2023 MOTORSPORT AUSTRALIA MANUAL

SPECIFICATIONS OF AUTOMOBILES 5th Category – Historic Cars Group A, C, N & U – Touring Cars



Modified Article	Date of Application	Date of Publication
General Requirements (g) Lubrication System	01/01/2023	01/01/2023
Group Nb (i) Bodywork	01/01/2023	01/01/2023
Group C Specific Requirements (d) Steering	01/0120/23	01/01/2023
Group A Specific Requirements (d) Steering	01/01/2023	01/01/2023
General requirements (b) Safety requirements Re-word for clarity	01/01/2023	20/02/2023

VEHICLE ELIGIBILITY

GENERAL REQUIREMENTS

Groups A, C and U cover cars which have a documented competition history in their given periods and reference should be made to their specific regulations further on in this section for more details. Group N is designed to provide a forum for competitors to race production touring cars which do not necessarily have a racing history, but are presented in a form similar to racing of the period. Limited modifications may be made. These should be of a period nature and not out of character with the vehicle or group period.

This section details the requirements common to all the Group N historic production touring cars that do not have a competition history. Additional specific requirements for individual groups are detailed in the individual group sections and all groups are also subject to the 5th Category general requirements set out in 5th Category Group N: Vehicle Eligibility: General regulations

Vehicles shall comply with all relevant requirements of Schedules A, B and C (refer the *Manual* Technical Appendix), where not in conflict with the Group N regulations.

A high standard of presentation will be insisted upon at all times. Any vehicle considered to be of an inappropriate standard will be rejected. Vehicles decorated in a manner not consistent with the period (such as 'modern' graphics) may be considered to be of an inappropriate standard.

Modifications may be made in accordance with the freedoms outlined in these and the group-specific regulations. Where the regulations are silent on an issue, it shall be deemed that no modifications from the standard specifications are permitted, except where the specific modifications are defined on the approved Specification Sheet, which are available from the Motorsport Australia website: www.motorsport.org.au

All vehicles must continue to comply with the Specification Sheet for the model in question. Motorsport Australia reserves the right to alter Specification Sheets at any time, if new or different information becomes available. The onus of proof of eligibility of the vehicle and/or major components, whether options or not, will be the responsibility of the owner, by way of homologation papers, parts manuals, workshop manuals etc.

Original vehicles: Vehicles with a racing history may be presented in the most predominant eligible form in which they were raced in the period, including the original sponsor signage, even though this specification may not fully conform to these rules.

Owners of vehicles with a competition history are required to obtain a Certificate of Description for the vehicle, which reflects the period specification of the car. Owners of such vehicles are encouraged to present their vehicles in this specification. Alternatively, the vehicle may be presented in conformance with the Group N regulations, in which case the divergence from the original specification will be noted on the Certificate of Description.

(a) **Technical Definitions:**

Elastomeric suspension bushings: Elastomeric suspension bushings are suspension components utilising an elastomer (eg, rubber, urethane) to permit freedom of movement in three axes at suspension pivot points. Where the bush incorporates an outer metal shell and/or central crush tube, these parts shall be regarded as part of the bushing. Where the bushing is integral with the arm or other secondary component, only the elastomer material shall be regarded as the bushing for replacement purposes.

Non-suspension elastomeric bushes: The chassis to body insulator rubber replacement material may be changed but the replacement must retain elastomeric properties and maintain the original dimensions.

Electronic ignition: An ignition system relying on electronic triggering of the spark timing, which does not use mechanical contact points as the spark trigger.

Transistorised ignition: An ignition system using conventional contact breaker points but which has a transistorised spark discharge enhancement, e.g. capacitor discharge ignition.

Free: A component, deemed to be free under these regulations may, where fitted to the vehicle as standard, be removed or replaced. Where the removed component is replaced, the replacement is not restricted in design or material (unless otherwise specified) providing it performs only the same function. No modification may be made to surrounding components or bodywork to which the replacement is fitted, unless otherwise permitted.

Where freedom is granted for the fitment of any component, such freedom is restricted to that component and such modifications to enable fitment of it, but is limited to the following: holes may be drilled for fasteners, eg, bolts, screws, rivets etc. Holes of the minimum dimensions necessary for the passage of wiring and fuel, brake, and oil lines/hoses are permitted. For the purpose of this article, a component shall be deemed to include all other components with which it is integral, or to which it is attached by means the manufacturer intended to be permanent. Where a system is deemed as free, all components solely associated with that system are regarded as free, as per above.

(b) Safety Requirements:

Important note: Group N is sometimes combined in races with non-historic categories, and in such cases, the dispensations granted in relation to safety for historic racing no longer apply. Cars must be fitted with the safety items applying to the relevant category and level of the event. Potentially this could include, but is not necessarily limited to, items such as "full" roll cages and window nets.

Windscreen: A laminated windscreen is required in races and in multiple car speed events. However, in the event that a laminated screen is unavailable, approval may be given on individual application to Motorsport Australia for the fitment of a Lexan or Perspex windscreen.

Safety Harness: Safety harnesses refer the *Manual* Technical Appendix Schedule I – "Safety Harnesses and window nets"

Safety Cage Structure: The fitment of a safety cage structure Is Compulsory. The safety cage structure shall comply with the *Manual* Technical Appendix Schedule J requirements in all aspects save for the following: a Type 2 (half cage) is a minimum requirement for Group N Touring cars and it is strongly recommended that a Type 3 (full cage) should be installed in a closed vehicle.

For Groups Na, Nb and Nc not using the original period fitted and installed safety cage the lower mounting plates of the safety cage structure must be contained entirely within the cockpit (ie, the structural inner volume which accommodates the driver and the passengers) and no component may pass through any part of the body work nor be installed in any other compartment of the vehicle. The front legs of the roll cage may pass through the dashboard adjacent to the A-pillar. The minimum amount of material may be removed to enable fitment. The front leg is not to be attached to the dashboard except where prior approval has been granted by Motorsport Australia. No associated components contributing to the strength of the safety cage structure may be situated outside the cockpit. In the case of a "hatchback" type of body no component of a safety cage structure may be located rearward of the upper pick-up point of the rear shock absorbers.

In addition to the mounting points depicted in the Type 2 and Type 3 illustrations in the *Manual* Technical Appendix Schedule J, it is permitted to attach the safety cage structure to other points of the body subject to those additional attachment points being to either the front hoop or the main hoop of the safety cage structure. Such additional attachments may be by bolting or welding.

Side anti-intrusion bars or other additional braces outlined in the *Manual* Technical Appendix Schedule J may be fitted to the safety cage structure provided that none of these additional components passes through the bodywork.

Rear seats may be locally modified to permit the fitment of a safety cage structure.

For the approval process for a safety cage structure not in compliance with the *Manual* Technical Appendix Schedule J please refer to Schedule J section 6 – "Certification by Motorsport Australia".

Fuel tanks: The fitment of a foam-filled fuel tank, or a fuel tank of a safety type approved by the FIA to FT3 specifications, is highly recommended refer the *Manual* Technical Appendix Schedule N. Where such a fuel tank is fitted, it should be installed either:

- in the same location as the original fuel tank, whereupon the original tank may be removed; or
- (ii) as near as practicable to the retained original fuel tank. In this instance the original fuel tank must be fully drained of any liquid, cleaned and rendered totally fuel vapour free, any drain plug must be removed, and the tank must be adequately vented. The filler neck must be isolated to prevent accidental re-filling.

Isolation switches: All vehicles must be equipped with a Battery Isolation (Master) Switch which effectively isolates all electrical circuits from the battery and stops the engine. It should be capable of being operated by the seated driver.

It is recommended that there be a second switch, or a remote means of operating the main switch, which can be operated from outside the vehicle. This should be positioned in the vicinity of the base of the A pillar on the drivers side. This external switch or remote activation must be clearly marked by a symbol showing a red spark in a white edged blue triangle.

(c) Chassis/Bodywork: The bodywork and body fittings must be as supplied by the manufacturer. Chassis or chassis-body unit, including the floorpan, must be original and unmodified, save for the strengthening techniques provided for under the Group N general regulations. Original vehicles with a competition history for which a Certificate of Description has been issued must retain period appearance of all components.

The original wheelbase dimensions must be retained.

The track dimension for all Groups are free save that the upper part of the tyre, down to the flange over the wheel hub centre must be within the perimeter of the vehicle when viewed vertically from above (see diagram 1).

Bumper bars must be retained.

Strengthening:

Seam welding: It is permitted to seam weld the body. Save for underneath the vehicle, seam welding must not be visible externally on the exterior of the vehicle.

Original axle housings as supplied by the vehicle manufacturer must be employed. Strengthening and reinforcement of such rear axle housings, and the addition of bracketry for the attachment of rear axle locating arms is permitted.

Strut braces: Strut braces solely between the front strut/shock absorber towers are permitted save for those vehicles with alternative bracing structures as standard, strut braces solely between the front strut/shock absorber towers are permitted.

The fitment of strut braces should ideally be by the manufacturer's original fixtures, however, the welding or bolting of additional lugs to the body (eg, inner guard or strut tower) for the purpose of mounting the strut brace is permissible. The strut brace itself must be attached by bolts and must be removable.

Minor strengthening by the addition of Sheetmetal is permitted provided such strengthening follows the contour of the bodyshell. The Sheetmetal being added must be of the same gauge/thickness as of the parent material. The only other method of permitted strengthening will be as per the relevant vehicle Specification Sheet.

Timing device: It is permitted to remove the minimum amount of metal necessary to facilitate fitment of a timing transponder to the upper surface of the cockpit floor.

Sound deadener: Sound deadener (bitumen and fabric types) may be removed from the body shell and hung components.

Nuts and bolts may be locked; nuts, bolts, screws, washers, clips and gaskets may be replaced with non-original items. In the case of nuts and bolts these may be larger replacements, captive nuts, lock nuts etc. however quick release type fasteners are specifically prohibited.

Undertrays/fairings: The use of undertrays, fairings etc, designed to improve the aerodynamic form of the automobile shall not be permissible unless supplied as standard equipment.

Mudguard flares/extensions: Flares and/or extensions to the guards are not permitted unless originally fitted by the manufacturer.

LHD to RHD Conversions: LHD to RHD conversions are permitted to Group N cars provided that the conversion is a full firewall conversion with mirror image dashboard conversion including all features, design and appearance of the original, no restrictions on the conversion are placed on the vehicles based on their original LHD specification.

(d) **Interior:** Unless otherwise specified, all original interior trim and fittings as supplied by the manufacturer for the model in question must be in place.

Floor coverings may be removed. Insulating materials may be added.

Where the original trim has deteriorated, restoration is permitted and encouraged, but should be as near as practicable to original specifications.

The steering wheel may be replaced, provided that the replacement wheel is not less than 320mm diameter, unless the original wheel was of a lesser diameter, in which case a replacement of at least equal diameter to the original is acceptable.

Original instruments and switches may be replaced, provided that they are replaced by items compatible in face, style and size with the other instruments.

Additional instruments/equipment of compatible style may be fitted into a separate panel.

Heaters must remain in place unless the particular model of the vehicle in question was available from the manufacturer without a heater fitted. Heater cores may be removed. Heater hoses are optional.

The original driver's seat may be replaced by a seat meeting the requirements of the *Manual* Technical Appendix Schedule C and the seat style illustrations set out in the *Manual* Historic Appendix Approved seats Group N & S provided it is the product of a commercially recognised aftermarket seat manufacturer.

In the case of events listed on the FIA International calendar, the replacement seat must also carry FIA approval.

It is permissible also to replace the passenger seat with a seat of similar specification in size, style, appearance, colour and trim to the replacement driver's seat.

On vehicles originally fitted with a bench seat, the fitting of an approved driver's seat as detailed above is permissible, but shall be complemented by:

- the fitting of an individual passenger seat derived from a comparable car model produced by the same automobile manufacturer, or:
- the fitting of a passenger's seat of similar specification in size, style, appearance, colour and trim to the replacement driver's seat.

If the original equipment bench seat is retained, modification of the driver's portion of that seat is free, subject to the origin of the seat remaining identifiable as the original bench seat.

The original rear seats must be retained in all respects, including location, save where varied in 5th Category, Vehicle Eligibility – Historic Sports

An additional tachometer may be fitted provided the glass face does not exceed 105mm in diameter, the unit does not provide any other electrical function and only mechanical types of maximum rev indicator are permitted.

(e) Engine: the original type and design of the cylinder block as originally used in the make, model and year of the vehicle in question or a Motorsport Australia-approved alternative (which will be outlined in the vehicle Specification Sheet) must be employed.

Internal engine components (eg, pistons, piston rings, connecting rods, crankshaft, bearings and gaskets) are free, subject to relevant bore and stroke restrictions for the Group in question (see Group-specific regulations). Main bearing cap supports or girdles may be used. The engine block may be "sleeved" to achieve the correct bore dimensions.

Save that the original number and location must be retained, camshafts are free.

The original type and design of cylinder head casting as originally used in the make, model and year of the vehicle in question, or a Motorsport Australia-approved alternative (which will be outlined in the vehicle Specification Sheet) must be employed.

Cylinder head/s may be modified provided such modification is effected only by the removal of metal. Variation in combustion chamber or port design by the addition of material attached by welding, bonding or mechanical fastening systems is not allowed. Welding as required to reclaim damaged cylinder heads is permitted. The insertion or replacement of valve seat inserts is permitted. Cylinder head components not forming part of the cylinder head casting are free.

Note: Save that the original type of drive belt must be retained, engine pulleys are free.

The engine mountings may be replaced by components of alternative design provided that the engine remains in the original position in relation to the body/chassis with a tolerance of \pm 8mm.

- (f) **Cooling:** The radiator may be replaced but must retain its original location, form and function. The support panel opening may not be modified. The material from which the radiator may be manufactured is free.
- (g) Lubrication system: The original lubrication system supplied by the manufacturer must be employed, save that oil pumps may be replaced or modified to enable higher pressure and/or volume, and additional external oil lines to original or approved components may also be employed. Any replacement oil pump must work on the manufacturer's original principle. Sumps as supplied as original equipment for the model in question may be modified to incorporate baffles and/or increased capacity.

Oil coolers and remote oil filters are permitted, but the bodywork must not be altered for the purpose of fitment, nor may they be fitted outside the confines of the standard bodywork.

Dry sump lubrication systems are not permitted, unless originally fitted. Remote pressurised oil accumulators are permitted, conditional on them being used in conjunction with a normal wet-sump oil system and serving no other purpose. The capacity of the accumulator must not exceed three litres. Should the accumulator be mounted in the cockpit then the system must comply with the *Manual* Technical Appendix Schedule A (I)

- (h) Ignition: Ignition must be of the same type, but not necessarily brand, as supplied by the manufacturer. Breaker type distributors must remain so configured, but may otherwise be modified. See Group-specific regulations for details.
- (i) Induction: Carburettors available during the period and later models of carburettors which were available in the period are acceptable, provided that the outward appearance is the same. Multiple carburettors may be fitted in the ratio of not more than one choke per two cylinders (Group Na) and one choke per cylinder (Groups Nb and Nc). Throttle bore sizes are free. Internal modifications of carburettors are permitted. Carburettors of a make, model and/or appearance not available in the period are not permitted.

Forced induction is not permitted, unless such induction method was employed as standard on the make and model of vehicle by the manufacturer concerned.

Fuel injection is not permitted, unless fitted as original equipment to the make, model and year concerned. In such circumstances only the type, make and model of fuel injection equipment as originally fitted may be used. Inlet manifolds are free except that they must be of a type compatible with the period.

Mechanical fuel pumps may be replaced by electric fuel pumps.

- (j) **Exhaust:** the exhaust system should be of a type compatible with the period, and must comply with the requirements of Schedule B, but is otherwise free.
- (k) Transmission: The flywheel must be of the original diameter, as determined by the ring gear, but is otherwise free.

The clutch is free.

The original type of gearbox as supplied by the manufacturer for the make and model concerned, assembled and operating as originally supplied by the manufacturer, shall be retained. The number of forward and reverse gear ratios may not be changed, however the use of alternate gear ratios is permitted. The gear lever may be modified but the original shift pattern must be retained.

(I) Final drive: The original type of final drive assembly, including the housing supplied by the manufacturer for the make, model and year concerned shall be employed. The final drive assembly may be subject to machining operations provided always that its origin is able to be established. The

overall width of the differential assembly may not be altered from the original specification. The use of alternate ratios is permitted.

Tailshafts and yokes: may be replaced provided they are of a steel construction and must maintain the original configuration.

Rear axle camber must be as per the manufacturer's specifications.

- (m) **Suspension, shock absorbers/springs and sway bars:** See Group-specific regulations.
- (n) Steering: The steering system employed for the year model in question, by the original manufacturer, must be utilised. Only Motorsport Australia approved alternative components may be used. These components will be listed in the particular vehicle Specification Sheet. Elastomeric bushings may be replaced by another, as defined in these regulations. Elastomeric bushings may not be replaced by spherical or "Rose"-type joints.
- (o) **Brakes:** The original form and type of braking system shall be employed.

The major brake dimensions of drum brakes (ie, internal drum diameter and width) shall be as supplied as original equipment with a tolerance of 3mm permitted on drum diameter.

In the case of disc brake systems, see Group-specific regulations for details.

Disc pad and drum brake lining materials are free.

Backing plates may be ventilated and/ or fitted with cooling ducts.

Mechanical operation may be converted to hydraulic operation.

Dual or tandem master cylinders may be fitted.

The installation of power brake assistance is permitted.

Drum brakes may not be replaced by disc brakes.

Disc brakes may not be grooved or drilled.

Disk brake dust/stone shields may be removed.

Front and Rear Brake cooling ducts may be fitted. Front ducts to a maximum width of 300mm on each side vehicle. If brake cooling ducts or scoops are fitted, they must be separated by a minimum of 300mm so as not to form an aerodynamic aid and their sole function shall be to assist in the supply of air to the brakes. Any Rear brake ducting must be wholly contained within the perimeter of the bodywork.

It is permitted to render the foot and/or hand operated park brake systems inoperative whilst retaining the operating mechanism in its original position.

- (p) Wheels: Wheels are required to be original in diameter and style See Group-specific regulations for details.
- (q) **Electrical:** All electrical equipment must be of period style and specification, save that a dynamo/generator may be replaced by an alternator in Groups Nb and Nc.

The component parts of a complete electric system, including generator, accumulator, warning. The electrical system, including lighting and warning apparatus, must be in working order at the start of the competition.

A self-starter in proper working order fitted to the vehicle is obligatory, and none of its parts may be removed during the event.

The battery may be relocated. If the battery is relocated, the battery must be either of dry cell construction or be fitted within a suitable container which will prevent spillage of battery acid outside the container. In all cases the battery must be securely attached to the vehicle and the terminals covered to prevent short circuits.

(r) Advertising/signage: No advertising material or sign will be distributed from or carried on any vehicle in this category provided that this rule shall not apply to the manufacturer's usual nameplate. Motorsport Australia reserves the right to permit also the display – in neat, unobtrusive lettering – of the name of the competitor and/or the driver and/ or the State of their residence on the scuttle or the side of the vehicle. The total area of all such signs shall not exceed 75mm in height and 600mm in length on each side of the vehicle. Club badges of an acceptable motoring club may appear on the vehicle. Each badge must be not larger than 150mm by 100mm and must be placed below the window line. Only two such badges are permitted, one on each side.

The territory of origin of the driver may be shown on the vehicle. Each sign must be not larger than 100mm by 150mm and must be placed below the window line. Only two such signs are permitted.

In addition to vehicles in this class complying with Schedule K of the *Manual* all vehicles must display an upper case "N" directly followed by a lower case "a", "b" or "c" (as appropriate) being black or white contrasting in colour to that of the bodywork, 100mm and 80mm in height respectively in typeset Helvetica Bold Condensed immediately following the vehicle's racing number at the bottom right hand corner, no further than 100mm from the border of the background.

The location of the battery must be indicated by a blue triangle (with sides of 150mm) on the coachwork.

No other signs may be displayed, unless specific approval has been granted by the Australian Historic Motor Sport Committee for event signage – The *Manual* Historic Appendix , Vehicle Eligibility General Requirements – Paintwork and Signage.

SPECIFIC REQUIREMENTS

Group Na

TOURING CARS (PRE-1958)



Group Na is designed to provide a forum for competitors to race both pre-war production touring cars and early post-war production touring cars in a form similar to racing of the period. To this extent, the modifications permitted are those that are not intended to radically alter the individual vehicle's character or appearance and will be of an improved performance road car nature, as opposed to making the vehicle totally dedicated to outright competition; the concept being that the vehicles could be driven comfortably to and from the race circuit event.

Limited modifications may be made. These should be of a period nature and not out of character with the vehicle or group period. People wishing to race vehicles of a more highly modified nature should look to other categories, such as Group Nb or an appropriate contemporary class. It is envisaged that most vehicles in this class will not have a racing history and these are acceptable provided they conform to the Group Na Specific Regulations and the relevant Motorsport Australia Specification Sheet.

Specific requirements additional to the General Requirements:

(a) Classes:

Vehicles shall compete in the following capacity classes:

Class	Capacity
Class A	3001cc and over
Class B	1501 - 3000cc
Class C	1101 - 1500cc
Class D	Up to 1100cc

Engine configuration: the bore may be increased by a maximum of 1.5mm, and the stroke must remain standard as specified for the make and model.

(b) Ignition: Electronic or transistorised systems are not permitted.

A distributor of a different make but similar design is permitted, but must use the points and condenser components within.

- (c) Final drive: Limited slip or locked differentials are not permitted unless part of the original specification.
- (d) **Suspension:** The method of suspension originally employed by the manufacturer must be retained. Each front suspension pickup point may be moved laterally by up to 10mm provided that a maximum of two degrees negative camber is not exceeded.

Eccentric or modified suspension components that alter the dimensions or geometry from original specifications, other than as provided for in this regulation are not permitted.

Shock absorbers/Springs: Spring rates and height (and therefore the ride height) may be altered. Damper settings may also be altered, however, externally adjustable shock absorbers are not permitted.

Sway bars: Fitment of period-type anti-sway bar to the front suspension is permitted. Rear sway bars are not permitted unless originally fitted.

Originally fitted sway bars may be replaced by another of alternate dimensions, but must remain mounted by the original method. Bushing materials are free.

Fore and aft axle location may be altered and locating devices to achieve this may be installed. Transverse axle location devices may not be fitted.

The steering system employed for the model in question by the original manufacturer must be utilised. At all times, the original form of steering and suspension joints must be employed.

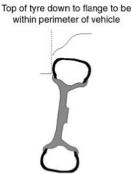
Elastomeric bushings may be replaced by another, as defined in these regulations. Elastomeric bushings may not be replaced by spherical or "Rose"-type joints.

Externally adjustable shock absorbers are not permitted.

- (e) **Clutch:** original method of operation must be utilised, eg, cable or hydraulic.
- (f) Wheels: The wheels shall be either as supplied by the manufacturer or of a type approved by Motorsport Australia and which is in harmony with wheels used prior to 31 December, 1958. At all times the original wheel diameter shall be maintained, save that all cars originally fitted with 14" diameter wheels may use replacement 15" diameter wheels. The width of the rim may not exceed 5" unless originally specified by the manufacturer; in which case the rim width must be as originally supplied. Aluminium alloy type wheels may be fitted, but only of a design and style available prior to 31 December, 1958. 4" Pitch Circle Diameter (PCD) hubs may be modified or replaced for the purpose of accepting 100mm PCD wheels. Any replacement hubs must be of ferrous material. Vehicles fitted with hubs that have a PCD other than 4" will be considered upon application. Wheel studs are free. Wheel nave plates or covers must be removed.
- (g) **Tyres:** Tyres must have an aspect ratio of at least 65% as determined by the Tyre and Rim Association manual. (Refer Na, Nb, Nc, Sa, Sb and Sc Tyre List article 1.2(a).)

The upper part of the tyre, down to the wheel rim flange over the wheel hub centre must be within the perimeter of the vehicle when viewed vertically from above (refer diagram 1).

Diagram 1.



Group Nb

PRODUCTION TOURING CARS (PRE-1965)



Group Nb is intended to be representative of the prescriptions of the former Appendix J which was current until 31 December, 1964. Before the introduction of the current sub-groups, this category was known as "Group N". This is a group for series production type touring cars, manufactured prior to 31 December, 1964. The group recognises models or components homologated for competition by the manufacturer, however at least 100 identical examples of a particular model must have been produced for the vehicle to be eligible. It is envisaged that most vehicles in this class will not have a racing history and these are acceptable provided they conform to the Group Nb Specific Regulations and the relevant Motorsport Australia Specification Sheet.

Spirit of regulations: It is emphasised that the purpose of this category of racing is to emulate, as far as is practicable, racing of touring cars under Appendix J regulations which were current until 31 December, 1964. Under the spirit of these regulations, and with the obvious exception of current safety requirements which were not mandatory in the period, over-restoration of vehicles, including the use of technology, parts or equipment not available within the period in question, are not acceptable and will render the vehicle ineligible.

Specific requirements additional to the General Requirements:

Class	Capacity	Class	Capacity
Class A1	Over 4500cc	Class D	1601 to 2000cc
Class A2	3001 to 4500cc	Class E	1301 to 1600cc
Class B	2601 to 3000cc	Class F	1001 to 1300cc
Class C	2001 to 2600cc	Class G	Up to 1000cc

(a) **Classes:** Vehicles shall compete in the following engine capacity classes

(Classes may be amalgamated)

Vehicles in the above-mentioned Classes A, B, C, D, and E must have four doors unless they have been homologated by the FIA, or are otherwise specifically approved by Motorsport Australia, in a two-door version. Vehicles in Classes F and G must have at least two doors.

- (b) Engine: The bore may be varied and/or the stroke reduced provided that the swept volume of the engine remains within the same cubic capacity class as that within which the engine came as supplied by the manufacturer. But in cases where retaining the original stroke and increasing the cylinder bore by up to 1.5mm over the original dimension increases the engine cubic capacity above the original class limit, for competition purposes the vehicle will remain within its original cubic capacity class.
- (c) Ignition: May be of the same type, but not necessarily brand as supplied by the manufacturer for the make and model concerned. Contact breaker points and condenser may be removed and their standard operations performed by electronic components providing the following conditions are adhered to:
 - (i) all components, save for the coil, shall be an integral part of the distributor.
 - (ii) A maximum of two wires shall connect the low tension side of the distributor to the coil. These wires shall be visibly continuous and not contain any supplementary connection to any other

component. Permitted is the fitment of an uninsulated earthing conductor between distributor body and cylinder block.

- (iii) Ignition advance shall be restricted to mechanical actuation within the distributor.
- (d) **Transmission:** The clutch and its method of actuation are free; save that concentric throwout bearings are not permitted.
- (e) **Final drive:** Differentials may be modified internally to incorporate slip limiting or locking devices. Modifications to incorporate floating hubs are permitted.
- (f) Suspension: The original form and type of suspension only shall be employed (eg, a semi-elliptic leaf spring suspended live rear axle may not be replaced by a coil spring suspended De Dion type, and so on).

Springs are free provided that the type and location are unchanged. Adjustable ride height is permitted, save that the body may not be altered to incorporate any system facilitating the adjustment of the ride height. MacPherson struts may be modified to incorporate adjustable spring seats/platforms.

Shock absorbers are free, save that they may not utilise external gas/fluid reservoirs and/or canisters. From April 21 2014 a maximum of 5° static negative camber is permitted for wheels on the front axle.

Sway bars: Sway bars may be fitted or removed from the front or rear of vehicles provided the sway bar does not perform any other function. Such sway bars must be of a conventional type, ie, made of a solid steel bar bent to shape. The diameter of the sway bar is free. Hollow sway bars are not permitted.

The method of mounting is free. The end links on bars may incorporate the use of spherical or rose type joints. Sway bars that perform more than one function can only be varied in diameter.

Locating devices/attachment: Suspension pickup points may be moved by up to 30mm.

Additional control arms may be fitted front and rear but in doing so, the original components must remain functional. The method of mounting is free, including the use of spherical or rose-type joints, providing all such control arms remain outside the original bodywork.

Where a vehicle is fitted with a Panhard rod as standard equipment, its mounting points may be moved without restriction, or it may be removed and replaced with a Watts linkage. Spherical rod ends may be employed in either application.

(g) Brakes: It is permitted to fit alternative calipers of a type available pre-1965. Drum brake systems may have components replaced with those of a production vehicle of the period provided the swept area and diameter of the drum does not change. Non-standard pedal boxes are permitted provided the original pedal location & configuration is maintained ie; where the pedals are pendulum or floor mounted they must retain this configuration. Brake hoses are free. Drum brakes may be drilled for the purpose of cooling, but such holes may not be drilled in the swept braking surface of the drum.

The replacement of original disc rotor assemblies with those of two or three-piece construction of a similar appearance is permitted. Original hubs must be retained, machining is permitted. Any adaptor between hub and disc rotor must be solid and be of aluminium or steel.

The use of adaptor plates for the attachment of brake calipers or intermediate spacers within brake calipers to accommodate variations in rotor and brake pad thickness is permitted.

(h) Wheels and tyres: The wheels shall be either as supplied by the manufacturer or of a type approved by Motorsport Australia and which is in harmony with wheels used prior to 31 December, 1964. At all times the original wheel diameter shall be maintained, save that all cars originally fitted with 14" diameter wheels may use replacement 15" diameter wheels. The width of the rim may be increased by not more than 1" over that originally fitted to the particular make and model, subject to an absolute maximum width of 6". Aluminium alloy type wheels may be fitted, but only of a design and style available prior to 31 December, 1964. Wheel nave plates or covers must be removed.

Tyres: Tyres must be of an approved type of radial or cross-ply construction with a minimum aspect ratio of 60% as determined by the Tyre and Rim Association. (Refer Na, Nb, Nc, Sa, Sb and Sc Tyre List, article 1.2(b).) Re-grooving of tyres is not permitted.

The upper part of the tyre, down to the wheel rim flange over the wheel hub centre must be within the perimeter of the vehicle when viewed vertically from above. (Refer diagram 1 - Group Na.)

(i) **Bodywork:** Mudguard flares/extensions – flares and/or extensions to the guards are not permitted unless originally fitted to the make and model in question by the manufacturer. The inner lip of the wheel opening may be folded back for tyre clearance.

Group Nc

PRODUCTION TOURING CARS (1965-1972)



Group Nc is an historic group introduced on 1 January, 1995, to cater primarily for vehicles of a year, make and model which competed in Australia between 1 January, 1965, and 31 December, 1972 in either the Australian Touring Car Championship or races specifically for 3rd Category Group C Improved Production Touring Cars and Series Production Touring Cars.

The Group Nc rules have been established to enable competition under a common set of rules which reflect the nature of touring car racing in the period.

The Historic Production Based Eligibility Committee, HPBEC, at its sole discretion, shall determine the contents of the vehicle Specification Sheets, which will be based on data sourced from:

The relevant FIA homologation and Motorsport Australia vehicle recognition documents (for over 3 litre cars, up to page 12), factory (not dealer) fitted parts lists and factory workshop and parts manuals.

All vehicles must continue to comply with the Specification Sheet for the model in question. Motorsport Australia reserves the right to alter Specification Sheets at any time, if new or different information becomes available. It is envisaged that most vehicles in this class will not have a racing history and these are acceptable provided they conform to the Group Nc Specific Regulations and the relevant Motorsport Australia Specification Sheet.

Spirit of Regulations: It is emphasised that the purpose of this category is to emulate, as far as practicable, the racing of touring cars (as described in the preamble) in the period from 1 January, 1965 to 31 December, 1972. Under the spirit of the regulations, and with the obvious exception of current safety requirements which were not mandatory in the period, over restoration of vehicles, including the use of technology, parts or equipment other than consumable items, not available within the period in question, are not acceptable.

Specific requirements additional to the General Requirements:

(a) **Classes:** Vehicles shall compete in the following capacity classes:

Class	Capacity
Class A	Over 5100cc
Class B	3501cc - 5100cc
Class C	3001cc - 3500cc
Class D	2001cc - 3000cc
Class E	1501cc - 2000cc
Class F	1101cc - 1500cc
Class G	Up to 1100cc

- (b) **Bodywork:** Mudguard flares/extensions flares and/or extensions to the guards are not permitted unless originally fitted to the make and model in question by the manufacturer. The inner lip of the wheel opening may be folded back for tyre clearance.
- (c) Engine:

(i) **Reciprocating engines:** The bore may be increased by a maximum of 1.5mm, and the stroke must remain standard as specified for the make and model.

Where increasing the bore size up to 1.5mm increases the engine cubic capacity above the original capacity class limit, for competition purposes the vehicle will remain within its original cubic capacity class. Toothed belts driving engine ancillaries are permitted. Engine pulleys are free.

(ii) **Rotary engines:** Rotary engines shall be deemed to be engines with rotary (rather than reciprocating) motion of the compressing medium (Wankel type). A rotary engine shall be defined as the rotor housings, intermediate and end plates.

Modifications: The rotors, apex seals and crankshaft are free.

Modifications to rotary engine rotor, housings and end plates may be effected only by the removal of metal. Rotary engines may be modified by the utilisation of the porting technique/s known as "Extend", "Mild" or "Bridge" porting.

Mild/extend porting shall be defined as a single induction port per end/intermediate plate, per rotor, extended beyond the original induction port size and shape. Save that it may not extend beyond the region traversed by the original rotor seal, the size and shape of such a port is free.

"Bridge" porting is permitted with the restriction that the original O-ring seals must remain unmodified and in their original location.

Bridge porting shall be defined as where the induction is accomplished utilising two separate induction ports per end/intermediate plate, per rotor, but not extending beyond the original outer edge of the inner water seal.

Peripheral porting is specifically not permitted.

Peripheral porting is defined as a port on a rotary engine allowing the passage of gasses through the periphery of the rotor housing. Any bridged induction port that is extended radially beyond the original outer edge of the inner water seal is, for the purposes of these regulations, considered to be a peripheral port.

Engines must be sealed, with rotor housing and end plates as a complete assembly.

Toothed belts driving engine ancillaries are permitted. Engine pulleys are free.

- (d) Ignition: May be of the same type, but not necessarily brand as supplied by the manufacturer for the make and model concerned. Contact breaker points and condenser may be removed and their standard operations performed by electronic components providing the following conditions are adhered to:
 - (i) All components, save for the coil, shall be an integral part of the distributor.
 - (ii) A maximum of two wires shall connect the low tension side of the distributor to the coil. These wires shall be visibly continuous and not contain any supplementary connection to any other component. Permitted is the fitment of an uninsulated earthing conductor between distributor body and cylinder block.
 - (iii) Ignition advance shall be restricted to mechanical actuation within the distributor.
- (e) **Transmission:** The clutch and its method of actuation are free.
- (f) **Final drive:** Differentials may be modified internally to incorporate slip limiting or locking devices. Modifications to incorporate floating hubs are permitted.
- (g) **Suspension:** The original form and type of suspension only shall be employed (eg, a semi-elliptic leaf spring suspended live rear axle may not be replaced by a coil spring suspended De Dion type, and so on).

Springs are free provided that the type and location are unchanged. Adjustable ride height is permitted, save that the body may not be altered to incorporate any system facilitating the adjustment of the ride height. MacPherson struts may be modified to incorporate adjustable Shock absorbers are free, save that they may not utilise external gas/fluid reservoirs and/or canisters. From April 21 2014 a maximum of 5° static negative camber is permitted for wheels on the front axle.

Sway bars: Sway bars may be fitted or removed from the front or rear of vehicles provided the sway bar does not perform any other function. Such sway bars must be of a conventional type, ie, made of a solid steel bar bent to shape. The diameter of the sway bar is free. Hollow sway bars are not

permitted. The method of mounting is free. The end links on bars may incorporate the use of spherical or rose type joints. Sway bars that perform more than one function can only be varied in diameter.

Locating devices/attachment: Suspension pickup points may be moved by up to 30mm.

Additional control arms may be fitted front and rear but in doing so, the original components must remain functional. The method of mounting is free, including the use of spherical or rose-type joints, providing all such control arms remain outside the original bodywork. Where a vehicle is fitted with a Panhard rod as standard equipment, its mounting points may be moved without restriction, or it may be removed and replaced with a Watts linkage. Spherical rod ends may be employed in either application.

(h) Brakes: Components may be replaced with those from another make and model of production touring car that was produced before 31 December 1972, provided there is no increase in the swept area or diameter of the disc or drum. Machining of the rotor is permitted.

The replacement of original disc rotor assemblies with those of two or three-piece construction of a similar appearance is permitted. Original hubs must be retained, machining is permitted. Any adaptor between hub and disc rotor must be solid and be of aluminium or steel.

The use of adaptor plates for the attachment of brake calipers or intermediate spacers within brake calipers to accommodate variations in rotor and brake pad thickness is permitted.

Non-standard pedal boxes are permitted provided the original pedal location & configuration is maintained ie; where the pedals are pendulum or floor mounted they must retain this configuration. It is not permitted for brake bias to be adjustable by the driver when in the normal driving position.

Brake hoses are free.

It is permissible to replace brake discs with items that are wider than the original component. Discs replaced under this provision may incorporate ventilation between the braking surfaces.

Brake discs may not be grooved or drilled.

Drum brakes may be drilled for the purpose of cooling, but such holes may not be drilled in the swept braking surface of the drum.

Brake cooling ducts may be fitted. If brake cooling ducts or scoops are fitted, they must be separated by a minimum of 300mm, so as not to form an aerodynamic aid and their sole function shall be to assist in the supply of air to the brakes.

(i) Wheels: Wheel diameter must be as originally supplied by the manufacturer or that which was deemed by Motorsport Australia to have been commonly used on the model in competition during the period as outlined in the vehicle's Specification Sheet save that all cars originally fitted with 14" diameter wheels may use replacement 15" diameter wheels.

Wheels may be replaced by period style alloy wheels.

Maximum rim width permitted is:

Class	Maximum permitted rim width
Class A and B	Maximum 8 inches
Class C, D and E	Maximum 7 inches
Class F and G	Maximum 6 inches

Wheel nave plates or covers must be removed.

(j) Tyres: Tyres must be of approved type radial or cross-ply construction with a minimum aspect ratio of 60% as determined by the Tyre and Rim Association. (Refer Na, Nb, Nc, Sa, Sb and Sc tyre list – article 1.2(b).) Re-grooving of tyres is not permitted.

The upper part of the tyre, down to the wheel rim flange over the wheel hub centre must be within the perimeter of the vehicle when viewed vertically from above. (Refer diagram 1 – Group Na.)

Appendix J Touring Cars (App J)

PRODUCTION TOURING CARS (PRE-1965)

This group will cater for vehicles with a competition history established in the period ending 31 December 1965 in events run to CAMS regulations for Appendix J Touring Cars.

Eligible vehicles:

- (a) Only an actual vehicle from the defined period will be recognised.
- (b) A clear line of history is required for each eligible vehicle. The applicant for a Certificate of Description and Log Book must, with the application, provide all evidence reasonably necessary to establish a clear line of history for the vehicle.
- (c) Other than in respect of variations permitted in terms of these regulations, each vehicle must be presented in the same specification as noted in the relevant homologation/recognition document as it was presented for competition at an event (the "Specified Competition Event") during a year in which the vehicle competed as an Appendix J Touring Car in the period (the "Specification Year").
- (d) It is not permitted to construct a new vehicle. A vehicle reconstructed using only spares or damaged and cast-off components are not eligible for this group. A chassis/body may, but does not necessarily, constitute an eligible vehicle.
- (e) Tyres: Each tyre must have an aspect ratio of at least 60% as determined by the Tyre and Rim Association manual. Tyres must be a cross ply treaded tyre and will be approved on individual application. The use of non R Spec radial road tyres may be approved on individual application. Regrooving of tyres is not permitted.

Improved Production (IP)

PRODUCTION TOURING CARS (1966-1972)

This group will cater for vehicles with a competition history established in the period between 1 January 1966 and 31 December 1972 in events run to CAMS regulations for Improved Production Touring Cars.

Eligible Vehicles

- (a) Only an actual vehicle, for which a Log Book was/is issued by CAMS, will be recognised.
- (b) A clear line of history is required for each eligible vehicle. The applicant for a Certificate of Description and Log Book must, with the application, provide all evidence reasonably necessary to establish a clear line of history for the vehicle.
- (c) Other than in respect of variations permitted in terms of these regulations, each vehicle must be presented in the same specification as noted in the relevant homologation/recognition document as it was presented for competition at an event (the "Specified Competition Event") during a year in which the vehicle competed an Improved Production Touring Car in the period (the "Specification Year").
- (d) It is not permitted to construct a new vehicle. A vehicle reconstructed using only spares or damaged and cast-off components are not eligible for this group. A chassis/body may, but does not necessarily, constitute an eligible vehicle.
- (e) Tyres: Each tyre must have an aspect ratio of at least 60% as determined by the Tyre and Rim Association manual. Tyres must be a cross ply treaded tyre and will be approved on individual application. The use of non R Spec radial road tyres may be approved on individual application. Regrooving of tyres is not permitted.

Series Production Touring Cars (SP)

PRODUCTION TOURING CARS (1966-1972)

This group will cater for vehicles with a competition history established in the period between 1 January 1966 and 31 December 1972 in events run to CAMS regulations for Series Production Touring Cars.

Eligible Vehicles

- (a) Only an actual vehicle, for which a Log Book was/is issued by CAMS/Motorsport Australia, will be recognised.
- (b) A clear line of history is required for each eligible vehicle. The applicant for a Certificate of Description and Log Book must, with the application, provide all evidence reasonably necessary to establish a clear line of history for the vehicle.
- (c) Other than in respect of variations permitted in terms of these regulations, each vehicle must be presented in the same specification as noted in the relevant homologation/recognition document as it was presented for competition at an event (the "Specified Competition Event") during a year in which the vehicle competed an Improved Production Touring Car in the period (the "Specification Year").
- (d) It is not permitted to construct a new vehicle. A vehicle reconstructed using only spares or damaged and cast-off components are not eligible for this group. A chassis/body may, but does not necessarily, constitute an eligible vehicle.
- (e) Tyres: Tyres must be of approved type radial or cross-ply construction with a minimum aspect ratio of 60% as determined by the Tyre and Rim Association. (Refer Na, Nb, Nc, Sa, Sb and Sc tyre list article 1.2(b).) Re-grooving of tyres is not permitted.

Group C Touring Cars (1973-1984)

CATEGORY REGULATIONS FOR GROUP C TOURING CARS



The group will cater for vehicles with a competition history established in the period between 1 January 1973 and 31 December 1984 in events run to regulations promulgated by CAMS for Group C Touring Cars.

In the period, Group C (Production Touring) cars were intended to be representative of mass-produced motor vehicles, made more suitable for competition by a number of modifications expressly permitted in the regulations of the period.

Eligible Vehicles:

- (a) Only the actual vehicles, for which a Group C log book was issued by CAMS/Motorsport Australia, will be recognised.
- (b) A clear line of history is required for each eligible vehicle. The applicant for a Certificate of Description and log book must, with the application, provide all evidence reasonably necessary to establish a clear line of history for the vehicle.
- (c) Other than in respect of variations permitted in terms of these regulations, each vehicle must be presented in the same specification as noted in the relevant homologation/recognition document as it was presented for competition at an event (the "Specified Competition Event") during a year in which the vehicle competed as a Group C Touring Car in the Group C period (the "Specification Year").
- (d) No new vehicles may be constructed.
- (e) Vehicles reconstructed using only spares or damaged and cast-off components are not eligible for this group. A chassis/body may, but does not necessarily, constitute an eligible vehicle.

General Requirements:

- (f) When a vehicle is presented for historic recognition as a Group C Touring car, the application for a Certificate of Description must be accompanied by sufficient and appropriate documentation as evidence in support of the vehicle's originality and authenticity. The general requirements as set out in the period specifications for the vehicle as at the Specified Competition Event in the Specification Year, will apply.
- (g) Suspension, brakes, wheels, steering, coachwork, interior, electrical systems, fuel systems and all other aspects of the vehicle's specification other than the items mentioned under Specific Requirements must not be modified except for modifications allowed by the period specifications for the vehicle as at the Specified Competition Event in the Specification Year.
- (h) A vehicle must also meet the weight requirements as set out in the homologation/recognition documents for the vehicle at the Specified Competition event, which requirements will be specified in the Certificate of Description.
- (i) Except for consumable items, a vehicle is not to be restored or repaired using technologies or components that were not available in the Specification Year.
- (j) For the purpose of the preceding sub-paragraph (a), "consumable items" means and includes gaskets, fan and drive belts, spark plugs, brake pads, lubricants, bushes and such other items of a consumable nature as are determined by the Historic Production Based Eligibility Committee (HPBEC) of the

Australian Historic Motor Sport Committee to be consumable items for the purpose of these regulations.

(k) Where a component is no longer available, a substitute component can only be used if an application has been made to the HPBEC and that committee has given approval for use of the substituted component.

Specific requirements additional to the General Requirements:

- (a) Engine: All engines are to be inspected for eligibility and fitted with an approval seal by an Eligibility Officer or their nominee.
 - (i) The engine crankshaft and connecting rods are free, provided that they respect the recognised weights and style for the engine as set out in the recognition document for the year represented, and that the crankshaft retains the original manufacturers stroke dimension and phasing, however the rest of the engine, including intake and exhaust systems must not be modified except for modifications allowed by the period specifications for the Specified Competition Event as evidenced in the relevant CAMS Manual and any subsequent CAMS Bulletins issued up to the time of the Specified Competition Event, updating or amending those specifications
 - (ii) The bore may be increased to a maximum of 1.5mm beyond the dimensions evident in the specifications for the subject vehicle within the group period. Vehicles will be classed according to their period capacity specification, regardless of whether the engine has been the subject of the permitted increase in bore dimensions.

Class	Capacity
Class A	0 to 1300cc
Class B	1301 to 1600cc
Class C	1601 to 2000cc
Class D	2001 to 3000cc
Class E	3001 to 6000cc

(iii) The following capacity classes will apply:

- (A) In the case of turbo charged engines the nominal cylinder capacity will be multiplied by a factor of 1.4 and the vehicle will pass into the class corresponding to the nominal capacity thus attained.
- (B) In the case of rotary engines the nominal cylinder capacity will first be determined by subtracting the minimum capacity of the working chambers from their maximum capacity. The capacity thus attained will then be multiplied by a factor of 2.0 and the vehicle will pass into the class corresponding to the nominal capacity thus attained.
- (b) Transmission: Gearbox ratios shall be those as listed in the homologation/recognition document for the vehicle at the time of the Specified Competition Event. The gears may be replaced with nongenuine parts provided their functional dimensions (ie, factory specification) are respected and the number of teeth retained, however the number of gears must remain as specified. The final drive ratios shall be those as listed on the homologation/recognition document for the vehicle at the time of the Specified Competition Event. The gears may be replaced with non-genuine parts provided the functional dimensions (ie, factory specification) are respected and the number of teeth are retained. Otherwise the transmission must not be modified.
- (c) **Tyres:** Within the limits of availability, the tyres fitted must be of the same tread width and diameter as those fitted in the group period; only rim sizes as listed in the homologation/recognition document are to be used in dry and wet track conditions.
- (d) Steering: Upon application to the HPBEC a car may be fitted with power steering provided that the power steering system employed for the year model in question, by the original manufacturer, is utilised and an erratum is added to the car's Certificate of Description.

(e) Vehicle signage:

(i) If a vehicle is to display signage it must be the signage which actually appeared on the vehicle at the Specified Competition Event in the Specification Year and in the same configuration and colour scheme (the "Original Signage").

- (ii) When a vehicle is presented for historic recognition as a Group C Touring Car the application for a Certificate of Description must be accompanied by appropriate evidence of the vehicle's Original Signage.
- (iii) A vehicle may be presented in its Original Signage or with omissions from (but not additions to) that signage or with no signage at all. Owners are encouraged to present their vehicles in Original Signage.
- (iv) Notwithstanding sub-paragraph (i) above:
 - (A) The name of the driver/s or the original driver/s may be displayed on the vehicle across the top of the vehicle's windscreen, as was allowed in the Group C period.
 - (B) The name of the competitor and/or the driver and/or their State of residence may also be displayed in neat, unobtrusive lettering on the scuttle or the side of the vehicle. The total area of all such signs is not to exceed 40mm in height and 300mm in length on each side of the vehicle.
 - (C) Two club badges of an acceptable motoring club may also be displayed on the vehicle, one on each side. Each badge must be no larger than 150mm by 100mm and must be placed below the window line.

(f) Safety equipment:

- (i) Rollover protection: The fitment of rollover protection is compulsory. Rollover protection shall be either as used by the subject vehicle at the Specified Competition Event in the Specification Year (refer to 1.5 Safety) or a rollover protection structure complying with the Manual Technical Appendix Schedule J.
- (ii) Fire extinguishers: A fire extinguisher must be fitted to the vehicle in accordance with the *Manual* Technical Appendix Schedule H.
- (iii) Safety harnesses: A safety harness must be fitted to the vehicle in accordance with the *Manual* Technical Appendix Schedule I.
- (iv) Driver's seat: A new driver's seat which replaces either the original standard driver's seat or a period replacement seat must meet the requirements of the *Manual* Technical Appendix Schedule C. However such new seat must replicate the appearance and style of driver's seats fitted to category vehicles during the Group C period.
- (v) Rain Light is mandatory refer the Manual Technical Appendix Schedule C
- (vi) Other Safety requirements: Otherwise the safety requirements must be in accordance with the period specifications for the vehicle as at the Specified Competition Event in the Specification year unless a different requirement is specified in the *Manual* Historic Appendix General Requirements.

(g) Fuel

Only the following fuel is permitted:

- (i) Pump Fuel as defined by the Manual Technical Appendix Schedule G; or
- (ii) Unleaded Racing Fuel as defined by The *Manual* Technical Appendix Schedule G except that the following higher specifications are permitted:
 - (A) Up to a maximum RON of 104; and
 - (B) Up to maximum of 3.7% Oxygen by volume (v/v)

Group A Touring Cars (1984-1992)

CATEGORY REGULATIONS FOR GROUP A TOURING CARS



The group will cater for vehicles with a competition history established in Australia and elsewhere in the period between 1 January 1984 and 31 December 1992 in events run to regulations promulgated by FISA and or as adopted by CAMS/Motorsport Australia for Group A touring cars.

In the period, Group A (Production Touring) cars were intended to be representative of mass-produced motor vehicles, made more suitable for competition by a number of modifications expressly permitted in the regulations of the period.

Eligible Vehicles:

- (a) Only the actual vehicles for which a Group A log book was issued by CAMS/Motorsport Australia, FISA or other national sporting authorities (ASN) will be recognised.
- (b) A clear line of history is required for each eligible vehicle. The applicant for a Certificate of Description and log book must, with the application, provide all evidence reasonably necessary to establish a clear line of history for the vehicle.
- (c) Other than in respect of variations permitted in terms of these regulations, each vehicle must be presented in the same specification as noted in the homologation/recognition document, and as it was presented for competition at an event (the "Specified Competition Event") during a year in which the vehicle competed as a Group A Touring Car in the Group A period (the "Specification Year").
- (d) No new vehicles may be constructed.
- (e) Vehicles reconstructed using only spare or damaged and cast-of components are not eligible for this group. A chassis/body may, but does not necessarily, constitute an eligible vehicle.

General Requirements:

- (a) When a vehicle is presented for historic recognition as a Group A Touring Car, the application for a Certificate of Description must be accompanied by sufficient and appropriate documentation in evidence as to the vehicle's originality and authenticity. The general requirements as set out in the period specification and the applicable homologation papers for the vehicle as at the Specified Competition Event in the Specification Year, will apply. Suspension, brakes, wheels, steering, coachwork, interior, electrical systems, fuel systems, and all other aspects of the vehicle's specification other than the items mentioned specific ally below must not be modified except for modifications allowed by the period specification for the vehicle as at the Specified Competition Event in the Specification for the vehicle as at the Specified Competition Event in the Specification for the vehicle as at the Specified Competition Event in the Specification for the vehicle as at the Specified Competition Event in the Specification for the vehicle as at the Specified Competition Event in the Specification for the vehicle as at the Specified Competition Event in the Specification Year.
- (b) A vehicle must also meet the weight requirements set out in the homologated specifications for the vehicle at the Specified Competition Event, which requirements will be specified in the Certificate of Description.
 - (i) Except for consumable items a vehicle is not to be restored using technologies that were not available in the Specification Year.
 - (ii) For the purposes of the proceeding sub-paragraph (a) "consumable items" means and includes gaskets, fan and drive belts, spark plugs, brake pads, lubricants bushes and other such items of a consumable nature as are determined by the Historic Production Based Eligibility Committee (HPBEC) or the Australian Historic Motor Sport Committee to be consumable items for the purpose of these regulations.

(iii) Where a component is no longer available a substitute component can only be used if an application has been made to the HPBEC for the use of the substitute component and the HPBEC and the Australian Historic Motor Sport Committee have given approval for the use of the substitute component.

Specific requirements additional to the General Requirements:

- (a) **Engine:** All engines are to be inspected for eligibility and fitted with an approval seal by an Eligibility Officer or their nominee
 - (i) The engine crankshaft and connecting rods are free, provided that they reflect the recognised weights and style for the engine as set out in the recognition document for the year represented, and the crankshaft retains the original manufacturer's stroke dimensions, and phasing. However, the rest of the engine, including intake and exhaust systems must not be modified except for modifications allowed by the period specifications for the Specified Competition Event as evidenced by the CAMS Manual of Motor Sport and any subsequent CAMS bulletins issued up to the Specified Competition Event.
 - (ii) The bore may be increased to a maximum of 1.5mm beyond the dimensions evident in the homologation/ recognition document for the subject vehicle within the group period. Vehicles will be classed according to their period capacity specification, regardless of whether the engine has been the subject of the permitted increase in bore dimensions.

Class	Capacity
Class A	0 to 2000cc
Class B	2001 to 3000cc
Class C	3001 to 6000cc

- (iii) The capacity classes to apply to this category, will be those as specified below.
- (iv) In the case of turbo charged engines the actual cylinder capacity will be multiplied by a factor of 1.7 and the vehicle will pass into the class corresponding to the nominal capacity thus attained.
- (v) Fuel:

Only the following fuel is permitted:

- (A) Pump Fuel as defined by the *Manual* Technical Appendix Schedule G; or
- (B) Unleaded Racing Fuel as defined by the *Manual* Technical Appendix Schedule G except that the following higher specifications are permitted:
 - Up to a maximum RON of 104; and
 - Up to maximum of 3.7% Oxygen by volume (v/v)
- (b) Transmission: Gearbox ratios shall be those as listed on the homologation/recognition the vehicle at the time of the Specified Competition Event. The gears may be replaced with non-genuine parts provided the functional dimensions (ie, factory specification) are respected and the numbers of teeth are retained, however the number of gears must remain as specified.

The final drive ratios shall be those as listed on the homologation/recognition document for the vehicle at the time of the Specified Competition Event. The gears may be replaced with non-genuine parts provided the functional dimensions (ie, factory specification) are respected and the number of teeth retained. Otherwise the transmission must not be modified.

- (c) **Tyres:** Within the limits of availability, the tyres fitted must be of the same tread width and diameter as those fitted in the group period. Only rim sizes as listed in the homologation/recognition document can be used in dry and wet track conditions.
- (d) **Steering:** Upon application to the HPBEC a car may be fitted with power steering provided that the power steering system employed for the year model in question, by the original manufacturer, is utilised and an erratum is added to the car's Certificate of Description

(e) Vehicle signage:

(i) If a vehicle is to display signage it must be the signage which actually appeared on the vehicle at the Specified Competition Event in the Specification Year and in the same configuration and colour scheme (the "Original Signage").

- (ii) When a vehicle is presented for historic recognition as a Group A Touring Car the application for a Certificate of Description must be accompanied by appropriate evidence of the vehicle's Original Signage.
- (iii) A vehicle may be presented in its Original Signage or with omissions from (but not additions to) that signage or with no signage at all. Owners are encouraged to present their vehicles in Original Signage.
- (iv) Notwithstanding subparagraph (i) above:
 - (A) The name of the original driver/s or the make of vehicle may be displayed on the vehicle across the top of the vehicle's windscreen, as was allowed in the Group A period.
 - (B) The name of the competitor and/or the driver and/or their State of residence may be displayed in neat, unobtrusive lettering on the scuttle or the side of the vehicle. The total area of all such signs is not to exceed 40mm in height and 300mm in length on each side of the vehicle.
 - (C) The name of the original driver/s is/are to be displayed on the rear quarter window as was allowed in the Group A period.
 - (D) Two club badges of an acceptable motoring club may also be displayed on the vehicle. Each badge must be no larger than 150mm by 110mm and must be placed below the window line.
 - (E) The competitor is required to display the letter "A" signifying the group of the vehicle adjacent to the number on both sides of the vehicle. The letter is to be 100mm high and of a contrasting colour to the car.

(f) Safety equipment:

- (i) Rollover protection: The fitment of rollover protection is compulsory. Rollover protection shall be either as used by the subject vehicle at the Specified Competition Event in accordance with the period specification and/or homologation/recognition documents (refer to 1.5 Safety), or a rollover protection structure complying with the *Manual* Technical Appendix Schedule J.
- (ii) Fire extinguishers: A fire extinguisher and or a fire extinguishing system must be fitted to the subject vehicle in accordance with the period specification and or the homologation papers but, must be also fully compliant with the *Manual* Technical Appendix Schedule H.
- (iii) Safety harnesses: A safety harness must be fitted to the vehicle in accordance with the *Manual* Technical Appendix Schedule I.
- (iv) Driver's seat: A new driver's seat which replaces either the original standard driver's seat or a period replacement seat must meet the requirements of the *Manual* Technical Appendix Schedule C. However such new seat must replicate the appearance and style of driver's seats fitted to category vehicles during the Group A period.
- (v) Rain Light is mandatory refer the *Manual* Technical Appendix Schedule C
- (vi) Other Safety requirements: Otherwise the safety requirements must be in accordance with the period specifications for the vehicle as at the Specified Competition Event in the Specification year unless a different requirement is specified in the *Manual* Historic Appendix General Requirements.

Group U Sports Sedans

(Prior to 31 December 1985)



The group will cater for vehicles with a competition history established prior to 31 December 1985 in events run to regulations promulgated by CAMS/Motorsport Australia for Group B Sports Sedans and Sports Racing (Closed) Cars. In the period, Sports Sedans were intended to be representative of vehicles based on production Touring Cars, made more suitable for competition by a number of modifications expressly permitted in the regulations of the period.

Eligible Vehicles:

- (a) Only the actual vehicles, for which the following log books were issued by CAMS/Motorsport Australia will be recognised:
 - (i) 2nd Category Sports Sedans (Group B)
 - (ii) 2nd Category Sports Racing Closed (Group B) where the vehicle is derived from a CAMS/Motorsport Australia-recognised Touring Car.

(b) Wheels and Tyres:

- (i) Considering the limits of availability, the tyres fitted must be the same tread pattern, width and have a maximum wheel diameter of 19 inches.
- (ii) Wheels should be in the period style of the Specification Year.

(c) Safety equipment:

- (i) Rollover protection: The fitment of rollover protection is compulsory. Rollover protection shall be either as used by the subject vehicle in the Specification Year in accordance with the period specification and/or homologation/recognition documents (refer to 1.5 Safety), or a rollover protection structure complying with the *Manual* Technical Appendix Schedule J.
- (ii) Fire extinguishers: A fire extinguisher and or a fire extinguishing system must be fitted to the subject vehicle in accordance with the period specification and or the homologation papers but, must be also fully compliant with the *Manual* Technical Appendix Schedule H.
- (iii) Safety harnesses: A safety harness must be fitted to the vehicle in accordance with the *Manual* Technical Appendix Schedule I.
- (iv) Driver's seat: A new driver's seat which replaces either the original standard driver's seat or a period replacement seat must meet the requirements of the *Manual* Technical Appendix Schedule C. However such new seat must replicate the appearance and style of driver's seats fitted to category vehicles in the period of the Specification Year.
- (v) Other safety requirements: Otherwise, the safety requirements must be in accordance with the period specifications for the vehicle as at the Specified Competition Event in the Specification Year unless a different requirement is specified in the *Manual* Historic Appendix General Requirements
- (d) Fuel:
 - (i) Only Pump Fuel or an approved fuel noted on the Certificate of Description and/or in the Vehicle Log Book, as defined by the *Manual* Technical Appendix Schedule G.