

## SPECIFICATIONS OF AUTOMOBILES

### 2nd Category – Sports Cars

### Group 2A – Sports Cars, open and closed

Modified Article	Date of Application	Date of Publication

The 2nd Category provides for two-seater sports racing cars and other highly-modified cars:

<b>Group 2A</b>	<b>Sports Cars, open and closed</b>
<b>Group 2B</b>	<b>Production Sports Cars</b>
<b>Group 2C</b>	<b>Supersports Cars</b>
<b>Group 2F</b>	<b>Production Sports Cars</b>

Cars must comply with the General Requirements for Automobiles, including Schedules A, B and, in races, C (refer “General Requirements for Cars and Drivers” in the Motorsport Australia Manual) as well as the Specific Requirements for each group.

#### 1. BODY

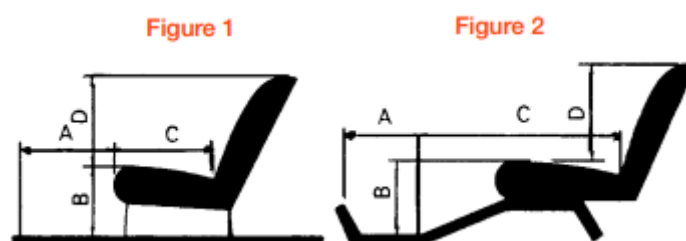
##### 1.1 BODY:

Bodies must be completely finished, and must not have any temporary part.

##### 1.2 SEATS:

They must have at least two seats of equal dimensions and symmetrically disposed on each side of the longitudinal axis of the automobile. The minimum external width of the body must be 900mm; measured at right angles to the longitudinal axis of the automobile at the immediate rear of the steering wheel, extending in the vertical plane over 250mm. Two seats must be capable of being occupied over a minimum width of 360mm each.

- (a) Seats must fulfill the conditions set out hereunder (figures 1 and 2)



- (b) (A) is always measured horizontally and parallel to the longitudinal axis of the chassis, between two vertical planes perpendicular to the longitudinal axis and delimiting from front to rear the open space of a level where such measurement is taken.
- (c) For the driver’s seat (A) is measured on the floor level, or at the bottom of any recess if need be, from the perpendicular of the furthest pedal in its position of rest. For the passenger seat, this measurement is taken at a height of 200mm above the floor, or at the bottom of the recess if need be.
- (d) In the case of movable seats, it is forbidden to alter the position of any seat while the cars are being measured.
- (e) (B) is measured vertically from rear of (A) to the horizontal plane tangent to the highest part of the cushion as shown on the drawings.
- (f) (C) is measured in the horizontal plane defined (at left) from the upper end of (B) parallel to (A) and in the centre of each seat as far as the vertical plane perpendicular to the longitudinal axis of the chassis and tangent to the foremost point of the back of the seats; (D) is measured vertically from the horizontal plane used in measuring (C).

- (g) When the following minimum dimensions are fulfilled:

A = 300mm	B = 100mm	C = 400mm	D = 300mm
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The measurement of the body must be such that  $A + B + C = 1100\text{mm}$  at least.

- (h) In the case of semi-reclining seats of a continuous contour and having no separate cushion and squab elements, the basis of acceptability shall be that the surface length, measured along the centre line of the seat plus dimension B if any, shall be no less than 950mm. The limitations of A and D must be maintained.
- (i) All measurements must be made when the seat cushions are uncompressed.

### 1.3 PASSENGER SEAT:

The passenger's place shall remain available throughout the competition, and under no circumstances may it be occupied by a spare wheel, fuel tank or any other equipment. It is permissible either wholly or partly to cover the passenger's place with a cover of supple material provided that such cover may be quickly removed by hand without the use of tools. The opening delimiting the driver/passenger compartment must be symmetrical about the lengthwise centre line of the car.

### 1.4 FOOTWELL:

The minimum width for the foot space for each person must be 250mm measured at the level of the pedals along a horizontal line at right angles to the longitudinal axis of the chassis.

### 1.5 ENTERING VEHICLE:

During competitions wherein a "Le Mans" type start is specified, or wherein a specified pit stop is compulsory, it is obligatory for the driver/s to enter and leave the car by way of the door.

### 1.6 DOORS:

- (a) All closed automobiles must have at least two rigid doors, giving adequate access to the seats. Each must be fitted with operative closing devices and hinges.
- (b) Each door shall accept a rectangular hole in a vertical plane of at least 300mm x 500mm. These dimensions shall not include any area above the horizontal plane of the body and door panels. The door openings may not be obstructed in any way.
- (c) The locking mechanism shall be operable from both inside and outside of the car. (Vehicles first registered with Motorsport Australia prior to 1 July, 1973 may be equipped with doors of 400mm x 200mm.)
- (d) Doors on open vehicles are optional unless specified otherwise in the original design; in such case they shall be required to be fitted as per the original design.

### 1.7 MUDGUARDS:

- (a) Mudguards must not include temporary parts, and they must be firmly fixed to the vehicle. They must throughout their structure be opaque, homogeneous as to material and impervious to material thrown up by the wheels.
- (b) They shall provide sufficient covering of at least one third of the circumference of the tyres (over at least the full width of the wheel and tyre as it is viewed both vertically and horizontally).
- (c) The rear extremity of the rear mudguard must be not higher from the ground than a horizontal line passing through the centre of the wheel hubs.
- (d) Cooling holes may be provided between the mudguards and the body. Openings or cooling holes directed to the rear must be fitted with louvres, baffles or any other device which prevents the dispersion of foreign matter towards the rear.

### 1.8 WINDSCREEN:

- (a) A transparent windscreen is compulsory. An aero-type screen or similar device offering protection only to the driver is acceptable. If a windscreen is constructed of glass, only laminated safety type is permitted.

- (b) Automobiles fitted with a full-width windscreen which is in the normal line of vision of the driver must have an automatic wiper acting on an area sufficient to enable the driver to see effectively from their normal seating position.

### **1.9 GROUND EFFECT:**

All cars in this Group are subject to the regulations prescribing "ground effects" in that:

- (a) Any specific part of the vehicle influencing its aerodynamic performance must be rigidly secured to the entirely sprung part of the vehicle, and must remain immobile in relation to the entirely sprung part of the car.
- (b) Any device or construction that is designed to bridge the gap between the entirely sprung part of the vehicle and the ground is prohibited under all circumstances.

## **2. ELECTRICAL EQUIPMENT**

### **2.1 ELECTRICAL SYSTEM:**

The component parts of a complete electric system, including generator, accumulator, warning apparatus and lamps, are compulsory. None may be of a temporary kind or addition. The entire electrical system, including lighting and warning apparatus, must be in working order at the start of the competition. The Supplementary Regulations may specify that these devices shall be in order during the whole of the event or allow for penalties in cases where the systems are not working at any time during the event.

### **2.2 SELF-STARTER:**

- (a) A self-starter in proper working order fitted to the vehicle is obligatory, and none of its parts may be removed during the event.
- (b) Upon failure of the engine to start on the starting motor at the start of a competition, such car may, after the departure of other vehicles from the grid, be push started and in such cases a time penalty of one minute shall be applied to the car concerned, such penalty to be promptly advised to the car's pit crew; but failure so to notify the pit crew shall nevertheless not expunge the penalty.
- (c) Supplementary Regulations may require that other means of starting during the event be forbidden and provide for a penalty in case of the non-functioning of the self-starter during the event.
- (d) Any check of the function of the starter motor will be made at scrutiny and/or in the pre-event marshalling area.

### **2.3 LIGHTING SYSTEM:**

- (a) The complete lighting system must consist of at least two dipping headlamps each of at least 125mm diameter or 160cm<sup>2</sup> area, each of 35 Watts minimum power; and two tail lamps each of three Watts minimum power (both the above sets of lamps must be not less than 600mm apart) and at least one stop lamp of 20 Watts minimum power. If only one such stop lamp is fitted, it shall be in the central vertical plane of the vehicle.
- (b) At the start of the competition, headlamps must be in effective working order and correctly aligned; the lens must be protected by a translucent shield.

## **3. EXHAUST SYSTEM**

### **3.1 EXHAUST:**

- (a) The outlet pipe/s of the exhaust system shall be directed either rearwards or sideways. If rearwards, their orifices shall be between 100mm and 450mm above the ground, and they shall not protrude by more than 150mm beyond the rearmost portion of the car. If they are directed sideways their orifices must be located aft of a vertical plane passing through the midpoint of the wheel base.
- (b) They may neither project in any way beyond the maximum width of coachwork nor terminate at a point more than 50mm within the projected plan of the adjacent coachwork. Adequate protection shall be provided to prevent heated exhaust pipes from causing burns.

## **4. GENERAL PROVISIONS**

### **4.1 SPARE WHEEL:**

The Supplementary Regulations may provide that the first change of wheels shall compulsorily be made with a spare wheel carried aboard. In this case the wheel removed from the spare wheel carrier must be substituted by another eligible wheel before the vehicle continues in the competition. During competitions, and for safety

reasons, any spare wheel placed outside the body must include at least two kinds of systems to fix it which must be independent one from the other (for instance, a hub-shaped attachment, and straps).

#### **4.2 BODY:**

Supplementary Regulations may require that all the integral parts of the body, such as front and rear mudguards, supports and frame of windscreen, doors and spare-wheel attachments, must be maintained (or, at need, repaired at the first passage at a replenishing pit), in a normal position of use throughout the event. Supplementary Regulations may provide for penalisation for loss of all or part of accessories such as windscreen glass, headlights, lamp bulbs, reflecting mirrors etc; but damage to glass through vibration or stones etc, thrown up cannot give rise to penalisation. Replacement of bulbs must always be allowed. Furthermore, the Supplementary Regulations may provide that only those cars are eligible which carry a national registration plate enabling proper identification to the exclusion of all provisional mobile plates (trade plates etc).

#### **4.3 REVERSE GEAR:**

All cars must be fitted with an operable reverse gear controlled by the driver whilst seated normally.

#### **4.4 TRANSMISSION:**

In circuit racing competition, only two-wheel drive cars are eligible. In a speed event, separate classes may be provided for four-wheel drive vehicles which are either;

- (a) based on a series production car available with four wheel drive (Series 4WD); or
- (b) built specifically for competition with four-wheel drive or modified to incorporate four-wheel drive (Non-Series 4WD).

#### **4.5 ELIGIBILITY:**

All vehicles complying with the above requirements shall be eligible to enter in all Australian national competitions for sports cars; however, this eligibility shall not prevent promoters from refusing entry to a competitor for any other reason.

### **5. FUEL**

#### **5.1 FUEL:**

Only fuel, as defined in Schedule G (see "General Requirements for Cars and Drivers" in the Motorsport Australia Manual), may be used.

## **Sports Cars, Closed**

### **6. DESCRIPTION**

Automobiles of closed type, not otherwise complying with the requirements of any other Group prescribed in the Regulations, but complying with the provisions of Group 2A.

### **7. BODIES**

Bodies of closed cars, whether convertible or not, shall correspond at least to all the conditions indicated above for open cars. They shall also comply with the following specifications:

#### **7.1 WINDOWS:**

- (a) Bodies of closed cars must be constructed in such a way that they ensure adequate visibility for the driver in all directions forward of the driver when normally seated, and must be fitted with windows of safety glass or rigid transparent plastic material to the following minimum requirements:
  - (i) Each door must be fitted with a window of at least 250mm height and at least 400mm length. At least one-third of the window area of front door windows must be "mobile" – by lowering, sliding, or pivoting to provide ventilation. (Vehicles registered with Motorsport Australia prior to 1 July, 1973 may have windows of at least 200mm height.)
  - (ii) A back window of 500mm total width, composed of one pane or several panes inserted into separate frames, of minimum height 100mm along the width, measured vertically.
  - (iii) All windows (including windscreens) of other than glass must be clear, transparent and free of any colouring: glass windows must not be coloured or tinted after production. All windows are subject to the specific approval of the Chief Scrutineer.

(b) During the race, a sufficient draught must exist to prevent gases accumulating inside the automobile.

**7.2 WINDSCREEN:**

A full-width windscreen of minimum width 700mm and a minimum height in the vertical plane of 150mm is compulsory.

**7.3 DOORS:**

The hinges of the doors may not be located on the rear door post nor on the door sill. The doors shall be so designed that in case the car is partially or completely overturned, at least one of the doors shall remain in a position to be opened or a means of escape other than the door must be provided. (Vehicles first registered with Motorsport Australia prior to 1 July, 1973 are not subject to this requirement).

**7.4 FIREWALL:**

An adequate firewall must separate the fuel tank from the driver's compartment. It must be impervious to the passage of fumes or liquids.

**7.5 ROOF:**

The height of the roof, excluding any interior roof padding or trim, shall be at least 850mm measured from the lowest part of the uncompressed seat cushion, such measurement to be effected vertically and coincide with the centre line of the seat.