



Australian Karting Association

Technical Document TDKF1

Technical Regulations for CIK KF1 Class

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

50.4 KF1 Class Tyres

Dry Tyres;

** Tyres: 5" Dunlop DDS, 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.

Wet Tyres:

Dunlop KT11 W11 CIK

4 front tyres plus 1 spare.

4 rear tyres plus 1 spare.

For a meeting that is declared wet from it's 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.



50.5 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.

50.6 Homologated Engines and Modifications:

*** Modifications**

Any modification 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.

* The mechanical functioning of the power-valve is free, provided that all of the components shown on the exploded drawing included on the Form 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 repaired / modified to a maximum tolerance of -0.2mm of the dimension on the homologation form. The Combustion chamber minimum volume of 11 cc, measured in accordance with the AKA cc measuring method.

***Notes on Cylinder head modification.**

As there are no dimensions on the cylinder head contained within the homologation documents the permissible modifications are as follows;

The combustion chamber dome and spark plug area cannot be modified in any way and must conform to the IAME profile gauge damage from debris in this area is not considered a modification. The only exception shall be for the insertion of a helicoil insert.

The squish band area may be altered. Any alteration that is performed must still comply to the minimum cc requirement.

* Cylinder may be modified except in the following areas, Volume of transfer ducts, exhaust duct length, internal profile of the exhaust duct outlet, maximum ports chord width and lower gasket plane of the cylinder according to the Homologation Form. These elements cannot be modified or altered in any way or method and are control surfaces and areas. The upper cylinder plane may be repaired / modified to a maximum tolerance of -0.2mm of the dimension on the homologation form



* 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.

50.7 Weights:

* Total minimum weight: 167 kg (Driver included).

50.8 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.

50.9 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.

50.10 Radiator:

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

50.11 Air Box (Inlet Silencer):

The control airbox for this class shall be the KG P.No.FA006AG only no other airbox is permissible. **Note:** It is allowed to fit 30mm ram tubes

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