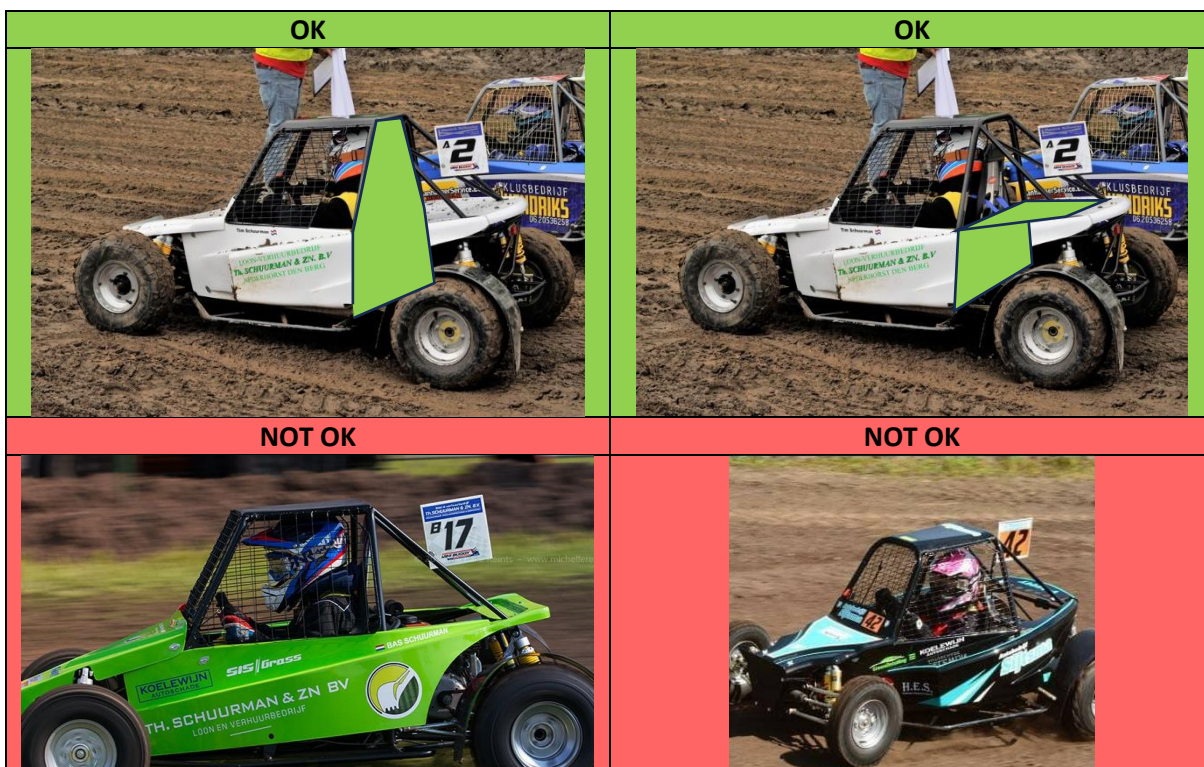
	TECHNICAL NOTE	Ref : 2024-01 v1
	Subject : <u>MiniBuggy & Cross Car 2024</u>	Date : 01/02/24

In preparation for the RACB MiniBuggy, CrossCar Junior and CrossCar Senior 2024 championships, the purpose of this note is to clarify the main changes in the technical regulations for each category and to draw attention to a few important points.

This document does not substitute to a careful reading and compliance with all points of the technical regulations.

1. MiniBuggy

- 1.1. Tires : free but the maximum rim diameter is 10 inches and the maximum diameter of the rim + tire assembly cannot be more than 500 mm. The maximum width of the assembly is 170 mm.
- 1.2. Restrictor : a restrictor plate is mandatory. This plate will be supplied by RACB or KNAF (plates will be identified) and be conform to the diameter indicated in the technical regulations. Restrictor plates will be brought at the first race and will be further available upon request at technical@racb.com.
- 1.3. Fireproof bulkhead : a fireproof bulkhead made of metallic plate of minimum 1,5 mm thickness must be installed between the cockpit and and the engine compartment. This bulkhead can be vertical or « bended » :



2. CrossCar Junior

The new CrossCar Junior technical regulations is based on 2 principles :

- 100% compatible with FIA CrossCar Junior (including same restrictor)
- Maximising compatibility with existing RACB Junior CrossCar (with ER6 engine)

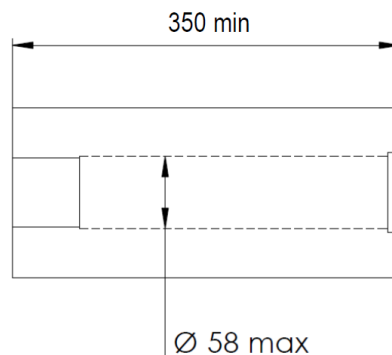
In this regard, we have performed a test campaign with the support of the FIA and their technical delegate to define an equivalence of performance between the 2 engines.

The RACB XC Junior technical regulations are based on FIA Junior CrossCar technical regulations (FIA Article 279b) with some adaptations :

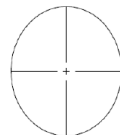
- Possibility to use Kawasaki ER6 engine (with restrictor)
- Dashboard is free
- Metallic fuel tank (not FIA homologated) is allowed
- Goldspeed yellow tires mandatory
- All other **green highlighted** points in the technical regulations are RACB adaptations.

2.1. ER6 engine

The ER6 engine must be conform to its RACB homologation. This homologation is being finalised and will be identical to FFSA homologation SC003 A + B + C, with the addition of a **maximum fuel pressure of 3,6 bar (mandatory fuel sampling connector on all cars)** and **mandatory exhaust silencer dimensions identical to those included in the MT-07 engine homologations to be respected :**



SECTION OF SILENCER



Free shape with
Min surface of 125 cm²

The ER6 ECU must remain original but the mappings are free.

2.2. Restrictors

Both Junior homologated engines must be equipped with restrictors on the engine air intake. Internal dimensions of the restrictors are defined in the technical regulations. External dimensions of the restrictors are free in order to allow more installation freedom and adaptability (airbox/air filters etc).

Each competitor is responsible of buying/manufacturing its own restrictors but internal dimensions defined in the regulations must always be respected.
Restrictors dimensions might be changed if deemed necessary by RACB for equivalence of performance.

2.3. Restrictors installation and sealing

Restrictors must be installed directly on the throttle body or using silicon hose as on the example pictures below. There might be no other interface part between the restrictor and the throttle body. In all cases, the assembly must be airtight and all the air necessary for feeding the engine must pass through these restrictors. This might be checked using among others the « stall test » procedure (inserting a plug into each restrictor while engine is running and making sure it stalls directly).

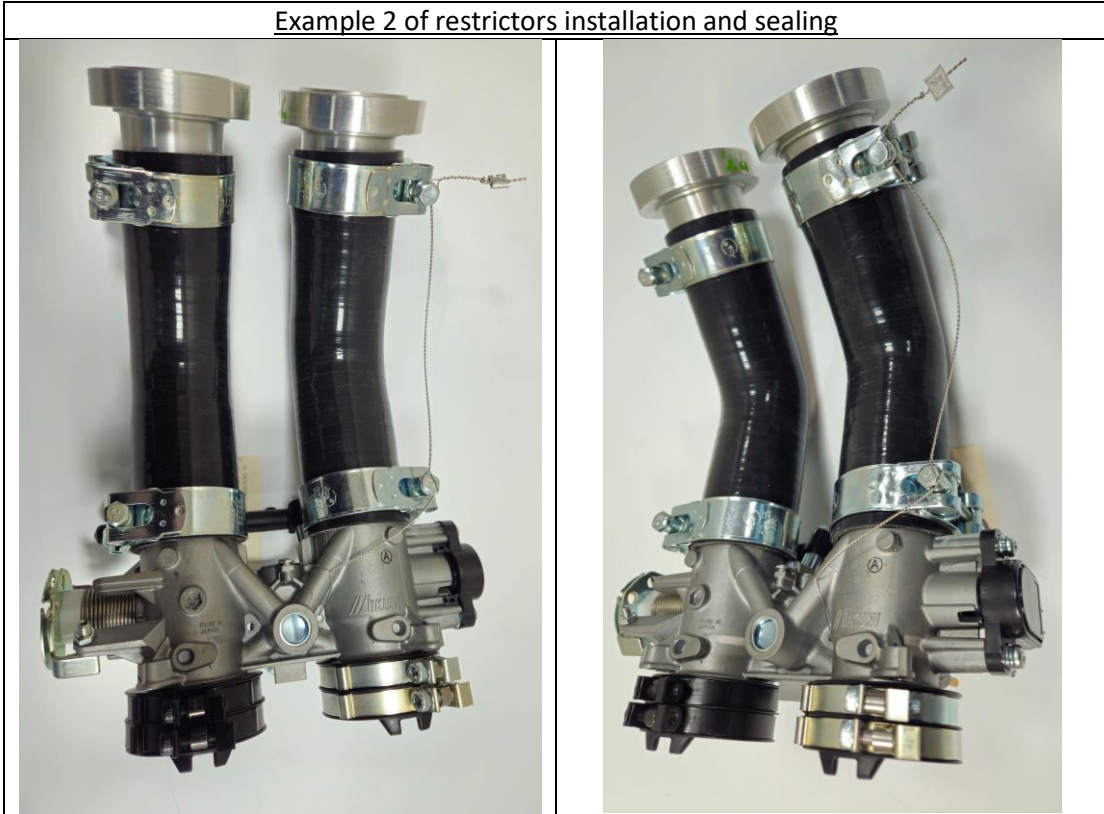
The minimum distance between the restrictor and the throttle body is free but the maximum distance between the restrictor and the throttle body (points furthest apart) is 152 mm.

The clamps used for mounting the restrictors onto the throttle body or the silicon hose must be « superclamps » such as seen in the pictures below. No other clamp type will be accepted. The head of the superclamps screws must be drilled by the competitor and a sealing wire must be installed such as in the pictures below.

Any other installation setup is forbidden unless prior request to RACB for analysis.



Example 2 of restrictors installation and sealing



2.4. ECU

Both Junior homologated engines ECUs must remain original but all mappings are free. Only one original ECU must be installed in the car.

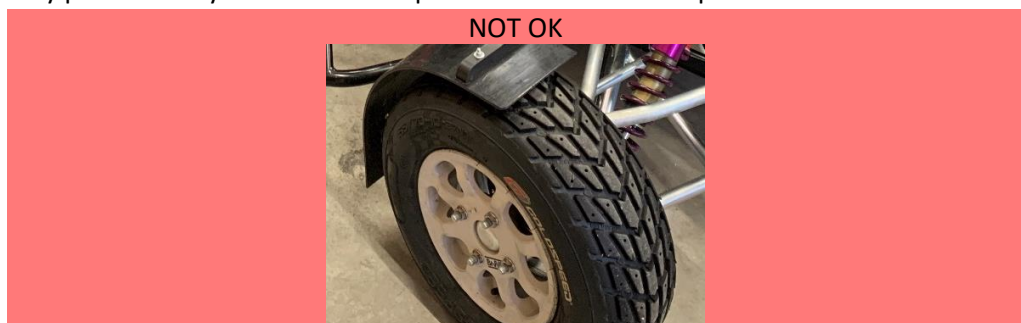
If a competitor still has a RACB-locked ER6 ECU and wants to have it unlocked before the start of the season, a request can be sent to technical@racb.com.

2.5. Fuel sampling connector

A fuel sampling connector is mandatory in all CrossCar Junior cars.

2.6. Other major FIA CrossCar regulations changes that will also apply in RACB CrossCar Championship :

- Fireproof bulkhead : From the floor to the height of the door bars, the bulkhead must be made of steel sheet with a minimum thickness of 1.0 mm. The remaining part of the bulkhead can be made of metallic material with a minimum thickness of 0.8 mm.
- Wheel attachment : No part of the wheel attachment (wheel studs and wheel nuts) may protrude beyond the vertical plane of the outermost part of the rim :



- All other yellow highlighted points in the RACB technical regulations are FIA 2024 adaptations.

3. CrossCar Senior

3.1. Engines

The most important change is the homologation of the Yamaha MT-09 890 cc. It must be conform to its FIA homologation and competitors must always be in possession of this homologation (it might be requested at technical@racb.com).

3.2. Other major FIA CrossCar regulations changes that will also apply in RACB CrossCar Championship :

- Fireproof bulkhead : From the floor to the height of the door bars, the bulkhead must be made of steel sheet with a minimum thickness of 1.0 mm. The remaining part of the bulkhead can be made of metallic material with a minimum thickness of 0.8 mm.
- Wheel attachment : No part of the wheel attachment (wheel studs and wheel nuts) may protrude beyond the vertical plane of the outermost part of the rim :



- All other **yellow highlighted** points in the RACB technical regulations are FIA 2024 adaptations.

For any question regarding RACB MiniBuggy & CrossCar technical regulations, please feel free to contact us at technical@racb.com