



**TECHNICAL & SAFETY
REGULATIONS
(Draft)**

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WARNING!

Motorsport is dangerous.

Motor Sport activities are inherently dangerous recreational activities and there is significant risk of injury, disability, death or property damage. If you do not wish to be exposed to such risks, then you should not attend or participate in Motor Sport activities.

Participants, spectators, officials and guests are warned that motor racing, including tarmac rally, is dangerous, and accidents can happen. All care is taken to protect participants, officials, spectators, guests and the public but participants, spectators, and guests entering the Event area are warned that there is a possibility of an accident-causing personal injury or death, property damage or economic loss. By entering or participating an Event, the participant or guest acknowledges that the Event has a degree of danger and the owners, organisers, promoters, participants or other person's having any connection with promoting, organising or conduct of the Event shall have no liability, either in tort or contract, for any personal injury or death, whether caused by negligence or otherwise, to the, participant, spectator or guest, except in regard to any rights those persons may have under the Australian Consumer Law and a t law.

The Event will be conducted under the rules of the Australian Auto Sport Alliance Pty. Ltd. The organisers by accepting the entry of any vehicle and by allowing any vehicle to participate in the Event shall not be deemed to warrant or guarantee the competency of any drivers, nor mechanics participating in the Event nor any officials appointed for the supervision of the Event or activity pursuant to these rules, nor the efficiency or mechanical soundness of any vehicle entered in the Event not that the course for the Event is in a safe condition for racing or driving, nor that such course nor any part thereof shall be free from spectators or any obstacles nor that the rules governing said Event shall be observed by any other entrant, driver, mechanic nor official therein.

ALL VEHICLES & CREW REQUIREMENTS

1 Numbers and Signage

- 1.1 All vehicles must provide space on their vehicles for numbers and sponsors as per the Event Supplementary Regulations.
- 1.2 Signs from sponsors or supports of individual cars may be displayed on the vehicle, provided they do not interfere with the door or windscreen panels mentioned in 1.1 above and are printed and applied in a professional and tasteful manner and are not in conflict with any sponsors of The Event. The organisers reserve the right to have any advertising they consider distasteful or inappropriate removed from a competing vehicle before it is permitted to start.
- 1.3 The Penalty for infraction – NO START
- 1.4 Driver and Co-Driver/Navigator names may be displayed on both sides of the vehicle, on the rear side glass, or on the upper part of the front mudguards.
- 1.5 Refer to Event Supplementary Regulations
- 1.6 The Organisers accept no responsibility for any damage to vehicle paintwork during removal of Event signage. The entrant agrees to and accepts this as a condition of acceptance of entry.

2 Vehicle Scrutiny

- 2.1 All vehicles must be “scrutineered” / be the subject of a “vehicle safety check” prior to starting in the ‘The Event’. Vehicles must be presented to scrutineering fully compliant with all these Regulations and all other requirements. Scrutineering ties will be posted in the Event schedule and on the website.
- 2.2 Each vehicle entered in the Competition must hold an AASA Vehicle Passport, which is to be presented at scrutineering.
- 2.3 A vehicle may be inspected or re-scrutinised at any time during the Event to ensure that the vehicle is in an acceptable condition to continue, that all safety equipment is present, serviceable, and correctly positioned, and that the eligibility of the vehicle remains unchanged.
- 2.4 All vehicles must pass scrutiny to be allowed to complete/continue to compete in the Event.
- 2.5 If during the Event the Chief Scrutineer considers a vehicle to be non-compliant, he may direct it to be repaired before recommending that the Clerk of the Course approve its continuation in the Event. No time allowance will be made for such repairs.

3 Crew Requirements

- 3.1 All Drivers & Co-Drivers must hold a current Civil Licence.
- 3.2 All cars must have two (2) occupants (Driver & Co-Driver or Driver and Navigator).
- 3.3 All Crew must hold a current AASA Tarmac Rally Licence or Tarmac Rally Navigator Licence.
- 3.4 Helmets and Apparel

Drivers, Co-Drivers and Navigators must wear helmets and apparel that comply with the current Australian Standard and the AASA Regulations.

Refer <https://aasa.com.au/regulations/appendices/> Item 4 – Apparel Requirements

Drivers, Co-Drivers and Navigators must wear an approved (FIA, SFI or similar) FHR front head and neck restraint system (HANS device)

ALL VEHICLES TECHNICAL & COMPULSORY

4 Technical Requirements for all vehicles

4.1 The Spirit of the Regulations

- 4.1.1 The spirit of the Regulations is to ensure that all vehicles compete in a safe environment and be mechanically sound.
- 4.1.2 Vehicles entered in period categories shall be visually compatible with the period being portrayed. Where any doubt exists between these Regulations and the original period specification, the latter will take precedence.
- 4.1.3 The Technical Regulations are based on the principle that modifications to the vehicle or its components, other than those specified below, are forbidden. All competing vehicles must comply with these Regulations and the AASA Standing Regulations for Tarmac Rallies. These Regulations are to be used in conjunction with the AASA

National Competition Rules (NCR's) and any specified Event documentation such as Supplementary Regulations and any further bulletins.

4.2 Vehicle Eligibility

- 4.2.1 Each vehicle must have at least two seats and was capable of achieving road registration when first released.
- 4.2.2 At all times the onus of proof of eligibility of the vehicle and/or components, whether options or not, will be the responsibility of the competitor by way of homologation papers, parts manuals, workshop manuals, etc.
- 4.2.3 These Regulations do not remove the requirement to comply with any civil obligations or regulations, and compliance with all such provisions is the responsibility of the competitor.
- 4.2.4 In cases where production of a model commenced before the cut-off date and continued after that date, vehicles actually manufactured after this date are considered to be eligible provided, they were produced to exactly the same specification as the vehicles built prior to the date. This provision, known as "model run-on", terminates upon a change in vehicle specification having been implemented by the manufacturer. In all cases, the onus of proof in relation to eligibility matters lies with the competitor.

4.3 Roadworthiness and Road Registration

- 4.3.1 All vehicles must be the subject of a valid road registration or have a suitable permit (i.e. Temporary or Rally permit) from a competent civil authority for use on public road, complete with a current policy of third-party insurance, including where necessary an extension for competition use relevant to state or territory requirements from the state of issue. All statutory requirements relating to the use of such permits/registration must be met.

Unregistered vehicles which are to compete in the Event, may obtain an event unregistered vehicle permit by applying to WA Dept. of Transport using the Over 48 Hour Permit Application available on the Targa West Website.

Proof of registration and insurance are required to be provided at documentation.

- 4.3.2 Left hand drive vehicles re permitted.

4.4 Authority to enter vehicle

- 4.4.1 The vehicle must be entered by the bona-fide owner of the vehicle, or a person having the written authority to the bona-fide owner.

4.5 Technical Specification

- 4.5.1 To aid in the classification of the vehicle, the entrant must fully complete the Cars / Profile on the Tarmac West Online system 'Should any vehicle detail be altered, such alteration shall be notified in writing to the organisers who reserve the right to reclassify the vehicle.
- 4.5.2 The organisers reserve the right to amalgamate classes if there are fewer than three vehicles in any class.

4.6 Vehicle Passport

- 4.6.1 All Competing vehicles must be the subject of a Vehicle Passport issued by AASA, and as required by the condition of the Event Regulations, the Passport number must be recorded on the Tarmac West Online System. Failure to present such Passport when the relevant vehicle is presented for documentation and scrutiny may cause it to be denied permission to start the Event.

4.7 Optional Item Eligibility

- 4.7.1 The onus is at all times on the competitor to provide proof that each component is in fact a genuine option for the model, and if this cannot be provided the Technical Advisor may either request that the component be removed (prior to the start of the Event) or recommend a penalty.
- 4.7.2 Options/accessories/parts (henceforth described as the 'option') may be permitted in certain areas, subject to the following;

To be acceptable in competition, each option shall comply with at least one of the following requirements.

 - i. It shall be listed by the manufacturer as a "production option", i.e., an optional item or specification listed on the vehicle build sheet and fitted at the time of the build. (For some vehicles, the options with which it was built are listed on the vehicle ID plate).
 - ii. It shall be an option listed and authorised by the manufacturer in official sales literature and to which a manufacturer's warranty applies and which may have been fitted at an authorised dealership.
 - iii. The option shall have been proven to have been supplied by the manufacturer in more than the minimum production quantities for eligibility, in vehicles registered for road use.

- 4.7.3 In addition to the above, an option shall comply with ALL of the following requirements:
- i. Each option must comply with the regulations of the relevant road authority and the ADR compliant.
 - ii. Each option included on the vehicle must have been available during the model run of the vehicle.
 - iii. Where a recognition document has been issued for a particular vehicle, each option shall be specified in the recognition document.
 - iv. Each option must be permitted under the provisions outlined under each specification.
- 4.7.4 Options will only be permitted in the following areas when in compliance with the requirements set out under each category specification or where these Technical Regulations already provide freedom of modification:
- Engine Radiator and oil cooler.
 - Gearbox Case, gear set and selector. (Classic only)
 - Suspension bushes, Sway bars, Springs and Shock Absorbers.
 - Power Steering, Cooler.
 - Wheels – Wheel size and offset.
 - Interior – Additional gauges, gauge pods, consoles.
- 4.7.5 Aerodynamic Devices
- Each aerodynamic ‘add on’ device may be considered as an option, provided it complies with the following requirements.
- The rear aerodynamic device of a vehicle shall not exceed the dimensions of the original aerodynamic devices supplied by vehicle manufacturer.
- The material of construction for aerodynamic devices is free.
- 4.7.6 Other Body Options
- ‘Side skirts’ fitted between the front and rear wheel arch. The side profile shall be no more than 100mm high, and which are entirely contained within the frontal projection of the standard bodywork without its rear-view mirrors.
- 4.8 Engine Changes / Oil Leaks / Damaged Engine**
- 4.8.1 Engine Changes
- Engines may be changed during the Event, upon application to the Clerk of the Course and his/her acceptance of the change. The replacement engine must have the same type of block and cylinder head as the original engine and must comply with the requirements of the class within which it is entered.
- 4.8.2 Oil leaks/Spillage
- If any official requests repairs to a vehicle to prevent or eliminate oil leaks or spillage, such repairs must be carried out to the satisfaction of the Chief Scrutineer. If a vehicle continues to leak or spill oil the vehicle may be refused permission to continue in the Event, or such other position as is determined by the Clerk of Course. Any Stage official is empowered to prevent, under the above circumstances, a vehicle from starting a stage until a decision is made by the Clerk of Course.
- If an engine is fitted with any crankcase breather/s discharging to atmosphere, there must be fitted to each breather an oil-trap “catch can” or container (which must be visually empty at the start of each stage).
- The capacity of the catch can shall be a minimum of two litres (for NA engines of under 2000cc) or three litres (for turbo charged engines or engines of over 2000cc).
- On engines with a closed or recirculating crankcase ventilation system, provided that there is no venting to the atmosphere (i.e. the engine is totally closed) a catch can is not required to be fitted.
- 4.8.3 Damaged engine resulting in an Oil Leak
- If a competitor damages an engine while driving (including in a transit stage) which results in an oil leak they must immediately pull off the driving line and stop as soon as safe to do so.
- Caution triangles are then to be placed in a visible location nominally 50m & 10m before the start oil spillage. The crew are then to spread the oil absorbent material carried where the bulk of the leaked oil has been deposited on the road. Crews are to do this in a safe manner with one crew member warning the other crew member of oncoming cars (and if on a competitive stage, at the same time showing the OK board to oncoming cars).
- 4.9 Wheels & Tyres**
- 4.9.1 Wheels

Wheels may be replaced. Wheel diameters may be varied by up to a maximum of 2" and the width by up to 2" from the standard (not optional) dimensions.

Wheels may be manufactured only from aluminium alloy, steel or magnesium.

Notwithstanding, the maximum wheel diameter is 17" unless larger diameter is specified by the manufacturer as standard fitment, in which case the manufacturer's diameter is the maximum permitted. The maximum wheel width is 9" unless larger width is specified by the manufacturer as standard fitment, in which case the manufacturer's width is the maximum permitted.

The fitment of tyres to rims which are either too narrow or too wide for the tyre in question shall result in exclusion from the Event.

Except where varied by the following specific regulations, the wheel track shall conform to the following requirement:

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.

4.9.2 Tyres

The organisers reserve the right to prohibit the use of specific tyres at any time up to the start of the Event should such tyres not meet the spirit of these Regulations. Studded or slick tyres are prohibited. Tyres must have tread that is legal as defined by Australian Design Rules (ADR). At start of each day, and upon subsequent inspection, Event officials may order that a tyre be changed and re-presented for checking before the vehicle can continue.

Tyres must be marked legal for road use as indicated by the presence of either DOT (Department of Transport) marking or be a competition tyre approved by AASA. AASA will be final arbiter on tyres. The use of tyre warmers or any artificial method of pre-warming tyres is not permitted.

Tread wear indicators as provided by the tyre manufacturer shall be the definitive indicator of tread depth. All tyres must have a minimum tread depth of 1.5mm at any point on the tread normally in contact with the road other than at tread depth indicators.

It is the responsibility of the competitor to ensure that tyres remain in conformance with any civil regulations during touring stages.

In all cases, the correctly inflated tyre shall not foul the body, suspension or steering at any point in full movement of these components.

Tyre Aspect Ratio's

The minimum tyre aspect ratio percentages are:

Vehicles built up to	1946	65
	1947 to 1971	45
	post 1971	30

Lower aspect ratios are not permitted unless specified by the manufacturer as standard fitment, in which case that profile is the minimum permitted. Tyres that are not marked with a percentage aspect ratio by the manufacturer during the manufacturing process are not permitted, except where the tyre has an aspect ratio greater than 70.

4.9.3 Rim Profile/Inner Tubes

Any tyre fitted to a rim without safety profiles may only be used in classic category and must be fitted with an inner tube.

4.9.4 Tyre fitment

Tyres shall be fitted in accordance with the tyre manufacturer's published specification or the Tyre and Rim Association Manual.

4.9.5 Valve Caps

Each tyre valve shall be fitted with a cap.

4.9.6 Wheel Spacers

A maximum of one metallic spacer may be used behind each wheel.

4.10 Fasteners

Throughout the vehicle, any nut, bolt, clamp or screw may be replaced by any other nut, any other bolt, clamp or any other screw and have any kind of locking device (washer, lock nut etc.) or clamp.

4.11 Addition of Material and Parts

Any addition of material or parts are forbidden unless it is specified or required by an article in these Regulations.
Restoration of chassis geometry following accidental damage during the Event, is permissible by the addition of the materials necessary to affect the repairs (weld metal etc.) parts which damaged maybe repaired by the addition or attaching of materials.

Restoration of suspension components following accidental damage during the Event, is permissible by the addition of the materials necessary to affect the repairs (weld metal etc.). Parts which are worn or damaged are not to be reused unless first adequately repaired.

After any of the above repairs the car must be re-presented to scrutineering before continuing in the Event.

4.12 Chassis, Sub-Frame, Monocoque and Interior

General modifications to the Chassis, Sub-Frame, Monocoque and interior trim to facilitate the fitment of mandatory equipment and for the fitment of any other items permitted under specified freedoms within these Regulations, are permitted.

4.13 Rear Vision Mirror

At least two rear vision mirrors, with a reflecting surface of at least 50 square centimetres (8 centimetres diameter if round), must be fitted to the vehicle and must provide view to the rear of the vehicle in order to permit the driver to become aware of any overtaking vehicle.

4.14 Battery

The battery may be relocated to any position. Regardless of the battery location it must be mounted securely to prevent movement in the event of an accident. If mounted within the cabin of the vehicle, it must be behind the front seats and mounted within an acid-proof sealed container with a vent outside the vehicle or be of dry cell construction (dry cell construction batteries are preferable).

All positive battery terminals shall be insulated (i.e., covered with plastic or rubber boots).

A blue triangle of sides 150mm indicating the location of the battery must be placed on the vehicle adjacent to the battery location.

All vehicles should be equipped with a battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine. The battery switch should be located as close to practicable to the battery, the switch should be capable of being operated either directly or by some means of remote control by the driver when seated in the driver's seat. There should also be a second means of operating the battery isolation switch on the outside of the vehicle. This "external battery isolation switch control" should be in the vicinity of the A pillar (for vehicles without an A pillar the switch shall be in a comparable position). This external control must be clearly marked by a symbol showing a red spark in a blue triangle.

4.15 Fuel & Fuel Tanks

A maximum of 98RON unleaded fuel is permitted to be used during the Event.

All commercially available fuels including diesel fuel that are legal for road use are permitted.

Classic category entrants may apply to the organisers in writing prior to the Event for an exemption to fuel specification rule.

Penalties will apply for exceeding the octane rating.

First offence: 10-minute penalty. Second offence: Exclusion.

The carriage of fuel in containers that are not part of the piped vehicle fuel system is prohibited, regardless of the vehicle construction.

All fuel lines passing through the cockpit area must be metal or protected (e.g. covered by a metal shield or enclosed in a metal tube) and must not have any joins inside the cabin.

Fuel tanks are free but must be of safe design. Race Fuel Cells / FT3 standard fuel tanks are recommended. If an FT3 fuel tank is being utilised, the minimum amount of local modification of the bodywork to fit the fuel tank is permitted. An auxiliary fuel pump, to enable transfer of fuel to a swirl pot if required, is permitted.

4.16 Extensible Straps

Extensible straps (e.g. 'Octopus' straps) shall not be used to hold down objects of more than 100g mass inside the vehicle.

4.17 Cameras

Cameras and video recorders may be fitted to vehicles.

The mounting of any on-board camera shall be to AASA Regulations and approved by the Chief Scrutineer.

No camera may be fitted in such a way that it relies solely on a suction cup mounting.

Cameras may only be fitted to the structure of the vehicle, mount to crew member in any way is prohibited.

4.18 SRS Air Bags

Competition vehicles fitted with SRS (Supplementary Restraint Systems – airbags) must have these systems disconnected, deactivated or removed where any equipment is mounted in front of the airbag, and must carry a sticker advising of this deactivation.

4.19 Anti-lock Brakes

Vehicles fitted with ABS (anti-lock brake systems) may have these systems disconnected or deactivated.

4.20 Electronic Driver Aids

Electronic Driver aids and active system may be disconnected or deactivated.

4.21 Steering Wheel

The steering wheel may be replaced by another, providing that the replacement is:

It is not made of wood.

Complies with all relevant civil regulations.

4.22 Pedals

Removable 'pads' on brake, clutch and accelerator pedals are free.

4.23 Navigation Instruments

Aftermarket Electronic or Mechanically driven navigation instruments may be fitted.

5 All Vehicles – Compulsory Equipment

5.1 Safety Cage

All relevant vehicles must be fitted with a safety cage in compliance with AASA Safety Cage Regulations Class 3 and any other requirements for tarmac rally.

A safety cage demonstrated as meeting the requirements of other internationally recognised motorsport sanctioning bodies may be accepted subject to prior written approval by AASA Refer <https://aasa.com.au/regulations/appendices/>

Additionally, any part of the safety cage structure where the helmet or body (excluding limbs) of either of the crew could come into contact with during an accident, and any safety cage bar that is directly above or to the side of the helmet of an occupant, shall be fitted in that area with protective padding, which complies with either FIA standard 8857-2001, SFI specification 45.1. or SFI specification 45.2.

Tarmac 130 & Time Speed Distance entrants see category requirements for category minimum safety cage requirements.

5.2 Seats

Vehicles must be equipped with minimum 2 seats (one for each occupant). The material from which seats are manufactured is free, including carbon fibre and Kevlar provided each seat is compliant with one or more of the following:

- The original seat as supplied by the OEM for the vehicle; or
- A seat licensed by the SFI Foundation to the SFI 39.2 standard; or
- A seat in compliance with the requirements of an internationally recognised motorsport sanctioning body; or
- A seat that has no provision for backrest adjustment, incorporates a head restraint and is supplied by a manufacturer recognised by the AASA.

Fixed back winged seats to an internationally recognised standard are highly recommended

****PLEASE NOTE – AS OF 1ST JANUARY 2025, WINGED SEATS WILL BE MANDATORY IN ALL COMPETITION VEHICLES****

For further information refer AASA Standing Regulations for Tarmac Rally.

Seats shall be mounted in accordance with the seat manufacturer's instructions. This shall include the use of each required mounting point and associated components supplied. Seats may be mounted, either separately or in combination, to

- the unmodified OEM seat mounting points on the vehicle's structure; or
- the safety cage; or
- additional mounting points, each incorporating a steel reinforcement at least 3mm in thickness and in contact with surrounding vehicle structure over an area not less than 3750mm². The fitment of

additional seat mounting points to automobiles constructed of a material other than steel will be authorised by the AASA on an individual basis and recorded in the AASA Vehicle Passport.

For further information refer AASA Standing Regulations for Tarmac Rally.

The front seats may be moved rearwards, but not beyond the vertical plane defined by the front edge of the original rear seat (where originally fitted). The limit relating to the front seat is formed by the seatback at its rearmost point where the seat does not incorporate the headrest, and if the headrest is incorporated into the seat, by the rearmost point of the driver's shoulders.

5.3 Seatbelts/Harnesses

All competition vehicles (excluding TSD) shall be fitted with safety harnesses for each crew member that comply with the requirements listed below.

Harnesses are recommended but not mandatory for TSD competition vehicles.

The use of 3 inch wide five/six-point belts as the standard is recommended.

****PLEASE NOTE – AS OF 1ST JANUARY 2025, 6 POINT HARNESSSES WILL BE MANDATORY IN ALL COMPETITION VEHICLES****

Safety harnesses shall be marked as having compliance to one or more of the following standards:

- ECE 16 (European Standard)
- SFI 16.1 (SFI Standard)
- AS 2586 (Australian Standard)

FIA 8853/98 or 8853-2016

Additionally, harnesses meeting the requirements of internationally recognised motorsport sanctioning bodies will be deemed acceptable.

Any harness showing visible signs of wear, damage or degradation will be rejected.

The age limit on harnesses is 31st December of the marked expiry date year + 5 years. (harnesses without an expiry date are not acceptable).

The Safety harness may be mounted to either the OEM harness mounting points, to the safety cage, or to additional mounting points on the vehicle structure. Additional mounting points shall incorporate a steel reinforcement at least 3mm in thickness and in contact with surrounding vehicle structure over an area not less than 3750mm².

The fitment of harness mounting points to automobiles constructed of a material other than steel will be authorised by the AASA on an individual basis and recorded in the AASA Vehicle Passport

Refer <https://aasa.com.au/regulations/appendices/> Appendix 5-Occupant Restraint Systems

Harnesses must be worn at all times when the vehicle is moving.

Under no circumstances may a safety harness mounting bolt be used to also affix a ROPS to the bodyshell.

Harnesses or seat belts of cars involved in any accident must be inspected by a scrutineer. If appropriate, the Vehicle Passport shall be endorsed with a requirement that the belts be replaced. The scrutineer at the car's next meeting must satisfy himself that the replacement has been made.

An approved (FIA, SFI or similar) FHR frontal head and neck restraint system (HANS device) is compulsory for both Driver and co-driver of all competition vehicles.

Refer <https://aasa.com.au/regulations/appendices/> Appendix 4

Tarmac 130 & TSD entrants see category requirements for category minimum requirements

5.4 Helmets and Apparel

Drivers, Co-Drivers and Navigators must wear helmets and apparel that comply with AASA Regulations. Refer <https://aasa.com.au/regulations/appendices/> Item 4 – Apparel Requirements. Drivers and Co-Drivers must wear an approved (FIA, SFI or similar) FHR frontal head and neck restraint system (HANS device).

Tarmac 130 & TSD entrants see category requirements for category minimum requirements.

5.5 Headlamps & Lighting

Effective headlamps must be fitted to the vehicle.

Vehicles must have lighting and signalling equipment that complies with civil regulations applicable to the State or Territory where the Event takes place.

Vehicles with standard retractable headlamps may be fitted with two alternative auxiliary lights, which must be fitted securely and to a standard approved by the scrutineer. When illuminated, these lights must be visible to at least the same extent as the vehicle's standard headlamps on low beam in daylight.

5.6 Throttle Return Spring

On each throttle, whether butterfly, slide or other type, there must be fitted a return mechanism which, in the event of the throttle linkage becoming detached, will in all cases return each throttle to the closed position. This requirement does not apply to electronic drive by wire throttle body mechanisms.

5.7 Wiring, Brake/Fuel & Oil Lines

Wiring, brake, fuel or oil lines and brake cables were installed under the vehicle or in an area that may be subject to damage, must be protected against damage or deterioration (stones, corrosion, mechanical breakages, etc). If the OEM designed system is retained, no additional protection is deemed necessary.

5.8 Windscreen & Glass

Vehicles must be fitted with a laminated glass windscreen unless fitted otherwise with a non-glass windscreen by the OEM.

Other glass in all windows except for the windscreen may be replaced by any transparent material of adequate strength (e.g. polycarbonate), which must be fixed and operate in the same manner as the glass replaced. Such material shall be resistant to shatter and not less than 3mm thickness. Safety straps or clips on front and rear windows are permitted.

Tinted windows are permitted on the side and rear windows only in accordance with State Vehicle Regulations.

5.9 Oil Absorbent Material

Competitors are required to carry in the vehicle a minimum 1kg bag of oil absorbent material, e.g. "Kitty Litter"

5.10 First Aid Kits

All vehicles are required to carry on board a first aid kit which can be easily accessed, reasonably protected from dust, water or other contaminants and secured so as not to be a potential hazard in the event of a collision. The contents of the first aid kit must be in date, usable and sterile (where applicable). Competitors are responsible for ensuring the contents of the first aid kit are maintained and must make the kit available for inspection by Event officials as required.

5.11 OK/SOS Signs

Each vehicle is required to carry an OK/SOS sign on board, minimum A3 size, at all times.

5.12 Reflective Warning Triangles

At least two reflective 'safety triangles', with sides at least 300mm in length, must be carried in the vehicle at all times while competing. Triangles should be carried within the cabin of the vehicle, be secured so as not to be a potential hazard in the event of a collision, be in an accessible position and able to be removed without the use of tools (i.e. taped not cable tied). If a vehicle has stopped on a competitive stage for any reason (including a minor breakdown). One triangle must be placed approximately 100m and the second triangle approximately 50m prior to the vehicle. Failure to place triangles as described may result in a penalty being applied by the Clerk of the Course.

5.13 Fire Extinguishers

Each vehicle is required to carry one or two hand-held extinguishers, which must meet the following criteria:

Be in compliance with Australian Standard AS1841, suitable for use in motor vehicles and having a combined extinguishant capacity of at least 2 Kilograms. Where a single extinguisher is fitted it shall comply with either AS1841.4 (Foam) or AS1841.5 (Dry Chemical). Additional extinguishers may include those to AS1841.2 (Stored pressure-water).

Extinguishers shall be mounted so as to remain restrained when subject to a force of 25 times the gross weight of the container in any direction and be removable without the use of tools.

Due to the widely varying structure of competition automobiles, advice is not provided as to the location of each fire extinguisher but at least one extinguisher must be within the cockpit. Consideration should be given to allowing access to each extinguisher by the crew, or other parties outside of the vehicle. Access to extinguishers in the luggage compartment must not require the use of keys or internally located release mechanisms.

Each extinguisher must be equipped with a gauge or means of checking the pressure of its contents.

The following information must be visible on each extinguisher:

Capacity, Type of extinguishant, Date on which the extinguisher was manufactured (stamped or engraved into the cylinder by the manufacturer).

Fire extinguishers must be maintained according to the following prescriptions:

An inspection, at least once every six months, or otherwise prior to competition. This shall involve visually checking the both the extinguisher and its mountings for condition and damage, checking the pressure of the contents, and shaking the container to check for settling of the extinguishant.

The mandatory requirement states extinguisher/s shall be replaced 3 years after date of manufacture on the cylinder, or alternatively maintained in compliance with AS1851 (severe environment provisions). In this case the fire extinguisher may be emptied, pressure tested, and refilled to the requirements of AS1851 by a recognised fire service supplier. Note: if AS1851 servicing is undertaken, it is the competitor's responsibility to provide written evidence by way of certificates and invoices (with the extinguishers identified) that the required three yearly services to AS1851 have been undertaken (fire extinguisher "tags" are not considered satisfactory evidence of servicing).

A non-removable, plumbed fire suppression system is recommended and may be installed as a supplement to the above requirements.

****PLEASE NOTE – AS OF 1ST JANUARY 2025, A PLUMMED FIRE SUPPRESSION SYSTEM WILL BE MANDATORY IN ALL COMPETITION VEHICLES APART FROM TSD****

5.14 Bonnet Restraints

Each vehicle must have at least two independent fastening systems, of adequate strength and limited extensibility, which simultaneously hold the bonnet closed.

5.15 Towing Eyes

To facilitate the ease of recovery of a vehicle, towing eyes shall be fitted complying with the following: Are fitted forward of the front axle and rearwards of the rear axle:

Are clearly visible from front or rear of the car in yellow, orange or red, (the chosen colour being in contrast to the colour of the body work immediately adjacent the towing point) and indicated by 'Tow' signs.

Each towing point shall be capable of permitting the insertion of a circular pin of diameter 40mm and be of sufficient strength to permit the vehicle to be towed with its wheels locked on an asphalt surface. Tow hooks provided by the manufacturer of the car as a standard fitment may be utilised, provided they comply with the above.

5.16 Carriage of spare wheel & tyre

A single spare wheel & tyre may be carried either in the boot space, inside the driving compartment, on the boot lid or any manufacturer's original location on the following conditions.

- i. That it is firmly secured with a retaining device of adequate strength to avoid excessive movement in the event of an accident.
- ii. That it does not protrude into the space reserved for the driver and/or co-driver. (iii) The rearward vision must not be obstructed.
- iii. The fitting devices must satisfy the Vehicle Safety Checkers who shall be considered Judges of Fact for all matters relating to wheels and tyres.

5.17 RallySafe

A RallySafe device is compulsory for all vehicles and will be provided by the organisers at documentation.

RallySafe antennas, wiring and mountings (fitting kits) are available from

<https://shop.statusas.com/shop/category/rallysafe/> and must be installed in all vehicles prior to the Event to allow for fitment of the RallySafe device prior to vehicle scrutineering.

For further information see <https://rallysafe.com.au/competitors-tm/>

5.18 Compulsory Requirements Interpretation

The Organisers, Rally Officials and Scrutineers shall be considered Judges of Fact in relation to all compulsory requirements.

Whilst every attempt has been made to ensure these Regulations reflect the provisions that will be in place at the time of the Event, the timing of the Event and publication of the Supplementary Regulations can make that difficult. Any changes made by AASA to the relevant provisions of the AASA Regulations shall supersede these requirements and in addition, the organisers reserve the right to amend the safety equipment to reflect such requirements.

6 Category Requirements

6.1 Category List

Category	Applicable Years
TSD	1900 - current
Competition (200), Tarmac 165 & Tarmac 130	
Early Classic	Pre 1972
Classic	1972 - 1985
Classic Modified	1900 - 1985
Early Modern 2WD	1986 - 2007
Early Modern 4WD	1986 - 2007
Modern 2WD	2008 - current
Modern 4WD	2008 - current

7 Classic Category (Early Classic / Classic / Classic Modified)

7.1 Classic Categories

There are 3 Classic categories, 2 based on age. (Early Classic (pre-1972) & Classic (1972-1985)) and a third encompassing both ages with a higher allowed modification level

- 7.1.1 Early Classic, Open to vehicles manufactured prior to 31st December 1971 or vehicles of a model/specification which matches that of a vehicle manufactured prior to 31st December 1971
See "run on" 4.2.4
- 7.1.2 Classic, open to vehicles manufactured between 1st January 1972 & 31st December 1985 or vehicle to a model/specification which matches that of a vehicle manufactured prior to the 31st December 1985.
See "run on" 4.2.4
- 7.1.3 Classic Modified, Open to vehicles manufactured prior to 31st December 1985 or vehicle to a model/specification which matches that of a vehicle manufactured prior to the 31st December 1985. See "run on" 4.2.4 with a modification level as described in these regulations.

The organisers reserve the right to combine Classic Categories if there are insufficient entries in any given Category

7.2 Technical

All vehicles entering Classic category must comply with the Classic category requirements below:

- 7.2.1 Application:
The Technical Regulations are based on the principle that modifications to the vehicle or its components, other than those specified below, are forbidden.
- 7.2.2 Minimum Weight:
The minimum weight must be in accordance with the organisers imposed minimum or manufacturer's original specifications, homologation papers, workshop manuals, or sales specifications (in that order of priority). This weight will be deemed to include all liquid tanks to be at the normal operating levels as foreseen by the vehicle manufacturer, except the fuel tank which shall be empty.
For the purposes of confirming weight during the competition, the organisers may refer to the minimum competition weight of the vehicle.
If the organisers intend to use competition weight as the reference, this intention will be stated in the Supplementary Regulations for the Event.
The minimum competition weight shall be:
Early Classic and Classic: The minimum weight shall be not more than 5 per cent below the manufacturer's original specifications.
Classic Modified: The minimum weight shall be not more than 10 per cent below the manufacturer's original specifications.

7.3 Modifications Permitted

Vehicles can be modified. The modification level of such vehicles is controlled to a level deemed compatible within the parameters set out in these Regulations.

Vehicles homologated prior to 31 December 1985 (including Errata) can be presented in their entirety.

- 7.3.1 Engine:
Early Classic & Classic:
Other than turbo/supercharged vehicles where replacement with a different type is not permitted, the cylinder block shall be standard, or a replacement cylinder block is permitted subject to the following requirements:
The replacement must be a production cylinder block from the same manufacturer and of the same configuration, with more than 2500 units sold for road use, which upon application may be approved for tarmac rallies by the organisers as a suitable replacement engine; or
Be a documented recognised replacement or substitute for use in this period with approval of the organisers, in which case the approved item shall be utilised in its entirety.
The guidelines for approval of replacement cylinder blocks are that the block shall not increase the overall potential performance of the car:
- be produced prior to 01 January 1986,
 - be produced by the same manufacturer as the original, have the same number of cylinders,

- iii. be made of the same material as original, (i.e., be iron block or alloy block)
- iv. and be able to be located in the same general location as the original.

No body modification is permitted to allow the fitment of the replacement cylinder block.

Classic Modified:

All vehicles (including Turbo/supercharged) may replace engine with a different type provided it meets the following criteria.

- i. Be produced prior to 01 January 1999,
- ii. Be produced by the same manufacturer (including associated companies) as the original,
- iii. Have the same number of cylinders,
- iv. Be able to be located in the same general location as the original.
- v. No body modification is permitted to allow the fitment of the replacement cylinder block. vi. Ancillary pulleys and driving belts are free.
- vi. For GM LS1 & LS3 engines the following conditions apply
 - a. Must retain original GM LS Bore & Stroke
 - b. Must retail original GM LS Cylinder heads, including valves and valve actuation. Valve springs are free.
 - c. Camshaft timing and lift is free.
 - d. Must retail original GM LS crankshaft.
 - e. It is permitted to replace pistons provided the replacement piston does not alter the performance of the engine and must not be coated in any material unless the original piston is coated in a material.
 - f. It is permitted to replace each connecting rod provided it is of a solid, ferrous and magnetic steel construction and be of the same critical dimensions as the standard connecting rod and equal to or greater than the weight of the original connecting rod. (Note: connecting rod weight is inclusive of the small end bush, big end bearings and each required fastener.
 - g. Must be fitted with a single carburetor which may have multiple throttle plates,
 - h. Inlet manifold and air filter are free.
 - i. All other Classic regulations remain applicable.

7.3.2 Engine Capacity: Early Classic & Classic:

A maximum increase in capacity of 10% above the original capacity of the engine is permitted. The automobile will be classified in accordance with the actual capacity of the automobile, inclusive of any supercharging and rotary equivalence factors.

Classic Modified:

Capacity: The maximum original capacity shall not exceed 6000cc, unless the original was larger capacity. If the original capacity was over 6000cc, boring of the cylinders up to 1.0mm above the original diameter is permitted.

For the purpose of engine capacity increase, other than those over 6000cc, the capacity of the original automobile may be increased by a maximum of 17% increase over the original capacity of the automobile is permitted but, in any case, must not exceed a maximum modified capacity of 6200cc.

The automobile will be classified according to its actual capacity inclusive of any bore or stroke increases (or decreases) and any relevant supercharging and rotary equivalence factors.

In the event engine capacity is required for classing or awards grouping, the vehicle will be classified according to its actual capacity inclusive of any bore or stroke increases (or decreases) and any relevant supercharging and rotary equivalence factors.

Rotary-engine vehicles are permitted to be fitted with engines with one size larger housing available from the original manufacturer, (e.g. for Mazda engines, from 10A to 12A, or from 12A to 13B) over what was standard in the vehicle. The same number of rotors as standard shall be retained.

7.3.3 Crankshaft

The crankshaft and connecting rods are free.

7.3.4 Pistons & Rings

Pistons and piston rings are free.

7.3.5 Cylinder Heads

Cylinder heads are free.

Valve size is free.

7.3.6 Camshafts

Camshafts are free, providing the original number and location are retained.

7.3.7 Rotary Engines

Modifications to rotary engines rotors, housings and end plates may be affected only by the addition of metal to the housing to run peripheral port, so as to attach an intake manifold.

Rotary engines may be modified by the utilization of the porting technique/s extend, bridge and peripheral. The rotors and seals of rotary engines are free.

7.3.8 Ignition

The ignition system is free.

7.3.9 Turbos & Superchargers

Where fitted as original equipment, the turbo and waste gate or supercharger may remain standard. Or may be replaced by another from the same period provided the turbo mounting flange is fitted in the same position as the original part and the air inlet is increased by no more than 10% over standard size.

Wastegate must retain the same configuration as original, (IE. Internal or external wastegate) and must discharge into exhaust system) Turbo boost level is free, provided that it remains fixed.

The remainder of the induction system is free including intercoolers, but these must be fitted without any modifications to the external bodywork.

Should period parts not be available alternative parts may be permitted subject to approval by the event organizers at their absolute discretion.

Any request for approval must be presented to the event organizers with full specifications of the original part and the replacement part.

7.3.10 Induction

Early Classic & Classic:

For naturally aspirated vehicles the complete induction system is free save that fuel injection shall not replace carburettors unless it was an option on another model of the same family of vehicle from the same period. Where fuel injection replaces carburettors, all replacement items must be from the same period as the original items replaced.

Additional air ducting is permitted.

The radiator support panel may be modified to allow fitment of induction system ducting but external body panels may not be modified.

Classic Modified:

For naturally aspirated vehicles the complete induction system is free

Fuel injection may replace carburettors.

Additional air ducting is permitted.

The radiator support panel may be modified to allow fitment of induction system ducting but external body panels may not be modified.

7.3.11 Fuel System

Fuel pump/s, fuel pressure regulator, fuel rail/s, fuel filter, fuel line diameter and hoses are free.

7.3.12 Exhaust

The exhaust system is free.

Vehicles must be fitted with an effective exhaust muffler so that the maximum noise emitted is no more than 95dB(A) when measured 30m from the edge of the tarmac at any point on a competitive stage determined by the Clerk of the Course.

7.3.13 Engine Cooling System

The engine liquid cooling systems are free. However, save for the radiator support panel which may be modified to accommodate the liquid cooling systems, the bodywork must not be modified to allow fitment, nor are additional air scoops permitted.

Air cooled engine cooling systems are free.

7.3.14 Clutch

Clutches and flywheels are free, and carbon components are permitted in the clutch assembly. Clutch activation system cable or hydraulic is free.

7.3.15 Sump

The sump is free and/or dry sump oil systems are permitted. Oil filters are free.

7.3.16 Engine Mounts

Engine mounts are free.

7.3.17 Internal Engine Modifications

All other internal engine modifications, other than those specifically addressed and/or limited in this Article, are free.

7.3.18 Gearbox/Transmission/Final Drive

Early Classic & Classic

Gearboxes or transaxles may be replaced by another of free design, provided they have no more forward gears than what was originally supplied on that model and one (1) reverse gear.

Automatic transmissions provided optionally by the manufacturer for that model are permitted in lieu of a manual gearbox and vice versa.

Transmission tunnel modifications necessary to allow the fitment of a transmission are permitted. It is permitted to modify the body for revised gearbox mounts and for the entry of the gear lever mechanism into the cabin.

The bell housing is free.

Column gearshift mechanisms may be transferred to floor shift mechanisms. The original method of actuating the gear change, (e.g. 'H' pattern, pre-selector) must be retained. Shortened or 'quick' shifters are permitted. Sequential change mechanisms are not permitted unless originally fitted.

The configuration of the rear axle or final drive assembly must be as originally fitted to the vehicle (e.g. a live rear axle must remain in a vehicle so equipped as original), but otherwise the rear axle or final drive assembly is free.

Full floating hubs are permitted.

Limited slip differentials or other differentials which act to limit the differential action are permitted. Only mechanical differentials are permitted. 'Mechanical limited slip differential' means any system which works purely mechanically, i.e. without the use of hydraulic or electric actuators.

All transmission drive shafts are free.

Gearbox and differential oil coolers are permitted.

Classic Modified

Gearboxes or transaxles may be replaced by another of free design, provided replacement has no more the six (6) forward gears and has one (1) reverse gear that is located in the same location as gearbox originally supplied in that model.

Automatic transmissions provided optionally by the manufacturer for that model are permitted in lieu of a manual gearbox and vice versa.

Transmission tunnel modifications necessary to allow the fitment of a transmission are permitted. It is permitted to modify the body for revised gearbox mounts and for the entry of the gear lever mechanism into the cabin.

The bell housing is free.

Gearshift location is free but must be mechanical.

Shortened or 'quick' shifters are permitted.

Sequential change mechanisms are permitted but must be activated directly by mechanical lever. (electronic or pneumatic activation is not permitted)

The configuration of the rear axle or final drive assembly must be as originally fitted to the vehicle (e.g. a live rear axle must remain in a vehicle so equipped as original), but otherwise the rear axle or final drive assembly is free.

Full floating hubs are permitted.

Limited slip differentials or other differentials which act to limit the differential action are permitted. Only mechanical differentials are permitted. 'Mechanical limited slip differential' means any system which works purely mechanically, i.e. without the use of hydraulic or electric actuators.

All transmission drive shafts are free.

Gearbox and differential oil coolers are permitted.

7.3.19 Chassis/Sub-Frame/Monocoque

The chassis, and any monocoque structure may be prepared to Group N specification (AASA Regulations) Seam welding is permitted. Further strengthening is permitted provided the added material follows the shape of the original component, the chassis and body must be otherwise standard except for any modifications to the body shell in the immediate area which may be necessary to permit the fitment of a

replacement seat or specified safety equipment. No part of the modified bodywork may extend any lower than the surrounding bodywork.

Suspensions sub-frames are free, providing they are attached exclusively at the original mounting points.

7.3.20 Suspension

Early Classic & Classic

The suspension type/configuration as fitted front and rear must remain original (e.g. McPherson strut, dual wishbone, live rear axle, de Dion rear axle etc.), but may be modified only in accordance with the following regulations:

All sprung and semi-sprung suspension components may be replaced, and/or modified.

The material used in suspension bushes is free. Rose joints, spherical bearings, or Heim joints may replace elastomeric bushings.

Springs, torsion bars, McPherson struts and dampers and their mountings are free.

Anti-roll (sway) bars, mountings and links are free, rear suspension is free, subject to the following: For live rear axles:

The body shell may be modified to allow the fitment of brackets to mount locating arms. To that end, the minimum required amount of metal may be removed from the standard body shell to allow the construction of a forward mount for the suspension arms inside the cockpit space.

It is permitted to make the appropriate modifications (such as removal of metal and welding in replacement panels of the necessary shape) in order to construct a "turret" in the rear wheel arch, inner guard and/or boot area, the purpose of which is to accommodate and mount the top of a damper or combined spring/damper unit.

The cockpit space must be effectively sealed from the outside of the vehicle in the area where such modifications are made.

Suspension pivot points are free.

Adjustable strut tops which may have the effect of altering the camber and/or caster are permitted (where applicable, i.e. on McPherson strut equipped vehicles). Modifications are permitted to the bodywork at the point where the strut top is mounted to allow clearance for the strut top.

The addition of braces for strut/damper towers is permitted.

Classic Modified

The suspension type/configuration as fitted front and rear must remain original (e.g. McPherson strut, dual wishbone, live rear axle, de Dion rear axle etc.), but may be modified only in accordance with the following regulations:

McPherson strut may replace double wishbone.

All sprung and semi-sprung suspension components may be replaced, and/or modified

The material used in suspension bushes is free. Rose joints, spherical bearings, or Heim joints may replace elastomeric bushings.

Springs, torsion bars, McPherson struts and dampers and their mountings are free.

Anti-roll (sway) bars, mountings and links are free, rear suspension is free, subject to the following: For live rear axles:

The body shell may be modified to allow the fitment of brackets to mount locating arms. To that end, the minimum required amount of metal may be removed from the standard body shell to allow the construction of a forward mount for the suspension arms inside the cockpit space.

It is permitted to make the appropriate modifications (such as removal of metal and welding in replacement panels of the necessary shape) in order to construct a "turret" in the rear wheel arch, inner guard and/or boot area, the purpose of which is to accommodate and mount the top of a damper or combined spring/damper unit.

The cockpit space must be effectively sealed from the outside of the vehicle in the area where such modifications are made.

Suspension pivot points are free.

Adjustable strut tops which may have the effect of altering the camber and/or caster are permitted (where applicable, i.e. on McPherson strut equipped vehicles). Modifications are permitted to the bodywork at the point where the strut top is mounted to allow clearance for the strut top.

The addition of braces for strut/damper towers is permitted.

7.3.21 Steering

Steering is free.

All changes to the original steering layout/system must be accompanied by a certification document signed by an Australian Road Authorities' accredited Engineer. Collapsible steering columns are highly recommended.

7.3.22 Brakes

The brakes are free providing they do not incorporate ceramic materials. Modifications to fit pedal boxes and/or dual master cylinders are permitted.

Cooling ducts may be added but these must remain within the perimeter of the bodywork when viewed from above.

Handbrake along with method of activation of handbrake is free.

7.3.23 Throttle Cables

Throttle cables and linkages are free.

7.3.24 Coachwork/Bodywork

Bodywork and body fittings in their entirety must be as supplied by the manufacturer, including materials, save that:

Front mudguards, bonnet, nose panel, boot lid or rear hatch of alternative material are permitted, provided they are of the same external shape as the original panel.

The use of any under trays, fairings, scoops, louvres, air intakes or exits is not permitted (except as provided for in 0 above) unless supplied by the vehicle manufacturer as standard equipment in original production or the competitor can prove their legitimate use on the particular make and model in national or international level rally & circuit racing competition during the period in which the vehicle was manufactured.

Notwithstanding the above, the addition of period style bonnet louvres and engine cooling ducts within the bonnet and/or front valance panel is permitted.

Easily demountable windscreens may be replaced by another screen of a period type.

The addition of front and rear aerodynamic aids, side skirts and mudguard/wheel arch flares is permitted provided these are identical with the components originally fitted to a production model of the same body shape and the items are fitted in accordance with the total original package configuration.

Where a vehicle does not have access to such components, wheel arch flares may be added, provided that the increase in the total width of the bodywork is less than 100mm and that the flare may not exceed the radius of the original wheel arch opening by more than 200mm. In this case, the maximum track increase allowed is 100mm and for the purpose of wheel and tyre clearance, it is permitted to remove up to 75mm of original bodywork measured radially from the edge of the wheel arch outwards. Any cavity exposed in a door or wheel arch through the removal of metal must be covered by the addition of a metal closing panel. Any body joint protrusions must be rendered safe. The operation of any door must not be affected.

Bumper bars and over riders may be removed, or replaced by others of the same shape, but of alternate material.

Roof vents may be added provided they are of a style evident in competition.

7.3.25 Interior

Except for the door trim (which shall comply with the requirements below) and dashboard and instrument binnacle, interior and fitments are free. Any remaining trim should be of period style. Doors - Side trim:

It is permitted to remove the soundproofing material from the doors, provided that this does not modify the shape of the doors. It is permitted to remove the trim from the doors and replace this with a panel made from some form of rigid material (e.g. carbon fibre or Kevlar, aluminium, fibreglass). Alternatively, it is permitted to remove the trim from the doors together with their side protection bars to install a side protection panel which is made from composite materials.

If the original structure of the doors has not been modified (removal, even partially, of the tubes or reinforcements), the door panels may be made from metal sheeting at least 0.5mm thick, from carbon fibre and or Kevlar at least 1mm thick or from another solid and non-combustible material at least 2mm thick. The rules mentioned above also apply to the trim situated beneath the rear side windows of two-door vehicles. The minimum height of the door's side protection panel must extend from the base of the door to the maximum height of the door strut.

The material from which additional interior brackets, switch panels and other similar fitments are made is free, including the use of carbon fibre or Kevlar.

The removal of heating and air conditioning systems is permitted, providing adequate provision is made for windscreen demisting.

7.3.26 Electrical system

The wiring harness is free. Instrumentation (dash) is free.

A panel incorporating additional/replacement switches and/or circuit breakers may be added. The battery may be replaced by one of free type and may be relocated provided that it is located within an appropriate battery box and securely mounted.

8 Modern Categories (Early Modern / Modern)

8.1 Categories

8.1.1 Early Modern 2WD Category

Open to 2 Wheel Drive (FWD or RWD) vehicles manufactured between 1st January 1986 and 31st December 2007 or to a model/specification which matches that of a vehicle manufactured prior to 31st December 2007

see "run on" 4.2.4.

8.1.2 Early Modern 4WD Category

Open to All Wheel Drive (4WD) vehicles manufactured between 1st January 1986 and 31st December 2007 or to a model/specification which matches that of a vehicle manufactured prior to 31st December 2007

see "run on" 4.2.4.

8.1.3 Modern 2WD Category

Open to 2 Wheel Drive vehicles manufactured 2008 to current.

8.1.4 Modern 4WD Category

Open to All Wheel Drive (4 Wheel Drive) vehicles manufactured 2008 to current.

8.2 Technical

All vehicles entering Modern category must comply with the Modern category requirements below.

8.2.1 Weight

The minimum weight must be in accordance with the organisers imposed minimum or manufacturers original specifications, provided either by details obtained from recognition papers, workshop manuals or sales specifications *(in that order of priority).

This weight will be deemed to include all liquid tanks to be at the normal operating levels as foreseen by the vehicle manufacturer.

For the purposes of confirming weight during the competition, the organisers may refer to the minimum competition weight of the vehicle.

If the organisers intend to use competition weight as the reference this intention will be stated in the Supplementary Regulations for the Event.

8.3 Modifications Permitted

Vehicles can be modified. The modification level of such vehicles is controlled to a level deemed compatible within the parameters set out in these Regulations.

8.3.1 Engine Capacity

For all engines other than rotary engines the maximum engine capacity is 1mm oversize of original bore size.

Rotary-engine vehicles are permitted to be fitted with engines with one size larger housing available from the original manufacturer, (e.g. for Mazda engines, from 10A to 12A, or from 12A to 13B) over what was standard in the vehicle. The same number of rotors as standard shall be retained.

8.3.2 Crankshaft

The crankshaft but may have shot peen, chemical and heat treatment.

8.3.3 Pulleys and Drive Belts

Ancillary pulleys and drive belts are free.

8.3.4 Pistons & Rings and Connecting Rods

Pistons and piston rings and connecting rods are free.

- 8.3.5 Cylinder Heads
Cylinder head inlet and exhaust ports may be modified only by the removal of metal.
- 8.3.6 Camshafts
Camshafts are free, providing the number and location are “original”.
- 8.3.7 Rotary Engines
Modifications to rotary engine’s rotors, housings and end plates may be affected only by the addition of metal to the housing to run peripheral port, so as to attach an intake manifold.
Rotary engines may be modified by the utilisation of the porting technique/s extend, bridge and peripheral. The rotors and seals of rotary engines are free.
- 8.3.8 Ignition /Engine Management
The ignition system is free.
The electronic control unit free.
- 8.3.9 Throttle Cables
Throttle cables and linkages are free.
Fly by wire throttle system may be replaced by a cable operated system or vice versa.
- 8.3.10 Exhaust
Vehicles must be fitted with an effective exhaust muffler to all exhaust/s so that the maximum noise emitted is no more than 95db* when measured 30m from the edge of the tarmac at any point on a competitive stage determined by the Clerk of the Course.
For naturally aspirated and mechanically supercharged vehicles the exhaust is free from the cylinder head.
For turbocharged vehicles, the exhaust system is free from the point of exit of the turbo charger.
- 8.3.11 Electrical system
The wiring harness is free. Original instruments may be replaced.
A panel incorporating additional/replacement switches and/or circuit breakers may be added. The battery may be replaced by one of free type and may be relocated provided that it is located within an appropriate battery box and securely mounted.
- 8.3.12 Turbos & Supercharges
Each turbo charger must use the original manufacturer’s exhaust and compressor housings which must retain all external standard specifications. It is permitted to replace the core assembly including the compressor and exhaust turbine assemblies with a free component in which case only the internal standard specifications of the original exhaust and compressor housings may be modified. The original oil and coolant fittings may be modified only at the turbocharger core. The waste gate or boost control actuator as fitted to the original turbo charger must be retained in its position, the actuator is free.
Twin Turbo to Single Turbo conversion
Factory “twin turbo” systems may be replaced only with a single turbo to a specification approved for the application by the organisers. (Where the twin turbo system is retained the requirements for Turbo above applies to each turbo).
For the purposes of fitment of an approved single turbo to a twin turbo engine, the exhaust manifold/s shall be fabricated from metallic pipe suitable for the application or may be cast.
- 8.3.13 Engine Intake, Air Boxes and Intercoolers
- i. Air boxes and air intakes are free upstream of the throttle plate or turbocharger.
 - ii. The pipes and hoses between a turbo charger or supercharging device, intercooler and the manifold are free providing that the diameter does not exceed 80mm, unless the standard size is greater, and their only purpose is to channel air.
 - iii. A vehicle originally fitted with a front mounted intercooler may replace the intercooler and the size and material of the intercooler is free but must fit within the front bar/bodywork without alteration and use existing mounting points.
 - iv. A vehicle originally fitted with a top or engine bay mounted intercooler may replace/relocate the intercooler and the size and material of the intercooler is free. Where relocated it must fit within the front bar/bodywork and it is permitted to modify only the original front bar by the removal of material where at least 50mm of the original front bar must be retained in any direction. Pipes and hoses between the charge device, intercooler and manifold are free providing that the diameter does not exceed 80mm and no removal of material is permitted to fit the pipes and hoses.
 - v. Intercooler water spray systems may only be used if originally fitted to the vehicle model and must be retained in the original specification. Only water can be used in intercooler water spray systems.
 - vi. The inlet manifold/s are free.
 - vii. Throttle bodies are free.

8.3.14 Exhaust

The original exhaust in normally aspirated or supercharged vehicles may be replaced from the engine block. The original exhaust in turbo charged vehicles may be replaced from the turbo outlet. The outside diameter of all downstream pipes may only be up to a maximum of 90mm.

8.3.15 Fuel System

Fuel pump/s, fuel pressure regulator, fuel rail/s, fuel filter, fuel line diameter and hoses are free.

8.3.16 Engine Cooling System

The engine liquid colling systems are free. The external bodywork must not be modified to allow fitment. Air cooled engine cooling systems are free.

8.3.17 Sump / Lubrication System

The lubrication system is free. The sump is free and/or dry sump oil systems are permitted. Oil tanks may not be located within the cockpit. There may be no joins in oil lines within the cockpit. Oil filters are free.

8.3.18 Engine Mounts

Engine mounts are free.

8.3.19 Clutch

Clutches and flywheels are free, and carbon components are permitted in the clutch assembly.

8.3.20 Gearbox/Transmission/Final Drive

Gearboxes or transaxles may be replaced by another, provided the replacement is based on the original manufacturers gearbox and have no more forward gears than what was originally supplied on that model and one (1) reverse gear.

Automatic transmissions provided optionally by the manufacturer for that model are permitted in lieu of a manual gearbox and vice versa.

It is permitted to modify the body for revised gearbox mounts and for the entry of the gear lever mechanism into the cabin.

The bell housing is free.

Gearshift mechanisms may be replaced provided the original method of actuating the gear change, *e.g. 'H' pattern), must be retained. Shortened or 'quick' shifters are permitted. Sequential change mechanisms are not permitted unless fitted by the original vehicle manufacturer.

The configuration of the drive axle/s original drive assembly must be as originally fitted to the vehicle (e.g. a live rear axle must remain in a vehicle so equipped as original), but otherwise the axle or final drive assembly is free.

Full floating hubs are permitted.

Limited slip differentials or other differentials which act to limit the differential action are permitted.

All transmission drive shafts are free. Gearbox and differential oil coolers are permitted.

8.3.21 Chassis/Sub-Frame/Monocoque

Are to remain standard.

8.3.22 Suspension

- i. Springs may be replaced by others of the same type, e.g. one coil spring may replace another. Springs and spring seats are free. Torsion bars are free as are their splines. For McPherson strut suspensions it is permitted to add/incorporate a threaded sleeve to the exterior of the strut for allowing adjustment of the height of the spring seat.
- ii. A leaf spring may be replaced by a coil over spring and suspension damper provided the replacement coil over spring and damper is mounted using only the original existing chassis/monocoque and suspension control arm mounting points for the original damper. Where a leaf spring is replaced by a coil over suspension damper it is not permitted to make any additional modification for the mounting of the coil over spring and damper.
- iii. Suspension bushings are free, provided that the design of the bushes is original, and they are all of an elastomeric material. The bush offset of the hole in the bush is free.
- iv. Original suspension mounting points may be altered in design, but not in location.
- v. The addition of braces for strut/damper towers is permitted
- vi. Live rear axle equipped vehicles may be modified to incorporate floating rear hubs.
- vii. Sway bars are free other than on strut type suspensions where the sway bar acts as a control arm. In this case it is permitted to change the thickness of the bar and/or add an additional sway bar. The inclusion of spacers at the sway bar mounting points is permitted, but only by extending bolts in the original body mounts. Sway bars may only be adjustable at their mounting points.

- viii. The reinforcing of the suspension and its anchorage points by the addition of material is allowed, provided it follows the original shape and is in contact with it. The addition of mounting points or bracing is not permitted.
 - ix. Adjustable McPherson strut tops and/or adjustable upper arm may be fitted on double wishbone equipped vehicles.
- 8.3.23 Steering
- Steering ratio is free.
- 8.3.24 Brakes
- The brakes are free.
- Modifications to fit pedal boxes and/or dual master cylinders are permitted.
- Cooling ducts may be added but these must remain within the perimeter of the bodywork when viewed from above.
- Handbrake along with method of activation of handbrake is free. Handbrake must be able to be applied and park the car.
- 8.3.25 Coachwork/Bodywork
- Bodywork and body fittings in their entirety must be as supplied by the manufacturer, including materials, save that:
- Front mudguards, bonnet, nose panel, boot lid or rear hatch of alternative material are permitted, provided they are of the same external shape as the original panel. The following minimum specifications of alternative materials shall be respected:
- The use of any under trays, fairings, scoops, louvres, air intakes or exits is not permitted (except as provided for in above) unless supplied by the vehicle manufacturer as standard equipment in original production or the competitor can prove their legitimate use on the particular make and model in national or international level rally & circuit racing competition during the period in which the vehicle was manufactured.
- The addition of front and rear aerodynamic aids, side skirts and mudguard/wheel arch flares is permitted provided these are of identical shape with the components originally fitted to a production model of the same body shape and the items are fitted in accordance with the total original package configuration.
- Bumper bars may be removed provided they are replaced by others of the same shape, but of alternate material.
- Roof vents may be added provided they are of a style used in rally competition.
- 8.3.26 Interior
- Except for the door trim (which shall comply with the requirements below) interior and fitments are free.
- Doors – Side trim:
- It is permitted to remove the soundproofing material from the doors, provided that this does not modify the shape of the doors. It is permitted to remove the trim from the doors and replace this with a panel made from some form of rigid material (e.g. carbon fibre, Kevlar, aluminium, fibreglass).
- The rules mentioned above also apply to the trim situated beneath the rear side windows of two-door vehicles. The minimum height of the door's side protection panel must extend from the base of the door to the maximum height of the door strut.
- The material from which additional interior brackets, switch panels and other similar fitments are made is free, including the use of carbon fibre or Kevlar.
- The removal of heating and air conditioning systems is permitted, providing adequate provision is made for windscreen demisting.

9 Time Speed Distance (TSD)

TSD vehicle and entry requirements are as per the general requirements for all vehicles. Vehicles may be standard cars with no cage or harnesses. Frontal Head Restraints are not required.

9.1 TSD Maximum Speed

The maximum speed allowed for any TSD vehicle is 110km/h.

Speed will be monitored by Event Officials using data from RallySafe. RallySafe data will be the Judge of Fact.

Violations reported to the Clerk of the course will result in penalties being applied as per the Supplementary Regulations.

10 Tarmac 130

Tarmac 130 vehicle and entry requirements are as per the general requirements for all vehicles, along with the requirements of relevant classic or modern category with the following amendments:

10.1 Safety Cage

Cars must have at minimum AASA approved class 1 half Safety Cage, preferably a class 11a safety cage fitted with side protection bars (NOTE higher specification class 3 full safety cages are recommended).

10.2 Tarmac 130 Maximum Speed

The maximum speed allowed for any Tarmac 130 vehicle is 130km/h.

Speed will be monitored by Event Officials using data from RallySafe. RallySafe data will be the Judge of Fact.

Violations reported to the Clerk of the Course will result in penalties being applied as per the Supplementary Regulations.

11 Tarmac 165

Tarmac 165 vehicle and entry requirements are as per the general requirements for all vehicles along with the requirements of the relevant FULL COMPETITION classic or modern category with the following amendment:

11.1 Tarmac 165 Maximum Speed

The maximum speed allowed for any Tarmac 165 vehicle is 165km/h.

Speed will be monitored by Event officials using data from RallySafe. RallySafe data will be the Judge of Fact.

Violations reported to the Clerk of the Course will result in penalties being applied as per the Supplementary Regulations:

Appendix

For the purpose of calculating and equivalent engine capacity for any class engine capacity awards the following engine capacity calculations are applied to the actual engine cubic capacity to result in the final classing of an engine:
Supercharged/Turbocharged x 1.7, Rotary x 1.8, Turbo Diesel x 1.5.

General

The organisers reserve the right not to accept any crew, vehicle or crew/vehicle combination. Acceptance of a vehicle or crew in one year does not necessarily mean that vehicle will be accepted in a following year/s.

Vehicles with a production run of few than twenty identical units will at the discretion of the organisers.

For any and all Technical regulation enquiries,
please contact Ross Tapper on
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