



UPDATE 4. 20th December 2011

Australian Karting Association

Technical Document TDKF1(2012)

Technical Regulations for CIK Pro Light KF1 Class

*** The only engine eligible for use in this category is the IAME KF engine supplied by the AKA and Remo Racing**

43.4 KF1 Class Tyres

Dry Tyres;

** Tyres: 5" Dunlop DES, 2 Sets per meeting for racing and time trial.*

4 Front tyres plus 1 spare

4 Rear tyres plus 1 spare

1 set of tyres to be fitted and used at the commencement of time trials and must remain in use throughout the heats.

2nd set of tyres must be fitted and used at the commencement of the first final / prefinal and remain in use until the conclusion of the last final.

Note: The above tyres shall be in use at Round 1 of the Australian CIK championship, from Round 2 onwards the designated tyres shall be the Dunlop DES.

Wet Tyres:

Dunlop KT13 W12 CIK

4 front tyres plus 1 spare.

4 rear tyres plus 1 spare.

For a meeting that is declared wet from its commencement, tyres are to be used as follows;

1 set of tyres to be fitted and used at the commencement of time trials and must remain in use throughout the heats.

2nd set of tyres must be fitted and used at the commencement of the first final / prefinal and remain in use until the conclusion of the last final.

Should the meeting be declared wet at any time after time trials, use of wet tyres is at the discretion of the competitor.

For the purpose of practise and carburation the control tyres are not mandatory for use, but may be used at the discretion of the competitor.

Replacement Tyres:

In case a slick tyre is punctured during time trials, a replacement may be used providing the damaged / punctured tyre is reported to the Technical Officer prior to leaving parc ferme / in-grid area. The replacement tyre must be used on the non load side of the kart and must be verified by the Technical Officer prior to the next section of the event. For the second final, if a new replacement tyre is required, the competitor must start at the rear of the field. The competitor may elect to use a used tyre in similar condition to those remaining on the kart as a replacement for the

second final, which would allow the competitor to start from their correct grid position. The condition of the used replacement tyre must be verified and approved by the Technical Officer prior to the commencement of the second final.

43.5 Wheels: as per CIK Technical Regulations 2.22.1 – Rims

The use of rims complying with the CIK-FIA technical drawing No. 4 is compulsory:

1. Diameter of coupling for tyres: for 5 inch rims: 126.2 mm with a tolerance of +/-1.2 for the circumference with the hump and a tolerance of -1 for the diameter of rims with screws.
2. Width of the tyre housing: 10 mm minimum.
3. External diameter for 5 inch rims: 136.2 mm minimum.
4. Radius to facilitate the balance of the tyre in its housing: 8 mm.
5. Maximum pressure for assembly: 4 Bar.
6. Tyre burst resistance test with fluid at an 8 Bar pressure.
7. This rim must be manufactured in accordance with the appended technical drawing No. 8. The diameter of the rim must be 5" maximum.
9. The front and rear wheels must have some form of bead retention with 3 pegs/ screws minimum in the outside rim.

43.6 Homologated Engines and Modifications:

*** Modifications**

Any modification changing the initial aspect and or dimensions contained within the homologation document is forbidden if it is not explicitly authorised by an article of these Regulations, or for safety reasons decided by the CIK-FIA or AKA. By modification it is meant, any operations likely to change the initial aspect, the dimensions, the drawings or the photographs of an original homologated part represented on the Homologation Form. **Maximum No. of engines 3**

* The mechanical functioning of the power-valve is free, provided that all of the components shown on the exploded drawing included in the homologation doc nos. 20/M/18-KF2 and 13/M/15 are used and that no other components are added.

* It is allowed to use an adjusting knob of the power-valve, modified only with the aim of being able to accept the fixation of a power valve shift measurement sensor.

* Cylinder head may be modified so long as the cylinder head maintains the Combustion chamber minimum volume of 11 cc, measured in accordance with the AKA cc measuring method. **No material may be added.**

Cylinder head marked **AUS** must be used with its corresponding cylinder as per homologation document no 20/M/18-KF2.

Cylinder head as per homologation doc No. 13/M/15 must be used with its corresponding cylinder as per doc No. 13/M/15

* Cylinder may not be modified except in the following area. The upper cylinder plane may be repaired / modified to a maximum tolerance of -0.2mm of the dimension on the homologation form. The only cylinder that may be used are those contained within Homologation documents 13/M/15 and 20/M/18-KF2

For clarity the cylinder ports and passages cannot be modified in any way, and must remain in their original form and conform to homologation doc no. 20/M/18-KF2

The cylinders must also have the AUS logo embossed from the manufacturer on the cylinder outer casting and also on the cylinder liner. Failure to have the logos shall deem the engine as non conforming and hence illegal for use in this category.

- Piston is a non tech item.

- **Crankcase must be that of the previous homologation 13/M/15 and contain a vertical reed block assembly. The crankcase may be modified so long as it maintains**

conformity in all aspects and dimensions contained within the original homologation document.

* Engine rpm limited to maximum 16,000 rpm. Homologated ignition system must be used. The engine ECU program / software cannot be altered or modified.

*On decision of the Stewards or Technical Official, they shall be authorised to interchange Any part or all of the Entrants' ignition systems for the system supplied as original equipment at their discretion for the purpose of checking conformity.

* KF2 or KF1 homologated butterfly carburettor with a maximum diameter of 24 mm or 30mm, comprising two set screws; it must remain strictly original. It must comply with the Homologation Form and the tooling deposited by the Manufacturer for the control of the shape of the inlet duct.
24mm control carburettor IBEA, Model L6, 2Jet
30mm control carburettor Tillotson KF1

****The homologated exhaust supplied with the engine must be used and cannot be altered or modified except by way of the homologated spacers, a maximum of 2 only may be used.**

* Homologated reed block assembly must be used.
(Reed Petal is non tech item)

* Clutch according to CIK technical drawings No. 15 & 16. - Minimum weight (complete clutch with starter ring and engine sprocket) according to the engine Homologation Form.

* The engine clutch must be triggered at 3,000 rpm maximum and make the kart with the Driver on board move forward; it must be in direct drive (and 100% engaged) at 5,000 rpm maximum under all circumstances.

Non tech items are gaskets, seals, orings bearings and any other such small items not contained within the homologation document.

43.7 Weights:

* Total minimum weight: **163** kg (Driver included).

43.8 Chassis: CIK homologated or AKA homologated or registered.

As per CIK regulations, Lateral bodywork (i.e. side pods,) Nassau panel, and front fairings are obligatory. The green plate holder may choose to run the No.1 or a number of their choosing.

43.9 Brakes:

Front brakes are optional but must be hand operated and independent of the rear brake. Rear Brake must comply with the relevant CIK Homologation or AKA registration.

43.10 Radiator:

Style, type and size are at the discretion of the competitor.

43.11 Air Box (Inlet Silencer):

The only airboxes for this class shall be the KG P.No.FA006AG 23mm / 30mm ram tube and the alternate airboxes and their corresponding ram tubes as per the following technical drawings



