

SPECIFICATIONS OF AUTOMOBILES

All vehicles in races and other speed events must comply with the General Requirements of Automobiles (see “General Requirements for Cars and Drivers” in the CAMS Manual of Motor Sport).

3rd Category – Touring Cars

Group 3E – Series Production Car Regulations



I. PREAMBLE

The intent of the following regulations is to enable competitors to adequately prepare a production automobile for competition. The purpose of freedoms granted herein is to provide for cost effective competition by increased serviceability and reducing maintenance costs whilst maintaining the inherent strengths or weaknesses of each automobile. This statement has no regulatory role and serves only to clarify the intent of these regulations.

1.1 Definition:

The present regulations apply to mass-produced series production touring, sports or utility automobiles.

1.2 Modifications and Adjuncts Permitted or Obligatory:

A modification or tuning practice which is not permitted by the present regulations is expressly forbidden. The only work which may be carried out on the automobile is that necessary for normal servicing, or for the replacement of worn or damaged parts. The limits of the modifications and fittings permitted are specified hereinafter. Apart from these, any worn or damaged part can only be replaced by a standard part.

The use of carbon fibre or carbon/Kevlar® composites, or titanium alloys, is not permitted unless such component was fitted as a standard part by the manufacturer, or its use is otherwise specifically permitted.

2. ELIGIBILITY

2.1 Eligible Models:

With the exception any make/model that has previously competed in the Australian Production Car or the Australian Performance Car Championships prior to 2009, only automobiles certified for road use in Australia and listed on the Road Vehicle Certification System (RVCS) published by the Department of Transport and Regional Services (DOTARS) are eligible for recognition in this Group. Automobiles under the DOTARS register of Specialist and Enthusiast Vehicles will not be eligible for recognition in this Group.

Any make/model that has previously competed in the Australian Production Car or the Australian Performance Car Championships prior to 2009, that is not certified for road use in Australia under the Road Vehicle Certification System (RVCS), may be deemed to be eligible for recognition in this Group by CAMS. Any make/model deemed eligible for recognition in this Group by CAMS will be identified in the relevant Sporting Regulations as appropriate and must remain in compliance with all other aspects of these Group 3E regulations.

Each automobile must be homologated with CAMS once RVCS compliance has been demonstrated or otherwise as detailed above.

Homologation shall cover the detail necessary to describe an automobile without reference to workshop manuals, dealer bulletins or similar documents. FIA homologation papers shall be accepted where they apply to an eligible automobile described above.

Optional components will only be considered for approval if the component is a legitimate manufacturer option that complies with one of the following requirements:

- (i) the component is listed on the relevant automobile's Road Vehicle Descriptor (RVD) as published by DOTARS, or;
- (ii) the component is listed and authorised by the manufacturer in official sales literature and to which a manufacturer's warranty applies.

All approved manufacturer options will be listed in the relevant automobile's homologation document.

Homologations will be recognised on the basis of complete papers submitted by a manufacturer/importer or alternatively by an individual competitor. For the avoidance of doubt, the manufacturer/importer papers will have precedence.

2.2 Number of seats:

Each automobile recognised as a touring car must have at least four places, in accordance with the dimensions defined for touring cars (FIA Group A) to be recognised as 'Series Production Touring Cars'.

Each automobile not meeting the above dimensions will be recognised as a 'Series Production Sports Car' or 'Series Production Utility' dependent upon their design and market position.

2.3 Racing Weight:

Each automobile must comply with the racing weight specified in the Vehicle Homologation Document. This will be calculated by:

- (i) deducting a percentage of weight from the automobile's homologated weight (the tare weight as detailed on the automobile's RVD) in accordance with the table below, rounded ± 2 kg, and;
- (ii) adding 85kg.

Homologated Weight (kg)	Reduction (%)
1299 or less	2
1300 – 1349	3
1350 – 1399	4
1400 – 1449	5
1450 – 1499	6
1500 – 1549	7
1550 – 1599	8
1600 – 1649	9
1650 – 1699	10
1700 or greater	11

2.4 Non-Genuine Parts:

Freedom of source of supply is granted for all fasteners, belts, gaskets, seals, flexible hoses, liquid carrying pipes, mechanical cables, bearings, clamps, spark plugs and spark plug leads, filters, batteries and battery cables, globes and LEDs, fuses and electro mechanical relays and windscreen glass provided no additional modifications are made to facilitate the fitment of the replacement part.

3. CHASSIS/MONOCOQUE

3.1 Safety Cage / Roll Bar:

Each closed automobile must be fitted with a **Type 3** full safety cage. Each open automobile must be fitted with at least a **Type 2 half** safety ~~cage roll bar~~ (half cage). Each ~~roll bar or~~ safety cage must be in compliance with Schedule J (refer "General Requirements for Cars and Drivers" in the CAMS Manual of Motor Sport).

4. ENGINE

4.1 General:

Unless specified otherwise below, tolerances for machining, finishing and weighing of engine components will be in accordance with 'Definitions – Technical, Measuring Tolerances' in "General Requirements for Cars and Drivers".

All plastic shrouding located in the engine bay, the sole purpose of which is aesthetic, may be removed. Soundproofing material and trim fitted to the underside of the bonnet that is not visible from the outside may be removed.

Unless otherwise restricted by event regulations, engine tuning parameters may be adjusted freely.

4.2 Mounts:

The dampening material of the engine mounts is free provided the location, position and orientation of the engine remains standard.

4.3 Cylinder Block:

It is permitted to increase the cylinder block bore diameter up to a maximum of 0.6mm over the standard bore size. It is permitted to re-sleeve the cylinder bores of a sleeved block, or to fit a sleeve to a unitary block, provided that in each case the material used to sleeve the cylinder bore is either the same as the standard bore or is cast iron.

It is also permitted to remove material from the head gasket contact face of the cylinder block up to a maximum of 0.25mm provided the engine's compression ratio remains within the automobile manufacturer's limits.

4.4 Cylinder Head/s:

It is permitted to remove material from the head gasket contact face of the cylinder head up to a maximum of 0.25mm provided the engine's compression ratio remains within the automobiles manufacturer's limits. It is also permitted to re-grind valve seats provided that the grinding process does not remove any of the cylinder

head casting.

4.5 Crankshaft:

The maximum amount of material permitted to be removed from any crankshaft journal diameter is 0.25mm. For the purpose of balancing, it is permitted to remove material from the crankshaft.

4.6 Connecting Rods:

Each connecting rod of a reciprocating engine may be replaced provided the replacement is of a solid magnetic steel construction, the distance between the centre of the big end and small end tunnels are the same as the standard connecting rod and the weight of the connecting rod is within 2.0% of the standard connecting rod

Note: the connecting rod weight is inclusive of the small end bush, big end bearings and bolts and nuts.

4.7 Pistons:

Pistons may be replaced provided the replacement piston has an identically shaped crown to that of the standard piston, the distance between the gudgeon pin centre line and the highest point of the piston crown remains the same as the standard piston and the weight of the piston is within 2.0% of the standard piston. No part of the replacement piston is permitted to be coated unless supplied as standard equipment.

Note: the piston weight is inclusive of gudgeon pin, locks and piston rings.

4.8 Piston Rings:

Piston rings may be replaced provided the number of compression and oil rings remain the same as the standard piston, the number of components per ring remains the same as the standard piston rings (ie, single piece compression rings may not be replaced by two piece 'gapless' rings) and the face of each piston ring (the part of the ring which is in contact with cylinder wall) must not be less than that of the standard ring.

4.9 Camshaft/s:

The timing of the camshaft in relation to the crankshaft is free. The camshaft drive components are free provided the method of operation remains standard (ie, chain drive systems must remain chain drive) and no additional modifications are made to facilitate the fitment of replacement components.

4.10 Lubrication:

The removable portion of the oil sump is free provided any additional material added to the oil sump is the same as that of the standard oil sump and no additional modifications are made to facilitate the fitment. It is permitted to modify the oil pickup and to add an oil separator tank to the crankcase breather line.

4.11 Throttle:

Where an automobile is fitted with an electronically controlled throttle valve/s, it is permitted to replace the electronic assembly with a mechanical assembly provided the replacement assembly respects the exact shape and dimensions of the standard assembly in all areas that come in contact with the engine intake air.

In this instance it is permitted to replace or modify parts of the pedal assembly, the sole function of which is to operate the replacement throttle control valve, as well as fit a throttle cable, associated mounting brackets and a replacement or addition throttle position sensor. It is permitted to fit a duplicate throttle cable and associated mounting brackets.

Cruise controller units may be disconnected and/or removed.

4.12 Pulleys:

Each pulley that drives engine ancillaries (ie, water pump, alternator, etc) is free. Each associated belt may be replaced provided it respects the standard type and width.

4.13 Forced Induction Engines:

Each forced induction automobile must comply with the maximum manifold pressure as listed in the relevant automobile's homologation document.

Each forced induction automobile must be fitted with a pressure monitoring data logger, as specified in the relevant championship/series/event regulations.

It is permitted to modify the boost control mechanism to achieve the specified boost pressure provided such modification is expressly approved by CAMS.

4.14 Electronic Engine Control Unit:

- For cars first issued with a CAMS Log Book after 1 January 2008:

Electronic engine control units are free provided that no modifications are made to the original electrical connectors of the automobile wiring harness. At any given time the original electronic engine control unit must be capable of being fitted to the automobile and performing its original functions.

- For cars first issued with a CAMS Log Book prior to 1 January 2008:

Electronic engine control units are free provided that any modification to the original electrical connectors and the automobile wiring harness required for their fitment are confined to within 100mm from the end of the original wiring harness. At any given time the original electronic engine control unit must be capable of being fitted to the automobile and performing its original functions.

It is permitted to fit an additional engine coolant temperature sensor, air intake temperature sensor and manifold pressure sensor, provided they are wired separately to the main wiring harness.

The use of traction control/launch control is prohibited, unless the system is standard. In this case, the traction control/launch control system may only be operated by the original electronic control unit utilising the manufacturer's standard software with standard calibration settings.

4.15 Cooling System:

Radiators may be replaced provided the width, height and position of the replacement radiator is the same as the standard radiator. No additional modifications are permitted to be made to facilitate the fitment of a replacement radiator other than the complete removal or modification of the plastic fan shroud.

Water pumps are free provided they are mechanically identical to the standard pump.

The thermostat, its operation and method of control is free as is the method of operation of the standard engine cooling fan/s and the manner in which the radiator pressure is maintained.

It is permitted to fit a protective screen mounted in front of the radiator provided no additional modifications are made to facilitate the fitment.

It is permitted to fit an engine, transmission, final drive and power steering oil cooler provided that the sole purpose of the cooler is to reduce the oil temperature and the direction of oil flow within the engine is unchanged. All coolers and associated components must remain inside the external bodywork of the automobile. The only modification permitted to facilitate the fitment of coolers and associated components is the relocation of the oil filter and the drilling of holes for mounting purposes.

4.16 Exhaust:

The exhaust system of normally aspirated automobiles is free downstream of the final junction point of the exhaust manifold.

The exhaust system of forced induction automobiles is free downstream of the exit of the turbine housing of the turbocharger. No part of the replacement exhaust system may protrude upstream of this mating surface.

If the catalytic converter is an integral part of the retained exhaust manifold, it is permitted to remove the internal matrix part of the catalytic converter.

No additional modifications are permitted to facilitate the fitment of a replacement exhaust system.

4.17 Air Conditioning Components:

Any components solely associated with the air conditioning system of the automobile may be removed from the engine compartment.

5. TRANSMISSION

5.1 Mounts:

The dampening material of the transmission mounts is free provided the location, position and orientation remains standard.

5.2 Gearbox:

Shift forks, shift hub keys and shifter bushes are free provided no additional modifications are made to facilitate their fitment. It is also permitted to fit an extension to the transmission breather using a short length of tubing.

5.3 Flywheel:

The flywheel may be replaced provided the outside diameter is identical to the standard flywheel, it is made of a steel construction and the weight is within 2.0% of the standard flywheel.

5.4 Clutch:

The clutch driven plate/s is/are free provided the number of plates remains standard and the plate/s are not made from a carbon material. The pressure plate may be replaced by another assembly, the primary mechanism of which must remain mechanically identical to the standard assembly.

5.5 Differential and Final Drive Assembly:

The action of all final drive differential units, including those within AWD transfer cases, is free. The rear cover plate of the final drive assembly may be replaced by another mechanically identical unit.

5.6 Electronic Transmission Control Units:

The use of electronically or automatically adjusted drive systems are prohibited, unless the system is standard. In this case, the system may only be operated by the standard electronic transmission control unit utilising the manufacturer's standard software with standard calibration settings.

6. SUSPENSION

6.1 General:

The adjustment of suspension geometry within the range of adjustment provided for by the manufacturer, or as permitted by such modifications as are permitted by the present technical regulations, is free.

6.2 Coil Springs:

The length, wire diameter and external diameter of each coil spring is free, as is the type (ie, linear or progressive) provided that each spring is made from a ferrous material. The use of a keeper spring in series with the primary spring is permitted.

6.3 Leaf Springs:

The length, width, thickness, number of leaves and vertical curvature is free.

6.4 Torsion Bars:

Each torsion bar is free provided no additional modifications are made to facilitate the fitment of a replacement and it is made from a ferrous material. A torsion bar is not permitted to be replaced by another type of primary springing medium, eg, a coil spring.

6.5 Spring Seat:

Each coil spring seat, which is not permanently attached to the chassis/body work, is free. Each permanently attached spring seat is permitted to have an adaptor added to facilitate ride height adjustments, provided no material is removed and the spring seat remains concentric with the original seat.

6.6 Shock Absorbers:

Each shock absorber is free provided that the number, type, working principle and the attachment points remain unchanged.

An external hydraulic canister may be fitted to the dampers provided that no additional modifications are made to facilitate their fitment, except for the drilling of holes for mounting purposes. Where a shock absorber has a separate fluid reservoir located in the cockpit or a compartment not separated from the cockpit, the reservoir must be strongly fixed to the automobile and shielded by a protective covering.

The rubber bush/es may be replaced by a 'Uniball' joint/s.

Where a standard shock absorber forms an integral part in the attachment of the wheel hub assembly to the chassis/body work (ie, MacPherson strut), the shock absorber assembly, in its entirety, is free. No additional modifications are permitted to facilitate the fitment of the replacement shock absorber assembly. The resulting replacement shock absorber assembly must be fully interchangeable with the standard unit.

6.7 Attachment Points:

In the case of independent suspensions it is permitted to relocate in a horizontal and lateral plane, the mounting point/s of the lower and upper control arms to a maximum distance of 25mm each side. In this case the track of the modified axle is free.

In the case of MacPherson struts, it is permitted to replace the upper insulating/bearing block with another of free design provided that the original attachment points on the bodyshell are utilised;

Reinforcing of each suspension attachment point is permitted, provided the material used follows the original shape and is in contact with the standard attachment point.

6.8 Suspension Bushes:

Each elastomeric suspension pivot point bush and subframe mounting bush may be replaced by a mechanically identical bush made from another elastomeric material.

In the case where a suspension bush incorporates an outer metal shell and/or a central crush tube, these components will be regarded as part of the bush. Each outer shell or central crush tube must respect the dimensions of the standard bush.

In the case where a suspension bush is integrated with a secondary component, such as a suspension arm, only the elastomer material shall be regarded as the bush.

6.9 Ride Height:

Each fully sprung part of the automobile must be at least 100mm above the ground when measured at any point within the wheelbase. The automobile ride height will be measured without the driver.

6.10 Steering:

It is permitted to add components to the steering tie-rods in order to continue to provide adjustment of the toe angle. Tie-rods may also be shortened if necessary.

The locking system of the anti-theft steering lock may be rendered inoperative.

It is permitted to replace the steering wheel provided the rim of the replacement steering wheel remains within 50mm of the location of the rim of the original steering wheel.

7. WHEELS AND TYRES

7.1 Wheels:

Each wheel is free, subject to compliance with the maximum diameter, maximum width and offset as listed on the relevant automobile's RVD.

Wheel attachment studs are free provided the number of studs remain the same, the diameter of the replacement stud is equal to or greater than the standard studs and no additional modifications are made to facilitate the fitment of the replacement studs.

Wheel attachment bolts may be replaced with studs and nuts provided that the number of attachment points remains standard and the diameter of the thread is not less than that of the replaced bolt.

Any device, system, procedure, construction or design the purpose and/or effect of which allows the wheel nuts or bolts to be retained within the wheel during the process of the wheel being fitted to or removed from the car is forbidden.

The design of wheel nuts is free provided that they are of ferrous material and the outer end is not enclosed.

7.2 Tyres:

Only a tyre listed on the Production Car Tyre List (Schedule E - refer "General Requirements for Cars and Drivers") is permitted to be used.

Each tyre fitted to a particular automobile must be the same type (see note below). In the case of automobiles which are recognised with different size rims on the front and rear axles, both tyres on the same axle must be of the same type.

Note: the term 'Type' refers to the size, construction and compound of a given tyre.

At no time may any tread wear indicator be exposed, or in the case of tyres that have dimpled tyre wear indicator, the tyre must not be worn below the indicator. With the exception of the shoulder of a tyre, in each area of a tyre where there is no tread wear indicator, the original tread pattern must be clearly visible.

8. BRAKES

8.1 Anti-Lock Brakes (ABS):

ABS may be rendered inoperative by using one of the following methods:

- (i) the removal of electrical power to the electronic operating system. If this method is utilised it is permitted to mount a driver operated switch to perform this function;
- (ii) the replacement of the main ABS actuating system with the fitment of a junction block. No modification to the brake lines is permitted;

8.2 EBD:

Where an automobile is fitted with electronic brakeforce distribution (EBD), it is permitted to either replace the original master cylinder with a mechanically identical unit incorporating a mechanical proportioning valve, or add a mechanical proportioning valve to the rear brake line; such valve must not be adjustable within the cockpit.

8.3 Power Assisted Braking:

The vacuum assist of the braking system may be rendered inoperative. It is permitted to modify the servo unit by replacing the internal valve system, diaphragms and pushrods with a solid rod linking the unmodified brake pedal to the master cylinder.

The fitment of an additional vacuum reservoir tank is permitted provided that the tank is mounted under the floor pan of the automobile. No additional modifications are permitted to be made except for the drilling of holes for mounting purposes and the addition of a one-way valve and vacuum line.

8.4 Pads:

Brake pads are free.

8.5 Rotors:

Each brake rotor and mounting hat is free provided it complies with the following:

- (i) the diameter of each brake rotor must not be greater than that of the standard brake rotor;
- (ii) the width of each brake rotor must be within +5mm, -2mm of the width of the standard brake rotor;
- (iii) each brake rotor must be made exclusively from a ferrous material. If separate mounting hats are utilised, the brake rotor must be solidly fixed to the mounting hat in such a manner as to permit no movement of the disc relative to the hat.

8.6 Calipers:

Where the standard front brake caliper contains less than four pistons per caliper, it is permitted to fit a replacement brake caliper provided the maximum number of pistons per caliper is four.

Where the standard front brake caliper contains four or more pistons per caliper, it is permitted to fit a replacement brake caliper provide the maximum number of pistons remain the same as the standard brake caliper.

Where the standard rear brake caliper contains less than two pistons per caliper, it is permitted to fit a replacement brake caliper provided the maximum number of pistons per caliper is two.

Where the standard rear brake caliper contains two or more pistons per caliper, it is permitted to fit a replacement brake caliper provide the maximum number of pistons remain the same as the standard brake caliper.

When utilising a replacement caliper the maximum permitted number of calipers per wheel is one, the caliper must be mounted using the standard mounting points (an adapter bracket may be utilised) and the caliper pistons must be round in section.

8.7 Park Brake:

It is permitted to render the park brake inoperable via the removal of components, the sole purpose of which is to operate the park brake.

8.8 Backing Plates:

The backing plate may be removed.

8.9 Brake Cooling:

It is permitted to remove any blanking plates, covers or fog lights (and associated hardware) located in the lower section of the standard front bumper bar, solely for the purpose of providing additional cooling air to the front brakes.

9. FUEL SYSTEM

9.1 Fuel Tank:

The fitment of a single replacement fuel tank is permitted, provided the replacement fuel tank is to FT5, FT3.5 or FT3-1999 specification. The replacement fuel tank shall be either in the same general location as the original, or in the luggage compartment. No additional modifications are permitted to facilitate the fitment of a replacement tank other than the drilling of holes of the minimum necessary dimensions, for mounting purposes and for the passage of fuel lines.

The entire fuel system shall be at all times isolated from the cockpit unless supplied otherwise as standard. Should a fuel tank be installed in the luggage compartment and the rear seats removed, a fireproof and liquid-proof bulkhead must separate the cockpit from the fuel tank. In the case of twin-volume automobiles it is permitted to use a non-structural partition wall made from transparent, non-flammable plastic between the cockpit and the fuel tank.

The maximum capacity of the fuel system must be in accordance with Table 1:

Engine Capacity (cm ³)	Maximum Fuel Tank Capacity (litres)
1000 and under	50
1001 – 1600	60
1601 – 2000	70
2001 – 3000	80
3001 – 4000	90
4001 and over	100

9.2 Fuel Pump/s:

When using a replacement fuel tank, it is permitted to utilise a replacement external fuel pump and fuel pressure regulator provided the fuel pressure remains standard.

When using a standard fuel tank fitted with an internal electric fuel pump, it is permitted to utilise a replacement external fuel pump provided the fuel pressure remains standard. In each case the fuel pump must be adequately mounted and protected from damage.

When using a replacement fuel tank, it is permitted to fit one anti-surge container and one additional electric fuel pump (the sole purpose of which is to supply fuel to the anti-surge container). All components, including the additional fuel pump and anti-surge container, must be mounted inside the replacement fuel tank.

9.3 Dry-Break Fittings:

When utilising a replacement fuel tank it is compulsory to fit dry-break refuelling couplings. If the standard tank is retained, it may be modified to accept a dry-break refuelling coupling.

The filling and vent points may either be located inside the luggage compartment, on the boot lid or rear hatch, on the rear valence panel or on the rear quarter panels.

In each case the filling and vent fittings must be mounted as close as practical to the fuel tank. All associated plumbing must be no greater than the outside diameter of the exit of the dry-break and vent bottle bulb. The route of the filler and vent bottle pipes must be as short as practical.

IO. ELECTRICAL EQUIPMENT

The use of data storage devices including multi-display dashes with the ability to store car data is permitted. The only inputs which are permitted are allowed are as follows:

- (i) G forces;
- (ii) 2 x wheel speed;
- (iii) trigger device for lap timing;
- (iv) brake light;
- (v) engine RPM;
- (vi) 2 x exhaust gas oxygen sensors;
- (vii) temperature inputs used solely for the purpose of measuring fluid temperatures of engine and drive line components, exhaust temperatures and intake air temperature;
- (viii) pressure inputs used solely for the purpose of measuring fluid pressures of engine and drive line components;
- (ix) throttle position/s;
- (x) manifold pressure;
- (xi) fuel usage;
- (xii) steering angle;
- (xiii) engine operating parameters.

The software for the data storage device must not show any pin allocations set up to read sensors other than those permitted above. The use of any form of real time telemetry or the transmission of any data other than a lap trigger signal to or from the car is prohibited.

II. BODYWORK

11.1 Exterior:

It is permitted to reform the wheel arch beading against the inside of the wheel arch and remove the plastic inner guard liners. Plastic shrouds fitted under the body of the automobile (licked by the air flow) may be removed.

Additional headlights and associated components are permitted, provided that the total number of headlights does not exceed six (6) and that no modifications are made to facilitate the fitment other than the drilling of holes for mounting and wiring purposes.

Protective headlight covers may be fitted provided that they have no influence on the automobile's aerodynamics.

11.2 Jacking:

The jacking points may be strengthened by the addition of metal plate/s, relocated and/or increased in number provided that each jacking point does not exceed a surface area of more than 150mm x 150mm and follow the contours of the original structure.

On-board jacking systems are strictly prohibited.

11.3 Interior:

The driver's seat may be replaced by one that complies with the FIA 8855/99 standard. The seat may be made from carbon fibre or carbon/Kevlar® material. The driver must use a safety harness that complies with Schedule I ("General Requirements for Cars and Drivers").

The following may be removed from the cockpit:

- (i) roof padding and lining;
- (ii) carpets and insulating material;
- (iii) front passenger and rear seats;
- (iv) components solely associated with the air conditioning system;
- (v) restraint systems and supplementary restraint systems;
- (vi) boot lining, spare wheel and wheel changing equipment.

The removal of above items is permitted, provided that no additional modifications are made to facilitate their removal and any void that is created as result of the removal of a component (ie, sound systems) is replaced by a suitable panel.

Door trims may be replaced with trims made from different material.

The only components which can be added in the cockpit are:

- (i) safety equipment and structures;
- (ii) tool kit;
- (iii) additional instruments;
- (iv) electronic equipment;
- (v) driver cooling system;
- (vi) ballast;
- (vii) driver ventilation equipment.

None of the above items may hinder cockpit exit or driver's visibility or increase the engine power or influence the steering, transmission, brakes, or roadholding of the automobile in a direct or indirect manner.

Each control must retain its standard function although it is permitted to adapted each control to facilitate their use and accessibility (ie, a longer handbrake lever, an additional flange on the brake pedal etc).