063/9 are the references to check the venturi and throttle bore diameters, and 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.
The original IAME template ATT-047-5M is the reference to check the diameter of L and H orifices.
The original ATT-077-10 and ATT-077-11 templates are the reference to check the diameter of the main fuel holes in the throttle bore.

7.17 Inlet Silencer

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.

7.17.1 The use of protective grilles is optional.
7.17.2 The rubber sleeve connecting the inlet silencer to the carburettor is mandatory with air filter, it must be installed and comply with the homologation form.

7.17.3 Any injection and/or spray system is prohibited.

7.17.4 In the event of rain, only the original inlet silencer protection device (SKE005-PN-IAME) is authorised.

7.18 Clutch

The centrifugal clutch must engage at 4,000 rpm maximum and begin to move the kart with the Driver in racing conditions. The clutch should be fully engaged at 6,000 rpm maximum in any condition, this rpm can be checked with the appropriate hardware if necessary.

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

7.18.2 The proper functioning of the clutch can be checked at any time during the event, and after each phase. The original IAME ATT-047/4 gauge is the reference for checking the inner diameter of 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. The tool must not enter the clutch housing perpendicularly to the axis of the clutch drum.

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

7.19 Ignition

Only the original ignition Selettra Digital "S" is authorised, without any modification.

7.19.1 Only the electronic box/coil the type "C" (16.000 rpm) is authorised and must be fixed to the engine.

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

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

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

7.19.5 The battery must be secured to the chassis and connected to the wiring harness.

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

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

7.20 Spark Plug

Only NGK BR9EG and BR10EG spark plugs are authorised, strictly original and without any modification.

7.20.1 The spark plug must be fitted with its original gasket. The porcelain insulator must not protrude from the spark plug body and the length of the spark plug body (gasket included) must be 18.5 mm. maximum (Appendix 7 of the CIK technical regulations).

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

7.21 Exhaust Plant

Only the original exhaust and header delivered with the engine are authorised, strictly original and compliant with the tech form. No modification of structure or dimensions is authorised. Drilling of the probe fitting is authorised to install a temperature probe.

7.21.1 Original exhaust manifold in compliance with the tech form of the engine.

7.21.2 The presence of one original gasket minimum, between the cylinder and the exhaust header, is compulsory.

7.21.3 The use of one or more original spacers IAME S1NH20500 (thickness 3 mm +/- 0.5) to adjust the exhaust length is authorised.

7.21.4 A gaskets must be placed between each element of the exhaust header group: cylinder, header, spacer or spacers where present.

7.21.5 The complete sealing of the exhaust gases between the cylinder and the exhaust header must be guaranteed at any time. Checking of the exhaust gas sealing can be carried out at any time by plugging the outlet of the exhaust header and filling it through the exhaust port with liquid.

7.22 Cooling System

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. A single IAME original water pump pulley (aluminium or black/blue plastic) is authorised and in compliance with the tech form. The type of water pump drive belt is free. The use of the pulley with the belts in position is mandatory.

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

7.22.2 Only original IAME 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, function as a fitting and temperature probe housing.

7.22.3 Only water without any other additives is allowed for cooling.

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

7.22.5 Original blue water hoses must be used, as supplied with the engine.

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

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

7.23 Starter

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

7.24 Inspections

The engine technical inspection is performed by the Scrutineers. The Scrutineers have the right to inspect any part to the point that it can no longer be employed. If this is the event, the inspected part that comes out to be regular will be replaced to the driver at no cost. Any part found out irregular, will not be refunded.

7.24.1 At any moment, the Scrutineers, following a decision of the Stewards, have the right to replace any part, any accessory or even the entire engine.

7.24.2 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.

8. IAME S125 RL TaG – JUNIOR CATEGORY

Any modification to the engine and its accessories is strictly prohibited, unless expressly authorised. 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. Any heat treatment or additional surface treatment is prohibited. The competitor is responsible for the conformity of his own equipment.

8.1 The following original homologation forms of the engine:

8.1.1 «409B » IAME S125 RL-N TaG Junior restricted

are an integral part of the technical regulations.

8.2 Only the IAME S125, 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. The pictures on the original engine tech form are also valid to identify the engine and the parts.

8.3 The engines must be provided with their original serial number. No modification, improvement, polishing, addition or removal of material of any engine part is allowed. Each internal or external part of the engine must be mounted in its original position and function, according to the original design specifications.

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

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

8.6 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.

8.7 Diagrams and volume chart: see the engine tech form

8.8 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.

8.9 <u>Cylinder Head</u>

8.9.1 The cylinder head has to be strictly original. 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 into the top of the combustion chamber dome.

8.9.2 The squish (minimum distance between the piston and the cylinder head) must comply, in all respects, with the engine tech form. The Squish measurement shall be carried out with a Ø 1.5mm tin/lead wire.
The original IAME template ATT-077-1 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.
The CIK insert tightened on the cylinder head must not protrude into the upper part of the combustion chamber dome.

8.10 Cylinder

8.10.1 Strictly original with the original safety pin and IAME markings. Polishing, sanding, deburring or adjustments are prohibited. 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. No heat treatment or additional surface treatment is allowed. Adjustment of the diagram is permitted only by means of cylinder base gasket replacement. The number and thickness of cylinder base gaskets is not limited. Only original gaskets are allowed.

8.10.2 Cylinder head gaskets are permitted. The number and thickness are not limited. Only original gaskets are allowed.

8.10.3 The original IAME gauge n. ATT-077-3 is the reference for measuring of the main and secondary transfer ports.
The original IAME gauge n. ATT-077-4 is the reference for measuring the exhaust main and secondary ports.
The original ATT-077-5 is the reference for checking shape and dimension of all the ports in the liner.

8.10.4 The cylinder block height is considered from the base plane of the cylinder to the top plane of the liner.

8.10.5 Cylinder thermal layers are allowed as long as they are not removable while the vehicle is in motion.

8.11 Crankcase, Crankshaft, Connecting Rod, Crank Pin
Strictly original and without any modification.

8.11.1 The original IAME ATT-077-7 template is the reference for checking the gasket plane of the reed valve block.
The original IAME ATT-077-8 template is the reference for checking the interaxle between the cylinder locating pins.
The original IAME ATT-077-9 template is the reference for checking the height of the cylinder base plane on the crankcase.

8.11.2 Only original connecting rod big end cage (TZC-50200), connecting rod small end cage (IFC-50350), crankpin (TZC-40200) and washers (TZC-70101) are authorised.

8.11.3 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.

8.12 Bearings
Only crankshaft roller bearings SKF BC1 1442 D (35398A) are authorised. Only balance shaft bearings 6202 C4, 6202 TN9/C4H, 6203 TN1 C4 and 6203 ETN9 / C4 with steel balls and polyamide cage, are authorised.

8.12.1 Bearings with oblique contact prohibited.

8.12.2 Ceramic balls and rollers prohibited.

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

8.12.4 The use of shims behind the bearings is allowed, in order to obtain the correct axial play.

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

8.13 Piston, Piston Ring, Piston Pin
Strictly original without any modifications and in compliance with the technical form of the engine.
The original IAME ATT-077-6 template is the reference for checking the shape of the piston dome.

8.14 Reed Valve

Strictly original without any modification.

8.14.1 No machining of gasket planes is authorised.

8.14.2 Original reed valve cover without modification.

8.14.3 Carburettor seat strictly original with no modifications.

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

8.15 Reed Petals

Carbon fibre petals (minimum thickness 0.24mm), marked and IAME original are authorised.

Modification to the original shape is not allowed.

8.16 Carburettor

Only the Tillotson HW-50A carburettor supplied with the engine in its original configuration (same brand, same model, same reference) is permitted. Only the accessories supplied with the original carburettor and shown on the carburettor data sheet are authorised.

8.16.1 The spring and the fork are free.

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

8.16.3 The thickness of the carburettor gasket is 1 mm (Allowed tolerance +/- 0.3mm).

8.16.4 The original IAME templates ATT-063/8 and ATT-063/9 are the references to check the venturi and throttle bore diameters, and 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.

The original IAME template ATT-047-5M is the reference to check the diameter of L and H orifices.

The original ATT-077-10 and ATT-077-11 templates are the reference to check the diameter of the main fuel holes in the throttle bore.

8.17 Inlet Silencer

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.

8.17.1 The use of protective grilles is optional.

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

8.17.3 Any injection and/or spray system is prohibited.

8.17.4 In the event of rain, only the original inlet silencer protection device (SKE005-PN-IAME) is authorised.

8.18 Clutch

The centrifugal clutch must engage at 4,000 rpm maximum and begin to move the kart with the Driver in racing conditions. The clutch should be fully engaged at 6,000 rpm maximum in any condition, this rpm can be checked with the appropriate hardware if necessary.

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

8.18.2 The proper functioning of the clutch can be checked at any time during the event, and after each phase. The original IAME ATT-047/4 gauge is the reference for checking the inner diameter of 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. The tool must not enter the clutch housing perpendicularly to the axis of the clutch drum.

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

8.19 Ignition

Only the original ignition Selettra Digital "S" is authorised, without any modification.

8.19.1 Only the electronic box/coil the type "C" (16.000 rpm) is authorised and must be fixed to the engine.

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

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

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

8.19.5 The battery must be secured to the chassis and connected to the wiring harness.

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

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

8.20 Spark Plug

Only NGK BR9EG and BR10EG spark plugs are authorised, strictly original and without any modification.

8.20.1 The spark plug must be fitted with its original gasket. The porcelain insulator must not protrude from the spark plug body and the length of the spark plug body (gasket included) must be 18.5 mm. maximum (Appendix 7 of the CIK technical regulations).

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

8.21 Exhaust Plant

Only the original exhaust and header delivered with the engine are authorised, strictly original and compliant with the tech form. No modification of structure or dimensions is authorised. Drilling of the probe fitting is authorised to install a temperature probe.

8.21.1 Original exhaust manifold with Junior restrictor in compliance with the tech form of the engine.

8.21.2 The presence of one original gasket minimum, between the cylinder and the exhaust header, is compulsory.

8.21.3 The use of one or more original spacers IAME S1NH20500 (thickness 3 mm +/- 0.5) to adjust the exhaust length is authorised.

8.21.4 A gaskets must be placed between each element of the exhaust header group: cylinder, header, spacer or spacers where present.

8.21.5 The complete sealing of the exhaust gases between the cylinder and the exhaust header must be guaranteed at any time. Checking of the exhaust gas sealing can be carried out at any time by plugging the outlet of the exhaust header and filling it through the exhaust port with liquid.

8.22 Cooling System

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. A single IAME original water pump pulley (aluminium or black/blue plastic) is authorised and in compliance with the tech form. The type of water pump drive belt is free. The use of the pulley with the belts in position is mandatory.

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

8.22.2 Only original IAME 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, function as a fitting and temperature probe housing.

8.22.3 Only water without any other additives is allowed for cooling.

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

8.22.5 Original blue water hoses must be used, as supplied with the engine.

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

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

8.23 Starter

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

8.24 Inspections

The engine technical inspection is performed by the Scrutineers. The Scrutineers have the right to inspect any part to the point that it can no longer be employed. If this is the event, the inspected part that comes out to be regular will be replaced to the driver at no cost. Any part found out irregular, will not be refunded.

8.24.1 At any moment, the Scrutineers, following a decision of the Stewards, have the right to replace any part, any accessory or even the entire engine.

8.24.2 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.

10. **IAME X30 Water Swift 60cc TaG – MINI CATEGORY**

Any modification on the engine and its accessories, if not expressly authorized, is forbidden. IAME considers as modifications any action changing the initial aspect and dimensions of an original part. Any modification and/or installation having as a consequence to alter a dimension and/or its control possibility are strictly forbidden. Polishing, sandblasting, trimming or adjustments are not allowed. No heat treatment or surface treatment is allowed. The Entrant is liable for the conformity of its own equipment. Any tuning is forbidden: the maximum and minimum allowed values and the volume of the combustion chamber have to be measured according to the procedure described in the Appendix 1 of series regulations.

10.1 The following original homologation forms of the engine:
«364I» IAME X30 WATER SWIFT – 60cc RL TaG

10.2 Only the IAME X30 WATERSWIFT 60cc RL TaG: original and strictly in compliance with the manufacturer's technical form (technical features, sizes, weights, diagrams with the tolerances prescribed by the manufacturer) is permitted. The pictures on the original homologation forms are as well valid to identify the engine and the parts.

10.3 The engines must be provided with their original serial number. No modification, improvement, polishing, addition or removal of material of any engine part is allowed. Each engine internal or external part has to be installed in its original position and functioning according to the original design specification.

10.4 The tolerances reported on the homologation forms are necessary to comprise all the machining, assembling and settling tolerances. Nevertheless, the Entrant is absolutely not allowed to make any intervention on the engine, even if the characteristic dimensions after his intervention will still be within the prescribed tolerances.

10.5 Any tuning is forbidden: the maximum and minimum allowed values and the volume of the combustion chamber have to be measured according to Appendix 1 of series regulations.

10.6 In any moment, the technical officials, following a decision of the Stewards, have the right to replace any part, any accessory or even the complete engine.

10.7 DIAGRAMS TABLE:
Refer to technical form of the engine

10.8 Cylinder Head:

10.8.1 Strictly original. The sparkplug body tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome.

10.8.2 The squish minimum value must be as prescribed on the engine technical form. The thickness of the tin wire (50% tin minimum.) used for the squish measurement must have a 1,5mm diameter. The original IAME gauge n. 10215 is the reference to check the cylinder head profile conformity. The gauge shape must match with the dome profile, the squish area and the gasket plane.

10.9 Cylinder:
Only the original cylinder can be employed. Polishing, sandblasting, trimming or adjustments are not allowed. Only re-boring is allowed. In case of doubt, the shape and the height of the transfers have to be compared to the cylinder of the sample engine. No heat treatment or surface treatment is allowed. The diagram adjustment is allowed only by means of the cylinder gasket replacement. The number of cylinder gaskets is not limited. Only original gaskets are allowed. No head gasket is admitted. The original IAME gauge n. ATT-005 is the reference to measure the distance of the upper edge of the ports from the cylinder head plane.

10.10 Crankcase, Crankshaft, Con-rod, Crankpin
Only original parts are allowed, without any modification. Only strictly original big end cage (IAME B-10431), original washers (IAME E-38436) and original small end cage (IAME A-60440) are allowed.
Oil seals must be installed in the correct position, cave side looking inside the crankcase.

10.11 Bearings

Strictly original: crankshaft ball bearings p.n. IAME: 10400-D (6204 C4). Ball-bearing with oblique contacts are forbidden. Only bearings with steel balls and rings are authorized. (Ceramic is forbidden). Shims can be added behind the main roller bearings to reach the correct axial play. All bearings not reporting the correct and clearly visible classification number, as described in the present regulations, are expressively forbidden.

10.12 Piston, Ring and Pin

Strictly original without any modification and in compliance with the engine technical form.

10.13 Carburettor

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

10.13.1 Only the accessories supplied together with the original carburettor are allowed; diaphragms, diaphragm gaskets and the needle valve spring are free. Carburettor positioning (i.e. with pump in upper or in lower position) is free. All carburettor spacers and gaskets are mandatory and must be in compliance and in the same order as indicated on the technical form.

10.13.2 In case of doubt the carburettor must be compared to the sample carburettor.

10.13.3 Inlet silencer strictly original as supplied together with the engine (same brand, same model, same reference) that is IAME mod. MINI SWIFT with CSAI 01/SA/14 homologation. Inlet hose max. internal diameter must be 22mm. Protective grids are optional.

10.13.4 The rubber manifold with air filter connecting the inlet silencer to the carburettor is mandatory, it must be installed and in compliance with the homologation form.

10.13.5 Any injection and/or spraying system is forbidden.

10.14 Clutch

The engine is supplied with a dry centrifugal clutch system. Any intervention intended to extend the sliding of the clutch hub beyond the prescribed limit is strictly forbidden. The centrifugal clutch must engage at max. 4.500 RPM moving the kart with driver on board and in racing conditions. The clutch must be completely engaged at max. 6.500 RPM in any condition; this measurement can eventually be checked with proper instruments. Each driver is responsible for the wear status of the clutch padding material and friction parts cleaning, since the proper clutch operation might be checked at any moment of the event, and even after each phase.

10.15 Ignition

Original ignition only, that is SELETTRA p.n. IAME A-61951 and coil p.n. IAME A-61955. Without any modification.

10.15.1 Scrutineers, following a decision of the Stewards have the right to ask for the replacement of the whole ignition system or part thereof at any moment before starting the race. The organizer will not be liable for any eventual breakdown occurred after the replacement.

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

10.16 Sparkplug

10.16.1 Only the following NGK sparkplugs, strictly original and without any modification, are allowed: BR9EG - BR10EG
10.16.2 The sparkplug must be installed with its original gasket.
10.16.3 The insulator must not exceed the sparkplug body and the length of the sparkplug body itself must be max. 18.5 mm.
10.16.4 Original spark plug cap, as delivered with the engine (IAME p.n. 10544 – PVL or Selettra)

10.17 Exhaust

Only the original exhaust pipe is allowed as supplied with the engine and must be kept strictly original and in compliance with the homologation form.

10.17.1 No modifications in structure or in dimensions are allowed.

10.17.2 The complete sealing of the exhaust gas between the cylinder and the exhaust manifold must be guaranteed at all times. The control of the sealing of the exhaust gas can be performed at any time through occlusion of the outlet hole of the exhaust header, filling of the exhaust header with liquid through the exhaust port and check for leaks. The proper sealing of the exhaust system is at Driver's responsibility.

10.17.3 The exhaust manifold (Ø28,5mm) must be strictly original and in compliance with the technical form. Only one original exhaust gasket is allowed.

10.17.4 Both new type (with temperature sensor seat – Page 7 of homologation form) and old type (without temperature sensor seat – Page 9a of homologation form) exhaust mufflers are allowed, only original and as supplied with the engine.
Pipe and probe seat modifications are strictly prohibited.
Use of temperature sensors is allowed only with the new type of exhaust.

10.18 Cooling

The cooling system must be in its original configuration: only one IAME original radiator (p.n. T-8601), only one IAME original simple water pump (black or blue) are allowed and in compliance with the homologation form.

10.18.1 Only simple or bypass original IAME thermostats are allowed, and their use is optional.
10.18.2 Cooling only by water, no other additives allowed.
10.18.3 Radiators shields, either adhesive or mechanic are allowed but should not be removable when the kart is in motion.
10.18.4 The use of the original water pump pulley activating the water pump through O rings is mandatory.

10.19 Starting

The engine is provided with an on-board electric starter. The original on-board starting system can be installed with all its components and properly connected.

9.19.1 The use of an external starter is authorized only in the event that a mechanical or electrical problem prevents the starting system operation.

10.20 Sprockets

Only IAME original clutch drums with built-in Z10 or Z11 sprockets are allowed.

10.21 Inspections

9.21.1 The engine technical inspection is performed by the Scrutineers. The Scrutineers have the right to inspect any part to the point that it can no longer be employed. If this is the event, the inspected part that comes out to be regular will be replaced to the driver at no cost. Any part found out irregular, will not be refunded.

9.21.2 In any moment, the Scrutineers, following a decision of the Stewards, have the right to replace any part, any accessory or even the entire engine.

9.21.3 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.