

SPECIFICATIONS OF AUTOMOBILES

1st Category – Racing Cars

General Requirements

Modified Article	Date of Application	Date of Publication

1. DESCRIPTION

Automobiles offering accommodation for one person, and designed exclusively for races and speed events on a closed course. In addition to the requirements of Schedules A, B and C (refer “General Requirements for Cars and Drivers” in the Motorsport Australia Manual of Motorsport), racing cars shall of necessity be required to comply with one or other of the following Formulae, and with such modification or alterations to such Formulae as may be determined by Motorsport Australia from time to time.

2. GENERAL REQUIREMENTS

2.1 All cars must be fitted with:

- (a) A rearward facing red warning lamp of at least 15 watts in working order throughout the event. It must be clearly visible from the rear, mounted not more than 100mm from the centreline of the car, have a minimum surface area of 20cm² and a maximum surface area of 140cm². An LED light with FIA approval, and or approved by Motorsport Australia, may be used and may strobe. It must be possible for the lamp to be switched on by the driver when normally seated in the car. It must be switched on when so directed by the Clerk of the Course or their representative.
- (b) A head restraint capable of restraining 17kg under a rearward acceleration of 5G (50m/s²). Its dimensions shall be such that in no case can the driver’s head be trapped between the roll over bar and head restraint itself. The recommended fitting is a head restraint supported around its perimeter and horizontally across its centre, mounted on a structure of the same specifications as the roll bar (or on the roll bar itself if practicable), and being itself steel plate of a minimum thickness of 3mm, and covered with a padding of minimum thickness of 25mm.
- (c) A gearbox including a reverse gear, which must be in working order when the car starts the event and able to be operated by the driver when normally in his seat.
- (d) An automatic starter with electrical or other source of energy carried aboard the car and able to be controlled by the driver when normally in his seat. The starting of engines is authorised both on the dummy grid and in case of a stop at the pit with temporarily connected power to a proper coupling fixed on the car. Push starts are permitted at all times. The battery must be capable of starting the engine at least twice.
- (e) Only such aerodynamic devices as comply with the rules relating to coachwork, which must be firmly secured whilst the car is in motion (see Schedule F – refer “General Requirements for Cars and Drivers”).
- (f) Exhaust pipes, the orifices of which, when directed horizontally to the rear, must be between 300mm and 600mm above the ground, and may not protrude by more than 250mm beyond the rearmost portion of the car.
- (g) A double circuit braking system so arranged that the pedal normally operates on the four road wheels, and in the event of leakage at any point in the braking system, the pedal shall still control two wheels on the same axle. Provided that in “straight-line” sprint events, and in events exclusively for historic or vintage cars, braking systems operating on two wheels of the same axle shall be acceptable.
- (h) Nothing may protrude more than 1000mm behind the centre of the rear wheel of F2 cars, and 800mm on Formula 4000 cars.
- (i) Four-wheel drive is prohibited.
- (j) Except if the cables, lines and electrical equipment such as battery, fuel pump etc, are in compliance with the requirements of the aircraft industry as regards their location, material and connections, they must be placed or fitted in such a way that any leakage cannot result in:
 - (i) accumulation of liquid;

- (ii) entry of liquid into the cockpit;
 - (iii) contact between liquid and any electrical line or equipment.
- (k) Should the cables, lines or electrical equipment pass through or be fitted in the cockpit, they must be fully enclosed in a cover of a liquid-tight and fireproof material. No oil, fuel or electrical lines shall be situated beyond 600mm on either side of the car's centreline and must not run adjacent to the main fuel cells or within the crushable structure.
- (l) All oil storage tanks situated outside the main structure of the car must be surrounded by 10mm thick crushable structure. In any case, no oil storage tank, not located within the main structure, may be situated aft of the gearbox or final drive casing.
- (m) On cars constructed after 1 January, 1975:
 - (i) Electroplating of steel suspension members of over 695 MPa tensile strength is forbidden.
 - (ii) The use of magnesium sheet on the vehicle will be authorised only if its thickness exceeds 3mm.
- (n) Only fuel as defined in Schedule G (refer "General Requirements for Cars and Drivers") may be used unless otherwise specified in Group Technical or Sporting regulations.
- (o) An automatically or manually operated battery circuit breaker or isolating switch must be fitted to all cars employing a battery electrical system. In the case of a manually operated device, it shall be accessible to the driver and to persons outside the car and shall be clearly identified by a 150mm white-edged blue triangle with a red "spark". The switch must be fitted in accordance with the switch manufacturer's directions. A clear indication of "off" and "on" positions must be marked adjacent to the relevant positions.