MOTORSPORT AUSTRALIA MANUAL



SPEED EVENT APPENDIX NATIONAL SPEED EVENT CHAMPIONSHIP CLASSES INCLUDING TECHNICAL REGULATIONS FOR ROAD CAR AND LIMITED MODIFIED ROAD CAR CLASSES

Modified Article Date of Application Date of Publication

A capitalised and italicised word in this document is defined in the FIA International Sporting Code (Code) or the National Competition Rules (NCR), including their Appendices.

Any HEADING is for reference only and has no regulatory effect.

1. APPLICATION

The following details the minimum classes for the following:

Motorsport Australia Supersprint Championship; and

Motorsport Australia Hill Climb Championship.

These classes may also be applied to any other *Speed Event* at National and below level as determined by the *Organiser*.

2. CLASSES

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The following table details the applicable classes which must be applied in their entirety and without modification.

If fewer than 3 *Automobiles* are entered in a class the *Organiser* may, at their discretion, amalgamate only the displacement classes within that category.

The Organiser may invite additional classes not listed below.

Formula Ford	All
Formula Libre	(a) up to 750cc (inc Superkarts) (b) 751 – 1300cc (c) 1301 – 2000cc (d) 2001cc and over
Formula Vee	(a) 1200cc (b) 1600cc
2A Sports Cars Open/Closed	(a) up to 1600cc (b) 1601 – 2000cc (c) 2001 – 4000cc (d) 4001cc and over (e) 4WD All
2C Supersports	All
2B/2F Prod Sports	(a) up to 1600cc (b) 1601 – 2000cc (c) 2001 – 3000cc (d) 3001cc and over
Historic Group N	(a) up to 2000cc (b) 2001cc and over.
Historic Groups S & T	(a) up to 2000cc (b) 2001cc and over
Historic Other	All

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3C Rally Cars	(a) 2WD – up to 2000cc
	(b) 2WD – 2001cc and over
	(c) 4WD - All
3D Sports	(a) up to 1600cc
Sedans	(b) 1601 – 2000cc
- Coulding	(c) 2001 – 3000cc
	(d) 3001 – 6000cc
3J Improved	(a) up to 1600cc
Production	(b) 1601 – 2000cc
	(c) 2001 – 3000cc
	(d) 3001 – 6000cc including
	` Group 3K and Group 3H.
	(e) 6001cc and over *
	` '
Time Attack	(a) Club Sprint 2WD
	(b) Club Sprint 4WD
	(c) Open 2WD
	(d) Open 4WD
Road Car	(a) up to 1600cc
Refer to:	(b) 1601 – 2000cc
	(c) 2001 – 4000cc
Attachment A	(d) 4001cc and over
Limited Modified	(a) Up to 1600cc
Road Car	(b) 1601 – 2000cc
	(c) 2001 – 4000cc
Refer to:	(d) 4001cc and over
Attachment A	` '

^{*} NOTE: 3J Improved Production 6001 cc and over to be in accordance with Circuit Race Appendix – Specifications of Automobiles – Group 3J, Article 16.3: Class E Specific Eligibility Conditions.

ATTACHMENT A

TECHNICAL REGULATIONS

ROAD CAR AND LIMITED MODIFIED ROAD CAR CLASSES

1. APPLICATION

These Technical regulations apply to each *Automobile* entered in either the Road Car or Limited Modified Road Car class.

1.1 Definitions

Where used in these Technical Regulations, the words and phrases set out in this Definitions section will have the following meanings. Unless otherwise expressed or implied in these Technical Regulations, words and phrases will have the same meanings as are contained in the *Motorsport Australia Manual*.

Aftermarket means non-factory parts, accessories and upgrades to a motor vehicle to assist in performance and, for the purposes of these Technical Regulations, includes Factory Extras.

Clubman means a lightweight two-seater open-top sports car generally based on the Lotus Seven, which may be either constructed with a chassis or be of monocoque construction with no limitation placed on the material used in the body shell. A Clubman will include, but not be limited to, vehicles generally based on the Lotus Seven either manufactured by (either whole, in part or in kit form) or marketed as Lotus, PRB, Birkin, Amaroo, Westfield, Caterham, Elfin, Fraser and Leitch but will exclude any Clubman Sports 1300 or any other *Automobile* described in Group 2C - Supersports (Group 2C Clubman Sports Cars) in the *Motorsport Australia Manual*.

EMS means such a devise as is variously known as the Engine Management System, the Engine Control Unit and/or the Engine Control Module and is the electronic device that controls various aspects of the operation of the *Automobile's* engine including but not limited to, the control of:

the engine ignition system,

the engine fuel supply and fuel injection, and

if the *Automobile* is turbocharged, the air pressure, above atmosphere, produced by the turbocharger.

EMS Modification means the modification of the EMS in any manner whatsoever and includes but is not limited to:

a modification (including reprogramming) of the software program incorporated in and forming part of the EMS; and/or

the replacement of the EMS or any part of it; and/or

the fitting of any additional component to the EMS; and/or

the "flashing", "chip tuning" and/or "remapping" of the EMS.

Exotic means any *Automobile* that has or had a Manufacturer's Recommended Retail Price that exceeds the Exotic Indexed Price for that *Automobile*. For the purposes of this definition, Manufacturer's Recommended Retail Price will not include what are commonly called On Road Costs, including, without limitation, Stamp Duty, Registration Fees, premiums paid or payable for any Compulsory Third Party Insurances and any Dealer Delivery Fees.

Exotic Indexed Price means the applicable Indexed Price as at the Year of Automobile Manufacture as shown in the following:

Year of Automobile Manufacture Indexed Price

Any year prior to 2005	\$75,000.00
2005	\$76,800.00
2006	\$79,900.00
2007	\$81.600.00

2008	\$85,200.00
2009	\$86,400.00
2010	\$89,100.00
2011	\$92,300.00
2012	\$93,400.00
2013	\$95,600.00
2014	\$98,500.00
2015	\$100,000.00
Any year after 2015	\$101,500.00

For the purpose of this definition, the year of *Automobile* manufacture will be the year of manufacture shown on the Identification Plate (formerly known as a Compliance Plate) attached to the *Automobile*.

Factory Extra means any optional extra available for purchase at the time of the sale of the original *Automobile* but only if such optional extra was manufactured by or on behalf of the manufacturer of the *Automobile* and offered for sale by the seller of the new *Automobile*.

Four Wheel Drive Turbo means a Production Car with a forced induction engine where all four wheels are or can be driven and where such forced induction is achieved by the use of a turbocharger.

Free means that the original part, as well as its function(s), may be removed or replaced with a new part, on condition that the new part has no additional function relative to the original part.

Kit Car means an *Automobile* produced by the assembly of a kit or set of components supplied by a supplier, which supplier may or may not be the manufacturer of some or all of the components supplied, where the assembly of the components is carried out by a party other than the supplier of the components.

Production Car means an *Automobile* of which the production of a certain number of identical examples within a specified period of time has been verified and which are destined for normal sale to the public. In regard to these Technical Regulations the following will also apply to the definition of a Production Car:

Either manufactured in Australia and/or overseas, the model of which is or has been commercially available to the general public in Australia and/or overseas as a new car through a manufacturer's dealer network;

At least 200 examples of such model must have been registered for normal road use in Australia and/or in the country of manufacture; and

At least 200 examples of such a model must have been produced in a 12 consecutive month period.

Registration Documents, in respect of an *Automobile*, means the documentation identifying the *Automobile* issued by the appropriate body administering the registration system of vehicles used for normal road use in Australia, which identifies the registered operator of the vehicle and the fact that it is valid and considered to be Road Registered.

Replica means an *Automobile* that is not mass produced but is generally available to the public and which is intended to resemble an *Automobile* manufactured by others either in performance or appearance.

Replacement component where these regulations permit the replacement of a component that replacement component is free, unless the replacement component is otherwise restricted by these regulations.

Road Registered means registered for normal road use within the Commonwealth of Australia by the application of valid Road Registration by the relevant State Roads and Traffic Authority or equivalent.

Two Wheel Drive means an *Automobile* where only two wheels of the *Automobile* are or can be driven and includes both rear wheel drive and front wheel drive *Automobiles*.

Road Car Class

1. ELIGIBLE AUTOMOBILES

The class is for road registered and unmodified Production Cars meeting the original manufacturer's specifications. Exotic, Four Wheel Drive Turbo, Clubman, Kit Car and Replica are prohibited to be entered in the Road Car Class. A Road Car may be eligible for another class.

Permitted Automobile types include open sports (with mudguards), sports coupes, sedans, station wagons, utilities and vans.

Each *Automobile* must be as originally specified by the manufacturer except for the specific freedoms allowed herein.

Each *Automobile* must be Road Registered and, apart from any freedom specifically mentioned in these regulations, no modification is permitted to be made to the *Automobile* during *Competition* that would render it ineligible for such registration.

Each *Automobile* must comply with the Technical Appendix in the *Motorsport Australia Manual*. Modifications necessary to comply with these requirements are permitted. Where freedom is permitted to fit nominated or recognised parts, such freedom is strictly limited to such components themselves and it is prohibited to modify other components, save by the drilling of holes for mounting purposes.

It is permitted to remove or conceal a registration number plate. Valid Registration document/s must be available for inspection by the Secretary of the Event and when the *Automobile* is presented for scrutineering to verify both the ownership of the *Automobile* and that it is Road Registered.

Components considered a Factory extra are permitted.

2. BODYWORK

2.1 General

The spare wheel and associated tools may be removed.

2.2 Internally

Safety equipment and cosmetic or comfort accessories may be added, provided that they do not improve the performance of the *Automobile*.

Additional instruments and switches are permitted and may be fitted to a separate panel.

The *Driver's Seat* may be replaced with a non-standard *Seat* that is commercially available and permitted in a Road Registered vehicle. The front *Passenger's Seat* may also be replaced provided that the replacement *Seat* is equivalent to or better than the *Seat* replacing the *Driver's Seat*. *Seat* supports may be modified to enable fitment of an allowable replacement *Seat*. Any rear *Seat* or *Seats* may be removed.

2.3 Externally

Additional headlights (e.g. fog lights and driving lights) are permitted.

3. ENGINE

The engine may be reconditioned in accordance with the manufacturer's repair manual and specifications.

It is permitted to add baffle plate/s to the removable section of the engine oil pan or sump.

Each condenser, ignition coil, filter element, spark plug, lead, fan belt, radiator hose and gasket is free.

It is permitted to replace the engine exhaust system only with such replacement components of the same configuration and diameter as the original.

EMS modifications are prohibited.

4. TRANSMISSION

Clutch linings are free, as is their method of attachment.

5. BRAKES

Brake linings and rotors are free provided that the diameters of the rotors are not increased.

6. SUSPENSION

It is permitted to adjust the wheel alignment in accordance with the manufacturer's recommendations and/or normal wheel alignment principles.

7. FUEL

Only Commercial Fuel in accordance with Technical Appendix - Schedule G of the *Motorsport Australia Manual* is permitted.

8. WHEELS AND TYRES

8.1 Wheels

It is permitted to replace each wheel only with such a wheel that is equivalent to the original manufacturer's size and mounting specifications.

8.2 Tyres

Only tyres which are compliant with the Production Car Tyre List for Speed Events in Technical Appendix - Schedule E of the *Motorsport Australia Manual* are permitted to be used. Tyre size must comply with the original manufacturer's specifications in respect to width and aspect ratio.

8.3 Tyre Tread

At no time prior to the commencement of a *Competition* may any tyre tread wear indicator as provided by the tyre manufacturer be exposed. In all areas where there is no indicator the original tread pattern must be clearly visible except on the shoulder of the tyre where localised wear may occur.

Limited Modified Road Car Class

1. ELIGIBLE AUTOMOBILES

1.1 General

The class is for Road Registered Production Cars with limited modifications to the original manufacturer's specifications. Clubman, Kit Car and Replica are prohibited to be entered in the Limited Modified Road Car Class. A Limited Modified Road Car may be eligible for another class.

Permitted *Automobile* types include open sports (with mudguards), sports coupes, sedans, hatchbacks, station wagons, utilities and vans.

Each Automobile must be as originally specified by the manufacturer except for the specific freedoms allowed herein.

Each *Automobile* must be Road Registered and, apart from any freedom specifically mentioned in these regulations, no change is permitted to be made to the *Automobile* during *Competition* that would render it ineligible for such registration.

Each *Automobile* must comply with the Technical Appendix in the *Motorsport Australia Manual*. Modifications necessary to comply with these requirements are permitted. Where freedom is permitted to fit nominated or recognised parts, such freedom is strictly limited to such components themselves and it is prohibited to modify other components, save by the drilling of holes for mounting purposes.

It is permitted to remove or conceal a registration number plate. Valid Registration document/s must be available for inspection by the Secretary of the Event and when the *Automobile* is presented for scrutineering to verify both the ownership of the *Automobile* and that it is Road Registered.

Components considered a Factory Extra are permitted.

2. BODYWORK

2.1 General

The spare wheel and associated tools may be removed.

Bracing may be fitted between front MacPherson strut towers.

2.2 Internally

Safety equipment and cosmetic or comfort accessories may be added, provided they do not improve the performance of the *Automobile*.

Additional instruments and switches are permitted and may be fitted to a separate panel.

The steering wheel may be replaced.

All controls and their functions must remain as provided by the manufacturer, but it is permissible to arrange them in such a way as to make them more accessible and easier to use (e.g. fitting additional padding to pedals, extensions to switches, etc.).

The *Driver's Seat* may be replaced with a non-standard *Seat* that is commercially available and permitted in a Road Registered vehicle. The front *Passenger's Seat* may also be replaced provided that the replacement *Seat* is equivalent to or better than the *Seat* replacing the *Driver's Seat*. Seat supports may be modified to enable fitment of an allowable replacement *Seat*. Any rear *Seat* or *Seats* may be removed.

Carpets and sound deadening material may be removed.

2.3 Externally

Reforming of the wheel-arch beading against the inside of the mudguard is permitted, and any body joint protrusion may be rendered safe.

Additional headlights (e.g. fog lights and driving lights) are permitted.

3. ENGINE

3.1 Applicable to each Automobile except for Four Wheel Drive Turbo:

3.1.1 General

Each condenser, ignition coil, filter element, spark plug, lead, fan belt, radiator hose and gasket is free

Air conditioning systems are free.

The engine may be reconditioned in accordance with the manufacturer's repair manual and specifications.

It is permitted to add baffle plate/s to the removable section of the engine oil pan or sump.

3.1.2 Fuel System

Carburettors may be replaced, provided the replacement(s) are of the same configuration (i.e. downdraught or side draught) and have the same number of inlet venturis as the originals.

A sandwich-type adaptor plate to enable installation of a replacement carburettor is permitted.

Fuel injectors are free but not their number or position.

Fuel injection cannot replace carburettor(s) and vice versa.

EMS Modifications are permitted on non-turbo cars.

3.1.3 Engine Ancillaries

Pistons and piston rings are free.

Material may be removed from, but not added to, piston crowns and cylinder heads for the purpose of volumetric balancing of the combustion chambers only.

Material may be removed from a conrod, crankshaft and/or flywheel for the purpose of balancing and surface polishing.

Material may be removed from a cylinder bore for reconditioning purposes to the limit of manufacturer's specifications.

The camshaft/s is free but not the number of its bearings.

Inlet and exhaust manifolds and ports may be internally polished and reshaped.

3.1.4 Rotary Engine

For each rotary engine the original dimensions of the intake and exhaust ports on the inner side of the engine can be changed, however, bridge and peripheral porting is prohibited.

3.1.5 Exhaust

The exhaust system is free on a naturally aspirated Automobile.

On each turbocharged Automobile the exhaust is free from the exit of the turbocharger only.

No muffler(s) may be visible outside the perimeter of the *Automobile* when viewed from above or from the side.

NOTE: Noise restriction requirements of an Event must be adhered to.

3.1.6 Turbocharged Automobile

Modifications are prohibited to the induction system or any components associated with its functioning.

Maximum engine inlet pressure must remain in accordance with the original manufacturer's specifications for the *Automobile*.

EMS Modifications are prohibited on a turbocharged Automobile.

3.2 Applicable for a Four Wheel Drive Turbo

The engine may be reconditioned in accordance with the manufacturer's repair manual and specifications.

It is permitted to add baffle plate/s to the removable section of the engine oil pan or sump.

Each condenser, ignition coil, filter element, spark plug, lead, fan belt, radiator hose and gasket is free.

It is permitted to replace the engine exhaust system only with such replacement components of the same configuration and diameter as the original.

Maximum engine inlet pressure must remain in accordance with the original manufacturer's specifications for the *Automobile*.

EMS modifications or additions are prohibited.

Air conditioning systems are free.

4. TRANSMISSION

Clutch linings are free, as is their method of attachment.

Limited slip differentials are permitted only when available as an option for the *Automobile* model concerned from the original manufacturer, or its authorised supplier. Modifications to the differential cover or the fitting of a high capacity differential cover to increase the oil capacity of the differential are permitted.

Non-standard gear and differential ratios are permitted only when available as an option for the *Automobile* model concerned from the original manufacturer, or its original supplier.

5. BRAKES

Brake linings and rotors are free provided that the diameters of the rotors are not increased.

6. SUSPENSION

The type of shock absorber is free but not their number or mounting points.

The rate and length of springs is free and adjustable spring platforms are permitted.

Sway bars may be added, replaced or deleted.

It is permitted to adjust the wheel alignment in accordance with the original manufacturer's recommendations and/or normal wheel alignment principles, except that the original dimensions must be respected as to wheelbase and a maximum increase in track of 25 mm (1") is permitted.

Camber adjustment kits are permitted.

It is permitted to replace each elastomer suspension pivot point bush and subframe mounting bush by a dimensionally identical bush made from another elastomer material.

7. FUEL

Only Commercial Fuel in accordance with Technical Appendix - Schedule G of the *Motorsport Australia Manual* is permitted.

8. WHEELS AND TYRES

8.1 Wheels

It is permitted to increase the original manufacturers specification for each wheel diameter by a maximum of 2" and each wheel width by a maximum of 1", provided that the tyre fitted does not extend beyond the outer edge of the bodywork (including wheel arch flares) when viewed vertically from above.

8.2 Tyres

Only tyres which are compliant with the Production Car Tyre List for Speed Events in Technical Appendix - Schedule E of the *Motorsport Australia Manual* are permitted to be used.

8.3 Tyre Tread

At no time prior to the commencement of a *Competition* may any tyre tread wear indicator as provided by the tyre manufacturer be exposed. In all areas where there is no indicator the original tread pattern must be clearly visible except on the shoulder of the tyre where localised wear may occur.

9. STEERING

Aftermarket power steering cooling units are permitted.