

RALLY / ROAD

NATIONAL RALLY STANDING REGULATIONS

VEHICLES GENERAL

Modified Article	Date of Application	Date of Publication
3. Vehicle Engine	01/01/2023	08/02/2023

A capitalised and italicised word in this document is defined in the FIA International Sporting Code (Code) or the National Competition Rules (NCR), including their Appendices.
Any HEADING is for reference only and has no regulatory effect.

1. VEHICLE ELIGIBILITY

- (a) Each vehicle must comply with *Schedule A* (refer to the *Motorsport Australia Manual*) and these Regulations as well as the specific regulations relevant to the status of the *Event*.
- (b) Each vehicle must be registered for use on public roads with an appropriate government authority or be subject of a vehicle permit issued by an appropriate government authority, which authorises the vehicle's use on public roads and must be covered by a policy of third party insurance. The engine and chassis numbers must agree with those shown on the certificate of registration or permit. It is the Competitors responsibility to ensure compliance with the Government regulations for the State or Territory in which the vehicle is registered or the vehicle permit is issued. All lamps must comply with the Government regulations for the State or Territory in which the vehicle is registered.
- (c) General appearance and presentation of vehicles must be of a neat and well finished standard.

1.2 ELIGIBILITY BY EVENT LEVEL:

- (a) Vehicle types eligible to enter *Rally* events are outlined in the following table. State *Rally* Panels may further restrict these eligible vehicle types but may not permit other vehicle types:

Vehicle Type ¹
Production <i>Rally</i> Cars (PRC)
Group N(P) <i>Rally</i> cars (33mm restrictor) Group N(P) has been adopted under PRC Regulations
Group G2
Group AP4 ³ ; FIA Group R5 ³
Group G4 ³
FIA Group N (currently homologated or for which the homologation expired less than four years ago) ⁴
FIA Group R ⁶ , FIA Super 1600, FIA Super 2000 – Rallies
Historic and Classic <i>Rally</i> cars ⁵
Club <i>Rally</i> Cars
Road-registered 4WD automobiles that comply with: <ol style="list-style-type: none"> (i) the <i>Motorsport Australia</i> Off Road Production 4WD category regulations, or (ii) the regulations relating to Groups A0, A1 or A2 of the Cross Country <i>Rally</i> Technical Regulations

NOTE 1: Automobiles entered in Tarmac Rallies must comply with relevant Tarmac Regulations.

NOTE 2: Includes Multi-Club Competitions.

NOTE 3: State *Rally* Advisory Panels are authorised to determine whether vehicles are eligible to score points in their State Level competition and Club *Series*.

NOTE 4: Group N vehicles (more than four years out of homologation) are recognised as PRC.

NOTE 5: Classic *Rally* Cars are eligible for separate category awards/points at National Level.

NOTE 6: Excludes R5 vehicles.

- (b) For Special Stage Rallies, excluding Introductory Rallies and Stage 1 Rallysprints, cars must be fitted with a safety cage structure as specified in *Schedule J*.
- (c) Where Off Road 4WD vehicles are permitted to compete they must run as a unique seeded group at the rear of the field with a suitable gap. These vehicles are not eligible to score points in any *Motorsport Australia*-recognised *Rally Series*.
- (d) *Event Organisers, State Rally Advisory Panels and/or State Councils* may make application to ARCom for specific dispensations.
- (e) Manufacturers wishing to enter rallies are required to seek authorisation from the Australian *Rally Commission*.

1.3 MOTORSPORT AUSTRALIA & FIA CLASS/GROUP EQUIVALENCIES

- (a) Where no specific class is provided for a *Motorsport Australia* or an *FIA* group, a car complying with the *FIA* Group shall be included in PRC or Group N in accordance with the following table:

Motorsport Australia	Includes FIA ¹
No PRC Class Equivalency – Outright ONLY	FIA Group R5 FIA Rally 2 Motorsport Australia AP4, Motorsport Australia G4
P5	S2000 Rally - 1.6 turbo engine with 28mm restrictor (restrictor size aligns with FIA Regional Rally Championships Sporting Regulations). S2000-Rally - 2.0 atmospheric (naturally aspirated) engine. Group R4 - Group N over 2000cc with additional modifications. FIA Rally 3 - Complying with FIA Rally 3 regulations.
P4	Group RGT Cars FIA Rally 4 - 2WD complying with FIA Rally 4 regulations. Motorsport Australia G2
P3	Group A - over 1600cc and up to 2000cc Group R2C - over 1600cc and up to 2000cc Group R3C - over 1600cc and up to 2000cc Group R3T - up to 1600cc / nominal Group R3D - up to 2000cc / nominal FIA Rally 5 - 2WD complying with FIA Rally 5 regulations (NOT FIA R5).
P2	Group A - over 1400cc and up to 1600cc Group R2B - over 1400cc and up to 1600cc Kit-car - over 1400cc and up to 1600cc
P1	Group A Kit-car - up to 1400cc
N4	Group N - over 2000cc
N3	Group N - over 1600cc and up to 2000cc
N2	Group N - over 1400cc and up to 1600cc Group R1B - over 1400cc and up to 1600cc
N1	Group N - up to 1400cc Group R1A - up to 1400cc

1: Some of the *FIA* groups/classes may overlap with PRC due to the *FIA* classes often allowing less modification than the equivalent PRC class. However, where a vehicle is not eligible for a *Motorsport Australia* group, the vehicle shall be presented in compliance with the relevant *FIA* regulations and homologation paper. Where provision does not exist for Group N classes, Group N vehicles shall be amalgamated with the closest PRC class.

1.4 POLICY – RECOGNITION OF MODEL

- (a) For each *Motorsport Australia Rally* car group, provided a car is presented in the correct specification for the model which has been entered in respect of any mechanical or cosmetic items required to be retained for that model under the relevant regulations (e.g., engine, bumpers, lights, grille, and dashboard); it shall be eligible to compete.
- (b) This may permit a car to be presented in a different specification to the one the manufacturer first produced for that particular bodyshell/chassis.

1.5 CAPACITY CLASSES

Where vehicle class prizes are to be awarded, such vehicle classes must be;

Class P1	PRC	Up to 1400cc
Class P2	PRC	Over 1401cc, up to and including 1600cc
Class P3	PRC	Over 1601cc, up to and including 2000cc
Class P4	PRC	2WD over 2001cc
Class P5	PRC	Four-wheel drive, over 2000cc (not meeting the requirements of Class P6). Mitsubishi models Evolution 7 onwards and Subaru GDA onwards. Any 4WD vehicle with a fully active differential* irrespective of their model or year.
Class P6	PRC	Mitsubishi models up to and including Evolution 6.5 and Subaru models up to and including GC8. For other four-wheel drive vehicles, models must be first manufactured prior to 1January, 1998. P6 precludes the use of fully active differentials*.
Class N1	FIA	Group N up to 1400cc
Class N2	FIA	Group N over 1401cc, up to and including 1600cc
Class N3	FIA	Group N over 1601cc, up to and including 2000cc
Class N4	FIA	Group N over 2001cc

***NOTE:** Active Differential as defined in Production *Rally* Car Regulations, PRC Classes. Classes may be further sub-divided.

2. VEHICLE SCRUTINY

2.1 SCRUTINY GENERAL PROVISIONS

- (a) Scrutineers may examine any participating vehicle:
- (i) before events: for safety and eligibility, including noise;
 - (ii) during events: for safety and noise. At any time they may order the withdrawal of, or the correction of nominated defects, in any vehicle which in their opinion is not safe or does not comply with noise requirements; and
 - (iii) after events: for eligibility.
- (b) The conditions of any pre- and post-*Event* examination or scrutiny must be indicated to competitors in *Supplementary Regulations* and/or Further Regulations.
- (c) Failure to comply with the eligibility requirements of *Supplementary Regulations* and/or Further Regulations shall result in *Disqualification*.
- (d) If, as a result of protest, it is necessary to determine a vehicle's eligibility, the Stewards or scrutineers may impound the vehicle for inspection.

- (e) Each State Council may specify additional scrutiny conditions or amplify the clauses herein.

2.2 SCRUTINY ITEMS

- (a) Before participation in any *Rally*, cars may be examined by scrutineers. Refer online *Motorsport Australia Manual; Rally / Road; Rally Scrutiny Report* to view checked items.

2.3 MEASUREMENT OF EMITTED NOISE

The following conditions apply for measurement of *Rally* car emitted noise:

- (a) Sound level meter
- (i) must comply with AS 37-1967;
 - (ii) must be used on FAST dynamic characteristic;
 - (iii) must be used on A weighting network;
 - (iv) must have a current calibration certificate.
- (b) Test site
- (i) must be in the open air;
 - (ii) must be substantially level;
 - (iii) must consist of an area bounded by a rectangle having sides at least 3m from the outline of the vehicle under test;
 - (iv) must contain no objects other than the vehicle and the sound level meter operator.
- (c) Microphone position
- (i) must be equal to the height of the geometric centre of the orifice of the exhaust outlet, but not less than 200mm above the ground;
 - (ii) must be located 525mm (± 25 mm) from the geometric centre of the orifice at the exhaust outlet;
 - (iii) must be at an angle of 45° ($\pm 10^\circ$) from the direction of travel of the vehicle at the side nearest the orifice of the exhaust outlet;
- Note: the 45° should be selected so as to achieve the greatest distance between the microphone and the vehicle.
- (iv) for vehicles fitted with two or more exhaust outlets spaced more than 300mm apart or connected to separate silencers, each exhaust outlet shall be treated separately as if it were the only one.
- (d) Measurement method
- (i) At normal operating temperature the engine shall be brought to:
 - (A) 4000 RPM for four-cylinder engines;
 - (B) 3500 RPM for six-cylinder engines;
 - (C) 3000 RPM for eight-cylinder engines;
 - (D) 5000 RPM for rotary engines;

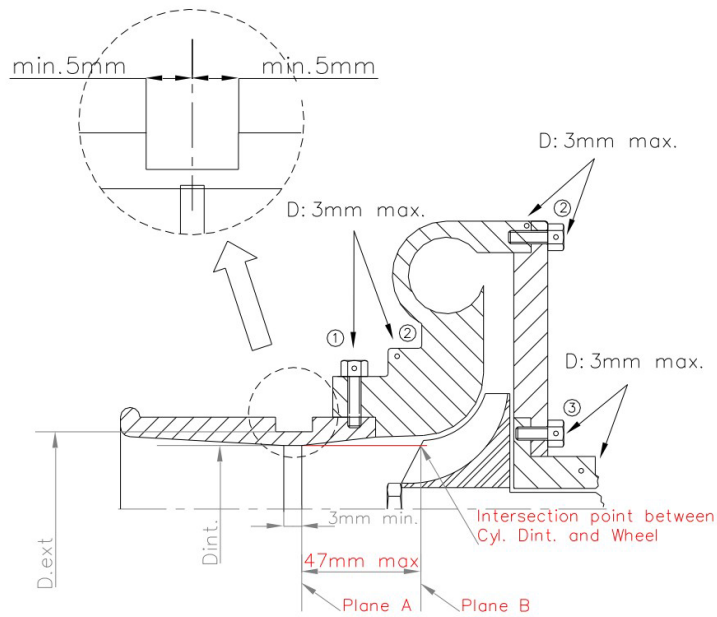
as determined by the tachometer and stabilised at those limits for a sufficiently long period of time to allow a noise level measurement to be made.

3. VEHICLE ENGINE

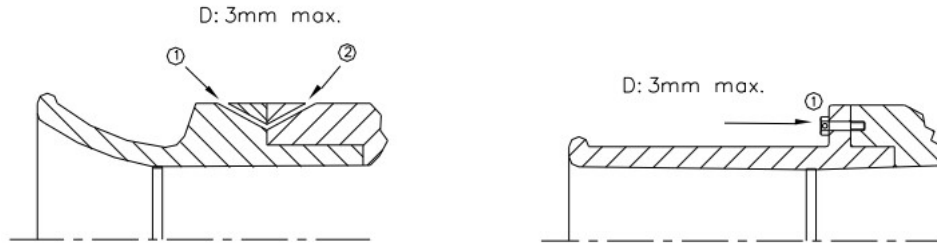
3.1 SUPERCHARGER SEALING REQUIREMENTS

- (a) ~~Except for a Stage 1 Rallysprint Competition each~~ Each supercharged Group N, and Group N (P), 4WD vehicle, ~~Automobile~~ whose homologated supercharger inlet size is 33mm or greater (22.6mm for vehicles fitted with two or more superchargers), and for each supercharged Group A, 4WD Production Rally Car (PRC), AP4 and G4/G2 vehicles, whose supercharger inlet size is greater than 34mm (24mm for vehicles fitted with two or more superchargers), ~~must it will be fitted with a supercharger restrictor, the size of the restrictor being in accordance with the applicable Rally/Road Group Code regulations. Each supercharger and any supercharger restrictor fitted must comply with the following:~~ ~~compulsory to have a restrictor fitted as follows:~~ must be fitted with a supercharger restrictor, the size of the restrictor being in accordance with the applicable Rally/Road Group Code regulations. Each supercharger and any supercharger restrictor fitted must comply with the following:

- ~~(i) Group N / Group N(P) in accordance with FIA Group N Regulations.~~
 - ~~(ii) Group A / PRC / G4 in accordance with the Group 3C Production Rally Cars (PRC) Regulations and where relevant the FIA Group A Regulations.~~
 - ~~(iii) Group AP4 in accordance with the requirements of the Group AP4 Technical Regulations.~~
 - ~~(iv) Group G2 in accordance with the requirements of the Group G2 Technical Regulations.~~
- ~~(b) These Regulations do not apply to vehicles entered in Stage 1 Rallysprints.~~
- (b) ~~Each Group 3C PRC 2WD vehicle that is fitted with a supercharger that has an inlet size greater than 10% of the homologated or manufacturer fitted original supercharger must be fitted with a restrictor in accordance with the Group 3C PRC regulations.~~ The supercharger restrictor must be measured and sealed in place prior to competition in any Rally. ~~All~~ Each superchargers used on an ~~car~~ Automobile during an *Event* will be required to be measured and sealed prior to their use.
- (c) Competitors must present superchargers to the organisers in a condition to be sealed, in that, they must be wired and prepared for sealing with ~~lead seals or a Motorsport Australia approved alternative seal~~ in a manner that will be easily seen when assembled on the ~~car~~ Automobile.
- (d) The restrictor must be sealed to the compressor housing, which (for turbochargers) in turn must be sealed to the bearing housing which in turn must be sealed to the exhaust housing. This can usually be effected by one wire.
- (e) All the air necessary for feeding the engine must pass through this restrictor which must respect the following with reference to Restrictor Drawing below:
- The maximum internal diameter of the restrictor is as per that specified in the applicable regulations. This diameter must be complied with, regardless of the temperature conditions.
- This diameter must be maintained for a minimum length of 3 mm.
- This length is measured upstream of plane A.
- Plane A is perpendicular to the rotational axis of the turbocharger and is at a maximum of 47 mm upstream of plane B, measured along the neutral axis of the intake duct.
- Plane B passes through the intersection between the most upstream extremities of the wheel blades and a cylinder of applicable restrictor maximum internal diameter the centreline of which is the rotational axis of the turbocharger.
- (f) The mounting of the restrictor onto a turbocharger must be carried out in such a way that two fasteners have to be entirely removed from the body of the compressor, or from the restrictor, in order to detach the restrictor from the compressor. Attachment by means of a needle screw is not authorised. For the installation of this restrictor, it is permitted to remove material from the compressor housing, and to add it, for the sole purpose of attaching the restrictor onto the compressor housing. Each fastener must have a minimum of a 2mm hole to accept wire so that they may be sealed.
- The restrictor must be made from a single material and may be pierced solely for the purpose of mounting and sealing, which must be carried out between the mounting screws, between the restrictor (or the restrictor/compressor housing attachment), the compressor housing (or the housing/flange attachment) and the turbine housing (or the housing/flange attachment).
- Restrictor Diagram (as per FIA Appendix J Article 254 2019, Diagram 254-4):
1. hole for restrictor / compressor housing
 2. hole for compressor housing or housing/flange
 3. hole for central housing or housing/flange



Other possibilities:



3.2 MUFFLER

An effective exhaust muffler must be fitted at all times. The maximum noise emission permissible is 96 dB(A) as tested by the *Motorsport Australia* method in Art. 2.3.

4. VEHICLE BODY AND EXTERIOR

4.1 SIGNS ON CARS

- (a) Signs and advertising are permitted on vehicles in accordance with the *NCR* and *Motorsport Australia Manual Schedule K* unless specifically varied in *Supplementary Regulations*.
- (b) Vehicles must not display *Competition* numbers other than those specified and provided by an *Event's* organisers. Such numbers must be removed or covered immediately the *Event* is concluded. This shall not apply to cars while they are displayed in showrooms or other trade promotions held away from public roads.
- (c) The name of each Crew member, in accordance with ARC regulations, shall be permissible at all levels of competition with the exception of those comprising part of an *FIA Championship*, where regulations may conflict. For international events the requirements shall be that of the relevant *FIA* regulations, or where silent, in accordance with these regulations. In all other rallies, such display is optional unless required by the applicable supplementary or sporting regulations, but if used shall comply with this Regulation.
- (d) The names shall be placed toward the bottom of the rear window, each centred in the window space and to each name, with minimum 30mm separating the upper case letters of the two names and the lower edge of the window frame. The *Driver* name shall be displayed above the *Co-Driver's* name on both sides of the car. The letters shall be of uniform style, white in colour and without background, using a capital for the first letter of the name, and lower case for all the other letters (see Figure K-3 of *Schedule K* – refer to Technical Appendix in the *Motorsport Australia Manual*).

The typestyle shall be “Helvetica Bold”, “Zurich Bold” or “Arial Bold”. The same font size shall be used for each letter.

- (e) Each upper case letter shall be 100mm except in the case of the *Co-Driver*, where the upper case letters of the *Co-Driver* name may alternatively be 80mm high. For grammatical correctness other letters of the surname may use a capital letter (e.g., MacDonald). Where there is insufficient space or no window to display the name/s in accordance with this regulation, the following shall apply;
 - (i) The minimum reduction in size to fit the name shall be permitted, and both names shall be displayed in lettering of the revised size, in one of the approved fonts.
 - (ii) An abbreviation of the name, in question may be permitted, subject to *Motorsport Australia Rally@motorsport.org.au* approval.
 - (iii) The turret/door frame immediately above the side glass line or front guard may be used for the name of the Crew member seated on that side of the vehicle. In such cases the names shall be displayed in accordance with this regulation save that the letters shall be displayed on a black background.

4.2 MUD FLAPS, SILL AND UNDERBODY PROTECTION

- (a) Notwithstanding any Group or Category regulation providing specific requirements on the subject of coachwork and underbody protection, it is permitted to add material to the vehicle solely for protection from stone chip damage:
- (b) Mud flaps of stout material shall be fitted behind all driving wheels, and in the case of front wheel drive vehicles, behind all four wheels. They shall be no closer than 50mm to, and no further than 100mm from, the ground, shall mask the full width of the tyre when viewed from behind, and be within 300mm of the tyre. Mud flaps fitted behind wheels shall leave un-masked at least one-third of the width of the car. Those fitted in front of the rear wheels shall leave at least 20cm un-masked. The vehicle shall comply with these requirements when it is presented in “ready to *Start*” condition. Mud flaps may not be required for an *Event* only on Tarmac in which case the *Event Supplementary Regulations* shall detail the requirements.
- (c) Where material is added to the sill and/or side of the vehicle it shall follow the contours of the existing body work. Material is free with the following restrictions:
 - (i) pliable material maximum thickness of 6mm; e.g., polyurethane, rubber or similar;
 - (ii) solid material maximum thickness of 3mm; e.g., aluminium, Kevlar®/carbon/fibreglass.
- (d) Where material is added to the underside of the vehicle sill it shall only be to the perimeter of the vehicle between the rear of the front arch and the front of the rear arch and shall be solely for the purpose of deflecting stones that may cause damage to the vehicle. The material must be pliable, e.g., polyurethane, rubber or similar, with a maximum thickness of 6mm and may not protrude further than the plan view of the vehicle or 100mm from the sill, whichever is the lesser.
- (e) The fitment of underbody protection is permitted to protect the engine components (i.e. sump), transmission/gearbox components, final drive (differential) components and fuel tank components. The addition of this protection must not influence the aero-dynamics of the *Automobile*. This underbody protection must not protrude beyond the original bodywork of the *Automobile*. Additional supports/mountings for underbody protection for these components are permitted provided their sole purpose is to support these underbody protection elements. The material for underbody protection of these components is free and may include composite materials.
- (f) The fitment of underbody protection is permitted to the underside of the floor of an *Automobile*, provided that it is contained complete underneath the *Automobile*. This material must follow the general contours of the existing underside of the floor and may include chassis/monocoque rails. The material for underbody protection of these components is free and may include composite materials.

4.3 WINDSCREENS

Vehicles shall be fitted with a laminated windscreen. Windows tinted with a film which complies with the state vehicle regulations in the relevant state may be used. The use of film which complies with the provisions of Article 253.11 of *FIA Appendix J* is mandatory for international events and permitted in ARC events.

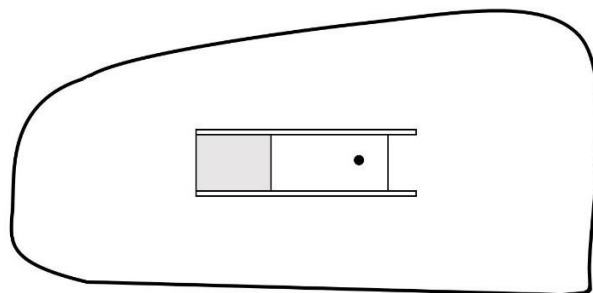
4.4 ENERGY ABSORBING SAFETY FOAM FOR SIDE INTRUSION PROTECTION

- (a) For each *Motorsport Australia Rally Car Group* it is permitted, and highly recommended, to install energy absorbing safety foam (foam), to protect against lateral collisions, in each door and for two

door vehicles in the area of the bodywork immediately rearward of the door aperture. If fitted the foam must be fitted, as a minimum, to each front door of the vehicle. The installation of foam must be done in accordance with the *FIA* and *GIMSS Rally Door Foam Installation Guidelines* (available from *Motorsport Australia*).

- (b) Each installation of foam must comply with the following:
- (i) Foam is only permitted where the vehicle is fitted with Safety Cage side intrusion members according to *Motorsport Australia Manual Schedule J* Drawings J-11, J12 or J13 (dual side intrusion members). The fitment of an additional side intrusion member to an existing vehicle with a single intrusion member is permitted in accordance with *Motorsport Australia Manual Schedule J* Article 4.
 - (ii) The minimum volume of foam in each application must be 60L.
 - (iii) Each foam used must be either listed on the *FIA* Technical List No. 58 or as approved by *Motorsport Australia*.
 - (iv) For the purpose of fitting foam it is permitted to (refer to *FIA* and *GIMSS Rally Door Foam Installation Guidelines*):
 - (A) Modify the interior part of the door or the aperture for the fitment of foam, provided that the structural and safety integrity of the door is not compromised. This may include the removal of window mechanisms and other door hardware.
 - (B) Modify the internal door opening mechanism. It is not permitted to modify the original door latch mechanism.
 - (C) Additional foam may be fitted in the space between the inner door panel and each seat.
 - (D) If an *FIA* specification seat which incorporates a head protection element (such as a winged seat) is fitted, additional foam may be fitted to fill the void that exists between the side of the seat head protection and the side window or B-Pillar. In this case the foam shall be fixed to the seat side with Velcro® or similar, hook and loop fastener.
 - (E) Each door or aperture fitted with foam shall have a trim panel fitted that consists of a minimum of six (6) ply carbon fibre or kevlar (or both) reinforced composite material.
 - (v) It is the responsibility of the *Competitor* to provide proof that the foam used is compliant with these requirements.
 - (vi) Where foam is fitted it is permitted to replace each side window in accordance with the PRC Regulations.
 - (vii) in the original shape of the original window;
 - (viii) a minimum thickness of 3.8mm; and
 - (ix) able to be removed both internally and externally without tools in an emergency situation.
 - (x) Where a replacement window is fitted it is permitted to fit a closable aperture, of the same polycarbonate material, using a sliding mechanism, within the replacement window polycarbonate material of each front door. (refer Drawing 3)

DRAWING 3:



4.5 AIR BAGS

It is recommended that vehicles fitted with SRS air bags have the airbags disabled and/or removed. If an air bag is not disabled, then nothing shall be mounted in the path of deployment of the air bag (e.g. distance measuring or vehicle tracking devices). If disabled, a decal to that effect (specific to that *Event*) shall be affixed to the *Automobile* adjacent to, or under, the *Driver* and *Passenger* windows.

4.6 FUEL TANKS

- (a) Additional fuel tanks of free design in accordance with *Motorsport Australia Manual Schedule N* may be fitted outside the *Passenger* compartment and must be vented to the outside of the vehicle. If the design of the car makes fitment outside the *Passenger* compartment impracticable, e.g., Ford Laser, it is permitted to fit the tank in that compartment provided that the filling orifice and ventilation are outside that compartment regardless of vehicle construction (see also specific Group Regulations).
- (b) On cars in which the fuel tank is either fitted as standard, or has been relocated, in the *Passenger* compartment (i.e., the rear of a hatch back) and/or has been relocated in the luggage compartment of any type of body-work configuration car;
 - (i) the fuel filler must be constructed so that any fuel spilled may drain safely to the outside of the vehicle;
 - (ii) if the filling orifice is located within the bodywork, it must be fitted with a catch tray to the satisfaction of the scrutineers;
 - (iii) a flame and liquid proof bulkhead, which may be of transparent material and which effectively separates the compartment occupied by the Crew members from any component of the fuel tank or refuelling system must be fitted.
- (c) If additional fuel containers which are not part of the piped fuel system are carried, they must be securely fastened to the vehicle structure, but not within the *Passenger* compartment regardless of vehicle construction.

4.7 FUEL LINES

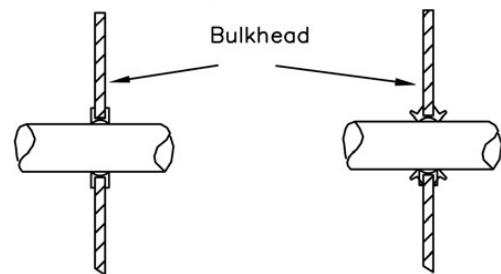
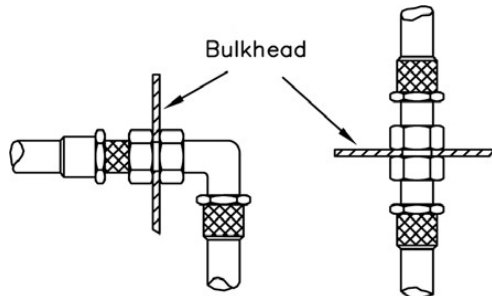
The following applies to all vehicles competing in Special Stage Rallies:

- (a) An adequate firewall to separate the fuel tank from the habitacle or vehicle cabin, which is impervious to the passage of fumes or liquids, must be fitted to all cars which are fitted with other than their standard fuel tank systems.
- (b) The original *Series* production fittings and fuel lines, lubricating oil lines and lines containing hydraulic fluid under pressure may be retained. If the *Series* production fittings and lines are not retained and where line replacement is permitted by relevant Group regulations, the following regulations shall apply:
 - (i) Lines which carry hydraulic fluid, fuel or lubricating oil may pass through the cockpit.
 - (ii) Any line containing fuel or lubricating oil shall not incorporate any connectors inside the cockpit except at the front and rear bulkheads in accordance with Drawings 253-59 or 253-60 below.
 - (iii) All fittings and lines used for the passage of fuel, lubricating oil and hydraulic fluid under pressure shall be manufactured according to the specifications below:
 - (A) when flexible, these lines must have threaded, crimped or self-sealing connectors and an outer braid resistant to abrasion and flame (will not sustain combustion);
 - (B) the minimum burst pressure measured at the noted minimum operating temperature shall be:

Fuel lines (except the connections to the injectors and the cooling radiator on the <i>Circuit</i> returning to the tank including any cooling radiator or lines):	70 bar (1000 psi) at 135°C (250°F)
Lubricating oil lines:	70 bar (1000 psi) at 232°C (450°F)
Lines containing hydraulic fluid under pressure:	280 bar (4000 psi) at 232°C (450°F)

- (c) Notwithstanding the requirements detailed above, if the operating pressure of any hydraulic system is greater than 140 bar (2000 psi), the burst pressure shall be at least double the operating pressure.

Note: Steel 'bundy' tube which is designed for use in automotive applications will usually comply with the minimum burst pressure as will many flexible braided lines designed for fuel injection systems. Reputable hose and line suppliers or manufacturers will be able to provide specifications and documentation (e.g., a catalogue) that can assist the scrutiny process.



DRAWING 253-59

DRAWING 253-60

4.8 TOWING POINTS

- (a) Other than in Introductory Rallies, cars must be fitted with towing points complying with the following:
- (i) have an internal diameter of at least 40mm;
 - (ii) are fitted forward of the front axle and rearwards of the rear axle;
 - (iii) are clearly visible in yellow, orange or red, the chosen colour being in contrast to the colour of the body work immediately adjacent the towing point;
 - (iv) are constructed and fitted in such a way that when a load is applied to the towing point, parallel to the ground and in a direction facing away from the vehicle, parallel to the longitudinal centre line of the vehicle, the vehicle shall be capable of drawing the car over two blocks of 100mm height. These blocks shall be of a section 100mm x 200mm, not less than the width of the tyre and shall be placed immediately "in front" of the tyres closest to the towing point being subject to the applied load. In order to test the strength of the towing point, any non-structural body work which interferes with the test may be removed.
- (b) OR
- (i) As an alternative to the above, tow hooks provided by the manufacturer of the car as a standard fitment may be utilised, provided they are easily accessible and clearly visible, in yellow, orange or red, contrasting with the colour of the bodywork immediately adjacent to the towing point, and pass the same test as outlined above.
 - (ii) It is recommended that towing and de-hitching gear also be fitted to vehicles competing in Introductory Rallies.

4.9 TYRES

The use of studded or spiked tyres is prohibited. All tyres shall be treaded in the original manufacturing process to a minimum depth of 2mm. Tyres shall not be used that are expressly designed for use on motor racing circuits and carry a label "For competition use only".

4.10 FUEL

- (a) Only the following fuels as defined by *Motorsport Australia Manual Schedule G* are permitted in a *Rally Event*:
- (i) Commercial Fuel; and
 - (ii) Unleaded Racing Fuel.
- (b) Where a specific *Rally* group is further restricted to a defined fuel in their regulations, that restriction is also applied.
- (c) Leaded Racing Fuel is not permitted.

5. EQUIPMENT

5.1 REFLECTIVE TRIANGLES

At least one reflective or fluorescent red warning triangle of metal or plastic material (sides at least 350mm in length) must be carried in the vehicle at all times while competing. Each triangle must be fitted securely and easily accessible by the crew, and must be displayed in cases where a stationary car could be a hazard to other road users (e.g., breakdown).

5.2 SOS/OK SIGNS

- (a) Each car is to carry at least one 'OK/SOS' sign. 'OK' shall be green or black, and 'SOS' shall be red. The sign may incorporate reflective materials.
- (b) *Supplementary Regulations* are to specify whether the *Organiser* will supply a sign in the road book, or as a separate rigid sign, or if each Crew is to supply its own rigid sign.
- (c) If a sign is supplied in the road book, the back cover of the road book or Route Instructions shall be printed on one side with 'OK' and 'SOS' on the other side, and printed on card (min. 130gsm). The background must be at least A4 size (297mm x 210mm). For all Australian *Rally Championship* and National-level Tarmac *Rally* events the sign background must be A3 size (420mm x 297mm).
- (d) Road signs shall be on a mounting sheet of area at least 620cm² and the letters shall be clearly discernible and fit for the purpose. Such signs may be mounted on to rectangular or triangular self-supporting brackets. Where the Crew is to supply the sign, it shall be presented at scrutiny.

5.3 FIRST AID KIT

- (a) All vehicles are required to carry on *Board* a weatherproof emergency first aid kit, which can be easily accessed, containing at least the following:

2 x extra large universal accident dressings
2 x large open weave bandages
2 x medium open weave bandages
1 x pair dressing scissors
1 x roll adhesive tape
6 x safety pins
1 x large burn dressing with a non-adhesive surface
1 x thermo accident blanket
2 x medium combination pads
6 x adhesive plaster strips
1 x triangular bandage
2 x sterile eye pads
1 x first aid <i>Manual</i>

Notes:

- (b) These items may be purchased from St John Ambulance as a kit or from any reputable first aid supply company.
- (c) This kit is no substitute for first aid training. It is recommended that all competitors should undertake a first aid training *Course*.

MODIFICATION APPLICABLE ON 01/01/2024	