

## **TASMANIAN SPEEDWAY BOMBERS**

# **SPECIFICATION MANUAL**

**EFFECTIVE 1/7/2022** 

## **TABLE OF CONTENTS**:

Interpretation
Declaration of Compliance 3
Authority to Exclude4
Construction4
Definition of Materials4
Inspection4
Driver Safety5
Race wear & Approval5
Seat belts5
Fig 2 (i - ii) Restraints 6
Fig 3 (i - iv) Restraint System7
Installation of Driver Restraint Systems7
Adjustment of Driver Restraints 8
Seat9
Window Net11
Body 12
Chassis
Steering & Brakes
Floors
Suspension
Ignition
Wheel Studs13
Wheels & Tyres
Cooling System14
Carburetors
Transmission
Scatter Shields
Rear Axle14
Battery & Electrical Systems15
Firewalls
Fxhaust Systems

Fuel	15
Ballast	16
Engine	17
Roll Cage	17
View A – Typical Roll Cage	19
Bumper Bar & Optional External Bar Work	19
Roof Number Plate	20
Dimensions	21
Engine Setback	22

## **INTERPRETATION**

Speedway Sedans Tasmania along with Speedway Sedans Australia Inc. (SSA) shall direct the enforcement of these specifications in all aspects. It and its delegates shall be the sole authority for the interpretation of the specifications as contained in this book and any circularized amendments.

Specific decisions made by the National/State/Zone Officers shall be subject to ratification by the National Technical Committee. After due notice of the decision and reasons have been given.

All enquirys must be directed through your local Zone Scrutineer to your State Technical Officer.

### **GENERAL:**

### **DECLARATION OF COMPLIANCE:**

The PERSON RESPONSIBLE for the LEGALITY of the car will complete an Speedway Sedans Tasmania DECLARATION OF COMPLIANCE each season...

Declaration will cover ELIGIBILITY for class and ALL points SAFETY including material specification and sizes. Details of the declaration are to be placed in the logbook. Registration is not complete until Pages 3 to 6 of the LOG BOOK are completed and signed by both the OWNER /DRIVER AND the SCRUTINEER/MACHINE EXAMINER or REGISTRAR.

Structural or other specification changes made during the year MUST be notified to the respective Officials and adjustments will be made to the Log Book if required. The Driver must have a SSA Inc. approved or .Speedway Australia insurance and a Speedway Sedans Tasmania Restricted License.

#### **AUTHORITY TO EXCLUDE:**

If a licensed Speedway Sedans Tasmania Official determines prior to the race that the Race Car does not meet the applicable specifications, the Race Car will not be allowed to compete unless, in the discretion of the official, the deficiency:-

- a. Will not adversely affect the orderly conduct of the race.
- b. Will not provide the competitor with a significant competitive advantage over other competitors.
- c. Is so insubstantial as not to warrant a determination that the car is ineligible to race.

If the Official permits the car to compete under these circumstances, the Official will advise the competitor in writing of the deficiency, and if the deficiency has not been corrected, within the allotted time frame, the car will be prohibited from competing in any future event.

This Manual must be read in conjunction with the Australian Speedway Racing Rules and Regulations and/or notices issued by the SSA Inc. / Speedway Sedans Tasmania from time to time.

Ignorance of these Regulations and Specifications and notices shall be deemed as no defense in regard to breaches and/or appeals of same.

#### **CONSTRUCTION:**

To be of professional standards all materials used must be of good quality. Bolts are not to be used through structural tubing, no drilling of holes and or tek screws/ pop rivets through main roll cage bars. All material sizes quoted are minimum unless maximum is stated.

#### **DEFINITION OF MATERIALS:**

RHS: Rectangular Hollow Section

WT: Wall Thickness
OD: Outside Diameter
ID: Inside Diameter

#### INSPECTION:

Cars must pass a pre-registration examination. Before obtaining a Log Book, and must be a financial member of a club. If vehicle is found to be defective, the Log Book may be withdrawn until repairs or adjustments have been made and approved. Drivers are responsible to have the Log Book endorsed before any official practice or meeting sessions. Passengers must also be present with their safety equipment at this inspection and must also have SSA Inc. approved or Speedway Australia Insurance.

An unendorsed Log Book is equivalent to a no race ticket.

Any defects written in the Log Book must be fixed by the next race meeting or there will be no racing.

## **DRIVER SAFETY**

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

All race wear/equipment shall be inspected at each practice/race meeting. Illegal parts or safety equipment shall be confiscated.

## **PROTECTIVE CLOTHING**

All protective clothing shall comply with the minimum standards for Safety apparel as specified in the current version of the Australian Speedway Racing Rules and Regulations.

#### **PADDING:**

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

## **SAFETY FLAG**

Each car MUST contain a white safety flag, which is to be securely mounted, within reach of both driver and passenger. This flag is issued by the club for a nominal fee, and can be obtained from the Secretary.

## **NECK BRACES:**

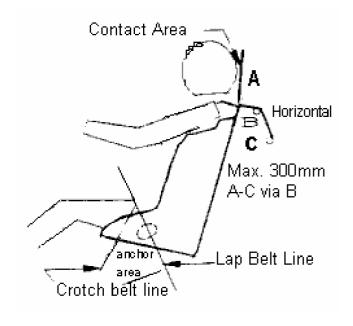
An SFI approved horse collar and or head and neck device must be worn. It must be correct fitting to suit the driver and helmet used, and to be worn as recommended by manufacturer. Neck brace is to be worn as recommended by manufacturer.

A Horse Collar is to be of high-density foam covered with Nomex, wool or similar fire retardant material.

## **SEAT BELTS:**

An approved type racing harness must be fitted, using a minimum of four major belts and four mounting points, plus one or two antisubmarine/crotch straps. Shoulder and Hip Belts width 75mm minimum.

Fig. 2 (i)



Only belts with over center lever lock buckle to be used.

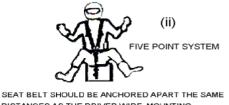
# SEAT BELT LIFE IS A MAXIMUM OF TWO YEARS FROM DATE OF MANUFACTURE. Not date of purchase.

Shoulder belts are to have separate anchor points/adjusters. Fig 2 (i) Shoulder belt mounting points shall be positioned to the rear and below the point at which the shoulder belts come through the seat and be not more than 300mm from that point, attached to 38mm x 3mm tube. See Fig 2 (ii)

Lower seat belt mounting brackets (anchor points) must be on roll cage and chassis or substantial bar work using a minimum construction of 25 x 25x3mm RHS or 25mm OD CHS. Seat belt attachment tag to be 3mm minimum mild steel.

Anchor bolts to be 10mm steel minimum.





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

Fig 3. Sample Seat only shown for clarity. See "Installation of Restraint System". See "Adjustment of Driver Restraints".

## INSTALLATION OF DRIVER/ PASSENGER RESTRAINT SYSTEMS: Fig 3

In order for the driver/passenger restraint system to be fully effective, considerable thought must be given to the location of mounting points, and to proper installation.

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

The mounting points must be solid and should remain so even if the vehicle is deformed due to an accident. The 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 of the pelvic area and its ability to protect internal organs make it the preferred location for the lap belt. Fig 3 (i) & (ii)

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

The required minimum 50mm from top of the driver's/passenger's helmet to the HEAD PLATE does not leave much lead way for the shoulder harness to prevent the helmet from striking the head plate or bar work in the event of a rollover. The shoulder harness is a major means of preventing injury in such an incident.

Anti-submarine straps serve two purposes:-

1. To secure the lap strap down across the driver's/passengers hips, do in the event of an accident; it is not pulled up across the stomach by the shoulder straps.

2. To prevent the Driver/Passenger from sliding forward and out of the harness. When the driver/passenger is seated in an upright position, as in most sedans, a five point system (a single anti-submarine or crotch strap) is considered adequate. Fig 3 ii. For extra assurance a double strap anti-submarine belt can be used. Fig 3 iv

When the Driver/Passenger is seated in a semi-reclining position a six point system (two antisubmarine or crotch straps) is preferable. Most drivers find the two anti-submarine strap system more comfortable. In many instances, the anti-submarine straps are mounted much too far forward of the seat.

This practice could cause unnecessary 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. Fig

3 i

Because of the differences (often vast) in competition vehicles a "standard" method of mounting is impractical. Good judgement and common sense in inspecting restraint system mounts is nee

#### ADJUSTMENT OF DRIVER / PASSENGER RESTRAINTS:

With the driver/passenger fully kitted out in "underwear" and "driving suit", check that, with the driver/passenger seated, belt slots in the seat line up with natural line of the belt from anchor to buckle when just the lap belt is tensioned.

Ensure that the lap adjusters do not foul the seat and that they are readily accessible. Some belts adjust by pressure downward other than pull up. Check that the driver/passenger can manipulate belt adjusters with gloves ON.

Check also that anchor hardware is aligned and that it is not possible to have a hitch in the anchor area without detection (sudden release of the belts to 50mm slack can put the driver/passenger off line).

Now check if the belt is holding the seat or the driver/passenger, it should be the latter.

Adjust the anti-submarine strap/s to ensure that the buckle is held flat and close to the body over the pelvis. When satisfied that the lap belt is OK, put on the helmet and check just how far the helmet (with visor) can reach, head plate clearance, helmet net, etc.

Slacken the seat belt, engage the shoulder belts into the buckle and tension the seat belts again, checking position of the buckle and adjusters.

Tension each shoulder belt, checking that the adjustment range is suitable to the driver/passenger, that the belts and hardware don't foul the seat and that the natural line of the belts holds the driver as with the lap belts. Note also any change in the buckle location and lay. If there is too much variation with the buckle it would appear that lap anchors are not in optimum position.

Before drivers release the buckle he should slacken shoulder belts with the adjusters, keeping the area of the adjuster supple, accessible for cleaning and making entry to the car a simple routine.

While lining up for restarts, it becomes a simple exercise to tug the adjusters to snug up the belts and stay in control of the car and should not be loosened after leaving dummy grid until ready to exit the car.

## SEATS: (updated 1/7/22)

A Competition Seat is used to secure the competitor within the vehicle with the objective of minimizing injury to the competitor during an accident and of supporting them safely during normal racing conditions. The following competition seats are permitted

NOTE – IF USING AN INTERMEDIATE STYLE SEAT WITHOUT CONTAINMENT BUILT IN, PROPRIETARY HEAD AND SHOULDER SUPPORTS MUST BE ATTACHED TO ACHIEVE FULL CONTAINMENT.

- 1. If using a non SFI/FIA approved proprietary manufactured full competition/containment style seat which is constructed of aluminium.
  - a) Homemade seats will be deemed non-compliant and are not permitted. (02/10/22)
  - b) The seat back is to be mounted approximately at shoulder height to the main hoop centre spreader bar or seat back/shoulder bar (Bar #5/6) at 2 (two) points. © Speedway Sedans Australia Inc. SSA Super Sedan Specification Online October 2022 v13 11
  - c) The seat base to be mounted with a minimum of 4 (four) points to the roll cage/chassis, spread evenly to distribute the load. (02/10/22)
  - d) Seat base is inclusive of the lower portion of seat that supports the hips, thighs and pelvic area. (02/10/22)
  - e) Hardware for mounting will be SAE grade 5 or better 5/16" minimum bolts.
  - f) The use of 30mm minimum diameter metal body or aluminium tapered seat body washers (see picture below) to be used at all seat mounting points. (17/09/22)
  - g) The use of proprietary seat manufacturers mounting kits are permitted.

NOTE – IF USING AN INTERMEDIATE STYLE SEAT WITHOUT CONTAINMENT BUILT IN, PROPRIETARY HEAD AND SHOULDER SUPPORTS MUST BE ATTACHED TO ACHIEVE FULL CONTAINMENT.

- 2. If using an SFI/FIA approved full containment seat which is constructed of either aluminium or composite materials and provides for mounting the seat back to the shoulder bar of the vehicle roll cage.
  - a) The seat assembly pertaining to the construction of the seat, shall remain as constructed by the original manufacturer and shall not be modified by anyone else. i.e. no drilling of seat for mounting purposes
  - b) If the seat used cannot be mounted as per this SSA specification, then the seat is unable to be used and is not permitted.
  - c) The seat is always to be mounted as per the manufacturers fitting instructions.
  - d) Where possible the use of the manufacturer mounting kits and hardware is highly recommended.
- 3. General Requirements for all Seats
  - a) All support projections/wings are portions of the seat which are positioned opposite the head, shoulder and pelvic areas are extensions of a regular seat to provide extra support for those body locations and side crashes.
  - b) The seat design shall provide lateral (sideways) support to upper part of legs and hip area.

- c) The seat shall support the drivers back to the top and full width of the shoulders.
- d) The seat must utilise and provide head and shoulder protection on both sides of seat
- e) The seat base is to be mounted completely on the right-hand side of the vehicle centreline.
- f) The driver shall have a minimum clearance between the helmet and the head plate/hoop bar when seated.

NOTE – IF USING AN INTERMEDIATE STYLE SEAT WITHOUT CONTAINMENT BUILT IN, PROPRIETARY HEAD AND SHOULDER SUPPORTS MUST BE ATTACHED TO ACHIEVE FULL CONTAINMENT

## **WINDOW NET:**

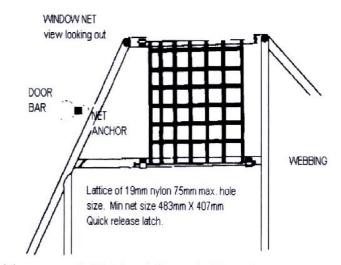
## The Window net is mandatory.

Window Net to be minimum 19mm woven webbing with 75mm maximum hole size. See appendix A (or SSA Inc. approved window net Fig 4)

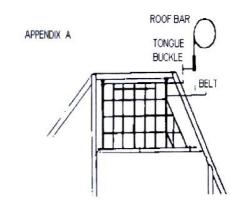
It is recommended that the window net be hinged from the bottom.

Window net = A lattice of 19mm woven webbing.

See appendix A. (or ASCF Inc approved window net)



It is recommended that the window net be hinged from the bottom.



Tubing at base of net fixed with bonnet lock pins.

Window net must be mounted directly to the roll cage bar (top) and NASCAR bar (bottom) from the quarter vent window bar back.

## **BODY:**

The original body profile (silhouette) shall not be changed. A power bulge is permitted to a maximum 100mm at any point above bonnet. No protrusion through the bonnet. A spoiler or aerofoil shall not hang past rear bumpers; spoilers or aerofoil shall be no wider than the body is at the point, maximum height 200mm. A front air dam may be fitted, but must be behind bumper bar. Cars will have the bodywork in good condition, (this will be at scrutineers discretion). All paint work, sign writing and numbers to be a neat attractive finish. All fittings such as door handles visors, ornamental moldings, body trim strips, wheel trims etc.. Must be removed.

All unnecessary flammable materials must be removed, e.g. door trims, floor coverings. All windows and lights to be removed Instrument glass allowed.

## (Interior rear vision mirrors NOT PERMITTED)

Rear of bonnet pegs (5 for fibre glass) to be 12mm minimum to 16mm maximum mild steel.

Bonnet pins 3mm minimum to 6mm maximum. Heavy duty large reinforced washers (min 30mm OD) to be fitted to all bonnet and boot peg holes where necessary. Hinged bonnet and boot lids permitted.

Fuel tank area must be accessible for scrutineering. Grille may be fabricated, no plastic or die cast grilles allowed. No flares allowed. All vehicles must carry the correct identification number as issued by the SST State Secretary.

This number is displayed on the roof. Side numbers are optional. The roof plate 300mm x 300mm black with white number 250mm high in block font.

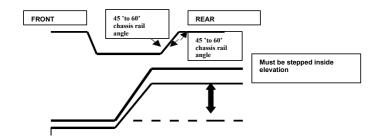
Any body changes to registered cars during season shall be notified to State Chief Technical Officer or Chief Scrutineer before racing, and to be noted in Log Book.

## **CHASSIS:**

CHASSIS CABIN WIDTH: Material: mild steel 75 x 50 x 3mm RHS minimum (Sonic test at not less than 2.7mm w.t. ABSOLUTE). The chassis shall be full width of the cabin area and be symmetrical along the cabin area centreline. Measurement from right hand side centre waistline bar into chassis/outrigger be a maximum of 255mm.

FRONT CHASSIS. Material: mild steel 75 x 50 x 3mm RHS minimum. (Sonic test at not less than 2.7mm w.t. ABSOLUTE). Front: Chassis rails must extend forward of the front axle centerline minimum 380mm and is symmetrical to the cabin chassis area or standard propriety clip i.e. (HQ, Toyota crown etc.)

REAR CHASSIS. Material: mild steel 75 x 50 x 3mm RHS minimum. (Sonic test at not less than 2.7mm w.t. ABSOLUTE) Rear chassis rails must extend from the centerline of the rear axle REARWARD a minimum of 610mm and have the fuel tank mounted in this area. Maximum rear chassis rail offset 75mm of symmetrical. Angle of rear chassis rails must be a minimum of 45° and a maximum of 60°. All material in fabricated chassis, chassis outriggers and/or sub-frames to be of mild steel, minimum of AS 1163 Grade 300.



## **STEERING:**

Steering components must be in sound condition. Steering joints to be split pinned as required.

Wire spoke or wood rim steering wheels not permitted.

Steering column must be securely mounted to the roll cage dash bar.

Hub of steering wheel must be padded with dense resilient foam and covered.

To reduce thumb and wrist injuries, the use of "PAW SAVER" type disc steering wheel is HIGHLY RECOMMENDED.

## **BRAKES:**

Foot operated, hydraulic brakes are to be fitted and be effective at race speeds.

Bias adjustable brake systems are permitted although "electronic" anti-lock brake system. (ABS) NOT PERMITTED.

Brakes are to be fitted to a minimum of three (3) wheels. A single brake assembly mounted on a **ONE PIECE** (live) rear axle is considered to be brakes fitted to two wheels.

## CARBON FIBRE/TITANIUM BRAKES AND COMPONENTS NOT ALLOWED.

### **FLOORS:**

Floors to be 3mm thick steel. Floor must be fixed to the top of the chassis.

## **SUSPENSION:**

Type and construction of constructor's choice, except that beam axles are not permitted on front.

## **IGNITION**:

Ignition system must not contain or actuate any traction control function.

Kill Switch to be clearly marked for method of operation e.g. DOWN/ OFF.

## **WHEELSTUDS:**

If wheel studs are replaced for some reason, i.e. too short, damaged or broken, they are to be replaced with a grade 8, 12mm (1/2 ") diameter minimum with tapered nuts.

#### **WHEELS AND TYRES:**

Minimum rim and tyre size to be 13inch x 185 x 60 Maximum rim width to be 10 inch ABSOLUTE.

Maximum rim and tyres to be 16 inch x 285 x 65 road-registered radials NO winter type treads i.e. (4x4)

Tyres may protrude maximum 100mm outside of original bodyline.

Standard rims not to have stud holes altered (e.g. welded and redrilled)

## **COOLING SYSTEM:**

Cooling system may be modified. All radiator hoses to be of fabrics reinforced material. Plane molded rubber hoses are not permitted.

Cooling systems to have a manual pressure release cap fitted to top of tank of radiator to relieve pressure before loosening or removing radiator cap.

Push button pressure cap not permitted. Leaver vent type must be fitted.

Exposed hoses or joints not permitted in cabin area.

Cabin mounted water pumps must be LAGGED or COVERED by a suitable guard.

Engine fan (metal or plastic) must be covered with a fan shroud. The metal fan shroud must cover the fan blade and extend minimum 100mm from the back face of the fan blades. The use of a Commodore (e.g VN Commodore) plastic fan shroud may be used if the minimum measurement of 100mm from the back face of the fan blades is achieved.

#### **CARBURETTORS:**

Shall be naturally aspired single throat carburetor with maximum venturi size of 36.5mm on any motor. No Aftermarket Carburettors are permitted. Down draft only, no sleeving venturi.

## **TRANSMISSION:**

Must have a minimum of two forward gears and one reverse gear.

## **SCATTER SHIELDS:**

A 3mm x75mm wide minimum steel scatter-shield to cover upper 180 degrees of bell housing and be securely attached and must cover clutch and pressure plate are and or torque converter.

## **REAR AXLE:**

Bearing retaining rings must be tack welded in at least three places. Failure to observe this procedure will incur a penalty, especially if an axle is dislodged. Tail shaft must be fitted with two tail shaft straps or hoops and must be within 150mm of universal joints and be no more than twice the diameter of the tail shaft, using 40 x 6 flat.

#### **BATTERY AND ELECTRICAL SYSTEMS:**

Batteries must be securely fastened in a steel frame box secured to roll cage or chassis. Location to be indicated by 100 mm BLUE triangles on body.

## NO PLASTIC BATTERY BOXES PERMITTED.

Rubber covering must be placed over the battery to reduce acid spillage. Rubber grommets must be fitted where battery cables pass through metal firewall.

At the commencement of a meeting, cars must be capable of starting with starter motor, switches: ignition switch and electric fuel pump switch, if fitted, must be grouped together and clearly marked.

An engine KILL switch, suitably marked, must be fitted in centre of cowl panel.

## **FIREWALLS:**

Drivers must be protected and isolated from mechanical, fuel, electrical and exhaust components by 3 mm. steel firewall, seam welded. Rear firewall minimum 1mm. thick, steel or aluminum.

#### **EXHAUST SYSTEMS:**

Exhaust must be within local council noise level requirements (95 decibels). A muffler MUST be fitted. All exhaust pipes must be firmly attached to the vehicle. If exhaust system is under the floor, safety chains will be fitted to front and rear of pipes and be attached to floor pan or chassis.

All exhaust gases are to be directed away from driver and passenger and fuel tanks, also away from tyres. The exhaust must be pointed or directed at the ground, at minimum 45 degrees.

## **FUEL TANK AND FUEL SYSTEMS:**

Original fuel tank must be removed and replaced with a tank of up to 40 litres. If using Jerry Cans, do not use a cheap thin one Make sure seams are welded and not crimped, and to have pin through lid catch to stop lid opening. Fuel tanks to be constructed of a minimum of 1mm steel or 3mm aluminum. All joints to be welded or lapped and brazed. Fuel tanks over 25 litres must be baffled.

Filler caps to be a positive seal, and inside body. All tanks to be fitted with an anti-spill vent (i.e. brake booster vacuum valve), and away from exhaust pipes. Tanks to be securely mounted inside car, behind firewall in a suitable cradle with a minimum clearance of 200mm forward of the lower rear of boot panel and 300mm minimum from side of vehicle. Area beneath tank should be clear or have adequate drainage to ensure spillage cannot remain in vehicle. Tank to be protected by substantial bar work on all sides. A flexible fuel line must be fitted and all fuel lines to be securely fixed in position.

All fixings and penetrations to be grommeted. Neoprene, reinforced plastic of "black fuel lines must be protected from tail shaft breakages i.e. deflector plate or angle.

The fuel lines to the engine must be fitted with a quick action ball cock type non-leak fuel tap in working order securely mounted within easy reach of driver and passenger, and crash crew and clearly marked **FUEL ON-OFF**.

Electric fuel pump must be behind a firewall fitted with an independent earth to case, a switched off by the kill switch electrical wiring must be isolated from fuel lines. NOT TAPED TO IT. New cars or replaced tanks will have outlet from top of tank.

#### NO METHANOL TO BE USED. & NO AVGAS (100%)

## FUEL (Cont)

Fuel must be supplied by a commercial outlet, through a multi-volume network via **Bowser** pump. i.e. Shell, BP, Mobil, Caltex.

## The use of exotic fuels not permitted

Fuel may be tested by any means available at any time.

#### **BALLAST**

A typical piece of ballast will be no greater than 610mm long, 100mm wide, and 50mm high.

Each individual piece of Ballast MUST be PAINTED white ONLY and be permanently marked with registered car number and prefix of the car the ballast is attached to.

ATTACHMENT OF BALLAST IS TO BE BOLT ON ONLY (i) Ballast is to be attached to roll cage or substantial bar work ONLY.

Ballast permanently attached to roll cage, bar work, or body via welding, clamping, or any other permanent attachment method is NOT permitted. This includes the welding of attachment hardware (Bolts).

Ballast attached to substantial bar work that is RHS is to use one of the below attachment methods ONLY  $\checkmark$  Sleeves inserted in bar work with a minimum of two  $\frac{1}{2}$ " or 12mm high tensile bolts, washers and nyloc nuts with a minimum of two threads protruding.  $\checkmark$  A 5mm plate minimum of 100mm x 50mm to a maximum of 200mm x 75mm with a minimum of two  $\frac{1}{2}$ " or 12mm high tensile bolts, washers and nyloc nuts with a minimum of two threads protruding.

Ballast attached to roll cage or roll cage material that is 38x3mm CHS is to be attached using a minimum of two proprietary ballast type clamps ONLY. i.e. Allstar, AFCO, Bicknell etc. Accessory type clamps are NOT permitted.

All ballast is to be attached separately using one of the permitted methods per piece of ballast ONLY. ie stacking or using the inverted side of clamps is not permitted.

Ballast is NOT to be attached higher than top NASCAR bar.

Ballast attached to fuel tank protection bar and/or supports is NOT permitted.

Ballast attached to bumper bars mounts and/or supports is NOT permitted.

MAXIMUM singular ballast pieces to be no more than 11.5 kg ABSOLUTE (x) MAXIMUM total ballast to be no more than 46kg ABSOLUTE i) Ballast that is non-compliant in weight or attachment may incur an Infringement and penalty notice.

## **ENGINES:**

"V' ENGINES" NOT PERMITTED.

"ROTARY'S" NOT PERMITTED.

6cyl OVERHEAD CAM NOT PERMITTED.

4cyl OVERHEAD CAM WILL BE PERMITTED.

Engine movement permitted sideways 50mm maximum. Rear face of engine block to be not less than three quarters of the wheelbase from the centre line of the rear axle. If engine set back does not work, number one plug should line up with centre block castings. If using standard engine mounts, a wire cable or chain restraint must be fitted. Oil filters and oil coolers should be securely mounted and not be in cabin area. Two return springs must be fitted on accelerator linkage on carburetor. No mechanical linkages to be used, cable only. Protective wire gauze or air cleaner to be fitted over air intake to prevent entry of foreign objects. And make of motor to any body maximum engine sizes.

## MAXIMUM CUBIC CAPACITY OF 258 CUBIC INCH

## Engine capacity is to be no greater than 258 cubic inch

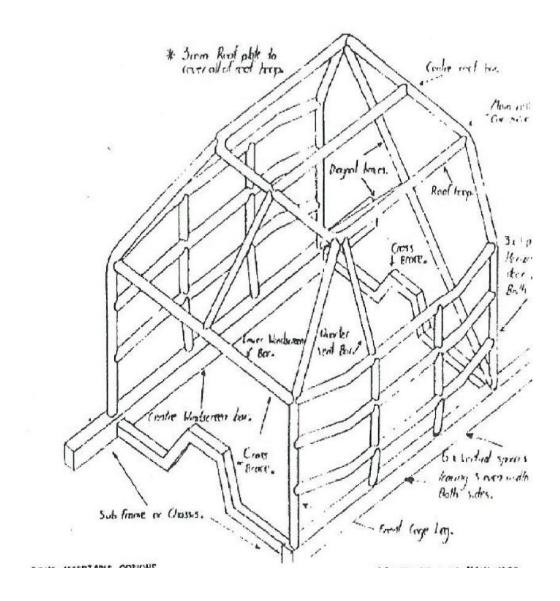
If a car is found to have an illegal size motor (i.e. over 258CI) then a suspension of 12 months becomes enforced immediately as per Australian Racing Rules & Regulations. No driver's license is to be issued in any other division of Speedway during this term of suspension.

#### **ROLL CAGE**

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

- a) The roll cage is to prevent the collapse of the cabin area under impact. Roll cage, to enclose the driver and passenger, to be full width and full height of the cabin area. Self drilling (tek) screws etc. or self-tapping screws are not permitted to be used and no pop rivets.
- b) The roll bars are to constitute a cage type framework, braced fore and aft.
- c) The cage must extend from behind the driver's seat forward to the windscreen area and incorporate protection for the driver and passenger's feet. All rollcage barwork is to be inside the body
- d) All roll bar material must be of good quality mild steel, minimum 38mm OD x 3.00mm wt. CHS. (Sonic tester reading, at not less than 2.70mm ABSOLUTE). Aluminum based materials not permitted.
- e) 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 bar work. Water pipe fittings or malleable fittings are not permitted.
- f) Roll cages built using other than fusion-welding techniques will not be accepted. Gussets on welded joints may require (Daylight Inspection).

- g) The rear main hoop and the 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.
- h) Main roll bar to minimum of 38mm OD x3.00mm WT CHS. A crucifix type bracing must be fitted in the main roll cage hoop, behind driver and passenger and be a OD x 3.00mm. One diagonal brace must be one piece and must be go from driver's head to bottom of passenger's side of main hoop. Top windscreen bar, lower windscreen/dash bar. On drivers and passenger's side three horizontal sidebars between front and rear cage legs. Evenly spaced between sill and subframe or sill rails and curved out towards the door skins. Two vertical bars evenly spaced between sill and top horizontal bar.
- i) Bars in pre-registered cars to be replaced when damaged to current specs. Rear sub-frame or chassis cross braces at rear roll cage legs, either CHS. or 25mm x 25mm x3.00mm WT RHS. 32mmOD x3.00mm WT CHS Centre roof bar. 25mmOD x 3.00mm WT CHS Centre windscreen bar.
- j) Roof plate minimum 3.0mm steel, must extend from rear roll bar to top windscreen bar and from driver's side bar to passenger's side bar. This plate must be securely welded to these bars, with intermittent welding procedure.
- k) A mesh screen will be securely fitted to roll cage in front of driver and passenger. Maximum mesh size 50mm x 50mm minimum 10gauge (3mm). A deflector plate or plates to be fitted in all squares of NASCAR side or to cover all NASCAR side on the outside. Bottom two thirds to be 6mm deflector plate. Top one third plate 3mm minimum. A quarter vent bar must be fitted to either side of roll cage. Quarter vent area 32mmOD x 3.00mm or 25mm x 3.0mm WT RHS.

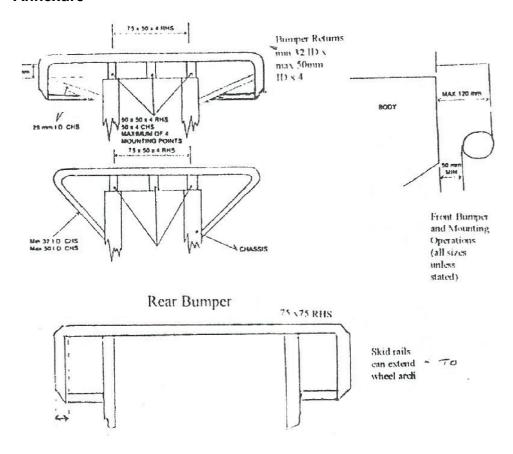


## **BUMPER BAR & OPTIONAL EXTERNAL BARWORK**

Bumpers in original position. Replace as per diagram, refer Annexure Bumper bars may be drilled and thickness measured during scrutineering. Rear bumpers may return to wheel arch, maximum bumper size 75mm x 75mm x 6mm RHS. Bumper bars and grill not to resemble Bull bar. Bumper caps to be 45. OD.

Original plastic bumpers may be fitted behind approved steel bumpers.

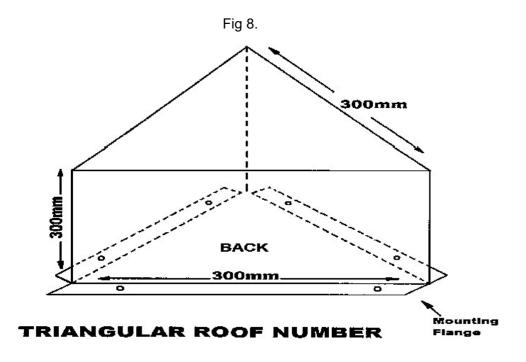
#### **Annexure**



## **Roof Number Plate:**

The use of a roof plate number is mandatory for all race meetings. It shall be a metal plate, 30cm Square with a 5cm right angle fold at the bottom, where 2 holes, at 20cm centres shall be drilled to take 6mm bolts. Fig 8.

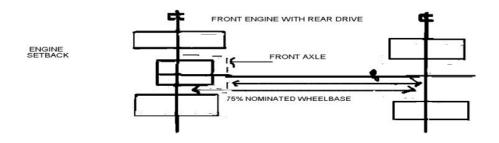
The number on the plate shall be painted using a black background & white number/s. Number to be minimum 250mm high in block font. A triangular 3-sided roof number is optional. Plate to be 300mm x 300mm x 300mm. Black background with white number.



## **TABLE 5 DEMENSIONS**

MODEL	WHEELBASE = mm
HOLDEN LJ Torana LLH/LX Torana UC Torana VB – VK Commodore VL Commodore VN Commodore VP Commodore VP Commodore VR – VS Commodore VT Commodore VT Commodore VX Commodore TX Gemini	2540 2592 2592 2668 2668 2731 2731 2731 2788 2788 2404
FORD TD Cortina TE Cortina TF Cortina XD Falcon XE Falcon XF Falcon EA Falcon EB – EF Falcon EL Falcon AU Falcon Escort Mk11 Escort	2581 2578 2580 2807 2794 2829 2794 2794 2791 2793 2400 2407

2667
2819
2380
2515
2530
2500
2500
2425
2423
2500
2570
2610



**TABLE 2:**ENGINE SETBACK (Minimum distance from Rear Axle CENTRELINE)

Norm. dW/Base	75% W/Base	Norm. dW/Base	75%Wheelbase
95"		71.25"	2413.0mm
1809.75m	nm		
96"		72.00"	2438.4mm
1828.80m	nm		
97"		72.75"	2463.8mm
1847.85m	nm		
98"		73.50"	2489.2mm
1866.90m	nm		
99"		74.25"	2514.6mm
1885.95m	nm		
100"		75.00"	2540.0mm
1905.00mm	1		
101"		75.75"	2565.0mm
1924.05m	nm		
102"		76.50"	2590.8mm
1943.10m	nm		
103"		77.25"	2616.2mm
1962.15m	nm		

104"	78.00"	2641.6mm
1981.20mm		
105"	78.75"	2667.0mm
2000.25mm	70 50"	2602 4mm
106" 2019.30mm	79.50"	2692.4mm
107"	80.25"	2717.8mm
2038.35mm	00.20	27 17 .011111
108"	81.00"	2743.2mm
2057.40mm		
109"	81.75"	2768.6mm
2076.45mm		
110"	82.50"	2794.0mm
2095.50mm 111"	83.25"	2819.4mm
2120.90mm	03.23	2019.411111
112"	84.00"	2844.8mm
2133.60mm	5 1100	23 7 1.011111

## **NOTES**