SPEEDWAY SEDANS AUSTRALIA INC

ONLINE – VERSION 20 – JULY 2024

SSA MODIFIED SEDAN
SPECIFICATION MANUAL

Rules and Regulations

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The content of this manual is to be read in conjunction with the SSA Class Technical Manual available as a separate download. Click Here

CLASS SPECIFICATION: SSA MODIFIED SEDAN

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PLEASE NOTE: Where possible the data in the Class Specification Manual has been taken from www.automobile-catalog.com which is the main reference book used by the SSA Inc. Information that is not available at www.automobile-catalog.com is taken from the Manufactures Workshop Manuals. We have checked and cross checked the information in this Manual. If you do find something that does not seem right, anywhere in this Specification Manual, please let us know immediately, so that we can check it out and if it is wrong, we can change it. (01/07/17)

SPEEDWAY SEDAN AUSTRALIA INC. SPECIFICATIONS

SSA Modified Sedan
CLASS SPECIFICATION

The content of this manual is to be read in conjunction with the SSA Class Technical Manual available as a separate download. Click Here

Refer to Class Technical Manual for information regarding the following items – Click Here (01/07/20)

PRESENTATION
DRIVER SAFETY
PROTECTIVE CLOTHING
SEAT BELTS and INSTALLATION
SEATS and SEAT MOUNTING
DUAL REGISTRATION
WINDOW NET and FITTING
PADDING
FIRE EXTINGUISHER
TRANSPONDER MOUNTING
ENGINE SEALING

GLOSSARY OF TERMS & DEFINITIONS:
CDS – Cold Drawn Seamless
ERW – Electric Resistance Welded
CHS - Circular Hollow Section.
FMS - Flat Mild Steel
RHS - Rectangular Hollow Section.
W.T - Wall thickness.
O.D - Outer Diameter
I.D. – Inner Diameter
OEM - Original Equipment Manufacture; used to indicate parts used, or the complete vehicle as it left the production line from the original manufacturer and means for make and model unless otherwise stated.
CARBURETTOR - Is to have all working parts in use, e.g., needle and seat, fuel bowl, float, jets etc and fuel is to be naturally delivered to the main jet by atmospheric pressure. The air pressure in the carburettor venturi being lower than atmospheric pressure, allows fuel then to flow from the bowl to the carburettor venturi as the pressure in the carburettor throat decreases.
Fuel is then drawn down the venturi and carburettor throat by vacuum provided by the rotation of the engine.
Carburettors that are of different configuration than that of the above must be submitted to SSA Inc Technical for permission to be used. A complete description must accompany the submission to substantiate a request.

PROPRIETARY – (of a product) marketed under and protected by a registered trade name. (01/07/17)

SEDAN RACE CAR – Sedan class race car is built from a full hard top road car with a full metal roof (non-removable), seating a minimum of four (4) persons as per the compliance plate (or manufacturers specifications) and catalogued for sale in Australia. i.e., available to the public through authorised Dealer sale and service networks throughout Australia. (01/07/23)

Note – All new and existing cars must comply with all specifications as detailed. If "IT" is not in the book, it will be considered non-compliant until written approval for use is issued by SSA Inc Technical and ratified by the SSA Inc Board. (01/07/23)

Prior to constructing a car not listed in the tables at the rear of the class specification manual full details will be submitted to the SSA Inc Technical. Submissions will be handled in a confidential manner. (01/07/23)

Once approved the vehicle will be included in the Class Specification Manual and the opportunity will be available for any competitor to build the same vehicle. (01/07/17)

Base model body is used for measurements and specifications. Forced induction models not permitted in that form.
Four-wheel drive, all-wheel drive and/or four-wheel steer models not permitted.

1. BODY/ROLLING SHELL:

a) Race car is to use an original, complete, metal body with the suspension mounting points in original position and being used. Refer to Section 10 – Suspension for further clarification. If it is not in the items that can be removed then it must be in place. (01/07/2020)

b) Cars may be upgraded by using later panels in same series i.e., VN - VS Commodore or EA - EL Falcon**.** Exception – AU Falcon CAN use BA Body Panels. The updated panel must be attached over the complete original panel, but must be registered as the original model.

c) All fittings such as door handles, visors, ornamental mouldings, body trim strips; wheel trims etc. must be removed.

d) All unnecessary flammable material must be removed, e.g., door trims, floor coverings; attached sound deadening material permitted except near exhaust system.

e) All window glass and lights must be removed. Window Glass openings must not be covered with fibreglass or other material. Exception: May have 3mm clear polycarbonate type material in rear door side windows in place of OEM glass. To have wording “MODIFIED SEDAN” and drivers surname in 50mm letters, plus car number in 150mm high fluro colour affixed to the panel. Polycarbonate type material is not permitted in any other areas. (17/07/23)

f) Instrument glass permitted.

g) The only panels which may be replaced with fibreglass/metal/aluminium/alucabest/race car plastics replica: max 2mm thick, doors, bonnet, boot, front guards, nose cone, front and rear bumpers and rear quarter panel. Under panel reinforcement plate NOT permitted. If original roof is damaged, you may fit a fibreglass roof skin overlay, only if original roof remains intact. (16/09/22)

h) Replacement panels must be securely fastened.
   (i) Panels to be attached using rivets or bolts. No cable ties or race tape, unless race nights repairs.
   (ii) The only panels which may be removed***:*** Radiator support panel front inner guard panels provided that they do not constitute suspension mounting points e.g., McPherson strut, rear quarter panels and all inner panels in boot area.
   (iii) In the boot area, rear quarter panels may be cut off in a line that projects from the most rearward point of the rear window to the centreline of the rear axle and be replaced with a replica panel. To be determined or measured whilst car is at ride height. (01/07/18)
   (iv) Rear silhouette to be maintained with plastic O.E.M. bumper over top of pipe bumper bar work.
   (v) All panels must be mounted within the OEM silhouette. (01/07/23)

i) The door pillars may be notched for bar work but otherwise must remain intact and in the original position, roof inner panels ONLY at the points where interference with the roll cage occurs may also be notched. Dash panel, non-structural bracketry on the interior side of the front firewall and on and under the floor, boot inner panels, boot floor, and/or rear wheel arch sections rearward of the rear axle centre-line provided that they do not constitute suspension mounting points where at least 50% must remain for measurement purposes may be removed. Which means 50% may be removed. Seat mounts and other brackets in the cabin on the floor may be removed.
   The rear chassis rail may be notched on Ford Falcons only BA – FG/FGX to allow clearance of rear upper control arm. Maximum notch 50mm x 50mm. (01/07/2020)

j) Transmission tunnel may be NOTCHED ONLY at the points where front and rear spreader bars intersect transmission tunnel. Under seat floor pan/tunnel area may also be modified to assist in the proper attachment of seat base bar work or sub frame and harness mounting tabs. All modifications must be of a professional standard and be fully welded. (01/07/2021)

k) Modifications to OEM firewall and parcel tray are permitted and maybe replaced. A firewall must be always maintained using metal with a minimum thickness of 0.9mm sealing around the radiator as part of firewall or via ducting into boot area if required, (01/07/2024)

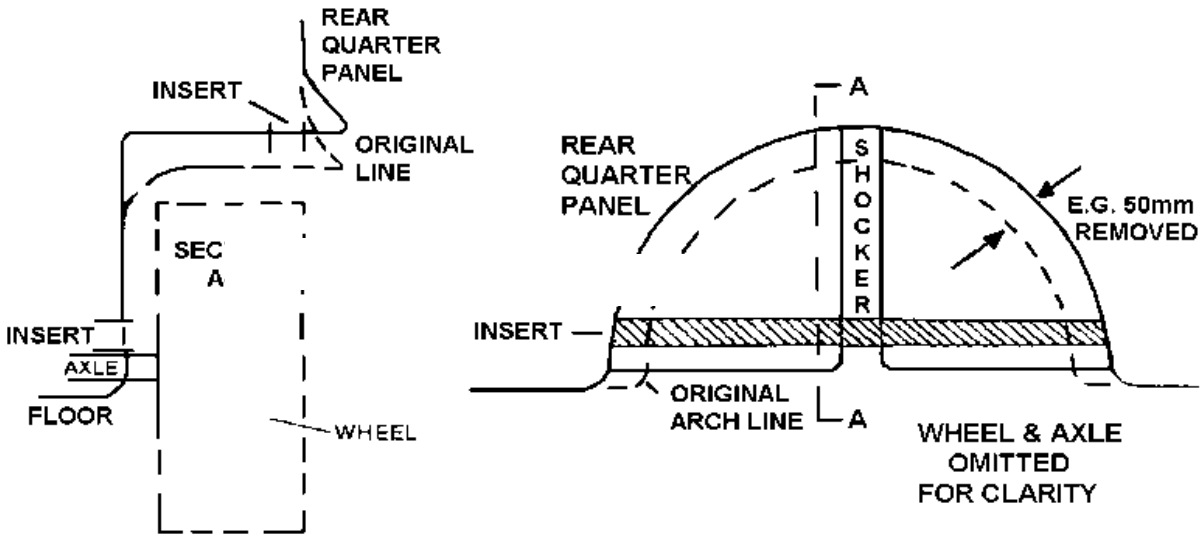
l) If rear wheel arches need to be enlarged for tyre clearance, the original wheel arch may be split and an insert fitted, and the remainder of inner and outer arch panels may be re-welded. It is also allowable to remove the section of the rear inner wheel arch from the factory seem / pinch weld that is located approximately in the centre of the wheel arch outwards to the quarter panel. This may be replaced with race plastic but is not compulsory. Fig 1. (01/07/2020)

Inner front wheel arches and fender skirts where they attach to the sub-frame and floor area may be re-positioned for wheel clearance - max. 50mm.

m) Original front sub-frames must remain in place, except that; the sections forward of the leading edge of both front tyres may be removed, “unless” they constitute suspension mounting points, e.g. Forward caster arm (radius rod) mounting on McPherson strut. Front wheel drive cars with transverse engine may modify the engine cradle assembly to strengthen the engine mount.

n) Front and rear under bumper stone trays must be of original shape.

o) Wheel Arch Modification Fig. 1
The rear axle centre line to be OEM position +/- 20 mm. (Tolerance allowing for ride height of vehicle)
Note: Wheelbase measurements must be met as per specification at all times. (01/07/2020)



p) Rear spoiler and/or front air dam permitted if manufacturer's option for the model.
Aerofoil permitted if OEM standard fitment. A V8 Super Car type or Walkinshaw and similar derivatives are NOT acceptable or permitted on rear.
Spoiler or Aerofoil fitment not permitted to be above half rear window height.
The position of the rear spoiler to be mounted in the standard position as recommended by the manufacturer. (01/07/23).

q) Other aerodynamic aids NOT permitted.

r) Except for the bumper and bumper support bars, all bar work outside the sub-frame skirts forward of the firewall, i.e., under front guards, shall be a maximum outside dimension of 25mm and a maximum wall thickness of 3.2mm Fig. 2(i) (ii) (iii). Max 3 braces per side, one may be a vertical upright attached to the bumper support. No other bar work to attach to bumper bars or supports.

s) Bonnet and boot lid to be securely fastened.
   (i) Four bonnet pins (5 for fibreglass) to be 12mm minimum to 15mm maximum. Mild steel or approved equivalent.
   (ii) Bonnet pins are to be in the bonnet not sides of mudguards. No mounting pins in side of panels, i.e.: mud guards.
   (iii) Bonnet lock pins 3mm min to 6mm max. Heavy duty large reinforcing washers (min 30mm O.D.) to be attached to all bonnet pin holes. (01/07/2020)
   (iv) Similarly, boot lid to be securely fitted, using four (4) pins, lock pins and large washers as for bonnet. A removable boot lid to be securely mounted in four points. (01/07/2020)
   (v) Hinged bonnet and boot lid permitted, using minimum of two pins.
   (vi) Skeletonising not permitted on hinged panels within 50mm hinges. The hinged panel is to be welded to the bonnet or boot skin.
   (vii) The use of Dzus clips on bonnets or boot lids is not acceptable. Exception being hatchbacks with a permanently fixed hatch panel. (24/11/18)

t) Fuel tank area must be accessible for scrutineering. A 300x300mm access panel may be in rear parcel shelf, deck panel or the boot lid.

u) Multi-piece sheet metal, brittle plastic, or die cast grille and/or fittings not permitted.

v) Cars may have a wheel arch flare if Manufacturer's OPTION is for the model and to be of original type and shape. Flares to be of body material only. Flare edges and/or guard edges are not to be reinforced. Side skirts are permitted – minimum ground clearance to be 100mm at ride height of the car. (01/07/23).

w) Light openings and grille must be filled using max. 1.6mm metal sheet, fibreglass or plastic. Grille to be 5mm woven mesh if airflow is required. (01/07/23)

x) Rear vision mirror not permitted.

y) Any front mud protection guards under cars to protect engine or suspension components from mud and dirt, must not be any lower than 100mm from ground level. (01/07/2020)

z) Dash panel is NOT permitted to continue past the forward most point of the steering wheel across the width of the car.

aa) Metal sheeting only in the driver's foot well may be fitted under drivers' feet, which is also covering the front roll cage spreader bar, so drivers do not get tangled in the bar work.

ab) The rear dog leg may be removed and replaced with a metal, fibreglass or plastic replica, from the OEM rear door catch position downward to the top of the sill panel bend, and inward to the first seam on the body.

NON-PERMITTED ALTERATIONS TO MONO (MONOCOQUE) BODY (01/07/2020)

FRONT ENGINE BAY – NON-PERMITTED

a) Sub rails that engine and suspension sub frames attach to CANNOT be removed or altered and must remain OEM. (Refer Section 10 Suspension)
b) Sub rails that include suspension mounts/pivots OEM unless otherwise mentioned in the specifications CANNOT be removed.
c) Structural fender bulkhead brace panels CANNOT be removed or altered and must remain completely OEM.

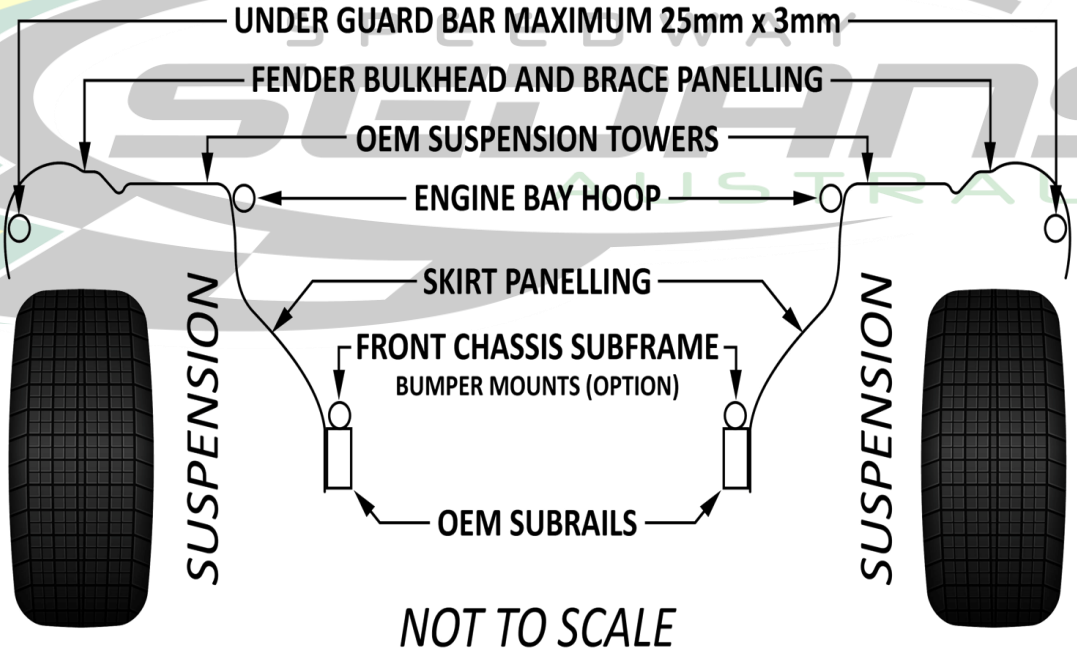
FLOOR & INTERIOR CABIN AREA – NON-PERMITTED

a) Under floor OEM sub rails and torque boxes CANNOT be removed, or altered and must remain in OEM position on body.
b) A and C Pillar inner header panels CANNOT be removed or lightened.
c) B Pillars CANNOT be removed, gutted, lightened, relocated etc and must remain complete OEM with the exception of notching for the NASCAR Bar installation and interior OEM Panel clips and bracketry. Refer to Body section 1, i). REMOVAL OF LOWER B PILLAR OUTER LEAVING ONLY THE INNER PANEL IS NOT NOTCHING.
d) Rocker sill panels, outer and multiple inners CANNOT be removed, gutted, hole saw lightened, etc and must remain completely OEM. VT-VZ Commodores, Monaro and IRS VS Commodore/Statesman are permitted 1 x 100mm maximum hole ONLY in rear of rocker sill panel to aid in rear swing arm installation and removal.
e) Door openings and front and rear window glass pinch welds CANNOT be removed or trimmed. 01/07/23)
f) OEM Gutter rails and Kant rails CANNOT be removed, trimmed, or filled. OEM Plastic mould strips in Kant rails are optional.
g) Transmission tunnels CANNOT be relocated or altered, side to side, fore and aft, raised or lowered.
h) Floor pans CANNOT be unpicked and relocated, side to side, fore and aft, raised or lowered.

BOOT AND FUEL TANK AREA – NON-PERMITTED

a) Rear sub rails that are suspension mount/pivot points CANNOT be fully removed
b) Rear sub rails that suspension and differential sub frames attach to CANNOT be removed or replaced with NON-OEM Rails, and CANNOT be altered in any way.

Fig.2



NON ORIGINAL BODY FIREWALL:

Driver must be protected and isolated from mechanical, fuel, electrical including battery - marine type plastic or similar box accepted and exhaust components by metal firewalls, min.0.9mm thick. (See Exhaust also).

ROLL CAGE (01/07/22)

Newly constructed vehicles will be able to option the use of the previous Section 2a Roll cage Material & Design

Both Roll Cage specifications will be subject to their individual respective design and material compliance requirements and are unable to be cross referenced.

Construction of Roll Cages in Section 2 as published in this Specification Manual inclusive of the Material and Design, is the preferred option and is highly recommended by Speedway Sedans Australia.

2. ROLL CAGE - Material and Design Option Effective for Registration commencing 1 July 2021

GENERAL

a) The roll cage is to provide a safe enclosed environment for the driver and is intended to prevent the collapse of the cabin area under impact.
b) The roll cage is to fully enclose the driver with the roll bar tubing that constitutes a cage type framework, braced fore and aft.
c) All bar work must be entirely inside the OEM glassed area of the cabin.
d) The cage must extend behind the driver's seat and forward to the windscreen area and incorporate adequate foot protection.
e) All A-leg and roof hoop options must be constructed so as the driver can enter and exit the car through the driver's side window opening at all times. A-legs and other roll cage bracing that protrude through the driver's side window opening that significantly impede the driver's ability to enter or exit the car will be deemed non-compliant. (01/07/23)
f) All bends to be made using a bender with the correct size former using a cold working process with no evidence of crimping, wall failure or significant weakening. The centreline bend radius must be 3 times the tube diameter. If during the bending process the tubing is ovalized the ratio of minor to major diameter must be 0.9 or greater.
g) All bars to be suitably notched to accommodate correct assembly of roll cage.
h) All welding is to be of a high quality with adequate penetration using only gas shielded arc welding techniques. e.g., mig or tig. All joints to be fully welded.
i) Sonic Testing to be performed only on a straight section of tube. It is the owner's responsibility to remove paint/powder coating if required. (Sonic Test at not less than 2.40mm ABSOLUTE) (01/07/23)
j) For Production Sedans and Street Stocks with Optional Passengers:
Roll cage left hand side must mirror the right-hand side and have full cruciform. Passenger handle for support is optional.

MATERIAL SPECIFICATION

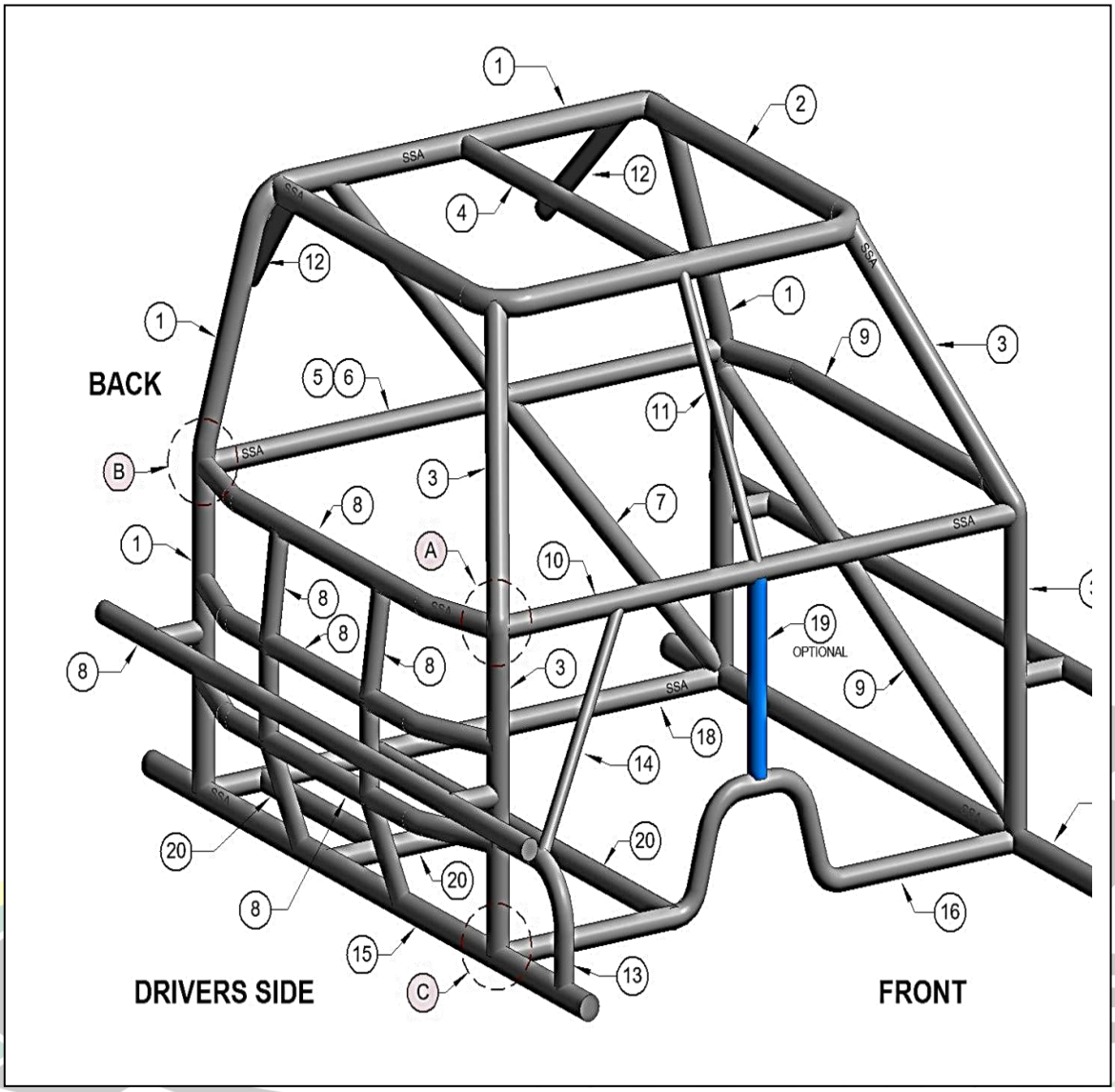
a) Please refer to Minimum Dimensions Table following for bar size and types. (01/07/23)
b) Minimum Cold Drawn Seamless (CDS) mild steel tube (CHS) with a minimum tensile strength of 350 MPA. Unless otherwise specified. (01/07/2020)
c) Where RHS is permitted all tube to be of AS1163 standard mild steel with a minimum tensile strength of 350 MPA.
d) No galvanising on any tube allowed.
e) All tube must display good elongation and welding properties.

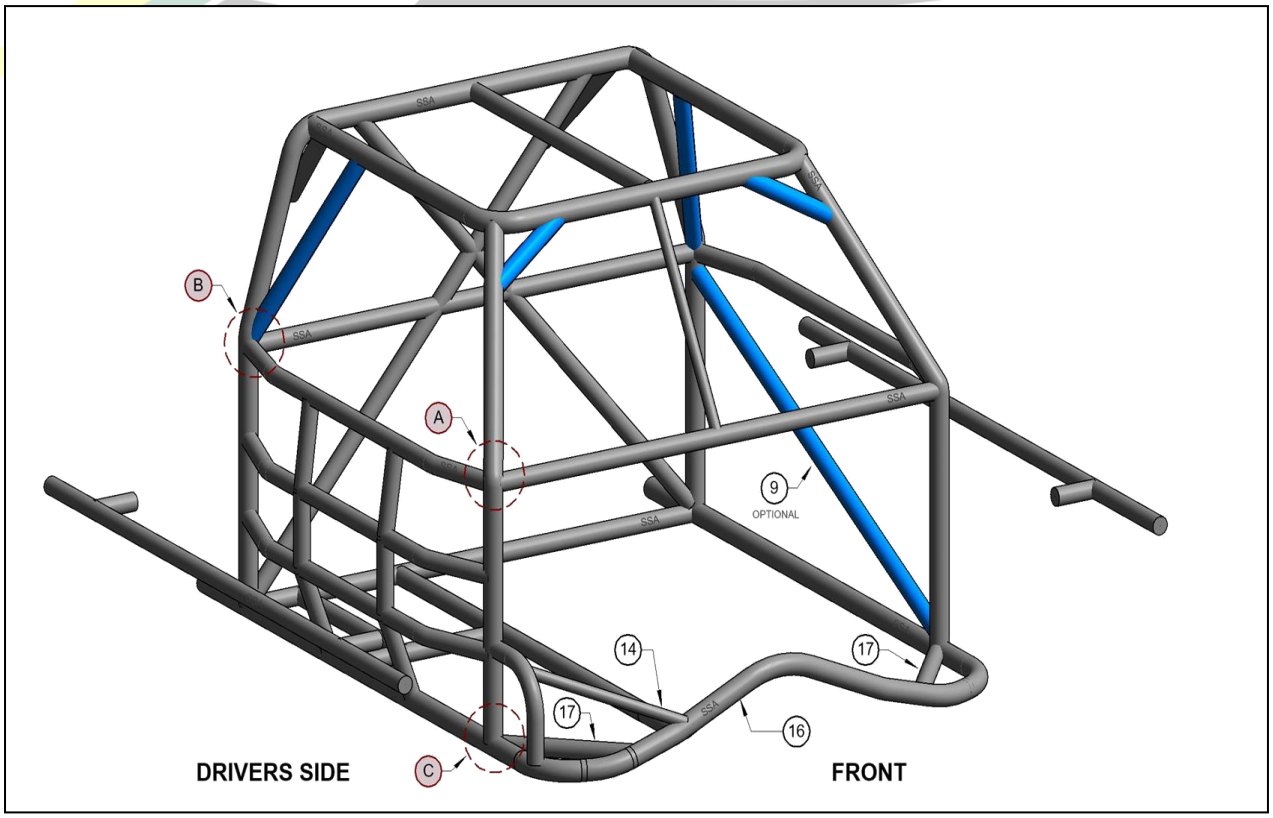
MINIMUM DIMENSIONS TABLE (01/07/23)

Bar #1	Main Hoop Bar	44.45 x 2.6mm	CHS
Bar #2	Roof Hoop Bar	44.45 x 2.6mm	CHS
Bar #3	Front A Legs / A Pillar Bar	44.45 x 2.6mm	CHS
Bar #4	Centre Roof Bar	38 x 2.6mm	CHS

Bar #5/6	Main Hoop Centre Spreader Bar	38 x 2.6mm	CHS
Bar #6/5	Seat Back/Shoulder Harness Bar	38 x 2.6mm	CHS
Bar #7	Main Hoop Diagonal Bars	38 x 2.6mm	CHS
Bar #8	NASCAR Door and Dropper Bars	38 x 2.6mm	CHS
Bar #9	Passenger Side Door Bars	38 x 2.6mm	CHS
Bar #10	Lower Windscreen Dash Bar	38 x 2.6mm	CHS
Bar #11	Centre Windscreen Bar (14/09/19)	25 x 2.6mm	CHS
Bar #12	Rearward Brace Bars	38 x 2.6mm	CHS
Bar #13	Foot Protection Bar	38 x 2.6mm	CHS
Bar #14	Foot Protection Support Bar (14/09/19)	25 x 2.6mm	CHS
Bar #15	Roll Cage Sub Frame Bar – these 3 choices are the only size and types of material accepted	44.45 x 2.6mm or 40 x 40 x 3.0 mm or 50 x 50 x 2.5mm	CHS RHS RHS
Bar #16	Lower Spreader Bar – Front	38 x 2.6mm	CHS
Bar #17	Lower Spreader Bar – Front Brace	38 x 2.6mm	CHS
Bar #18	Lower Spreader Bar - Rear	38 x 2.6mm	CHS
Bar #19	Lower Windscreen / Dash Bar Support - optional	38 x 2.6mm	CHS
Bar #20	Seat Base Mounting / Harness Mounting Bar	38 x 2.6mm	CHS
Bar #21	Rear Chassis Sub Frame Rail – these 5 choices are the only size and types of material accepted (01/07/21)	44.45 x 2.6mm or 38 x 2.6mm or 40 x 40 x 2.5mm 40 x 40 x 3mm 50 x 50 x 2.5mm	CHS CHS RHS RHS RHS
Bar #22	Front Chassis Sub Frame Rail – optional – these 3 choices are the only size and types of material accepted	38 x 2.6mm or 40 x 40 x 2.5mm or 50 x 25 x 3mm	CHS RHS RHS
Item #23	Additional / Optional Roll Cage Supports / Bracing	25 x 2.6mm Minimum	CHS

POINT A	The point where top NASCAR door bar (Bar #8), A pillar leg (Bar #3) and lower windscreen dash bar (Bar #10) intersect – Refer Fig 3 (ii)
POINT B	The point where the top NASCAR door bar (Bar #8), Main Hoop (Bar #1) and Main Hoop Centre Spreader Bar (Bar #5) intersect – Refer Fig 3 (ii)
POINT C	The point where sub frame bar (Bar #15), base of A pillar leg (Bar #3) and lower spreader bar – front (Bar #16) intersect – Refer Fig 3 (ii)


BACK
DRIVERS SIDE
FRONT
SSA
OPTIONAL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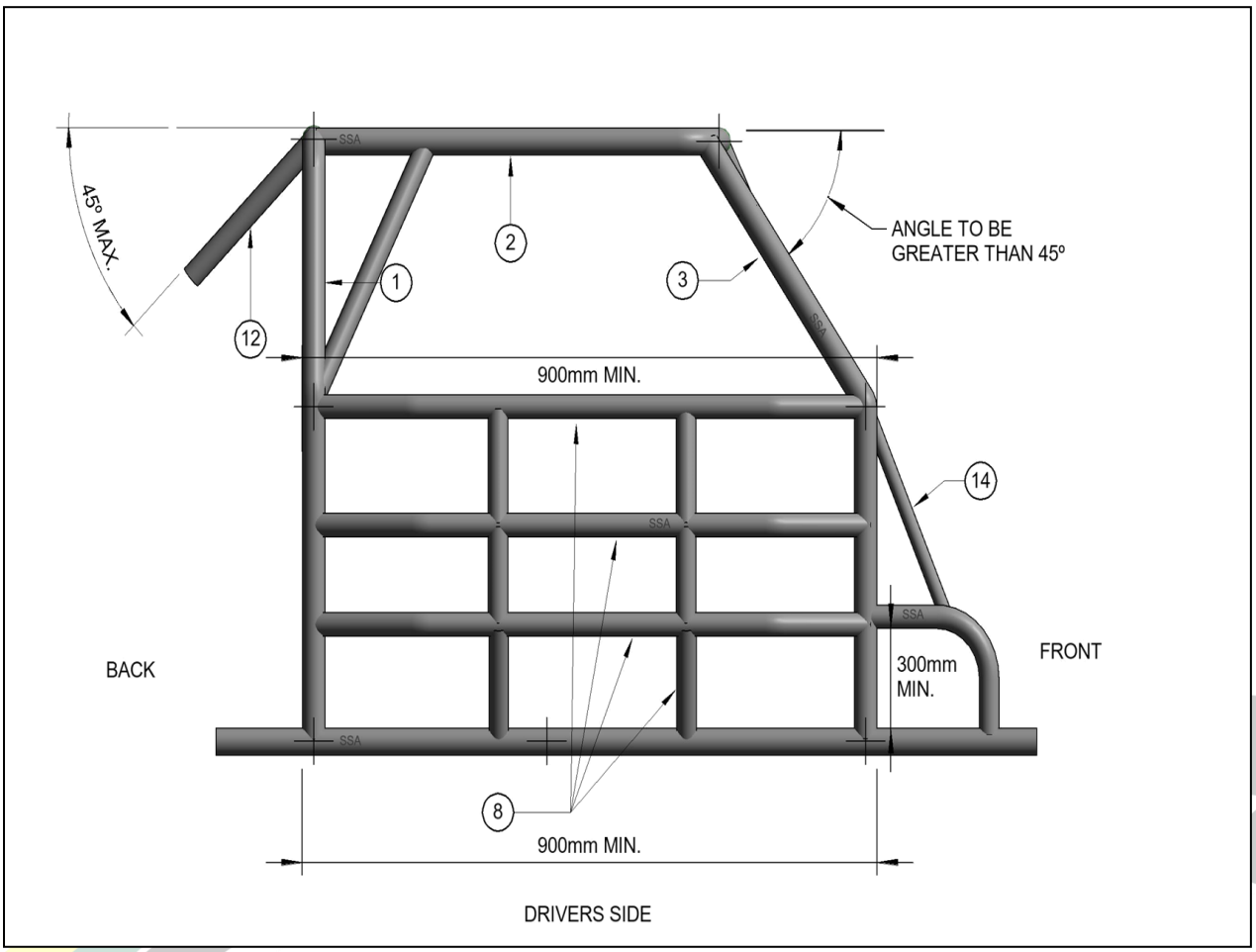
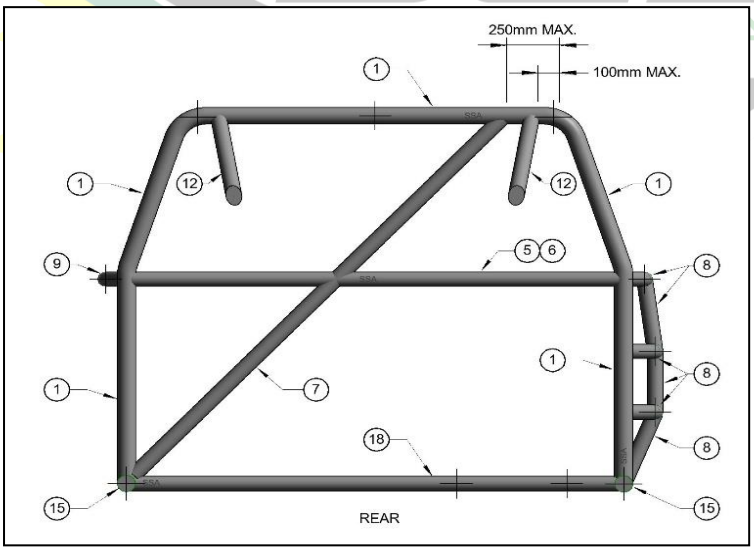
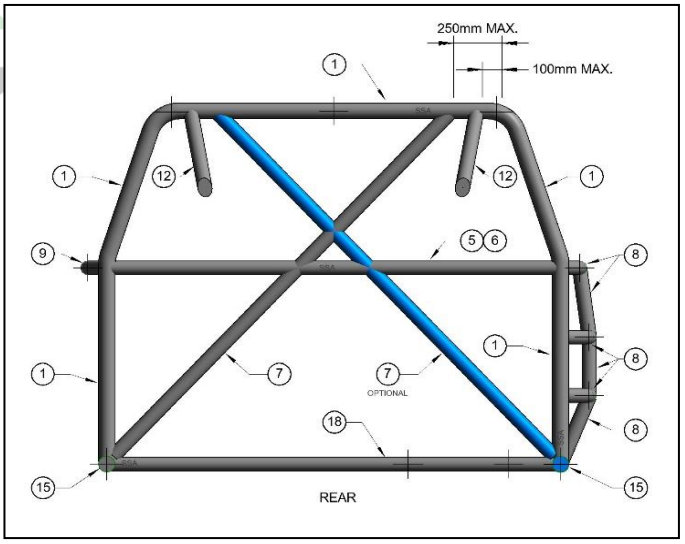
ROLL CAGE – Material and Design Option Effective for Registration commencing 1 July 2021







ROLL CAGE – Material and Design Option Effective for Registration commencing 1 July 2021

1. **Main Hoop Bar**: Bar #1
The rear main hoop will be made of one continuous length of tubing. See Fig 3(i). Hoop to be within 50mm of sides of roof at the narrowest point, be within 50mm of the inside line of the 'B Pillar' measured at point 'B' of Fig 3 (i) and be completely inside the body line. The base of the hoop will be fitted square in the car. If the Main Hoop requires bending to meet the 50mm requirement at point 'B' then the bend can only be formed within 50mm of this point. The distance between the rear of the main hoop and the front of the A pillar front leg at the intersection with the sub frame rail and at rear of the main hoop and front A pillar leg at the intersection of top NASCAR bar to be minimum of 900mm.

2. **Roof Hoop Bar**: Bar #2
Option 1: To be formed from one continuous length of tubing and be welded to the Main Hoop Bar (Bar #1) on each side of the roll cage. This bar incorporates the Top Windscreen Bar. The windscreen part of the Roof Hoop Bar to be no further rearward than 200mm from the front pinch weld lip of the front windscreen opening at narrowest point. Inner roof turret header panel may be notched ONLY where interference with the roof halo bar (bar #2) occurs. (01/07/23)

Option 2: To be formed using the top part of the Front A Legs (option 2) and be welded to the Main Hoop Bar (Bar #1) on each side of the roll cage. A Windscreen bar is to be fitted and welded between the two A Legs Bars and be no further back than 200mm from the front pinch weld lip of the front windscreen opening at narrowest point. Inner roof turret header panel may be notched ONLY where interference with the roof halo bar (bar #2) occurs. (01/07/23)

3. **Front A Legs/A Pillar Bar: Bar #3 (01/07/2020)**
GENERAL
a) The A Pillar part of the front legs MUST BE GREATER THAN 45º (See Fig 3(iii))
b) Be no further rearward than 300mm (250mm for Junior Sedans) behind and 50mm inwards of the OEM door opening at points A & C. Refer Fig 3 (i). The pinch weld is to be used as the reference point for measuring horizontally from a line between the A Pillar and the B Pillar at windowsill height. (01/07/23)
c) When bending this bar to meet the sub frame rail the bend must be within 50mm of Point A. Refer Fig 3 (i). (When using option 1 or 2)

Option 1 - Two front legs shall be formed from one continuous length of tubing and be welded to the sub frame rail (Bar #15) at the bottom at point C and the front corners of the Roof Hoop Bar (Bar #2) at the top.

Option 2 - Two front legs shall be formed from one continuous length of tubing and be welded to the roll cage sub frame (Bar#15) and continue up as the A Leg and be bent toward and welded to the Main Hoop Bar (Bar#1).

Option 3 – **Dash Hoop Bar and Roof Hoop Bar**. This requires the A Pillar/Front Leg to be formed in two straight pieces. Lower A Pillar/Front Leg to be welded to the Roll Cage Sub Frame bar (Bar #15) at Point C and to the Dash Hoop Bar at Point A. Upper A Pillar/Front Leg to be mounted upwards from Point A to the Roof Hoop Bar and be welded to the front corners of the one-piece Roof Hoop Bar (Bar #2). If using 38x2.6mm tube as the Dash Hoop Bar, the A Pillar/Front Legs will be notched to fit around this tube and be fully welded on all sides. The two pieces of the A Leg must intersect at the same point on the Dash Hoop Bar bend.
The Dash Hoop Bar is the combination of Bars #8, #9, #10 – in one continuous piece.

ROLL CAGE – Material and Design Option Effective for Registration commencing 1 July 2021

ALL A-LEG AND ROOF HOOP OPTIONS MUST BE CONSTRUCTED SO AS THE DRIVER CAN ENTER AND EXIT THE CAR THROUGH THE DRIVERS SIDE WINDOW APERTURE AT ALL TIMES. A-LEGS AND OTHER ROLL CAGE BRACING THAT PROTRUDE THROUGH THE DRIVERS SIDE WINDOW APERTURE THAT SIGNIFICANTLY IMPEDE THE DRIVER'S ABILITY TO ENTER OR EXIT THE CAR WILL BE DEEMED NON-COMPLIANT.

4. **Centre Roof Bar**: Bar #4
   A one-piece centre roof bar to be welded between the main hoop and the roof hoop, in the centre line of the roll cage.

5. **Main Hoop Centre Spreader Bar**: Bar #5
   Main Hoop Centre Spreader Bar: Bar #5 A one-piece straight bar/or two-piece if Diagonal bar is one piece is to be fitted to the Main Hoop within 50mm of top NASCAR bar height at Point B. Refer to Fig 3 (i). To be connected to the other side of the Main Hoop within 50mm of the top passenger NASCAR door bar. This bar may act as the Seat Back/Shoulder Bar (Bar #6). (01/07/2020)

6. **Seat Back / Shoulder Harness Bar**: Bar #6
   A one-piece mounting bar to be fitted to mount the seat and seat belts, to be positioned so that the belts are anchored a maximum of 300mm from the point at which the shoulder belts pass through the back of the seat. Top seat mount to be no further than 75mm lower than this bar.

7. **Main Hoop Diagonal Bar**: Bar #7
   Main Hoop Diagonal Bar: Bar #7 A two-piece diagonal brace/or one piece if Main hoop spreader bar is two pieces will be fitted in the roll cage behind the driver's head, within 250mm of the bend and down to the point where it intersects the Main Hoop Centre Spreader Bar (Bar #5). From this point the second piece in the same plane and angle as the top diagonal brace will follow down to the point where the hoop joins the LHS Roll Cage sub frame base. Refer Fig 3 (i). A second diagonal brace may be fitted and may need to be in 3 pieces. All braces must intersect with the Main Hoop Centre Spreader Bar/Diagonal bar. (01/07/2020)

8. **NASCAR Door and Dropper Bars**: Bar #8
   On the driver's side, three one-piece horizontal bars that will have a deflection/bend at each end of the bar which allows the NASCAR bars to be positioned towards the door skin and placed between front and rear cage legs, evenly spaced between window sill and roll cage sub frame. Top NASCAR door bar to be within 50mm of the window opening. The centre or bottom horizontal bar may run straight through, from front wheel arch to the rear wheel arch, and then have two separate pieces of 38 x 2.6mm CHS turning to the NASCAR bar connecting to the roll cage Main Hoop Bar and to the 'A Pillar' leg. There will be a minimum of two vertical dropper bars as close to evenly spaced as possible between the front leg, and the rear hoop for each of the openings created by the NASCAR bars, making a minimum of six vertical bars to be fitted. Refer to Fig 3 (i). OEM Door B pillar may be notched ONLY; not removed to allow fitment of bar work.

9. **Passenger Side Door and Dropper Bars**: Bar #9
   Passenger side will have a minimum of two one-piece bars attached at the Front A pillar legs and the Main Hoop Bar. One of these must be horizontal at window sill height which will be at the same height as the top NASCAR bar on the driver's side. The second bar cannot be vertical. Top NASCAR door bar may be straight or deflect outwards. (01/07/21)

10. **Lower Windscreen Dash Bar**: Bar #10
    A one-piece straight bar mounted horizontally between the Front A pillar legs must be fitted within 50mm at top NASCAR bar height.

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11. Centre Windscreen Bar: Bar #11

A one-piece straight bar is to be fitted at centreline of cage at 90º to and between roof hoop (bar #2) and the lower windscreen bar (bar #10).

12. Rearward Brace Bars: Bar #12

GENERAL

Both rearward brace bars options must connect to the rear of the main hoop within 100mm of the centre of the bend and extend rearward at a maximum angle of 45º down from the horizontal attaching to the rear subframe rails or a rear subframe chassis spreader.

Option 1 – two one-piece rearward brace bars free of bends.

Option 2 – a crucifix design with one bar being two pieces. The one-piece bar must be attached to the driver's side. All 3 bars to be free of bends. (01/07/2020)

13. Foot Protection Bar: Bar #13

When driver's feet are forward of the front roll cage A pillar leg (bar #3) in race position i.e., accelerator is at W.O.T. (wide open throttle) foot protection is mandatory. See Fig 3 (iii)

Foot protection bar is to attach to the Front A pillar legs (Bar #3) no lower than 300mm from the roll cage sub frame base (bar #15). To be measured from the top of the foot protection bar to the base of the roll cage sub frame. To protrude forward toward the front firewall / RHS front wheel well and re-attach to the roll cage sub frame base (Bar #15) to protect the driver's feet in the event of side intrusion. See Fig 3 (iii) (01/07/21)

Foot protection area to be completely filled with either 3mm mild steel or 5mm aluminium plate. See Fig 3 (iii)

When using a bolt in removable foot protection plate, it is to be attached to the outside of the foot protection bar using a minimum of 4 x 50x50x3mm (square) or 4 x 55x40x6mm (rectangular) mild steel tags attached no further than 200mm apart with 8mm or 5/16" bolts facing inward, with no protrusions. The larger the foot protection area, the more tags required. Multi hole or scalloped tags are NOT permitted.

14. Foot Protection Support Bar: Bar #14

The foot protection bar is to be braced to substantial bar work to the left. This is to prevent the collapse of the foot protection bar in the event of side intrusion. See Fig 3 (i)

15. Roll Cage Sub Frame Bar: Bar #15

Roll cage sub frame bar to be securely welded to body shell at a minimum of 4 points; 2 on each side of car, at a distance no closer together than 500mm. If using the 50x50x2.5mm RHS option, roll cage legs may be inserted into the RHS and fully welded

.

OPTION: It is permissible to use a one-piece sub frame rail and spreader bar, joined in the centre of the vehicle at the transmission tunnel. Join must use a spigot/sleeve and be plug welded at two locations on both sides of the join with the join fully welded. If the spreader bar part of this option is more than 200mm forward of the A Pillar leg then a support brace (Bar #17) of a minimum 38x2.6mm CHS is to be fitted from the spreader bar to a point no less than 200mm from the front A pillar leg. Refer Fig 3 (ii)

16. Lower Spreader Bar Front: Bar #16

A sub frame spreader bar at front A pillar legs bar to be fitted. 200mm is the maximum distance forward or rearward before a brace is required (Bar #17). No spreader bars that have any deflection shall be allowed if they are under any seating. That is deemed to be any area from the front edge of the seat to the rear edge of the seat base for all seats fitted to the vehicle. (01/07/21)

Refer also to Option above in Item #15.

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17. Lower Spreader Bar – Front Brace: Bar #17
If bracing is used must be a minimum of 38x2.6mm CHS and be fitted from the spreader bar to a point no less than 200mm from the A pillar front leg. Refer to Option in Item #15. Refer Fig 3 (ii)

18. Lower Spreader Bar Rear: Bar #18
A sub frame spreader bar to be fitted at the base of the Main Hoop Bar (Bar #1). This bar is to be as straight as possible. It is permitted to notch the body shell/transmission tunnel for the fitment of this bar in an endeavour to keep it as straight as possible. If the bar is bent to allow for the transmission tunnel it must be braced vertically to the centre of the centre spreader bar with 25x2.6mm CHS.

19. Lower Windscreen / Dash Bar Support (optional): Bar #19
A bar can be fitted between lower windscreen/dash bar and the front spreader bar.

20. Seat Base Mounting/Harness Mounting Bar: Bar #20
A fabricated or formed tubing frame for the mounting of seat base and harness will consist of the following options as a minimum. Tubing may be bent to accommodate fitment.
It is not permitted to drill through these bars for the mounting of seat base without the fitment of sleeves.
Refer to image. The use of tabs made out of 3mm minimum mild steel are recommended. All harness tabs to be as per specification. Refer to Class Technical Manual for tab specification.

21. Rear Chassis Sub Frame Rail: Bar #21
Rearward of the roll cage to where sub frame rails intersect with the rearward brace bars and incorporate bumper supports and mounts are to be either 44.45 x 2.6mm CHS or 38x2.6mm CHS or 40x40x2.5mm RHS or 40x40x3mm RHS or 50x50x2.5mm RHS. Rearward sub frame bars to be symmetrical to the common centreline of the car. (01/07/21)

22. Front Chassis Sub Frame Rail – OPTIONAL: Bar #22
Forward of the roll cage to where sub frame rails intersect with and incorporate bumper supports and mounts are to be 38x2.6mm CHS or 40x40x2.5mm RHS or 50x25x3mm RHS.

23. Additional Optional Roll Cage Supports/Bracing:
Other additional optional roll cage supports or braces are permitted and are to be a minimum of 25x2.6mm CHS.

24. Windscreen Mesh: Mesh screen is to cover the entire area from A Pillar front leg (Bar #3) to Centre Windscreen (Bar #11) and from top of dash panelling to Roof Hoop Bar (Bar #2).
a) Maximum effective mesh size 50x50mm mild steel. Mesh gauge 3mm.
b) Windscreen mesh to be welded or clamped with metal clamps to the roll cage A Pillar front leg (Bar #3) and Centre Windscreen bar (Bar #11).
c) Minimum of 4 (four) clamps.
d) Mesh may be welded to body of Mono cars.

25. Anti-Spear Plates: 3mm steel or 5mm aluminium (NOT to be lightened by any means)
a) The anti-spear plates to be mounted to the outside of the NASCAR bars and overlap the edge of the NASCAR bar work.
b) Recommended 1/3 length between roll cage legs, to be fitted on the driver's side, from base of roll cage to top NASCAR bar, forward of the first vertical door dropper bar to the front leg of the roll cage.
c) If using 3mm steel plate/plates to be fully stitch welded. (01/07/23)

d) If using 3 individual 5mm alloy plates, they must be bolted on using a minimum of 4 – 50x50x3mm (square) or 55x40x6mm (rectangular) mild steel tags/plates per piece. (01/07/23)
e) Tags/plates to be solid square or rectangular with one hole only for the mounting point. (01/07/23)
f) All alloy plates must be bolted on using a minimum of 8mm or 5/16" high tensile bolts with no protrusions. (01/07/23)

26. FUEL TANK PROTECTION BAR: Bar #26 (01/07/2020)

Bar must be constructed of minimum 38x2.6mm CDS or 40x40x3mm RHS with 25x2.6mm CDS minimum angled brace bars to be fitted on each side and be 25mm clear all-around tank and filter, projecting a line from the rear wheel centre to the bar.
Note - only applicable to dual registered Street Stocks and require a Fuel Tank Protection bar.

HEAD PLATE

A minimum of 50mm clearance is required between the helmet, including fresh air intakes and associated fixtures, to any part of the head plate and roll cage when the driver is seated and harnessed. (01/07/2020)

All steel or aluminium head plates are to cover in full the opening above the drivers. To extend from roof hoop (bar #2) on the outside to the centre bar (bar #4), front roof hoop (bar #2), to main hoop (bar #1). Cutting of corners or any lightening of any form is NOT permitted. (01/07/23)

REMOVABLE STYLE

a) Head plate to be of 5mm aluminium or 3mm mild steel (NOT to be lightened by any means).
b) Plate to be mounted from above and be proud of main hoop (bar #1), centre roof bar (bar #4) and side of roof bar (bar #2) as per Fig 4, with 10 mild steel Plate Tabs of 50x50x3mm (square) or 55x40x6mm (rectangular) will be required when using a removable Head Plate.
c) Plate to be mounted, from above, with 10 x 8mm dia. High Tensile bolts, with lock nuts/locking devices fitted, 3 each side, 2 front, 2 rear. Heads of bolts to be downwards and spot welded e.g., no protrusions. (01/07/23)
d) Plate tabs to be solid square or rectangular with one only hole for the mounting bolt.

Fig 4 Head Plate

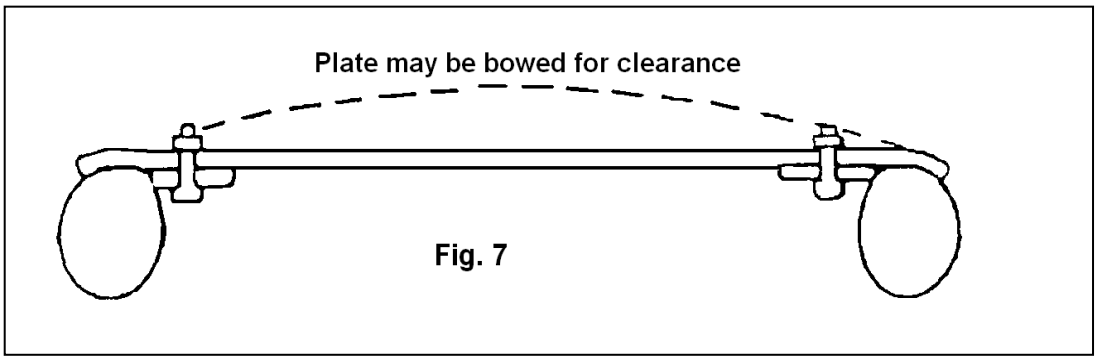


Fig. 7

NON-REMOVABLE STYLE

A full size 3mm mild steel head plate may be fully welded to top of Main Hoop bar (Bar #1), centre roof bar (Bar #4) and side of roof bar (Bar #2) using practice as outlined in General Item g).

2a. ROLL CAGE for cars built and registered using original Roll Cage Material and Design (01/07/22)

Fig 3(i) details the minimum structural requirements. Each item number is referred to in the text below.

The roll cage is to prevent the collapse of cabin area under impact, all bar work must be entirely inside the OEM glassed area of the cabin.

Roll cage, to enclose the driver, to be full width and full height of the cabin area. The roll bars are to constitute a cage type framework, braced fore and aft. The cage must extend from behind driver's seat forward to the windscreen area and incorporate protection for the driver's feet.

All roll bar material must be of good quality mild steel, AS1450, minimum Gr300. MINIMUM 38mm O.D. x 3.0mm w.t. CHS. Sonic testing to be performed only on a straight section of tube. It is the owner's responsibility to remove paint/powder coating if required. (Sonic test at not less than 2.70mm ABSOLUTE). Aluminium based materials not permitted. (01/07/23)

All bends to be made using a pipe bender with the correct size former, with no evidence of crimping, wall failure, or significant weakening. Galvanised tubing or welding over threaded tubing is not permitted in any structural bar work. (01/07/16)

Water pipe fittings or malleable fittings are not permitted. Roll cages built using other than fusion welding techniques will not be accepted. Gussets on welded joints may be required at daylight inspection of weld quality.

MINIMUM DIMENSIONS TABLE (01/07/23) (Bar #11 corrected 24/04/24)

Bar #1	Main Hoop	38x3mm O.D.	CHS
Bar #2	Roof Hoop	38x3mm O.D.	CHS
Bar #3	Front Legs / A Pillar	38x3mm O.D.	CHS
Bar #4	Centre Roof Bar	32x3mm O.D.	CHS
Bar #5	Rear Diagonal – single Rear Diagonal – crucifix 2nd bar	38x3mm O.D. 32x3mm O.D.	CHS CHS
Bar #6	Seat Back/Shoulder Belt Bar	38x3mm O.D.	CHS
Bar #7	Door Bars – RH Side	38x3mm O.D.	CHS
Bar #8	Door Bars – LH Side	38x3mm O.D.	CHS
Bar #9	Lower Windscreen/Dash Bar	38x3mm O.D.	CHS
Bar #10	Centre Windscreen Bar	25x3mm O.D.	CHS
Bar #11	Rearward Brace Bars	34mm O.D.	CHS
Bar #12	Foot Protection Bar	38x3mm O.D.	CHS
Bar #13	Sub-Frame	38x3mm O.D. 50x50x3mm 50x50x5mm	CHS RHS Angle
Bar #14	Spreader Bars	38x3mm O.D. 35x35x3mm	CHS RHS
Bar #15	Quarter Window Bar	25x3mm O.D.	CHS
Bar #16 - Optional	Lower Windscreen/Dash Bar	25x3mm O.D.	CHS
Bar #17	Foot Protection Support Bar	25x3mm O.D.	CHS
Bar #18	Dropper Bar	38x3mm O.D.	CHS
	Windscreen Mesh	50x50x3mm	Mesh
	Anti-Spear Plates	3mm Steel 5mm Aluminium	
	Head Plate	3mm Steel 5mm Aluminium	
POINT A	The point where top NASCAR door bar (Bar #7/8), A pillar leg (Bar #3) and lower windscreen dash bar (Bar #9) intersect – Refer Fig 3 (i)		

POINT B	The point where the top NASCAR door bar (Bar # 7/8), Main Hoop (Bar #1) and Seat Back/Shoulder Belt Bar (bar #6) intersect – Refer Fig 3 (i)
POINT C	The point where sub frame bar (bar #13), base of A pillar leg (Bar #3) and lower spreader bar – front (Bar #14) intersect – Refer Fig 3 (i)

1. **Main Hoop**: The rear main hoop will be made of one continuous length of tubing. See Fig.3 (i). Hoop to be within 50mm of sides of roof at the narrowest point, be within 50mm of the inside line of the B pillar measured at point B of Fig. 3 (i), and be completely inside the body line. The base of the hoop will be fitted square in the car.

2. **Roof Hoop**: The roof hoop will be formed from one continuous length, or alternately be replaced by using one continuous length to form the front leg A pillar bar, which then continues back to the rear hoop, with a top windscreen bar being fitted to complete the hoop. The roof hoop to be within 50mm of the roof at sides, within 50mm of windscreen opening, and be welded to the main hoop to form a halo around the driver's head – it does NOT have to follow the windscreen within 50mm of the entire opening. Inner roof turret header panel may be notched, ONLY where interference with the roof halo bar (bar #2) occurs. (01/07/23)

3. **Front Legs / A pillar**: The two front legs are to be formed each from a continuous length, and be welded to the roll cage base (bar 13) and the roof hoop (bar 2) or if using the second option for the roof hoop, welded to the main hoop (bar. 1).

   A third option is: The top Nascar bar, lower windscreen bar and passenger's top Nascar bar may be formed in one continuous bar. This entails the front leg to be formed in 2 pieces. One from the roll cage base to this hoop with the upper section from this hoop upwards to the roof hoop.

   The top part of all options must join the roof hoop at a point no further than 50mm from the windscreen opening, and follow downwards to point A of Fig. 3 (i) at an angle of 45 degrees downward from the horizontal.

   Newly constructed cars, as at 22nd August 2014 the front leg will be no further than 300mm behind, and 50mm inwards of the OEM door opening at points A & C of Fig 3 (i). The pinch weld is to be used as the reference point for measuring horizontally from a line between the A Pillar and the B Pillar at windowsill height. (01/07/23)

   Cars previously registered prior to the 22nd August 2014 will fully comply with the relevant Specification Book, with that being the last printed version of the Modified Sedan Class Specification Book 2011.

4. **Centre Roof Bar**: Centre roof bar to be minimum of 32x3mm CHS, and shall be welded between the main hoop and the roof hoop, in the centre line of the roll cage.

5. **Rear Diagonal**: A one-piece diagonal brace, minimum 38x3mm CHS will be fitted in the roll cage hoop, behind the driver's head, within 250mm of the bend, and down to the point where the hoop joins the L/H cage base as per Fig 3 (i). A second brace may be fitted in cruciform. If cruciform type bracing is used, a minimum of 32x3mm CHS may be used.

6. **Seat Back/Shoulder belt Bar**: A 38x3mm CHS mounting bar to be fitted to mount the seat and seat belts, to be positioned so that the belts are anchored a maximum of 300mm from the point at which the shoulder belts come through the back of the seat. Top seat mount to be no further than 75mm lower than this bar.

ROLL CAGE for cars built and registered using original Roll Cage Material and Design

7. **NASCAR Bars**: On the driver's side, three horizontal bars that will resemble the drawings provided. They are to have a deflection/bend at either end of the bar which allows the Nascar bars to be positioned towards the door skin and placed between front and rear cage legs, evenly spaced between window sill and roll cage sub-frame. Top NASCAR door bar to be within 50mm of the window opening for all cars registered after 1st July 2015. The centre or bottom horizontal bar may run straight through, from front wheel arch to rear wheel arch, and then have two separate pieces of 38x3mm CHS turning to the NASCAR bar connecting to the roll cage main hoop, and to the front leg. There will be a minimum of two bars evenly spaced between the front leg, and the rear hoop for each of the openings created by the Nascar bars, making a minimum of six bars to be fitted. Refer to Fig 3 (i). Door pillar to be notched, NOT removed, to accommodate bar work. (01/07/17)

8. **Door Bars**: Passenger side will have a minimum of two bars fitted between the front leg and the main hoop. One of these must be horizontal at window sill height. Top NASCAR door bar may be straight or deflect outwards. (01/07/21)

9. **Lower Windscreen/dash bar**: A 38x3mm CHS bar between the front legs must be fitted at top Nascar bar height. Refer also to front leg options (3). As an option a bar (16.) can be fitted between lower windscreen/dash bar and the front spreader bar.

10. **Centre Windscreen Bar**: A 25x3mm minimum bar, to be fitted at centreline of cage, between to roof hoop, and the lower windscreen bar.

11. **Rearward Brace Bars**: Two rearward brace bars minimum 34mm CHS to extend from top rear of main hoop down onto the rear sub frame (approx. 45 degrees). They may form a crucifix and must be attached to the rearward side of the main hoop within 100mm of the centre of the bend.

12. **Foot Protection Bar**: When drivers' feet are forward of the front roll cage leg (bar #3) in race position. i.e., accelerator is at W.O.T (wide open throttle) foot protection is mandatory. See Fig 3 (iii)
Foot protection bar is to be of 38x3mm CHS minimum and is to attach to the front roll cage leg (bar #3) no lower than 300mm from the roll cage sub frame base (bar #13) To be measured from the top of the foot protection bar to the base of the roll cage sub frame. To protrude forward toward the front firewall / RHF wheel well and re-attach to the roll cage sub frame base (bar #13) to protect the drivers' feet in the event of side intrusion. See Fig 3 (iii) (01/07/21)

    The foot protection bar is to be braced (bar #17) to substantial bar work to the left and is to be a minimum of 25x3mm CHS. This is to prevent the collapse of the foot protection bar in the event of side intrusion. See Fig 3 (i)

    Foot protection area to be completely filled with either 3mm MS or 5mm aluminium plate. See Fig 3 (iii)

    When using a bolt in removable foot protection plate, it is to be attached to the outside of the foot protection bar using a minimum of 4 x 50x50x3mm (square) or 4 x 55x40x6mm (rectangular) MS tags attached no further than 200mm apart with 8mm or 5/16" bolts facing inward, with no protrusions. The larger the foot protection area, the more tags required. Multi-hole or scalloped tags are NOT permitted. (16/09/17)

13. **Sub Frame:** Roll cage legs shall be welded to the top of a sub-frame of 38x3mm CHS, 50x50x5mm angle or 50x50x3mm RHS section running fore and aft. Sub-frame to be securely welded, or bolted to the floor pan/sills using at least four 12mm steel bolts through the sub-frame and using 100x100mm plates under the floor.

ROLL CAGE for cars built and registered using original Roll Cage Material and Design

Spreader Bars: A minimum of two sub frame spreader bars at roll cage legs, either 38x3 CHS or 35x35x3mm RHS to be fitted. 200mm is the maximum distance forward or back, from the front leg of roll cage, for fitment of the spreader bar, before a brace may be required. No spreader bars that have any deflection shall be allowed if they are under any seating. That is deemed to be any area from the front edge of the seat to the rear edge of the seat base for all seats fitted to the vehicle. (01/07/21)

14. **Quarter Window Bar:** A quarter window bar (bar.15) if required because of excessive rake or a long roll cage, where the "A" pillar bar (bar. 3) is less than 45 degrees from the horizontal must be fitted to both sides and installed from the top Nascar bar to top one third section of the "A" pillar bar, using a minimum of 25x3mm CHS.

    The lower mount point must be aligned with or be within 50mm of the first dropper bar. On the passenger side this will require an additional dropper bar between the top Nascar bar (bar.7) or the door bar (bar.8) and the base bar (bar.13) to support the quarter window bar.

15. **Lower Windscreen/ Dash Bar Support:** As an option a bar (16.) can be fitted between lower windscreen/dash bar and the front spreader bar.

16. **Foot Protection Support Bar:** A bar (17) minimum 25x3mm CHS will attach from the foot protection bar at one end, and the other end to bar work to the left.

17. **Dropper Bar:** On the passenger side a 38x3mm CHS bar will be required between the top Nascar bar (bar.7) or the door bar (bar.8) and the base bar (bar.13) if the quarter window bar is fitted. (01/07/17)

Windscreen Mesh: Mesh screen to cover entire area from "A" pillar to centre bar and from dash to roof bar.

(i) Maximum effective mesh size 50x50mm mild steel. Mesh gauge 3mm. (16/09/18)
(ii) Windscreen mesh to be welded, or clamped with metal clamps to the roll cage "A" pillar and centre windscreen bar.
(iii) Minimum of four clamps.
(iv) Mono cars may be welded to body.

Anti-Spear Plates: 3mm steel or 5mm alloy, (NOT to be lightened by drilling).

(i) The anti-spear plates to be mounted to the outside of the Nascar bars and overlap the edge of the NASCAR bar work. (01/07/17)
(ii) Recommended 1/3 length between roll cage legs, to be fitted on the driver's side, from base of roll cage to top Nascar bar, forward of the first vertical door dropper bar to the front leg of the roll cage.
(iii) If using 3mm steel, plate/plates to be fully stitch welded. (01/07/23)
(iv) If using a single 5mm alloy plate, it must be bolted on using a minimum of 6 – 50x50x3mm (square) or 55x40x6mm (rectangular) mild steel plate tags/plates. (01/07/23)
(v) If using 3 individual 5mm alloy plates, they must be bolted on using a minimum of 4 – 50x50x3mm (square) or 55x40x6mm (rectangular) mild steel tags/plates per piece. (01/07/23)
(vi) Tags/plates to be solid square or rectangular with one hole only for the mounting point. (01/07/23)
(vii) All alloy plates must be bolted on using a minimum of 8mm or 5/16" high tensile bolts with no protrusions. (01/07/23)

ROLL CAGE for cars built and registered using original Roll Cage Material and Design

Typical Roll Cage - Fig 3. (i)

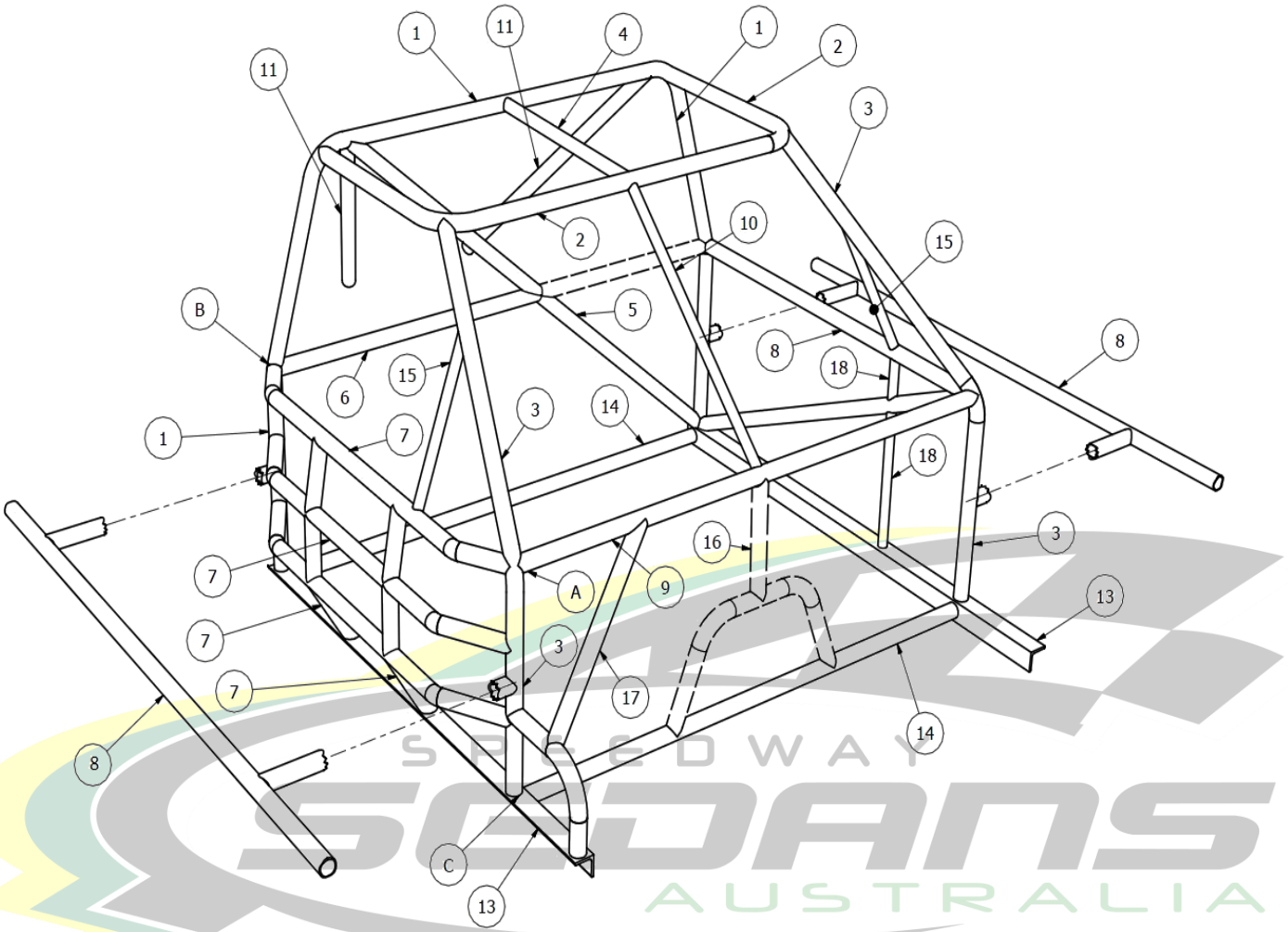
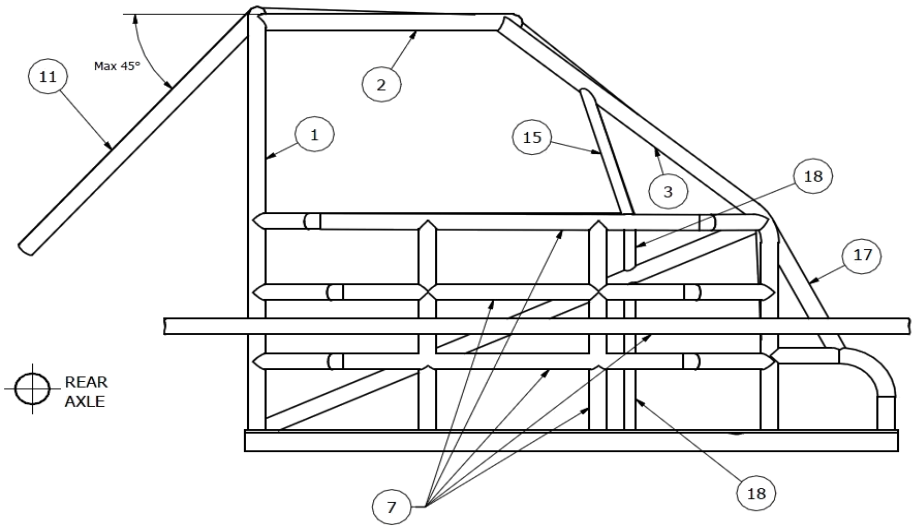


Fig. 3 (ii)



ROLL CAGE for cars built and registered using original Roll Cage Material and Design

Fig. 3 (iii)

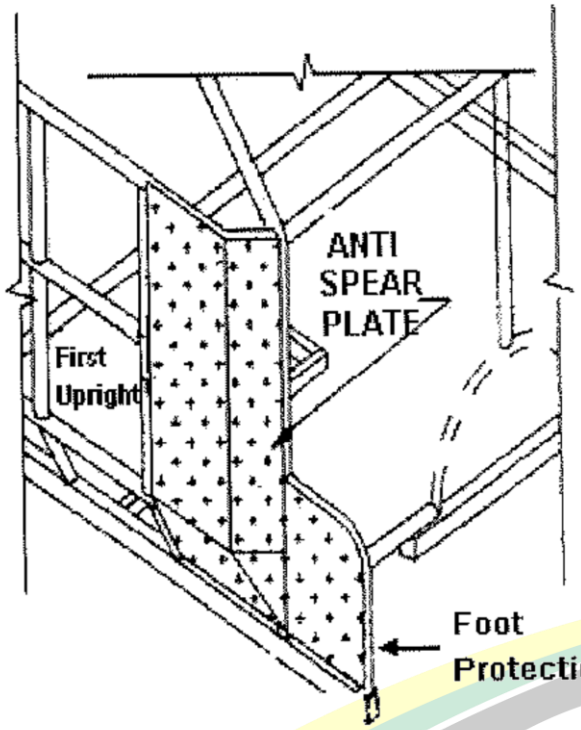


Fig. 3 (iv)

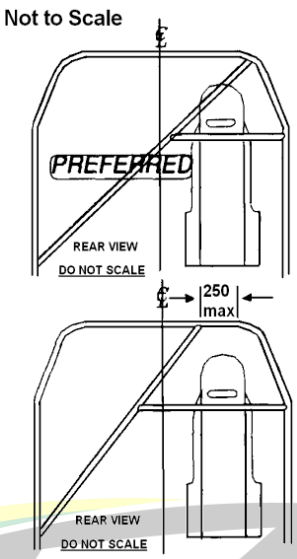
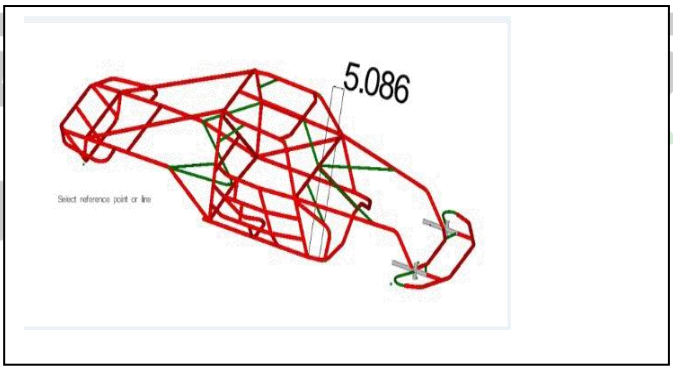


Fig 3a – Alternate Roll Cage Design (24/11/18)



HEAD PLATE:

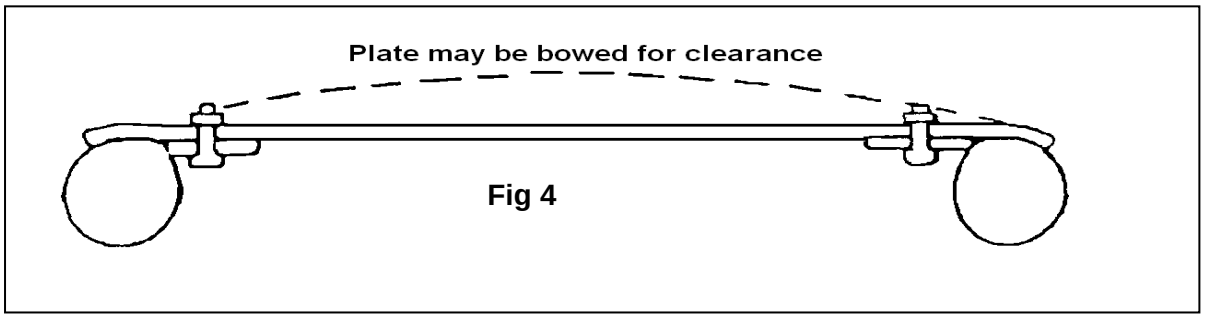
A minimum of 50mm clearance is required between the helmet, including fresh air intakes and associated fixtures, to any part of the head plate and roll cage when driver is seated and harnessed. (01/07/2020)

All steel or aluminium head plates are to cover in full the opening above the drivers. To extend from roof hoop (bar #2) on the outside to the centre bar (bar #4), front roof hoop (bar #2), to main hoop (bar #1). Cutting off corners or any lightening of any form is NOT permitted. (01/07/23)

a) Head plate to be of 5mm ALUMINIUM ALLOY or 3mm STEEL. 25x3mm FMS strip full length to be welded to main hoop, top windscreen bar, centre roof bar and side roof bar.
b) The use of 10 mild steel Plate Tabs of 50x50x3mm (square) or 55x40x6mm (rectangular) will be required when using a removable Head Plate.
c) Plate to be mounted, from above, with 10 x 8mm dia. High Tensile bolts, with lock nuts/locking devices fitted 3 each side, 2 front, 2 rear. Heads of bolts to be downwards and spot welded e.g., no protrusions. (01/07/23)

d) To simplify the removal of an injured driver it is highly recommended that a removable full-size head plate be used: Fig. 4.
e) Plates to be solid square or rectangular with one only hole for the mounting bolt. (01/10/16)

Fig 4. Head Plate

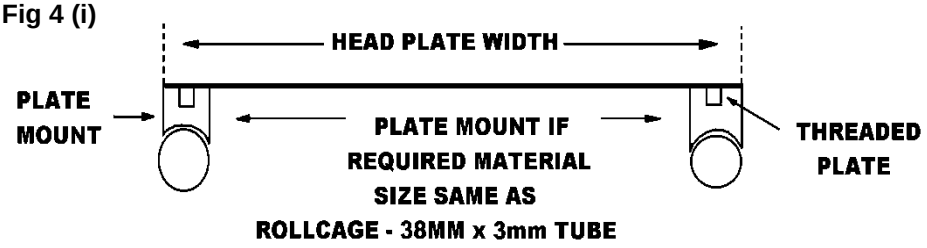


ALTERNATIVELY

a) A head plate min. 3mm steel must extend from rear roll bar to top windscreen bar and from driver's side outer roof bar to centre roof bar.
b) This plate must be securely welded to these bars with intermittent welding procedure.

Helmet clearance including fresh air intakes and associated fixtures, between roll cage roof/hoop bars for existing vehicles, may raise head plate as per drawing below, to obtain 50mm clearance. (01/07/2020)

Fig 4 (i)



Mounting procedure for raising of head plate (existing cars). 10 stubs 38mm x 3mm tube – stub length is determined by height required to gain 50mm clearance.
Stubs to be end capped and threaded for mounting purposes.

BALLAST (17/09/2022)

ATTACHMENT OF BALLAST IS TO BE BOLT-ON ONLY

a) 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.
  (i) Ballast is to be attached to substantial bar work or roll cage ONLY.
  (ii) Ballast permanently attached to roll cage, bar work or body via welding, clamping, or any other permanent attachment method is NOT permitted. This includes welding of attachment hardware (bolts).

b) Ballast attached to substantial bar work that is RHS is to be use one of the below attachment methods ONLY
  (i) Sleeves inserted in bar work with a minimum of two (2) ½" or 12mm high tensile bolts, washers and nyloc nuts with a minimum of two (2) threads protruding.
  (ii) A 5mm plate minimum of 100x50mm to a maximum 200x75mm with a minimum of two (2) ½" or 12mm high tensile bolts with washers and nyloc nuts with a minimum of two (2) threads protruding.
  (iii) A minimum of two (2) proprietary ballast type clamps. i.e. Allstar, Bicknell, AFCO etc. Accessory type clamps NOT permitted.

(iv) Rated leaf spring shackle type U-bolts, with washers and nyloc nuts with a minimum of two (2) threads protruding.

c) Ballast attached to roll cage or substantial bar work that is 44.45mm or 38mm CHS is to use one of the below attachment methods ONLY
- (i) Sleeves inserted in bar work with a minimum of two (2) ½" or 12 mm high tensile bolts with washers and nyloc nuts with a minimum of two (2) threads protruding.
- (ii) A minimum of two proprietary ballast type clamps. i.e., Allstar, Bicknell, AFCO etc. Accessory type clamps are NOT permitted.
- (iii) Rated leaf spring shackle type U-bolts with washers and nyloc nuts with a minimum of two (2) thread protruding.

d) ALL BALLAST IS TO ATTACH SEPERATELY USING ONE OF THE ABOVE PERMITTED METHODS PER PIECE OF BALLAST. I.E. STACKING OR USING THE INVERTED SIDE OF BALLAST CLAMPS IS NOT PERMITTED

e) Ballast is not to be attached any higher than top NASCAR bar.

f) Ballast attached to fuel tank protection bar or supports is NOT permitted.

g) Ballast attached to bumper bar or supports is NOT permitted.

h) MAXIMUM singular piece of ballast to be no more than 11.5kg ABSOLUTE.

i) MAXIMUM total ballast to be no more than 46kg ABSOLUTE.

j) Ballast that is non-compliant in both weight and attachment may incur an infringement and penalty notice.

3. BUMPER BARS & OPTIONAL EXTERNAL BARWORK:

OEM type Steel bumper bars **NOT** permitted but may be replaced with max. 42 x 3mm CHS.

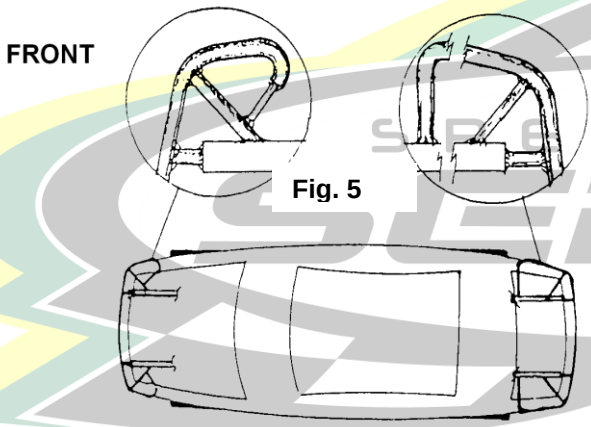


Fig. 5

a) Front and Rear Bumper Bar Pipe Bumper Bars to be covered with a plastic road car bumper or exact OEM fibreglass copy. (01/07/2020)

b) Plastic/fibreglass bumpers must be securely fitted with round head bolts. Aluminium rubbing strips optional. 40x3mm max. aluminium strip may be fitted between bolts to support bumper cover. (01/07/2020)

Bumper/s to be securely mounted in original position using supports of a minimum of 100mm from rear of bumper tube. Maximum support size, 42x3mm CHS, 40x40x3mm RHS, or 50x25x3mm RHS only, i.e., gussets are not to be used. Bumpers are not to tie to under-guard bar work. (fig.5) For the purposes of maintaining 100mm clearance of any bracing from rear of bumper tubes; rear of tubes is determined as the inner side of the tubes of both front and rear bumpers. (14/09/19)

c) Front bumper skirt option (01/07/2020)
A rubber or plastic skirt may be affixed to the full width of the bottom of the existing silhouette bumper bar. This optional fixture must have a minimum clearance from the ground of 100mm at all static ride heights and be firmly attached with rivets or bolts.
- (i) A minimum of 6 evenly spaced attachment points must be used

(ii) All attachment points are to be no closer than 50mm from top of skirt.
(iii) Two attachment points must be within 50mm at both ends of skirt at side of bumper.
(iv) Both attachment methods must use backing washers front of skirt and rear of bumper.

d) Front &/or Rear: Original plastic bumper bar can be reinforced.

e) FRONT bumper Maximum return 300mm, Minimum 100mm by max. 42x3mm CHS.
(i) Bumpers are to remain hollow.
(ii) Corners and the ends of front and rear bumpers to be radius formed, 100mm minimum.
(iii) A maximum of four mounting points on each bumper bar.
(iv) Returns and bumpers to be flush fitting with the body, within 25mm.
(v) Anti-hook-up bars from returns of Front and Rear bumpers to be extended onto the stay bars.

f) REAR only: Returns of rear bumper may be extended as a skid rail against outside of body between bumper and wheel arch, and then extend inward to the “chassis rails”.

g) Corner plates on top edges of either bumper not permitted.

SKID RAILS (01/07/2020)

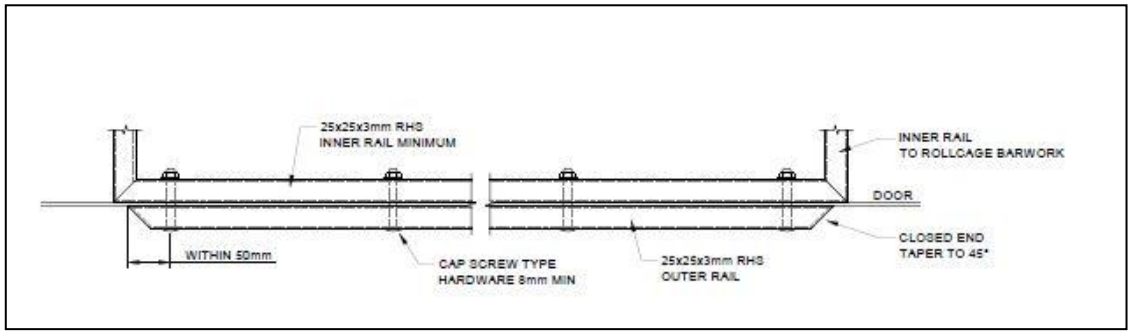
Skid Rails are an optional fitment on an SSA Modified Sedan. They are to be attached between front and rear wheel arches. Skid rails on rear quarter panels behind rear wheels are NOT permitted.

GENERAL

(i) Skid rails are to be either 25x25x3mm mild steel RHS or alternatively 50x12mm nylon or urethane. Nylon or urethane option will be attached as per option 1.
(ii) Skid rail to be attached to body and inner rub rail support with a minimum of 4 evenly spaced attachment points.
(i) Inner skid rail supports are to be a minimum of 25x25x3mm mild steel RHS or 25x3mm CHS and both ends must return to roll cage or bar work using a minimum of 3mm thick material. This applies whether an outer skid rail is used or not. Any barwork in the cabin area outside of the main roll cage be that forward or rearward of the roll cage that projects toward the door will be classed as inner skid rail. (01/07/23)
(ii) Skid rail attachment bolts are to be of round head, cup head, cap screw type hardware and must be a minimum of 8mm.
(iii) Attachment bolt heads must be external to outer rail wall and must insert horizontally through both outer rail and inner rail support, clamping together with door panel between the two rails.

Option 1

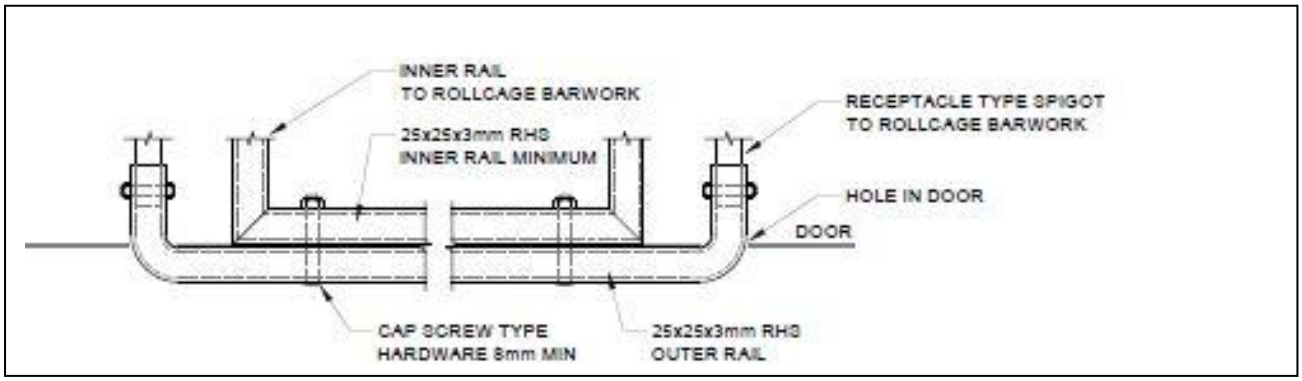
(i) Outer rub rail ends must be closed and taper to 45º so as to not become a tear point.
(ii) Attachment bolts at each end of outer rail must be within 50mm from each end of rail.



Option 2

(i) Outer skid rail ends must have a radius formed end as not become a tear point.
(ii) Outer radiused ends must return through a hole in door panel and be securely attached to a receptacle type spigot on roll cage or bar work.

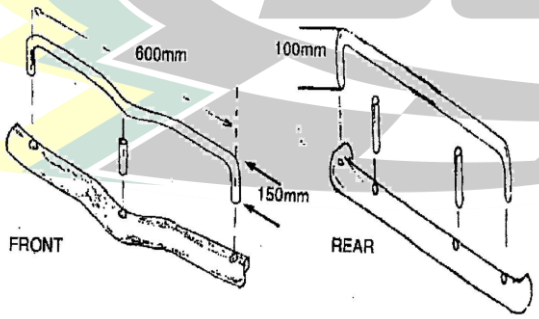
(iii) These two radiused ends will be classed as two attachment points.
(iv) An additional two attachment points of outer rail must be as per specification listed in **GENERAL**

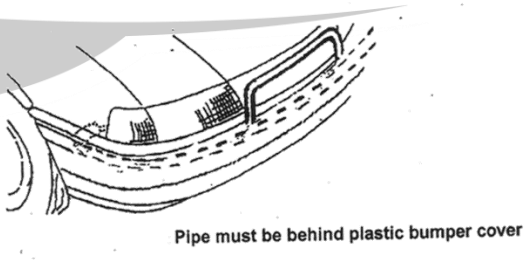


h) **REAR OVERRIDE BAR:** An override bar may be used. Constructed of maximum 25x3.2mm O.D. CHS it shall be no wider than the boot panel and shall be mounted centrally on the bumper bar at no more than four points, be VERTICAL and be max 100mm high. Brace bars are not to be used.

i) **FRONT OVERRIDE BAR:** An override bar may be used. Constructed of CHS maximum 25x3.2mm O.D. CHS. Maximum 600mm long, 150mm high and mounted centrally on top of bumper at three points only, i.e., it may have a centre support. Fig. 7.

j) **TOWING STRAPS – Optional – (01/07/2020)**
(i) Tow straps are to be of wire rope cable or nylon webbing.
(ii) Tow straps can be attached to front and rear over ride bars.
(iii) Tow straps can be accessible through a hole in the front and rear bumpers.
(iv) Tow straps are recommended to allow a disabled vehicle to be towed.




Pipe must be behind plastic bumper cover

4. ENGINE

ENGINE — All of the components making the engine function, meaning complete engine, including rocker covers, excluding exhaust.

All engine internal components are free for modification and upgrading and that the crankshaft stroke is as per OEM for the engine model. Crankshaft may be machined, be lightened or billet aftermarket. (01/07/17)

EARLY MODEL ENGINES – LATE MODEL BODIES BE PERMITTED
a) Engine to be mounted with rear face of engine block in the original position
b) Engine offset is not permitted.
c) The fitment of a throttle cable to replace fly by wire is permitted.

d) S550 Ford Mustang using Barra engine or 4.0 litre SOHC engine MUST use the applicable Tuff Mounts – Mustang kit #SKU; TM220. NO other variances of engine mounts are permitted to be used with these car and engine combinations. Effective 1 July 2023.

Engine Sealing is Compulsory

a) SSA use triplicate copy engine sealing books that are numbered, top copy (White) to car/engine owner, 2nd copy (blue) to state office, 3rd copy (green) to remain in book.
b) All engines are to be sealed to take part in Practice or Race Meetings.
c) The car owner/driver is to have a copy of the engine sealing applicable to the engine fitted in the car with the log book at all times – Practice or Race Meetings. (01/07/2020)
d) Engine Identification tag is to be BLUE. If using an engine sealed for a lower division, the engine ID tag will match the class engine specification for which the engine was sealed. (16/09/17)
e) Engine ID tag to be attached to timing cover seal using wire looped through engine seal. (01/07/17)
f) Seals to be fitted: 1 x Sump and 1 x Timing Cover

4.1 ENGINE: EFI CONFIGURATION

a) Maximum 6-cylinder reciprocating engine to 4500cc absolute OR twin rotor rotary engine.

The following are specific items relating ONLY to models produced with OEM Fuel Injection:

(i) Passenger car fuel pumps only are permitted.
(ii) Computer Control Units are not restricted.
(iii) If OEM unit includes ignition, the modified or replacement CCU must also perform this function.

Size of Throttle Body: Throttle Body to be OEM type and size for the model engine being used and to be standard in Internal and External appearance with the exception of one only hole of a maximum 5mm diameter drilled in the butterfly blade to assist engine idle. (No other machining or alteration permitted) (01/07/2020)

Multi throttle body for EFI not allowed.
Non-OEM Fuel injection NOT permitted; forced induction NOT permitted.

Checks will be on Fuel and OEM equipment.

b) Engine block to be of original type and make for model, or earlier engine not after-market alloy or iron replacement.

c) Engine changes permitted if of same make, series, type and configuration as original for model (Buick is not Holden).

(i) Race engine to be based on passenger car engine only.
(ii) Manufacturer's markings to remain on engine block castings.
(iii) Harmonic balancer optional.

d) Crankshaft stroke not to be increased or decreased relative to the block being used.

e) Cylinder head to be of original material, type, make and configuration.

f) If resilient engine mountings are used, a 6mm wire cable or 6mm chain restraint must be fitted.

g) Dry sump lubrication not permitted.

h) Remote filters, coolers, etc. to be isolated from driver by a 1mm firewall, mounted securely below door height, as to not impair vision through cabin.

All connecting hoses, couplings etc., to be correct class of fittings for the purpose. Remote oil pump permitted. External oil feeds to bearings permitted. No engine breathers inside cabin area.

h) Inlet manifold to remain of OEM structure and appearance in all areas externally.
   (i) Internal modifications are permitted.
   (ii) All fabrication through and involving any machining and/or welding must allow the manifold being used to retain its OEM structure and appearance except for an additional hole (19mm maximum) for the fitment of a sensor and the welding/filling of vacuum and water fittings no longer in use.
   (iii) Spacer/adaptor between head and inlet manifold or in any area of the inlet manifold not permitted.
   (iv) An additional exception to this ruling is for the SSA Inc approved Manifold for a Nissan 300ZX. (01/07/18)

i) Return springs must be fitted to each butterfly shaft (in-built springs accepted), and one spring to accelerator pedal linkage.
Protective wire gauze or air cleaner to be fitted over air intake to prevent entry of foreign objects to the throttle body and also to act as a flame trap.

j) ADDITIVES: The introduction into the combustion chamber/s of additives, either in solid, liquid or gaseous form, (e.g., nitrous oxide) by any means is expressly forbidden.
Any use of upper Cylinder lubricant via carburettor or vacuum system is non-compliant. Any vehicle found with these types of systems will be deemed non-compliant. (01/07/2020)

4.2 ENGINE: CARBURETOR CONFIGURATION CAR

ENGINE — All of the components making the engine function, meaning complete engine, including rocker covers, excluding exhaust.

a) Maximum 6 Cylinder Reciprocating Engine to 4500cc absolute OR Twin Rotor Rotary Engine.
   (i) Forced induction NOT permitted. Checks will be on fuel and OEM equipment.
   (ii) All cars fitted with single carburettor OEM are permitted to use a 2-barrel Holly carburettor on an OEM or OEM option for engine intake manifold, with a bolt on, NOT welded, adaptor block that is of a maximum thickness of 1.000" (25.4mm). Adaptor block MUST be removable and the listed carburettor for model be re-attached and engine will function. (14/09/19)
   (iii) OEM carburettor may only be replaced with a HOLLEY 350cfm carburettor. Holley carburettor copies are not allowed. e.g., Demon, Barry Grant etc. (14/09/19)
   (iv) A carburettor with more than two throttle butterflies or throats NOT permitted.
   (v) Cars produced in OEM multiple carburettor form must use a Holley 2 barrel with the above specification as referenced in (iii) (01/07/23)

Persons wishing to build any late model car supplied in multiple carburettor or 4-barrel form only, must apply in writing to the SSA Inc Technical for approval before it will be considered for registration. Application is to include full details of parent manufactures manifold (not SPORTS option) to be used with a 350cfm. 2bbl Holley carburettor and a 25.4mm maximum "bolt-on" adaptor block.

Any adaptor block for Holley 350 carburettor must be bolted to the manifold (not welded) and when removed, a standard carburettor for that manifold must still fit the manifold and the engine be able to run in that form.

b) Engine block to be of original type and make for model or earlier engine, not after market alloy or iron replacement.

c) Engine changes permitted if of same make, series, type and configuration as original for model (Buick is not Holden).
   (i) Race engine to be based on passenger car engine only.
   (ii) Manufactures markings to remain on engine block castings.
   (iii) Harmonic balancer optional.

d) Crankshaft stroke not to be increased or decreased relative to the block being used.

e) Cylinder head to be of original material, type, make and configuration.

f) Engine to be mounted in original position. If resilient engine mountings are used, the mount must be restrained with a minimum 6mm wire cable or 6mm chain, to be as short possible. (01/07/23).

g) Dry sump lubricant not permitted.

h) Remote filters, coolers, etc. to be isolated from driver by a 1mm firewall, mounted securely below door height, as to not impair vision through cabin. All connecting hoses, couplings etc to be correct class of fittings for the purpose. Remote oil pump permitted. External oil feeds to bearings permitted.

i) Inlet manifold to remain of OEM structure and appearance in all areas externally.
   (i) Internal modifications are permitted.
   (ii) All fabrication through and involving any machining and/or welding must allow the manifold being used to retain its OEM structure and appearance with the exception of an additional hole (19mm maximum) for the fitment of a sensor and the welding/filling of vacuum and water fittings no longer in use.
   (iii) Spacer/adaptor between head and inlet manifold or in any area of the inlet manifold not permitted. Exception being the use of an adaptor block for the fitment of a 350 Holley. (01/07/18)

j) Single carburettor, type and make as per SSA list for the model.

k) Additional adaptor/spacer block under carburettor not permitted.
   (i) Additional gaskets or thicker than standard gaskets not permitted in the carburettor on spacer/adaptor, or on the manifold.
   (ii) Additional fuel capacity for float chamber not permitted.
   (iii) Any use of upper Cylinder lubricant via carburettor or vacuum system is non-compliant. Any vehicle found with these types of systems will be deemed non-compliant. (01/07/2020)
   (iv) Return springs must be fitted to each butterfly shaft (in-built springs accepted) and one spring to accelerator pedal linkage. Protective wire gauge or air cleaner to be fitted over air intake to prevent entry of foreign objects to the throttle body and also to act as a flame trap.
   (v) ADDITIVES: The introduction into the combustion chamber/s of additives, either in solid, liquid or gaseous form, (e.g., nitrous oxide) by any means is expressly forbidden.
   Any use of upper Cylinder lubricant via carburettor or vacuum system is non-compliant. Any vehicle found with these types of systems will be deemed non-compliant. (01/07/2020)
   (vi) Fuel to be used. Refer to Fuel Section 16.

5. BATTERY AND ELECTRICAL SYSTEM:

a) The battery is to be securely mounted in a box or steel frame secured to roll cage or bar-work.

b) The battery and terminals is to be covered with non-conductive cover if battery is in cabin area to prevent spillage.

c) Battery's mounted within the cabin area be held down by an angle iron/steel/aluminum frame MINIMUM 25x25x3mm both top and bottom. (01/07/23)

d) Regardless of the location, the battery will be mounted with a minimum of 2 x 8mm bolts or rods. (01/07/23)

e) Maximum size battery permitted is N70ZZ and one only permitted. (01/07/16)

f) Suitable grommets must be fitted where electrical cables pass through metal fire-walls.

f) At the commencement of a meeting car must be capable of starting with starter motor.

g) Switches: Ignition switch and electrical fuel pump switch, if fitted, must be grouped together and be clearly marked.

h) An engine 'KILL' switch, suitably marked for method of operation should be of lever/twist type, located centrally and forward of the windscreen mesh. This switch must isolate the battery, and any other electrical item. E-stop type switches that utilise a rotating release function are permitted and are highly recommended. (12/01/24)

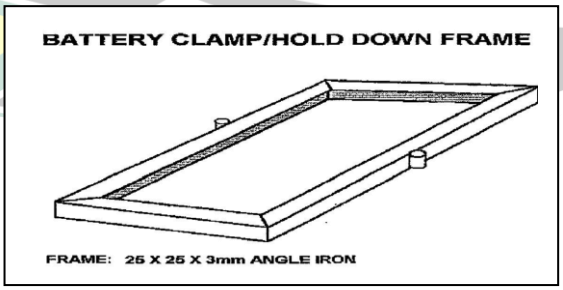
i) Electrical switches NOT to be mounted through the floor.

j) Electrical wiring is not attached to fuel lines.

k) All electric fuel pumps to be controlled by an engine monitoring relay, to stop fuel pump running when engine stops.

l) The use of data logging dashes be permitted. Traction control is STRICTLY PROHIBITED. (01/07/21)

Fig. 8



6. EXHAUST SYSTEM:

a) Exhausts must be within local noise level requirements. Recommend. 95. Dba.

b) All exhaust gases are to be directed away from all drivers, fuel tanks and tyres.

c) Internally ducted exhaust system shall vent through the body not higher than 100mm above the door sill panel, using a slip joint as in Fig.9

d) Driver is to be suitably insulated from the exhaust system. Insulation and firewall sheeting not to exceed 150mm above drive shaft tunnel. It must be within 50mm of exhaust or oil coolers, no other sheeting in cabin area.

e) Exhaust systems to have not more than two outlet pipes, not to protrude beyond body line, and to exit rearward of the rear of the driver's seat.

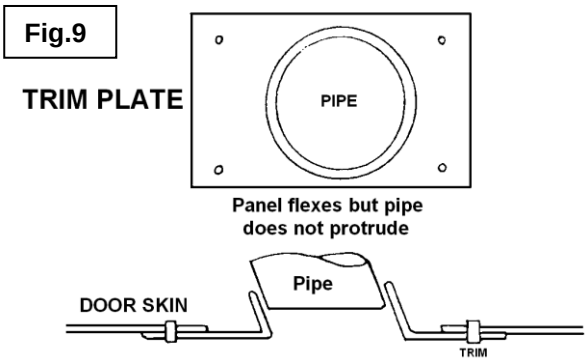
f) If exhaust system is under floor, safety chains will be fitted to front and rear of pipes and secured to floor pan or sub-frame.

g) Pipes and mufflers must be securely attached to the vehicle.

h) Any car exhausting excessive unburned fumes while on dummy grid, or being formed up on the track, may be excluded as this constitutes a health hazard.

Internal Exhaust Duct Body Vent

Fig.9



7. COOLING SYSTEM:

a) Cooling system may be modified.

b) Radiators may be mounted in engine bay, cabin, rear firewall (refer to Section 1) and boot. (17/09/22)

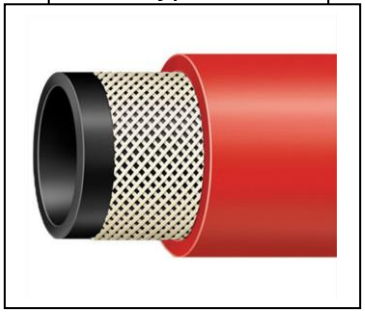
c) Radiators mounted in cabin: (17/09/22)
(i) MUST be completely rear of Main Hoop (Bar 1)
(ii) MUST have hoses entering and exiting from rear and be short as possible
(iii) Radiator tanks if NOT aluminium and TIG welded to core MUST be covered.
(iv) Radiator fans MUST have shroud or suitable guard
(v) Radiator cap MUST be covered

d) Radiators mounted in rear firewall and boot (17/09/22)
(i) May have hoses entering and exiting from sides

e) Shrouding on ALL radiators, if fitted, is to be no further forward than 600mm of the most forward point of radiator and no more than half rear window height. (17/09/22)

f) Internal pipes leading to all radiators are to be one of the following (17/09/22)
- steel,
- aluminum,
- copper material,
- Nonconductive reinforced Ortac type hose,
- PTFE Hose

Ortac type hose



g) All internal pipes and hoses MUST be ducted or lagged. NO exposed pipes or hoses in cabin. (17/09/22)
(i) Stainless steel externally braided hoses is accepted. E.g., Earls, Speedflow, Proflow etc that utilise the correct JIC or A/N type fittings that have been professionally installed as per correct fluid transfer practice are NOT required to be ducted or lagged.

h) All radiators MUST have manual pressure relief or cap fitted. (17/09/22)
(i) Lever vent caps may be used.
(ii) Tap to be installed to direct steam to ground

i) Cabin mounted water pumps that are of plastic construction MUST be covered or tagged with a suitable guard that protects driver and other in the event of pump being damaged. (17/09/22)

j) Water spray bars or jets on all radiators are NOT permitted. (17/09/22)

8. TRANSMISSION/DRIVELINE:

ELECTRONIC TRACTION CONTROL NOT PERMITTED.
Every race car is to be fitted with a clutch so that the engine may be started and then the vehicle be put into gear and move off in forward or reverse as required.

a. Gearbox must have a minimum of two forward gears and reverse gear and must be derived from mass produced passenger cars and remain visually standard externally.
   (i) The use of purpose-built racing transmissions, e.g., Bert, Brinn, Falcon and Racegators Transmissions are not permitted.
   (ii) The practice of locating or installing or hiding a purpose-built race transmission (as listed above) inside a mass-produced passenger car gearbox is not permitted.
   (iii) The practice of locating or installing clutch packs inside a manual gearbox case or housing is not permitted.
   (iv) The clutch must be attached or bolted to the flywheel in a car with a manual type gearbox.

b. All drive line components must be derived from mass produced passenger cars and remain visually standard externally. Subject to correct track measurements, an example would be the use of 9" ford rear axle assembly in a Centura or Torana. Aluminium Banjo centre allowed.

c. Where it is not possible to transfer the suspension mounting points correctly onto the new diff. e.g., Cortina the upper mounting points may be widened (around the bell of the housing) to make the height of the mounting point from the centreline of the axle housing the same as original for the model. Coil Spring mounts on Falcon differential must be in original position and being used, unless using coil over suspension.

d. Internal modifications are permitted.

e. For SAFETY OEM "full floating" rear axle assembly recommended. Conversion to floating hubs permitted.

f. Rear axle assembly to be of original type. I.e. IRS to remain IRS

g. Scattershield: All cars must fit a Scattershield if not using a competition clutch or bellhousing. To be a minimum 3mm x 150mm wide and must cover the upper 180 degrees of bell housing and be securely attached to the bell housing or fire wall in engine bay or front fire wall in cabin area to protect the drivers' feet and legs from clutch explosion.

h. Cars fitted with auto transmission and a torque converter must fit a Scatter shield.

i. Tail shaft may be of one piece or two-piece types, conversion is optional.

j. No carbon fibre tail shafts allowed.

k. Tail shaft/s must be fitted with 360º hoops at front and rear.

(i) Tail Shaft Loops — Steel strap minimum. 40x3mm FMS or 6mm chain or 6mm wire cable to be SECURELY fitted around the front and the rear of the tail-shaft within 150mm of universal joints to prevent the tail-shaft and or shafts from dropping in an event of breakage. The top part of the loop to be minimum 40x3mm FMS welded or bolted to floor pan/tunnel on either top or bottom. (01/07/2020)

(ii) If wire cable/chain is used the top/upper section (180º) part of the loop to have minimum 40x3mm FMS welded or bolted to floor pan/tunnel on either top or bottom. FMS to be one piece from side to side at points that cable passes through floor including FMS. The wire cable/chain is to be retained securely on the 40x3mm FMS. (01/07/2021)

(iii) If there is a joint in the middle of the tailshaft a third safety chain is required. (01/07/21)

(iv) Tailshaft/s must have fully operational constant velocity / universal joints, be suitable for the application and be correctly phased.

REAR AXLE BEARING RETAINING RINGS. If using assembly not fitted with floating axles, a new retaining ring must be fitted at replacement of bearing or axle.
Ring must be an interference fit with the axle, when in place the retaining ring is to be tack welded using MIG or a small diameter low hydrogen rod on low amperage.

FAILURE TO OBSERVE THIS PROCEDURE WILL INCUR A PENALTY ESPECIALLY IF AN AXLE IS DISLODGED. (SAFETY DECLARATION)

WHEEL STUDS. Grade 8, 12mm minimum all vehicles

9. STEERING: (01/07/24)

a) Steering components must be in a sound condition.
b) All steering joints to have locking devices fitted. i.e. split pinned, or lock nutted
c) Steering column must be securely mounted to the roll cage dash bar.
d) Hub of steering wheel must be padded with dense resilient foam and covered.
e) Quick release steering wheels are mandatory.

10. SUSPENSION:

A Modified Sedan race car must use a complete metal body (Refer to section 1 Body) with the OEM suspension mounting points/pivot points in original position and being used (Refer to Section 10, b) (01/07/2020)

All suspension components must attach directly to the OEM mounting/pivot point except McPherson and Chapman (Double Wishbone) type front upper strut mounting. (See Section 10 c))

Straps for mounting shock absorbers or suspension arms etc are NOT permitted. Multi or single hole mounting brackets that alter the OEM pivot are unacceptable and not permitted.

Suspension mounting points are defined as: -

(i) Mounting points of suspension arm, either end;
(ii) Shock absorber - either end;
(iii) Strut - either end;
(iv) Castor arm / radius rod either end.

Front and rear suspension to remain of original OEM type, design, and function, except that the use and position of rear lateral locating devices such as Panhard bars, and/or watts linkage etc is optional and not restricted. The use and attachment of sway bars is not restricted. (01/07/24)

Arms may be manufactured or fabricated, but must retain original OEM designed function. On a car with one-piece lower front arm, it may be replaced with an arm of two pieces (i.e., Falcon BA), and a car with a two-piece lower arm, it may be replaced with a single piece unit (IE: VZ Commodore), both of which mount/pivot from the OEM subframe/body position at both inner ends, and locate to the suspension upright at the outer position.

All suspension arms must not vary in length whilst in motion, and will not alter the direct measurement from one end to the other whilst in motion.

The use of Torsion Bars, unless OEM equipment is non-compliant. (01/07/2020)

(a) Weight jacking systems incorporated into the spring mounts are permitted but are not to be adjustable from the driving seat.

(b) Mounting shock absorbers directly to bar work is permitted. MOUNTING OTHER SUSPENSION COMPONENTS AS LISTED IN SUSPENSION MOUNTING POINTS DEFINITION (ABOVE) IS NOT PERMITTED.

Primary source of mounting shock absorbers must be within 25mm of the OEM body or sub frame position which 50% of the original mounting point must remain for measuring purposes. Mounting of shocks at body end if original mount was direct to the body, not via a mounting bracket when to bar work, may be strapped/braced back to body using a minimum body type material. OEM mounting/pivots points MUST be used to mount suspension components including lower shock mounts. (01/07/2020)

(c) OEM shock mounts on body or subframes that are removable OEM may be replaced with fabricated components that attach in OEM location. The car owner must be able to produce an un-altered OEM mount for verification purposes. Failure to produce un-altered OEM mount upon request may result in penalty / penalties, disqualification and/or fine. Refer to Class Technical Manual Section 6 (01/07/2020)

(d) Shock absorber may have a tolerance of plus (+) or minus (-) 25mm maximum overall for mounting purpose, except for when using McPherson or Chapman Strut (Double Wish-bone) front suspension, where the centre of the shock absorber can be no more than 25mm from the original manufacturers McPherson or Chapman Strut (Double Wish-bone) mounting hole on the body sub frame skirt in horizontal direction only. The centre of the shock absorber mounting bolt can be no more than 25mm above or 30mm below the OEM mounting hole on the body. Aftermarket camber kits allowed. Strut brace between towers permitted.

(e) No electronic, manual, or hydraulic adjustment can be carried out from the cabin or from driver's seat or whilst on the dummy grid or race track, with the exception of brake bias and brake shut off valve. This includes rear lateral locating devices, shock absorbers, and weight jacking mechanisms, which must be manually adjusted (e.g.; with spanners)

(f) That Coil Over Units be allowed as an option, and be mounted in original shock absorber position. Coil Over units are not to be used to replace a leaf spring and shock absorber, on a car fitted with OEM leaf type suspension.

(g) No external reservoir/canister type shock absorber allowed.

(h) Additional shock absorbers, strut bars and/or springs are not permitted. Use of stacker springs are permitted.

FRONT SUSPENSION:

(i) Original front stub axles must be used. This also includes bearing carriers (classed as stub axle assembly) used in later model vehicles.

(ii) Front hubs to be of a mass-produced passenger car type and mount directly to original stub axles.

(iii) Front wheel bearing carrier on VR-VZ Commodore may be replaced with aftermarket type carrier (i.e.: Harrop)

(iv) Front wheel bearing carrier mounting support may be fabricated from high grade aluminium or steel.

(v) AU-BF Falcon stub axle assembly, along with the upper AU-BF Falcon standard arm, is permitted for use in EA-EL Falcon. The lower arm will need to be fabricated as per rule 10(b). This allows for AU/BF Falcon stub axle to be used in EA-EL Falcon, and will alleviate the need to cut and weld two stub axles to produce one.

(vi) TE-TF Cortina be permitted to replace the standard stub axle spindle with that of an XF Falcon stub axle spindle This is to be done by machining the original stub axle spindle from the original position and then press fit the XF Falcon spindle into place before being welded by a certified engineer. The XF spindle is to fit in the same position as the original was removed from.

(vii) Replacement bearing carriers may be used or the fitment of a Mitsubishi L300 front stub axle be permitted to be used in a TE/TF Cortina.

(viii) Front castor bar / radius rod pivot point to be within the confines of the OEM rubber bush. See also section 1(i).

(ix) Original front cross member to be used**.** The cross member may be reinforced, and rack mounts modified to suit non-OEM steering rack.

(x) When McPherson or Chapman Strut (Double Wish-bone) suspension system is used, the lower spring mounting may be adjustable. (12/10/15)

REAR SUSPENSION:

(i) The use of a spring loaded Panhard bar is optional. Adjustable Panhard bars are permitted provided that they are adjusted manually. (e.g., with spanners).

(ii) 5th Arm's, lift bars or any derivatives are not accepted in class.

(iii) All mountings/pivots must be in the original position and being used on body/chassis/subframe and differential, in a horizontal and vertical plane.

(iv) All arms must be fitted using the correct bolt/bush or Heim joint rod end combination (No large holes with a small bolt fitted. e.g., ½ bolt in 1" hole)

(v) No bushes or mounting/pivot holes to be slotted or elongated. Unless OEM.

(vi) Bushes/Heim joint rod ends must be fitted and in good condition.

(vii) The rear trailing arms/control arms be of same design and function as OEM no chain or no cable or no pliable material is to be used. (01/07/2020)

(viii) Coil springs must be mounted to differential using the OEM saddle or perch, unless using coil overs where it will attach to the OEM shock absorber points in OEM position. With the tolerance of 25mm maximum overall for mounting purpose requirement used if needed.

(ix) Coil spring sliders are not permitted.

(x) Shock Absorbers must be mounted to differential if OEM, design and function using the OEM separate mountings with the tolerance of 25mm maximum overall for mounting purpose requirement being used if needed.

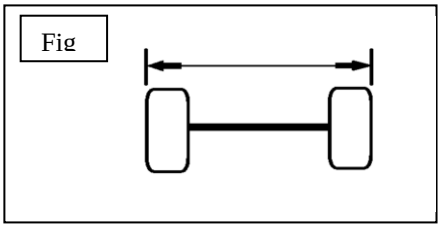
(xi) Rear centre axle line to be in OEM position. In an IRS car, this relates to the outer drive axle. (01/07/16)

m) Cortina TE/TF upper rear shock absorber mounts, may be fabricated if OEM mounts have been rust compromised, using a 40x40x3mm RHS section, welded into the OEM position on the body. Mount position MUST be symmetrical to the body centreline, 390mm down from the OEM parcel shelf centre, and 550mm apart. 25mm tolerance is permitted if using this method due to the compromised OEM shock absorber mounts. Implementation 1 July 2023 (01/07/18)

n) Rear K-Frames to be OEM for make and model. Example – No Ford Territory K-Frames to be used in BA to FG/FGX Falcons. Spacers between K-Frame and body are NOT PERMITTED. (01/07/2020)

11. WHEELTRACK: Fig 10

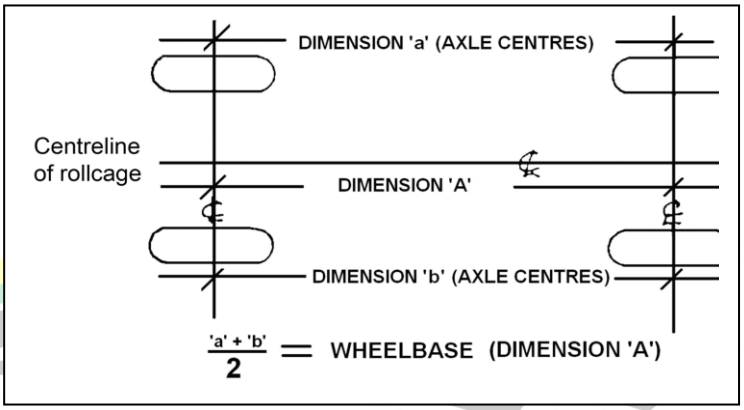
Original track plus 75mm maximum is allowed, Measured from the outside of one rim to the outside of the opposite rim. (Wheel/tyre measured at stub axle height and averaged front and back) Measurements (Table 5) includes 200mm for rim and bead lock to accommodate SSA Wheel Track measuring tool.



12. WHEELBASE:

Original, within 1% ABSOLUTE!

Method of measuring wheelbase shall be; with each front wheel pointing straight ahead. Measure distance from front axle centre to rear axle centre on each side of vehicle. Add dimensions for left and right and divide by 2, allowable tolerance is +/- 1%.



13. WHEELS:

a) Seven-inch (180mm) rims are allowed including bead lock attachment. Fig.11

b) Wheels must be in good condition and free from cracks.

c) Wide Five style wheels, hubs and adaptors NOT permitted. Dual stud pattern drilling is NOT permitted. Wire wheels and/or dual wheels NOT permitted.

d) Balance weights to be securely fastened or taped.

e) Rim edges to be rolled or rounded off if rim protrudes past the tyre side wall

f) Covering is not to be welded to outer section of rim.

g) Wheels may be reinforced provided they meet with the approval of the Class Technical Advisory Committee and the SSA Inc.

h) Wheel nuts/studs are not to protrude past the outer face of the wheel when measured from bead to bead. (01/07/23)

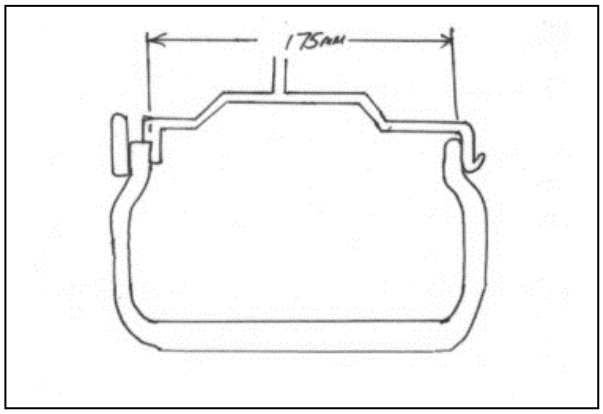
i) **Mag Wheels** –
   (i) Composite type wheels NOT acceptable. Composite wheel means wheels made of different materials. E.g., 3-piece alloy wheels are not classed as composite wheels.
   (ii) Correct matching nuts and washers must be used.

j) **Steel Centre Wheels —**
   (i) Heavy Duty “Off Road” type centres preferred to flat plate.
   (ii) Wheel centre hole is to be chamfered.

(iii) Stud holes are to be chamfered to suit the nut used and to be chamfered on inner edge also to relieve guillotine action on studs.

(iv) If the right-hand front wheel is made of flat steel plate, it is to be not less than 10mm in thickness; if dished centre, min. 5mm. thickness absolute.

Fig 11 updated 16/09/17



k) If at any time a beadlock rim is measured using a calliper tool and found to be over 200mm the competitor may be asked to remove the tyre for measurement of the rim as per Fig 11 above (16/09/17)

14. TYRES:

Tyre size is to be a maximum of 8" or 265mm as per the manufacturer's markings. E.g., 84x8x15 or 265x60x15. All details are to be visible in OEM markings on tyre sidewall. (01/07/16)
Any type of lubrication (grease or oil etc) is not permitted on the tyre walls.

15. BRAKES:

a) Foot operated hydraulic brakes to be fitted and be effective at race speeds.

b) Brakes are to be fitted to a minimum of three (3) wheels. Right Hand Front brake only may be removed.

c) Electronic ABS not permitted. Adjustable brake systems permitted.

d) Disc rotors may not be altered by drilling of rotor surface. *Note: some discs are supplied from the factory as drilled disc (i.e.: DBA, Willwood)

e) No Carbon Fibre components to be used.

16. FUEL:

THE USE OF COOLING SYSTEMS FOR FUEL IS NOT ALLOWED. Refer to Section 17 – Fuel Tank and Fuel System (01/07/23)

Gas e.g. LPG or CNG is NOT PERMITTED.

Non EFI Cars (01/07/18)
Methanol: Methanol may be used. Specific Gravity of max 0.802.

Petroleum

a) Must be supplied from a commercial outlet, via a multi volume network available to the general public obtained through a bowser pump.

b) Multi volume PULP fuel varieties such as Shell V-Power, Caltex Vortex, BP Ultimate etc are permitted ONLY.

c) Only Fuel that has a maximum Octane (RON) of 98 is permitted.

d) Only Fuel that has a maximum Specific gravity or density of 0.775 are permitted.

e) Fuels sourced from refinery or depot supplied fuels that are different or superior quality are NOT permitted.

f) Ethanol or Ethanol Blend fuels such as E1O and E85 are NOT Permitted

g) Blending of Ethanol based fuels with PULP fuels is NOT permitted.

h) The use of exotic or Unleaded racing type fuels, such as ELF and or additives that improve fuel quality or increase octane (RON) are not permitted.
DEFINITION - RON = RESEARCH OCTANE NUMBER.

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

Fuel shall be tested as per the SSA Inc. policies and procedures.

a) EFI Cars and early model engine cars in late model body
Petroleum

a) Must be supplied from a commercial outlet, via a multi volume network available to the general public obtained through a bowser pump.

b) Multi volume PULP fuel varieties such as Shell V-Power, Caltex Vortex, BP Ultimate etc are permitted ONLY.

c) Only Fuel that has a maximum Octane (RON) of 98 is permitted.

d) Only Fuel that has a maximum Specific gravity or density of 0.775 are permitted.

e) Fuels sourced from refinery or depot supplied fuels that are different or superior quality are NOT permitted.

f) Ethanol or Ethanol Blend fuels such as E10 and E85 are NOT permitted.

g) Blending of Ethanol based fuels with PULP fuels is NOT permitted.

h) The use of exotic or unleaded racing type fuels, such as ELF or additives that improve fuel quality or increase octane (RON) are NOT permitted.
DEFINITION – RON = RESEARCH OCTANE NUMBER

i) Older engines in late model bodies – Only PULP fuel and specification pertaining to contained above is permitted.

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

Fuel shall be tested as per the SSA Inc. policies and procedures.

17. FUEL TANK AND FUEL SYSTEM:

a) Original fuel tank must be removed and replaced by a tank/s of up to 72 litres for petrol or 120 litres for Methanol.

b) Pressurised fuel tank/s NOT permitted.

c) Area beneath tank to be cut out, giving adequate ventilation and ensuring that spillage cannot remain in vehicle.

d) Fuel tank area is to be accessible for scrutineering. A 300x300mm access panel maybe in the rear parcel shelf, deck panel or the boot lid. Fuel tank is to be isolated from the driver by a minimum 0.9mm metal firewall. For all cars that do not have an OEM firewall to separate the fuel tank from the driver – the fuel tank must be fully enclosed – this includes the base as well as the sides and top. (14/09/19)

e) Filler cap to be a positive seal, behind a firewall and inside body. Levers on cam locked caps to be clipped.

f) Metal fuel tanks over 25 litres must be baffled. All joints are to be welded to a professional standard.
Fuel tanks are to be constructed of min. I.0mm steel or 3.0mm aluminium alloy.

g) Competition type “plastic” tank permitted. The use of an approved type fuel cell and receptacle is recommended.

h) All fuel tanks may be covered/wrapped in insulation material product such as heat mat/wrap to deflect heat. This must be removable for inspection/testing when requested. (01/07/23)

i) All fuel tanks are to be constructed with pick-up fittings etc. coming from the top, bottom or side of tank.

j) If pump is placed in an existing tank, then low outlets are to be blanked off and outlet moved to the top. Pump Fuel only is allowed in old engines in new car bodies

k) A flexible fuel line section must be fitted within 75mm of fuel tank and all fuel lines to be securely fixed in position.

l) Barbed fittings of the correct size must be used in conjunction with screw type clamps when connecting flexible fuel line. (Genuine SAE R6 fittings and hose exempted).

m) Neoprene, reinforced plastic or black fuel line may be used. OEM type Bundy steel tubing may be used through the car or under the car. Flexible fuel lines can pass through cabin area. Bulkhead type fittings may be used where flexible fuel lines pass through front and rear firewalls as an alternative to grommets and are highly recommended. (01/07/2020)

n) High pressure lines are to use high pressure hose and fittings.

o) **Carburettor cars only**: The fuel line to the engine MUST be fitted with a quick action NON-LEAK fuel tap or valve in working order. The fuel tap, actuator or switch is to be mounted within easy reach of driver and crash crew, and clearly marked “FUEL” and the positions ON/OFF. Solenoid valves or remote mounted fuel taps are permitted. (01/07/18)

p) If a return line is used, it must be fitted with a one-way valve. A fuel pressure regulator will suffice as a One-Way Valve. (01/07/16)

q) Electric fuel pumps must be wired with an independent earth. The pump MUST be controlled by the 'KILL' switch and if using PETROL, by an engine monitoring relay. This device is highly recommended for Methanol.

r) Fuel lines passing through cabin area are to be secured and isolated from electrical wiring and be positioned in such a manner so as potential damage is avoided. (01/07/2020)

r) Tank/s to be securely mounted in the boot area of the car, and be mounted on suitable bar work or on a frame mounted directly to the bar work. A minimum clearance of 150mm forward of the lower rear end of the boot panel and 300mm minimum from side of tank to be maintained around tank, and isolated from driver by a firewall. (01/07/19)

s) Fuel tank not to be mounted using brackets welded to tank or cell. Minimum strap size is to be 25x3mm FMS. Tank to be protected by substantial bar work on all sides.

t) Fuel tank protection*:* Bar must be constructed of minimum 38x3mm CHS or 40x40x3mm RHS with 25x3mm CHS OD MINIMUM angled brace bars to be fitted on each side and be 25mm clear all around tank and filter, projecting a line from the rear wheel centre to the bar. (24/11/18)

u) Bar is to prevent side entry to tank by nose of another vehicle. Protector must be 25mm lower than an underslung tank and mounted as per Fig.12 (Brace bars do not constitute Bumper mountings)

v) The corners of the fuel tank protection bar are to be radius corners. No straight side pipes for jacking to extend.

w) Tank vents to be fitted with an anti-spill device.

x) Non underslung fuel tank is a fuel tank that has some portion above the bumper tube or chassis tube and therefore is to have a fuel tank protector bar fitted. Protector bar must be 25mm higher than a non-underslung tank and mounted as mirror of Fig 12. (Brace bars do not constitute Bumper mountings)

y) Underslung fuel tank is a fuel tank that is below bumper or chassis rails and therefore must have a fuel tank protector bar fitted.

z) Plastic fuel tanks fitted with a metal filler ring must be fitted with an anti-static earth wire. (01/07/23)

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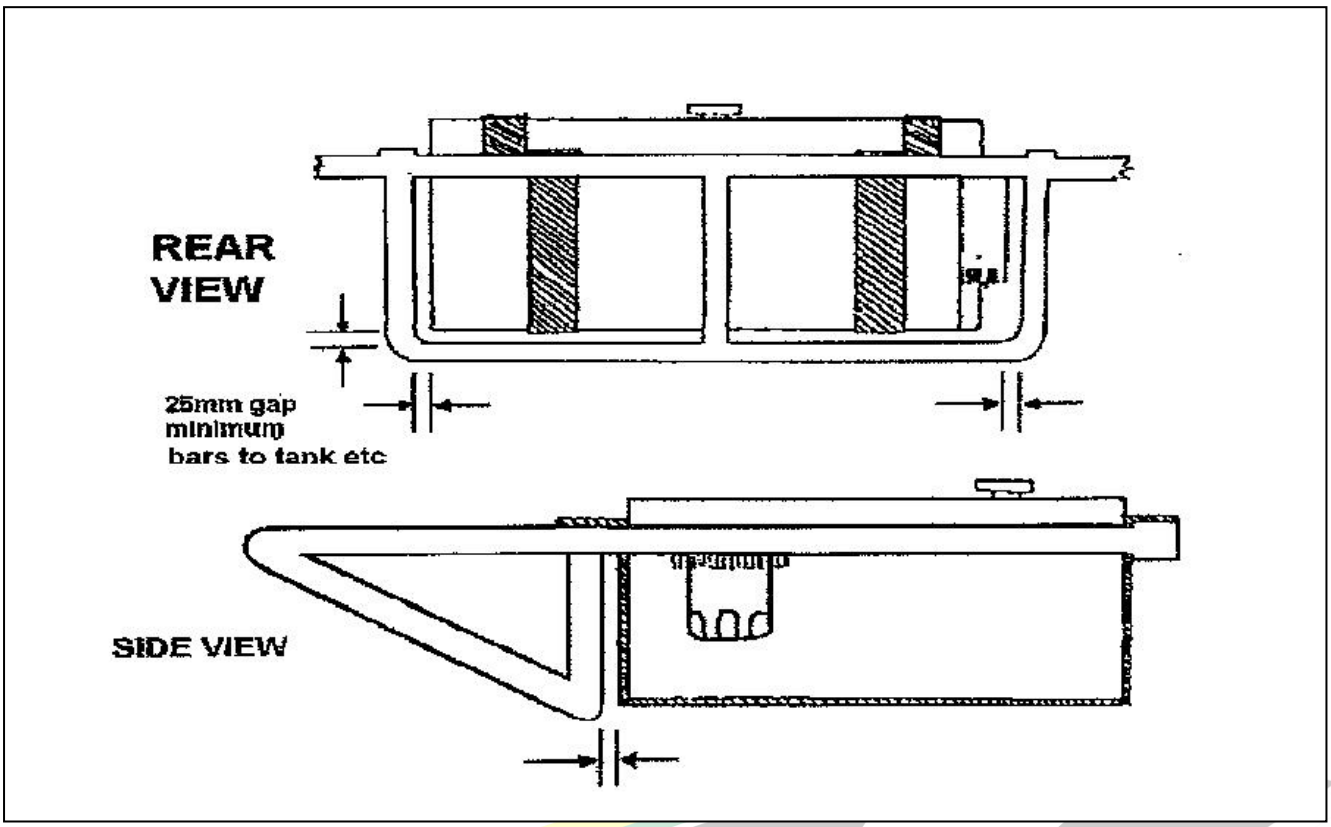
REAR
VIEW
25mm gap
minimum
bars to tank etc
SIDE VIEW

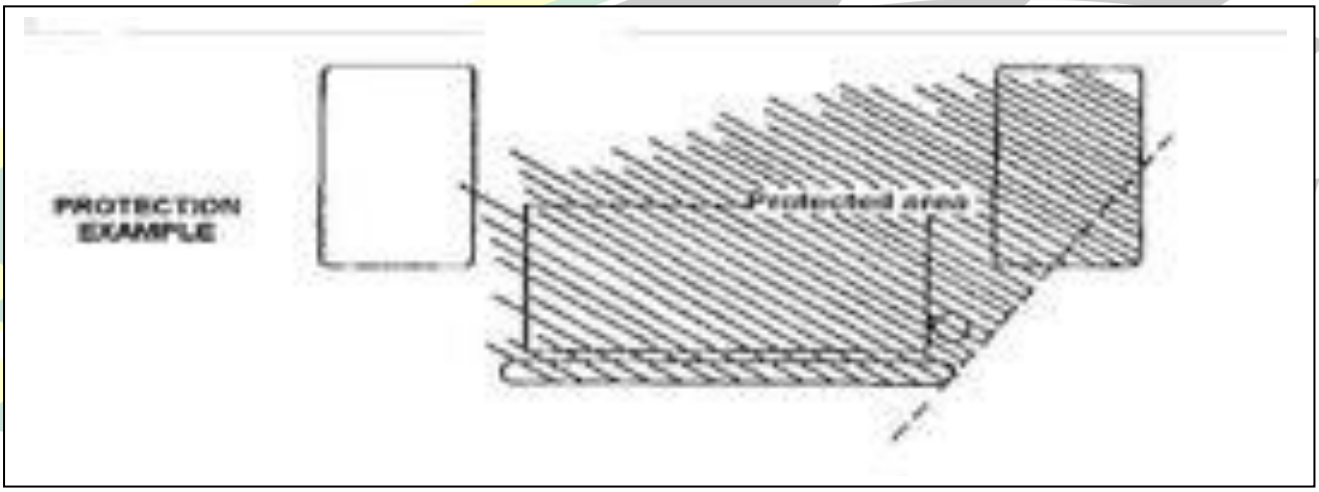
PROTECTION
EXAMPLE
Protected area

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TABLE 1. LIST OF APPROVED/ACCEPTED MAKES/MODELS – if the car you are interested in is not listed here you must make application for inclusion – prior to commencing to build – your car may not be automatically accepted. Click Here

BMW	**CHRYSLER/MITSUBISHI**
E36 328	Sigma GE/GH
E46 33ci Coupe (01/07/2020)	Sigma GJ/GN 82-87
E82 128i Coupe (17/09/22)	Centura KB/KC
	Charger
HONDA	Magna TJ
Prelude 1994	Valiant CL
	Lancer CJ 2008 (01/07/21)
HOLDEN	Mitsubishi DB 380 Series 1-3 10/05-03/08 (01/07/24)
Commodore VB, VK, VL	
Commodore VN, VP, VR, VS, VT, VY, VZ, VE, VF	**FORD**
Monaro	Cortina TD, TE, TF
Statesman VS	Falcon XC, XD, XE, XF
Torana LC, LJ, LH, LX, UC	Falcon EA, EB, ED, EF, EL, AU, BA, BF, FG, FGX
	Telstar AX 92-96
CHEVROLET	Mustang 2015 on (01/07/2020)
Camaro 2011 (01/07/24)	
	NISSAN
MAZDA	Skyline R31
Mazda MX6	300zx
Mazda RX7 (Ser 1-3)	
Mazda RX8	**TOYOTA**
	Aurion ATX
MERCEDES	Lexcen CSI 1996
C350 Series W204 07-14 RWD	Toyota 86 (17/09/22)
	Lexus IS 350 XE20 – note IS250 body is permitted – all other specifications remain unchanged (01/01/22)

TABLE 2. ENGINE LIST FOR VEHICLE MODEL

MODEL	STANDARD BORE	STROKE	ENGINE
HOLDEN			
UC, LH/LX/LJ Torana	3.625 (92.075mm)	3.25 (82.55mm)	202 in-line 6
VB-VK Commodore	3.625 (92.075mm)	3.25 (82.55mm)	202 (later3300)
VL Commodore	3.3858 (86mm)	3.3465 (85mm)	NISSRB30 OHC6
VN Commodore	3.8 (96.507mm)	3.4 (86mm)	3800 v6
VP-VR-VS Commodore	3.8 (96.507mm)	3.4 (86mm)	3800 v6
VS Statesman (01/07/19)	3.8 (96.507mm)	3.4 (86mm)	V6 Ecotec
VT-VX-VY Commodore	3.8 (96.507mm)	3.4 (86mm)	3800 v6
VZ Monaro	94mm	85.6mm	VZ - 3.6 V6
VZ-VE Commodore	94mm	85.6mm	3.6 V6
VF Commodore			

MODEL	STANDARD BORE	STROKE	ENGINE
CHEVROLET			
2011 Camaro (01/07/24)	3.7 inch	3.37 inch	3.6 litre V6 Alloytec LLT/LFX

MODEL	STANDARD BORE	STROKE	ENGINE
FORD			
Ford Telstar	84.5mm	74.2mm	KL 2.5L OHC V6
TD-TE-TF Cortina	3.6811 (93.5mm)	3.9093 (99.3mm)	4.1 L in-line 6
XD-XE-XF Falcon	3.6811 (93.5mm)	3.9093 (99.3mm)	4.1 L in-line 6
EA Falcon	91.86mm	79.4mm	3.2L OHC 6
	91.86mm	99.31 mm	3.9L OHC 6
EB-ED-EF-EL Falcon	3.63 (92.25mm)	3.90 (99.31mm)	4.0L OHC 6
AU-BA-BF Falcon	3.63 (92.25mm)	3.90 (99.31mm)	4.0L OHC 6
FG Falcon	3.63 (92.25mm)	3.90 (99.31mm)	4.0L Barra
Mustang (01/07/2020)	3.63 (92.25mm)	3.90 (99.31mm)	FG Barra

MODEL	STANDARD BORE	STROKE	ENGINE
CHRYSLER/MITSUBISHI			
Centura	3.76 (89.4mm)	3.68 (93.5mm)	245 Hemi in-line 6
Charger	3.91 (95.5mm)	3.68 (93.5mm)	265 Hemi in-line 6
Sigma	91.1 mm	98.0mm	2.6L Astron II
Magna TJ	93mm	85.8mm	6G74 24 valve 3.5l
Lancer CJ 2008 (01/07/21)	88mm	97mm	B12 – 2.4 Litre 4 Cyld
Mitsubishi DB 380 Series 1-3 (01/07/24)	95mm	90mm	6G75 SOHC V6 Transversely Mounted

MODEL	STANDARD BORE	STROKE	ENGINE
TOYOTA			
Aurion AT-X	3.70(94)	3.27(83)	FE 3.5L V6
LEXUS IS 350 XE (24/11/18)	94mm	83mm	V6 3.5 litre DOHC
Lexcen 1996 (16/11/19)	96.5mm	86.4mm	V6 3.8 Litre OHV 2 Valves per Cylinder
Toyota 86 (17/09/22)	86mm	86mm	Boxer Flat 4 FA20

MODEL	STANDARD BORE	STROKE	ENGINE
BMW			
E36 328	3.31 (84mm)	3.31 (84mm)	M52 B28
E46 33ci Coupe (01/07/2020)	84mm	89.6mm	M54 B30
E82 128i Coupe (17/09/22)	88.0mm	85.0mm	N52 3.0 litre In-Line 6 cylinder

MODEL	STANDARD BORE	STROKE	ENGINE
NISSAN			
300ZX 300ZX Alternate Engine (17/09/22)	87mm 91.5mm	83mm 83mm	VG30DE DOHC 3 litre VG33e SOHC V6
Skyline R31	3.3858	3.3464	RB30E

MODEL	STANDARD BORE	STROKE	ENGINE
MAZDA			
RX7 (Series to 1 to 3) (01/10/19)			12A, 13B Wankel
RX8 (01/07/17)			13B Renesis or Wankel
MX6 (12/10/15)			2.5 litre Series KLDE DOHC 4 Valve per Cylinder

MODEL	STANDARD BORE	STROKE	ENGINE
MERCEDES 01/07/19			
C350 Series W204 RWD only 2007-2014	92.9mm	86mm	V6 3.5 LITRE DOHC M276 Series

C350 Series W204 RWD only 2007-2014	92.9mm	86mm	V6 3.5 LITRE DOHC M272 Series

MODEL	STANDARD BORE	STROKE	ENGINE
HONDA 01/10/19			
Prelude 1994	87mm	90mm	Honda H22a

TABLE 3. CARBURETTOR LIST

Carburetted Cars

MODEL OF CAR	CARBURETTOR PERMITTED
Torana LC, LJ, LH, LX, UC mcl 3.3 “Red”	Single Throat Stromberg
Commodore mcl 3.3 “Red”	Single Throat Stromberg
Commodore 3.3 “Blue” Engine	Varijet 11
Cortina TD 6cyl NOT CROSS FLOW	Single Throat Stromberg
Cortina TD-TE-TF CROSS FLOW	Single Throat Stromberg
Falcon XD CROSS FLOW	Single Throat Stromberg
Falcon XE 3.3 or 4.1	Weber 34ADM
Centura All models all “Hemi” engines	Dual throat Carter Email.
Sigma All engines	Solex Down Draught 2BBL
Mazda Rotary engines	Holley 350cfm with max 25mm adaptor

NOTE: All cars fitted with single carburettor may use 2-barrel Holley carburettor that is of 350cfm on original manifold or an OEM manifold option for the engine, not a sports option. Carburettor cars are only permitted to use Holley 2-barrel carburettor. Copies are NOT permitted – E.g., Demon The original carburettor bolt pattern and position must be used and if required an adaptor plate maximum 25mm thick may be used.

All 2-barrel Holley Carburettors: Maximum venturi size of 30.56mm. Venturis are to be symmetrical and affixed in position.

TABLE 4. THROTTLE BODY

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
HOLDEN		
VK Commodore	68mm	65mm
VL Commodore	64mm	54mm
VN Commodore	72mm	60mm
VP Commodore	72mm	60mm
VR Commodore	72mm	60mm
VS-VY Commodore	72mm	64mm
VS Statesman (01/07/19)	72mm	64mm
Monaro	72mm	64mm
VE Alloytec engine*	73mm	72mm
VZ Alloytec engine**	70mm	68mm
VF Commodore		

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
CHEVROLET		
2011 Camaro (01/07/24)	73mm	72mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
FORD		
XF Falcon	70mm	64mm

EA Falcon	64mm	64mm
EB Falcon	64mm	64mm
ED Falcon	64mm	64mm
EF Falcon	70mm	64mm
EL Falcon	70mm	64mm
AU Falcon	70mm	64mm
BA Falcon	75mm	69.5mm
FG Falcon	74mm	70mm
Telstar AX		
Mustang (01/07/2020)	74mm	70mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
TOYOTA		
AURION AT-X	75mm	70mm
LEXUS IS 350 XE20 (24/11/18)	75mm	70mm
Lexcen 1996 (16/11/19)	72mm	64mm
Toyota 86 (17/09/22)		65mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
BMW		
E36 B28 328i		64mm
E46 33ci Coupe B30 (01/07/2020)	69mm (01/07/24)	68mm (01/07/24)
E82 128i Coupe (17/09/22)	80mm	76mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
MAZDA		
RX7 (Wankel 13B) (October 2019)		3 x 45mm
RX8 (12/10/15) (Renesis 13B)		70mm
MX6 (12/10/15)	65mm	61mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
MITSUBISHI		
Magna TJ	66mm	65mm
Lancer CJ 2008 (01/07/21)	68mm	60mm
Mitsubishi DB 380 Series 1-3 (01/07/24)	69.5mm	67.5mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
NISSAN		
300ZX (use Maxima)	65mm	60mm
300ZX VG33E – option (01/07/23)	60mm	66mm
Skyline R31	64mm	54mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
MERCEDES – 01/07/19		
C350 Series W204 RWD only 2007-2014 – M276 Series	76mm	74.5mm
C350 Series W204 RWD only 2007-2014 – M272 Series	74mm	74mm

MAKE	THROTTLE BODY OUTER SECTION I.D.	BUTTERFLY SECTION I.D.
HONDA – 01/10/19		
Prelude 1994	60mm	65mm

Alloytec engine with the throttle actuator on the RH side when you lift the bonnet and look at engine.
*** Alloytec engine with the throttle actuator on the LH side when you lift the bonnet and look at the engine.*

TABLE 5. DIMENSIONS

Note:

***Listed measurements for the wheel track include the 75mm max. allowance and 200mm rim measurement – to accommodate SSA Wheel Track measuring tool.

**Method of measuring wheelbase shall be; with each front wheel pointing straight ahead. Measure distance from front axle centre to rear axle centre on each side of vehicle. Add dimensions for left and right and divide by 2, allowable tolerance is +/- 1%.

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
HOLDEN		New 01/07/2020	Updated 01/07/17	Updated 01/07/17
LJ Torana	2540	2515 / 2565	1591	1565
LH/LX Torana	2591	2565 / 2617	1675	1647
UC Torana	2591	2565 / 2617	1690	1657
VB-VK Commodore	2668	2641 / 2695	1726	1692
VL Commodore	2668	2641 / 2695	1726	1708
VN Commodore	2731	2704 / 2758	1726	1753
VP Commodore	2731	2704 / 2758	1726	1753
VR-VS Commodore	2731	2704 / 2758	1766	1766
VS Statesman (01/07/19)	2826	2798 / 2854	1766	1766
VT-VY Commodore	2788	2760 / 2816	1844	1862
Monaro	2788	2760 / 2816	1844	1862
VZ Commodore	2789	2761 / 2817	1844	1852
VE Commodore	2915	2886 / 2944	1877	1893
VF Commodore (01/07/18)	2915	2886 / 2944	1877	1893

MODEL	WHEELBASE STANDARD	**WHEELBASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
CHEVROLET				
2011 Camaro (01/07/24)	2852	2824 / 2881	1893	1903

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
FORD		New 01/07/2020	Updated 01/07/17	Updated 01/07/17
TD Cortina	2578	2552 / 2604	1697	1697
TE Cortina	2578	2552 / 2604	1701	1701
TF Cortina	2578	2552 / 2604	1701	1701
XD Falcon	2818	2790 / 2846	1834	1802
XE Falcon	2818	2790 / 2846	1834	1802
XF Falcon	2829	2801 / 2857	1825	1800
EA Falcon	2794	2766 / 2822	1821	1808
EB – ED Falcon	2794	2766 / 2822	1829	1808
EF – EL Falcon	2791	2763 / 2819	1841	1822
AU Falcon	2793	2765 / 2821	1841	1822
BA – BF Falcon	2829	2801 / 2857	1828	1846
FG/FGX Falcon	2838	2810 / 2866	1858	1873
Telstar AX	2610	2584 / 2636	1775	1775
Mustang (01/07/2020)	2720	2693 / 2747	1857	1923

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
CHRYSLER/MITSUBISHI		New 01/07/2020	Updated 01/07/17	Updated 01/07/17
KB/KC Centura	2667	2640 / 2694	1675	1672

CL Valiant	2819	2791/ 2847	1756	1766
GE/GH Sigma	2515	2490 / 2540	1645	1623
GJ/GN Sigma	2530	2505 / 2555	1655	1625
Magna TJ	2722	2695 / 2749	1820	1810
Lancer CJ 2008 (01/07/21)	2635	2609 / 2661	1805	1805
Mitsubishi DB 380 Series 1-3 (01/07/24)	2750	2723 / 2777	1770	1770

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
TOYOTA		New 01/07/2020		
Aurion AT-X	2775	2747 / 2803	1850	1840
LEXUS IS 350 XE20 (24/11/18)	2730	2703 / 2757	1810	1810
Lexcen 1996 (16/11/19)	2731	2704 / 2758	1766	1766
Toyota 86 (17/09/22)	2570	2544 / 2596	1794	1814

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
NISSAN		New 01/07/2020		
Skyline R31	2615	2589 / 2641	1709	1685
Nissan 300ZX	2570 (05/08/21)	2544 / 2596 (05/08/21)	1771	1809

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
MAZDA		New 01/07/2020		
Mazda RX7 (Series 1 to 3) (October 2019)	2420	2396 / 2444	1675 (updated 12/09/22)	1675 (updated 12/09/22)
Mazda RX8 (12/10/15)	2700	2673 / 2727	1775	1780
Mazda MX6 (12/10/15)	2610	2584 / 2636	1775	1775

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
BMW		New 01/07/2020		
E 36 328	2700	2673 / 2727	1693	1706
E46 33ci Coupe B30 (01/07/2020)	2725	2698 / 2752	1746	1758
E82 128i Coupe (17/09/22)	2659	2632 / 2686	1758	1791

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
MERCEDES (01/07/19)		New 01/07/2020		
C350 Series W204 RWD only 2007-2014 – M276 Series	2760	2732 / 2788	1816	1819
C350 Series W204 RWD only 2007-2014 – M272 Series	2760	2732 / 2788	1816	1819

MODEL	WHEELBASE STANDARD	**WHEEL BASE MINIMUM/MAXIMUM	*FRONT TRACK MM	*REAR TRACK MM
HONDA (01/10/19)		New 01/07/2020		
Prelude 1994	2550	2525 / 2576	1800	1790

SPEEDWAY
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AUSTRALIA