



The heart of kart

IAME S.p.A. - Via Lisbona, 15 - 24040 Zingonia (BG) - Italy - COD. CEE. IT 01254850165
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TECHNICAL REGULATIONS X30 SHIFTER

Reading the following regulations, never forget that any modification or adjunction 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 is strictly forbidden. The drivers are liable for the conformity of their equipment.

The following original homologation forms of the engine:

- «303B» Parilla 125cc X30 Shifter 125cc TaG of 22.10.2013
- «Pagina aggiuntiva alla fiche 303B_Parilla 125cc X30 Shifter 125cc TaG»

are integral part of the technical regulations.

ARTICLE 1: AUTHORIZED CHASSIS

Only the CIK South African Homologated chassis proposed in the manufacturers' catalogue, in compliance with Article 2 of the CIK regulations, are admitted in the X30 Challenge. One chassis per driver. Any chassis damaged during an ascertained accident will be reported to the Technical Delegate, who will present a report to the Sporting Stewards stating if the chassis needs to be replaced or not. Only the sporting board can authorise the replacement. Any replaced chassis can no longer be used after the replacement.

ARTICLE 2: DEFINITION OF THE CHASSIS

The chassis must comply with the following regulations:

- Conventional chassis, under CIK current homologation
- Solid or hollow magnetic steel rear axle, maximum diameter 50mm.
- Two or three rear axle ball-bearings (Ceramic ball bearings are forbidden)
- Rear protection, body-works, front panel, spoiler: CIK homologated only.
- Rear and front hydraulic brakes in compliance with CIK regulations and Homologated acting on both front and rear wheels, KZ type

The regulations prescribed by CIK (**group 2**) are strictly applicable for any detail not mentioned in the paragraph concerning the CHASSIS (as per Article 2 of the present regulations).

In addition only Chassis homologated for use in SA, may be used.





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ARTICLE 3: WEIGHT

185 kg. minimum weight complete kart + driver fully equipped, in any moment of the race

ARTICLE 4 : TYRES

Slick Tyres: TBA

Wet Tyres: TBA

For distribution method and allowed quantities, refer to the Sporting Regulations.

ARTICLE 5: ENGINE

Only the IAME PARILLA X30 SHIFTER 125cc-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 admitted. The pictures on the original homologation forms are as well valid to identify the engine and the parts.

Only 2 (two) engines per driver and per event are allowed.

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 specs.

IMPORTANT: The tolerances reported on homologation form 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 the intervention will still be within the prescribed tolerances.

Any tuning is forbidden: the maximum and minimum allowed values and the volume of the combustion chamber, have to be measured according to the CIK Technical Regulations. In any moment, the technical officials, following a decision of the Clerk of the Course or promoter, have the right to replace any part, any accessory or even the entire engine.



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DIAGRAMS TABLE:

	PARILLA X30 SHIFTER
EXHAUST - E	195° ±2°
BOOSTERS - F	186° ±2°
TT TRANSFERS - I	127.5° ±3°
PRIMARY SIDE TRANSFERS - G	130° ±2°
SECONDARY SIDE TRANSFERS - H	128° ±2°
COMBUSTION CHAMBER VOLUME	13cc minimum with CIK insert

Homologation Form « 303B » of 01.10.2010

ARTICLE 6: CYLINDER HEAD

The cylinder head has to be strictly original. Only the thread repairing is allowed, by means of an M14x1,25 helicoil, with the same length as the original thread. The ceramic insulator and the sparkplug body tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome. The squish (distance between piston and cylinder head) must be minimum 0.85mm at all points. The thickness of the tin wire used for the squish measurement must have 1,5mm diameter. Measurements must be taken with the engine in racing conditions at any time during the event.

ARTICLE 7: CYLINDER

Original cylinder only. Polishing, sandblasting, trimming or adjustments are not allowed. No heat treatment or surface treatment are allowed. Only re-boring is allowed. In case of doubt, the shape and the height of all the ports have to be compared to the cylinder of the sample engine. The diagram adjustment is allowed only by means of the cylinder gasket replacement. Only the cylinder gaskets identical to the original ones (0.10mm, 0.20mm, 0.30mm or 0.40mm) are admitted. A +/- 0.05mm tolerance is admitted taking into account the gasket thickness variation. Maximum base gasket thickness 0.45mm.

ARTICLE 8: CRANKCASE, CRANKSHAFT, CON-ROD, CRANKPIN

Strictly original and without any modification. Only original big end cage (X30125431), washers (X30125436) and original small end cage (IFC-50350) are allowed.

ARTICLE 9: BEARINGS

Only steel and plastic cages are allowed. Only the strictly original crankshaft bearings (ball bearing 6205 C4 or roller bearing 6205 BC1 1442B) and gearbox shafts ball bearings (6205 C4 - 6204 C4 - 6202 T1XC4) are admitted. Ball-bearing with oblique contacts are forbidden. Only bearings with steel balls, steel rollers and steel rings are authorized. (Ceramic is forbidden).





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ARTICLE 10: PISTON, RING, AND PIN

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

ARTICLE 11: REED BLOCK

Strictly original without any modification. No gasket planes machining is allowed. Free screws. Only the original cover, without any modification, is allowed. Original carburettor rubber manifold.

ARTICLE 12: REED PETALS

Only original carbon fibre IAME marked (min. 0.30mm thick) reed petals are allowed. Modification to the original petals shape is forbidden.

ARTICLE 13: CARBURETTOR

Only the Dell'orto VSH30-CS carburettor supplied together with the engine in its original configuration (same brand, same model, same reference) is admitted. Only the original Dell'orto setting elements, provided for the concerned carburettor and summarized on the homologation form, are allowed. The inlet silencer must be selected between the two options reported on the homologation form. The inlet silencers must remain strictly original and in compliance with their homologation form. Any injection and/or spraying system is forbidden.

ARTICLE 14: FUEL, LUBRICANT, TANK

Only fuel, commonly sold on the market and delivered from the pump, is allowed. The compulsory fuel supplier will be designated by the specific race regulation adopted by the organizer. Wherever it will be possible the fuel will be n.o 98 (n.o 95 fuel, in the other cases). No additives other than lubricant are admitted. Only 2014 MSA homologated lubricants are allowed. Min. 3 litres extractable tank is allowed. An oil expansion tank has to be compulsorily installed on the chassis and connected to the gear box vent.



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ARTICLE 15: CLUTCH

All the clutch components must be strictly IAME original. The clutch must be installed with all its parts in the original number and position.

ARTICLE 16: IGNITION

Only the original Digital Selettra or PVL ignition systems are allowed, without any modification. Scrutineers have the right to ask for the replacement of the whole ignition system or part at any moment before starting the race. The organizer will not be liable for any eventual breakdown occurred after the replacement.

Only the **electronic CDI box type "Z1"** is allowed and must be fixed on the chassis. Modifications on the stator fixing, shape and thickness of the rotor key and the rotor and crankshaft slots are forbidden as well as any modification on the ignition system support. The markings on the electronic box are compulsory and must be clearly visible without disassembling the electronic box. Covering with adhesive or masking tape is forbidden. The battery must be fixed to the chassis and always connected to the ignition system. The battery must have the following measures:

- L. 151 mm.
- W. 65 mm.
- H. 94 mm.

The ONLY alternate battery allowed is:

- Battery "Super B 2600" (LiFeP04) 114x81,25x35mm 13,2V 2600mAh 150CCA

ARTICLE 17: SPARKPLUG

The sparkplug must be installed with its gasket. The sparkplug temperature probe is admitted and, if it is min. 1.20 mm thick, it can act as a sparkplug gasket.

The insulator must not exceed the sparkplug body and the length of the sparkplug body itself must be max. 18.5 mm.





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ARTICLE 18: MUFFLER, HEADER

The original muffler as supplied with the engine must be kept in compliance with the homologation form, therefore no modification in structure or in dimensions are allowed. Drilling and welding operations on the exhaust pipe are only allowed to install a temperature probe. Only spacers and gaskets between cylinder and exhaust manifold can be added or removed in order to adjust muffler length.

ARTICLE 19: EXHAUST SILENCER

Only the original silencers Elto Racing Hom. FIK 1041300/09 or MC Racing Hom. CSAI 10410695/12 reported on the homologation form are allowed. No size or structure modifications are allowed.

In any moment the exhaust system must be in compliance with the prescribed sound measurement.

ARTICLE 20: COOLING

Water pump Free. Radiator Free. Maximum 1 Water pump. Maximum 1 Radiator

ARTICLE 21: STARTING

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

Should the starter does not crank the engine (ascertained by a technical steward) the engine can be exceptionally started by pushing the go-kart, according to the current sporting rules.

ARTICLE 22: GEARBOX

All the gearbox and selector components must be strictly original. No further heat treatment nor surface treatment are allowed. The gear ratios must be strictly original and according to the list described in the homologation form. The check of the gear ratios must be done according to the Article 12 of the CIK Technical Regulations.

Only IAME Z15, Z16, Z17, Z18, Z19 and Z20 sprockets are admitted.



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ARTICLE 23: INSPECTIONS

Only the MSA technical Consultants are officially entitled to register and check the equipment before and after the race.

The engine technical inspection is performed by the technical Consultants together with one Delegate previously appointed by the IAME S.p.A importer.

The technical forms are the main comparison reference for Scrutineers however the comparison made with a sample engine will be the definitive probating element in case of doubts on the engine conformity.

ARTICLE 24: CLAIMS

In case of claim, the complaints must be made accordingly with the regulations of the ASN in which the event is held.

ARTICLE 25: MODIFICATIONS TO THE REGULATIONS

In order to guarantee the good progress of the X30 Challenge, the promoter reserves the right to modify any clause of the technical regulations at any moment, according to the ASN approval.

ARTICLE 26: PADDLE SHIFT SYSTEMS

Only mechanical paddle shift systems are allowed. All flat shifting mechanisms are strictly prohibited.

Article 27: Age

Open to all drivers from the year of their 18th birthday. In addition, competitors under the age of 18 may participate from the year of their 16th birthday, subject to them having had a minimum of two (2) years motor sport experience.

Article 28: MASTERS CLASS:

After receiving requests for a Masters Class within X30, the promoter has decided that the following conditions will apply the Masters class:

1. Any driver from the year where they turn 40 years will be eligible
2. Minimum of 6 Masters to score separately
3. In the event that X30 becomes a National Class, the age will drop to the year where the driver turns 30 years old