



## Appendix 4 - Vehicle Specifications



These specifications are complimentary to Schedule A & Group 4H of the current Motorsport Australia manual of motorsport (<https://motorsport.org.au>).

Determinations and decisions are at the absolute discretion of the scrutineers and organisers

Only two (2) wheel drive vehicles naturally aspirated (no turbo charges or super charged engines) engines are permitted to enter this event; no buses or tractors. The vehicle must have been licensed for Western Australian roads at some point.

All competing vehicles are to be scrutinized prior to the event must be clean and presented in a "ready to compete" state.

Only two (2) people (driver and leader or other authorized person) are permitted in the vehicle during an event.

Any vehicle involved in an incident is required to be scrutinized again before further participation.

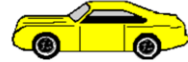
Vehicle parts or bodies of any kind must not be disposed of anywhere at the site; vehicles and parts must be removed from the site at the end of the event and disposed of correctly if required; parts are not to be placed on the current scrap heap. Any vehicle parts found on the site following and event may attract a disposal fee from land owners and may jeopardise future events.

Oil, fuel and or coolant must not be drained directly onto the ground, and/or buried on site. All hydrocarbons are to be collected and properly disposed of. Prior to any vehicle works a tarp or plastic sheet must be laid out on the ground to catch any spills.

General Requirements	Compliance	
	Pass	Fail
The vehicle complies with Schedule A and Group 4H Regulations of the Motorsport Australia Manual of Motor Sport and specific requirements in the document.		
Engine, firewall and front seats must remain in their original location.		
<b>Body Shell and Chassis</b>		
The vehicle must be constructed to minimize the entry of foreign matter into the passenger compartment from the road or road wheels.		
Vehicles factory fitted with bonnet or engine cowling must retain such.		
All mechanical components and fittings of a vehicle shall be free of any sharp or jagged edges or projections likely to on occasion cause danger or risk of bodily injury due to normal contact.		
The passenger compartment of a vehicle shall be free of any component or protrusions likely to increase the risk of bodily injury under all driving conditions e.g. door interiors and dashboards shall not have sharp edges, gear levers shall be free from sharp edges and have suitable knob.		
All moving components and hot surfaces in a vehicle shall be adequately guarded against coming into accidental contact with any person.		
Any jacks, spare wheels or tools are secured firmly; it is not mandatory to carry these items.		
All doors, bonnets and boot lids are to be securely fixed to the vehicle.		
Doors must be operable from inside and outside the vehicle.		
The floor pan shall be in good condition and be free from holes or gaps.		
Firewalls must be fitted between the passenger compartment and motor-gearbox assemblies (if it does not already exist) to prevent the passage of flame. No holes or gaps shall exist.		



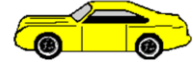
## Appendix 4 = Vehicle Specifications



Where fuel tanks are inside a boot or hatchback and the rear seats and trim have been removed, a metal fuel and flame proof firewall shall be constructed between the fuel tank and the passenger compartment,		
There are to be no unsecured items anywhere in the vehicle e.g. screws, nails, tools.		
Self-tapping screws or pop rivets are not suitable for securing any items within the passenger compartment e.g. fire extinguishers, toolboxes, etc. Heavy items must be securely bolted down.		
The use of distributable ballast is forbidden.		
Vehicles with excessive rust which affects the integrity of the vehicle will not be allowed to compete.		
Rust damaged sections may be properly welded and repaired by using steel only.		
To maintain the structural integrity of the vehicle, no holes are to be made in main components of the chassis or body.		
Sump guards are strongly recommended; alloy plate is often found to be the best type of sump guard material as it is light, easy to work with and durable.		
Mud guards must be fitted to all vehicles and must comply with current Motorsport Australia manual.		
Except for front door trims; all interior fittings may be removed.		
<b>Tow Points</b>		
Tow points are not mandatory, however if not factory fitted to a vehicle it is recommended to fit tow points that comply with the current Motorsport Australia manual; NB: Most cars manufactured from the mid 1980's onwards are factory fitted with tow points. It is recommended that competitors know where their tow points are in case of the need for vehicle recovery.		
<b>Roll Over Protection Systems (ROPS)</b>		
A Roll Over Protection System (ROPS) shall be fitted to a vehicle unless the vehicle has a roof and support pillars in good condition e.g. open top (convertible cars, buggies and specials) vehicles must have a ROPS fitted. Metal, four-pillar roof minimum.		
If fitted ROPS must confirm to Schedule J of the Motorsport Australia Manual of Motor Sport, minimum half roll cage required.		
Only the specified material in Schedule J of the Motorsport Australia Manual of Motor Sport is to be used. It may be painted, however no galvanizing operation is allowed.		
Vehicles fitted with conforming ROPS are required to have a current Motorsport Australia log book.		
<b>Seats</b>		
Substitute seats are permitted (i.e. race seats) as long as mountings are correctly constructed and deemed strong enough for the intended task.		
Where factory fitted seats have been retained, all original mounting points and bolts shall be used and seats must be securely fastened. Broken seat adjusters, seat rails or mountings are unacceptable and must be repaired or replaced.		
If the seat does not incorporate a head rest, then a separate device must be fitted. The minimum dimensions are to be; 2500mm square and 35mm thick. It must be of high energy absorbing material mounted within 50mm of the helmet when the driver or passenger is in a normal seated position.		
<b>Safety Harness</b>		
Every occupant of the vehicle shall be provided with a minimum of a lap sash seat belt fitted to the vehicle.		
4, 5 or 6 point race harnesses are allowed and if fitted, shall comply with the mounting requirements. 3 point Y type harnesses are not to be used.		
The mounting of harnesses must comply with Section 2 of Schedule I of the Motorsport Australia Manual of Motor Sports.		



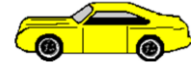
Appendix 4 - Vehicle Specifications



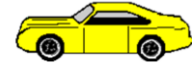
Seat belts must operate correctly, be free of any tears, rips, fraying or excessive sun damage.		
Inertia reel seat belts are acceptable, however reels must operate correctly.		
A seat belt shall be securely mounted on all three points in compliance of factory settings or with the prescriptions of Drawings I-1, I-2 and I-3 Schedule I of the Motorsport Australia Manual of Motor Sports.		
A safety harness shall be mounted as per one of the following: <ol style="list-style-type: none"> <li>1. On a series production automobile, any unmodified seat belt mounting point may be used.</li> <li>2. Where a safety harness is affixed to an un-reinforced section of the body shell, each attachment point shall be reinforced by the use of a plate not less than 75mm x 50mm x 3mm thick as per drawing I-4.</li> <li>3. To the safety cages; or to a substantial part of the automobile structure.</li> </ol>		
Under no circumstances shall a safety harness mounting bolt be used to affix a safety cage to the body shell.		
A safety harness damaged in any way, including in a collision, shall be subject to inspection by a scrutineer. If appropriate, the automobile's log book shall be endorsed with requirement that the belt/harness be replaced.		
<b>Windows and Limb</b>		
<b>Restraints</b> All factory fitted glass must be retained.		
All windows fitted must be clean (i.e. no paint over spray), and in good condition; window winders do not need to be operable.		
Working windscreen wipers and washers must be fitted.		
A grab handle is not compulsory for the passenger, however recommended as long as the handle does not impede the entry or exit of the passenger.		
<b>Vehicle Markings</b>		
The position of the battery is to be marked with a blue equilateral triangle with 150mm sides on the body of the vehicle.		
Advertising and sponsorship is permissible; tobacco advertising is strictly prohibited and constitutes a breach of Australian Federal advertising law.		
Advertising such as windscreen stickers must not obstruct the driver or passenger's view in any way.		
<b>Steering and Suspension</b>		
All the steering and suspension components must be in a good serviceable condition i.e. no excessive movement or play within components.		
All steering mechanisms so designed as to eliminate the danger of any accidental detachment or over locking.		
All steering connections secured with bolts are to be fitted with split pins or nylock nuts.		
Any power steering lines and connections must be free from leaks, in good condition and protected from hot surfaces such as exhaust components etc.		
The vehicle shall have no more than two (2) steered wheels, except for production vehicles originally equipped with four wheel steering.		
<b>Brakes</b>		
All vehicles shall be fitted with dual circuit brake systems; most cars manufactured from the mid 1970's onwards have dual circuit brake systems.		
A park brake must be fitted and operable on all vehicles, hydraulic handbrakes are permitted.		
All brake hoses and pipes in or on a vehicle shall be in good condition, free from leaks and adequately secured. Components not designed for brake line use shall not be used.		
Brake linings shall be free from oil and brake fluid contamination.		
Appropriate advice should be sought if changes to the brake lines are carried out.		



Appendix 4 - Vehicle Specifications



Brake line alterations or modifications shall be carried out in a professional manner; no leaks shall be present. Brake lines shall not be kinked, improperly bent or crimped.		
Bleed valves shall to the original equipment's manufacturer's specification.		
Gutter bolts, screws and other assorted items shall not be used to replace bleed valves.		
Where brake systems have been altered from factory, all brake lines shall be suitably protected against vibration and damage.		
Frayed, worn or damaged rubber brake lines must be replaced.		
<b>Engine and Driveline</b>		
Preferred 4 cylinder, Naturally aspirated engines only (i.e. no turbo charged or super charged cars may be entered.)		
When a water-cooled engine is fitted to a vehicle, all hoses forming part of a cooling system of that engine shall be adequately secured.		
No engine cooling components may run inside the passenger compartment irrespective of shielding, except for factory fitted heater/air conditioner hoses.		
Radiator or cooling systems must be equipped with an overflow pipe that is directed towards the ground from within the engine bay.		
Engines, transmissions, and final drives must be securely mounted.		
Engine/transmission mounts must be in good condition and correctly fastened/bolted in.		
The engine, transmission and final drive are not to have any excessive fluid leaks.		
<b>Exhaust System</b>		
The exhaust system shall be securely fitted to the engine of the vehicle.		
The exhaust shall have adequate ground clearance. Consideration should be given to maintaining the distance between the ground and exhaust system to be as large as practicable, but sufficient to clear the vehicle body.		
All exhaust systems shall run under the vehicle unless factory fitted in a different position; no vehicle exhausts may exit through the vehicle floor, over the roof, out the back window or boot area etc.		
Exhaust systems shall not terminate inside the vehicle.		
All joints in the exhaust system shall be gas tight. Systems which develop faults, will be required to be repaired prior to the participation of the next event.		
Exhausts shall be adequately muffled so as to limit noise emission to a maximum of 95 dB (A) when tested in accordance with the Motorsport Australia special method.		
<b>Fuel and Fuel Systems</b>		
Standard grade fuel formulas of the type that can be purchased from normal retail outlets shall only be used; premium, unleaded or lead replacement petrol and diesel.		
The fuel tank of the vehicle shall be firmly secured to the vehicle and be in sound condition.		
Fuel tanks are not to be fitted in the area of the vehicle occupied by the crew.		
A metal fire wall must exist between the fuel tank and the crew.		
Fuel tank vent lines must be fitted where applicable and be vented to a safe place external to the passenger compartment.		
A correctly fitted fuel cap shall be affixed to the fuel tank of the vehicle so as to prevent the spillage of fuel from the fuel tank and/or inlet pipe.		
Fuel lines of metal or braided construction may run through the vehicle but must have no joins inside the passenger compartment.		
All hoses and fittings must be of a good standard and securely mounted.		
Flexible fuel line complying with Australian Standards and good quality metal fuel hose clamps are to be used.		
Make-shift fuel lines, fuel tanks and connections will not be accepted.		



<b>Wheels and Tyres</b>		
Every tyre and rim fitted to a vehicle shall be free from any apparent defect likely to render the use of the vehicle unsafe.		
The fitting of a tyre and rim shall be in accordance with the recommendations of the Tyre and Rim Association of Australia.		
Vehicles shall be fitted with tyres on all wheels which are pneumatic, containing gas only.		
All tyres must be in a safe condition. Do not use bald tyres or tyres with low tread; RallyVent and Ventkhana are run on gravel and loose surfaces.		
Tyres are not to be fitted with anti-skid devices such as chains, studs etc.		
Vehicles shall have road wheels of not less than 10" in Diameter.		
Mud/snow and/or rally tyres are permitted.		
<b>Electrical</b>		
All electrical wiring in a vehicle shall be adequately fused, insulated, and properly secured.		
The battery of a vehicle shall be securely mounted and when placed in the passenger compartment, it shall be fully enclosed, and a breather fitted which expels the gases to the exterior of the vehicle.		
If a battery is to be mounted in an enclosure such as a battery box, there must be two (2) mounting brackets: One directly on the battery itself, and the second on the enclosure lid.		
If the battery is located in an enclosed area (e.g. boot) the enclosure shall have a vent to expel the gases to the outside of the vehicle.		
All electrical wiring must have circuit protection such as a fuse or circuit breaker installed between the battery and any devices (switch, light etc).		
There must be a cover over at least the positive terminal, sufficient to stop any short circuits in the event of the battery becoming loose in a roll over.		
<b>Fire Extinguishers</b>		
At least one (1) fire extinguisher must be fitted to the vehicle complying with AS1841 (sace for 1841.2) of at least 900g capacity. NB: Halon and BCF are not permitted. The fire extinguisher must conform to section 4 of Schedule H of the Motorsport Australia Manual of Motorsport.		
The fire extinguisher must be securely mounted in a readily accessible position within the passenger compartment. The driver and passenger must be able to reach the extinguisher from their seated position. It is recommended to bolt the extinguisher(s) to the floor directly in front of one or both front seats.		
The fire extinguisher must use a metal type bracket; plastic brackets are not permitted.		
The fire extinguisher(s) is to be tested and tagged in date.		
It is recommended that a secondary fire extinguisher that meets the above criteria be fitted or taken to the event as a backup.		
<b>Helmets</b>		
All helmets must comply with current Motorsport Australia manual. As a minimum, the helmets shall comply with the Australian standard and have correct stickers and tags affixed. NB: Over the years we have rejected many helmets from Ventkhana/RallyVent as unsuitable because they were too badly damaged. <b>Helmets must comply with the following to be permitted for use:</b> <ul style="list-style-type: none"> <li>• All padding affixed and intact,</li> <li>• No rust on buckles,</li> <li>• Free of deep scratches, gouges, or excessive chips,</li> <li>• No cracks,</li> <li>• No frayed straps.</li> </ul>		



Appendix 4 - Vehicle Specifications



---

<b>If you have any questions regarding RallyVent and Ventkhana please don't hesitate to contact Danielle Turton: 0409 374 145, <a href="mailto:venturermotorsport@outlook.com.au">venturermotorsport@outlook.com.au</a>.</b>		