

C1. Introduction. This class endeavours to provide performance approaching that of the comparable current non-gearbox intermediate classes, combined with low running costs and low noise levels, the engine can be changed from cadet to intermediate by removal of a simple exhaust restrictor. It is expected that the class will continue to evolve and the promoters reserve the right, with the agreement of Motorsport UK, to alter the technical regulations to ensure safety of drivers, fairness of competition, economy and the wishes of competitors and changes of specifications from IAME agreed by Motorsport UK. Enquiries to John Mills Engineering Ltd PF International Kart Circuit, Brandon, Grantham, Lincolnshire NG32 2AY Tel:01636 626424

C1.2 Chassis. Any CIK homologated Mini Kart chassis or conforming to Motorsport UK Yearbook regulations. Must use a currently CIK-homologated Rear Protection System.

C2.1 Engine. IAME Water Swift 60cc U.K. two-stroke engine equipped with electric start, ignition, centrifugal clutch, carburettor, inlet silencer and exhaust system. The power unit, as raced must conform in all aspects with the official Motorsport UK homologation fiche and must bear the relevant official IAME markings as shown in the Motorsport UK homologation fiche. The machining of ANY surface is strictly prohibited. Compliance with the Motorsport UK homologation fiche may be checked at any time during an event, with the technical checking tools supplied by IAME. No addition of, or other change of material is permitted. No modification or tuning for whatever purpose is allowed, except for that listed in the following regulations, or where expressly permitted by Motorsport UK. Where specific dimensions are not given for the engine and its supplied accessories in the Motorsport UK homologation fiche, the dimensions will be checked against a control engine held by Motorsport UK. Procedures for taking measurements and details of measuring gauges are defined in the 'Measurement Guidelines' document available from Motorsport UK on request. Any engine used must have its individual identification number registered with John Mills Engineering Ltd (JME).

C2.1.1 Engine Replacement Parts. The only replacement parts allowed are those supplied by IAME and listed on their parts list for the Motorsport UK homologated engine. Replacement parts must carry the manufacturers part number and/or marking where applicable.

C2.1.2 Spark Plug. The only spark plugs permitted are shown below; they must be unmodified and as supplied by the manufacturer, with original sealing washer in place. Permitted spark plugs:

NGK: B8EG, B9EG, B10EG, BR8EG, BR9EG, BR10EG, BR8EIX, BR9EIX, BR10EIX

The insulator must not exceed the sparkplug thread the length of the thread itself must be max. 18,5 mm. (CIK technical regulations appendix 7)

C2.1.3 Bearings. Main bearings part number 6204 C4 must be unmodified, complete with 8 steel balls and plastic cage. ORS or SKF can be used. 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

C2.1.4 Engine Lubrication. The only oils permitted are those specified in the current CIK list of homologated lubricants, The current list can be found on the CIK-FIA website at www.cikfia.com

C2.1.5 Engine Management. Engine management equipment/systems are prohibited.

C2.1.6 Engine Sealing. All engines will remain unsealed in their normal use. However, a Motorsport UK licensed scrutineer appointed to the meeting may reserve the right to seal any engine at any time during an event for further inspection at a later date or at their convenience.

C2.1.7 Engine Modifications. The engine must be raced in standard form as manufactured and supplied by IAME unless otherwise stated. Fixtures and fittings are free. Filing, grinding, polishing, surface treating, machining, adding or removal of material or lightening of any component, including

for repair purposes, is not permitted unless otherwise stated in these regulations or unless expressly permitted by Motorsport UK.

The following minor repairs/modifications/additions are permitted:

- (i) Repair of damaged threads in the crankcase and/or cylinder with helicoils or timeserts.
- (ii) A wet-box or splash-guard attached to the IAME inlet silencer, provided that it in no way modifies the shape or size of the inlet trumpet or creates a ram effect. The IAME inlet silencer cannot be modified to aid in the attachment of a wet-box or splash-guard and the attachment must be of a non-permanent type, e.g. tape or cable ties.
- (iii) Decals applied on the engine side and on the inlet silencer.
- (iv) Modification of the chain guard upper edge to prevent fouling on the chain.

(v) The addition of protective material to the HT-lead.

(vi) Honing of the cylinder.

(vii) Shortening of the HT lead, but the length of the lead must not be less than 230mm. Cutting and re-joining of the lead is not permitted.

The following repairs/modifications/additions are specifically not permitted:

(i) Painting of the cylinder head or cylinder.

(ii) Repair of the cylinder head spark plug thread.

(iii) Any device mounted on the kart to aid in the cooling of the engine is strictly prohibited, unless stated on the Motorsport UK homologation fiche.

C2.1.8 Engine Eligibility. The checking of the combustion chamber volume must be carried out as described in the Motorsport UK homologation fiche with TQF oil and using a digital burette. The checking of the squish must be done along the centreline axis of the gudgeon pin, at the smallest point, a maximum of three times. 1.6mm or 1.5mm solder must be used and conform to the engine fiche

C2.1.9 Ignition unit. All parts, including the plug cap, must be unmodified as manufactured by Selettra, p.n IAME A-61951 and coil p.n. IAME A-61955 and as supplied by IAME. The rotor location key must be unmodified and have minimum thickness of 1.95mm. Scrutineers at any time during the Meeting have the right to request a part or full controlled ignition system to be fitted. The battery must be fixed to the chassis and connected to the ignition system at all times.

C2.2. Exhaust. Exhaust with part no. A-61715 must be used. The exhaust system and silencer must not be modified in any way and must comply at all times with the Motorsport UK homologation fiche. The use of a jubilee clip to secure the end silencer screws is permitted. The use of any coating or plating is not permitted. Exhaust temperature probes are not permitted

C2.2.1 Exhaust manifold. The exhaust manifold p.n. IAME A-61365 as defined in the Motorsport UK homologation fiche must be in place at all times. The manifold must be as manufactured by IAME and supplied by JME and must comply with the Motorsport UK homologation fiche, no modifications are

permitted. One single exhaust gasket (part no: A-60360) must be used. The use of any additional gasket is prohibited. All exhaust gases must pass through the manifold.

C2.2.2 Cylinder must remain strictly original with security pin and markings, Only one base gasket or 0.40mm +/- 0.06 thickness is admitted. No head gaskets are permitted.

C2.3. Carburettor. Tillotson HW-31A laser marked 'IAME'. The carburettor must remain unmodified and conform in all aspects to the official Motorsport UK homologation fiche. Three inlet gaskets (part no: A-61822), two thermal blocks p.n IAME A-60819 & IAME A-61819A, are mandatory and must be in compliance and in the same order as indicated on the engine fiche. The use of any additional gasket is prohibited. Any parts fitted must be original parts as shown on the spare parts list in the Motorsport UK homologation fiche, and must remain unmodified. The only repair gasket set permitted is p.n DG1-HW & RK7-HW. The paddle spring is free, only one inlet tension spring may be fitted at any time and it must be an original Tillotson part as listed on the Motorsport UK homologation fiche and remain unmodified.

C2.3.1 Inlet Silencer. The inlet silencer p.n. IAME A-61742 must be used unmodified as supplied by IAME for the Water Swift engine with CSAI 01/SA/14 homologation . The use of a gauze filter on the inlet trumpet is permitted. The rubber manifold connecting the inlet silencer to the carburettor can be installed in either way, it must be in compliance with the size indicated on the fiche. If the manifold with sponge air filter is used, the sponge must be intact and the whole must be in compliance with the size indicated on the fiche

C2.4 Transmission. Direct from the engine to the rear axle via a single length of chain. The clutch must be as supplied by IAME for the Water Swift engine and must comply at all times with the Motorsport UK homologation fiche. . Only IAME original Z10, Z11, Z12 or Z13 sprockets can be used. The internal running surface of the clutch must remain dry and free of grease or lubricant or any additional substance. Use of O-ring seal (part no: A-60565) and needle cage (part no: B-55598) for the clutch assembly is mandatory.

C2.5 Cooling system. Only one radiator p.n. T-8601 must be fitted to the left-hand side of the kart, using standard hoses and connectors . The water pump – plastic or aluminium as supplied by IAME – must be mounted to the chassis driven via pulley from the rear axle. The radiator, pump, axle pulley, radiator, hoses and support brackets must be as supplied by IAME.

Extra joints in the water hoses are permitted to aid fitment to the chassis. The use of a radiator blind or wind shield as supplied by Newline is permitted

C2.6 Weight. Minimum 110kg, including the driver. Minimum driver weight as per U17.29.6 is 29kg (B1.8.2).

C2.7 Plates. Yellow with black numbers (see U17.27). The numbers must be of the 'Classic' type as described in U17.27.3.

C2.8 Tyres. Dry: KOMET K1D -M 10 x 4.00-5 fronts. 11 x 5.00-5 rear

Wet: KOMET K1D - W 10 x 4.00-5 front. 11 x 5.00-5 rear

Tyres must be fitted with the correct direction of rotation.

C2.9 Age. Year of 10th birthday to 31st December of the year of 12th birthday. Drivers who have not reached their 10th birthday must hold a minimum of a Kart National licence (U15.3).

C3. General. An ignition kill switch must be fitted and must be identified with a blue triangle to assist marshals in the event of an incident.

C3.1 Fasteners and attachments. The use of alternative fasteners, washers, hose clips, fuel line is allowed unless otherwise specified. The use of an additional earth strap is allowed. The use of additional air box support brackets and/or radiator support brackets is allowed, providing the fitting of these does not necessitate modification of the original components.

C3.2 Data logging. Data logging is permitted, data logging systems with or without memory may be used. Global Navigation Satellite System reception is permitted. It is only permitted to take readings from a maximum of 5 channels. The rpm, may only be recorded via a sensor on the HT-lead to sense spark plug pulses. The HT-lead must remain a single length from ignition coil to spark plug cap. The fitting of these sensors is only permitted providing there is no modification to the original engine components.