

VICTORIAN SPEEDWAY COUNCIL INCORPORATED STANDARD SALOON 2017-2022 SPECIFICATIONS

These Regulations and Specifications apply to all Owners, Driver's, Pit crews, Officials and Clubs engaged in the promotion, conducting, competing and/or presentation of VSC Inc. classes.

This book must be read in conjunction with VSC Inc. approved Special Regulations and/or Notices issued by the VSC Inc. from time to time. Ignorance of these Regulations and Specifications and Notices shall be deemed as No Defence in regard to breaches and/or appeals of same.

Where there is a difference of opinion between the Scrutineer, Machine Examiners, Officials, Owner/Driver in regard to the interpretations of any specification or regulation within this book then that matter shall be resolved by the VSC Inc. Technical Committee at the earliest available opportunity.

If 'IT' is not in the book, inquire for prior clarification or approval before construction or implementing.

GENERAL SPECIFICATIONS:

CONSTRUCTION

To be of professional standard. All materials used must be of good quality.

Bolts are not to be used through structural tubing unless a welded sleeve is provided.

All material sizes quoted are minimum unless a maximum is stated.

Definition of material:

CHS Circular Hollow Section

RHS Rectangular Hollow Section

WT Wall Thickness

OD Outside Diameter

AS 1163 G.200: Australia Standard 1163 for structural steel tubing grade 200.

For clarity in printing Imperial sizes changed to Metric have been rounded off to the nearest full millimetre. These sizes will continue to be accepted (i.e.: 1.25" = 31.75mm rounded to 32mm)

DRIVER SAFETY

All protective clothing and safety equipment must be used and/or worn in the approved and accepted manner. Flame protection (suit) plus thermal protections (underwear) equal driver protection.

PROTECTIVE CLOTHING

RACE SUIT:

Driving suit must meet minimum standard of either SFI 3.2A /1 or FIA 8856-2000 Suit to be snug fit at ankles, collar and cuffs. Must be fastened at all times whilst in car. Suit to be in a clean and tidy condition and free of holes or wear. **The only IMPACT RACING safety attire accepted is to have relevant SFI label with date of manufacture 2009-2010 or later on label.**

Two piece suits NOT PERMITTED.

No synthetic material to be worn against skin. (One way communicator earpiece and lead allowed).

No jewellery to be worn.

UNDERWEAR:

Full length underwear meeting minimum standard of either SFI 3.3, or FIA 8856-2000, "MUST" be worn by all drivers and passengers.

Approved underwear must be worn regardless of type of race suit.

SOCKS:

Only socks in good condition meeting minimum standard of either SFI 3.3, FIA 8856-2000 must be worn

Socks must be higher than bottom cuff of under wear.

BOOTS, GLOVES, BALACLAVAS:

Boots, gloves and balaclavas are compulsory in all divisions and must meet minimum standard of either SFI 3.3, or FIA 8856 – 2000.

Balaclava must cover the nose to prevent inhalation of flames and must be long enough to fit inside of or cover the collar of the race suit.

Gloves must reach driving suit cuff. Gloves cannot be modified in any way (eg. Removing thumb).

Boots must cover the ankles and be high enough to permit coverage by the driving suit cuff.

HELMET:

Driver must wear approved and correctly fitting helmet. The helmet must meet minimum standard **AS 1698, Snell 2010 or Snell 2015** and pass inspection by the Scrutineer or Technical Committee.

SFI suggested helmet life is four years. However if helmet has signs of misuse, neglect or damage Scrutineer will note helmet serial number in log book. If the helmet is found in use Chief Steward is to be notified under Rule 6.2. Chin cups are not permitted. Inspection and approval from Technical Committee to be obtained before painting.

NECK BRACE (HORSE COLLAR)/ HEAD & NECK RESTRAINT

Approved head and neck restraints (e.g.: "Hans" type devices) can be used in lieu of a horse collar neck brace. A compulsory neck brace must meet minimum standard of either SFI 3.3, or FIA 8856 – 2000. Correctly fitted to suit the driver and helmet used, leaving a nominal 15mm gap to prevent leverage injuries. A horse collar neck brace is to be high of density foam covered with Nomex, wool or similar fire retardant material. Head and neck restraint devices must only be fitted to the helmet by authorised installer as directed by the manufacturer and must be SFI 38.1 or FIA 8858-2002 or FIA 8858-2010. **5 YEAR REPLACEMENT OR RECERTIFICATION FROM DATE OF MANUFACTURE ON SFI 38.1**

EYE PROTECTION/GLASSES

Suitable eye protection must be worn IE: visor or goggles.

If a driver is required to wear optical glasses under any requirement for licence under Vic Roads licensing and/or Medical Practitioner stipulates that the optical glasses must be worn for reasons of V.S.C. Inc. licensing, then that driver must wear those glasses whilst competing and any such glasses must be made of non-splintable type material.

SEAT AND SEAT BELTS

A "Purpose Built" professional standard one-piece, fibreglass, approved plastic, steel or aluminium bucket type seat incorporating a substantial headrest, must be used. The use of mass produced, competition based alloy seats with lightening holes are permitted. E.g. Kirkey/Butler. All holes are to be swaged as per manufacturers specifications. The use of one off type seats without holes is permitted subject to VSC Technical Committee approval.

Minimum 50mm clearance Helmet to head plate/roll cage bars.

Concave seat to support back to minimum of TOP of shoulder height and width.

Top of headrest to be at least 50mm above helmet to seat contact area and to be within easy contact of helmet. Minimum width 150mm.

It is mandatory for all VSC cars to have a head rest brace of minimum strength equivalent to 20mm x 20mm x 1.6mm RHS within 25mm of the back of the head rest, to stop the head rest moving back beyond 25mm. If tubing is used end on, a plate of minimum 60mm x 60mm x 3mm is to be fitted to the end to stop it becoming a spear into back of the head rest.

Seat base to be mounted to roll cage sub frame at a minimum of two (2) points using 8mm bolts and minimum 38mm diameter body washers.

Seat back to be braced to, and attached to roll cage approximately 75mm below shoulder height using a minimum of two (2) 8mm bolts and minimum 38mm diameter body washers.

Lateral (sideways) support must be given to hips and above waist. Front of seat under legs to be raised and rolled. Seatbelts must be run through seat or links, not over top or sides. Cut outs for belts to be suitably grommetted.

Seats may be padded and covered, the covering being securely attached.

Maximum padding thickness 50mm.

Adjustable seats to be approved by VSC Inc. Technical Committee via Zone Scrutineer or Technical Representative and endorsed in logbook. An approved type racing harness must be fitted. MUST be SFI or FIA approved. Five or six point 3 inch harness is mandatory and MUST be a lever latch type, 2 inch crotch strap is permitted. SFI or FIA approved head and neck restraint (e.g.: "Hans" type devices) seatbelts permitted when restraint is used.

Harness to be fitted to manufacturers specifications or for existing fitment the following guide lines. Seat belt bolts to be minimum 10mm grade 8.8 with Nylock nuts **only**. (Standard manufacturer's bolts and nuts permitted ie: Simpson, G Force)
Maximum 300mm seat-to-seat belt mounting points

Seat belt mounting brackets must be on roll cage or subframe or cross frames, not on sheet metal. **Additional seat belt mounting points may be needed for adjustable seats and or junior drivers.**

See "Installation of Restraint System". [Fig.1 and Fig.2].

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. Many installations comply only with the letter of the rules with no understanding of the needless injury to the driver.

The mounting points should be solid and should remain so even if this vehicle is deformed due to an accident. The mounting 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 to protect internal organs makes it the preferred location for the belt. (See diagrams)

The shoulder harness should be mounted to prevent the driver from moving upward, out of the seat, in the event of a rollover. The required minimum distance from the top of the driver's helmet to the top of the roll bar does not leave much leeway for the shoulder harness to prevent the helmet from striking the roof in the event of a rollover. The shoulder harness is the major means of preventing injury in such an accident.

Anti-Submarine straps serve two purposes.

To secure the lap strap down across the drivers hips, so in the event of an accident, it is not pulled up across the stomach by the shoulder straps.

To prevent the driver from sliding forward and out of the harness [see Fig. 2(i) and Fig. 2(ii)]

For extra assurance a double strap anti submarine belt can be used [see Fig. 2(iii) and Fig. 2(iv)]

When the driver is seated in a semi-reclining position a six point system (two anti-submarine or crotch straps) is preferable. Most drivers find the two anti-sub strap position more comfortable regardless of the type of car.

In many instances, the anti-submarine straps are mounted much too far forward of the seat. This practice could cause injury as the body can slide partially out of the seat before being restrained when the strap contacts the groin. It is much more practical to cut a slot in the seat bottom so the anti-submarine strap can be anchored in line with the chest.

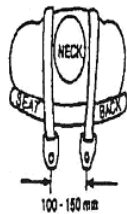
Because of difference (often vast) in competition vehicles, “standard” method of mounting is impractical.

Good judgement and common sense in inspecting restraint system mounts is needed. Safety equipment is often neglected in favour of performance equipment, but its proper operation when the need arises is essential to survival.

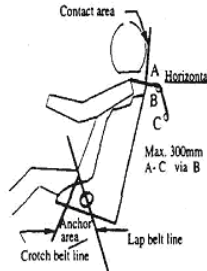
The belts must be in good condition – no fraying, tears, fading etc.

If passenger seat fitted and no passenger in race, seat belts and window net must be removed or correctly buckled or attached.

See "Installation of Restraint System".
See "Adjustment of Driver Restraints".

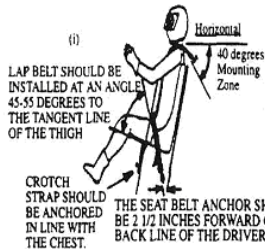


(i)



(ii)

Fig. 1



LAP BELT SHOULD BE INSTALLED AT AN ANGLE 45-55 DEGREES TO THE TANGENT LINE OF THE THIGH

CROUCH STRAP SHOULD BE ANCHORED IN LINE WITH THE CHEST.

THE SEAT BELT ANCHOR SHOULD BE 2 1/2 INCHES FORWARD OF THE BACK LINE OF THE DRIVER



(iii)

SHOULDER HARNESS SHOULD BE ANCHORED AT 45 DEGREES ANGLE FROM THE SEAT. IF MOUNTED TO A ROLL BAR CROSS BRACE LOCATED 4 INCHES BELOW THE SHOULDER LINE.



(ii)

SEAT BELTS SHOULD BE ANCHORED APART THE SAME DISTANCE AS THE DRIVER IS WIDE. MOUNTING BRACKETS SHOULD BE ANGLED THE SAME DIRECTION AS BELT PULL AND NOT TILTED IN OR OUT.

(iv)
6 POINT SYSTEM



CROUCH STRAPS MOUNTS AS FAR APART AS COMFORTABLE

FIRE EXTINGUISHER:

On board fire extinguisher optional. It must be securely mounted and be of the correct type for the fuel being used.

NUMBERS:

Numbers 1, 2 and 3 reserved for VSC Inc. State Title placegetters. All vehicles are to be presented for racing in a good condition, with paintwork, sign writing and allocated numbers to be painted on both sides of body and a number to be visible when car viewed from the front: i.e. roof number or sun visor.

Registered number and prefix are to be a contrasting colour and clear of any sign writing, etc. Number will be 300mm minimum height x 75 mm minimum width and prefix 150mm high. Cars must also have car number front and rear of car, in a clearly visible position and to be minimum 75 x 100mm in contrasting colours. Driver's name/s to be on roof above driver's door or sunvisor minimum 50mm lettering.

ROOF NUMBER PLATE:

The roof identification number shall be a metal plate 30cm (300mm x 300mm) square with a 5cm 50mm right angle fold at the bottom where 2 holes, at 200mm centres shall be drilled to take 6mm bolts. The plate shall be bolted vertically on the roof of the vehicle parallel with the side of the car. (may also be V shaped)

The plate must be black background and white number/s in plain font 200mm high.

LICENSING:

Only VSC Inc. licensed persons may participate as a driver or passenger.

Junior licence age limits, aged over 10 years and under 16 years at the time of application. 10 and 11 year olds are restricted to 4 and 6 cylinder cars.

INSURANCE:

Proof of approved speedway accident coverage is compulsory for drivers and passengers.

Ambulance membership is compulsory for drivers and passengers.

ALCOHOL:

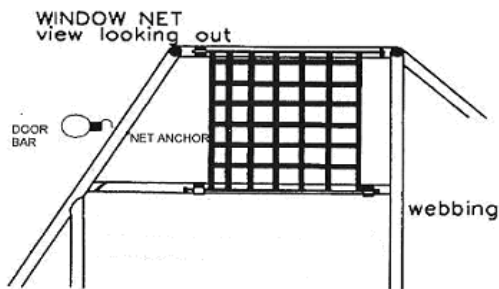
No alcohol/illicit drugs are to be consumed within twelve hours prior to racing by driver. No alcohol permitted in the pit area. Drivers, passengers or crews must not exceed .02% blood alcohol level at any time during scrutineering or race meeting, as per racing rules and regulations.

TEK SCREWS:

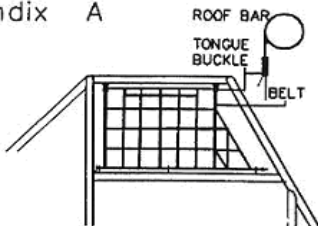
No self tapping or self drilling screws (Tek Screws) permitted on external panels.

The use of one way communicator is compulsory.

Operating one way communicator is to be presented at scrutineering.



Appendix A



WINDOW NET:

Window nets are mandatory.

Window Net lattice to be a minimum 19mm wide webbing with a maximum hole size of 75mm x 75mm inside.

Window net to be securely attached to roll cage at top and bottom, NOT car body and to cover 60% of side window area.

Not to be made of flammable material: i.e. Plastic.

Window net must be fixed top and bottom using a

minimum 25mm x 3mm flat steel or 8mm steel rod through window net. Original window net manufacturer supplied fitting hardware permitted.

The above design uses two push button seat belt buckles and the belts tongues are welded to side roof bar

Using either 25mm x 3mm minimum flat steel or 8mm minimum steel rod, to be welded to rear of buckles.

Tubing at base of net fixed with bonnet lock pins.

No tek screws, pop rivets or cable ties permitted to fit window net. **STANDARD SALOON CLASS SPECIFICATIONS**

1. CARS:

All types of passenger cars are permitted. Cars must have been available through an Australian authorised dealer network. Cars must remain in Standard Model trim: i.e. anything not mentioned in these specifications reverts to Standard Model specifications and be no less than 8 years old for start of the model being used. NO sports type models permitted.

No Four Wheel Drive Vehicles permitted. All diecast, brittle plastic and chrome must be removed from the vehicle and all holes in firewall must be covered. No strengthening to be added or holes to be filled in body or chassis unless compliant with these specifications.

Vehicle identification plate must remain where applicable. Cars of unusual construction or configuration must apply for approval from V.S.C. Inc. Technical Committee before construction. All new models must have VSC and Technical Committee approval to be eligible to race.

Change of body (same model reshell) during race season requires new day light inspection and log book endorsement. Re registration not required.

2. ROLL CAGE:

See attached minimum roll cage diagram.

All bars in diagram are compulsory.

All cars must be constructed with a complete Roll Cage built to the NASCAR design as used in other classes within the VSC Inc.

A head plate is compulsory for the driver and passenger and must be welded on a minimum of three sides. The head plate to be 3mm flat mild steel. Refer diagram. Bolt-in roof plate optional. Removable head plate to be 5mm aluminium alloy or 3mm steel, 25mm x 3mm FMS strip to be welded to main hoop, top windscreen bar, centre roof bar and side roof bar. 10 of 50mm x 50mm x 3mm MS tags acceptable. Plate to be mounted, from above, with 10 x 8mm diameter high tensile bolts, 3 each side, 2 front, 2 rear. Heads of bolts to be downwards, i.e. no projections.

No bar work permitted front or rear of roll cage except foot and fuel tank protection bar work.

A scatter shield of 150mm minimum wide x 3mm minimum steel must be incorporated into the engine fire wall and/or floor to extend from

right floor to left floor and cover the clutch housing. So as to protect the driver and passengers limbs from a 'clutch explosion'. When an engine is transverse the scatter shield must also cover the driver's side of clutch housing.

Scatter shields to be securely mounted to floor and/or fire wall. Preferably braced to roll cage under dash bar.

The roll cage is to prevent the collapse of cabin area under impact. Roll cage to enclose the driver/passenger, to be full width and full height of the cabin area.

The roll bars are to constitute a cage type framework; braced fore and aft. The cage must extend from behind seats forward to the windscreen area and incorporate protection for the feet.

- a) All roll bar material must be good quality mild steel, minimum AS 1163 Gr200. Minimum 38mm OD x 3mm WT CHS. The use of any material other than low carbon steel for the construction of roll cage must have VSC Inc. Technical Committee approval. Aluminium based material **not** permitted.
- b) 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. All bends to be made using a pipe bender with the correct size former, Galvanized tubing or welding over threaded tubing **not** permitted in any structural barwork. Water pipe fittings or malleable fitting are not permitted. Roll cage built using other than fusion welding techniques will not be accepted. Gussets on welded joints may be required.
- c) Main roll cage hoop to be within 50mm of sides of roof at narrowest point. Top windscreen bar to be within 50mm of windscreen at front roll cage leg on side elevation. Front roll cage leg is to follow the "A" pillar line within 50mm. NOTE for cars with sever rake of windscreen. If the angle of roll cage "A" pillar bar is less than 45 degrees down from roof bar a quarter vent bar minimum 25mm OD x 3mm W.T. CHS is necessary. Must be as close as practicable to the first upright of the NASCAR barwork. Roll cage legs shall be welded to the top of sub frame within 50mm of door pillars on front elevation. Sub

frame to be of tubular or angle section running fore and aft, welded or bolted to the floor pan/sills using minimum FOUR 12mm steel bolts through the subframe and using 100mm x 100mm plates under the floor or four x 50mm fillet welds.

d) **SUBFRAME MATERIAL SIZES:**

A. Tubular minimum 38mm OD x 3mm WT CHS or 38mm x 38mm x 3mm RHS.

B. Angle minimum 50mm x 50mm x 5mm.

e) A two piece diagonal brace, minimum 38mm OD x 3mm WT CHS will be fitted in main rollcage hoop behind driver/passenger head.

f) **ADDITIONAL MINIMUM BARWORK:**

38mm OD x 3mm WT CHS.

Top Windscreen bar.

Lower windscreen/dash bar.

Nascar door bars on drivers side: Three horizontal side bars with only one bend at each end curving out to the door skin, are to be placed between front and rear cage legs, with even spaces between top bar and cage subframe. Top bar to be within 75mm of original top window sill.

A minimum of two vertical spacer bars, evenly spaced between front and rear roll cage legs, are to be fitted between the cage subframe and top horizontal bar. Two door vehicles or vehicles with excessive roll cage length between the front and rear legs of the roll cage, must use three vertical bars and a quarter vent bar fitted above the first vertical bar.

Passengers (Left) side minimum two bars between front and rear roll cage legs. One must be horizontal within 75mm at window sill height.

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

h) Minimum of two subframe cross braces at roll cage legs, either 38mm OD x 3mm WT CHS or 35mm x 35mm x 3mm WT RHS. Option for cars registered prior to 1-7-2014, front subframe

cross brace (spreader bar) may be moved rearward no further than the first vertical door bar or to a maximum 300mm from the front roll cage leg (as per diagram), providing a diagonal brace is fitted between spreader bar and front roll cage legs on both sides. Centre roof bar minimum 32mm OD x 3mm WT CHS. Centre windscreen bar minimum 25mm OD x 3mm WT CHS.

- i) FOOT PROTECTION must be used as per diagram 1, minimum tube size 32mm x 3mm **CHS with minimum height of 300mm and brought forward to a minimum of the accelerator pedal**. Must be filled with 3mm plate.

A mandatory foot protection brace bar of a minimum 25mm x 3mm chs fitted between the front top half of the foot protection bar and bar work to the left on the driver`s side (preferably the dash bar) and between the front top half of the foot protection bar and dash bar at approximately 45 degrees on the passenger side if passenger seat fitted.

A MESH SCREEN will be securely fitted to roll cage and/or metal body covering the complete windscreen opening in front of driver and passenger, using either weld, bolts or metal hose clamps, covering the entire windscreen opening. Maximum mesh size 50mm x 50mm minimum gauge 3mm. 25mm x 25mm mesh may use minimum 2.5mm gauge wire.

An “**ANTI SPEAR**” deflector plate, 3mm (not to be lightened by drilling) to be fitted to drivers side, from floor line to window sill bar, forward of the first vertical door bar to the front leg of the roll cage and must be fitted outside of roll cage. Must be mirrored on passenger side bar work if passenger seat fitted.

ALL BARS IN THIS DIAGRAM ARE MANDATORY. LEFT HAND SIDE MUST BE MIRROR OF DRIVERS SIDE IF PASSENGER SEAT FITTED. INCLUDING HEAD, ANTI SPEAR, AND FOOT PROTECTION PLATE AND BARS. NASCAR BARS MAY BE USED ON PASSENGER SIDE WITHOUT PASSENGER SEAT FITTED.

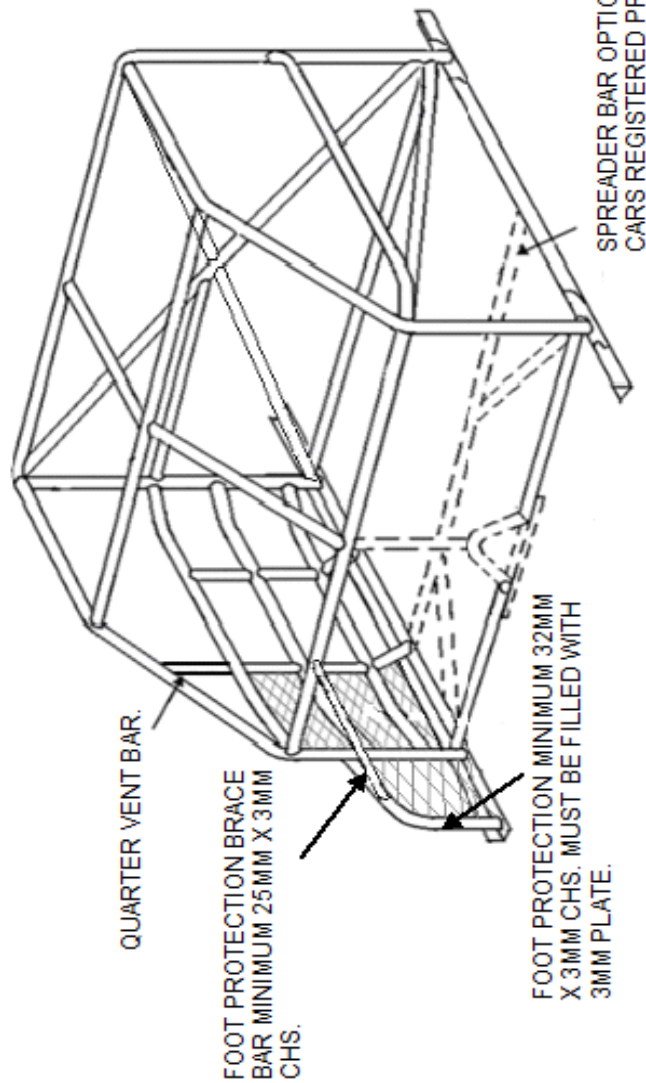
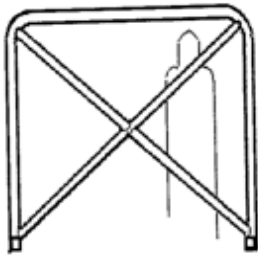
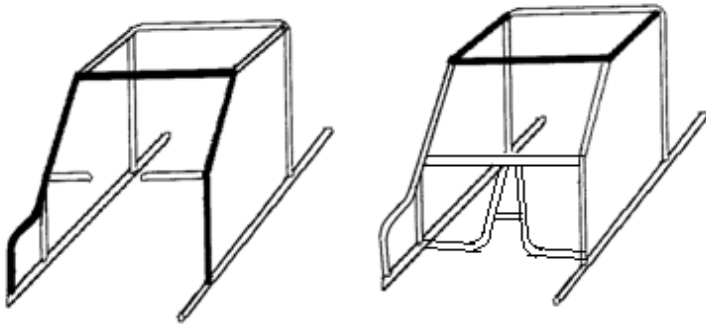
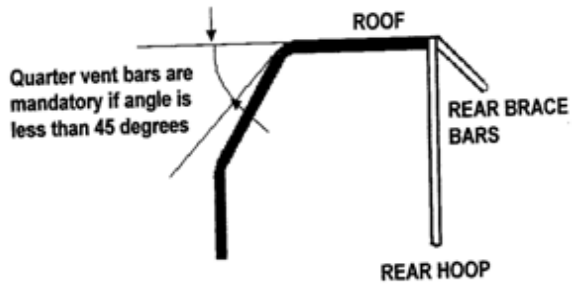


Diagram 1

SOME ROLL BAR OPTIONS



REAR HOOP DIAGONAL BRACE



HEAD PLATE

Plate may be bowed for clearance

Diagram 2.

FUEL PROTECTION BARWORK:

All fuel tank protection bar work to be a minimum 38mm OD x 3mm WT CHS, maximum 42mm OD x 3mm WT CHS.

To be welded to rear roll cage hoop. Bar work may follow contours of boot floor and may be attached by a maximum of four x 50mm fillet welds to floor or two 12mm steel bolts through the boot floor not chassis rail, using two 100mm x 100mm x 5mm steel plates or one 50mm x 50mm x 4mm steel angle (no wider than inside of rear wheel arches) above floor, and 100mm x 100mm x 3mm steel plates under the floor.

Rear braces to be attached to top of roll cage rear hoop no more than 200mm from outside of roll cage leg. Lower bars to be no wider than inside rear wheel arches, minimum width 800mm. To be no closer than 150mm to rear inner face of boot panel.

One (1) pair of reward bars may be crossed.

Bar may be joined by sandwich plates or sleeved-joints to be minimum 500mm from rear of roll cage. Sandwich plate size maximum 150mm square, minimum thickness 5mm, using four (4) 10mm high tensile bolts per join.

Alternatively bars to be sleeved a minimum 150mm and welded.

Optional, extra protection barwork, **maximum 200mm high**, as per diagram 3.

A spreader bar is to be fitted between lower bars adjacent to rear firewall, to be a minimum 38mm OD x 3mm W.T. CHS, or 40mm x 3mm W.T RHS. as per diagram 3.

Rear bumpers not to be attached to bar work.

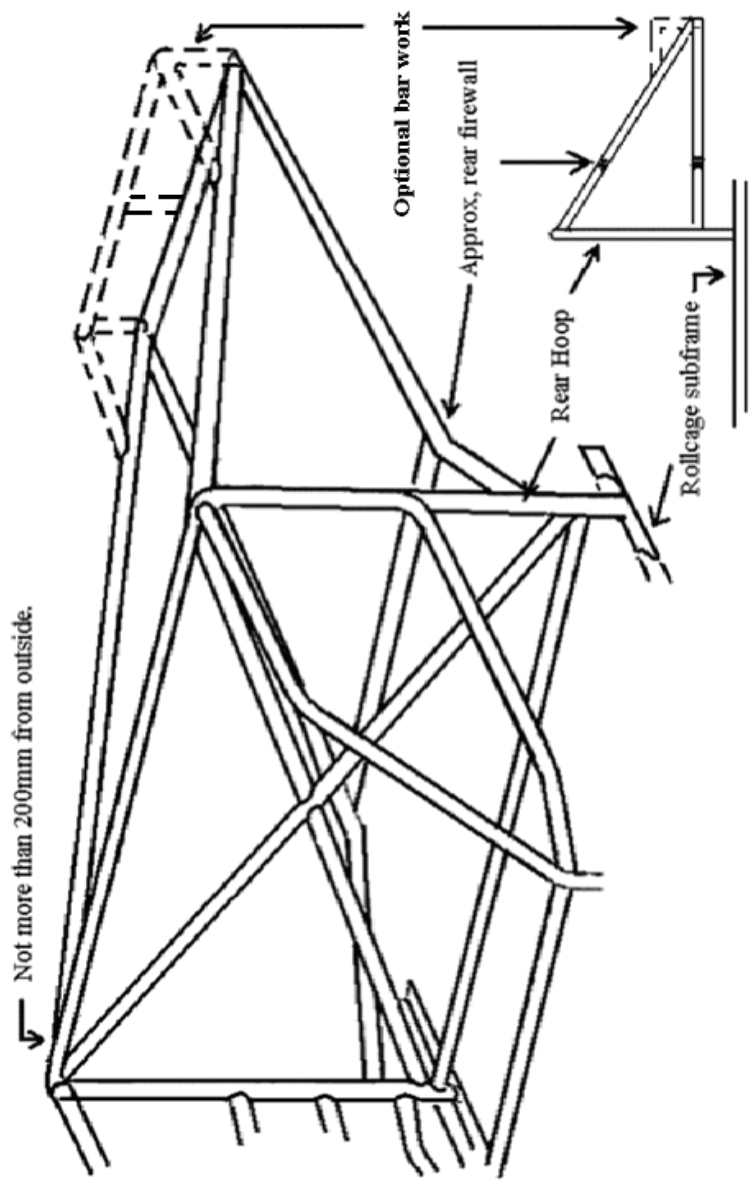


Diagram 3.

3. BODIES:

Original metal bodies must be used. Redundant interior brackets IE: console and seat brackets may be removed.

Securely attached Fibreglass rear quarter panel and front mudguard covers may be used over existing original rear quarter panels and front mudguards.

Doors must be securely bolted or welded shut.

Door skins may be fabricated. Fabricated door skin to resemble the original, minimum thickness 1.2mm, maximum thickness 1.6mm steel or 2mm fibreglass. Fibreglass door skins to be securely mounted at each end, bottom and top. Maximum 25 mm x 25mm x 1.6mm RHS or 25mm x 25mm x 3mm angle top support.

STANDARD SALOON FIBRE GLASS DOOR SKIN BOTTOM MOUNTS

Maximum 40mmx3mm flat steel may be fitted to sill panel, using rivets or weld. Maximum 15mm overlap onto sill, maximum 15mm long stitch welds at minimum 170mm centres, ON ONE EDGE OF SILL OR FLAT ONLY.

Bonnets must have a minimum of two quick release pins. Boot to have a minimum of one quick release pin, two preferred, pin to be 12mm.

No openings or holes allowed in bonnets.

Both front doors may be cut down a maximum 75mm to allow for driver/passenger access, but front and rear original metal door skins must be used, window frames optional.

A rear panel of maximum thickness 1.6mm flat material may be fitted across rear of vehicle for cosmetic reasons. (eg. Rear XD Falcon)

Rear quarter vent windows or upper quarter panel above door window sill only may be filled in (optional). Original covers or panel steel covers only.

OPTIONAL RUB STRIPS:

Mild steel rubbing strip between wheel arches to be 25 x 25 x3mm RHS.

Be securely mounted against body at a minimum of four) reasonable evenly spaced points.

Bolts must be minimum of 12mm coach-head (cup head) bolts and be bolted horizontally to bar work. Bolts at each end must be no more than 50mm from the end of rub rail.

Inner mounting bar to be returned to roll cage at each end.

Rubbing rail ends to be closed and taper to 45 degrees as not to become a "spear"

Rub strips not to be used on quarter panel behind rear wheel.

See diagram 4.

Or VSC style rubbing strips between wheel arches permitted, to be 25mm x 25mm x 3.2 WT RHS, to be securely attached against outside of body by four (4) reasonable evenly spaced points, using 12mm cup head bolts (round dome head). Through onto bar work mounting points, ends of strips to be chamfered and filled in, mounting bracket to be no larger than 25mm x 25mm x 3.2 RHS where necessary (ie. onto rear bar work) any holes in bar work must be sleeved and sleeves must be welded in place.

No other material may be placed inside rubbing strips, end mounts to be within 50mm of ends. See diagram 5.

Inner rails only as in diagram 4. may be used.

Diagram 4.

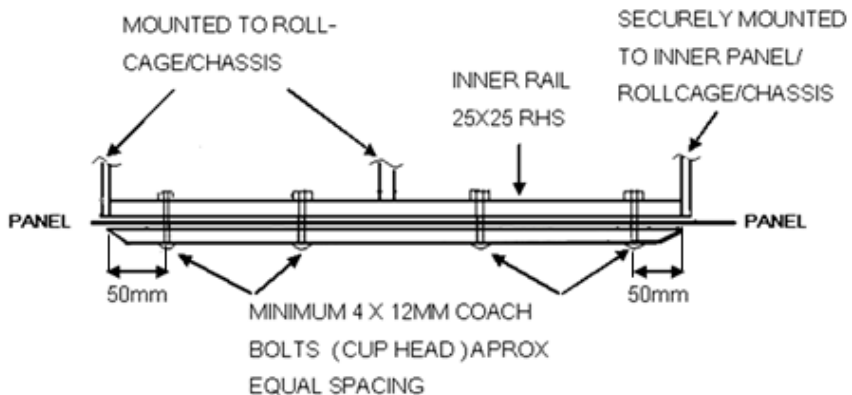
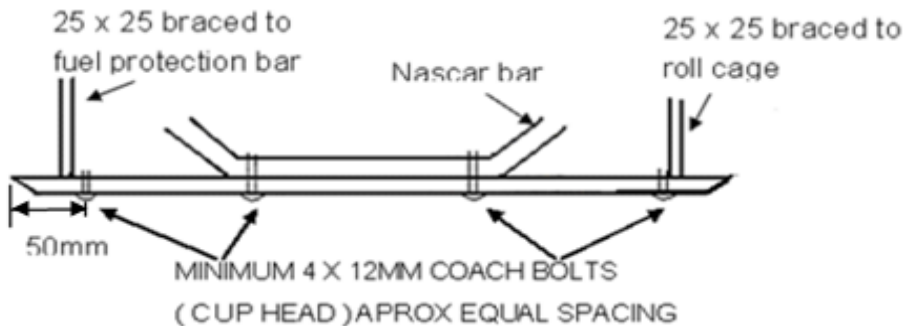


Diagram 5.



4. BUMPER BARS:

Must be original and securely bolted in the original position. Plastic bumper bars on late model cars may be used. Original bumper replacement, plastic bumpers may be used, including the original mounting equipment or original steel bumper must be cut off at widest chassis bracket mounting point, bolt/weld, plastic bumper may be fitted over top and bolted in place. Bumper to be Holden to Holden, Ford to Ford etc. Exception where original bumper bar is unavailable or impractical, permission may be given to use suitable replacement after application to V.S.C. Inc. Technical Committee.

5. GRILL:

May only be filled with mesh, maximum 50mm x 50mm x 3mm thick mesh.

Mesh may only be attached with maximum 1.6mm flat panel steel supports.

No strengthening folds permitted.

Headlight and taillight opening may be filled with mesh or panel steel.

6. SUSPENSION:

Must remain visually standard, as per OEM manufacturer.

Gas type exchange shock absorbers permitted.

No additional springs or shockers permitted. No aluminium strut tops permitted. No externally adjustable shockers permitted.

7. STEERING:

Steering to remain original type; i.e. Rack and Pinion to remain Rack and Pinion.

Steering a minimum three turns lock to lock. If car has less than three

turns lock to lock when fitted with standard or optional OEM steering systems, then proof must be supplied at daylight inspection and logbook will be suitably endorsed.

NO modifications permitted to steering arms.

NO reduction boxes permitted.

After-market steering wheels permitted, minimum 330mm diameter.

Steering must be mounted in original position and securely attached to roll cage (i.e. U Bolt) top steering shaft mount maybe moved maximum 30mm at dash bar to bring steering wheel in line with driver's seat. Non original steering shaft permitted

Steering wheel hub must be suitably padded.

OEM power steering permitted. Maximum power steering cooler size 250mmx175mm must be mounted in engine bay.

Quick release steering wheel is mandatory.

Quick release mechanism is preferred to be purchased from a manufacturer. Any that are self manufactured must not be driven by the attaching pin and seek Technical Committee direction and be approved by Technical Committee via Technical Representative.

Standard front end alignment settings free.

8. BRAKES:

Standard brakes must operate effectively on all four wheels at all times.

Brakes not to be adjustable from the drivers/passengers seat.

Hand brake, if fitted must remain standard.

9. ENGINES – GUIDELINES FOR ENGINE INSPECTION:

Engine will be inspected on the basis that all parts used in/on all engines must comply with the specifications/dimensions specified in original manual produced by the manufacturer for the standard engine; with the exceptions of listed permitted modifications.

Owner/driver is responsible to prove the above and produce information when necessary to validate.

4, 6 and 8 Cylinder reciprocating only permitted. Owners of V8 four (4) barrel engined cars not listed must provide documentation to satisfy Scrutineer/Technical Committee that said combination of carburettor to engine to car is permitted. This document must be produced at daylight inspection and forwarded to State Secretary for logbook endorsement. Sports model, Rotary, Fuel Injected, Turbo-Charged or Super Charged engines or any other performance modifications are not permitted.

Cars may run any size engine as long as the design of the engine conforms to the model of the car (i.e. 202 motor in an EH Holden; 4lt sohc engine in an EA Falcon etc.) Multiple carburettors are not permitted.

Engine capacity size is to be OEM – Base Australian Model.

All engines to have VSC issued **BLUE TWIST** seals fitted before racing at any race meeting (**see section 23. Engine inspections**).

V8 Engines permitted to have a standard OEM manifold fitted with a standard 4 barrel OEM carburettor if fitted on that series. Choke butterfly/s, linkage and shaft only may be removed.

V8 engines may use a **standard model** number 4150 or 4160 (not HP etc) Classic or Avenger series vacuum secondary Holley 4 barrel carburettor up to a maximum 750cfm.

Original choke horn, list and model numbers to be in standard unaltered condition.

Choke butterfly/s, linkage and shafts are the only parts that may be removed.

Standard interchangeable internal parts permitted IE: Jets, power valve, floats, needles and seats.

All housings, bowls, blocks, plates, venturis, shafts etc to be in standard original condition.

(no grinding, drilling, filing, sanding, welding etc.)

A maximum 25mm adaptor plate may be used when necessary.

4 and 6 cylinder vehicles may run a standard original 2 barrel carburettor or may use OEM manifold and one standard 2 barrel carburettor up to and including 500CFM (i.e. Holley).

Choke butterfly/s, linkage and shafts are the only parts that may be removed.

A maximum 25mm adaptor plate may be used when necessary.

VN, VP, VR, VT, VY, VX, VZ, VE V6 Ecotec may use approved standard Ecoflow adaptor only and Holley 2bbl to 500cfm.

Carburettors to be fitted with two throttle springs, one to carburettor butterfly and one to the linkage.

All vehicles must use some form of air filter. Standard fitment base model air cleaner ducting only is permitted before air cleaner element.

No air cleaners or air intakes in cabin.

Headers are permitted only if factory fitted on standard base model 4 and 6 cylinder only can run extractors.

Cable, chain or solid mounts must be used to hold engine in position.

Engine to be of standard stroke, camshafts unrestricted.

Cam followers to remain as standard type; i.e. Hydraulic, Solid etc.

Replacement cam drives unrestricted. Crankshaft to remain as standard, stroking or fitting of other makes or specially built crankshafts not permitted.

Conrods and pistons to remain as standard.

Standard model valves and port sizes only permitted.

Sumps may be baffled but must remain externally visually standard.

External oil drain tubes permitted from rocker cover to sump and must be installed in a safe manner.

After market chrome or alloy rocker covers permitted.

Distributor – OEM system, electronic distributor permitted.

Standard engine may be over-bored a maximum of .060”.

A standard cylinder head may be faced a maximum of .060”.

Valve train gear etc. to remain standard, interchangeable standard components permitted; i.e. cylinder heads, carburettors, manifolds, but must remain same make and series; Late model engine permitted with early head and manifold configuration. Eg; VT black engine can run up to VL heads manifolds etc.

Engines permitted in approved late model cars.

FALCON-

XF

200ci or 250ci Log head or cast iron crossflow

302, Cleveland with 2 barrel carburettor/ 4 barrel carburettor

351 .Cleveland with 2 barrel carburettor/ 4 barrel carburettor

EA, EB, ED, EF, EL, AU

351 Windsor with 4 barrel carburettor

302 Windsor with 2 and 4 barrel carburettor

250 Alloy crossflow

4 litre OHC engine with single point manifold and up to a 500 cfm

Holley carburettor.

BA, BF

4 litre SOHC engine with single point manifold and up to a 500cfm

Holley carburettor.

250 Alloy crossflow

FG

FG Falcon may only use 4 litre SOHC engine and single point manifold and up to a 500 cfm Holley carburettor. Sump maybe fabricated but must be same capacity and function as OEM sump for the engine.

Rear face of engine block to be in the same position as original FG engine.

COMMODORE-

VL

Nissan RB30 engine using Nissan Patrol manifold and up to a 500 Holley carburettor.

VN, VP, VR, VS, VT, VX, VY, VZ

V8 308 / 5 litre including black motor can run VL heads, manifold, and 4 barrel carburettor. Or may use inline 6 cylinder engine or V6 Buick or Ecotec with approved adaptor and carburettor. If so VK K frame must be used up to VS and VT series 1 K frame to VZ.

VE

VE Commodore may only use V6 Ecotec with approved standard Ecoflow adaptor only and up to a 500cfm Holley carburettor. Sump may be fabricated but must be same capacity and function as OEM sump for the engine. Rear face of engine block to be in the same position as original VE engine.

10. COOLING SYSTEM:

Any size radiator can be used, but must be fitted in the original position. No metal to be removed from around radiator opening. No additional cooling systems permitted e.g. Heater cores, spray bars. The use of, and type of fan is optional. Water overflow must be no bigger than standard. An effective pressure release system must be fitted. Lever lock type cap preferred. No optional oil coolers allowed. A steel mesh may be fitted between fan and radiator. The use of non-standard water outlet/inlet points not permitted, conversion of Welch plug holes to water outlets/inlets not permitted.

11. BATTERY:

Must be securely mounted behind rear roll cage hoop bar work within rear cabin and attached to the roll cage or fuel tank protection bar work (not floor) in a suitable cradle. Lower angle frame to be mounted no higher than to top of lower fuel protection bar. All batteries to be fully enclosed i.e. battery box. Marine type box acceptable. Must have a steel angle frame that covers four (4) sides of the battery, top and bottom. Angle to be a minimum 25mm x 25mm x 3mm steel. Frame to

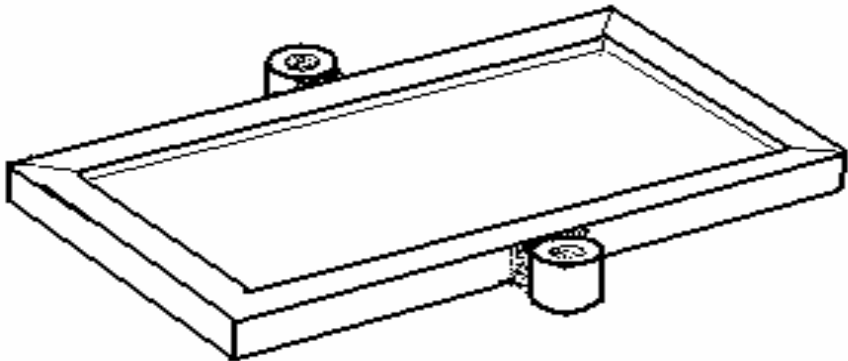
be connected with a minimum two (2) 8 mm rods/bolts, recommended four (4). See diagram 6.

A blue triangle of 50mm x 50mm x 50mm to be placed on the outside of the car to show the position of the battery.

Only one passenger vehicle size battery is to be used.

Diagram 6.

Example of mandatory battery clamp/hold down frame.



**Frame 25 x 25 x 3mm Angle
Top and Bottom**

12. KILL SWITCH:

An external kill switch of contrasting colour must be fitted to the middle of the cowl panel forward of windscreen mesh, and be clearly marked ON/OFF. The purpose of the kill switch is to kill the engine, ignition and all electrical items. **Type of fuel being used to be marked at Kill Switch.**

13. TRANSMISSION:

As per standard vehicle specifications

Clutch controls may be converted from cable/lever type to hydraulic.

Transmissions to be Holden to Holden; Ford to Ford; Not Ford to Holden.

Automatic or Manual transmissions permitted.

Automatic driven vehicles can run a transmission oil cooler. Must be mounted in engine bay. Size up to 250mm x 150mm.

When using an automatic a working gearshift activated inhibitor switch **must** be used.

Floor shifts are permitted, but if used must have a knob fitted and a correctly fitting boot, Bell-housings are interchangeable, after market are permitted.

14. TAILSHAFT:

Each piece of tailshaft must be fitted with 360 degree hoops at the front and rear. Front hoop to be minimum 40mm x 5mm FMS, 6mm wire cable or equivalent, be round, no larger than twice the diameter of the tailshaft, and be securely mounted approximately 150mm from the universal joint. 6mm minimum chain securely mounted through the floor can form lower part of hoop. Rear hoop to be as above except that it may be elongated vertically to permit suspension movement. Full chain hoops permitted.

Tail shaft and universal joints to be correctly phased and be suitable for the application. A one-piece tailshaft may be used in place of a two-piece tailshaft. Minimum modification permitted to fit the one-piece tailshaft in the tunnel.

15. DIFFERENTIALS:

No locked differentials. No limited slip differentials allowed. Axles to have shrink rings, tack welded in three positions. Interchangeable ratio permitted.

DEFINITION of an "Un Locked Differential". When a vehicle is jacked up, BOTH rear wheels must turn independent of each other. i.e. when one person holds one wheel whilst car is out of gear, other wheel should be able to turn freely with no resistance by second person. It is at the discretion of the Technical Committee as to how differentials are checked. VSC Inc. authorised diff checking device where available, to be used during scrutineering.

THIS CHECK IS TO VERIFY DIFF IS UNLOCKED BEFORE CAR RACES. Check is with car in gear, jack up in centre of diff, opposite wheel must revolve in opposite direction to wheel with diff check tool attached. Diff check tool not to be assisted to fall. Brakes may be adjusted or removed for this check, Independent diff must be supported by both side suspensions. **ONCE CAR HAS RACED**, check is with car out of gear. One wheel at a time is to be jacked up. To pass the check one wheel must be able to be turned one full revolution by hand, by the scrutineer. No adjustments permitted with this check.

16. EXHAUST PIPES:

Must exit out behind the rear rollcage hoop and be securely mounted. Mufflers must be fitted and the noise level must not exceed 95 decibels or track requirements.

The exhaust must be fitted underneath the vehicle, and securely attached in minimum two places, mounts to be a minimum 4mm chain. Headers are permitted only if factory fitted on standard base model. Extractors only permitted on 4 and 6 cylinder vehicles.

17. FUEL/FUEL TANK:

ONLY pump fuel commercially available to the general public at a service station must be used.

No additives permitted.

An effective lever type fuel tap or SAE R6 combination type lever tap/filter must be fitted within reach of the driver whilst belted in the car and accessible to crash crew and must be clearly marked ON/OFF and fuel type. Return fuel line if used must have one way valve fitted near tank.

Fuel lines and electrical wiring must be separated and both to be suitably grommeted where required.

Original tank to be removed.

Fuel tank may be fabricated, all metal tanks to be constructed of minimum 1.0mm steel or 3.0mm aluminium alloy, **maximum capacity 30 litres**. No Jerry Cans permitted.

Boat fuel tank permitted but must comply with above measurements.

Competition type "plastic" tank permitted. Metal fuel filler rings on plastic fuel cells must be fitted with earth strap to barwork or body. Fuel tank to be mounted centrally between wheel arches in a steel cradle attached to bar work. Fuel tank to be mounted with rear of tank no further back than rear of wheel arches. Fuel tank to be secured in a steel cradle attached to rear fuel protection bar work (not body). Fuel tank straps to be steel minimum 25mm x 3mm flat or 5mm steel chain, no aluminium straps or fittings to secure tank permitted.

All electric fuel pumps and fuel filters to be inside bar work.

Fuel tank must not protrude through floor.

Fuel tank to be isolated from driver by a metal firewall.

Mounting brackets not to be welded to fuel tank.

Fuel tank must have positive seal cap. (Not a taper)

Fuel tank area must be accessible for scrutineering.

Parcel shelf modification permitted if required.

Tank must have a non-spill one way valve breather **finishing through the floor away from the exhaust system.**

Pick up and breather pipes to enter top of the tank only, all fuel lines must be fastened to fuel tank (i.e. no push on/in fittings)

Commercially available competition type plastic or metal fuel cells/tanks may use factory fitted side outlets.

Fuel pipe from tank to engine, is to have flexible section close to the tank and engine, to be securely fastened. Screw type clamps with barb fittings or SAE R6 type fittings to be used throughout fuel system.

Maximum two fuel system connection to tap only in cabin area.

Commercial R6 bulk head fittings allowed at firewalls.

Neoprene fuel line may be used or the original system.

Type of fuel being used must be marked at kill switch, fuel tap and on boot lid near filler cap.

Fuel tank capacities are measured by the volume being .030 of a cubic meter maximum (eg. Rectangular tanks 480mm (4.8) x 250mm (2.5) x 250mm (2.5) = 30 litres, cylindrical tank 611mm long x 250mm diameter = 30 litres).

18. WHEELS & TYRES:

Radial tyres ONLY, permitted with SPEED RATING of V or less.

Maximum casing size to be 225.

Minimum tyre section to be 60 series as stated and clearly visible on the tyre side wall, (i.e. 225/60 H R14 or 225/75 H R14).

No performance tyres permitted.

Maximum rim width 7 inch, 178mm. All wheels must be of steel or "mag" construction and must meet A.S.A. standards for use on street registered cars under registration by Vic Roads.

"Mag" wheels must be of one-piece construction.

Rims edges to be free of jagged edges.

Rim diameter – a tolerance of one inch (1") from the standard rim diameter is permitted, maximum rim diameter permitted remains 16 inches.

Rim diameter must be the same across the front or rear axle line.

Tyres may be regrooved using up to a maximum 10mm wide cut with any pattern. Track to be standard plus 50mm for vehicle being used.

This is the maximum allowable measurement. Measured from centre of tyre to centre of tyre at axle height.

Vehicles using 4 stud pattern can be converted to 5 stud pattern using professional methods.

19. MIRRORS:

Mirrors NOT permitted.

20. PADDING:

All projections that may present a danger to the driver/passenger must be suitably padded.

21. TOWING EYE:

Lifting/Towing chain is permitted front and rear; to be fitted between bumper irons/chassis rails.

Mounts not to be strengthened. Maximum size 8mm chain.

22. DIRECTION OF RACING:

Cars to be capable of racing in both directions.

The direction of racing will be decided in the pits prior to the cars entering the track for each race; i.e. with a toss of a coin.

23. ENGINE INSPECTIONS:

Any competitor may have their engines inspected at any time, engine inspection to be in accordance with Technical Committee direction.

Only VSC Inc. registered seals to be recognised.

All engines to have VSC issued **BLUE TWIST** seals fitted before racing at any race meeting. **The following parts to be sealed** sump and heads to block, inlet manifold and rocker covers to heads, V8 exhaust manifolds to head. I.e.: If head can't be removed with rocker cover in place this can be the head seal. Sealing wire to pass through two accessible adjacent bolt heads or studs or bolt head and adjacent casting, not brackets. Where practical wire can pass through rocker cover bolt and inlet and/or exhaust manifold bolts.

24. TABLE 1. DIMENSIONS:

HOLDEN

Model	Wheelbase (mm)	Track	
		Front (mm)	Rear (mm)
LJ Torana	2540	1371	1345
LH/LX Torana	2591	1447	1422
UC Torana	2591	1465	1432
VB-VK Commodore	2668	1500	1470
VL Commodore	2668	1500	1483
VN Commodore	2731	1505	1530
VP Commodore	2731	1501	1528
VR-VS Commodore	2731	1541	1541
VT/VZ Commodore	2788	1620	1640
VE Commodore	2915	1652	1668
TX Gemini	2404	1350	1360

FORD

Model	Wheelbase (mm)	Track	
		Front (mm)	Rear (mm)
TD Cortina	2581	1472	1472
TE Cortina	2578	1476	1476
TF Cortina	2580	1470	1470
XD Falcon	2807	1610	1576
XE Falcon	2794	1602	1587
XF Falcon	2829	1597	1575
EA Falcon	2794	1596	1583
EB-EF Falcon	2794	1604	1583
EL Falcon	2791	1616	1597
AU Falcon	2793	1616	1597
BA/BF Falcon	2829	1603	1621
FG Falcon	2838	1633	1648
Escort	2400	1310	1330
MKII Escort	2407	1320	1346

CHRYSLER- MITSUBISHI

Model	Wheelbase (mm)	Track	
		Front (mm)	Rear (mm)
VH/VJ Charger	2667	1531	1542
KB/KC Centura	2667	1470	1460
VH/CL Valiant	2819	1531	1542
VK/CL Charger	2667	1544	1554
GE/GH Sigma	2515	1420	1400
GJ/GN Sigma	2530	1430	1400

TOYOTA

Model	Wheelbase (mm)	Track	
		Front (mm)	Rear (mm)
Corona	2500	1425	1400

NISSAN

Model	Wheelbase (mm)	Track	
		Front (mm)	Rear (mm)
Datsun 200B	2500	1395	1395

Note: - Front and Rear Track include +50mm

TYRE RATINGS

A1- A8	5-40 kph
B	50 kph
C	60 kph
D	65 kph
E	70 kph
F	80 kph
G	90 kph
J	100 kph
K	110 kph
L	120 kph

M	130 kph
N	140 kph
P	150 kph
Q	160 kph
R	170 kph
S	190 kph
T	200 kph
U	200 kph
H	210 kph
V	240 kph

25. V8 CARBURETOR LIST:

V8 engines may use a standard model number 4150 or 4160 (not HP etc), Classic or Avenger series vacuum secondary Holley 4 barrel carburettor up to a maximum 750cfm. See section 4: motor guidelines or the following.

HOLDEN /CHEV V8 253/ 4.2, 308/5LT, 350.
ROCHESTER QUADRAJET 4 BARREL, 4MV, M4MC,
BENDIX WW 2 BARREL.

FORD V8

XW, XY, XA, XB, XC, XD, XE, XF.
CLEVELAND V8 302, 351.
CARTER THERMO-QUAD 4 BARREL, MOTORCRAFT/AUTOLITE 2100
SERIES 2 BARREL, BENDIX WW 2BARREL, CARTER-EMAIL BBD
2BARREL.

XR XT EA, EB, EL, EF, AU.
WINDSOR V8 351.
MOTORCRAFT/AUTOLITE 4300, 4100 SERIES 4 BARREL.

WINDSOR V8 302,
MOTORCRAFT/AUTOLITE 2100 SERIES 2 BARREL.
MOTORCRAFT/AUTOLITE 4300, 4100 SERIES 4 BARREL

CHRYSLER/VALIANT V8 318, 360

CARTER AVS-4934S 4 BARREL, CARTER THERMO-QUAD 4 BARREL.
HOLLEY 2210 2 BARREL, CARTER-EMAIL BBD 2 BARREL.

ALL CARBURETORS TO BE FITTED TO STANDARD AUSTRALIAN
FITMENT MANIFOLDS.

26. SPECIFICATIONS:

Specifications current until 30 June 2022.

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