

**VICTORIAN SPEEDWAY COUNCIL INCORPORATED**  
**SDAV HOT RODS INC 2018-2022 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 8846-2000. 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 **Snell M, SA, SAH 2010(To end of 2020), Snell M, SA, SAH 2015, SNELL EA2016, Snell M, SA, SAH 2020** 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 manufacturer's 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.

See "Installation of Restraint System". [Fig1 and 2].

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.

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 makes 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 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 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 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.

### **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, protection and to prevent the driver's knees or legs from striking any part of the vehicle or components. Suitable padding permissible.

**SEAT PLATE:** 3mm steel or 5mm aluminium plate under seat minimum width 200mm by full length of driver's seat. Rear seat protection bar mandatory. Minimum size for seat bar 25mm O.D.x 3mm W.T.

### **ARM RESTRAINT AND MINIMUM LEFT 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. Helmet net to meet minimum standard SFI 37.1 or FIA 8863-2013. Helmet net not required when using approved helmet containment seat

### **LICENCING:**

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

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".

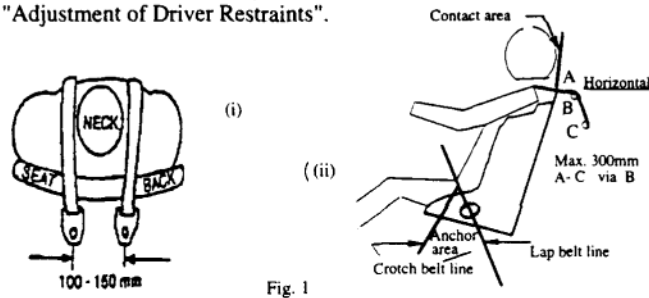


Fig. 1

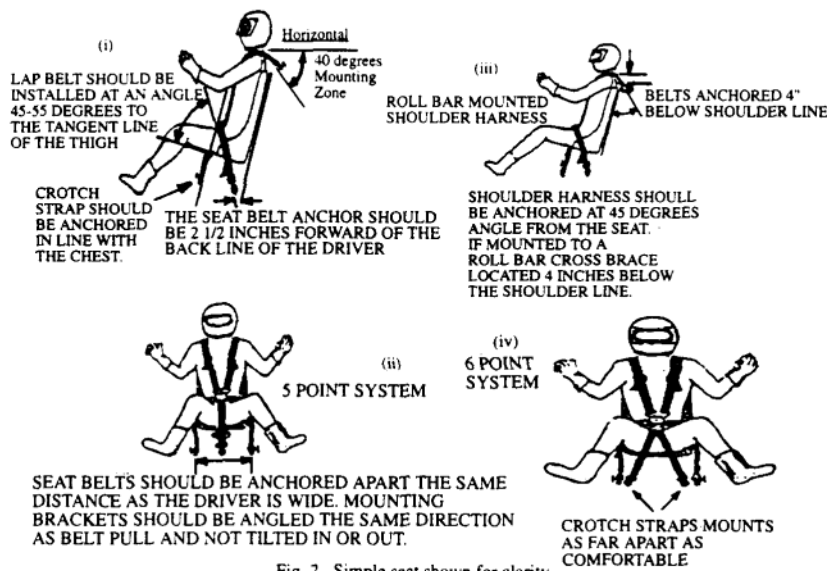


Fig. 2 Simple seat shown for clarity

## FIRE EXTINGUISHER

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

## NUMBERS

All vehicles are to be presented for racing in good condition, with paintwork, signwriting and allocated numbers to be painted on the bonnet, both sides of the body or either the rear of body or both rear corners of the body. Club numbers and V.S.C. registered prefix to be a contrasting colour and clear of any signwriting etc. and will be approximately 300mm minimum height and prefix to minimum of half size of number. Roof numbers highly recommended. Size as per Racing Rules and Regulation Book. Driver's name/s to be painted on the vehicle.

## LICENCING

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

## **RULES COMPLIANCE**

The committee and chief scrutineer, in cohesion with the rules advisory panel, to have the power to examine the design and safety or any new type performance methods of any vehicle and enforce any necessary changes

## **DIRECTION OF RACING**

Direction of racing for all SDAV Hot Rod club events to be clockwise.

## **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.**

## **SUPPLEMENTARY REGULATIONS**

As passed by VSC Committee 12 June 2009

### **NUMBERS**

Amendment to Racing Rules & Regulations 8.1

Number 1 reserved for winner of Victorian Title. Vic 2 and Vic 3 to be supplied with appropriate decal.

Number 1 to be displayed from the beginning to the end of the following season.

### **TITLES**

Amendment to State Titles Racing Rules & Regulations

To be eligible to compete in Victorian Title driver must compete in a minimum 2 SDAV Hot Rod race meetings of the season of the Title. Prior to Title taking place.

### **RACE MEETINGS** Amendment to Racing Rules & Regulations 11.33

One driver per car per race meeting.

Drivers competing in SDAV sanctioned events must be SDAV Members.

Drivers must have Committee approval to compete in non SDAV calendar events.

### **WEIGHT RULE**

If there is a weight discrepancy the SDAV nominated weigh station shall be used to determine eligibility.

**ENGINES** Any competitor may have their engine inspected at any time, engine inspection to be in accordance with Technical Committee direction. Only V.S.C. Inc registered seals to be recognised. All engines to have VSC issued **BLUE TWIST** seals fitted at daylight inspection and before racing at any race meeting. **The following parts to be sealed** sump, timing cover and heads to block. Sealing wire to pass through two accessible adjacent bolt heads or studs or bolt head and adjacent casting, not brackets. Engines measured and sealed to SDAV engine checklist shall be deemed legal providing appropriate VSC registered seal has not been disturbed. First four place getters in Victorian Title shall be impounded. The first three engines to be measured and checked for legality at owner's expense. (Sealed engines as stated above deemed legal).

**REGISTRATION** It is to be stated at preseason daylighting check as to which VSC class the car being daylighted will be competing in and the car will be registered as that class if the car is altered out of specification for the class that it is registered as, it must remain in the other VSC class for a minimum 5 months.

**S.D.A.V. HOT RODS INC**  
**2018 - 2022 CLASS SPECIFICATIONS**

**INTRODUCTORY NOTE:** All rules written at specification meeting of the SDAV Hot Rod Inc and voted on with full intention of members. Any item that is not written is deemed that it cannot be used.

**CHASSIS AND ROLL CAGE**

- 1:1 All cars must be constructed of only top grade materials and built to a professional standard with welding and method of attachment of all parts and components and shall be entirely safe and trackworthy.
- 1:2 All steel pipe or section used shall not be coated or plated material before welding.
- 1:3 Galvanised pipe must not be used.
- 1:4 Cars may use chassis made up of R.H.S. section 75x50x3mm (3"x1.1/2"x10GA) or channel iron LYS LC 100x10g. (4"x1.1/2"x10GA) minimum size or 38mm x 3mm pipe / tube where 38mm tube is used high or mid bar configuration must be incorporated. Sprint car chassis either chrome moly steel tubing S.A.E. 4130 seamless tubing 35mm O.D. x 2.4mm W.T. or mild steel may be used but must conform to all other specifications. Any modifications to sprint car chassis must be inspected by Club Scrutineer prior to painting.
- 1:5 Mid or high bar chassis design cars allowed. Roll cages to be constructed in one of the following manners:
- (a) Two main rollover bars, one behind and one in front of the driver. The rear bar to be one piece material and extend to the lower space frame rail.
  - (b) The Gambler type in which the main roll bars run longitudinally. Each to be one-piece material. In a space frame, to extend to the lower chassis rail or torsion bar tubes at the rear. This junction to be gusseted with 19mm min x 3mm W.T. min tube. Chassis must incorporate a vertical member behind driver's seat on each side of 38mm x 3mm W.T. tube extending from top roll bar to lower chassis rail.
  - (c) A combination of a & b: with a single main hoop to be one-Piece material, extending to the bottom rail in a space frame. Longitudinal bars to be one-piece and extend to the upper space frame.

- (d) The rear rollover bar must incorporate an inverted "V". The "V" to extend down the sides as far as possible. The rear roll over bar must be stayed down towards the rear inside chassis rail of the car. Inverted "V" and rear stays to be minimum 32mm x 3mm W.T. tube or RHS.
  - (e) A bar minimum 25mm x 3mm tube to be fitted to protect intrusion from side to open area of roll cage. A bar to be fitted approximately 100mm below body window line and to be between front and rear rollover bars or diagonally from the top rear corner of the opening to the top chassis rail forward of the center of the opening.
- 1:6 All main constructional bars to be 25mm MBPE (1") diameter minimum x 2.8mm (1/8") wall.
  - 1:7 Except in main roll bars, where a minimum round pipe size is stated the equivalent square section tubing may be used. All bar measurements to be I.D.
  - 1:8 The driver must be protected by a main roll bar formed from one piece of material of 31.8mm MBPE x 2.8mm (1.1/4I.D. x 1/8") wall thickness, with supporting bars of 25mm MBPE (1") x 2.8mm (1/8"). An inspection hole of 6mm (1/4") to be drilled in front and rear roll bars.
  - 1:9 On cars built after June 1995, no holes other than inspection hole to be drilled in rear roll bar.
  - 1:10 All cars to have a 25mm MBPE x 2.8mm (1") I.D. bar a maximum of 100mm (4") below window line on each side of car.
  - 1:11 A plate 450mm (18") x 250mm (10") x 2.8mm (1/8") thick (minimum size) may be used to protect the drivers sides and be inside of body of car. The 450mm (18") x 250mm (10") side plates to be retained with pipe welded on both ends of side plates to complete "4" sides. 19mm (3/4") pipe minimum size.
  - 1:12 Centre steering cars may have steel plates on the doors on both sides of car. Steel plates to be a minimum of 100mm (4") below window ledge. ( Refer also to rules 3:11 and 3:12).
  - 1:13 Side plates may be replaced by two (2) vertical 19mm (3/4") I.D. bars evenly spaced between the front and rear roll bars.
  - 1:14 A head plate (or bar 25 MBPE) to protect the drivers head.
  - 1:15 Head and side plates must be of one (1) piece of material, (no joins) and be securely welded on all four (4) sides to outside of bar work.
  - 1:16 Drivers must be able to alight from car in racing trim through the roof, must have 75mm (3") clearance between helmet and bar or plate.
  - 1:17 A full floor must be fitted and Drivers feet should not be able to intrude into space under or beside seat.

#### **WHEEL BASE AND TRACK**

- 2:1 Wheel base to be minimum of 2.18 metres (86") maximum of 2.84 metres (112").
- 2:2 Front and rear track measurements to be measured from center of tyre to center of tyre and not to exceed 1615mm on the front and rear.
- 2:3 All cars to have an offset front and rear no greater than 203mm (8"). Offset to be measured from the center of the diff pinion to the center of the wheel and the difference between the left and right to be the offset, the diff pinion to be offset no greater than 20mm from the center line of the crankshaft.



## **WEIGHT**

- 3:1 Minimum weight for all vehicles and driver is 820kgs, 1000 kg max. Vehicles and driver to be weighed when car is daylighted. If weight is checked during racing season vehicle and driver must not be less than 820kg whether it be prior to or after race, no fuel is to be added prior to being weighed. After completing a race if you are to be weighed you come straight into the weigh station and weigh car and driver.
- 3:2 Where portable ballast is used, total weight of ballast is not to exceed 20kg. Ballast is to be fitted forward of the firewall and to be approx 50% each side. Ballast must be declared and method of attachment to be inspected by scrutineer prior to racing. All portable ballast to be painted white and clearly marked with car number.

## **FRONT AND REAR NERF BARS**

- 4:1 All cars must use a front push bar which extends forward no further than 250mm (10") in front of tyres.
- 4:2 Front and rear push bars may extend a maximum of 100mm (4") past the chassis rails on each side, rear bar on offset side of car may be 150mm (6") and must give protection at 450mm (18") from ground level to center of each push bar, ie: bars to be above and below the 450mm (18") measurement.
- 4:3 Rear push bar to be maximum 25.4mm (1") x 2.8mm (1/8") W.T. or minimum of 19mm (3/4") x 2.8mm (1/8") W.T. Front push bars to be no greater than 19mm (3/4") x 2.8mm (1/8") W.T, 25mm x 1.2mm minimum stainless permitted.
- 4:4 Push bars must be designed so as to prevent vehicles becoming entangled.

## **SIDE RAILS**

- 5:1 A side rail on both sides of the car at axle height, all corners to have a minimum 50mm radius and extend  $\frac{3}{4}$  way between wheel, must be fitted to prevent wheels becoming entangled with other vehicles.
- 5:2 Minimum size of side rail to be 19mm (3/4") x 2.8mm (1/8") W.T. or maximum 25.4mm (1") x 2.8mm (1/8") W.T. minimum or 3mm maximum pipe, 25mm x 1.2mm minimum stainless permitted, an 8mm (5.16") minimum high tensile bolt or pin to retain both side rails and push bars.

## **ENGINES AND CARBURATION**

- 6:1 Maximum engine capacity 352 cubic inch + .060". Any commercially manufactured steel block engine produced ten (10) years in configuration prior to current racing season, i.e: racing season being run from 1<sup>st</sup> of July each year to the 30<sup>th</sup> June the following year may be used. After market performance engine blocks eg: bow tie etc not permitted. Standard production 4 bolt blocks permitted. After market replacement blocks permitted.
- 6:2 No factory performance engines allowed.
- 6:3 Engines under 310 cubic inches standard manufacture may use high compression pistons. Engines 310 – 352 inch standard manufacture must use flat top pistons and must not protrude out of block. All engines must use standard bore / stroke configuration for engine being used.
- 6:4 O.H.V. motors under 300 cubic inch may overbore .125".
- 6:5 Engines 300 cubic inch to 352 cubic inch standard specification may overbore .060".
- 6:6 With exception of 355ci Holden and 4.6lt Ford engines crankshafts to be standard manufacture stroke for engine configuration being used.
- 6:7 Any make or length conrod permitted. Stroke to remain standard for engine configuration being used.

- 6:8 Any aftermarket steel or aluminum cylinder heads may be used but must retain OEM valve angle, cylinder head must remain in standard manufacturers trim including valve size, heads may be machined on gasket surface only. Cylinder heads must be standard valve angle before machining  
Standard Valve Angle: Chev 23deg, Chrysler 18 deg, Holden 10 deg, Ford Windsor 20 deg, Ford Cleveland 22 deg any other engine must be approved by VSC Technical Committee.
- 6:9 Standard production cylinder heads may be modified by removal of metal only. Heads must not be filled.
- 6:10 High porting of cylinder heads not permitted.
- 6:11 Roller valve trains not permitted. All engines may use roller rockers only.
- 6:12 Any size valves may be used in all engines, as long as the valve center lines remain at standard manufacturers specifications. Refer 6:8.
- 6:13 Engine block, standard production cylinder heads and inlet manifolds may be ported, polished and relieved. Refer 4:1.
- 6:14 Six cylinder engines may run open carburation on any type of inlet manifold.
- 6:15 V8 engines up to 249 C.I. may use two or three dual throat carburetors or one four barrel carburetor on any type of manifold.
- 6:16 V8 engines over 249 C.I. may run one four barrel carburetor of any size on any single four barrel design manifold or two x two barrel carburetors on suitable design manifold.
- 6:17 No fuel injection or mechanical forced induction allowed. No air cooling device to be fitted to air cleaner or carburetor intake. Only ambient air to be used.
- 6:18 Any standard production or after market type steel flywheel or flex plate may be used. Flywheel may be lightened by removal of metal only. Aluminium flywheels not permitted.
- 6:19 Any engines not previously used or accepted must have full committee approval prior to being used.

## **FUEL SYSTEM**

- 7:1 All cars must use a fuel tank with an anti-spill device, comprising either fuel pump valve securely soldered in tank or a pipe to be wrapped around all four edges of the tank and extend past bottom edge.
- 7:2 Approved tank 18G steel or stainless or 3mm aluminium to be used.
- 7:3 Fuel cells optional but recommended.
- 7:4 Claw type or screw on cap of minimum 1.1/2 turns to be used. Where claw type cap is used a suitable type locking device must be fitted.
- 7:5 Fuel tanks to be secured with (25mm x 2.8mm) metal strap fittings only, mounts not to be welded to tank.  
Fuel tanks to be mounted with straps going over tank in an area protected by bar work and be isolated by a 16G (1.55mm) aluminum minimum firewall. Fuel tank to be above the height of the diff.
- 7:6 All fuel tanks to be clearly marked methanol on tank and outside body.
- 7:7 No pressurized fuel tanks allowed.
- 7:8 Fuel pick up must come from top of tank.

- 7:9 All cars must be fitted with copper, steel or neoprene fuel line only. No plastic may be used as fuel line.
- 7:10 Approved flexible connection with screwed connections or approved hose clips to be fitted between fuel line and motor, fuel line and tank.
- 7:11 Where flexible meet steel or copper pipe correct fitting procedure must be observed ie: flaring of pipe or commercial "barb" type fittings to be used.
- 7:12 A fuel tap, which isolates pumps and filters from fuel tank and is accessible when driver is strapped in is to be fitted in the fuel line in a convenient location, clearly marked on/off on outside of body adjacent to tap. Tap must be accessible from outside of body.
- 7:13 All cars must use methanol. Nitro or performance additives are not permitted.
- 7:14 Fuel tank capacity 70 litres maximum.
- 7:15 Plastic cells – metal flange on fuel filler ring must be earthed to chassis.

### **EXHAUST**

- 8:1 Exhaust pipes to extend toward rear wheel and be directed away from driver. Upswept pipes not to have open ends and are to be no higher than top bar of side rail. Support bracket or chain must be fitted.

### **BATTERY AND IGNITION**

- 9:1 Ignition switch must be within the reach of the driver when strapped in and accessible to officials / safety crew. Must be clearly marked and be fitted to top right hand corner of dash and must isolate ignition, starter and fuel systems where applicable.
- 9:2 Distributor may be modified, twin point distributors may be used, including performance coils and distributors.  
Electronic ignition or magnetos may be used.
- 9:3 All cars must be capable of starting by a starter motor, permanently fitted.
- 9:4 Electronic fuel pump may be used but must be wired into master ignition switch.
- 9:5 Battery to be mounted in steel angle iron frame 25mm x 2.8mm minimum size. Frame is to be snug fitting around all sides of the top of the battery, mounting bolts to be 8mm (5/16") minimum size. Rubber (e.g. inner tube), to be fitted between frame and battery top. Care to be taken to avoid shorting.
- 9:6 Where battery leads pass through a thin metal wall, ie: firewall etc, the leads must pass through a rubber grommet or hose to prevent chafing of battery leads.
- 9:7 Battery location must be clearly marked with blue 50mm triangle on exterior of car, blue cars to use a white outline to same dimensions. Triangle to point towards battery.

### **COOLING SYSTEM**

- 11:1 All cooling systems including radiator pressure cap must remain under the cars bonnet and be fitted with pressure release cap or tap to top tank of radiator with a hose extending below the bottom of the radiator.
- 11:2 Hoses to be canvas or nylon reinforced.
- 11:3 Plastic header tanks not permitted.

## **GEAR BOX AND FLYWHEELS**

- 12:1 Cars using aluminium bell housing to be fitted with scatter shield to cover flywheel housing from floor line and top of flywheel housing and be made of material 125mm (5") x 2.8mm (1/8") thick minimum m/s. Scattershield not necessary when auto driveplate is used without torque converter. Scatter shield not necessary on manufactured racing gear boxes ie: Bert
- 12:2 Vehicles running steel bell housing, home made or manufactured, to be fully enclosed, do not require scatter shield.
- 12:3 All cars must incorporate a fully protective firewall.
- 12:4 Automatic gear boxes must be shielded sufficiently to prevent intrusion / injury at bottom of bell housing.
- 12:5 Gear box may be modified, reverse gear optional.
- 12:6 Quick change boxes allowed in automatic or manual configuration.
- 12:7 Torque tubes or torque finder when fitted above gear box must be suitably guided to prevent injury.

## **DIFFS**

- 13:1 Diff must not bottom on seat. On cars where diff is positioned under the seat, a bar or plate to be welded or bolted to frame to prevent diff making contact with seat.
- 13:2 Live axles may be used.
- 13:3 Full floating type hub must be used on standard production diffs.
- 13:4 Quick change differentials allowed aluminum axles not permitted.
- 13:5 No open axle independent rear ends permissible. Jaguar, Datsun, Rover etc.
- 13:6 Radius plate 2.8mm (1/8") minimum thickness, must cover and extend downwards over both U/joints on open tailshaft vehicles.
- 13:7 A full loop must be used to prevent tailshaft from hitting ground or seat. Loop to be 12.5mm (1/2") bar or 12.5mm x 2.8mm (1/2" x 1/8") flat minimum. Where torque tubes are used a guide loop must be fitted.
- 13:8 No front wheel or four wheel drive vehicles to be used.
- 13:9 Differentials may be modified.

## **FRONT END AND STEERING**

- 14:1 Front end to be constructed from minimum 50mm (2") O.D. or minimum 50mm (2") square tube x 2.8mm (1/8") minimum wall thickness, with king pin eye suitably attached, ie: king pin boss inserted a minimum of 2/3<sup>rd</sup> of its length into tube and welded all round. If king pin eye is welded to end of tube only, a suitable steel wrap around must be used to prevent detachment of eye from tube. If axle is to be cut and joined it must be suitably sleeved 50mm either side of join and plug welded with 2 plug welds either side of weld and plugs to be visible.
- 14:2 Any safe type of steering may be used.
- 14:3 All pitman arms to be mounted externally of rollcage area.
- 14:4 Steering free play must not exceed four inches at outer circumference of steering wheel.

- 14:5 Steering joints to have split pins or nylon lock nuts fitted.
- 14:6 Washers must be used on the outside of all heim joints to prevent joint pulling apart.
- 14:7 Where steering components are cut and welded to be sleeved and pinned or suitably reinforced.
- 14:8 Press fit power steering fittings must be replaced with threaded type.

### **SUSPENSION**

- 15:1 Any safe type suspension may be used.
- 15:2 All coil suspension cars, must have retainer on coil spring, either shocker, chain or clamp passing through spring, chain thickness to be 5.6mm (1/4") link material size minimum.
- 15:3 Mild steel may be used. Minimum size 19mm (3/4") x 2.8mm (1/8"). or minimum 25mm (1") aluminium radius rods, may be hollow section.
- 15:4 Radius rod mounting bolts to be 12.5mm (1/2") high tensile minimum. Nylon lock nuts or split pins to be used.
- 15:5 All cars must incorporate an operative shock absorber on each wheel.

### **BRAKES**

- 16:1 Brakes must operate on a minimum of three wheels, (two rear and one front) and be foot operated. Cars using quick change diffs may use one ventilated or solid inboard disc suitably covered to deflect sparks.

### **WHEELS**

- 17:1 Heavy duty wheels to be used and may be modified to a minimum of 300mm (12") and a maximum of 410mm (16") diameter. Suitable lightweight wheels permissible.
- 17:2 Maximum rim width to be 450mm (18"0 including beadlock.
- 17:3 Steel plate centers optional but must be made from a minimum of 8mm (5/16") mild steel plate and be suitably drilled to allow wheel flex.
- 17:4 12.5mm (1/2") wheel studs must be used on all rear drive wheels with a minimum of five (5) studs per wheel.
- 17:5 Single nut type "knock ons" permissible.
- 17:6 Dual wheels not permitted.

### **BODIES**

- 18:1 Only 1932 – 1934 Ford sedan type bodies to be used on SDAV Hot Rods. Steel or fiberglass.
- 18:2 Engine must be covered by suitable type bonnet and fans must be shrouded.
- 18:3 No aerofoils or aerodynamic aids permitted.
- 18:4 All vehicles to be presented in good condition and appearance for racing, with clear suitable signwriting etc.
- 18:5 All vehicles must display state registered number on both doors and both rear corners of body. All numbers to be contrasting colours and clear of any major signwriting. Numbers must be approximately 300mm in height.

18:6 Roof number plate, if used, to be no greater than 350mm x 450mm.

18:7 S.D.A.V. and web site address to be displayed on cars the website size of writing to be a minimum of 40mm and the SDAV size to be a minimum of 75mm.

**WINDSCREEN MESH**

19:1 All cars to be fitted with a welded mesh front screen to protect driver. Mesh size to be 25mm (1") maximum x 2.1mm thickness. To be attached with 4 hose clamps.

**All rules to be frozen until June 2022  
Safety changes excepted**

**The following forms are available from Club Secretary:**

S.D.A.V. Membership

Licence Application

Car Registration

Medical

F.A.S. Insurance

Lost Licence or Log Book Application

Thunder Down Under Series Form

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