

Bulletin Number: **B16/011**
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SPORTING BULLETIN

SPECIFIC REQUIREMENTS FOR OFF ROAD VEHICLES – OFF ROAD KARTS

REFERENCE: <http://www.cams.com.au/motor-sport/regulations/cams-manual/off-road>

RATIONALE: To publish Specific Requirements for Off Road Karts.

ACTION: Amend the Specific Requirements for Off Road Vehicles as follows:

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5. OFF ROAD KART

5.1 GENERAL

- (a) Each vehicle shall comply with these regulations, CAMS General Requirements for Cars and Drivers and the Off Road General Requirements (GR) where specifically mentioned.
- (b) Each Junior Kart shall remain unmodified and in compliance with all aspects of its CAMS Recognition Document except for the freedoms permitted by these regulations. Any modification or tuning practice which is not specifically permitted by these regulations is expressly forbidden.

5.2 ELIGIBILITY/DEFINITION

The aforementioned rules will apply as per the Off Road Kart Standing Regulations outlined in the CAMS Manual of Motor Sport.

5.3 COACHWORK

- (a) Coachwork shall comply with the vehicles Recognition Document.
- (b) Mud flaps shall comply with the requirements of GR 35 and shall be affixed to the vehicles with bolts and fender washers to resist folding back or tearing of the mud flap.
- (c) Skid plates shall comply with the requirements of GR3.

5.4 INTERIOR

(a) Seats

- (i) Only manufactured race seats shall be permitted. Full containment seats are highly recommended. Plastic seats are prohibited. Each seats shall be sized appropriately for driver's height and weight (i.e. Child sized seats). Each seats shall be securely mounted to the frame of the automobile and properly reinforced as to keep the seat from moving in relationship to the frame. Headrests designed and installed to prevent whiplash are mandatory on all automobiles. Headrests shall be constructed as per GR 12 of the CAMS Manual of Motor Sport. Each seat shall be centrally located in the vehicle.

5.5 CHASSIS

- (a) Each chassis shall comply in all respects to the specific vehicles Recognition Document and Safety Cage Certification approved by CAMS where applicable.
- (b) Roll Bar Padding: Where the helmet of an occupant could come into contact with the Safety Cage Structure, protective padding shall be fitted to that area, which complies with Schedule J of the CAMS Manual of Motor Sport.

5.6 ENGINE

- (a) Shall comply in all respects to the specific vehicles Recognition Document except where a freedom is provided by these Regulations
- (b) Cooling: Junior Kart 200A & Junior Kart 200B
 - (i) A fine metal screen may be added to deflect dirt.
- (c) Lubrication: Junior Kart 200A and Junior Kart 200B
 - (i) Oil is free
- (d) The exhaust system is free, save, it shall be configured such that the sound emitted when measured 30m from the track edge does not exceed 95dB(A) unless event regulations set a lower limit.
- (e) Carburetor
 - (i) No modifications of any kind may be made to the carburetion system. No material may be added or removed.
 - (ii) The carburetor bore, venturi, air or fuel passages may not be enlarged.
 - (iii) Stock fuel bowl must be used.
 - (iv) A larger carburetor may not be installed.
 - (v) Jetting is free
 - (vi) A throttle return spring shall be fitted on the carburetor and at the foot pedal.
- (f) The air filter and inlet are free.

- (g) A pull starter or electric starting system may be used.
- (h) Fuel Injection: RS450 Trophy Karts
 - (i) Fuel injection is permitted if it was a stock system included with the engine by the OEM
 - (ii) No modifications to the throttle body, manifold, injectors or sensors are allowed
 - (iii) Aftermarket controllers are allowed but must be approved by the AORCom
- (i) Clutch: General
 - (i) The engine clutch shall be mounted in the stock location
 - (ii) Clutch tuning is free providing that all tuning parts used are commercially available to the general public.
- (j) Junior Kart 200A:
 - (i) Clutch tuning is limited to springs, weights, ramps, and sliders only
 - (ii) The mandated clutch is the Comet Series 20 (six inch diameter only)
 - (A) The Comet TAV2 Torque-A-Verter may also be used
 - (B) The use of any other manufacturer's components is prohibited. Any non-mandated components will be confiscated
 - (C) No modifications may be made to either system. This includes no modifications of any kind to the drive cones, plates, and shafts, including changes in profiles, diameters, or materials
 - (D) No components may be added or removed
 - (E) The brand of a replacement belt is free
 - (F) The clutch cover may be removed
- (k) Junior Kart 200B , RS250 and RS450 Trophy Karts
 - (i) The clutch is free

5.7 GEARBOX AND TRANSMISSION

- (a) General
 - (i) Final drive gearing is free
 - (ii) Four wheel drive is prohibited
 - (iii) Chain drive is mandatory
- (b) Junior Kart 200A:

- (i) No transmission permitted
- (c) Junior Kart 200B, RS250 and RS450 Trophy Karts
 - (i) Transmission must remain stock as delivered by manufacturer for this model of engine
 - (ii) Reliability changes are allowed with AORCom approval
- (d) Drive parts:
 - (i) Rear drive shall be spool type only
 - (ii) Engine to transmission must be all one piece (as a factory motorcycle or quad)
 - (iii) Chain drive is required from the driver to the driven sprocket
 - (iv) 1 constant velocity joint is permitted
 - (v) Only 1 half shaft/drive shaft with 2 universal joints is permitted

5.8 SUSPENSION AND STEERING

- (a) The steering system shall comply with the vehicles Recognition Document. The system shall work as the manufacturer intended with all bolts and parts tightened
- (b) Shocks
 - (i) There must be at least one and only one shock absorber per wheel in working condition at the start of the race.
 - (ii) No internal or external bypass shocks are allowed
 - (iii) Shock valving and fluid type are free
 - (iv) Air shocks are prohibited
 - (v) Reservoirs are allowed with a maximum size of 50mm x 200mm
 - (vi) Dual rate springs are permitted
 - (vii) Shocks shall not be adjusted while kart is in motion
 - (viii) Externally adjustable rebound and compression (clicker) shocks are permitted
 - (ix) Shocks shall have a maximum of travel of 300mm
- (c) Bump stops
 - (i) Suspension bump stops shall be of the solid type
 - (ii) Bump stops shall not be attached to any moving suspension parts

5.9 FUEL AND FUEL TANK

- (a) The fuel tank shall comply with the vehicles Recognition Document

- (b) Pump fuel as defined by Schedule G of the current CAMS Manual of Motor Sport shall be used

5.10 WHEELS AND TYRES

Wheels and tyres shall comply with the vehicles Recognition Document

5.11 BRAKES

- (a) Turning or cutting brakes shall not be permitted
- (b) Brakes must be in safe operating condition during the entire event. If brake system problems do occur during the event they must be repaired before continuing in competition
- (c) Front brakes are permitted
- (d) Brakes may be hydraulic or cable activated.

5.12 ELECTRICAL

- (a) Ignition: General:
 - (i) Each vehicle must have a positive action on/off switch in good working order. The switch must be highlighted in red, be labelled "ignition on/off," and be located within easy reach of the driver and from the outside of vehicle
 - (ii) Spark Plugs are free
- (b) Junior Kart 200A & Junior Kart 200B
 - (i) The ignition shall comply with the vehicles Recognition Document. No modifications of any kind may be made to the ignition system unless specified herein
- (c) RS450 Trophy Karts
 - (i) The ignition system is free; however aftermarket ignitions must be readily available to the public and pre-approved by AORCom

5.13 MISCELLANEOUS

- (a) No titanium or any other exotic materials may be used anywhere in the vehicle
- (b) All fuel and brake line hoses including metal lines and fittings shall be clamped and/or safety wired

END