



Updated 4/16/18

IAME KA100 Rules and Regulations:

- * Must be USA engine.
- * Homologation Document listed on the IAME website will be used for anything not listed below.
- * Note: Any part may be compared to known stock part for determination of legality.
- * No external modifications of any type including air scoops or heat retention additions.

Engine Pressure/Vacuum Testing: KPX may perform a pressure or vacuum test to ensure extra air is not being pulled into the engine for any performance gain. Both pressure and vacuum tests may be performed — engine must hold 5 psi for 60 seconds and/or 5 HG of vacuum for 60 seconds.

Air Box: Must use OEM air box with OEM internal foam filter. Max inside diameter of tubes is 23mm (0.905” No Go). One (1) 0.200” drain hole is allowed. In rain condition any rain covers are legal as long as it does not act as a ram air device.

Fuel Filter: Any fuel filter is permitted. If utilized, it must be between the tank and carburetor.

Carburetor: Tillotson HW-33A shall be OEM as manufactured. The carburetor including the finish of the venturi and bore, the arm, throttle shaft, butterfly, slide assembly for jetting and/or manifold shall be OEM and not modified. OEM needle jets are required. Engine and carburetor shall match the specs and carburetor shall be mounted as specified by manufacturer. *Bypassing fuel or air to the motor in any way other than as manufactured is illegal.

Reed Cage: Only OEM fiberglass reeds are allowed with a minimum thickness of 0.011”.

Manifold shape and design shall remain as manufactured; grinding or polishing the reed cage or manifold is illegal. Removal of excess loose rubber at manufactured parting lines, resurfacing rubber contact surface to reeds and gasket surface, de-burring and minor grinding at reed attachment screws are allowed. Reed screws are non-tech.

Spark Plug: Must be as manufactured with OEM spark plug washer in place. Head temp sensor or indexing washer may be used along with the OEM spark plug washer. **Maximum length 18.5mm including washer or lead.**

Any of the following plugs may be used: NGK B10EG, BR10EG, 6254-105 or R6252K-105
Spark Plug Boot: OEM part PVL #10544 or NGK #8636 (TB05EMA)

Cylinder Head: Cylinder head shall be OEM as manufactured; head shall be the same profile as the IAME gauge. Only modification allowed is spark plug thread repair.

Cylinder Head Gasket: Changing the cylinder head gasket to adjust the squish is allowed. Thickness of the copper gasket is a non-tech item. **Head gasket is optional.** Minimum squish is .041" using 1/16" 50/50 solder.

Cylinder: Ports must remain as manufactured, known stock part may be used as a comparison. Bore and stroke shall be per manufacturer spec and will be taken as raced. Any internal modification such as adding, removing or grinding material is prohibited.

45 Base Gaskets: Changing base gaskets is allowed to obtain exhaust port height, no min. max. thickness. Bearings, Seals, O-Rings, Gaskets: May be replaced with aftermarket equivalent. No ceramic or exotic bearings.

Crankcase: Crankcase shall be as manufactured; metal removal or polishing is not allowed except for de-burring and or repair from rod failure. Main bearing pocket repair is allowed provided the pockets are not relocated during the process. Bearings and seals must be OEM as manufactured; replacement bearings shall be a standard bearing with steel or plastic retainers with same width and diameter as stock. Dual-row, ceramic or angular contact bearings are illegal. Seals shall be as manufactured and shall not have the spring removed, trimmed or installed backwards. Any internal modification such as adding, removing or grinding material is prohibited unless it is for minor repairs as stated above.

Crankshaft and Rod: The crankshaft shall be OEM as supplied from the manufacturer; crank shall be the same manufacturer as the motor. Plastic or aluminum crankshaft stuffing supplied by the manufacturer is required. Removing metal, shot peening, polishing or counterweight plugging is illegal. Weights must match that of the supplied specifications. Rod must be OEM as manufactured; removing metal or modifying rod is illegal. Any rod bearing is legal. Piston and Ring: Piston and rings shall be OEM as supplied from the manufacturer; piston shall be the same manufacturer as the motor. The stock piston may be coated. The wrist pin shall be made from ferrous material.

Ignition: Ignition shall be OEM as manufactured. Flywheel key must be in place and not modified. Header and Pipe: Shall be OEM as manufactured; intentional header and pipe modifications are illegal. Interchanging, plating or ceramic-coating is illegal. The system shall be intact at the start and finish of the race as manufacturer intended. One hole for EGT probe is allowed in the header. If probe is not in place hole must be plugged. Must use OEM gasket, only one is permitted. Excessive leakage in any part of the exhaust system is illegal and competitor could be DQ'ed,

Starter & Battery: All OEM parts, starter components and battery must be installed and in working order. Demonstration of onboard starter may be requested by tech official. In the event there is a failure of the starter/battery an auxiliary starter may be used. Consecutive use of auxiliary starter over race weekends may result in a penalty.

Clutch: Clutch shall be OEM as manufactured and within factory spec. Oiling clutch is illegal. Clutch cannot be adjustable and must pass clutch test: while on the kart stand competitor will start engine and by holding the brake and applying throttle RPM must not exceed 6000. Timing Procedure: 1. Insert dial indicator in spark plug hole 2. Zero at TDC 3. Roll piston back 0.200" before TDC 4. Roll piston forward to align timing marks 5. Dial indicator must read between 0.080" – 0.106" before TDC 46 IAME KA100 Specs Minimum Squish 0.041" Min. Reed Thickness 0.011" Min. Port Height "LAD Tool" 1.420" Min. Port Height "Light Check" 1.295" Piston Type - Single Dykes Ring Rod Length 102mm Max. Stroke 54.05mm Maximum Bore 48.53mm Clutch - 3 Shoe No Spring Minimum Clutch Diameter 83mm 3.267" Timing min. - max. 0.080" - 0.106"

Ignition - Selettra Analogue 2 Poles Min. Complete Crank Weight 1820 grams

Carburetor Specs Spec. Carb. Tillotson HW-33A Venturi 24.10mm (No-Go) .948" Bore 28.10mm (No-Go) 1.106" Min. Shutter Thickness 0.030"