Specifications

DIVISION 5B

Super Production

Publication Date:

August 2024

RSA Titles Policy

- On a state title event date for a RSA division, no race car registered for that division may race or practice at another venue on the same date using a logbook for the division that is holding the title.

- If a state title event is CANCELLED or POSTPONED for any reason and re-scheduled for a later date, the above restriction does not apply to the re-scheduled date (i.e. if the title event moves to another date, race cars registered for that division may race or practice at another venue on the re-scheduled date using a logbook for the division that is holding the title).

- Dual-registered race cars may race or practice using a logbook for a division that is not holding a title on the same day.

- Roof numbers may be changed to avoid duplicate numbers, car numbers must be displayed on front sun visor and rear taillights/ boot lid - minimum height 75mm.

RSA DIV 5B SUPER PRODUCTION SPECIFICATIONS

INTRODUCTION

a) Racing Sedans Australia shall direct the enforcement of these specifications in every aspect. The RSA Executive Committee in consultation with the RSA Div. 5B Chief Technical Officer and Technical Advisor/s shall together be the authority for the interpretation of the specifications contained within and any further amendment, clarification, alteration or addition.

b) Any amendment, clarification, alteration or addition of, or to these specifications will be sent to all RSA clubs (electronic / post) who shall then pass on the relevant information to their competitors and membership as required.

c) This specification book supersedes all others, and no reference is to be taken from any previous books regardless of their contents. Any amendment or clarification will be sent to all clubs (electronic or post) who in turn will notify all their competitors/members.

d) DIVISION 5B – SUPER PRODUCTION - **NO CONTACT PERMITTED**. Direction of racing will be anti-clockwise only.

e) ***NOTE:*** *This book is to be read and referenced in its entirety. Whilst every effort has been made to have all relevant information pertaining to all issues contained in one area, paragraph or page of this book for quick reference and guidance, it may not have always been practical, possible or achievable for that to have had occurred.*

Table of Contents

1) INTERPRETATION 5
2) SAFETY STANDARDS 7
3) IDENTIFICATION NUMBERS 8
4) INSTALLATION OF DRIVER RESTRAINT SYSTEM 9
Seats 9
Seat Belts 10
Seat Belt Mountings 10
Seat Belt Installation Guide 11
5) WINDOW NET 13
6) BATTERY 13
7) PADDING 13
8) ELECTRICAL WIRING 14
9) MIRRORS / CAMERAS / TRANCIEVERS 14
10) STARTER MOTORS 14
11) BODIES 14
12) TOTAL VEHICLE WEIGHT 16
13) BUMPERS 16
14) RUB RAILS 17
15) FIREWALL 18
16) COOLING SYSTEM 18
17) EXHAUST SYSTEM 19
18) FUEL TANK / LINE / TAPS / PUMP 19
19) FUEL 21
20) ROLL CAGE 21
21) SCATTERSHIELD 31
22) SUSPENSION 31
23) WHEELS / TYRES 31
24) HUBS 31
25) BRAKES 32
26) STEERING 32
27) TRANSMISSION 32
28) DIFFERENTIAL 32
29) REAR AXLES 33
30) TAIL SHAFTS 33
31) ENGINE 33
32) SPOILERS 34
Appendix 1 – Limited Approvals 2024-25 season 35

1) INTERPRETATION

a) Specifications listed in this book are meant as a guide only to building race cars unless otherwise specified. **If "IT" is not mentioned in this book, enquire beforehand for clarification and / or possible approval.**

b) Before constructing any race vehicle, or adding any part, panel or component thereof of unusual, unconventional or unknown design, full details are to be submitted in writing to the RSA. These submissions are to be with supporting documentation of the issue/s and come via your club to the RSA secretary for processing. A written response will be provided, and if approved, the letter of approval is to be attached to the car's logbook. Prime consideration must be given where any doubt exists, to safety of Drivers, Crew, Officials and Spectators.

Note: It may not always be possible for RSA Committee persons and / or Tech Advisors / Officers to provide an immediate verbal or written response to queries relating to specifications.

c) Prime consideration must be given where any doubt exists, to safety of Drivers, Crew, Officials and Spectators.

d) It is recommended, whenever possible, that all race cars under construction be inspected by the licensed Club Scrutineer before painting.

e) All race cars are subject to engine and general measurement before and after any race at the discretion of the Chief Steward, Technical Officer, or Disputes Committee. Any question of legality of a race car, or eligibility of a race driver, must be settled before the commencement of a race meeting.

f) Notwithstanding anything contained in these specifications or any other Supplementary Regulations that have been approved by the Racing Sedans Australia Inc (RSA), the Scrutineer shall have the right to exclude any vehicle if it is not track worthy, fails to meet specifications in relation to safety or performance advantage, or could become a danger to other competitors or the public or is not constructed in an acceptable manner.

g) The Scrutineer will make a full report in the Car's Logbook and all defects noted must be rectified before the car is presented for scrutineering again or the vehicle may be excluded from the event.

h) All material sizes mentioned here within are a minimum unless a maximum is stated. Any Part, Panel or Component not specifically mentioned to be modified must remain standard as per production base model.

i) Ignorance of Speedway Australia Rules and Regulations and this RSA Div. 4 Specification book and notices shall be deemed as no defence in regard to breaches and/or appeals of same.

j) Race cars must maintain a neat and presentable appearance, so as not to bring disgrace to the Association. All body panels, bumpers, exhaust systems, etc., must be securely mounted. Any driver who continually loses components on the racetrack will be liable to a fine and/or suspension.

k) All cars are to be built and repaired to a high standard. All material used is to be of high quality. No bolts/rivets/screws or holes of any sort are to be put in any structural tubing in the roll cage cabin area.

l) Race cars, when presented for scrutineering, must be in full race condition (i.e. tyres to be used for racing, battery secured, helmet, full race clothing, bonnet and boot may be removed for ease of scrutineering).

m) Any driver who continually loses components on the racetrack will be liable to a fine and/or suspension.

n) It is the responsibility of all drivers to ensure their race cars have all sharp protrusions removed when presenting them for any race. The Scrutineer may at any time, direct a driver to remove sharp protrusions, and this must be carried out before entering the track.

o) Car registration (green sheeting) and payment and issue of an annual / seasonal RSA logbook are required before competition. **Registration of an RSA Vehicle cannot be made by a person under the age of 18 years.**

p) **PASSENGERS** Where state laws allow. Super Production are allowed to carry a passenger for either promotional events or race events.

1) Cars must be daylighted by an authorised RSA Scrutineer through the approved process.

2) All safety requirements set out for driver safety must be mirrored to the passenger side. i.e. NASCAR Bars, Head Plate, Windsreeen Mesh, Race Seat, Seat Belts, seat belt mounts etc.

3) Anyone travelling in the car as a passenger must hold a Speedway Australia Competitors license or Day License for the appropriate division.

q) It is the driver's responsibility to make sure that his/ her car and all internal and external engine components meet the specifications of this Division. Pre-race and post-race vehicle scrutineering inspections may be performed at any race meeting, including state and national titles. If any car fails, the after-race specification inspection the driver will be fined / suspended and / or disqualified from the event under Speedway Australia' s Racing Rules & Regulations.

r) **RSA head gasket refund policy:** If the vehicle is found to comply with RSA specifications for the division after post-race scrutineering the RSA will either:

- Directly pay for OEM or standard after-market equivalent parts from an RSA nominated supplier, or
- Provide a refund that is equivalent to the RSA's cost for supplying replacement parts.

NO REFUNDS will be paid for any vehicle that is found to be in breach of RSA Specifications for the division.

s) Vehicles may have fuel checked at any time during the course of any race meeting including state and national titles.

t) Any driver found with any debris in cabin, boot or pockets, etc. (i.e.: broken glass, bolts, tools etc.) will be refused race clearance to enter the track until the offending items are removed.

u) Long hair must be fully contained within suit. No cigarettes / lighters or similar allowed on or used by driver whilst in the race car and / or to track pit requirements. No asthma puffers allowed on driver whilst in the race car. Jewellery that could cause injury (e.g. dangling earrings) is not to be worn.

v) Drink bottles (plastic) permitted – maximum size 2 litres. The drink bottle must be suitably and firmly mounted behind driver and to be to the Scrutineer's satisfaction.

w) **NOTE:** RSA will not accept, recommend, or endorse any 'homemade' modifications / alterations to any suspension component/s or to any other OEM vehicle parts. Any fabrication / alteration allowable within these specifications to these items is to be performed only by persons who are certified specialists in their field of expertise in regard to modifications / repairs to the respectively noted equipment.

x) RSA Inc. reserves the right to impound and inspect any race car at any time; this may include the removal of any engine for inspection and including the downloading of any information via relevant means if applicable. Cars can be selected at random and ordered to the impound area for dismantling. The Owner and/or Driver of the car must deliver them immediately upon request and supply the necessary manpower and hand tools to accomplish dismantling. Only 2 x persons actually involved in dismantling the car will be allowed in the immediate area of a vehicle being checked. Any persons not having cars in the impounded area, and gaining entry without authorisation, will be ejected.

2) SAFETY STANDARDS

Note: These are the minimum only safety standards for racing apparel of which may be subject to change at any time. Refer to your local club and/or www.speedwayaustralia.org for current up to date regulations and notification of any changes. At the time of publication, the following standards were applicable (copied from Part 16 of Speedway Australia Racing Rules & Regulations, v.24/25.1 version):

APPLICABLE LICENCE CATEGORIES

- **A** All Sedan Divisions
- **B** All Divisions
- **JD** Junior Competitors except Jr F500's

16.1) Race Suit

Minimum standard of a 1 piece complying with either SFI 3.2A/1, FIA 8856-2000, FIA 8856-2018 or a higher standard of apparel.

16.2) Boots

Comply with SFI 3.3, FIA 8856-2000 or FIA 8856-2018. Socks must comply with SFI 3.3, FIA 8856-2000 or FIA 8856-2018.

16.3) Balaclavas

Comply with SFI 3.3, FIA 8856-2000 or FIA 8856-2018 and must be worn

16.4) Gloves

Comply with SFI 3.3, FIA 8856-2000 or FIA 8856-2018. It is recommended they are the Gauntlet style glove, and they must not be modified in any way.

16.5) Underwear

Must be worn and comply with SFI 3.3, FIA 8856-2000 or FIA 8856-2018, must be long sleeved, long legged and must have a neck collar. Drivers must only wear cotton under-garments (e.g., no synthetic boxer shorts), and no under wires on bras. No synthetic attire and no jewellery to be worn by a competitor whilst competing.

16.6) Helmets

Tozuda head impact indicators are optional.
Note: RSA recommendation only and is not part of the SA safety rules

Full faced and comply with one of the following:-

1) Snell SA2025 (to be introduced October 1st 2025)
2) Snell SA2020
3) Snell SA2015 (Note: Snell SA2015 Standard Helmets cannot be used after July 1st 2026)
4) FIA 8858-2010
5) FIA 8859-2015
6) FIA 8860-2010
7) FIA 8860-2018

For JD (Junior Divisions) only, the following helmets are also approved for use:
1) SFI 24.1
2) CMR2016
3) CMS2016

NOTE: All BS 6658-85 Type A/FR, AS/NZS 1698:2006 or UN ECE 22.05 standard Helmets cannot be used after 30 June 2024 (Speedway Australia rule).

16.7) Horse Collar

Compulsory if Driver is not using a Head and Neck Restraint. Must comply with SFI 3.3.

16.8) Head and Neck Restraint

Recommended but not mandatory. If worn a Head and Neck Restraint must conform with FIA or SFI 38.1.

Please note that SFI Spec 38.1 Head & Neck restraints must have an in-date compliance sticker on them. The SFI 38.1 Spec requires them to be re-certified every five years. Competitors and officials please take time to check the dates on all Head and Neck Restraints to ensure compliance with these rules.

- HANS Device Recertification Revolution Racegear www.revolutionracegear.com.au

- Safety Solutions / Simpson Hybrid + variants & R3 Frontal Head Restraints Simpson Safety Equipment Australia www.simpsonraceproducts.com.au

16.9) Arm Restraints

Arm restraints must be worn in all classes where a window net is not fitted. Must comply with SFI 3.3 or FIA. Where a window net is used, it must comply with SFI 27.1 or FIA J253.11 and comply with expiry dates/replacement periods.

3) IDENTIFICATION NUMBERS

a) All race cars must carry the correct identification number as is issued by their club. The numbers must be displayed on BOTH front doors, rear doors or quarter panels. Numbers on doors are to be a minimum height of 40cm high x 7 cm wide strokes, on rear quarter panels minimum 30cm high x 7cm wide strokes, in a contrasting colour and easily read by officials. Club prefix to be minimum height of 10cm high x 2 cm wide strokes. club prefix optional. IE: Grafton = GCSC.

b) Car number must also be displayed on windscreen visor and rear taillight/Boot lid. Minimum height 75mm.

c) Drivers will use upright roof numbers of no more than 16G material, 300mm x 300mm in size - Number must be **white on black background.**

d) Visiting drivers with conflicting car numbers will alter their roof numbers as notified when it is required for lap scoring purposes. Failure to comply will be dealt with by the Chief Steward.

e) Drivers' name is to be placed above right-hand front door or on sun visor minimum height 7cm.

f) Current RSA registration / logbook decal must be affixed to the roll cage / cabin area within easy view for verification.

4) INSTALLATION OF DRIVER RESTRAINT SYSTEM

In order for the driver restraint system to be fully effective, considerable thought must be given to the location of mounting points and to proper installation in accordance with the product manufacturers' installation instructions. Many installations comply only with the letter of the rule with no understanding of the purpose, and although effective, to some degree, may cause needless injury to the driver.

Seats

a) A purpose-built, one piece, Steel or Aluminium bucket type seat and headrest must be used. Seats may be padded and covered with a fire-resistant type material, the covering being securely attached - maximum thickness 50mm. NO fiberglass or plastic seats allowed.

b) Minimum of 50mm clearance between helmet and head plate.

c) All seats should be mounted as per manufacturer's installation instructions.

d) Seats must be either:

- mounted directly to the roll cage or seat frame of roll cage material (minimum 38mm OD x 3mm WT CHS) and/or 50mm x 50mm x 3mm angle iron or stronger or,
- mounted to the roll cage or seat frame of roll cage material (minimum 38mm OD x 3mm WT CHS) and/or 50mm x 50mm x 3mm angle iron or stronger using the manufacturer's seat mounts for the seat being used.

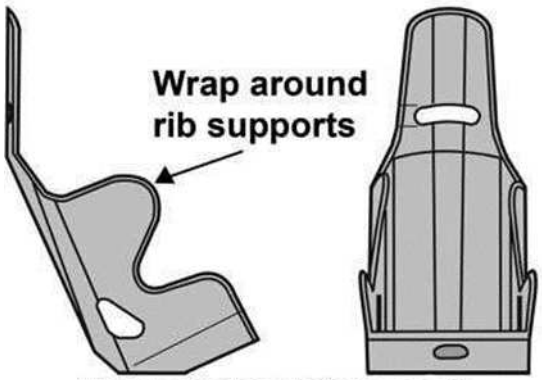
e) The seat must be suitably supported by a minimum of 50mm backing plate or washers (to prevent bolts pulling through seat). A minimum of 4 x 8mm bolts must be used - 2 upper (e.g. in seat back) and 2 lower (e.g. in seat base or sides). All seat bolts must be of cup-head design.

f) All cut-outs for seat belts must be suitably grommeted. No sharp protrusions allowed.

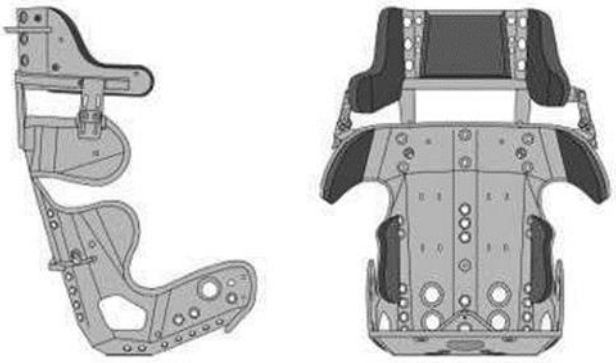
g) Head rest must be at least 100mm wide. (Cover with suitable material optional).

h) Side supports to be a minimum of 50mm on all seats at thighs and torso areas. Seat is to be a correct fit for driver.

i) Side head/shoulder support restraints optional – manufacturer's recommendation on fitment.



Typical aluminium seat



Typical Full Containment type seat

Seat Belts

a) All race cars must be fitted with a 5 or 6 mounting point racing harness of the lever latch style, which must be certified by an authoritative body (such as SFI) and must conform to all of their policies including fitment and care/maintenance. Any worn, frayed, rotten or weld spotted holed seat belts are not acceptable, and race cars will not be allowed to enter the track until the seat belts are replaced.

b) Seat belts must be no older than 2 years from the date of manufacture. Date of manufacture and/or expiry date must be clearly marked on a manufacturer-fitted identification tag.

c) Belts, including crotch strap must be a minimum width of 50mm (2 inch).

d) All seat belts must be mounted in such a manner to allow their removal between race meetings or when working on the car.

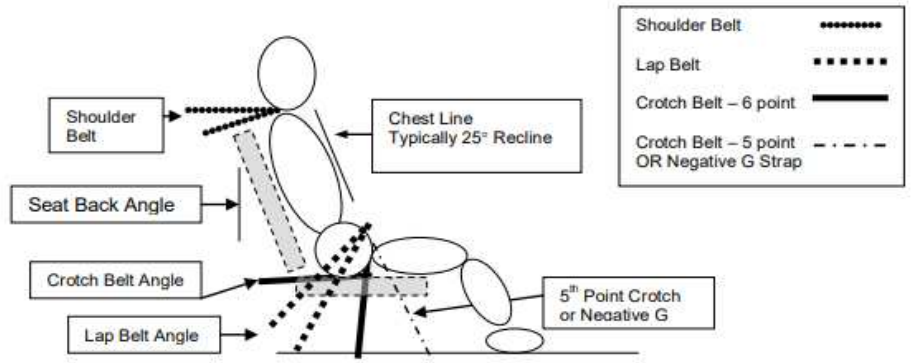
Seat Belt Mountings

a) Because of the difference (often vast) in competition race cars and size of drivers, a standard method of mounting is impractical. Good judgment and common sense are needed. The lap belt should be positioned so that it rides across the solid pelvic area and not the soft stomach area or down on the thighs. Seat belts must be mounted to roll cage. Mounting brackets must be welded to roll cage or roll cage cross braces only. Mountings to be equivalent or stronger than roll cage material or 50mm x 50mm x 3mm angle iron. Any race car found with bolts through seat belt webbing will be immediately given an order to replace seat belts. Rear anchorage must be mounted so as to prevent side movement by harness. Scrutineer may require the fitting of a rear harness loop.

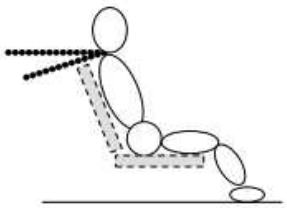
b) MINIMUM 10mm bolts to be used.

Seat Belt Installation Guide

The purpose of this guide is to provide race car drivers, owners and mechanics with additional information on seatbelt installation for upright seats (up to 25° recline seat back angle). This guide is for informational purposes only.



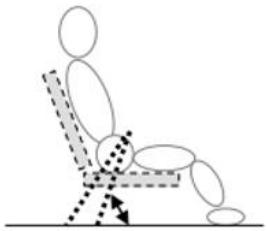
SHOULDER BELTS



Shoulder Belt Angle: 0 to -20° (-10° optimum) from horizontal

- Clear passage of webbing from top of shoulder (or head and neck restraint) back to the harness bar or mounting point without any interference of the seat openings
- Belts should be as short as possible back to the mounting points

LAP BELTS



Lap Belt Angle: -45° to -80° from the horizontal

- Belt should ride within the curvature of the pelvic bone preferably just below the iliac crest
- There should be clear passage through the seat opening without webbing being corded or binding on edges of seat openings with a direct path to the mounting point
- The webbing should not ride against any hardware such as seat mounting brackets, bolts, or tabs
- Lap belt adjusters should be clear of the seat openings. Pull-up adjusters if outside the seat opening should be a minimum of 2" below the opening when the lap belt is tightened
- Belts to the mounting point should be as short as possible mounted beside the seat and never behind the seat
- Lap belt should be allowed to pivot freely at the mounting point
- Webbing should be allowed to pull on hardware in plane (straight)

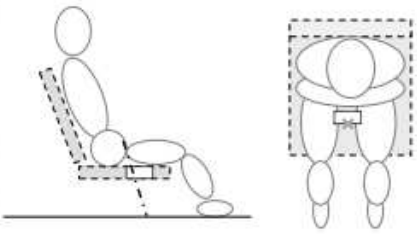
Position of the Cam Lock or Latch and Link

- Centered on the body 1 to 2 inches below the belly button when all belts are tightened

CROTCH BELT – 5-POINT

Sports Car "Shell Type Seat" and aluminum seats with single crotch belt hole forward of the inside seat back from 11 to 13 inches:

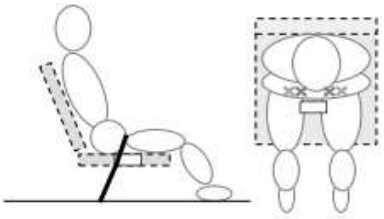
- Crotch Belt Angle: Chest line to 20° through the hole
- Crotch Belt should never wrap around the front of the seat – there should be a pass through
- Crotch belt is used only to maintain position of the lap belt



CROTCH BELT – 6-POINT

Sports Car "Shell Type Seat" and aluminum seats with single crotch belt hole forward of the inside seat back from 10 to 12 inches: *(NOTE: Seats with a single hole positioned more than 12 inches from the inside seat back are designed for 5 point belt installations and may not be as effective for 6-point installations)*:

- Crotch Belt Angle: -20° (2" rearward) through the hole
- Two separate anchors 4 to 6 inches apart (×)

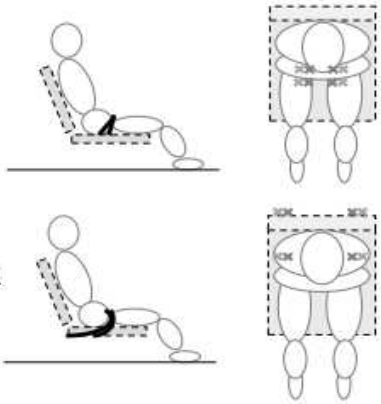


Containment Seats with Crotch belt mounting directly to seat bottom OR through holes provided at the back of the seat bottom: *(Driver is sitting on the Crotch belts)*

- Crotch Belt Angle -10° to -20° from the perpendicular just in front of the crotch with anchors 4 to 6 inches apart (×)

OR

- Crotch Belt Angle Horizontal rearward to under the butt or to the back of the seat (×)



Option (typically for single-seat wide cockpits):
Crotch Belt mounting to the front side of the outboard lap anchors. (Option not illustrated)

Considerations:

- Routing of crotch belts should have a clear and unobstructed path to the mounting point

5) WINDOW NET

Must be mirrored on passenger side bar work if passenger seat fitted.

The use of an SFI approved window net is mandatory. It must comply with SFI 27.1 or FIA J253.11 and comply with expiry dates/replacement periods (Speedway Australia rule).

a) All race cars must be fitted with an SFI approved window net (i.e. no string nets and no steel mesh). The window net should, as near as practicable, cover the drivers' side window opening. Triangular window nets are not permitted. Maximum size of holes to be 75mm x 75mm.

b) All window net mounting brackets must remain inside window and door frames. The purpose of a window net is to stop the head or arms coming outside of the car in an accident or roll-over. Window net must be easy to remove in case of an accident. window net must be hinged from the bottom.

c) Must be securely mounted top & bottom to avoid coming loose in an incident.

d) Window net must be mounted to the roll cage using brackets, using minimum of 3mm steel plates and a minimum of 6mm steel or 10mm aluminium rods, and mounted so that it cannot be pushed outwards.

e) Top mounting rod must be manually removable (i.e. without using tools). Examples of this are: spring-loaded fitting, seat belt style fitting, R clips etc. If using a spring-loaded fitting, it must have sufficient tension to avoid it coming loose in the event of an impact.

f) Mounting points to be to the Scrutineer's satisfaction. Window net must be mounted to the roll cage using brackets, using minimum of 3mm steel plates and a minimum of 6mm steel rods; and mounted so that it cannot be pushed outwards.

g) Ocky straps not permitted.

6) BATTERY

a) Battery must be securely fastened in a steel frame in the cabin area or boot area. After market weld on/bolt on battery bracket (e.g. Kenco weld on or bolt on steel battery box clamp) permitted. No plastic bridges.

b) All batteries (sealed batteries included) must have an effective rubber cover placed over the top to prevent acid spilling in the event of a roll-over. Rubber grommets must be fitted where battery cable passes through metal firewalls.

c) A highlighted blue triangle is to be placed on outside of car body to show battery location. A white bordered blue triangle permitted for contrast on blue or similar coloured cars.

7) PADDING

Padding shall be used to protect driver from injury in the event of an accident. Cars shall be manufactured to minimise driver contact with sharp edges, projections or bar work in the cabin area.

8) ELECTRICAL WIRING

a) All switches to be grouped together within easy reach of driver with seat belts fastened and clearly marked on/off.

b) A 'kill switch' must be fitted outside the windscreen in the centre of the cowl panel or on the front of roll cage windscreen centre bar to control all electrical circuits and must be clearly marked on/off in a contrasting and distinctive colour. Dipper switches may be used and it is highly recommended that a 'fairy light' be used to indicate when power is on/off. No other lighting to be fixed to any other body panels or external of vehicle. Electrical wiring must be grommeted where it passes through firewalls etc. and taped to prevent chaffing.

9) MIRRORS / CAMERAS / TRANCIEVERS

Mirrors or similar not permitted. Small electronic recording devices (cameras) are permitted on vehicles but need to be securely mounted within the cabin area. Various configurations and designs may need prior approval before fitment. No electronic device / screen or similar, capable of receiving live transmission from rear, side or front facing cameras to driver permitted in any shape or form whatsoever. Penalties will apply. One-way steward to driver communication devices (raceceivers) and lap scoring transponders are permitted. All other radio or similar telemetry to or from a car is not permitted.

10) STARTER MOTORS

At the commencement of the race meeting, car must be capable of starting by an installed starter motor.

11) BODIES

a) Vehicles must be constructed from a "Mono-constructed" road car and are to be Mono-Construction only.

b) Vehicles must be:

- Right-Hand Drive
- A Hard-Top Vehicle Type
- Constructed of good quality materials
- Presented in a professional manner
- Built from an original passenger vehicle
- The silhouette (body profile) must remain recognisable.
- Four-wheel drive vehicles are **NOT** permitted.

c) Will be built from original or replica of a passenger sedan or full hard turret coupe bodied car. The silhouette (body profile) must remain standard and recognisable.

d) All fitting and trims, flammable materials, windows, lights etc must be removed. Body panels must be complete, including rear quarter panels below bumper and rear panel down to bumper.

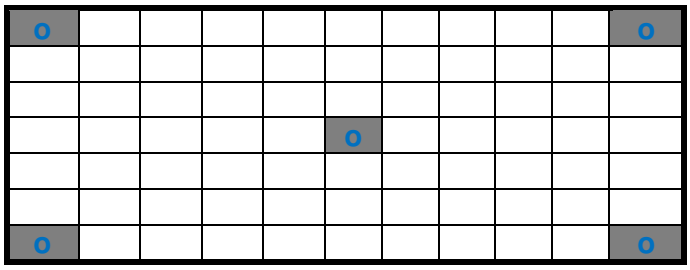
e) Cars must retain their structural integrity.

f) Maximum body width 2150mm, including rub rails.

g) A protective mesh must be fitted to the driver's side of the windscreen. Mesh to be up to maximum 5mm thick x 50mm x 50mm or 50mm x 75mm maximum. There must be a clear vision area in front of the driver of at least 200mm. Name plate may run width of front windscreen, maximum depth at centre of windscreen 200mm. Windscreen mesh may be welded to roll cage or attached to roll cage using metal clamps, minimum 4 clamps (2 on each side) for single-side mesh or minimum 6 clamps (2 on each vertical roll cage bar) for full windscreen mesh in divisions which allow this option for 2-seaters.

Must be mirrored on passenger side bar work if passenger seat fitted.

h) Additional windscreen mesh option for 2-seaters:



A one-piece removable windscreen mesh covering full width of windscreen and attached to roll cage by 5 pins and clips or snap rings is permitted as an option:

- Outside border: Minimum 5mm steel rod shaped to fit into the original windscreen channel on the car body.
- Internal mesh: 3mm to 5mm, 50mm x 50mm or 50mm x 75mm steel mesh.
- Metal plates: 5 x minimum 3mm steel plates fully covering one square of the mesh to be welded in – one in each corner and one in the centre as shown.
- Pins: 5 x 10mm to 15mm steel pins to be welded to roll cage at one end and go through the metal plates to hold the mesh in place with clips or snap rings.
- R-clips or snap rings: 5 x minimum 3mm R-clips or snap rings in – one in each corner and one in the centre.

i) Original full hard turret, original floor pan rearward to behind the driver's seat, sill panels, steel turret. Body Panels may be fabricated from Aluminium, Fibreglass, non-brittle plastics or steel original panels may be used.

Optional panels which may be removed:

1) radiator support,
2) inner front guards (provided they do not constitute suspension mounting points),
3) front subframes forward of the leading edge of both front tyres (provided they do not constitute suspension mounting points),
4) boot floor,
5) boot inner panels and/or rear wheel arch sections rearward of the rear axle (provided that they do not constitute suspension mounting points).

j) Hinged bonnets and boots permitted, but no skeletonising permitted on hinged panels within 50mm of hinge and hinged panel to be welded to bonnet or boot skins.

k) Rear of bonnet to be sealed and securely fastened. Steel/Alloy bonnets must be secured with 4 bonnet fasteners. Fibreglass/Plastic bonnets must be secured with 5 bonnet fasteners, 2 rear and 3 forward. Fasteners must be peg type 12mm Min – 15mm Max steel fitted with large washers (30mm OD Min) fitted to the bonnet peg holes.

l) Lock pins must be 3mm – Max 6mm.

m) Bonnet Power bulge/s permitted to max 150mm at any point above the original bonnet, measured from a line across both front guards.

n) Air cleaner may protrude through a flat bonnet to a maximum height of 150mm

o) A bonnet scoop will also be measured from flat section of bonnet.

p) Maximum clearance around filter – 20mm.

q) Appropriate air filters will be fitted to all air intakes.

r) All fitted panels must be securely fastened to the satisfaction of the RSA Technical Officer and Scrutineers.

s) Front and rear tow / lift points to be fitted or have a sufficient place for tow truck hook for ease of removal of vehicle off the track.

t) Side Silhouette must resemble nominated body as much as practical and be recognisable to the scrutineers' discretion.

u) All headlights, taillight apertures must be covered with maximum 3mm material.

v) Side mirror frame and/or front and rear quarter window frame (if fitted) may be filled in only – NO partial or full fill in off any other side / front or rear windows permitted unless noted otherwise. Diagram below

w) If roof is removed during race car construction (e.g. to install roll cage), it must be fully welded (inside and out) when it is reattached. Additional reinforcing plates across joins are recommended.

12) TOTAL VEHICLE WEIGHT

8-cylinder engine cars to weigh not less than 1050Kg dry.

13) BUMPERS

Must be original position, original bumpers or "C" section **NOT** permitted.

a) Minimum Material 32mm OD x 3.2mm WT CHS.

b) Maximum material 42mm OD x 3.2mm WT CHS.

c) Minimum 4 mounting points on each bumper – must be secure with no sharp edges.

d) Ends must be chamfered – with ends returning to chassis rail or chassis rail pipes.

e) Braces Maximum material 32mm OD x 3.2mm. Maximum return on bumpers 300mm.

f) A skid bar may be fitted to the rear only – Maximum material 38mm OD x 3.2mm WT CHS.

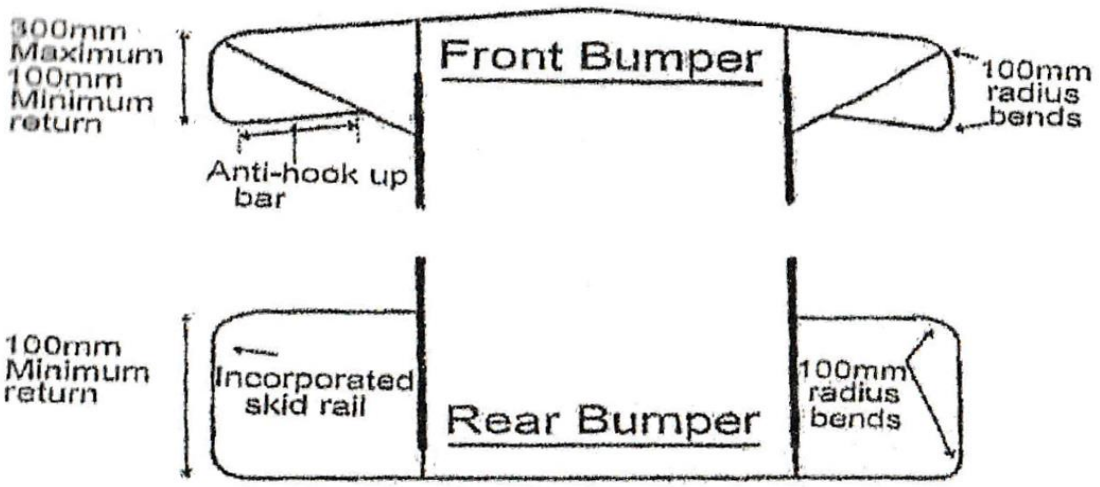
g) A front override may be fitted – maximum material 25mm OD x 3.2mm WT CHS, maximum height 150mm – maximum length 600mm, mounted in centre of bumper – three mounting points.

h) Override bars permitted on rear of vehicle but only as wide as chassis rail.

i) Plastic bumper bars are optional

j) Nerf bars not permitted.

k) Front Air Dam may be fitted but must not protrude beyond the bumper.



14) RUB RAILS

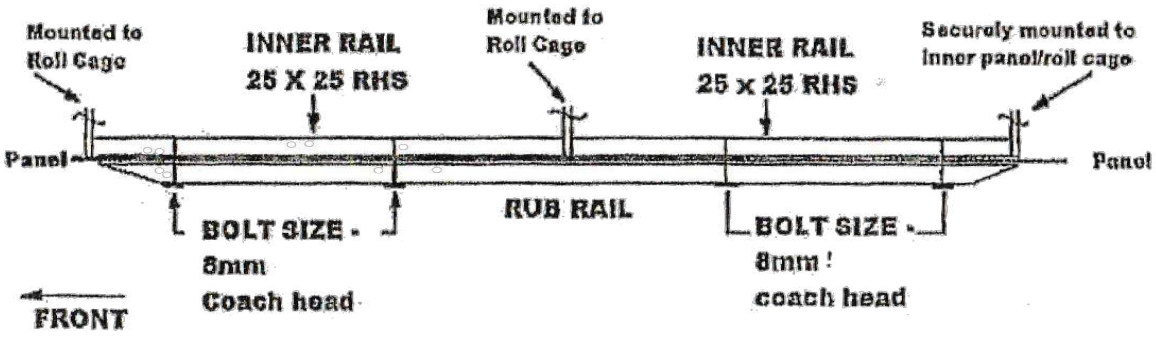
a) If vehicle has skeletonized / skinned doors (fiberglass / aluminium, metal / plastic replica), an outer and inner rub rail must be attached, specifications as follows: (Exception: if the driver's door only has been skeletonized/skinned, a rub rail is optional).

b) Outer rub rails of 25mm x 25mm x 3mm RHS mild steel or aluminium to be securely mounted against body at a minimum of four points between wheel arches only on both sides. Rub rails not permitted on quarter panel behind rear wheel. Rub rail ends to be closed and taper to 45 degrees.

c) Inner rub rail bar to be of a minimum 25mm x 25mm x 3mm RHS mild steel, or maximum 42mm x 3mm CHS mild steel and to be securely mounted to the chassis or roll cage at each end.

d) Bolts must be a minimum 8mm Cup-Head bolts only and be bolted horizontally through outer and inner rub rails. There must be a bolt at each end within 50mm of the end of the rub rail. Bolts (inner and outer) are not to be recessed into RHS rails.

Rub Rail Diagram



15) FIREWALL

a) Drivers must be isolated from mechanical, fuel, electrical and exhaust components by firewalls of minimum 0.9mm steel or aluminium. Standard firewalls (front and rear) must remain in original position.

b) All holes in firewalls must be filled with suitable material. Small holes (up to 3mm) and small gaps around wiring and radiator pipes may be filled with fire resistant sealant. Larger holes to be filled with minimum 0.9mm steel or aluminium.

c) Rear firewall and parcel shelf to be covered with min 0.9mm steel or aluminium secured with bolts, pop rivets or welded.

16) COOLING SYSTEM

a) If a professionally fabricated aluminium racing radiator is used with the tanks TIG welded to the core, the tanks are not required to be covered, but radiator cap must be covered. Examples of this are racing radiators produced by KENCO and AFCO. All other cabin mounted radiators must have BOTH tanks and cap covered to protect the driver (and passenger if applicable) in the event of the rad cap blowing off or tank splitting.

b) May be modified. All hoses must be in good condition and of a fabric reinforced material only. All clips and fittings must be of a professional standard.

c) Radiator cap must be lever vent type and must be shielded. This is to release pressure before removing cap – hose must vent to the ground – push button pressure caps are not permitted.

d) Radiators mounted inside cabin provided that they are mounted as low as possible in the rear of the vehicle rearward of the roll cage main hoop. The upper half of rear window opening MUST NOT be obscured by the rear radiator. Radiator ducting shroud must not be more than half the rear window height, overflow hose must be vented below floor pan.

e) Radiator can be installed in rear fire wall.

f) All pipes in the cabin area must be of one piece – securely fastened on inside of roll cage, be lagged with suitable material – be steel, aluminium or copper – any hoses to be as short as possible and mounted to the rear of the radiator – away form the driver.

g) All internal pipes must be covered / lagged and shielded to protect driver in the event of a hose or pipe leak. No household carpet, cloth or similar material permitted.

h) Fans must have a shroud or suitable guard – maximum 600mm forward or aft of radiator.

17) EXHAUST SYSTEM

a) Exhaust must be within noise level requirements of each track. If exceeds the noise limit will be required to fit muffle/s to comply or will be unable to compete.

b) Any car that has a muffler or exhaust system dislodge during competition must immediately pull onto the infield and switch off its motor.

c) Outlet to be behind driver seat. Exhaust system may pass-through cabin. The driver must be suitably insulated from the exhaust system with min .9 steel or Aluminium. A minimum of a 50mm gap to sheeting cover recommended. All exhaust gases must be directed away from driver, tyres and fuel tank.

d) All systems must be securely attached with suitable fittings – safety chains are recommended for under floor systems. Must not protrude beyond the body line.

18) FUEL TANK / LINE / TAPS / PUMP

a) Original fuel tank must be removed.

b) Maximum fuel tank size:

- Methanol 120Lt.
- Petrol 72Lt.

c) Constructed Fuel Tanks must be Min. of 1mm steel or 3mm Alum. All joints to be welded.

d) Approved proprietary Brand Fuel Tanks and Cells permitted.

e) Tanks over 25Lt must be baffled.

f) Pressurised Tanks **NOT** permitted.

g) Tanks must be securely mounted inside the car, behind a firewall with a minimum clearance of 150mm forward of the lower rear end boot panel and 300mm from either side of vehicle.

h) All full tanks must have rubber under all mounting points and straps to prevent metal to metal, aluminium to metal contact.

i) Commercially produced plastic racing fuel tanks permitted but must have an earth strap fitted from the plastic fuel cell filler neck to roll cage or chassis as an earth to prevent build-up of static electricity.

j) All straps used to secure fuel tanks must have a rubber layer separating strap from tank.

k) Fuel Filler caps must be a positive seal and inside the body. All tanks must be filled with anti-spill device.

l) Approved fuel line must be used together with correct fittings:

- Standard fuel line = SAE 30R7
- EFI fuel line = SAE 30R9
- Methanol fuel line = SAE 100

m) Fuel Lines – EFI cars: Optional - 'Push Lock' fittings and SAE 100 R6 spec fuel hose (examples of both pictured below) are permitted and may be used as a combination without hose clamps. Note that the correct spec hose must be used with this type of fitting, and the fitting is unsuitable for use with standard EFI or Carby fuel hose.

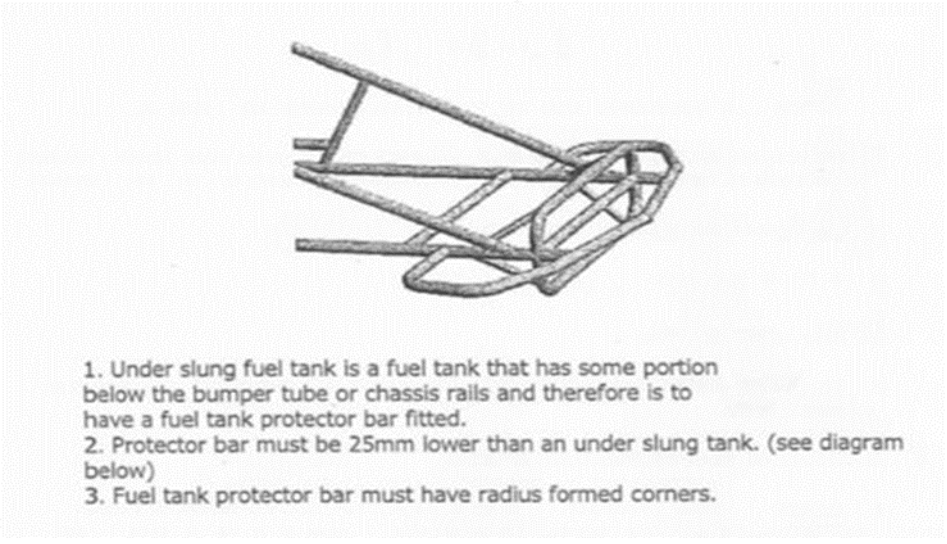
n) A positive quick action tap must be fitted between tank and engine – clearly marks ON/OFF – must be within easy reach of driver and crash crew. Do not use taps if OEM injected or original fuel lines used.

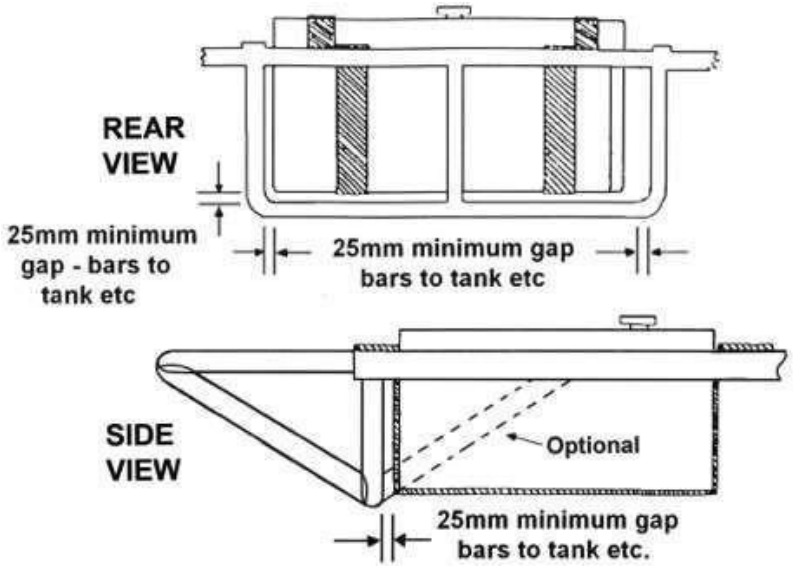
o) Under slung Fuel tank protector bar must attach to the rear chassis bars and be constructed of minimum 38mm x 3 mm CHS. This bar must be minimum 25mm lower than bottom of tank.

p) Electrical fuel pumps must be behind a firewall – fitted with an independent earth to case – must be switched off by Kill Switch. Electrical fuel pump to stop when engine stalls.

q) Fuel tank protection diagram:

Brace bars to tank protector do not constitute bumper mounts.





19) FUEL

a) Petroleum fuel – maximum 130Octane – Methanol may be used.

b) Gaseous fuels **NOT** permitted – any Nitro fuels or additives **NOT** permitted

c) ELECTRICAL WIRING MUST BE ISOLATED FROM FUEL LINE.

d) FUEL TANK AREA MUST BE ACCESSABLE FOR SCRUTINEERING

20) ROLL CAGE

Definitions

CHS	Circular Hollow Section
CDS	Cold Drawn Seamless
RHS	Rectangular Hollow Section
WT	Wall Thickness
ID	Inside Diameter
OD	Outside Diameter

General

a) The purpose of the roll cage is to prevent the collapse of the cabin area under impact. The cage must extend from behind the driver's seat forward to the windscreen area and incorporate protection for the driver's feet. The roll bars are to constitute a cage type framework, braced fore and aft. All roll cage bar-work is to be inside the body and within the cabin area. The roll cage is to enclose the driver and to be full width and full height of the cabin area.

b) No bolts/rivets/screws or holes of any sort are to be put in any roll cage structural tubing in the cabin area, except as described for floor bars where angle iron is used, and inner rub rail bars only.

c) All roll bar material must be of good quality mild steel, sizes for each bar as described in the following sections. Aluminium based materials not permitted Galvanized tubing or welding over threaded tubing not permitted in any structural bar work. Water pipe fittings or malleable fittings are not permitted.

d) All bends to be made using a pipe/tube bender with the correct size former with no evidence of crimping, wall failure or significant weakening.

e) **NOTE:** Unless otherwise stated, all roll cage bars **including the Main Hoop bar must be made of one continuous length** of the appropriate material and built using fusion welding techniques only. Gussets may be required to welded joints.

f) Roll cage pipe padding is recommended around / near driver area to cushion the effects of any impact.

g) There are many variations in roll cage design mainly due to the different body shapes, especially in later models. These roll cage specifications describe the minimum elements that constitute an acceptable roll cage. Roll cages which exceed the requirements of the specifications through additional bars or the use of larger diameter tube are also acceptable provided all roll cage bar-work is to be inside the body and within the cabin area, and the roll cage is passed as safe. If in doubt, contact the RSA or State technical officer for the class to get a ruling as covered in this books 'Interpretation' section.

h) The specifications for the minimum elements of a roll cage follow. Unless otherwise specified, all bars are compulsory. Any additional roll cage bars must be of roll cage material, i.e., Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS.

i) If unsure in any aspect of the design or assembly of cage or any other roll cage compliance as stated within, contact the RSA for clarification. **NOTE:** This applies especially when using, modifying or retro-fitting an earlier built existing cage.

j) The 'halo bar' style roll cage as shown in the 'Optional external barwork' section is permitted as an option to the roll cage design for the forward legs and top windscreen bar as described earlier in the roll cage section. The 'halo bar' extends forward along the inside of the door frame following the roof line from the main hoop to the top of the windscreen and back to the main hoop on the opposite side. The forward legs run from the 'halo bar' down the inside of the A-Pillar and inside door frame to the floor bars. Material to be as per roll cage bar work (minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS).

1) Floor bars

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS or
Minimum 50mm x 50mm x 3mm RHS or
Minimum 50mm x 50mm x 5mm Angle iron.

The floor bars run from front to rear inside the cabin on each side as close to floor as practicable. At a minimum they must extend from the rear of the main hoop to front of the foot protection on the driver's side and the front of the forward roll cage leg on the passenger's side. They may extend as far forward or back as possible (e.g., to the rear wheel arch) as long as they are within the cabin area. If using CHS or RHS they must be securely welded to the floor panels/sills.

2) Cross Braces

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

The cross braces run from side to side between the floor bars as close to floor as practicable. The rear cross brace must line up with the main hoop. The front cross brace must be in the area from the front of the seat to the firewall. There are multiple

options for front cross brace designs – refer to roll cage diagrams.

3) Main Hoop

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 44.45mm OD x 2.6mm WT CDS

.

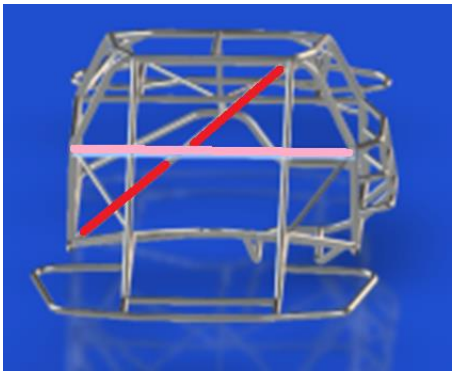
The one-piece main hoop runs vertically from the floor bars on each side of the cabin following the profile of the doors and roof behind the driver and be within 50mm of the sides of the roof at the narrowest point.

4) Main Hoop Brace

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

A one-piece diagonal brace must be fitted in the main hoop behind the driver's head from top right to bottom left. The top right mounting point must be within 250mm of the corner of the main hoop.

The use of a two-piece main roll hoop diagonal brace is permitted only if a full length left to right one-piece seat back/shoulder belt mount bar between main roll hoop down legs is used as shown below. The diagonal brace must be fitted inside the main hoop behind the driver's head from top right to bottom left. The top right mounting point must be within 250mm inward of the top right-hand corner of the main hoop.



Main Hoop Cruciform Brace (optional)

Material: Minimum 32mm OD x 3.0mm wt. CHS or
Minimum 32mm OD x 2.6mm WT CDS

A second brace may be fitted to form a crucifix with the main hoop brace. This brace runs from top left to bottom right.

5) Seat Back Support

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

The seat back support runs horizontally from the main hoop brace to the main hoop. It is also used as a seat belt mounting point for the shoulder belts.

6) Roll Cage Legs

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm wt. CHS or
Minimum 44.45mm OD x 2.6mm WT CDS

The one-piece roll cage legs run from the top corners of the main hoop to the floor bars near the front door pillars. They must follow the A pillar line in the windscreen area, following the line of the A pillars.

Exception: Cars with severe rake of the windscreen. Angle of roll cage A-pillar bar to be of not less than 45 degrees down from roof bar. May require a quarter window bar to be fitted. 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 LHS is required.

3rd Roll cage leg (optional)

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

A 3rd roll cage leg running from the centre of the main hoop to the centre of the front cross brace may be fitted as an alternative to the centre roof bar and the centre windscreen bar. If this bar is fitted, the top and bottom windscreen bars may be fabricated in two pieces (one on each side of the 3rd roll cage leg).

7) Quarter Window bars

Material: Minimum 25mm OD x 3.0mm WT CHS or
Minimum 25mm OD x 2.6mm WT CDS

A quarter window bar, if required because of excessive rake or a long roll cage, must be fitted on both sides and installed from the top NASCAR door bar to roll cage leg at top half of the A pillar.

8) Top Windscreen bar

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

The top windscreen bar runs between the roll cage legs at the top of the windscreen area. It must be within 50mm of roof and 100mm of windscreen at front roll cage leg on side elevation.

9) Lower Windscreen bar

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

The lower windscreen bar runs between the roll cage legs at the bottom of the windscreen area.

Optional: Lower Windscreen bar to Cross Brace - recommended It is recommended that an additional bar of 38mm OD x 3.0mm WT CHS or 38mm OD x 2.6mm WT CDS be fitted between the lower windscreen bar and the forward cross brace if the cross brace is located sufficiently forward in the cabin so this bar is vertical or close to vertical.

10) Centre Roof bar

Material: Minimum 32mm OD x 3.0mm WT CHS or

Minimum 32mm OD x 2.6mm WT CDS

The centre roof bar runs from the centre top of the main hoop to the centre of the top windscreen bar.

11) Centre Windscreen bar

Material: Minimum 25mm OD x 3.0mm WT CHS or
Minimum 25mm OD x 2.6mm WT CDS

The centre windscreen bar runs from the centre of the top windscreen bar to the centre of the bottom windscreen bar.

12) Driver's side door bars & spacers

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

On the driver's (right) side three (3) horizontal side bars, curved out ('NASCAR' style) to the door skin, must be fitted between the main hoop and the front roll cage leg, evenly spaced between the window sill and the floor bar.

A minimum of two vertical spacer bars, evenly spaced between the front and rear roll cage legs, must be fitted between the floor bars and the top horizontal bar. The top horizontal NASCAR bar will be within 100mm of the windowsill.

Optional: One (1) only middle (not the top bar) driver's NASCAR door bar may extend or be extended through to the front of the rear wheel arch area and attach to the main hoop via a short bar forming a 'T' junction. This bar is not to be used as an inner rub rail mount.

****LEFT HAND SIDE (PASSENGER SIDE) TO BE MIRRORED OF DRIVERS SIDE IF PASSENGER SEAT FITTED.** Including foot protection, anti-spear plate and head plate.

13) Passenger's side door bars – NASCAR Option

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

On the passenger's (left) side two (2) horizontal side bars, curved out ('NASCAR' style) to the door skin, must be fitted between the main hoop and the front roll cage leg, evenly spaced between the window sill and the floor bar.

A minimum of one vertical spacer bar, evenly spaced between the front and rear roll cage legs, must be fitted between the floor bars and the top horizontal bar. The top horizontal NASCAR bar will be within 100mm of the window sill.

Optional: One (1) only middle (not the top bar) passenger's NASCAR door bar may extend or be extended through to the front of the rear wheel arch area and attach to the main hoop via a short bar forming a 'T' junction. This option is only available with the NASCAR option for passenger door bars. This bar is not to be used as an inner rub rail mount.

Passenger's side door bars – Alternative

Material: Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

On the passenger's (left) side one (1) straight (not curved) horizontal side bar, must be fitted between the main hoop and the front roll cage leg, within 100mm of the windowsill.

An additional diagonal bar may be fitted (shown in diagram) between the main hoop and the front roll cage leg under the horizontal door bar from rear to corner to bottom front corner.

14) Rearward brace bars (optional)

Material: Minimum 34mm x 3mm WT CHS or
Minimum 34mm OD x 2.6mm WT CDS

The rearward brace bars run from the top rear main hoop down onto cabin or boot floor sub-frame, firewall, parcel tray or wheel arch areas (approx. 45 degrees) and may be crucifix. Bars in boot area must terminate inward from rear boot panel. Bars may attach down to rear bumper return pipes (if fitted). They must attach to the rearward side of the main hoop within 100mm of the centre of the top radius.

15) Head plate

Must be mirrored on passenger side bar work if passenger seat fitted.

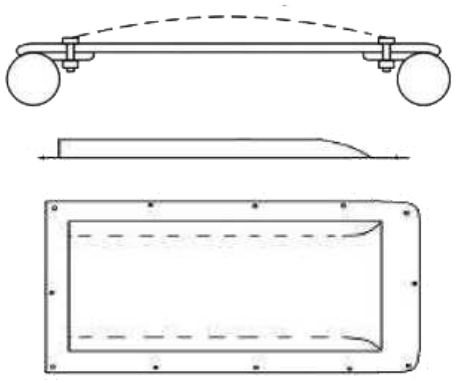
Material: Minimum 3mm steel plate or 5mm aluminium alloy plate.

A full head protection plate must be fitted to fully cover the area between the main hoop and top windscreen bar from the centre roof bar to the top of the roll cage leg on the drivers' side. When sitting, and belted in seat, there must be a minimum of 50mm clearance between helmet and head plate. Steel plate may be welded on or bolted on, alloy plate must be bolted on.

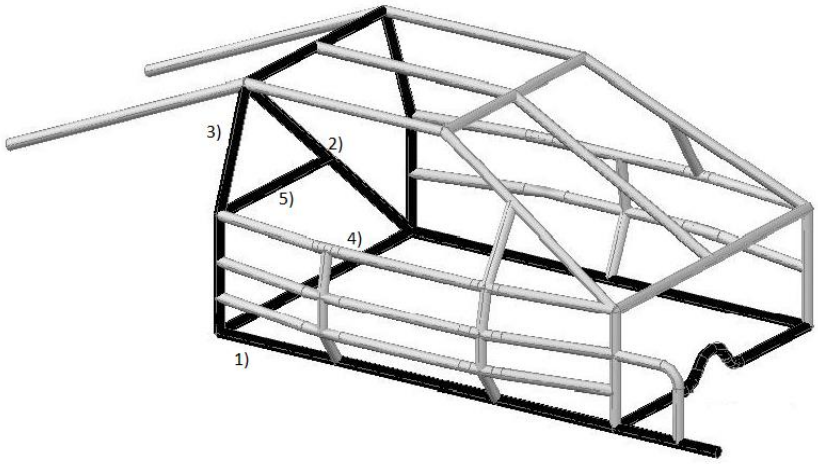
Welded option: to be mounted from above the roll cage bars and to be a minimum stitch welded to roll cage.

Bolted option: to be mounted from above the roll cage bars and bolted to minimum 10 tabs (3 tabs on each side, 2 front and 2 rear) of 50mm x 50mm x 3mm steel welded to roll cage using minimum 10 x 8mm high tensile bolts (one bolt per tab).

HEADPLATE
Plate may be bowed for clearance



Roll Cage Diagrams



1) Floor bars
2) Cross braces
3) Main hoop
4) Main hoop brace
5) Seat back support

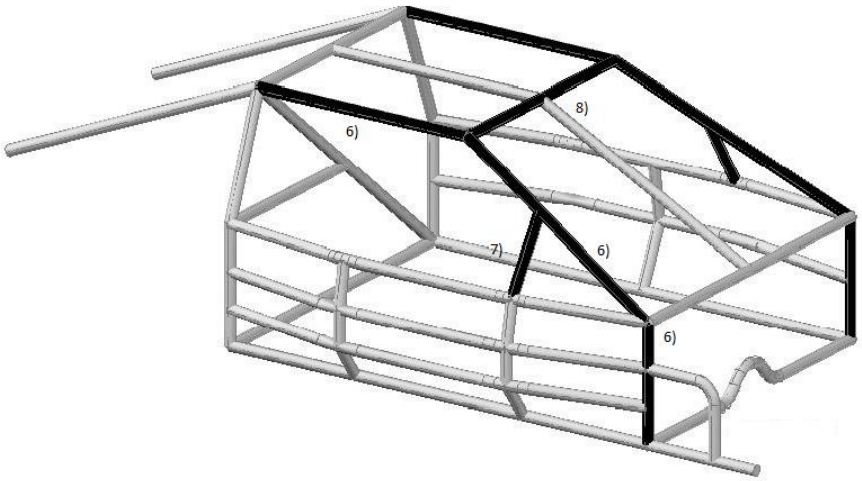
Front Cross brace design options

A. Old Style Cross Brace

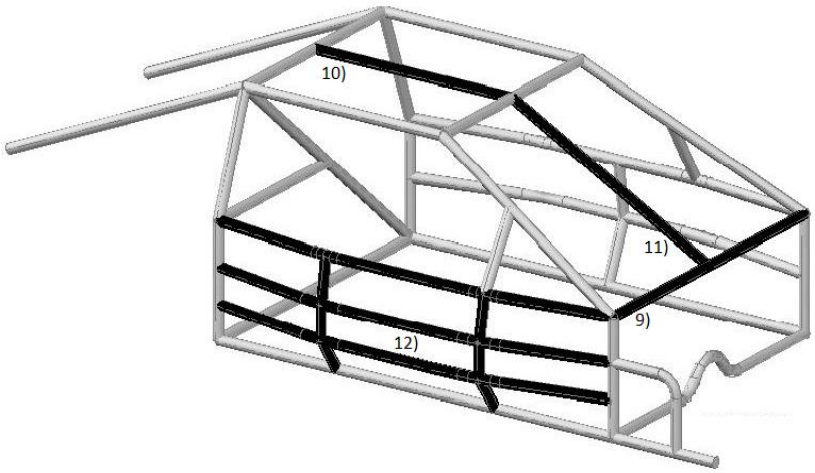
B. Later models with higher tunnels

C. ‘Fuller’ Cross Brace

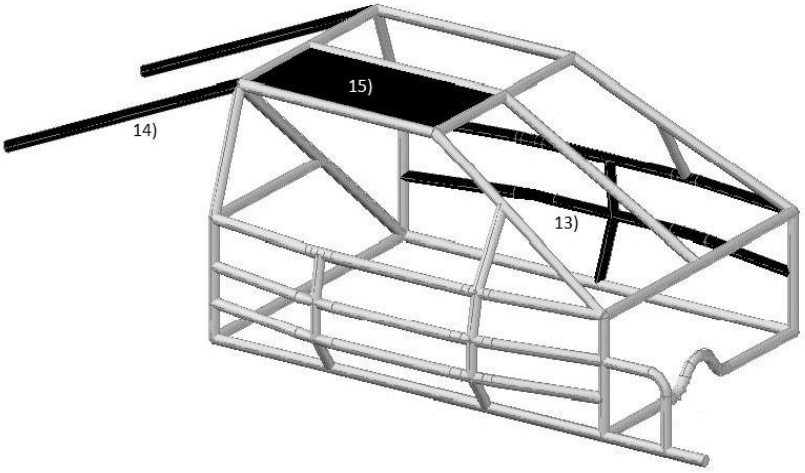
D. As used in other divisions



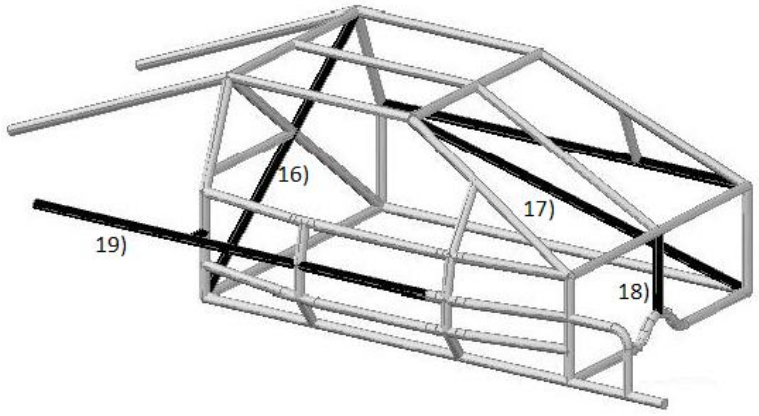
6) Roll cage legs
7) Quarter window bars
8) Top windscreen bar



9) Lower windscreen bar
10) Centre roof bar
11) Centre windscreen bar
12) Driver's door bars and spacers



13) Passenger door bars (NASCAR option)
14) Rearward brace bars
15) Head pate



16) Cruciform main hoop brace (optional)
17) Passenger side door bars (alternative to NASCAR option)
18) Additional lower centre windscreen bar (optional / recommended)
19) Optional extended door bar (driver's side only shown)

Optional external bar work

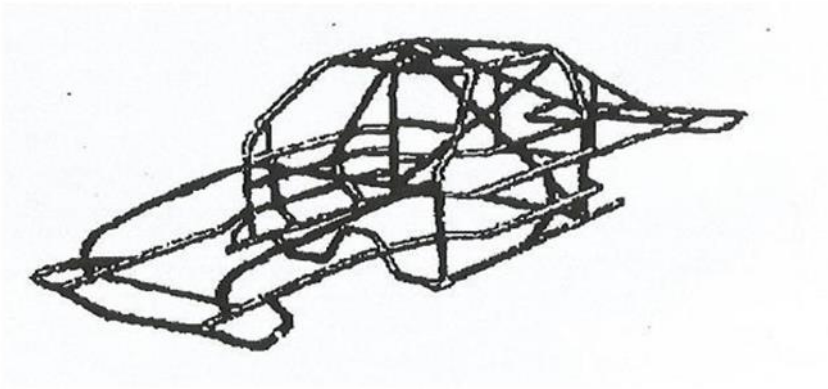
Material: Maximum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Maximum 50mm x 25mm x 3.2 RHS

1) Bar work can be attached to roll cage.

2) Vehicles with plastic bumpers must have the bar work behind the bumpers. Front barwork maximum return 300mm, minimum 100mm. Corners and ends of front and rear bumpers to be radius formed, 100mm minimum.

3) Maximum of four mounting points on each bumper bar. Returns and bumpers to be flush fitting with the body rear only. Returns of rear bumper may be extended as a skid rail against outside of the body between the bumper and wheel arch, and then extend inward to the bar work.

4) Gussets are not permitted.



2) Anti-Spear plate

Must be mirrored on passenger side bar work if passenger seat fitted.

Material: Minimum 3mm steel plate or 5mm aluminium alloy plate

Either a one-piece plate or 3 individual plates of 3mm steel or 5mm alloy must be fitted to form an anti-spear external cage plate on the driver's side NASCAR bars from floor-line to window sill bar, forward of the first vertical door bar to the front leg of roll cage. Not to be lightened by drilling. The anti-spear plate may be extended to 2nd spacer bar on the driver's side NASCAR bars as an option.

Steel plate: to be a minimum stitch welded (preferably fully welded) to roll cage.

Alloy plate one-piece plate: to be bolted to minimum 6 tabs of 50mm x 50mm x 3mm steel welded to roll cage using minimum 6 x 8mm high tensile bolts (one bolt per tab).

Alloy plate individual pieces: each plate to be bolted to minimum 4 tabs of 25mm x 25mm x 3mm steel welded to roll cage using minimum 4 x 8mm high tensile bolts (one bolt per tab).

3) Foot Protection bar work

Must be mirrored on passenger side bar work if passenger seat fitted.

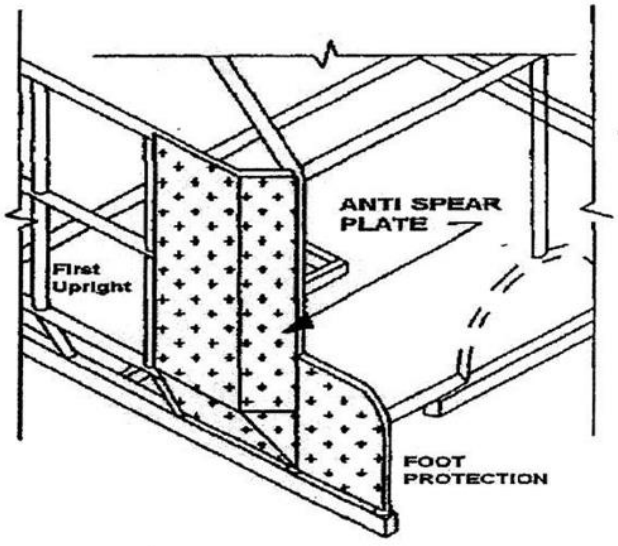
Material: Minimum 3mm steel plate or 5mm aluminium alloy plate
Minimum AS1163 Gr300 38mm OD x 3.0mm WT CHS or
Minimum 38mm OD x 2.6mm WT CDS

Foot protection bar work is mandatory if drivers' feet are past the A pillar bar whilst the driver is seated in the car in race position. The minimum requirement for foot protection a curved bar of minimum 38mm OD x 3.0mm WT CHS or minimum 38mm OD x 2.6mm WT CDS extending forward from the A-pillar bar to the floor bar in the footwell of the driver's side. The internal area formed by the foot protection bar must be filled with minimum 3mm steel plate either stitch or fully welded to the foot protection bar.

Alloy plate one-piece plate: to be bolted to minimum 4 tabs of 50mm x 50mm x 3mm steel welded to roll cage using minimum 4 x 8mm high tensile bolts (one bolt per tab).

If practical, straight leg fitment of driver's side A-pillar bar through to subframe floor bar intersecting at firewall, is permitted as an option for the foot protection bar.

Anti-Spear Plate / Foot Protection diagram



21) SCATTERSHIELD

Material: Minimum 3mm steel plate or minimum 5mm alloy

Front engine cars not using competition type enclosed clutch or competition bell housing must fit a scatter shield to cover upper half of the bell housing & protect the driver's feet and legs. Scatter shield to be a minimum 3mm steel or 5mm alloy & must be securely mounted.

22) SUSPENSION

Wheelbases must remain standard – front beam axles not permitted – otherwise constructers choice.

23) WHEELS / TYRES

a. Must be in good condition and free from cracks. Wheel edges to be rolled or rounded off if the rim protrudes past the tyre sidewall –**NO** covering to be welded to the outer section of the rim. Wire spoke, or dual wheels **NOT** permitted.

b. Heavy duty "Off Road" type centres preferred to flat plate centres. Both right hand wheels, if of flat steel plate, to be of not less then 10mm thickness. If dished centre, minimum 5mm thickness.

c. It is recommended that a maximum of 5 scallops may be taken from the outer perimeter of a solid wheel centre. Maximum diameter of the scallops not to exceed 65mm.

d. Plate centre must be securely welded on both sides to a heavy-duty rim. If centre is not scalloped, reduce rim welding to stitch welding.

e. Stepping is permitted.

f. Wheel centre hole to be chamfered.

g. Stud holes to be chamfered to suit the nut and also chamfered on the inner edge to relieve guillotine action on the studs.

h. Correct matching wheel nuts must be used and washers if applicable.

i. TYRES Must be in good condition and may protrude 100mm outside of body measured from outside of rub rail.

j. Compounds open.

k. Track width max 2150mm from widest part of tyres (outside to outside).

i. "With front wheels centred for driving straight ahead and allowing for toe in/out of 3mm Maximum – measure distance from front axle centre to rear axle centre on each side of vehicle – add dimensions from left to right – divide by 2."

24) HUBS

a) Single nut wheel attachment hubs with drive pins are **NOT** permitted.

b) Semi floating hubs on right hand rear are not recommended but are permitted.

c) Non-standard and floating hubs permitted.

d) If hubs are not approved proprietary line, they will be made of SAE 4130 Chrome moly of Comsteel x 4150 alloy steel.

e) Wheel studs are to be grade 8, 12mm (1/2") diameter minimum.

25) BRAKES

Effective foot operated hydraulic brakes must be fitted – adjustable brake systems permitted. Minimum of 3 brakes operational.

26) STEERING

a) Must be in sound condition – may be modified – all joints must be split pinned – wire spoke, or wood rim steering wheels **NOT** permitted. Steering column must be securely mounted to roll cage dash/lower windscreen bar.

b) If using a standard steering column with standard mounts, the steering column must pass through a steel loop 12mm thick, bolted or welded to the dash bar (loop not required if using a Rose joint).

c) Centre of steering wheel to be adequately padded.

d) Steering quickener permitted.

e) The use of professionally made after market steering column mounts as shown below is permitted. Mounts must be in original position and not to be used to offset steering position. Must be securely mounted to lower windscreen bar.

27) TRANSMISSION

a. Any form of Electronic Traction Control systems NOT permitted

b. Gearbox must have a minimum of two forward gears and reverse gear.

c. Torque converter Automatics permitted. Seeking neutral / inhibitor safety switches or brake pedal switch to be installed and working on all auto cars.

28) DIFFERENTIAL

a) Differentials are locked.

b) Specifications are open.

29) REAR AXLES

a. Full floating rear axle assembly preferred.

b. If not using an assembly with floating axles – a new retaining ring with an interference fit with axle must be fitted when axle or bearing is replaced. The retaining ring is to be tack welded to the axle using small diameter low hydrogen rod on low amperage.

c. If a car is presented and these procedures have failed to be observed and if an axle is dislodged and the procedure was not followed – the driver will be held responsible and penalised accordingly.

30) TAIL SHAFTS

a. Tail shafts must be fitted with 360 degrees hoop at front and rear. Front hoop – minimum 40mm x 5mm mild steel or equivalent, 6mm chain or equivalent wire rope no longer than twice the diameter of the tail shaft and be securely mounted approx. 150mm from universal joint.

b. Rear hoop to be same dimensions but elongated vertically to permit suspension movement.

c. Tail shaft and universal joints must be suitable for the vehicle and of sufficient and strength – i.e. V8 must use V8.

d. Tail shafts **MUST** be painted white.

e. Open tube diffs allowed with single wheel nuts.

31) ENGINE

a. Maximum 8 cylinders – maximum engine capacity 5.2 litres plus 60 thou oversize (320ci) Rotary engines limited to 2 rotors and 1400cc capacity.

b. Engine mounts will be solid and professional type mounts – no resilient mounts permitted.

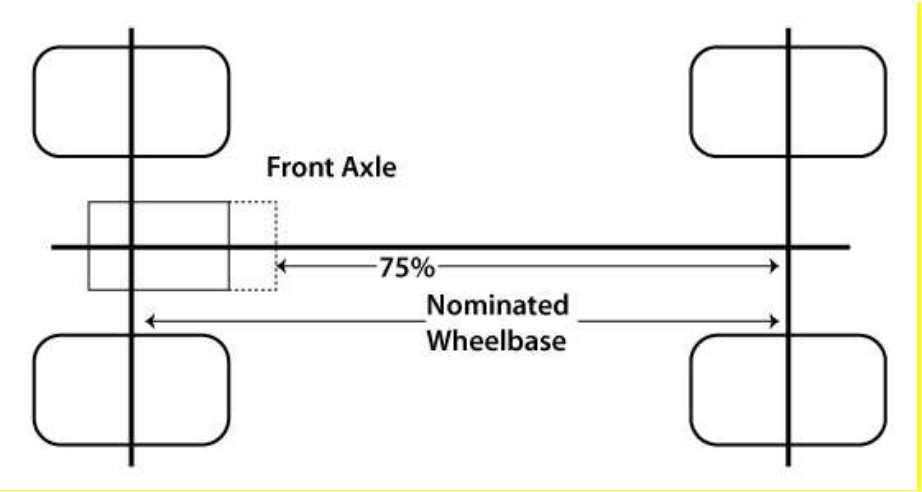
c. All engines must remain in standard manufacturer's vertical or horizontal running angle.

d. Front Wheel Drive and Rear engine vehicles must have engine within 100mm of original position with maximum offset of 50mm.

e. Front Wheel drive may be changed to rear wheel drive, but engine set back rule applies.

f. Engine setback for Front engine, rear wheel drive – rear face of engine block to be not less than ¾ distance of wheel base forward of rear axle centre line, regardless of original engine position.

g. Maximum offset – 50mm to either side of centre line.



h. OEM Fuel injected engines may use methanol. Must be standard configuration plus 60thou. Injectors maybe changed or modified to suit

i. Computers are open.

j. Forced induction is allowed on 4 and 6-cylinder engines up to 4.3 litre plus maximum 60thou oversize.

k. Carburetted engines may be modified.

l. Roller camshafts permitted.

m. All naturally aspirated 8 cylinders and "V" engines 4.0 litre capacity and/or over will be limited to a maximum 4 venturis – 750cfm maximum – carburation.

n. Return springs must be fitted to each butterfly shaft and accelerator pedal linkage or cable.

o. Oil reservoirs, oil filters and coolers must be securely mounted in an area that will not impair vision, are isolated from driver and all connections and hoses must be of professional standard – leak proof caps must be fitted where used.

p. **No Dry Sumps** permitted.

q. Twin rotor Rotary engines and engines of less than eight cylinders may use carburettor/s or fuel injection and may also be forced induction.

r. Scatter plate must surround turbo, over bell housing min 100mm x 150mm x minimum 3mm thickness or drag scatter blanket optional, (including automatics)

s. Engine interchange permitted

32) SPOILERS

a. Rear Spoiler permitted – maximum 150mm above original boot line. No wider than body at that point. Not to extend past the rear Bumper – supports must taper back to body – no radical constructions – subject to scrutineer's approval.

b. Late model Falcon/Holden type rear wings permitted. Not above roof line.

c. Front Air Dam may be fitted but must not protrude beyond the bumper.

Appendix 1 – Limited Approvals 2024-25 season

The following optional specifications have been approved until the date of the 2025 AGM. Any permanent approval after that date is dependent on these specifications being passed at the 2025 AGM.

1) The use of ballast is permitted as follows:

- Must be painted white and have car identification details (club and car number) clearly marked on each ballast piece.
- Must be very securely clamped to barwork (minimum 38mm OD x 2.6 WT CDS barwork) using professionally manufactured hardware or suspension grade U-bolts. Minimum 2 clamps for each ballast piece. Not to be attached to pipe bumpers, bumper supports or fuel tank protection barwork.
- Each ballast piece is to be less than 12 kgs and maximum total weight of all ballast is to be less than 48 kgs.