

SSQ SUPER STREET SEDANS Car Specification and Driver Safety Equipment

To apply to cars registered from May 2015 that do not meet any SSA National class.

To be known as SSQ Super Street Sedans

Speedway Sedans Queensland – www.qsca.com.au

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Preamble to be noted:

If you have major engine work to be carried out or a rebuild of your race car it would be wise to consider your options going forward at that time before committing to spending a large amount of money on an engine or car style which may not serve you into the future.

National Speedway Sedans Australia classes that you could move into are National 4's, Street Stocks, Production Sedans and Modified Sedans. Specifications for these classes are on the website at http://www.speedwaysedans.com/technical-specs.asp

1. INTERPRETATION

Speedway Sedans Queensland shall be the sole authority for the interpretation of specifications as contained in this book with circularized amendments. At any race meeting this authority is delegated to the Head Technical person.

2. GENERAL

Super Street Sedans are a Queensland state class and as such are not able to race outside of the state of Queensland.

Specifications listed in this book are of a general nature only. IF "IT" IS NOT IN THE BOOK, enquire for prior clarification or approval. Speedway Sedans Queensland are responsible for the introduction of any specification changes/upgrades.

Cars must always be well presented. Race tape and zip ties are only acceptable for repairs on race days.

Drivers and crews always will abide by the Speedway Australia, Speedway Sedans Australia and Speedway Sedans Queensland Codes of Conduct.

All competitors (driver/passenger) must be the holder of a Speedway Australia 'SSA Super Street' Licence. The car must be registered as a SSQ Super Street Sedan.

BEFORE CONSTRUCTING RACE CAR, READ THE SPECIFICATIONS CAREFULLY.

It is better to ask first than be required to change something after the car has been constructed.

3. AUTHORITY TO EXCLUDE

If there is a dispute as to compliance of any car at any time Speedway Sedans Queensland will adjudicate. Cars outside the specification will be unable to compete until such time as compliance has been achieved.

Only items of a non-safety and/or non-performance will be given a 7-day work order.

4. DAYLIGHTING / REGISTRATION (07/23)

- a) Each car will be required to apply for and obtain registration and be issued with a Logbook and registration decal for each racing season. Cars are registered July through to June each year. To accommodate the northern season; registration is available from 1 May each year and will carry forward to the next season.
- b) Each car must be inspected at times as directed by Speedway Sedans Queensland. For cars that had a daylight inspection completed in the 2022/2023 season; are permitted to re-submit this daylight inspection for registration purposes for a further two registration periods.
- c) To continue to use the 2022/2023 daylight inspection sheet the car must be continually registered. If the car is not registered for one or more years, it will be required to have a daylight inspection completed for registration purposes.
- d) Cars not registered in the 2022/2023 season are required to have a daylight inspection completed for 2023/2024 season or any other subsequent season in the future.

5. CONSTRUCTION

Workmanship on race cars is to be of a professional standard. All materials used must be of good quality. Bolts are not to be used through structural tubing in roll cage cabin area unless a welded sleeve is provided. **No TEK screws or self-tappers to be used.** All material sizes quoted are minimum unless a maximum is stated.

6. GLOSSARY OF TERMS

Material:

ERW - Electric Resistance Welded CDS - Cold Drawn Seamless

CHS - Circular Hollow Section
RHS - Rectangular Hollow Section

WT - Wall Thickness

AS1163 GR300 - Australian Standard 1163 for structural steel tubing Grade 300

FMS - Flat Mild Steel
O.D. - Outside Diameter
I.D. - Inside Diameter

OEM - Original Equipment Manufacture: used to indicate parts used or the complete

vehicle as it left the production line from the original manufacturer.

PROPRIETARY – (of a product) – marketed under and protected by a registered trade name

7. DRIVER SAFETY

All protective clothing and safety equipment must be used and/or worn in the approved and accepted manner whilst competing or testing and/or practising.

All race wear/equipment will be inspected at each practice/race meeting, and if found to be misused, neglected, or damaged, it may be rejected and impounded by the scrutineer at any time, and if considered to be unsafe, gear may not be used again for any speedway event.

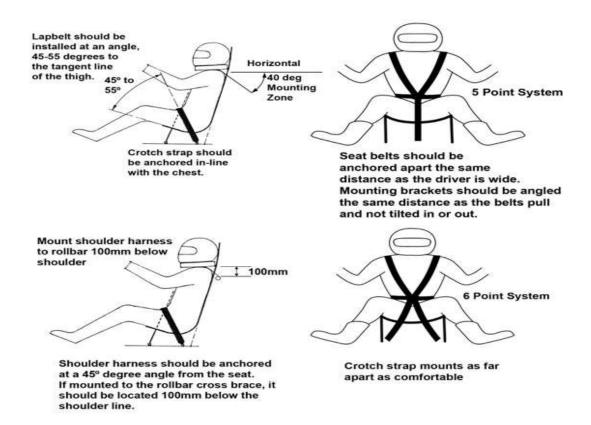
8. SAFETY APPAREL

All safety apparel shall comply with minimum standards for Safety Apparel as specified in the **current** Speedway Australia Speedway Racing Rules and Regulations and/or notices issued from time to time for safety standards pertaining to the licence level.

Mandatory from 01.07.24 – the use of a HANS Device neck restraint with approved helmet attachments.

<u>Seat belts:</u> Five or six mounting point restraints are mandatory. 75mm highly recommended. Seat belts to be no older than 2 years from date of manufacture or not be used past the SFI expiry date.

- a) An approved type racing harness must be fitted, using a minimum of four major belts and four mounting points plus one or two antisubmarine/crotch straps.
- b) Seat belt to be lever latch type.
- c) Anchor bolts to be 10mm hi-tensile min.
- d) Shoulder belts to have separate anchor points/adjustors.
- e) Shoulder belt mounting point shall be positioned to the rear and below the point at which the belt should come through the seat and be not more than 300mm from that point, attached to 38x3mm CHS or 38x2.6mm CDS material.
- f) Lower seat belt mounting brackets (anchor points) must be on a roll cage, chassis barwork or substantial bar work using a minimum construction of 25x25x3mm RHS or 25mm OD CHS.
- g) Seat belt attachment tags to be 50x50x3mm minimum mild steel fully welded.



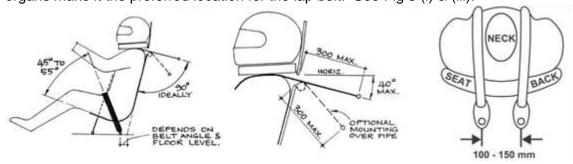
INSTALLATION OF DRIVER RESTRAINT SYSTEMS:

For the driver restraint system to be fully effective, considerable thought must be given to the location of mounting points, and to proper installation.

With the seat, roll cage and belt anchors all part of the same structure, deformation of the remainder of the car does not put driver at serious risk.

The mounting points must be solid and should remain so even if the vehicle is deformed due to an accident. The counting points should also not put undue strain or twist on the belt system hardware.

The lap belt should be positioned so it rides across the solid pelvic area and not the soft stomach area or down on the thighs. The shock absorbing ability of the pelvic area and its ability to protect internal organs make it the preferred location for the lap belt. See Fig 3 (i) & (iii).



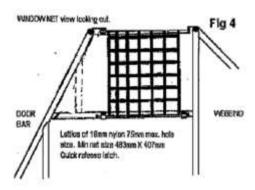
The shoulder harness should be mounted to prevent driver's shoulders from moving forwards (upward if semi-reclining), out of the seat, in the event of a roll over.

The required minimum 50mm from the top of the driver's helmet to the roll cage roof and head plate/hoop bar. Anti-submarine straps serve two purposes:

- 1. To secure the lap strap down across the driver's hips, so in the event of an accident it is not pulled across the stomach by the shoulder straps.
- 2. To prevent the driver from sliding forward and out of the harness. When the driver is seated in an upright position, as in most sedans, a five-point system (single anti-submarine or crotch strap) is considered adequate (Fig 3 (ii)). For extra assurance a double anti-submarine belt can be used (Fig 3 (iv)).

9. WINDOW NET

- a) Window nets are mandatory for driver and passenger.
- b) Net to be a minimum 19mm woven webbing with 75mm max hole size. See Fig 4



- c) Lattice of 19mm nylon 75mm max. hole size. Quick release latch.
- d) Window net to carry a current SFI 27.1 rating and be no more than 2 years old as per the date of manufacture or no older than the SFI expiry date.
- e) The window net must be able to be completely removed without the use of tools.
- f) Window net must be hinged at bottom and fastened at top.
- g) Window net must be mounted directly to the roll cage bar (top) and NASCAR bar (bottom) by use of welded tags.
- h) When installed the net must be firm not floppy and loose.
- i) Window net a lattice of 19mm woven webbing.
- j) This design uses two push button seat belt buckles and belts. Tongues are welded to the side of roof bar. 25 x 3 mm FMS welded to rear of buckles. Minimum 6mm Tubing at base of net fixed with bonnet lock pins.

10. PADDING

The driver must be protected in the race car, from all sharp edges and projections or bar work, which could cause injury in an accident.

11. FIRE EXTINGUISER

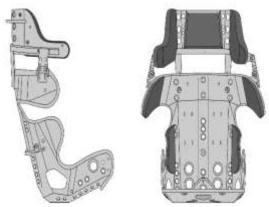
On board fire extinguishers permitted. It must be securely mounted, within reach of the driver, and be of the correct type. Fire extinguisher to be in date. (6 months)

12. SEAT

Mandatory from 01.07.23 a full containment or containment type seat must be fitted. The seat must provide head and shoulder support.

- a) A "Purpose Built" one piece, minimum 1.6mm steel or 3mm aluminium bucket type seat incorporating a substantial head rest must be used. Approved proprietary line competition seats and mounts are permitted e.g., Kirkey/Butler/Genesis. Proprietary seats must not be altered for fitment if the seat cannot be mounted as per this specification, then the seat cannot be used.
- b) Magnesium alloy seats are not permitted.
- c) Lateral (sideways) support must be given to hips and above waist.
- d) Concave seat to support back to minimum of TOP of shoulder height and width.
- e) The driver's seat is to be mounted completely on the right-hand side of the vehicle centreline.
- f) 4 Door cars Seats to be mounted maximum 225mm behind B Pillar at windowsill height.

- g) 2 Door cars The rear of the backrest must be no further back than rear of centre pillar, measured at windowsill height.
- h) The seat mounting barwork is to be attached to roll cage at a minimum of three points, preferably 4 using a minimum of 25x25x3mm RHS or 25x3mm CHS material as a frame.
- i) The seat base is to be mounted to the roll cage chassis at a minimum of four (4) points using 8mm bolts and minimum of 30mm minimum diameter body washers.
- j) Seat back is to be braced and attached to the roll cage approx. 75mm below shoulder height using a minimum of two 8mm bolts and 30mm minimum body washers. There is to be a minimum of 50mm clearance between the helmet and the head plate/hoop bar.



Typical Full Containment type seat

k) All seats may be padded and covered; the covering must be securely attached. Maximum padding thickness 50mm.

CLASS SPECIFICATION - SUPER STREET SEDAN

13. GENERAL

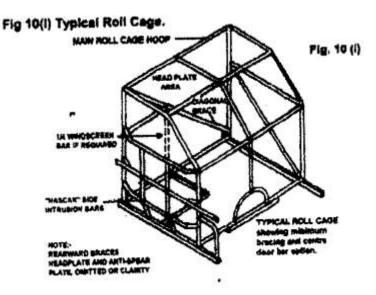
- Four wheel/all-wheel drive and/or four-wheel steer models are NOT permitted.
- Existing chassis cars are accepted, however all newly registered cars must be mono constructed from 1st May 2016.
- If any car requires repair, such repairs must comply with current construction rules.
- a) Race car is to be made from an original, complete metal body production type sedan,
- b) All fittings such as door handles, visors, ornamental mouldings, body trim strips, brittle plastic grills, wheel trims etc, must be removed,
- c) All unnecessary flammable material must be removed, e.g., door trims, floor coverings.
- d) All window glass and lights must be removed. No window openings to be covered.
- e) Instrument glass permitted.
- f) Replacement panels must be securely fastened; self-drilling (TEK) screws are NOT permitted.
- g) Rear (boot) spoiler permitted. Spoiler to be not higher than half rear window height, not wider than waistline of the car at that point nor further to the rear than the back of the original rear bumper.
- h) Boot spoilers are the only aerodynamic aids permitted.
- i) All vehicles must carry the identification number, as issued by the club. This number must be displayed on each side of the car, minimum 400mm high. Club prefix, if required, to proceed number. Roof Number to be displayed on Roof Number Plate size 300 x 300mm to be black background with white numbers. Roof plate number/s to be a minimum of 250mmx250mm.
- j) Fuel tap lever or switch to be marked, including the words 'FUEL' and the operating method 'ON/OFF'.
- k) Kill switch to be clearly marked, in contrasting colours, for method of operation e.g. **ON/OFF** to be located forward of the windscreen mesh and centrally located. Kill switch must kill all power when operated. No push button types allowed.
- Bonnet to be securely fastened at FIVE mounting points using minimum 12mm pins and large washers.
- m) Boot lid to be securely fitted, using FOUR 12mm minimum pins and large washers. A removable boot lid to be securely mounted at four points.
- n) Hinged bonnet and boot lid permitted using minimum of two pins. Skeletonising not permitted on hinged panels within 50mm of hinges. The hinged panel to be welded to the bonnet or boot skin.
- o) Fuel tank area must be accessible for scrutineering. Minimum 300x300mm hole under the tank.

14. NON-ORIGINAL BODY FIREWALL

Driver must be protected and isolated from engine, drivetrain, fuel, and electrical components. Battery to be covered by a marine type of plastic (or similar) box. Exhaust components to be shielded by metal firewalls.

15. ROLL CAGE

- a) The roll cage is to prevent the collapse of cabin area under impact. Roll cage, to enclose driver, to be full width and full height of cabin area. The roll bars are to constitute a cage type framework, braced fore and aft. The cage must extend from behind the driver's seat forward to the windscreen area and incorporate protection for driver's feet,
- b) All roll bar material must be of good quality mild steel, AS1163. MINIMUM 38mm OD x 3.0mm WT. Aluminium based materials are not permitted. All bends to be made using a pipe bender, the correct size former. Galvanised tubing or welding over threaded tubing is not permitted in any structural bar work. Water pipe fittings or malleable fittings are permitted. Roll cages must be metal welded.
- c) Cold Drawn Seamless (CDS) material and design roll cages will be accepted as per the SSA National specification – no mixing and matching of materials.



- d) The rear main hoop and main roll cage bars will each be made of one continuous length of tubing, with smooth continuous bends and no evidence of crimping, wall failure or significant weakening. See Fig 10 (i)
- e) Bars are to be inside body. As close as practical to body panels.
- f) Angle of roll cage "A" pillar bar to be not less than 45 degrees down from roof bar. See Fig 10 (i) and (ii). If "A" pillar bar does not follow "A" pillar line and is 45 degrees, additional sub-frame cross brace from front of foot protection to left hand side is required. Roll cage legs shall be welded to the top of a sub-frame of tubular or angle section running fore and aft.
- g) Sub-frame to be securely welded or bolted to the floor pan/sills using at least four 12mm steel bolts through the sub-frame and using 100mm x 100mm plates under the floor.

Sub-frame Material Sizes

- (i) Tubular minimum 38mm x 3.0mm CHS or maximum 50mm x 50mm x 3mm RHS.
- (ii) Angle minimum 50mm x 50mm x 5mm.

A one-piece diagonal brace, min 38mm OD x 3.0mm CHS will be fitted in the main roll cage hoop behind driver's head, (within 250mm of the bend), top right to bottom left, See Fig 10 (iii). A second brace may be fitted in cruciform. The diagonal brace, top right to bottom left, must be one piece. Note if car is to carry a passenger a full crucifix is required.

16. ADDITIONAL MINIMUM BAR WORK: 38MM OD X 3.0MM CHS

- a) Top windscreen bar. Lower windscreen/dash bar.
- b) Seat back support/shoulder belt mounting bar.
- c) On driver's (right) side: three horizontal side bars, curved out to the door skin, are to be placed between front and rear cage legs, evenly spaced between windowsill and cage sub-frame. One must be horizontal at windowsill height.
- d) Door pillar may be notched, to accommodate bar work.

- e) A minimum of two vertical spacer bars, evenly spaced between front and rear roll cage legs, are to be fitted between the cage and sub-frame and top horizontal bar. See Fig 10 (i).
- f) Passenger's (left) side: three bars between front and rear roll cage legs. One must be horizontal at windowsill height.
- g) Minimum of two sub-frame cross braces at roll cage legs, either 38mm OD x 3.0mm CHS or 35mm x 35mm x 3mm RHS. Centre roof bar 32mm OD x 3.0mm CHS. A quarter window bar, if required because of excessive rake or a long roll cage to be fitted to both sides and installed from the top NASCAR bar to top half of pillar bar using minimum 25 x 3mm CHS (38mm x 3mm CHS recommended). If a quarter window bar is fitted there must be a dropper bar of 38mm x 3mm OD from the top NASCAR door bar to the chassis rail directly under the quarter window bar.
- h) Alternately, a 38 x 3mm OD bar may be fitted from top of "A" pillar bar to top of NASCAR bar at 45 degrees of the top bar on both sides.
- i) Centre windscreen bar, 25mm OD x 3.0mm CHS.
- j) Rear ward brace bars from the top rear of main hoop down onto rear sub-frame (approximately 45 degrees). May be crucifix.
- k) Must attach to the rear ward side of the hoop within 100mm of the centre of the top radius.
- I) Seat to be mounted to a frame **25x25x3MM RHS** or 25x3mm OD CHS minimum which attaches to the roll cage at a minimum of 3 points and preferably 4.

17. WINDSCREEN MESH

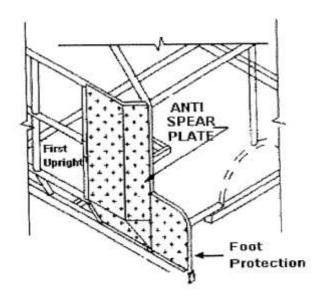
- a) Mesh screen to cover entire area from "A" pillar to centre bar and from dash to roof bar. Also, passenger side if carrying passenger.
- b) Maximum effective mesh size 50mm x 50mm. Mesh gauge 3mm.
- c) Windscreen mesh to be welded or clamped with metal clamps to the roll cage "A" pillar and centre windscreen bar. Minimum of four clamps.
- d) Mono cars may have mesh welded to body. It is preferable for windscreen mesh to be able to be removed in an emergency to help remove driver or passenger.

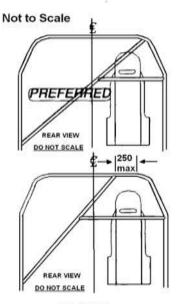
18. ANTI SPEAR PLATE

Anti spear plate, 3mm steel or 5mm aluminium (NOT to be lightened by any means). To cover 1/3 of length between roll cage legs, to be fitted to driver's and passenger's side, from floor-line to windowsill bar.

19. FOOT PROTECTION

The minimum requirement for foot protection to be a bar of roll cage material. Fig. 6 (iv) Foot protection bar to be fully plated with 3mm steel or 5mm aluminum. Foot protection bar to be braced to the left to bar work.





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Fig. 6 (iii)

20. HEAD PLATE

To simplify the removal of an injured driver or passenger it is highly recommended that a removable full size head plate be used. Cars that have a passenger seat fitted must fit a full width head plate.

Head plate to be of 3mm STEEL or 5mm ALUMINUM.. 25x3mm FMS strip to be welded or bolted to, main hoop, top windscreen bar, centre roof bar and side roof bar. 10 of 50mm x 50mm x 3mm MS tag acceptable. Plate to be mounted, from above, with 10 x 8 diameter High tensile bolts, 3 each side, 2 front and 2 rear. Heads of bolts to be downwards, i.e., no projections inside cabin.

ALTERNATIVELY:

A head plate minimum 3mm steel must extend from rear roll bar to top of windscreen bar and from driver's side outer roof bar to centre roof bar. This plate must be securely welded to these bars with intermittent welding procedure.

Helmet clearance between roll cage roof/hoop bars from existing vehicles. May raise head plate as per drawing above to obtain 50mm clearance.

21. BUMPER BARS & OPTIONAL EXTERNAL BARWORK

- a) OEM type steel bumper bars are NOT permitted but may be replaced with maximum 42mm OD x 3.2 CHS.
- b) Bumpers are to remain hollow.
- c) Corners and ends or front and rear bumpers to be radius formed, 100mm minimum.

REAR only: returns of rear bumper may be extended as a skid rail against outside of body between bumper and wheel arch, and then extend inward to the "chassis rails." Corner plates on top edges of either bumper bar not permitted.

22. SKID RAIL

- a) Mild steel SKID RAIL between wheel arches to be up to 25x25x3mm MS RHS. Be securely mounted against body at a minimum of four points.
- b) Bolts must be a minimum of 8mm (Cuphead) bolts and be bolted horizontally to bar work.
- c) Bolts at each end must not be more than 50mm from the end of the skid rail.
- d) Skid rail ends to be closed and taper to 45 degrees as not to become a "spear". Skid rail not to be used on quarter panel behind rear wheel.
- e) Inner skid rail 25x25x3mm RHS to be fitted both ends to return to barwork not to body.

23. REAR OVERRIDE BAR

An override bar may be used. Constructed of maximum 25mm OD x 3.2mm, be VERTICAL and maximum 100mm high, using a maximum of four upright posts. Brace bars are not to be used. Rear override bar to be maximum of width of boot lid.

24. FRONT OVERRIDE BAR

An override bar may be used. Constructed of CHS maximum 25mm OD x 3.2mm 150mm high and mounted centrally on top of bumper. Front override bar to be maximum 600mm in length. Maximum of three uprights allowed.

25. BALLAST

ATTACHMENT OF BALLAST IS TO BE BOLT-ON ONLY

- a) Each individual piece of ballast MUST be PAINTED white ONLY and be permanently marked with registered car number and prefix of the car the ballast is attached to.
 - (i) Ballast is to be attached to substantial bar work or roll cage ONLY.
 - (ii) Ballast permanently attached to roll cage, bar work or body via welding, clamping, or any other permanent attachment method is NOT permitted. This includes welding of attachment hardware (bolts).

- **b)** Ballast attached to substantial bar work that is RHS is to be use one of the below attachment methods ONLY.
 - (i) Sleeves inserted in bar work with a minimum of two (2) ½" or 12mm high tensile bolts, washers and nyloc nuts with a minimum of two (2) threads protruding.
 - (ii) A 5mm plate minimum of 100x50mm to a maximum 200x75mm with a minimum of two (2) ½" or 12mm high tensile bolts with washers and nyloc nuts with a minimum of two (2) threads protruding.
 - (iii) A minimum of two (2) proprietary ballast type clamps. i.e. Allstar, Bicknell, AFCO etc. Accessory type clamps NOT permitted.
 - (iv) Rated leaf spring shackle type U-bolts, with washers and nyloc nuts with a minimum of two (2) threads protruding.
- c) Ballast attached to roll cage or substantial bar work that is 44.45mm or 38mm CHS is to use one of the below attachment methods ONLY.
 - (i) Sleeves inserted in bar work with a minimum of two (2) ½" or 12 mm high tensile bolts with washers and nyloc nuts with a minimum of two (2) threads protruding.
 - (ii) A minimum of two proprietary ballast type clamps. i.e., Allstar, Bicknell, AFCO etc. Accessory type clamps are NOT permitted.
 - (iii) Rated leaf spring shackle type U-bolts with washers and nyloc nuts with a minimum of two (2) thread protruding.
- d) ALL BALLAST IS TO ATTACH SEPERATELY USING ONE OF THE ABOVE PERMITTED METHODS PER PIECE OF BALLAST. I.E. STACKING OR USING THE INVERTED SIDE OF BALLAST CLAMPS IS NOT PERMITTED
- e) Ballast is not to be attached any higher than top NASCAR bar.
- f) Ballast attached to fuel tank protection bar or supports is NOT permitted.
- g) Ballast attached to bumper bar or supports is NOT permitted.
- h) MAXIMUM singular piece of ballast to be no more than 11.5kg ABSOLUTE.
- i) MAXIMUM total ballast to be no more than 46kg ABSOLUTE.
- j) Ballast that is non-compliant in both weight and attachment may incur an infringement and penalty notice.

26. ENGINE

- a) A maximum engine size of 6 litre/LS2 = 378 cu.in.
- b) Turbos and forced induction on V8 powered engines are NOT permitted.
- c) Turbos and forced induction on 4-cylinder, 6 cylinder inline or V6 powered engines is permitted.
- d) Any compliant 4-cylinder, 6 cylinder inline or V configuration or V8 engine may be fitted to any vehicle. Engine to be fitted wholly within the engine compartment without alteration to the body of the car.
- e) No restriction on internal engine modifications.
- f) If resilient engine mountings are used, a minimum 6mm wire cable or 6mm chain restraint must be fitted and be as short as possible.
- g) Solid engine mounts are permitted.
- h) Return spring must be fitted to each butterfly shaft (in-built springs accepted) and one spring to accelerator pedal linkage.
- i) Protective wire gauze or air cleaner to be fitted over air intake to prevent entry of foreign objects to throttle body and to act as a flame trap.
- j) Sumps may be altered and enlarged.
- k) Ignition system to be open.
- I) Oil filter to be in the engine bay.

27. BATTERY AND ELECTRICAL SYSTEMS

- a) Battery to be securely mounted in box or metal frame 25x25x3mm angle mild steel and secured to roll cage or bar work.
- b) Maximum size battery permitted is N70ZZ and one only permitted.
- c) Suitable grommets (to prevent chaffing) must be fitted where battery cables pass through metal firewalls.

- d) At the commencement of a meeting, the race car must be capable of starting with a starter motor.
- e) Switches: Ignition switch and electric fuel pump switch (if fitted) must be grouped together and clearly marked.
- f) An engine "kill" switch, suitably marked with contrasting colour for method of operation must be located centrally and forward of the windscreen mesh. This switch must isolate the battery, and any other electrical item.
- g) Electrical switches NOT to be mounted through floor.

28. EXHAUST SYSTEM

- a) All exhaust gases are to be directed away from occupants, fuel tanks and tyres.
- b) Occupants to be suitably insulated from exhaust system.
- c) Exhaust systems to not protrude beyond body line.
- d) Exhaust must extend past the driver/passenger in the seated position.
- e) Exhausts must be within local noise level requirements. Recommended 95 dba

29. COOLING SYSTEM

- a) Cooling systems may be modified.
- b) Use approved radiator hoses.
- c) Radiators may be mounted inside the cabin if they are mounted as low as possible in the rear of the vehicle and suitably isolated from the driver.
- d) Radiator to be wholly behind the main roll cage hoop.
- e) Cabin mounted radiators must have BOTH tanks and radiator cap fully covered to protect the driver in the event of a cap, hose, or tank blowing.
- f) When using an aluminium radiator, the tanks are not required to be covered. Cap to be fully covered.
- g) Pipes leading to the radiator to be of steel, aluminium, or copper tube. All internal pipes to be ducted or lagged with suitable material.
- h) Hoses to be as short as possible and fitted to radiator from rear side.
- i) Exposed hoses or joints not permitted in cabin area.
- j) Cabin mounted fans to have shroud or suitable guard.
- k) Lever vent radiator cap must be used.

30. TRANSMISSION / DRIVELINE

ELECTRONIC TRACTION CONTROL IS NOT PERMITTED

Scatter shield: All cars must have a Scatter shield fitted if not using a competition clutch or bellhousing. To be minimum 3mm steel / 5mm aluminium thick x 150mm wide minimum and must cover the upper 180 degrees of bell housing and be securely attached to the bell housing or fire wall in engine bay, or front firewall in cabin area, to protect the driver's feet and legs from clutch operation.

Cars fitted with automatic transmission and torque converter must be fitted with a scatter shield.

Tail shaft may be of one piece or two-piece types. Tail shaft/s must be fitted with 360 degree hoops at front and rear. Tail shaft loop – steel strap minimum 40x3mm FMS or 6mm wire rope to be securely fitted around the front and rear of the tail shaft within 150mm of universal joints to prevent the tail shaft and or shafts from dropping in the event of breakage. Two piece tail shafts must have an extra tailshaft loop.

Mandatory 01.07.22 - Top 180 degree of tailshaft loops to be 40x3mm FMS.

No carbon fibre tail shafts allowed.

All drive line components must be derived from mass produced passenger cars. No quick-change differentials. No racing gearboxes e.g., Bert Box, Brinn, Falcon or similar. **This will be strictly enforced from 01.07.2022.**

31. REAR AXLE BEARING RETAINING RINGS

In using assembly not fitted with floating axles, a new retaining ring must be fitted at replacement of bearing or axle. Ring must be an interference fit with axle, when in place the retaining ring is to be tack welded using MIG or small diameter low hydrogen or low amperage rod.

FAILURE TO OBSERVE THIS PROCEDURE WILL INCUR A PENALTY ESPECIALLY IF AN AXLE IS DISLODGED (SAFETY DECLARATION)

Wheel studs: Grade 8, 12mm on all vehicles or manufacture size.

32. SUSPENSION

Original type front and rear suspension must be retained. Example – rear leaf spring must remain leaf spring – front wishbone to remain wishbone.

If OEM option for make and model aftermarket / fabricated front wishbone / control arms can be used but must mount in the original mounting point.

If OEM option for make and model aftermarket / fabricated rear trailing arms can be used but must mount in the original mounting point.

If OEM option for make and model aftermarket / fabricated Panhard bar / watts linkage is permitted to be used in the original mounting point.

Panhard Bars / Watts Link

- a) The use and position of Panhard bars and watts linkage devices is not restricted.
- b) Conversion of OEM watts linkage to Panhard bar is permitted.
- c) Conversion of OEM Panhard bar to watts linkage is permitted.

Shock absorbers

Front – coil over shock absorbers are permitted to be used but must mount in the original shock absorber mounting point.

Rear – coil over shock absorbers are permitted to be used but must mount in the original shock absorber mounting point in conjunction with leaf spring if applicable.

33. STEERING

- a) Modifications are permitted to change the ratio.
- b) Minimum size steering wheel to be 350mm diameter.
- c) Power steering is permitted.
- d) Quick steer is permitted.
- e) Quick release steering wheels are mandatory from 01.07.2021.

34. WHEELS

- a) Maximum rim size 15 x 8 inch.
- b) Wheels must be in good condition.
- c) Dual stud pattern drilling is NOT permitted.
- d) Wheel covers are permitted.
- e) Wheel studs are not to protrude further than 12mm past the outer face of the wheel nut and to be contained within the rim as to not damage another competitor's tyre.
- f) Correct wheel nuts be used for the wheel being used.

35. TYRES

- a) Tyres must be in good condition.
- b) All manufacturer's markings to be visible on side wall.
- c) Grooving of tyres is permitted.

- d) Safety inner tubes permitted.
- e) Any type of lubrication (Grease or oil etc) is NOT permitted on tyre side walls.
- f) Tyre shine type cosmetic products are permitted for application to side walls only.
- g) The compliance of any permitted tyre can be reviewed at any time.
- h) Tyres must be road legal radial tyres.
- i) Maximum speed rating 'V'.
- j) Minimum aspect ratio 60.
- k) Maximum size permitted is 275 x 60 x 15.
- I) Tread wear rating of 220 and above as marked on side wall. Tyres with no tread wear marking may be used provided they meet all other specifications listed.
- m) The tyre must have been listed or is listed in a road tyre section of the manufacturer's tyre catalogue and have been commercially available.
- n) Road legal re-treaded tyres. Tyres must have the correct remoulder's speed rating etc and be legible as per AS 1973-1985
- o) Racing tyres NOT PERMITTED
- p) Tyres that are road legal for use on Australian roads that have been designed and marketed for motorsport / competition are NOT PERMITTED.

36. BRAKES

- a) Foot operated hydraulic brakes to be fitted and be effective at race speeds.
- b) Brakes to be fitted to a minimum of three (3) wheels.

37. FUEL

NO PERFORMANCE ADDITIVES TO BE USED. The introduction to the combustion chamber/s of additives whether in solid, liquid, or gaseous form (e.g., Nitrous Oxide) by any means is **expressly forbidden**.

The use of exotic fuels is not permitted.

ONLY ULP, PULP, Avgas (aviation fuel), E85, and Methanol is permitted.

No ethanol blended fuels allowed in any car.

EFI cars to use ULP, PULP, E85 pump fuel only.

Fuel filter must not be mounted in the cabin area.

38. FUEL TANK AND FUEL SYSTEMS

- a) Original fuel tank must be removed and replaced by a fabricated tank of appropriate capacity.
 Maximum capacity to be 72 litres.
- b) Fuel tank to be no closer than 150mm from rear panel.
- c) Area beneath tank to be cut out, giving adequate ventilation, and ensuring that spillage cannot remain in vehicle. Minimum size of the hole to be 300x300mm.
- d) The use of an approved type of fuel cell and receptacle is recommended.
- e) Filler cap to be a positive seal, behind a firewall and inside body. Leavers on cam locking caps to be clipped. All joints to be welded to a professional standard. Fuel tanks to be constructed of minimum 1.0mm steel or 3.0mm aluminium. Competition type "plastic" tank permitted.
- f) All fuel lines to be securely fixed in position. Barbed fitting of the correct size must be used in conjunction with screw type clamps when connecting flexible fuel line. Neoprene, reinforced plastic or "Black Fuel Line" may be used. OEM type Bundy Steel tubing may be used through the car or under the car. Flexible fuel lines can pass through the cabin area. High pressure lines are to use high pressure hose and fittings. The fuel line to the engine must be fitted with a quick action NON-LEAK fuel tap or valve in working order.
- g) Fuel lines MUST BE ISOLATED from electrical wiring.
- h) Fuel tank to be securely mounted in the boot area of the car, in a suitable metal cradle attached to the bar work. The use of tags (ears) to mount fuel tanks is disallowed, fuel tank is to be mounted by the use of minimum 25x6 FMS straps attached to the cradle.
- i) Tank vents to be fitted with an anti-spill device.

j) Fuel tank protection bar to be fitted – must be constructed of minimum 38x3mm CHS or 40x40x3mm RHS with 25x3mm CHS OD minimum angled brace bars fitted on each side and be 25mm clear on all sides including protection for the filter.

39. AERODYNAMIC AIDS / BOOT SPOILER

Boot Spoiler

- a) Boot spoiler to be inside bodyline.
- b) Boot spoiler not to hinder access to fuel tank.
- c) Boot spoiler to be no higher than half the rear window height.