

TECHNICAL BULLETIN

SPECIFIC REQUIREMENTS FOR OFF ROAD VEHICLES – PERFORMANCE 2WD

REFERENCE:

CAMS Online Manual of Motor Sport
http://camsmanual.com.au/05_offroad.asp

RATIONALE:

To clarify and update some elements of the Performance 2WD Specific Requirements

ACTION:

Amend Specific Requirements for Off Road Vehicles, SR 2.1 Performance 2WD as follows:

SR 2.1 PERFORMANCE 2WD

Modified 2WD with engine not exceeding 6000cc for petrol engines or 7200cc for diesel engines.

SR 2.1.1 ELIGIBILITY/DEFINITION

A two-wheel drive automobile as defined in GR 1 with provision for at least two crew members which is derived from a Series Production type being either:

- (i) an automobile recognised by the FIA in Group A or B, and/or recognised by CAMS; or
- (ii) a commercially-manufactured utility-type truck, pick-up or station wagon up to 1.5 tonnes rated load capacity, recognised by CAMS and which complies with GR 2-23 and 25-29 and, if required for a specific event, one or more of GR 31-36.

Note: Special attention should be paid to GR 9 (chassis), GR 12 (head restraints), GR 16 (collapsible steering columns) and GR 18 (roll over protection).

All modifications are allowed except for those prohibited in the following regulations.

SR 2.1.2 COACHWORK

(i) The original silhouette of the coachwork of the vehicle, when viewed from the side, must be retained ~~and may not be changed from the vehicle from which it is derived~~, except as specifically permitted below:

- (a) the bodyshell (see Definitions, "General Requirements for Cars and Drivers" in the CAMS Manual of Motor Sport) must be unchanged in material **save that external non-stress bearing panels (eg, the mudguards, bonnet, bootlid and tailgate/s) may be replaced by panels of free construction.**
- (b) **The tailgate may be removed.**

- (c) It is permitted to remove material from the engine cover to facilitate the fitment of larger &/or multiple air cleaners, provided always that the shape of the panel is clearly identifiable. This freedom does not allow the addition of any material to the exterior surface of the panel;**
- ~~(bd) the bumper bars and external decoration may be removed. The body must **have** present a neat and professional appearance;~~
- ~~(ce) the coachwork beneath the bumper bar mountings may be removed between those mountings and the centre of the corresponding wheel;~~
- ~~(df) a bull bar/brushguard not exceeding the width (at the front) of the bodywork may be fitted;~~
- ~~(e) front and rear stone trays may be removed;~~
- ~~(eg) the radiator grille must remain unchanged in shape and must remain in its original location;~~
- ~~(fh) the fitting of equipment and/or ancillary mechanical components in the cargo compartments of utility/pickup-type vehicles is permitted, provided that this does not alter the silhouette outside the area bounded by the rear of the cabin, the top of the side panels of the rear cargo area, and a straight line drawn from the top of the tailgate to the rear of the roof **save for the fuel tank/s or spare wheel;**~~
- ~~(gi) the maximum permitted variation of the wheelbase from the manufacturer's specification is plus or minus 3%;~~
- ~~(hj) external non-stressed panels, eg, mudguards, bonnet, bootlid and tailgates may be replaced by panels of free construction. The tailgate may be removed. It is permitted to remove material from the engine cover to facilitate the fitment of larger air cleaners, provided always that the shape of the panel is clearly identifiable. This freedom does not allow the addition of any material to the panel;~~
- ~~(ik) two independent methods of retaining the bonnet are required eg, bonnet pins or straps, together with the original fixing;~~
- ~~(jl) all interior trim, including the dashboard, is free-~~
- ~~(kl) **one or more** roof vents may be fitted, but they must be in the forward one-third of the roof, with their opens side facing forward, and their vertical opening not greater than 10cm.~~
- (ii) Complete wheels (see Definitions, "General Requirements for Cars and Drivers") must be covered by mudguards, or flares firmly attached to the mudguard, for at least one third of the circumference of the wheel (over the full width of the assembly).
- (iii) **Each** windscreens may be either removed, or replaced with one of the following:
- (a) **an** aero type windscreen of **(i.e. a windscreen that is fitted to the lower half of the original windscreen opening) of polycarbonate (eg. Lexan) or other suitable rigid material; perspex, Lexan, polycarbonate etc;**
- (b) shatterproof, zone toughened, or laminated glass **windscreen. Note: From 1 January 2012, a zone toughened windscreen shall not be permitted.**
- (iv) The front doors are required to comply with the following:
- ~~(a) the original front door frames **shall** are required to be retained, except that the portion of the door above the lower level of the window aperture may be removed;~~
- ~~(b) the door frame is required to be unchanged in the areas not covered by the original door trim;~~
- ~~(c) the removal of all window regulator mechanisms is permitted;~~
- ~~(bd) the original front door hinges and catches are required to be retained;~~
- ~~(ce) any internal anti-theft locks are required to be rendered inoperative;~~
- ~~(df) the door trim, if removed, is required to be replaced by flush-fitting rigid material, and~~
- ~~(eg) if the door is modified from the original, other than as provided for in sub-regulation (f) above, door bars are required to be incorporated into the roll over protection. (See article 3.2.5.2 of Schedule J – "General Requirements for Cars and Drivers".)~~
- (v) The use of chassis/cab vehicles without rear bodywork, and of tray-top vehicles, is prohibited. ~~on the grounds of safety.~~

SR 2.1.3 CHASSIS

- (i) The original chassis and/or monocoque, including any sub-frames, must be retained in its original location; and must remain unchanged in dimensions, plan view and silhouette.
- (ii) Engine and transmission mounts and cross-members may be removed, relocated or refurbished.
- (iii) Any brackets and mounts rendered surplus by authorised modifications may be removed.
- (iv) It is permissible to remove the minimum amount of material necessary to allow the fitment of wheels, tyres and suspension components **permitted under these regulations, however this freedom does not extend to steering. Eg. tie rods.**
- ~~(v) Material may be added for any purpose.~~

SR 2.1.4 ROLL OVER PROTECTION

A ~~roll~~ **safety cage structure**, of at least of Type 3 as outlined in Schedule J ("General Requirements for Cars and Drivers"), must be fitted to all vehicles save that in the case of vehicles registered for use on the road, and which are fitted with a steel roof of factory origin, the diagonal brace may be omitted.

A ~~f~~ Fibreglass or plastic-bodied vehicles must incorporate **a** roof plates as specified at GR 13 for open cars

SR 2.1.5 ENGINE/TRANSMISSION

The type and location of engine is free provided that it is located in the same general area as envisaged by the manufacturer of the body, subject to it being of not more than 6000cc capacity for petrol engines or 7200cc for diesel engines.

Engines mounted in front or rear may intrude into the space originally intended for passengers, save that no part of the cylinder block may extend across a line drawn at right angles to the longitudinal axis of the car, at a point halfway between the front and rear wheel hub centres.

The original engine/gearbox/final drive configuration, in relation to the body, must be retained.

~~Drive train components are free.~~

Engine covers inside the car must be of the same material as the firewall, and may be attached to the firewall by any method deemed safe by the event chief scrutineer.

Drive shafts must be contained in such a way that they cannot enter the cabin area in case of breakage.

SR 2.1.6 ELECTRICAL

In addition to GR 24, 25 and 26, tail lamps and stop lamps must be fitted and operational, and must be as near to original as possible. A dust lamp must be fitted.

The original headlamp position/s must be retained and the lamps must be operable.

SR 2.1.7 FUEL TANK

~~Additional or replacement fuel tanks of free and safe design may be fitted and must be vented to the outside of the vehicle.~~

~~If the design of the vehicle makes the fitment of a fuel tank outside the habitacle impracticable eg, Ford Laser, Mazda RX 7, it is permitted to fit the tank in that compartment provided the filling orifice and breather are outside that compartment, regardless of vehicle construction.~~

If fitted in the cockpit ~~the~~ the fuel tank must be separated from the occupants by a separate fire and liquid proof bulkhead.

SR 2.1.8 BRAKING SYSTEM

~~Brakes and braking systems are free save that all e~~**Each** vehicles must be fitted with a dual circuit braking system arranged so that in the event of a leakage at any point in the system, the pedal shall still control two wheels on the same axle.

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