



# ***2025 TECHNICAL SPECIFICATIONS***



# TECHNICAL SPECIFICATIONS 2025

The FIA Karting technical regulations apply to EUROCUP KARTING. The French language is the official version. The organizer of EUROCUP KARTING, KC Mariembourg, following an agreement from the RACB, reserves the right to issue additional notices concerning the Technical Regulations. These declarations will be sent to all competitors registered using Competitor Bulletins during the events, or sent to the (email) address detailed on the event registration form, or written on the official website <https://www.iame-motorsport.com/eurocup>.

## ARTICLE 1. CLASSIFICATION AND DEFINITION

1.1 Classification: Article 1 of the FIA Karting Technical Regulations.

1.2 Definition: Article 2 of the FIA Karting Technical Regulations.

## ARTICLE 2. GENERAL REQUIREMENTS

2.1 General: Article 3.1 of the FIA Karting Technical Regulations.

## ARTICLE 3. DRIVER SAFETY EQUIPMENT

3.1 Kart Safety: Article 3 of the FFSA Karting Technical Appendix.

3.2 Equipment safety: Article 3 of the FFSA Karting Technical Appendix.

## ARTICLE 4. GENERAL REQUIREMENTS FOR GROUP 2 KARTS

4.1 Chassis: Article 9 of the FIA Karting Technical Regulations.

## 5. TECHNICAL CHECKS

5.1 A mandatory check will be carried out before the start of qualifying practice. It must be possible to identify the approved equipment by the technical descriptions (drawings, dimensions, etc.) on the approval forms.

5.2 Each competitor must be able to submit the homologation forms relating to the equipment used.

## 6. CHASSIS REQUIREMENTS

6.1 The chassis must be FIA Karting approved, have been FIA Karting approved or meet FIA Karting standards.

6.2 Front brakes are not permitted.

6.3 The manufacturer's FIA Karting identification sticker (FIA Karting Technical Regulations - Appendix 10) and the manufacturer's logo stamped or engraved on the outside of the rear axle are not mandatory.

6.4 Use of the FIA Karting 2022 front fairing fixing system, according to diagrams N.2.2 and 2.2.1, is mandatory.

6.5 Technical inspection reserves the right to refuse front fairings, front fairing fixing systems or other components which do not meet the required standards.

6.6 The front fairing must be FIA Karting approved and must remain in the correct position at all times during a competition (qualifying heats or final races), as described in FIA Karting technical drawing No. 2c and 2d.

6.7 Drivers participating in EURO CUP KARTING undertake, at the request of the organizer, to affix the challenge stickers to at least 1/3 of each side box, front panel, front fairing, rear wheel protection.

6.8 Chassis protections are authorized as long as they are made of non-brittle materials, do not provide any advantage (rigidity, aerodynamics, etc.), are not protruding and are deemed dangerous.

## **7. ALLOWED EQUIPMENT (CHASSIS)**

7.1 Only one (1) chassis is authorized per meeting.

7.2 In the event of damage to the registered chassis and at the request of the competitor, the stewards may, after consultation with the technical stewards, authorize the replacement of the chassis if it proves to be irreparable.

After acceptance, the replacement chassis can then be registered.

## **8. ALLOWED EQUIPMENT (ENGINES)**

8.1 Each driver is authorized to submit to technical checks and to use only two (2) engines per meeting.

## **9. FUEL**

9.1 Fuel will not be placed in "Parc Fermé" unless indicated in the specific regulations of the event.

9.2 The requirements specified in this regulation are intended to ensure the use of fuels formulated only

with compounds normally present in commercial fuels (Petrol Sp98 – E5) and to prohibit the use of certain chemical compounds improving the power or the d index 'octane.

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

9.4 Gasoline must be unleaded 98-E5 available from the service station designated by the organizer or from the supplier selected for the event.

9.5 The oil dosage of the mixture must be 4% to 6%.

9.6 It is prohibited to add any power increasing additive (or octane number modification) to the fuel.

9.7 Technical control may at its discretion substitute the fuel in the tanks at any time during the competition.

The gasoline and oil required will be provided free of charge. The replacement fuel and oil will be the same as those specified in the specific regulations of the event.

9.8 Fuel monitoring may be carried out using one or all of the following tests:

1) Dielectric Constancy Test (Digatron) or others

2) Specific mass test

3) Water solubility test

9.9 If non-compliance is noted, further 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.

## **10. LUBRICANT**

10.1 The only blending oils authorized is WLADOIL K2-T.

## **11. TIRES**

11.1

X30 Junior, KA100

Model: KOMET Racing Tires K3H

Front size: 10 x 4.60-5

Back Size: 11 x 7.10-5

Slick tires X30 Sénior, 30 Lady, X30 Master, X30 Gentleman

Model: KOMET Racing Tires K3M

Front size: 10 x 4.60-5

Back Size: 11 x 7.10-5

X30 Mini slick tires

Model: Komet Racing Tyres K1D-M

Front size: 10 x 4.00-5

Back Size: 11 x 5.00-5

Rain tires X30 Junior, X30 Sénior, X30 Lady, X30 Master, X30 Gentleman

Model: Komet K3W

Front size: 10 x 4.20-5

Back size: 11 x 6.00-5

Rain tires KA100

Model: Komet K1W

Front size: 10 x 4.20-5

Back size: 11 x 6.00-5

Rain Tyres X30 Mini

Model : Komet K1D-W

Front size : 10 x 4,00-5

Back size : 11 x 5,00-5

11.2 All on-board systems for measuring and transmitting tire pressure and temperature are strictly prohibited in all categories.

11.3 The organizers of EURO CUP KARTING reserve the right to place tires in a closed park, totally or partially, without notice.

Note regarding tire distribution:

The competitor who notices a defect on a tire during registration/assembly must have it noted by the tire manager.

The competitor who, on the same reference and type of tire, notices, during registration, a difference in circumference equal to or greater than 15 mm may request its replacement.

These provisions only apply to registered tires that have not been used.

11.4 Any modification of a tire is prohibited.

11.5 Preheating and cooling of tires by any method and/or remoulding or treating tires with any chemical substance is prohibited.

11.6 The MiniRAE Lite measuring device from the company "RAE Systems Inc. (USA)" will be used during qualifying practice, qualifying heats, and the final phase to check that the tires comply with the regulations.

Tire VOC measurement should not exceed the maximum limit of 5 ppm under any circumstances.

11.7 Tire pollution, e.g. with chain grease, should be avoided as this may result in the limit value being exceeded.

11.8 If the check in the "Start" service park establishes that one or more tires do not comply with the regulations, the kart concerned will not be authorized to re-enter the pre-grid.

11.9 If the check is carried out at the "Finish" Service Park and one or more tires do not comply with the regulations, the Driver will be subject to a non-compliance report.

11.10 Appeals against this procedure will not be entertained.

## **12. RACE NUMBERS AND IDENTIFICATION OF DRIVERS ON THE KARTS**

12.1 Article 12 FIA Karting Specific Requirements.

12.2 Race numbers of Arial type or similar font must be black in color on a light yellow background and have a height of at least 15 cm, and a thickness of 2 cm and be similar in all places where they are present .

Multiple race numbers must be spaced at least 1 cm apart.

They must be installed at the front and rear as well as on both sides towards the rear of the bodywork before the free practice session and must be clearly visible throughout the meeting.

Damaged numbers must be replaced.

12.3 The name of the driver as well as the flag of his nationality (origin of the license) 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.

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

12.5 Karts that do not comply with article 6.8. will not be allowed to take part in free practice, qualifying practice, qualifying heats, the super heat or the final.

## **13. EQUIPMENT EXCHANGE**

13.1 The exchange of recorded material between drivers is prohibited.

## 14. MINIMUM WEIGHT

14.1 X30 Junior:	145 kg
14.2 KA100-138:	138 kg
14.3 KA100-160:	160 kg
14.4 X30 Senior	158 kg
14.5 X30 Master / Gentleman	168 kg
14.6 X30 Lady	150 kg
14.8 X30 Mini	110 kg

## 15. GENERAL ENGINES

KA100: Eurocup 2025 regulations / Engine sheet n°401D

X30: Eurocup 2025 regulations / Engine sheet n°254Z

Mini 60 Fr: Eurocup 2025 regulations / Engine sheet n°364I

## 16. INSPECTIONS

16.1 The inspection of the engines will be carried out by the Scrutineers in the presence of a delegate previously appointed by IAME who will act as a consultant.

16.2 The scrutineers may control any part of the engines to the point that it can no longer be used. Parts inspected as compliant will be replaced free of charge to the driver. Any non-compliant part will not be refunded.

16.3 At any time, technical inspectors have the right to substitute any part, any accessory or even the complete engine.

16.4 The Promoter, while guaranteeing the effectiveness and perfect functioning of the equipment provided, cannot under any circumstances be held responsible for malfunctions occurring during substitution.

16.5 The official technical forms constitute the main reference for comparison for Scrutineers.

16.6 In case of doubt about the conformity of the engine parts, comparison with the “standard” engine parts will be the definitive verification element.

16.7 In the event of extremely controversial events during the technical checks of the engines, the

Scrutineers may decide to send the part concerned, duly sealed, to IAME for a precise factory inspection in the presence of representatives of the Competitor and the Sporting Authority (ASN).

In the event of an appeal from the competitor, the parts must be sent to RACB.

16.8 Checks can be carried out on the engines, in racing conditions, at any time during the event.

All technical regulations, technical forms and annexes are available on: [www.iame-motorsport.com](http://www.iame-motorsport.com)

## **18. Engines X30 Junior – X30 Senior – X30 Master / Gentleman – X30 Lady**

18.1 Any modification to the engine and its accessories is strictly prohibited, unless expressly authorized.

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

18.3 Any heat treatment or additional surface treatment is prohibited. The competitor is responsible for the conformity of its own equipment.

18.4 Only the IAME

18.5 The images on the original engine sheets also remain valid to identify the engine and parts.

18.6 Motors must be provided with their original serial number.

18.7 No modification, improvement, polishing, addition or removal of material from any part of the engine is prohibited.

18.8 Each internal or external part of the engine must be mounted in its original position and operate in accordance with the original design specifications.

18.9 The machining, assembly and adjustment tolerances indicated on the engine sheets refer exclusively to the manufacturing tolerances, according to FIA Karting tolerances.

18.10 The competitor is absolutely not authorized to work on the engine, even if, after his work, the characteristic dimensions remain within the prescribed tolerances.

18.11 Any preparation is prohibited. The maximum and minimum permitted values and the volume of the combustion chamber must be measured in accordance with the FIA Karting technical regulations.

18.12 Diagrams and volume table: see the engine approval form

18.13 All the templates described in the engine approval form are considered valid means certified by the Manufacturer to check the conformity of the part for which they were designed.



## 19. CYLINDER HEAD

19.1 The cylinder head must be strictly original.

19.2 Only the thread repaired using an M14 x1.25 helicoil of the same length as the original thread is authorized. The spark plug base tightened on the cylinder head must not protrude beyond the top of the combustion chamber dome.

19.3 The squish (Distance between the piston and the cylinder head) must comply, in every respect, with the engine data sheet.

19.4 The Squish Control will be carried out with a "tin/lead" wire (tin 60% Lead 40% brand WURTH Ref: N°0987-113) of Ø 1.5mm (+ 0.05mm / – 0.10mm), following the method described in appendix 12 of the Coupe de Marque technical regulations (IAME international).

19.5 The original IAME template ATT-025/1 is the reference for checking the conformity of the cylinder head profile. The shape of the template must correspond at every point to the profile of the dome, from the crushing zone to the joint plane.

19.6 The CIK insert tightened on the cylinder head must not protrude beyond the upper part of the combustion chamber dome.

## 20. CYLINDER

20.1 Strictly original and supplied with the safety pin and the original IAME markings.

20.2 Polishing, sanding, deburring or adjustments are prohibited.

20.3 Only re-boring is authorized. In case of doubt, the shapes and height of the lights will be compared to the cylinder of the standard engine.

20.4 No heat treatment or additional surface treatment is prohibited.

20.5 Adjustment of the diagram is permitted only by means of replacement of the cylinder seal.

20.6 The number of cylinder seals is not limited. Only original seals are permitted.

20.7 No cylinder head gasket is permitted.

20.8 The original IAME template n. ATT-025/2 is the reference for measuring the height of the cylinder ports.

20.9 The original IAME template n. ATT-035/1 is the reference for carrying out a visual inspection of all lights.

20.10 Only the straight water connection on the bottom of the cylinder can be replaced with an elbow connection.

## **21. CRANKCASE, CRANKSHAFT, CONNECTING ROD, CRANKPIN**

21.1 Strictly original and without any modification.

21.2 The original IAME ATT-035/3 template is the reference for checking the joint plane of the valve box.

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

21.4 The original IAME ATT-035/5 template is the reference for checking the height of the casing base plane.

21.5 Only original connecting rod cages (X30125431), connecting rod small end (E-10440/E-10441) and washers (X30125436/X30125437) are authorized.

21.6 The crankcase/crankshaft seals must be installed correctly, with the hollow side towards the inside of the crankcase and not filled with any material whatsoever. They cannot be modified under any circumstances.

## **22. BEARINGS**

22.1 Only 6206 clearance C4 crankshaft bearings and SKF BC1-3342 B roller bearings are permitted. It is prohibited to mix ball bearings and roller bearings on the same motor. Only balance shaft bearings 6202 C3/C4/C4H and 6005 C3/C4 steel ball bearings and polyamide cage are authorized.

22.2 Oblique contact prohibited.

22.3 Ceramic balls prohibited.

22.4 Bearings must be mounted with visible balls inside the housing

22.5 All bearings not displaying the correct and clearly visible reference number as described in these regulations are expressly prohibited.

22.6 The use of spacers behind the bearings is permitted, in order to obtain clearance axial correct.

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

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

23.1 Strictly original without any modification and in conformity with the technical form of the engine.

23.2 The original IAME ATT-035/2 template is the reference for checking the shape of the piston dome.

## **24. VALVE BOX**

24.1 Strictly original without any modification.

24.2 No machining of joint surfaces is authorized.

24.3 The original intake conveyor without modification is permitted. Only model 1 (x30125816) is authorized in X30 Junior, X30 Senior, X30 Master-Gentleman.

24.4 The thickness of the reed valve/casing seal is 1mm (allowed tolerance +/- 0.3mm).

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

## **25. VALVES**

25.1 Fiberglass valves (minimum thickness 0.30mm), marked and of authorized IAME origin

25.2 Carbon fiber valves (minimum thickness 0.24mm), marked and of authorized IAME origin.

25.3 The mixing of fiberglass valves and carbon valves is prohibited. Prohibition on modifying the original form.

## **26. CARBURETOR**

26.1 Only the Tillotson HW-27A carburetor supplied with the engine in its original configuration (Same brand, same model, same reference) is permitted.

26.2 Only accessories supplied with the original carburetor and shown on the carburetor technical data sheet are authorized.

26.3 The spring and the fork are free.

26.4 The orientation of the carburetor is free. (Pump up or down)

26.5 The thickness of the carburetor gasket is 1 mm (allowed tolerance +/- 0.3mm).

26.6 The original IAME template ATT-035/2 is the only reference for checking the shape of the carburetor intake duct. The shape of the conduit must correspond at all points and over its entire

length to the profile of the template.

## **27. INTAKE MUFFLER**

27.1 The intake silencer (Ref.

27.2 Protective grilles are optional.

27.3 The rubber sleeve with air filter connecting the intake silencer to the carburetor is mandatory, must be installed and comply with the approval form.

27.4 Any injection and/or spraying system is prohibited.

27.5 In the event of rain, a device preventing water from entering directly into the suction silencer is authorized, provided that it does not act as a venturi and encourages the entry of a greater quantity of air than the original intake silencer used alone.

27.6 In the event of rain, only the intake silencer protection device reference SKE005-PN-IAME is authorized.

## **28. CLUTCH**

28.1 The centrifugal clutch must engage at 4,000 rpm maximum and begin to move the kart with the driver in racing conditions.

28.2 The clutch should be fully engaged at 6,000 rpm maximum in any condition, this measurement can possibly be verified with the appropriate equipment.

28.3 Each driver will be responsible for the state of wear and cleanliness of the clutch and the cleaning of the friction parts (friction material and bell).

28.4 The correct operation of the clutch can be checked at any time during the event, and even after each phase. The original IAME ATT-047/4 template is the reference for checking the clutch bell.

In the event of a pre-grid check, any driver not satisfying this rule will be prohibited from starting. In the event of an inspection on arrival, any driver not complying with this rule will be subject to a technical non-compliance report.

28.5 The tool must not enter the clutch bell in a position perpendicular to the axis of the clutch bell.

## **29. IGNITION**

29.1 Only original ignitions, Selettra Digital "K" or Selettra Digital "S" are authorized, without any modification.

29.2 Technical Inspection may request replacement of the entire ignition system or part at any time during the meeting.

29.3 The organizer cannot be held responsible for any possible breakdown occurring after replacement.

29.4 Only the electronic box and the type "C" coil (16,000 rpm) are authorized and must be fixed to the chassis or to the motor.

29.5 The markings on the electronic box and the coil are mandatory and must be clearly visible without dismantling the electronic box or the coil.

Covering them with adhesive or tape is prohibited.

29.6 Changes to the stator attachment, shape and thickness of the rotor key, rotor keyways and

crankshaft are prohibited.

29.7 The original IAME ATT-035/7 template is the reference for checking the correct position of the phase reference marking on the rotor.

29.8 The battery must be fixed to the chassis and always connected to the electrical harness.

### **30. SPARK PLUG**

30.1 Only NGK spark plugs B9EG - B10EG - BR9EG - BR10EG - BR9EIX - BR10EIX

- R6254E are authorized, strictly original and without any modification.

30.2 The spark plug must be fitted with its original gasket.

30.3 The insulating porcelain must not protrude from the spark plug base and the length of the spark plug base (including gasket) must be 18.5 mm maximum (Appendix 7 of the CIK technical regulations).

30.4 The only authorized spark plug caps are NGK TB05EMA, PVL 401 222 (ref. IAME 10543 & 10544) and Selettra (ref. IAME 10544).

### **31 EXHAUST**

31.1 Only the original exhaust pipe and exhaust manifold delivered with the engine are authorized, strictly original and compliant with the homologation form. No modification of structure or dimensions is authorized.

31.2 Drilling and welding operations on the exhaust pipe are only permitted for the installation of a temperature sensor.

31.3 Complete exhaust gas sealing between the cylinder and the exhaust manifold must be guaranteed at all times.

31.4 Checking the tightness of the exhaust gases can be carried out at any time by closing the outlet of the exhaust pipe and filling it through the exhaust port with liquid in order to check waterproofing.

31.5 Proper sealing of the exhaust system is the responsibility of the driver.

31.6 At least one original gasket between the cylinder and the exhaust manifold is authorized.

31.7 The use of original IAME X30125375 spacers (thickness 3 mm +/- 0.5) for adjusting the exhaust length is authorized.

31.8 The use of the exhaust manifold with original restrictor of 22.7mm maximum described in engine sheet no. 254YF is obligatory in X30 Junior.

No modifications allowed.

31.9 The use of the exhaust silencer is mandatory at all times.

## **32. COOLING**

32.1 The cooling system must be in its original configuration: a single original IAME radiator (T-8000B or T-8001), a single simple water pump of IAME origin (aluminum or black/blue plastic) is authorized and compliant with the approval form.

32.2 Only one original IAME water pump pulley (aluminum or black/blue plastic) is authorized and complies with the approval form.

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

32.4 Only original IAME 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 inside and function as a fitting.

32.5 Only water without other additives is permitted for cooling.

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

32.7 Original water hose delivered with the engine (black or blue).

32.8 Water pump drive belt type is free.

32.9 The use of the pulley with the belt in position is mandatory.

32.10 The combination of plastic or aluminum water pumps with plastic or aluminum water pump pulleys is permitted.

32.11 All heaters or connection systems for heaters on the water circuit are strictly prohibited.

## **33. DEPARTURE**

33.1 The engine is equipped with an on-board electric starter.

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

## **34. SPROCKETS**

34.1 Only IAME original Z10 / Z11 / Z12 / Z13 sprockets are permitted.

## 35. ENDURANCE

35.1 For endurance events of 6 hours or more and only in this case, the following modifications are authorized: Free valve cover and free piston.

## 36. KA100 engine

36.1 Any modification to the engine and its accessories is strictly prohibited, unless expressly authorized.

36.2 IAME considers as modifications any action modifying the initial appearance and dimensions of an original part. Any modification and/or installation having the consequence of modifying a dimension and/or its possibility of control is strictly prohibited. Polishing, sanding, trimming or adjustments are prohibited.

36.3 any heat treatment or surface treatment is prohibited. The competitor is responsible for the conformity of its own equipment.

36.4 Only the IAME Reedjet KA 100cc, original and strictly in accordance with the manufacturer's technical sheet (technical characteristics, dimensions, weight, diagrams with the tolerances prescribed by the manufacturer) is admitted.

36.5 The images on the original engine sheets also remain valid to identify the engine and parts.

36.6 Engines must have their original serial number.

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

36.8 Each internal or external part of the engine must be installed in its original position and operate in accordance with the original design specifications.

36.9 The machining, assembly and adjustment tolerances indicated on the engine data sheets 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.

36.10 The competitor is absolutely not authorized to work on the engine, even if the characteristic dimensions after his work remain within the prescribed tolerances.

36.11 Any preparation is prohibited. The maximum and minimum permitted values and the volume of the combustion chamber must be measured in accordance with the technical regulations of the CIK / FIA Karting.

36.12 Diagrams and volume table: see the engine approval form

36.13 All templates described in the engine technical sheet 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.

36.14 Decorative stickers prohibited on all parts of the engine.

36.15 One (1) engine authorized per meeting.

## **37. CYLINDER HEAD**

37.1 The cylinder head must be strictly original.

37.2 Only the thread repaired using an M14 x1.25 helicoil of the same length as the original thread is authorized. The spark plug body clamped to the cylinder head must not protrude beyond the top of the combustion chamber dome.

37.3 The squish (Distance between the piston and the cylinder head) must comply, in all respects, with the engine data sheet.

37.4 The Squish Control will be carried out with a "tin/lead" wire (tin 60% Lead 40% brand WURTH Ref: N°0987-113) of Ø 1.5mm (+ 0.05mm / – 0.10mm), following the method described in appendix 12 of the IAME international technical regulations.

37.5 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 every point to the profile of the dome, from the crushing zone to the joint plane.

37.6 The original IAME marble ATT-063/2 is the reference for controlling the volume of the combustion chamber "in the cylinder head".

37.7 The CIK insert tightened on the cylinder head must not protrude beyond the upper part of the combustion chamber dome. The original IAME template ATT-063/2

## **38. CYLINDER**

38.1 Strictly original and supplied with the safety pin and the original IAME markings.

38.2 Polishing, sanding, deburring or adjustments are prohibited.

38.3 Only re-reaming is authorized. In case of doubt, the shapes and height of the lights can be compared to the cylinder of the standard engine.

38.4 Additional heat treatments or surface treatments are prohibited.

38.5 Adjustment of the diagram is permitted only by means of replacement of the cylinder seal.

38.6 The number of cylinder seals is not limited. Only original seals are permitted.

38.7 Only one cylinder head gasket, made of copper, authorized.



38.8 The original IAME templates n. ATT-063/3 and ATT-065/5 are the references for controlling lights.

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

### **39. CRANKCASE, CRANKSHAFT, CONNECTING ROD, CRANKPIN**

39.1 Strictly original and without any modification.

39.2 Only original connecting rod cages (X30125431), connecting rod small end (E-10440 or E-10441) and washers (X30125436 or X30125437) are authorized.

39.3 The crankcase/crankshaft seals must be installed correctly, with the hollow side towards the inside of the crankcase and not filled with any material whatsoever. They cannot be modified under any circumstances.

### **40. BEARINGS**

40.1 Only crankshaft bearings 6205 TNH set C4 are authorized.

40.2 Oblique contact prohibited.

40.3 Ceramic balls prohibited.

40.4 Bearings must be mounted with visible balls inside the housing

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

40.6 The use of spacers behind the bearings is permitted, in order to obtain the correct axial clearance.

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

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

41.1 Strictly original without any modification and in compliance with the engine sheet.

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

### **42. VALVE BOX**

42.1 Strictly original without any modification.

42.2 No machining of joint surfaces is authorized.

42.3 The original valve box conveyor without modification is authorized.

42.4 The thickness of the valve box/casing joint is 1mm (allowed tolerance +/- 0.3mm).

42.5 The thickness of the conveyor/valve box joint is 0.8 mm (allowed tolerance +/- 0.3 mm).

### **43. VALVES**

43.1 Only original fiberglass valves marked IAME (min. thickness 0.25 mm) or carbon fiber (min. thickness 0.22 mm) are authorized.

43.2 The combination of carbon and fiberglass valves is prohibited, even if the valves are original.

43.3 Prohibition on modifying the original form

### **44. CARBURETOR**

44.1 Only the Tillotson HW-33A carburetor supplied with the engine in its original configuration (Same brand, same model, same reference) is authorized.

44.2 Only accessories supplied with the original carburetor and represented on the carburetor technical data sheet are authorized.

44.3 The spring and the fork are free.

44.4 The orientation of the carburetor (pump up or down) is free.

44.5 The thickness of the carburetor gasket is 1 mm (allowed tolerance +/- 0.3mm).

44.6 The original IAME templates ATT-63/8 and ATT 063/9 are the only references for checking the shape of the carburetor intake duct. The shape of the conduit must correspond at all points and over its entire length to the profile of the template.

44.7 The original IAME template ATT 047/5d and the only reference for checking the screw holes.

### **45. INTAKE MUFFLER**

45.1 The intake silencer (Ref. IAG-90000G) must be identical to the original one supplied with the engine (Same brand, same model, same reference). Stickers prohibited.

45.2 Protective grilles are optional.

45.3 The rubber sleeve with air filter connecting the intake silencer to the carburetor is mandatory, must be installed and comply with the approval form.

45.4 Any injection and/or spraying system is prohibited.

45.5 In the event of rain, only the protection device Reference IAME IAG-90000-W preventing water from entering directly into the suction silencer is authorized. Decorative stickers prohibited.

## **46. CLUTCH**

46.1 The centrifugal clutch must engage at 4,000 rpm maximum and begin to move the kart with the driver in racing conditions.

46.2 The clutch should be fully engaged at 6,000 rpm maximum in any condition, this measurement can possibly be verified with the appropriate equipment.

46.3 Each driver will be responsible for the state of wear and cleanliness of the clutch as well as cleaning the friction parts. (Trim material and bell)

46.4 The correct operation of the clutch can be checked at any time during the event, and even after each phase. The original IAME ATT-047/4 template is the reference for checking the clutch bell.

In the event of a pre-grid check, any driver not satisfying this rule will be prohibited from starting. In the event of an inspection on arrival, any driver not complying with this rule will be subject to a technical non-compliance report.

46.5 The template must not penetrate the clutch bell when inserted perpendicular to the clutch bell axis.

## **47. IGNITION**

47.1 Only the original Selettra analog 2-pole ignition is authorized, without any modification.

47.2 Technical Inspection may request replacement of the entire ignition system or part at any time during the meeting.

47.3 The organization cannot be held responsible for any possible breakdown occurring after replacement.

47.4 Changes to the stator attachment, shape and thickness of the rotor key, rotor keyways and crankshaft are prohibited.

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

47.6 The battery (free) must be fixed to the chassis and always connected to the electrical harness.

## **48. Spark plug**

48.1 Only NGK BR9EG, BR10EG, BR11EG spark plugs are authorized, strictly original and without any

modification.

48.2 The spark plug must be fitted with its original gasket.

48.3 The insulating porcelain must not protrude from the spark plug base and the length of the spark plug base (including gasket) must be 18.5 mm. Maximum (Annex 7 of the CIK technical regulations).

48.4 Only the original spark plug cap, PVL 401 222 (IAME p.n. 10544 or 1010543) supplied with the engine is authorized.

## **49 EXHAUST**

49.1 Only the pot and exhaust manifold that are strictly original and conform to the engine homologation form are authorized. No modification of structure or dimensions is authorized.

49.2 Drilling and welding operations on the exhaust pipe are only permitted for the installation of a temperature sensor.

49.3 Complete exhaust gas sealing between the cylinder and the exhaust manifold must be guaranteed at all times.

49.4 Checking the tightness of the exhaust gases can be carried out at any time by closing the outlet of the exhaust pipe and filling it through the exhaust port with liquid in order to check waterproofing.

49.5 Proper sealing of the exhaust system is the responsibility of the driver.

49.6 A mandatory original gasket between the cylinder and the exhaust manifold is mandatory.

49.7 The use of spacers between the exhaust manifold and the cylinder is prohibited.

49.8 The use of the exhaust silencer is mandatory at all times.

48.9 The IAME ATT.063/7 and ATT.063/6 templates will be used to check the exhaust manifold.

## **50. DEPARTURE**

50.1 The engine is equipped with an on-board electric starter.

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

## **51. SPROCKETS**

51.1 Only IAME original Z10 and Z11 sprockets are authorized.

## 52. X30 MINI ENGINE

**52.1** 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.

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

**52.3** 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.

**52.4** 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.

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

**52.6** 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.

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

**52.8** 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.

**52.9** 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.

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

### 52.11 – CYLINDER HEAD

**52.11.1** Strictly original

**52.11.2** 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.

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

**52.11.4** 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.

## **52.12 – CYLINDER**

**52.12 .1** Strictly original and supplied with the original safety pin and IAME markings.

**52.12.2** 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.

**52.12.3** 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.

**52.12.4** 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.

## **52.13 – CRANKCASE, CRANKSHAFT, CONECTING ROD, CRANK PIN**

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

**52.12.2** 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.

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

## **52.14– BEARINGS**

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

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

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

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

**52.14.5** The bearings must be fixed with the balls visible from inside the housing.

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

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

## **53 – PISTON, PISTON RING AND PIN**

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

## **54 – CARBURETTOR**

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

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

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

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

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

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

## **55 – INLET SILENCER**

**55.1** 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.

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

**55.3** ProtecQve grilles are optional.

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

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

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

## **56 – CLUTCH**

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

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

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

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

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

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

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

**56.8** 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.

## **57 – IGNITION**

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

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

## **58 – SPARK PLUG AND SPARK PLUG CAP**

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

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

**58.3** 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).

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

## **59 – EXHAUST SYSTEM**

**59.1** 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.

**59.2** The exhaust manifold must comply with the tech form at any Qme.

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

**59.4** 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.

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

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

## **60 – COOLING**

**60.1** 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.

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



**60.3** 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.

**60.4** 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.

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

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

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

## **61 – STARTER**

**61.1** 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.

## **62 – SPROCKETS**

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

**VISA RACB :**