VICTORIAN SPEEDWAY COUNCIL INCORPORATED
VSC V8 SUPER MODIFIED 2015-2018 SPECIFICATIONS

These Regulations and Specifications apply to all Owners, Drivers, Pit Crews, Officials and Clubs engaged in the promotion, conducting, competing and, or presentation of V.S.C. Classes.

This book must be read in conjunction with V.S.C. approved Special Regulations and/or Notices issued by the V.S.C. 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, Rules Advisory Panel, Officials, Owner/Driver in regard to the interpretations of any specification or regulation within this book then that matter shall be resolved by the V.S.C. Technical Committee at the earliest available opportunity.

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

GENERAL SPECIFICATIONS

CONSTRUCTION

To be of professional standard. All materials 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:
C.H.S. Circular Hollow Section
R.H.S. Rectangular Hollow Section
W.T. Wall Thickness
O.D. Outside Diameter
AS I 163 G.200: Australian Standard 1163 for structural steel tubing Grade 200.

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.

Two piece suits **NOT PERMITTED.**

The only IMPACT RACING safety attire accepted is to have relevant SFI label with date of manufacture 2009 or later on label.

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, FIA 8856-2000, **"MUST"** be worn by all drivers.

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

SOCKS:

socks meeting minimum standard of either SFI 303 or FIA 8856-2000 must be worn.

Socks must be higher than the bottom cuff of underwear.

BOOTS, GLOVES, BALACLAVAS:

Boots, gloves and balaclavas are compulsory in all divisions and must meet minimum standard of either SFI 3.3, 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 conform to a minimum standard **AS 1698, Snell 2005, Snell 2010** 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 (eg: "Hans" type devices) can be used in lieu of a horse collar neck brace. A neck brace to minimum SFI 3.3 standard is compulsory. 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 of high 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 and/or FIA approved. 5 YEAR REPLACEMENT OR RECERTIFICATION FROM DATE OF MANUFACTURE ON SFI 38.1

EYE PROTECTION / GLASSES

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 is 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 via Zone Scrutineer or Technical Representative and endorsed in log book. Lateral (sideways) support must be given to hips and above waist. Front of seat under legs to be raised and rolled. Cut-outs for belts to be suitably grommetted. **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.
See "Installation of Restraint System". [Fig1 and 2].

All seats may be padded and covered, the covering being securely attached.
Maximum padding thickness 50mm
Seat belt mounting brackets must be on roll cage, chassis or cross Frames, not on sheet metal.

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 rule with no understanding of the needless injury to the driver.

The mounting points should be solid and should remain so even if the 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 make it the preferred location for the belt. (see diagrams)

The shoulder harness should be mounted to prevent the driver from moving upward, 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 a 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 crutch straps) is preferable. Most drivers find the two anti-submarine 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 the difference (often vast) in competition vehicles, “standard” method of mounting is impractical.

Good judgment 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.

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.
Seat base to be mounted to roll cage sub frame at a minimum of four (4) 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 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, not over top or sides.
Cut outs for belts to be suitably grommetted.

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, OEM crotch strap permitted.
SFI or FIA approved head and neck restraint (eg: “Hans” type devices) seatbelts permitted when restraint is used.
Harness to be fitted to manufacturer’s specifications or for existing fitment the following guide lines. Seat belt bolts to be minimum 10mm grade 8.8 with Nylok 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.
See “Installation of Restraint System”. (Fig. 1 and 2). A five point racing harness of approved type must be fitted to all vehicles, must be maintained in good condition and renewed as required. All

harnesses to be fitted with a sternum belt and buckle, no plastic buckles allowed. The sternum belt is not necessary if it is impinged on by the use of a head and neck restraint. Press button release racing harness not to be used.

Seat belt mounting brackets (anchor points) must be on roll cage and subframe or substantial barwork, not on sheet metal.

See "Installation of Restraint System".

See "Adjustment of Driver Restraints".

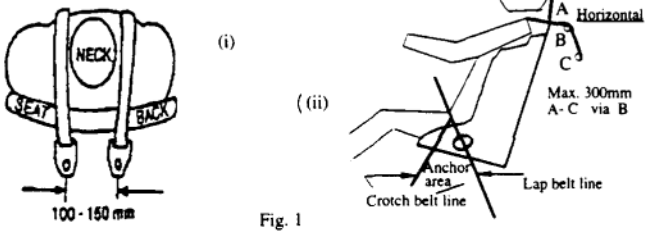


Fig. 1

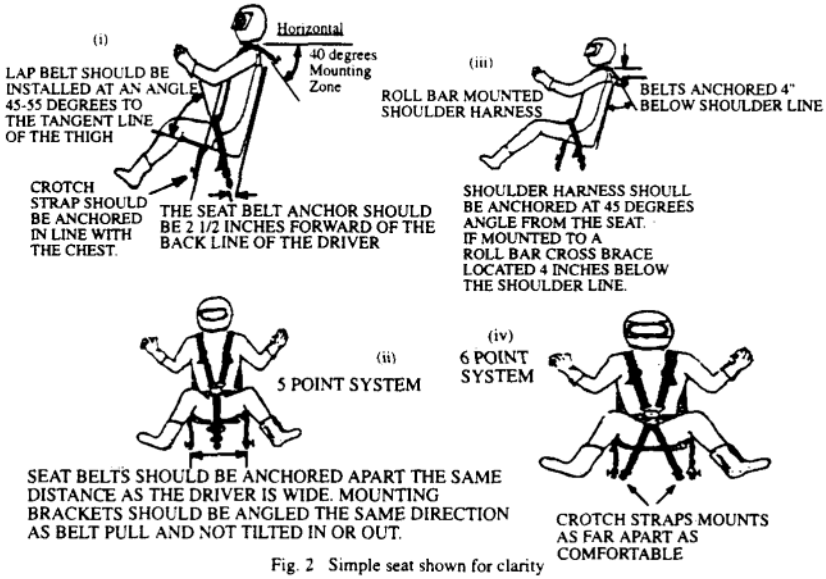


Fig. 2 Simple seat shown for clarity

SEAT PLATE: 3mm steel or 5mm aluminium plate under seat minimum width 200mm by full length of driver's seat plus a 25mm OD x 3mm WT bar at rear of seat bottom.

KNEE GUARDS COMPULSORY

Knee guards to be manufactured from metal panel minimum 1.6mm thick and minimum 150mm wide formed into a double "U" shape, care to be taken to prevent sharp edges. Knee guards to be securely mounted in a manner to offer support and protection; to prevent the driver's knees or legs from striking any part of the vehicle or components. Suitable padding permissible

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 V.S.C. State Title placegetters.
All vehicles are to be presented for racing in a good condition, with paintwork, signwriting and allocated numbers to be painted on the bonnet, both sides of the body/top wing and both rear corners of the body (on tail). Registered number and prefix are to be a contrasting colour and clear of any signwriting, etc. Number will be 300mm minimum height x 75mm minimum width and prefix 150mm high.
Driver's name/s to be painted on the vehicle.

LICENCING

Only V.S.C. licensed persons may participate as a driver.

INSURANCE

Proof of accident coverage is compulsory for drivers.
Ambulance membership is compulsory for drivers.

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 Tek Screws permitted on external panels.

Operating one way communicator is to be presented at scrutineering.

ARM RESTRAINT AND MINIMUM 1LEFT HAND HELMET NET MANDATORY
Not to be made of flammable material: ie plastic. Arm restraints to be worn between elbow and wrist. Arm restraints must meet minimum standard of either SFI 3.3, FIA 8856 – 2000.

V.S.C. V 8 Super Modifieds Class Specifications

1. **DESIGN AND CONSTRUCTION** –

(i) All phases of design and construction of any car are subject to the approval of the Technical Committee. The Technical Committee may exclude any car, design or construction which they deem to be dangerous.

(ii) The Chief Scrutineer and Machine Examiner have the right to exclude any vehicle from any event if the vehicle is in an unsafe condition or does not comply with these specifications and order the vehicle to be brought to a proper condition before being presented for scrutineering.

(iii) Cars are to be constructed of only top grade materials and built to a professional standard with welding and method of attachment of all parts and components entirely safe and track worthy. All steel tubing or section used shall not be coated or plated material before welding. No welds to be covered by synthetic filling.
The use of carbon fibre in car construction is not permitted.

(iv) The following components must have locknuts, lock wires or split pins: steering arms bolted to spindles, pan hard rods, all steering components, lower birdcage bolts. Method of retaining pitman arm to steering cross shaft must be used.

(v) Any existing vehicle not complying with the following specifications may be accepted at the discretion of the Technical Committee.

(vi) Front and rear axle assembles, steering components, etc. must meet with approval of the Technical Committee.

(vii) Rear engine, front wheel drive and four wheel drive cars are not permitted.

(viii) **NO** carbon fibre or titanium components permitted.

2. CHASSIS

(a) Wheelbase – measured from centre of tyres.

(i) Maximum wheelbase of 245 cm.

(ii) Minimum wheelbase of 200cm.

(b) Track

The track of all cars shall be 160 cm. maximum.
Measured from centre of wheel to centre of wheel.

(c) Weight

(i) Minimum weight 820kg.

(ii) Car to be weighed in racing condition at any time.

(iii) Ballast is to be bolted to the left hand chassis rail under the extractors using 4 x $^3/_8$" high tensile bolts or 2x $^3/_8$" high tensile "U" bolts with 2 x $^3/_8$" thick fish plates

(iv) Ballast is to be declared at daylighting / scrutineering and recorded in the log book. Each piece of ballast must be painted white with registered car number painted in black. If ballast is dislodged from race car during an event penalties may apply.

(d) Construction

(i) Chassis must be constructed from steel tubing not car chassis rail, and must incorporate a 1930's style body.

(ii) Chassis of one main runner construction to be a minimum of 44.5mm x 2.6mm wt. or 57.15 mm x 1.8mm wt. round tubing. Rectangular hollow section, square hollow section or channel section of similar strength may be used.

(iii) Chassis of space frame to be a minimum of two rails each side 32mm x 2.6mm wt. or 38 mm x 1.8mm wt. round tubing. Rectangular hollow section, square hollow section or channel section of similar strength may be used.

3. ROLL CAGE

(i) Rear roll bar minimum size 38mm O.D x 3.2mm wall low carbon structural tube or black pipe (not galvanised).

(ii) Front roll bar minimum size 35mm O.D. x 3.2mm wall low carbon structural tube or black pipe (not galvanised).

(iii) All other members minimum size 32mm O.D. x 3.2 wall (not galvanised).

(iv) Chrome moly steel tubing roll cages S.A.E. 4130 seamless tubing minimum 35mm O.D. x 2.4mm

(v) Minimum clearance between the topside of top bars and the top of driver's helmet to be 75mm, when the driver is seated in the race car and measured from a straight edge placed across the topside of the roll cage, to the top of helmet.

(vi) Gussets may be fitted in four opposite corners to top section, minimum thickness 3.mm in a manner least likely to endanger drives arms. Gussets to be fitted externally so as to leave a side opening of 25mm at the joint of tubing and extend at least 100mm from the joint. Tube gussets may be used.

Any attachments other than headrest, must first have approval of Technical Committee.

(vii) Minimum mean radius for bends used in cage to be 150mm.

(viii) It is recommended that all new cars include the cage as part of the frame.

(ix) The rear of roll cage must be braced in the form of a crucifix or an inverted "V". The "V" to extend from the top centre (behind the drivers head) down the sides as far as practicable.

(x) All cars to be fitted with a welded mesh front screen to protect driver. Mesh size to be 25mm (1") maximum x 2.8mm (1/8") thickness.To be attached with 4 hose clamps or sprintcar rock screen.

4. FRONT AXLE

(a) Size - Tube front axles to be a minimum of 44mm x 3mm wt. and eyes must be wrapped as far as possible or approved sprintcar axle.

(b) King Pins

- (i) To be of approved sprintcar or automotive design.
- (ii) To be a minimum of 19mm diameter.
- (iii) Hollow kingpins permitted providing they have a minimum wall thickness of 6mm.

5. REAR AXLE

(a) All cars must use a locked differential.

(b) All cars must be fitted with differentials using full floating or approved sprintcar type axles .

(c) Diff Centre: Lowest ratio permitted is 6.6 to 1 final drive. Quick-change with steel or standard weight aluminium axle permitted. Production truck /car type permitted.

6. SUSPENSION

(a) Type - Front and rear suspension may be of any safe type.

(b) Shock Absorbers -All cars must incorporate an operative shock absorber on each wheel. NO remote shock canisters permitted.

(c) NO suspension components or adjustors permitted in cabin area or in reach of driver.

7. TRANSMISSION

(a) Transmission / Gearbox - Any type may be used but must incorporate forward and reverse gear and clutch, 1:1 final gearbox ratio, no quick change gears.

(b) Clutch mandatory - A device which allows the transmission to be engaged and disengaged while the motor is running and move off from a stationary position under its own power.

(c) Scatter Shield

(i) A scatter shield to cover all cast bellhousings is to be fitted. The shield is to follow the cast housing as closely as possible and extend to floor level. Must be from steel minimum thickness 3mm.

(ii) If cast housing replaced with a fabricated unit 6mm steel minimum is to be used and follow the lines of the clutch and flywheel as closely as practicable to keep an exploding clutch confined to as small an area as possible.

(iii) Car type gearboxes must have scatter shield if all gears remain in box. No shield required if gears removed and used as in/out drive.

8. DRIVE SHAFT

Open drive shaft to be fitted with:

(a) Safety loop of at least 25mm by 6mm flat or 19mm O.D x 3mm wt. tubing securely fastened. Two (2) safety loops to be fitted, one front and one rear of open tailshaft and to be secured to chassis member.

(b) A sheet metal guard of at least 2mm must be fitted to protect the drivers body. The guard is to cover the front universal joint and to extend to the rear of the seat enclosing no less than one third of the upper circumference of the tail shaft. The guard is to be mounted to a rigid member, not the seat.

9. STEERING

(a) Any safe form.
All power steering hoses must be approved type hydraulic hoses and fittings and be covered in cockpit.

(b) Position of Steering Box - Steering boxes must be mounted as far away from driver's knees as practical and be adequately padded.

(c) Turns Lock to Lock
- (i) Maximum of two.
- (ii) Minimum of three quarters.

(d) Shaft/s, arm/s or rod/s that are joined must be suitably braced and all joined rod to be sleeved. if it is impractical to sleeve a welded steering component or to brace it, the weld must be covered by a certificate indicating it has passed an X-Ray test.

(e) All steering pitman arms are to be outside the cockpit.

Steering Wheel Pad

(a) The steering wheel hub must be padded with a resilient material of not less than 20mm in thickness.

(b) Quick release steering wheel is mandatory.

10. BRAKES

(a) Method of Operation
- (i) Locked diff's must have two (2) operational brakes.
- (ii) All braking systems must be operated from the left-hand side and to be foot operated (combined foot and hand pedal allowable) and be on min. 3 wheels.
- (iii) Quick change minimum 1 brake

(b) Type - Hydraulic only.

11. WHEELS

(a) Size
- (i) Right rear rim to be maximum 18" width.
- (ii) Left rear rim to be maximum 13" width.

(b) Type
- (i) Approved sprintcar wheels and centres and split rims (alloy or steel) with steel, heat treated alloy and magnesium alloy centres may be used.
- (ii) Wheels with steel plate centres for use on the rear must have a minimum plate thickness of 8mm Cars using solid

centre wheels must have no more than one stud pattern drilled on any wheel. Drillings must be centralised and wheels to be of professional construction.

(iii) Duel wheels not permitted on any car.

(iv) All imported wheels must have proof of manufacture.

(v) Fabricated and/or split rim wheels must have the specific approval of the Technical Committee.

(vi) Alloy Wheels - One-piece proprietary wheels conforming to Australian specifications to date have been accepted, and are still to be kept under close scrutiny. Custom built composite wheels must meet the approval of the Technical Committee, but as a guide, the extruded centre plate must be minimum thickness of 12 to 13 mm 6061 T6 attached to the hub by at least 5 lug nuts. Steel spun rims to be attached with 6mm high tensile bolts secured with locking nuts have centre distance no more than 64mm.

Cast centres CP, AP, BP, 6061 T6 must be at least 19mm thick at the hub and in case of spoke type to be no less than 9 to 10mm thick at any section. The Technical Committee will, if necessary, revoke any wheel from competition if failure is due to any inadequacy.

(c) Any recognised wheel cover accepted providing they are not fixed by protruding devices.

(d) Attachment

(i) Front wheels to be secured by no less than three steel studs or bolts of no less than 16mm diameter or five steel studs or bolts of no less than 12mm diameter. These studs or bolts are to be grade 8 high tensile type.

(ii) Rear wheel studs to be of high tensile proprietary design of minimum size 13mm National Fine Thread. Minimum of five studs are required. No "Knock-on" hubs permitted.

Bead-Lock compulsory on right rear tyre.

Right rear only to have 5/8 x 5 high tensile minimum / or six x 9/16 high tensile studs.

Stud adaptors and or wheel spacers allowed.

(iii) Wheel nuts shall comply with approved design.

(iv) Any approved type of "knock-on" hub, providing the "knock-on" screws on in a counter direction to the wheel rotation, may be used.

(v) Where "knock on" hubs are used a minimum of three (3) drive pins for each front hub to be used of 5/8" dia. with ½" thread. Pins to be grade 8.

(e) Tyres - All cars must use tyres that are in good condition.
Right Rear control diameter, minimum roll out 103"
Branded minimum 34" diameter. .

(f) Hubs - Front and rear axle hubs and housing must not extend beyond outer wheel rim. It is recommended that heavy duty front stub axles and heavy duty hubs be used (front and rear).

12. AEROFOILS

(a) Construction

(i) Wings are to uphold the "Teardrop" style of the 1960's and 70's as per diagram. Side plates to be a maximum 400mm high at front tapering off to a maximum 350mm at rear, length optional. No off setting of side plates in any plane allowed.
Side panels to be symmetrical.
To be of approved design and construction. No wooden frames or inflammable material to be used.

(ii) Aerofoils are restricted to one overhead wing. Overhead wing mandatory.

(iii) The width of wing will be checked on all cars to the rulebook after all sanctioned events and the penalty for infringement will be disqualification from the event.

(b) Attachments

(i) Attachment of the top wing to be at, four points. Front mounting to use bolts and locking nuts of not less than 6mm grade 5 minimum. Rear mounting to use bolts and locking nuts of not less than 8mm grade 5 minimum.

(ii) Overhead wing mountings are to be designed so that a driver is not endangered in the event of breakage.

(iii) Overhead wing runners to be a minimum of 38mm x 38mm x 4.5mm thick aluminium angle or 50mm x 10mm flat aluminium strip and to be fitted at teach end with a 9.5mm diameter minimum high tensile bolt.

(iv) Adjustments to Wing from cockpit is NOT permitted.

(c) Size Wing to be no more than 1200mm x 1200mm, side plate to be tear shaped, 400mm.

(d) Side wings of any description not allowed.
(e) The wing to be only aerodynamic panel.

13. FUEL SYSTEM

(a) Design and Construction

(i) The smallest size fuel tank possible is to be used.

(ii) An F.B.1. type breather or similar manufacture one way valve to be used.

(iii) Fuel tank caps must be of leak proof: screw, aircraft or approved design. (Not a taper)

(iv) Minimum thickness of fuel tank material to be used shall be: Mild Steel 1.4mm or Aluminium 3mm.

(v) No four or five-gallon drums, Jerry cans or car type fuel tanks to be used.

(vi) The fuel tanks is to be mounted in a cradle and suitably insulated from both the cradle and the retaining straps (minimum size of straps 25mm x 2.8 mm mild steel) to prevent chaffing. Mounting brackets not to be welded to the tank. Fuel tanks to be suitably protected by bar work.

(vii) Fuel pick up to come from top of tank, exception approved Bladder/Fuel Cells

(viii) Fuel Tank firewall: A protective firewall must be fitted between the fuel tank and the driver. This firewall to be minimum 1mm and follow the contour of the tail to the bottom of the seat. Any fuel tank that projects 100mm or more above the top of the rear nerf bar must have a vertical or horizontal hoop with two (2) braces to protect the fuel tank. Hoop is to be made of 25mm tubing minimum.

(b) **Fuel Bladder / Fuel Cell**

(i) Approved Fuel bladder / cell Optional

(ii) Fuel bladders will be completely surrounded by a container to rigidly support the fuel bladder and provide additional protection.

(iii) Fuel tank vent must have a check valve.

(c) **Fuel Lines**

(i) All cars must be fitted with copper or steel fuel lines or approved flexible tubing.

(ii) Approved flexible connection to fuel pump with screwed connector must be used.

(iii) All cars must be fitted with flexible fuel lines within 80mm of tank.

(d) **Fuel Tap**

All cars must have a tap in the fuel line within easy reach of the driver and prominently marked ON - OFF on the outside of the body panel adjacent to its location. The fuel tap must be the first connection from the tank and must effectively stop the flow of fuel from the tank to the pump and filter and will be mounted on the right hand side of the cockpit.

(e) **Fuel** Methanol only

Maximum specific gravity of methanol 0.802

Gaseous fuels not permitted.

"Nitro": The introduction into the combustion chamber/s of nitro fuels and/or additives, either in solid, liquid or gaseous form, (eg. nitrous oxide) by any means is expressly forbidden.

FUEL TYPE to be clearly marked on panel adjacent to filler cap and at Kill Switch.

14. NERF BARS

(a) Design

(i) Nerf bars must be of acceptable design with no uncovered upright pipes or horns. As long as the upright pipe or horn does not protrude one inch or 26mm past the rearmost point of the rear nerf without a sharp point, it is acceptable.

(ii) Front nerf bars are not to extend more than 200mm past the front edge of the tyre or cross torsion tubes but must extend to the front edge of the tyre.

(iii) Rear nerf bars shall comply with approved design as per diagram and must extend beyond tyres

(iv) Front and rear nerf bars to follow body line.

(v) No other single nerf bar is permitted.

(vi) All nerf bars to be kept to a size no smaller than 25mm. All front nerf bars to be a Maximum of 32mm outside diameter).

Nerf bars front and rear not to exceed past torsion bar arms (side to side).

(vii) No sharp or protruding corners permitted.

(viii) Side nerf bars must be fitted and not extend past the wall of the rear tyre and to extend forward as short a distance as practical. Full running rails not permitted.

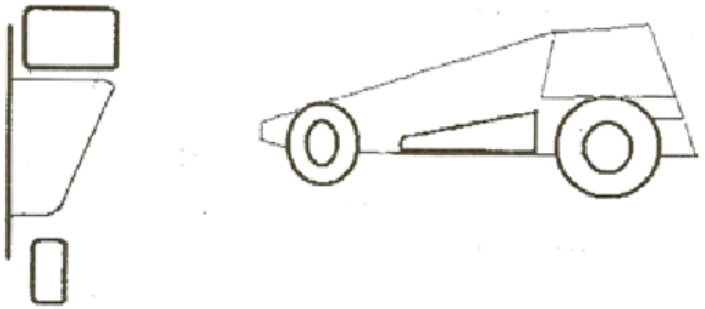
Side nerf bars should not leave more than 150mm of tyre exposed from the outside edge.
Side nerf bars must be a two bar design as per drawing.

(b) Nerf bars to be restrained by a bolt and locking nut, or 'R'clip of 5mm min. dia. and will pass through both sides of spud.

(c) Protection Height

(i) Centres of front and rear nerf bars to be approx. 450 mm from ground level.

(ii) Front and rear nerfs must offer protection at a height of 450mm.



15. BODY

(a) Firewall - All cars must incorporate a fully protective firewall between the engine and driving compartments.

(b) Ignition, Fuel Pump Switch(es)
All cars must have switches for ignition, fuel pump, etc. fitted in a prominent position surrounded by a square of contrasting colour to be marked ON - OFF.

(c) Bonnet Attachment
All cars must use a quick release method of attachments, e.g. Dzus fasteners, but not screws or nuts and bolts. ALL QUICK RELEASE

fasteners on bonnet and both side entry panels must be removable by hand without the use of tools of any kind.

(d) Floor

(i) All cars must have a floor under the driver's feet extending to the fire wall and to the front edge of the seat.

(ii) A bar to be fitted under driver's feet or in close proximity.

(e) Design of Body

(i) All cars are to have a suitably padded upholstered cockpit. All sharp protruding objects to be suitably padded.

(ii) All cars must have a body that contains a nose, bonnet, cockpit side panels and tail separate from fuel tank/cell. The side panel must extend from front fire wall to at least the front edge of the Seat.

16. BATTERY AND COVER

Battery must be mounted firmly and in a safe position relative to fuel tank.
Battery to be mounted in steel frame, attached to steel framework inside chassis.
Top frame is to be snug fitting around all sides of the top of the battery. Rubber, eg. (inner tube) to be fitted between frame and battery to avoid acid spillage. Care to be taken to avoid shorting.
Where battery leads through a thin metal wall i.e. firewall, etc. the leads must pass through a rubber grommet or hose to prevent chafing of battery leads. Blue triangle 75mm x 75mm x 75mm outside of body to indicate battery position.

17. KILL SWITCH

Must be mounted in a position easily accessible to driver and crash crew from outside the vehicle and fuel type clearly marked, painted in a contrasting colour. The method of operation clearly lettered (e.g. PUSH OFF / PULL ON). Master kill switch must stop all electrical activity and the engine.

18. ENGINE and CARBURETTOR

(a) Any type of pushrod V8 engine only, with a maximum capacity of 368 c.i. absolute, may be used in any stage of tune.

No roller cams permitted.

No alloy heads permitted with the exception of Leyland / Rover engines.

No forced induction or fuel injection permitted, engine to be naturally aspirated.

Front engine and rear wheel drive will be the only acceptable format.
Any type of piston may be used, with the maximum compression ratio of 12.5 to 1 absolute.

All cars are subject to engine and general measurement before and after any race by an authorised technical scrutineer/officer or at the direction of the Technical Committee. Penalty for illegal motor – as per the Racing Rules & Regulation Manual.

Any owner or driver refusing an engine check will be deemed to have an illegal motor in which case a penalty will apply.

(b) Carburettor to be one four-barrel carburettor.
Carburettor to be fitted with minimum two independent return springs. One to the butterfly shaft, the second spring to be attached at the first major linkage.
Open carburettors to be fitted with a suitable means to stop foreign bodies from entering and jamming throttle open.
A half stirrup type toe clip must be fitted to the accelerator pedal to enable manual closing of the throttle.
Marine or earth moving equipment flexible cable permitted as approved by the Technical Committee.

(c) All external air cleaners are to be fitted with a device to prevent the air cleaner from becoming detached from the car.

19. COOLING SYSTEM

(a) Radiator hoses to be canvas reinforced type.
(b) Hose clips to be screw up type only.
(c) Radiator caps to be covered by either the nose section or bonnet.
(d) All pressurised systems to have a manual pressure relief tap in the cooling system to relive pressure before loosening or removing the radiator cap. Tap to be fitted with hose to direct steam on to the ground.
(e) A fan guard must be fitted to cars that do not have a fully enclosed bonnet and fan is still visible.

20. EXHAUST SYSTEMS

(a) Exhaust pipe or pipes to extend to a minimum length of halfway along cockpit side, but not extend past rear nerf bars and to follow body line as closely as possible and designed in such a way as to deflect exhaust gases away from driver and fuel tank area.

(b) Exhausts not to protrude outside the side rail of either side nerf bars.

(c) Noise limits to comply with Promoter or Club's requirements.

21. STARTER MOTOR

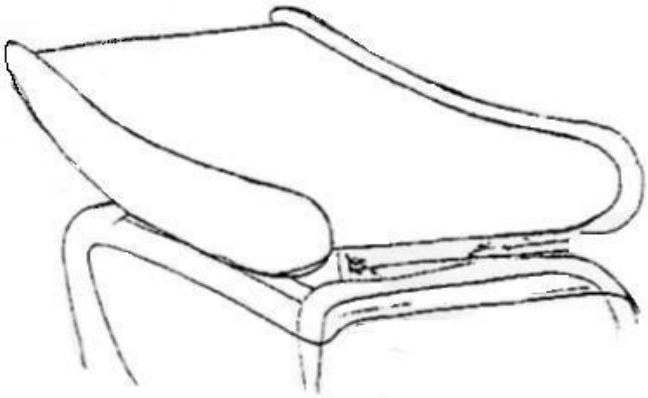
All vehicles must be cable of being started by the starter motor at the commencement of the day.

22. DIRECTION OF RACING

Direction of racing will be in an anti-clockwise direction.

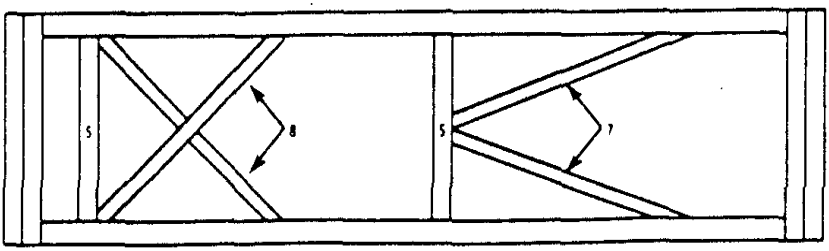
23. SPECIFICATIONS:

Specifications current until June 30th, 2018



note: side plates to be centred and parallel to each other. Max height 400mm

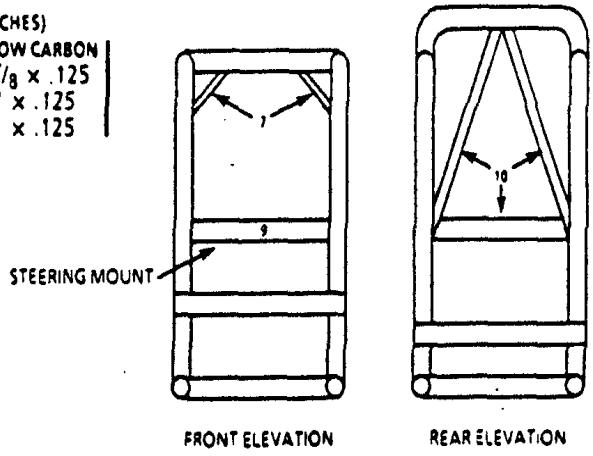
	MINIMUM SIZES (INCHES)	
	CHROME MOLY	LOW CARBON
5.	$1\frac{1}{4} \times .083$	$1\frac{1}{4} \times .125$
7.	$\frac{7}{8} \times .083$	$\frac{7}{8} \times .125$
8.	$\frac{7}{8} \times .065$	$\frac{7}{8} \times .125$



BOTTOM VIEW

CHASSIS SPECIFICATIONS (1991)

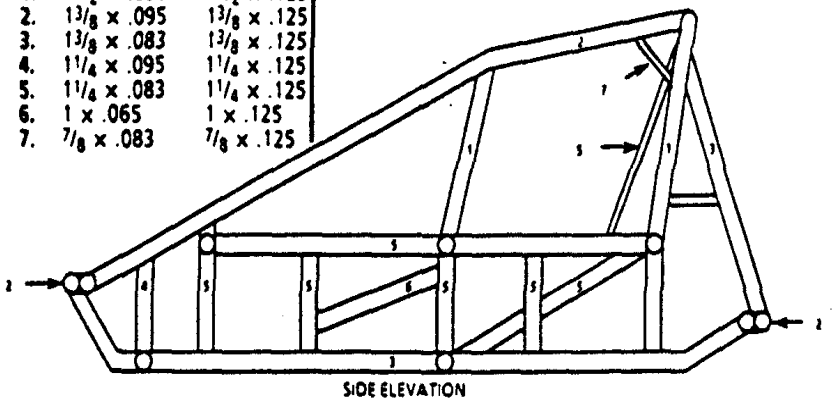
	MINIMUM SIZES (INCHES)	
	CHROME MOLY	LOW CARBON
7.	7/8 x .083	7/8 x .125
9.	1 x .095	1 x .125
10.	1 x .083	1 x .125



FRONT ELEVATION REAR ELEVATION

CHASSIS SPECIFICATIONS (1991)

	MINIMUM SIZES (INCHES)	
	CHROME MOLY	LOW CARBON
1.	1 1/2 x .095	1 1/2 x .125
2.	1 3/8 x .095	1 3/8 x .125
3.	1 3/8 x .083	1 3/8 x .125
4.	1 1/4 x .095	1 1/4 x .125
5.	1 1/4 x .083	1 1/4 x .125
6.	1 x .065	1 x .125
7.	7/8 x .083	7/8 x .125



SIDE ELEVATION

CHASSIS SPECIFICATIONS (1991)