SPEEDWAY SEDANS AUSTRALIA INC

ONLINE – VERSION 10 – JULY 2020

SSA JUNIOR SEDAN
SPECIFICATION MANUAL

Rules and Regulations

Speedway Sedans Australia Inc
P.O. Box 163
HOLDEN HILL SA 5088

Enquiries to State Technical Representative or
Email: technical@speedwaysedans.com

Website - http://www.speedwaysedans.com

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 JUNIOR SEDAN

TABLE OF CONTENTS

PLEASE NOTE: Where possible the data in the 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 Manufacturers Workshop Manuals. We have checked and cross checked the information in this Manual. If you do find something that does not seem to be 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 SEDANS AUSTRALIA INC. SPECIFICATIONS

SSA JUNIOR 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

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 after approval through the CTAC and Technical Committee and ratified by the SSA Inc Board. (01/07/2020)

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 State Technical Representative who will forward to SSA Inc Technical Committee. Submissions will be handled in a confidential manner. Approval, or required modification before approval, will be given in writing to the applicant. An administration fee of up to $250 will apply for unusual or unconventional design vehicles. (01/07/2020)

Once approved the approved 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)

CLASS CRITERIA – An **SSA Junior Sedan** class race car is built from a hard-top road car seating a minimum of four persons, as per compliance plate, and catalogued for sale in Australia, i.e. available new, to the general public through authorised Dealer sale and service networks throughout Australia.

a. **Drivers Age -** An SSA Inc. Junior Licence is issued to a Driver aged over 10 years of age, and under 17 years of age, at the time of applying for their licence, subject to State Government requirements. If a Junior Licence is obtained at the age of 16 years old, the holder is eligible to finish the season on the Junior Licence, even if they turn 17 during the season. Reference - Rule 2.2.4 iv) and 2.2.4 a) and 2.2.4 b) 2019 Speedway Australia Racing Rules and Regulations. (01/12/19)

b. All new drivers must display a "P", a minimum size of 150mm on the rear of the car for the first 12 months.

c. No SSA Junior Sedan Competitor will receive prize money from competing in an SSA Junior Sedan event. Reference – Rule 2.2.8 a) 2019 Speedway Australia Racing Rules and Regulations. (01/12/19)

d. **Direction of racing -** The direction of racing will be only in an anti-clockwise direction.

Base model is used for silhouette, all measurements and specifications. If unsure of base model options refer to www.automobile-catalog.com (01/07/17)

SSA JUNIOR SEDAN DERIVATION

a. The term "Stock" in Sedan Car Racing means precisely what it says, "STOCK STANDARD" as per Manufacture for the year, make and model and body type, so unless the specifications say otherwise, nothing is to be altered. If it is not specifically listed in the items that can be removed then it must be in place. (24/11/18)

b. O.E.M. Original Equipment Manufacturer – means for make and model unless otherwise stated.

c. Cars must be at least 8 years old. No G.T. Models, Coopers, or Cooper "S" etc. Base models only.

1. BODY/ROLLING SHELL

KE55 Corolla body may be used on a KE30, and Ford Escort MK1 may change to MK 11 body – for Carburetted models only. All other specifications as per this manual.

a) Mono-construction sedan, coupe or hatchback vehicle only. Full chassis cars or convertibles not permitted.

b) Parts to be removed:
   (i) All glass, interior trims, grille, door handles, ornamentation, bull bar, tow-bar and helper springs. (Glass apertures must not be covered with fibreglass or other material).
   (ii) Instrument glass permitted.

c) The only panels which may be replaced with fibreglass / aluminum / alucabest / metal / plastic replica: - max. 2mm. thick;
   (i) Doors, bonnet, boot, front guards, nose, head and tail light apertures.
   (ii) If original roof is damaged, fibreglass overlay may be used over existing damaged roof.
   (iii) Under panel reinforcement plate not permitted.
   (iv) Replacement panels must be securely fastened, self-drilling (TEK) screws not to be used.

d) If replica panels used: - To assist with the fitting of door panels, maximum of 25x25x3mm RHS, may be welded at window sill height from A to C pillars. Doors to be securely bolted or welded or riveted using large head blind type rivets.

e) The door pillars may be notched for bar-work but otherwise must remain intact and in the original position. Roof inner panels may be notched but ONLY at the point where interference with roll cage occurs.
All cars that have a welded in/non removable Dash Bar – Dash bar must remain in place. E.g. Hyundai Excel and Mitsubishi Lancer. (14/09/19)

f) Other panels that may be removed:
   (i) Radiator support panel;
   (ii) Front inner guard panels (provided they do not constitute suspension mounting points, e.g. McPherson strut (Double Wish-bone);
   (iv) Seat mounts and other brackets in the cabin on the floor may be removed. (01/07/16)
   (iii) All other panels such as rear OEM parcel shelf and firewalls MUST remain in place.

g) Rear firewall maybe modified to facilitate fitment of radiator. Any material removed must be a minimum amount to give clearance around radiator.

h) Front chassis rail forward of cross member must not be removed. If damaged, maybe repaired with maximum 1.6mm steel. Tie bar between chassis rails to be 50x50x2mm RHS maximum.

i) Front and rear stone trays must remain. A replica of same size may be fabricated using maximum 0.9mm metal or fibreglass sheeting. As of the 1st July 2016 all cars fitted with plastic style bumpers/stone trays must have either the original or replica fitted of same or similar type and profile and may be made from fibreglass.

j) To assist with appearance of cars, the rear quarter panels may be covered with fibreglass replica panels securely attached to the steel panel. Self-drilling (TEK) screws etc. or self-tapping screws are not to be used.

k) Only interior parts which may be removed: - Dash Panel – to assist with the roll cage installation.
Replacement dash panel is not permitted to continue past the forward most point of the steering wheel across the width of the car. No extra decking or internal sheeting permitted in cabin. If the rear radiator mounts against the rear firewall, the core area only of the rear firewall may be removed.

l) The boot floor must remain intact, except for a hole 25mm larger than the fuel tank, directly below the tank.

Cars that have cross members across the boot floor pan area; the drilling of multiple holes as large as possible that will allow spilt fuel to escape quickly is allowed otherwise cross member not to be cut or drilled. If rusted body material has been removed from the boot area it must be replaced with 1.6mm steel. No cutting out of boot floor other than for fuel tank allowances. (01/07/18)

m) Rear View mirror – not permitted

n) Ballast of any description is not to be carried. E.g. Water in tyres etc.

o) Grille – If grille is fabricated it must be of a steel welded wire mesh, no thicker than 5mm diameter x 25mm minimum aperture or panel steel, 1.6mm maximum. Folded sections, for strength, are not permitted. Fibreglass or plastic is also acceptable.

p) Light apertures must be filled using max. 1.6mm metal sheet, fibreglass or plastic

q) Daihatsu Charade rear wheel arch may be cut away to a maximum of 50mm clearance around the rear wheels and replaced with a fibreglass copy of original silhouette rear wheel arch. Original metal inner and outer edges to be re-welded together if cut back. This rule is for cars with flat top wheel arches, the same rule will apply for any other new models introduced if they have a flat top wheel arch.

r) Bonnet and boot lid to be securely fastened.
- (i) Four bonnet pins (five for fibreglass) to be 12mm minimum to 15mm maximum mild steel or approved equivalent.
- (ii) Bonnet pins 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 fitted to all bonnet pin holes on fibreglass bonnet.
- (iv) Similarly, boot lid to be securely fitted, using pins and large washers as for bonnet. The removable boot lid to be securely mounted in four points.
- (v) 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)

s) Hinged bonnet and boot lid permitted, using minimum of two pins. Skeletonising not permitted on hinged panels within 50mm of hinges. The hinged panel is to be welded to the bonnet or boot skin.

u) Except for the bumper and bumper support bars, all bar work outside the sub-frame rails, skirts and also forward of the OEM radiator support panel i.e. under front guards, shall be a maximum 25x1.6mm O.D. CHS 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.

v) Cars with steering boxes only; may run the sub frame brace bars on the outside of the chassis rather than inside or on top, maximum of 38x3mm CHS or 50x25x3mm RHS are to be used. Refer to Fig 2 (iii) (01/07/18)

Fig 2. (i)

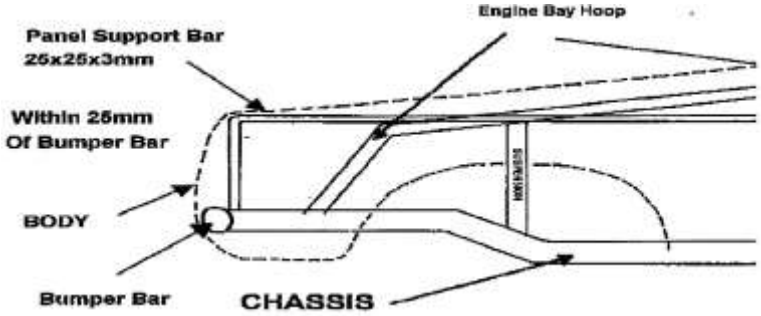


Fig.2 (ii)

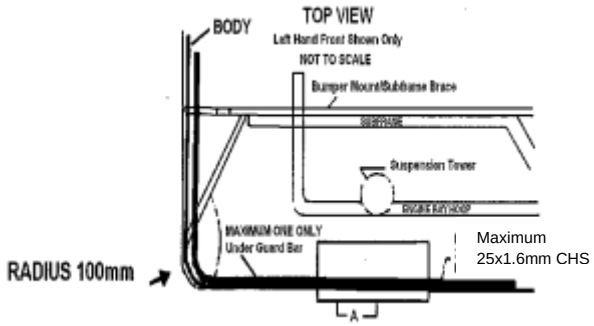
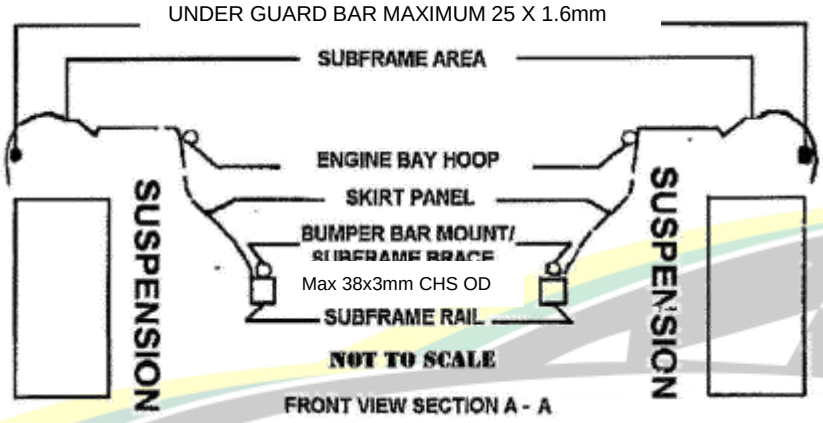


Fig.2 (iii)



Cars with steering boxes only; may run the sub frame brace bars on the outside of the chassis rather than inside or on top, maximum of 38x3mm CHS or 50x25x3mm RHS (01/07/18)

NON-ORIGINAL BODY FIREWALLS:

The driver must be protected and isolated from mechanical, fuel, electrical and exhaust components by metal firewalls, min 0.9mm thick.

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

2. ROLL CAGE – Material and Design Option Effective for Registration commencing 1 July 2019

To enable a seamless introduction to the new Section 2 Roll Cage specification, newly constructed vehicles will be able to option the use of the current Section 2 Roll Cage Material and Design, alongside of the new specification for a period ending June 30 2021. This will allow cars currently under construction to be completed to current specification and allow roll cage manufacturers and constructors to tool up.

The continuation or abandonment of this phase in period is subject to review and may be altered under the sole authority of Speedway Sedans Australia Inc.

Vehicles compliantly constructed and registered optioning the current Section 2 Roll cage specification will be

able to continue to be registered during and after the phase in period has ceased as per current Speedway Sedans Australia Policy.

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

Construction of new specification roll cages inclusive of its design and material only, will be able to be commenced effective from the date of publication of this release. Speedway Sedans Australia highly recommend this option.

Roll Cage Material and Design Option Effective for Registration commencing 1 July 2019

– Click Here for full details

2a. ROLL CAGE: (for cars built and registered up to and including 30 June 2021) (01/07/19)

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 test at not less than 2.70mm ABSOLUTE). Aluminium based materials not permitted. (01/07/16)

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.

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.

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 drivers head – it does NOT have to follow the windscreen within 50mm of the entire opening. (01/07/16)

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 250mm behind, and 50mm inwards of the OEM door opening at points A & C of Fig 3 (i).

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 Junior Sedan Specification Manual – 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.

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.

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 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) and 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)

    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, spot welded, 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.

14. **Spreader Bars:** A minimum of two sub frame spreader bars at roll cage legs, either 38x3mm 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 is required.

15. **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.

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

17. **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.

18. **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 50x50 mm 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 mesh 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 fitted 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 not welded, three external door plates to be bolted on, using a minimum of 6 – 50x50x3mm (square) or 55x40x6mm (rectangular) MS tags and bolted with either 8mm or 5/16th high tensile bolts with no protrusions.
(iv) If individual pieces are used then a minimum of 4 – 50x50x3mm (square) or 55x40x6mm (rectangular) MS tags and bolted to either 8mm or 5/16th high tensile bolts to each piece with no protrusions.
(v) Plates/tags to be solid square or rectangular with one only hole for the mounting bolt. (01/10/16)

Fig 3. (i) Typical Roll Cage

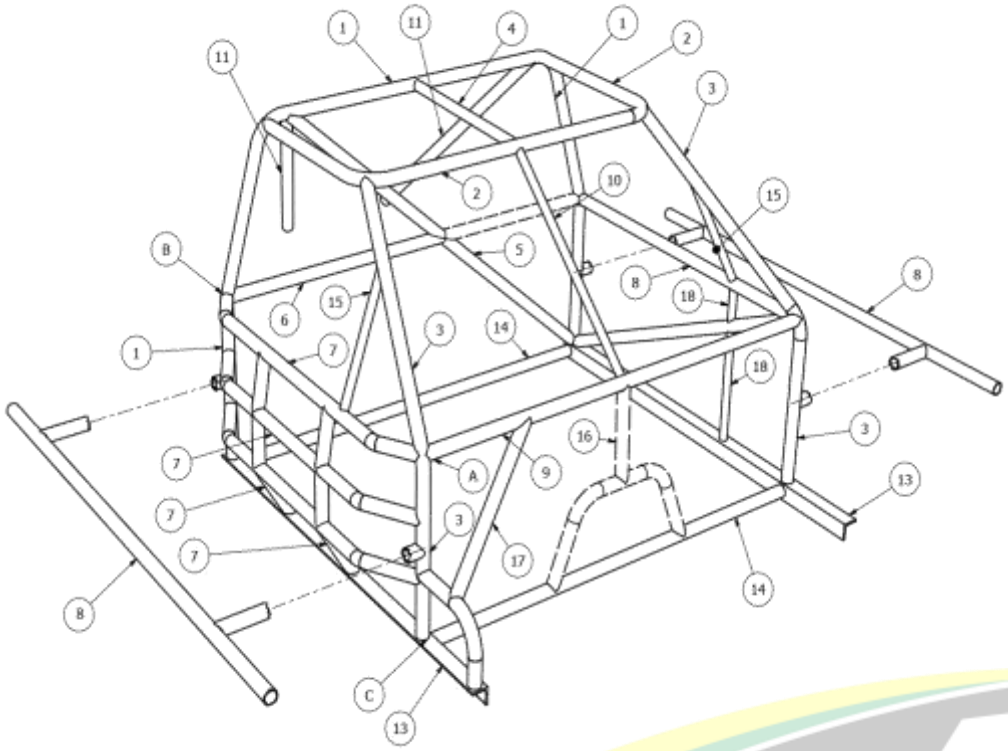


Fig 3 (ii)

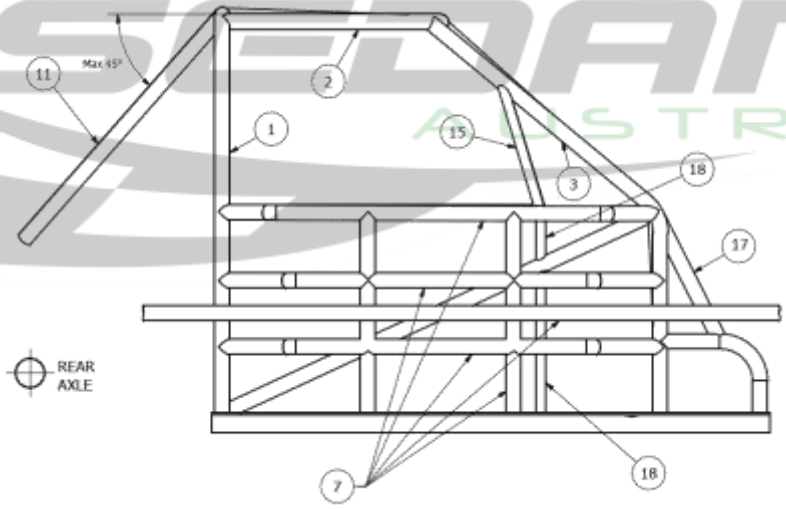


Fig 3 (iii)

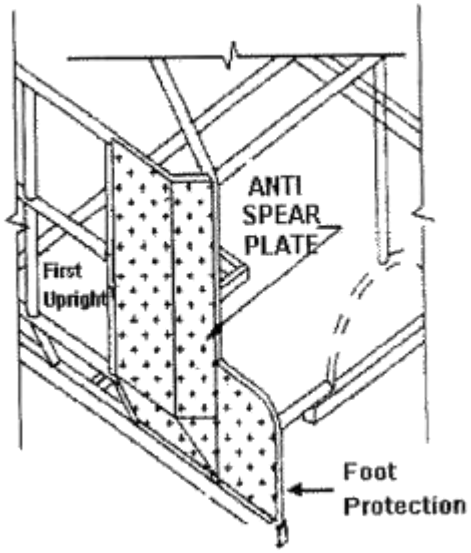


Fig 3 (iv)

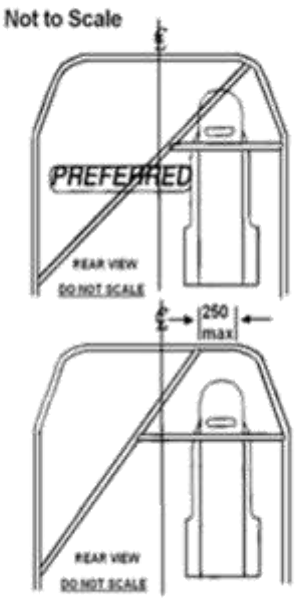
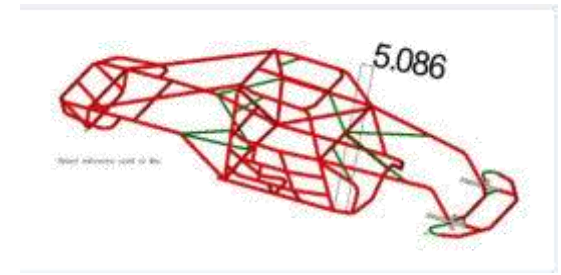


Fig. 6 (iii)

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)

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 of 50x50x3mm (square) or 55x40x6mm (rectangular) MS tags will be required when using a removable Head Plate. (01/07/17)
c) Plate to be mounted, from above, with 10 x 8mm dia. High Tensile bolts, 3 each side, 2 front, 2 rear. Heads of bolts to be downwards and spot welded e.g. no protrusions.
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/tags to be solid square or rectangular with one only hole for the mounting bolt. (01/10/16)

Fig 4 Head Plate

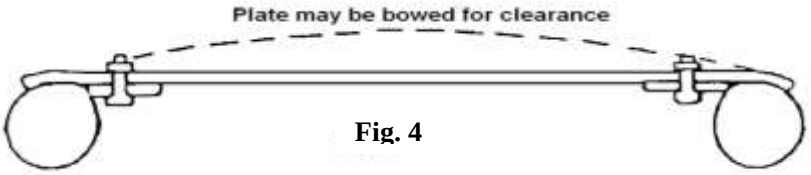


Fig. 4

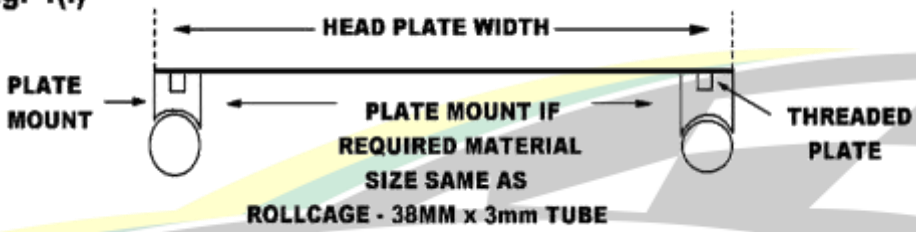
ALTERNATIVELY

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 38x3mm tube – stub length is determined by height required to gain 50mm clearance.
Stubs to be end capped and threaded for mounting purposes.

3. BUMPER BARS & OPTIONAL EXTERNAL BARWORK

a) From 1st July 2016 all Junior Sedans produced with plastic bumper/stone trays will be required to have the original fitted or as per subsection c).

b) OEM type steel bumper bars NOT permitted, must be replaced with maximum 38x3mm CHS. Vehicles with plastic bumpers must have the bar work behind the bumper.

c) Plastic bumpers can either be original for vehicle or one of similar size and profile made from the original materials or a fibreglass replica.

d) As of the 1st July 2016 section d) is relevant for Datsun's and Toyota's only. Original or replica stone tray must be fitted, may be of original material (metal), fibreglass or race car plastic replica only.

e) Bumper covers must be fitted with round head bolts aluminium rubbing strip 40x3mm may be fitted between bolts to support bumper cover.

f) Any front mud protection guards under cars to protect engine or suspension components from mud and dirt must not be lower than 150mm from ground level. Not to attach to front bumper.

g) Bumpers to be securely mounted in original position using supports of a minimum size, 100mm from rear of bumper tube. The maximum gap between rear of boot panel and rear bumper is 100mm Maximum, support size, 38x3mm CHS. I.e. Gussets are not to be used. For purposes of maintaining 100mm clearance of any bracing from rear of bumper tubes; rear of bumper tubes are determined as the inner side of the tubes of both front and rear bumpers. (14/09/19)

h) Bumper or supports are not to tie to under-guard bar work.

i) No Non-OEM skirts to be fitted to bottom of bumpers.

j) FRONT bumper maximum return 300mm, minimum 100mm, by max. 38x3mm CHS.
   (i) Bumpers are to remain hollow.
   (ii) Corners and ends of front and rear bumpers to be radius formed, 100mm minimum.
   (iii) 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 into the stay bars.

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

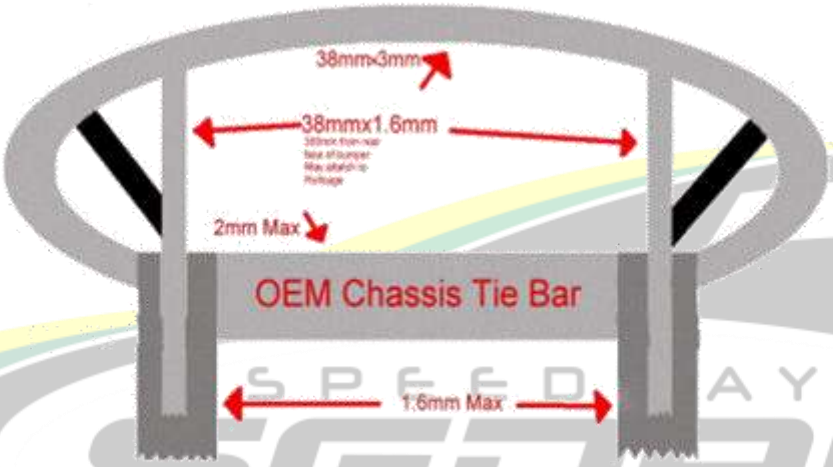


Fig. 10—Option 1
Bumper supports forward of the OEM radiator support panel position to be maximum of 1.6mm x 38mm max.

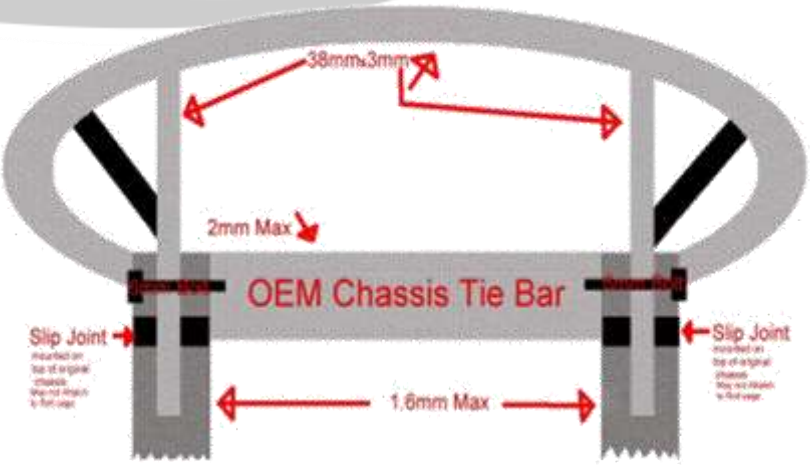
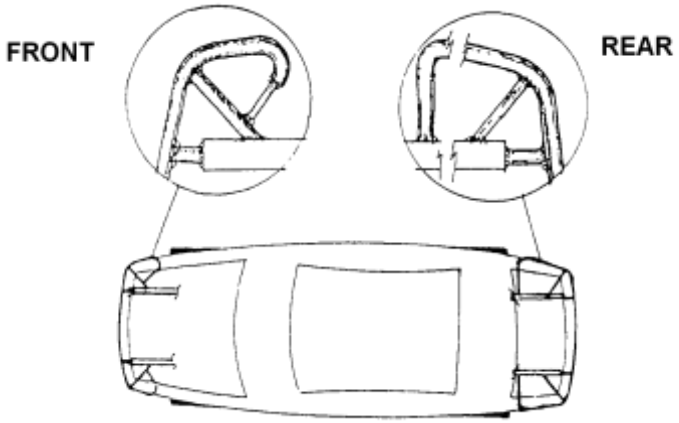


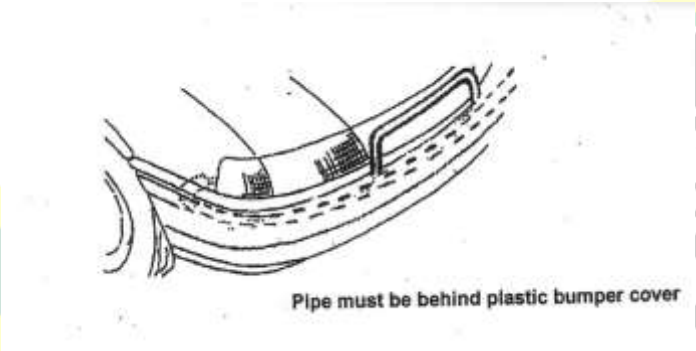
Fig. 10—Option 2
Bumper supports using 38mm x 3mm tubing maximum must use a stepped slip joint as per diagram using 1 x 5/16 or 8mm bolt each side.

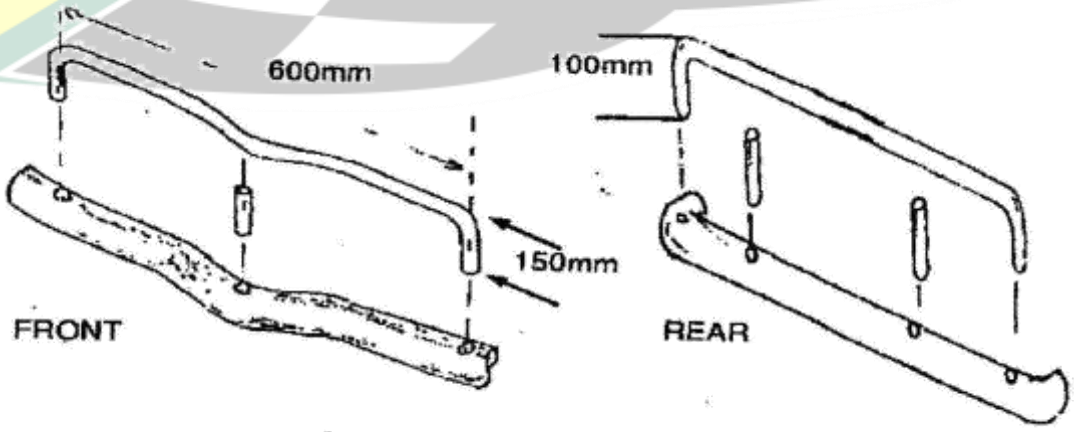
l) Corner plates on top edges of either bumper not permitted.

m) **REAR OVERRIDE BAR**. An override bar may be used.

Constructed of maximum 25x3mm 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. Fig 10 (i). Brace bars are not to be used. Fig 10 (i)







n) **FRONT OVERRIDE BAR**. An override bar may be used.
Constructed of maximum 25x3mm 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 10 (i)

o) 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.

p) RUB RAILS (01/07/2020)

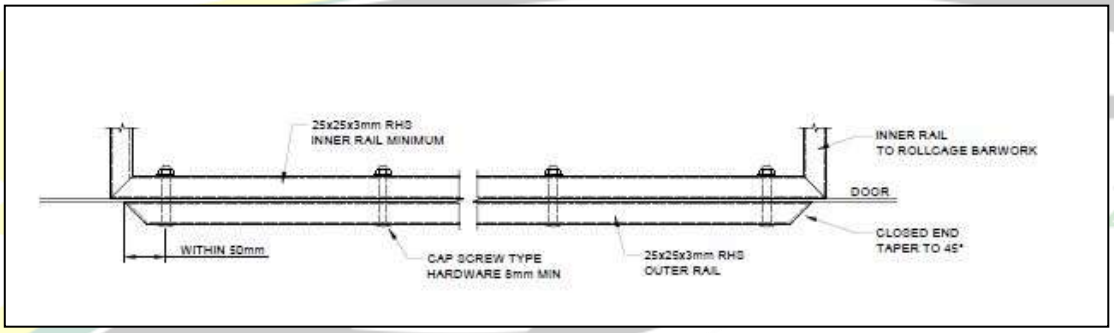
Rub Rails are an optional fitment on an SSA Junior Sedan. They are to be attached between front and rear wheel arches. Rub rails on rear quarter panels behind rear wheels are NOT permitted.

GENERAL

(i) Rub 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) Rub rail to be attached to body and inner rub rail support with a minimum of 4 evenly spaced attachment points.
(iii) Inner rub 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 regardless of whether either outer rub rail option is used or not to avoid a hook up point in the event of door panel damage.
(iv) Rub rail attachment bolts are to be of round head, cup head, cap screw type hardware and must be a minimum of 8mm.
(v) 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.

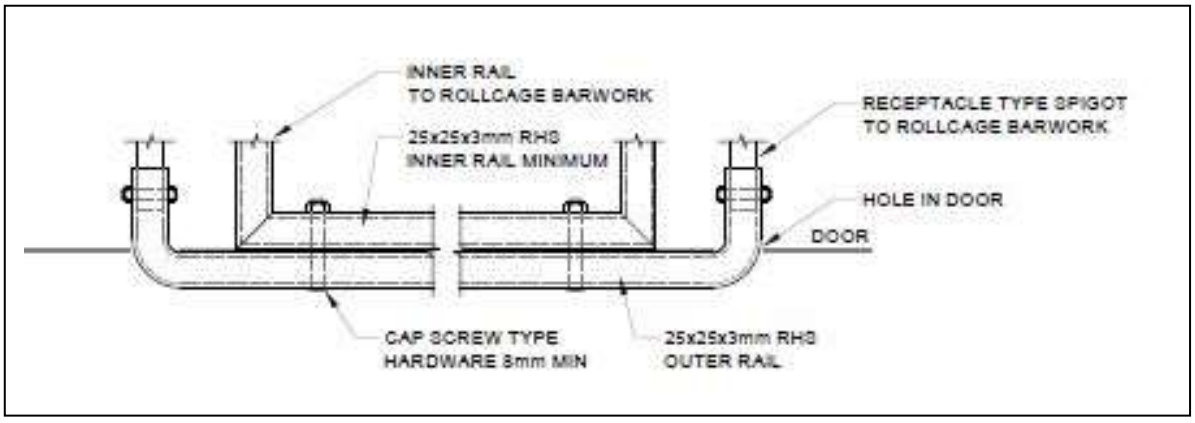
Option 1

(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 rub 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 above.



4. ENGINE

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

(i) Engine to be mounted with rear face of the engine block in the original position.
(ii) Engine offset is not permitted.
(iii) Engine Sealing is Compulsory.
(iv) 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 the book.
(v) All engines are to be sealed to take part in Practice or Race Meetings.
(vi) Engine Identification tag is to be ORANGE – to be attached to timing cover seal using wire looped through engine seal. (01/07/17)
(vii) Seals to be fitted: 1 x sump, 1 x timing cover and 1 x cylinder head
(viii) The car owner is to have a copy of the engine sealing and daylight inspection forms with log book at all times.
(ix) ECU must be sealed and the completed sealing form is to be kept with the Log Book at all times. See below in 4.1.1 a) for the process. (01/07/16)

4.1 – EFI CONFIGURATION

All items within this EFI section are subject to review at any time to maintain parity across the division.

Notification of Intent to Build an EFI car must be advised to SSA Inc – form available – Click Here for download.

To enable the collection of data and ensure constant review of the transition to allow EFI cars into this division you are also required to submit EFI Race Feedback forms – form available Click Here for download.

If a restrictor plate is required they will be available through the SSA Inc National Office. It will be stamped with a specific number and identification mark. Method of fitment will be tacked or sealed in the air intake of the throttle body (so it cannot be easily removed). The throttle body/plate bolts will have a seal fitted (similar to the engine seals)

Approved Makes and Models (updated 14/09/19)

- Daihatsu Charade 1987-92 1993-96 G102 and G200 Range – 1300 OHC 4 Cylinder 16 valve SOHC
- Daihatsu Charade 1993-96-00 G200 Range as per OEM – 1500 OHC 4 Cylinder 16 valve SOHC
- Hyundai Excel 1989-95 X2 – 1500 SOHC
- Hyundai Excel 1995-97 X3 – 1500 SOHC
- Mitsubishi Lancer 1996-2001 (CE) – 1500 SOHC (16/09/17)
- Mitsubishi Mirage 1996-2001 – 1500 SOHC (14/09/19)

4.1.1 E.F.I. is permitted to use with the following restrictions. Effective 1st July 2015

a) SSA Inc. approved and sealed ECU. All computers are to be sealed by Cool Drive Distribution only. (See below for details for Cool Drive Distribution). SSA Inc reserves the right to exchange or swap sealed and tested computers supplied from Cool Drive Distribution at any time during a race meeting. The ECU must have legible compliant identification on the unit to be deemed sealed. (01/11/17)

The only authorised branch for ECU sealing is:
Cool Drive Distribution, U5/3 Deakin Street, BRENDALE QLD 4500
Phone: 07 3481 5066 Option 4 Email: paulmasterson@cooldrive.com.au
Website: www.cooldrive.com.au

There is an ECU/Computer Sealing Form to be completed and forwarded along with your computer when sending for sealing – the form is able to be downloaded Click Here

The competitor is responsible for the downloading of the ECU Sealing form and forwarding along with the ECU to be sealed. It will be completed by Cool Drive Distribution and a copy returned with your ECU.

Speedway Sedans Australia have introduced a Seal Sticker which will be attached to all sealed ECU's – this will be placed on the sealed unit by Cool Drive Distribution – removal or tampering of this sticker will result in the need for the unit to be resealed.

From 01.07.17 all ECU's to be resealed with the SSA Inc Seal sticker and an ECU Sealing Sheet placed in the Log Book (01/07/16)

Note – to enable Cool Drive to test and seal your Lancer ECU you need to send the original key, key reader and immobiliser when sending the ECU for sealing. However, if the original key, key reader and immobiliser are not available contact Cool Drive direct PRIOR to sending the ECU for sealing. (01/07/18)

Location of the ECU is to be in a position that is easily visible for inspection purposes. (01/07/19)

b) Camshafts are to remain STD as per manufacturer's base model without modification, No variable cam timing (VCT) or derivatives. The camshaft specification may be changed in the future by SSA if required to maintain parity between all cars.

c) All approved makes and models must use original standard computer, DFI module and coil packs.

d) Standard memcal only to be used for make / model and series of car.

e) Standard inlet manifold and injectors for model of car. No High output or performance derivative of the make or model allowed.

f) Heads are to remain standard with facing as per current rule book. The original casting number on the head must remain.

g) Engine block can be bored to a maximum 40thou oversize for reconditioning purposes only. EFI engine blocks using multiple engine cylinder sleeves may use up to 4 on aluminium blocks.

h) Standard exhaust manifold base model only remainder of exhaust as per current junior rule book.

i) All standard sensors must be fitted and be operating including fuel pressure regulator except oxygen sensor and coolant sensor.

j) All engine components must be fitted (air cleaners etc).

k) All other engine specifications as per NON-EFI engines.

l) Header tanks for fuel pumps not allowed & no surge tank or cooling chambers.

m) No adjustable fuel pressure regulators.

n) Rev limiter to remain OEM.

o) If a restrictor plate is required they will be obtained through the approved SSA Inc National Office, it will be stamped with a specific number and identification mark. Method of fitment will be tacked or sealed in the air intake of the throttle body (so it cannot be easily removed). The throttle body/plate bolts will have a seal fitted (similar to the engine seals).

p) Engine oil pickup gauze may be replaced with larger size (not so fine) gauze. (01/07/18)

4.1.2 Approved *EFI specific items*

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

a) Standard size OEM injectors are to be used for make and model of car. Inside diameter not to be increased or decreased.

b) Any passenger car fuel pump permitted up to equivalent of Bosch 044 pump allowed. Fuel pump must be fitted with engine monitoring relay to stop fuel pump running when engine stops. Fuel pumps to be mounted in the boot area. Fuel pump to be external only. (16/09/17)

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

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

e) 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.

f) Flexible fuel line can pass through the cabin area, must be one piece.

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

h) If a return line is used, it must be fitted with a one way valve, at the fuel tank.

i) Computer control units are restricted. If OEM unit includes ignition, they must perform this function.

j) Size of throttle body to be OEM type and size for model being used and to be standard in INTERNAL and external appearance. (No machining or alteration permitted). IF REQUIRED An SSA Inc approved restrictor to be fitted to the air intake side of the butterfly to reduce horse power of engine to maintain parity. Regular checks on correct sizing will be carried out.

k) Checks will be on fuel and OEM equipment. Any modification to throttle body or butterfly is not permitted other than to insert restrictor/plate.

l) Non-OEM fuel injection not permitted. Forced induction not permitted.

m) Return springs must be fitted to each butterfly shaft (inbuilt springs accepted).

n) Protective wire gauze or air cleaner to be fitted to prevent entry of foreign objects to throttle body and also to act as a flame trap. OEM air filter box and airflow meter may be notched to allow for bar work but must be in use and remain under the bonnet. Flat panel filter to remain. (24/11/18)

o) 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.

4.2 ENGINE: CARBURETOR CONFIGURATION

a) In the engine bay one should see the basic items as in the road car, e.g. ignition, coil and distributor, fuel pump, air cleaner and charging system, all in use on the engine.

If a standard unmodified cylinder head fits the engine block without modification it can be used. Inlet manifold and exhaust manifold must bolt on without any modification to either head or manifold. Your original carburettor must also fit without modification to manifold or carburettor.

b) Engine to be maximum 4 cylinders reciprocating ONLY. Maximum capacity 1200cc rear wheel drive, 1100cc front wheel drive and 1000cc OHC. Rotary, turbo or supercharged engines are NOT permitted. Mechanical fuel injection systems are not permitted.
Others, not included above, must be approved by the National Technical Committee prior to construction.

c) Engine to be the type and size for the model.
Any doubts about engine sizes etc., will revert back to Manufacturer's 'base model' of the registered series.

d) Engines will be inspected on the basis that all parts used in/on all engines must comply with the specifications/dimensions specified in the original (O.E.M.) manual produced by the manufacturer for the standard engine with the exception of the listed permitted modifications.

The Owner/Driver is responsible to prove the above and produce information when necessary, to validate the claim.

e) Refer, Australian Standards 'AS 4182 – 1994 Code of Practice for Engine Reconditioning Standards'. ENGINE BALANCING: The balancing of any engine componentry or removal of any balance shaft in this class is STRICTLY PROHIBITED. The only tolerances allowed are the drill holes in the crankshaft as done by the manufacturer (O.E.M.). The Conrods cannot have any metal removed or polished. The pistons cannot be machined or lightened. Copper head gaskets are not permitted. Head gaskets to be standard replacement parts.

f) A standard engine is allowed not more than .060" overbore and .060" for head facing.

g) Engine Block: The maximum allowable cylinder sleeves to be fitted to an engine block are two in total.

h) OFFSET boring of bearings and/or cylinders, offset grinding of crankshaft or angled facing of head to block surfaces is prohibited.

i) ENGINE to be of standard stroke, con-rods and crankshaft to remain OEM parts for the engine model; the fitting of other model, make or specially built cranks and/or rods not permitted; port sizes and casting finish as for base model; standard flywheel (not lightened). Flat top pistons allowed. No forged or racing pistons. Some Charade pistons will protrude above engine block.

j) CAMSHAFT is not restricted. The use of multi key way timing gears or recut of OEM keyway or dowel is allowed. Offset key may be used. No other gears or modification allowed. Camshaft followers to remain hydraulic if as per base model.

The use of performance parts in the valve train is PROHIBITED, e.g. Roller rockers, cam followers. Adjustable or variable cam timing gears are not permitted and can only be standard O.E.M equipment gears. No variable adjustable cam gears allowed.

k) Engine sump to be visually standard externally.

l) Distributor must be OEM for make and model, both internally and externally and have all original function. Advanced weights must be OEM. Advance weights and vacuum advance unit must be OEM, vacuum hoses are optional. Upon removal of the distributor cap, by holding and moving the rotor button it must have advance and retard movement. The use of an OEM standard replacement electronic ignition is permitted. (01/07/18)

m) No double valve springs.

n) No cabin mounted engine breathers.

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

p) Twin outlet exhaust manifolds for Datsun 1200 permitted.

4.2.1 – CARBURETOR

a) DEFINITELY not more than one carburettor as originally fitted.

b) For all cars, the carburettor is to be OEM standard, including venturi size, except that an adjustable main jet may be used; float bowl position relative to engine, as in original vehicle.

c) The choke butterfly and shaft may be removed**.**

d) A return spring MUST be fitted to each throttle shaft of the carburettor (in-built springs acceptable).

e) That any type air cleaner may be used. No ducting to air filter or carburettor unless O.E.M.

f) That any use of upper Cylinder lubricant via carburetor or vacuum system is non-compliant. Any vehicle found with these types of systems will be deemed non-compliant. (01/07/2020)

g) Vacuum hoses to carburettor fitment not restricted.

h) The use of OEM carburettor to manifold heatshield only is permitted.

5. BATTERY AND ELECTRICAL SYSTEM

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

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

c) Battery mounted within the cabin area to be held down by an angle iron/steel/aluminum frame (i.e. 25x25x3mm) both top and bottom.

d) Regardless of the location; the battery will be mounted with a minimum of 8mm / 5/16" bolts or rods. (16/09/18)

e) The use of any battery over the size of N70ZZ is not allowed and one only permitted. (01/07/16)

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

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

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

i) An engine "KILL" switch, suitably marked with a contrasting colour, for method of operation, must be of lever/twist type only must be located centrally and forward of the windscreen mesh. This switch must also isolate the battery, and any other electrical item. (01/07/19)

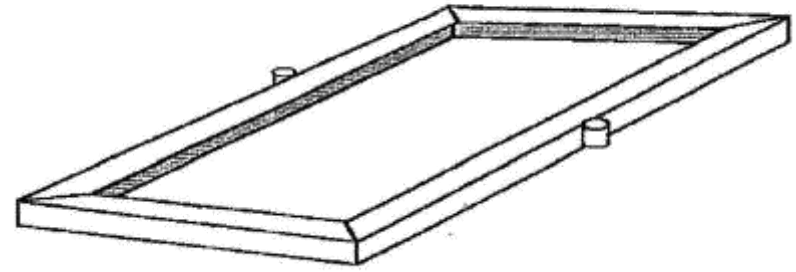
j) Electrical switches NOT to be mounted through the floor.

k) Electrical wiring not to be attached to fuel lines.

l) All electric fuel pumps to be controlled by an engine monitoring relay, to stop fuel pump running when engine stops. (EFI models only).

m) Data logging dashes are not permitted.

BATTERY CLAMP/HOLD DOWN FRAME



FRAME: 25 X 25 X 3mm ANGLE IRON

FIG. 8

6. EXHAUST SYSTEM

a) Exhausts must be within local noise level requirements. Recommended 95 dba.

b) Exhaust manifold to be OEM standard. Original casting marks must be visible. No modification to any part of the OEM standard manifold is allowed. Refer to photos in Section 19. (31/10/18)

c) Remainder of the exhaust system is free, provided that it has not more than one outlet pipe, it is vented to the side or the rear of the vehicle behind the driver and does not protrude beyond the body line. Fig. 9

d) Internally ducted exhaust system, if used, shall vent through the body, no higher than 100mm above the door sill panel, and to finish flush with the door panel.

e) Driver to be suitably insulated from exhaust system.

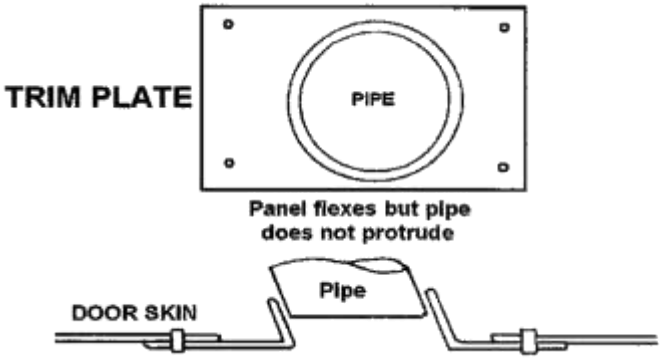
f) Insulation and firewall sheeting not to exceed 150mm above the drive shaft tunnel. Sheeting to cover exhaust within 50mm of exhaust, or oil cooler hoses. No other extra sheeting allowed in cabin area.

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

h) The muffler/s must be securely attached to the vehicle.

i) EFI Charades 1.3 and 1.5 litre – CAT must be bolted direct to manifold – the interior of CAT can be removed. (01/07/19)

Fig. 9



7. COOLING SYSTEM:

a) Radiator may be changed and/or relocated.

b) All radiator hoses to be of fabric reinforced material, plain molded rubber hoses not permitted.

c) Cooling system to have a manual pressure relief tap/cap fitted to the top tank of the radiator to release pressure before loosening or removing radiator cap. Tap to be fitted with hose to direct steam to ground. Push button pressure relief cap not permitted. Lever vent type may be used.

d) Radiator may be mounted inside the cabin, provided that it is mounted as low as possible in the rear of the vehicle, and suitably isolated from the driver. The upper half of the rear window opening MUST NOT be obscured by the radiator.

e) Radiator ducting shroud, if used, to be a maximum of 600mm forward of the radiator and must not obstruct more than half the rear window height.

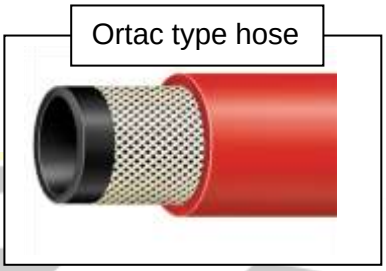
f) Cabin mounted radiators – (01/07/2020)

(i) that are of a crimped-on plastic tank or Copper soldered construction MUST have BOTH tanks covered to protect driver and others in event of tank becoming dislodged or damaged.

ii) Proprietary or custom fabricated radiators that are of Aluminum construction that have tanks TIG welded onto core, e.g. AFCO, KENCO, KEYSER, PWR etc DO NOT require tanks to be covered.

iii) ALL radiators MUST have radiator cap completely covered.

iv) Water spray bars or jets are NOT permitted.



g) Pipes leading to the radiator are to be one of the following (01/07/2020)

- steel,
- aluminum,
- copper material,
- Nonconductive reinforced Ortac type hose,
- PTFE Hose.

All cabin internal pipes are to be ducted or lagged with suitable material.

Stainless steel externally braided hose is accepted e.g. Earls, Speedflow, ProFlow etc that utilise the correct JIC or A/N Dash type fittings that have been professionally installed as per correct fluid transfer practice are not required to be ducted or lagged.

h) Pipe to be securely mounted on the inside of the roll cage.

i) Hoses to be as short as possible and fitted to the radiator from the rear side.

j) Cabin mounted fans to have a shroud or suitable guard.

k) All header tanks, hoses and caps in cabin area to be covered as per radiator tanks and hoses. Must be mounted below half window height.

l) No electric water pumps permitted.

m) In a car with a rear firewall – Rear radiator and shrouding to be rearward of Roll Cage main hoop mounted fully in the rear cabin area. (01/07/19)

n) In a car with NO rear firewall – Rear radiator and shrouding to be rearward of Roll Cage main hoop mounted fully in the rear cabin area and not further back than the front edge of the rear suspension towers. (01/07/19)

8. TRANSMISSION/DRIVELINE:

a) Gearbox and diff housing to remain standard OEM for make and model. Not Borg Warner to Borg Warner i.e. Corolla must use Corolla diff housing. Ratios are free as long as it fits in correct housings. All OEM gears must be operational. Rear axle centre line to be in OEM position.

Gear box to be model to model – example – Charade to Charade; Excel to Excel; Lancer to Lancer; Corolla to Corolla; Sunny to Sunny; (16/09/17)

b) REAR WHEEL DRIVE CARS – tail shaft/s must be fitted with 360º hoops at front and rear. (01/07/20)

(i) Tail shaft loops - steel strap minimum 40x3mm or 6mm chain or 6mm wire cable to be securely fitted around the front and rear of tail shaft within 150mm of universal joints to prevent the tail shaft and/or shafts dropping in an event of breakage. The top part of 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 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. (01/07/2020)

(iii) If there is a universal joint in the middle of the tail shaft a third tail shaft loop will be required. (01/07/19)

c) Scatter shield: A scatter shield must also be fitted: minimum 3mm steel or 5mm alloy minimum 150mm wide. It must cover the upper 180 degree of the bell housing and be securely attached to protect the driver's feet and legs from a clutch explosion. Front wheel drive cars must cover 180 degrees to the rear side of the bell housing, or attached to the front firewall immediately behind the flywheel.

d) The differential MUST be locked. Differential pinion angle to remain O.E.M. standard for make and model.

e) REAR AXLE BEARING RETAINING RINGS: 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 to the axle 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)

f) OEM needle roller bearings in Daihatsu Charade gear boxes may be replaced with an internal race bush. Part number #ir32x37x30ina as per transmission reconditioners general practice. Refer to image (01/072020)

9. STEERING:

Original for year, make, model and body type, must be used.

a) Must be in sound condition. Steering joints to be split pinned as required.

b) Wire spoke or wood rim steering wheels not permitted.

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

d) Hub of steering wheel to be padded with dense resilient foam, and covered.

e) To reduce thumb and wrist injuries, the use of "PAW SAVER" type disc steering wheel is permitted.

f) Quick release steering wheels are mandatory – effective 01 July 2019.

g) Modifications to Steering: No quick steer or reduction units allowed. O.E.M. only.

h) Steering, from lock to lock to remain O.E.M for make and model.

i) Pedal position must remain in original position. Except Accelerator pedal.

j) Pedals may be extended. No second set of pedals to push on the first set of pedals.

k) Power steering is only permitted in EFI cars that came out with it.

10. SUSPENSION

An SSA Junior Sedan race car must use a complete metal body with suspension mounting points in original position and being used.

Suspension mounting points are defined as;

(i) Mounting points of suspension arm – either end;
(ii) Strut either – end;
(iii) Shock absorber – either end;
(iv) Springs – either end.

a) All arms, rods, struts, spring shackles and sway bars must remain standard and function as manufactured as per the manufacturer for make/model/series and body variant being used unless otherwise specified. (01/07/2020)

b) Shock Absorbers/Strut Inserts: (01/07/2020)

(i) All cars may change shock absorbers/inserts to aid handling and stability. OEM or OEM replacement units ONLY.
- External adjustment of shock absorbers/inserts are NOT permitted.
- Remote or external canister type shock absorbers/inserts, OEM replacement or otherwise are NOT permitted.
- Increasing or decreasing of gas pressure via a Schrader valve attached to shock absorbers/inserts OEM replacement or otherwise is NOT permitted.

(ii) No shock absorber or McPherson Strut insert is to have the capacity to be adjusted whilst in situ and mounted in car.

(iii) OEM replacement shock absorbers for make, model and series of car are permitted. E.g. Koni and Bilstein
- Competition or rod ended racing type shock absorbers such as AFCO, PRO, FOX, GENESIS etc are NOT permitted.

(iv) OEM Struts and OEM replacement struts must be for vehicle make, model and series of car being used ONLY, be listed in an automotive parts catalogue and be readily available from an automotive parts supplier. Fabricated non-OEM strut tubes are NOT permitted.

(v) Mounting ends on shock absorbers and struts must remain OEM. i.e. pin type mount to remain pin type.

(vi) OEM spindle clevis clamps on OEM strut tubes must remain completely OEM and cannot be modified or altered in any way. i.e. elongation or enlargement of bolt holes is NOT permitted.

(vii) Fitment of Front and Rear Strut inserts:

All inserts must be installed as per the manufacturer instruction of insert, installation method cannot be modified or altered.
The top swaged section of strut tube may be removed and the insert installed, with the insert attached via bolt through the base of strut tube or retained by a gland nut and threaded collar supplied with insert and welded to top of remaining OEM tube.

c) Coil Spring to remain Coil Spring, Leaf Spring to remain Leaf Spring.
   (i) Coil spring spacers are permitted to fit above the installed coil spring.
   (ii) If using small diameter coil spring, the OEM perch must remain completely OEM.
   (iii) Coil spring is to be retained by the coil wire metal clamps. No other method to secure coil springs is permitted. (01/07/2020)

d) Adjustable coil-spring perches on front or rear strut tubes OEM or otherwise are NOT permitted. (01/07/2020)

e) A strut brace between front towers is permitted.

f) Adjustable suspension arms, Panhard rod/watts linkage's etc are not to be used.

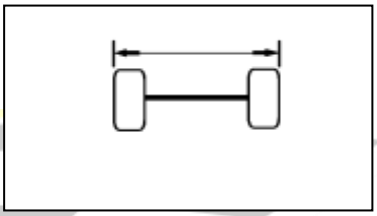
g) NO COILOVERS, AIR SHOCKS or PUMP-UP SHOCKERS ETC

h) No lowering blocks allowed.

i) The use of front and rear aftermarket caster and/or camber kits/adjusters are permitted. To be fitted without any modification. Multiple adjusters can be used. (01/07/19)

j) It is highly recommended that the rear stub axles on Mitsubishi Lancer and Mirage – where the rear stub axle attaches to the rear swing arm be reinforced. Recommended method as per the images below. (01/07/2020)

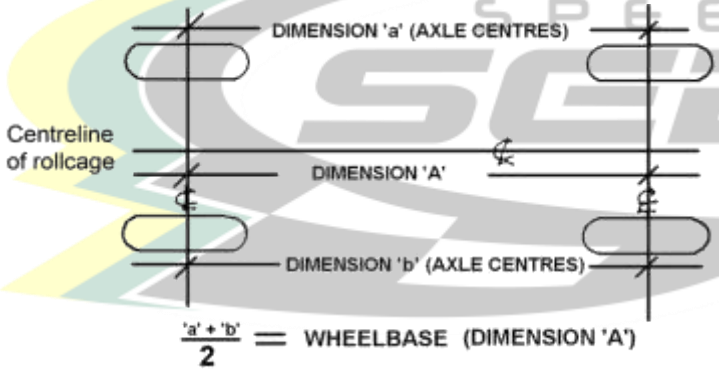
11. WHEEL TRACK



Wheel Track to be within 50mm of standard measurement (absolute). Measured from outside of one rim to the outside of the opposite rim. (Wheel/tyre measured at stub axle height, and averaged front and back of the rim). Measurements (Table 8) include 160mm for measurement (155mm rim width and 5mm rim thickness) 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) All wheels must be steel or alloy construction.

b) Alloy or Mag wheels may be used, but must be of one-piece construction. Correct matching nuts must be used.

c) OEM steel rim centres may be modified using steel 6” outers (blanks).

d) Rim diameter to be max. 13”. Max rim width 155mm (6”) Fig 11. Custom made wheels not permitted.

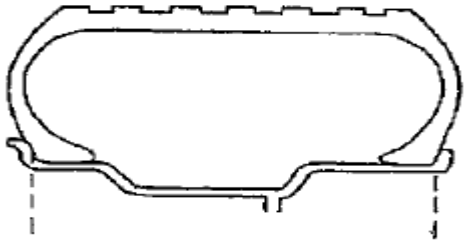
e) No bead locks.

f) Wheel covers (discs that cover the wheel) are not permitted.

g) Wheel spacers may be used. Maximum of 50mm spacer/s per wheel. (01/07/19)

h) Wheel studs not to protrude further that ½" (12mm) past the outer face of the wheel nut.

Fig 11



14. TYRES: (01/07/2020)

GENERAL

a) Tyres be in good condition.
b) All manufacturer's markings to be visible on side wall.
c) Grooving of tyres is permitted.
d) Safety inner tubes permitted.
e) Any type of lubrication (Grease or oil etc) is not permitted on tyre side walls.
f) Tyre shine type cosmetic products are permitted for application to side wall only.
g) The compliance of any permitted tyre can be reviewed at any time.

PERMITTED TYRES

a) Road legal radial tyres
b) Maximum side wall marking width 185
c) Maximum speed rating H
d) Tread wear rating of 220 and above as marked on side wall. Tyres with no tread wear marking may be used provided they meet all other specifications listed.
e) The tyre must have been listed or is listed in a road tyre section of the manufacturer's tyre catalogue and have been commercially available.
f) Road legal re-treaded tyres. Tyres must have the correct remoulder's speed rating etc and be legible as per AS 1973-1985.

NON-PERMITTED TYRES

a) Racing tyres.
b) Tyres that are road legal for use on Australian roads that have been designed and marketed for motorsport/competition use.

IF IN DOUBT, PLEASE SEEK CLARFICATION FROM SSA INC TECHNICAL COMMITTEE

15. BRAKES

a) Foot operated O.E.M. brake system to remain standard and operate correctly, on all four wheels, and be effective at race speed.

b) No brake isolation switch/s or drilled/lightened disc rotors allowed.

16. FUEL

THE USE OF COOLING SYSTEMS FOR FUEL IS NOT ALLOWED.

All cars are to comply to the following fuel specification;

Petroleum (01/07/18)

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 is permitted.
e) Fuels sourced from refinery or depot supplied fuels that are different or superior qualities are NOT permitted.
f) Ethanol and 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 and/or additives that improve fuel quality or increase octane (RON) are NOT permitted.

DEFINITION- RON = RESEARCH OCTANE NUMBER.

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

17. FUEL TANK AND FUEL SYSTEM

a) Original fuel tank to be removed and replaced by a tank of no more than 30 litres capacity or 8 US Gallons.

b) Tank may be constructed of minimum 1mm steel or minimum 3mm aluminium alloy. All joints to be welded in a professional standard.

c) Competition type "plastic" tank permitted. Jerry can or boat tank may be used, but must comply with the above metal thicknesses.

Plastic marine tanks have been suggested for use instead of jerry cans as these are a safer option to the jerry can.

d) All fuel tanks to be constructed with pick-up fittings etc., coming from the top, bottom or lower sides of the tank.

e) The boot floor must remain, except for a hole 25mm larger than the fuel tank, directly below the tank. Cars that have cross members across the boot floor pan area; the drilling of multiple holes as large as possible that will allow spilt fuel to escape quickly is allowed. Cross member not to be cut or drilled. If rusted body material has been removed from the boot area it must be replaced with 1.6mm steel. No cutting out of boot floor other than for fuel tank allowances. (01/07/18)

f) Filler caps to be positive seal and be behind and below the fire wall.

g) Lever on cam locked caps to be clipped.

h) Tank vent to be fitted with an anti-spill device and must go through the floor of the boot.

i) Fuel tank to be securely mounted in the boot area of the vehicle 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 firewall minimum 0.9mm metal. (01/07/19) 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)

j) 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 barwork on all sides.

k) 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 each side of the fuel tank and be 25mm minimum clearance all around tank and filter, projecting a line from the rear wheel centre to the bar. Refer to photos in Section 19. (24/11/18)

(i) 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.
(ii) Underslung fuel tank is a fuel tank that has some portion below the bumper or chassis rails and therefore is to have a fuel tank protector bar fitted.
(iii) 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 not to constitute bumper mountings)
(iv) Fuel tank protection bars must have radius corners as per Fig 12. No straight side pipes for jacking to extend from protection bars.

FUEL LINES

a) Fuel line from tank to engine, is to have a flexible section within 75mm of the tank, the line must be securely fixed in position.

b) 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).

c) 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)

d) 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)

e) High pressure lines are to use high pressure hoses and fittings.

f) Carburettor Cars Only: The fuel line to the engine must be fitted with a quick action NON-LEAK fuel tap, in working order. The actuator or switch is to be securely mounted within easy reach of the driver, and crash crew, and clearly marked “FUEL” ‘ON-OFF”.

g) Solenoid valves or remote mounted fuel taps are permitted.

i) Flexible fuel lines may be run through a metal conduit in the cabin area, but wiring in the same conduit is not acceptable.

j) Front and rear firewall to be sealed around fuel line or conduit. If a return line is used, it must be fitted with a one-way valve.

k) OEM electric fuel pumps permitted if standard fitment. Can be replaced with non-high-performance pump.

l) Electric fuel pump MUST be isolated from the Driver by a firewall and fitted with an independent earth to case, and switched off by the KILL switch AND, by an engine monitoring relay.

Fig. 12

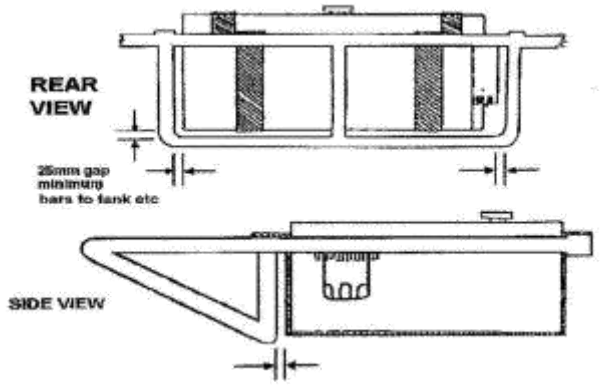


TABLE 1. LIST OF APPROVED/ACCEPTED MAKES/MODELS – if the car you are interested in is not listed here you must make application for inclusion – prior to commencing to build – your car may not be automatically accepted. Click Here

DAIHATSU	**FORD**
Charade XTE 81	Escort MK 70-73
Charade XTE 81-83	
Charade CSCX 83-85	**HOLDEN**
Charade CSCX 85-87	Torana HB 67-69
Charade G100 87-93	Torana LC/LJ 69-75
Charade G102 87-93	
Charade G200 93-96-00	**HYUNDAI**
	Excel X2 89-95
LEYLAND	Excel X3 95-97
Mini 1100 69-71	
Mini Clubman 1100 71-73	**MITSUBISHI**
	Lancer CE 96-01 2 Door
NISSAN/DATSUN	Lancer CE 96-01 4 Door
1200 Coupe 70-74	Mirage 96-01
1200 Sedan 70-74	
120Y 74-79	**SUZUKI**
Sunny 79-81	Swift SA 84-88
	Swift SF 88 - on
TOYOTA	
Corolla KE20 Sedan 70-74	
Corolla KE25 Coupe 70-74	
Corolla KE30 Sedan 74-78	
Corolla KE35 Coupe 74-78	
Corolla KE50 Lift Back 77-78	

TABLE 2 ENGINE LIST FOR VEHICLE MODEL – CARBURETED

MAKE	MODEL	STANDARD BORE	STANDARD STROKE
DATSUN	1200, 120Y, Sunny	73.0mm	70.0mm
DAIHATSU	Charade	76.0mm	73.0mm
FORD	Escort MK 1	80.978mm	53.29mm
HOLDEN	Torana	77.77mm	60.96mm
LEYLAND	Mini 1100	64.588mm	83.72mm
SUZUKI	Swift SA SF	74.0mm	77.0mm
TOYOTA	Corolla 1200	75.0mm	66.0mm

TABLE 3 – ENGINE LIST FOR VEHICLE MODEL – EFI

MODEL	ENGINE DESCRIPTION	STANDARD BORE	STANDARD STROKE
DAIHATSU			
Charade G102 1987-1992 Charade G200 Range 93-96	1300 OHC 4 Cylinder 16 Valve SOHC	76mm 76mm	71.4mm 71.4mm
Charade 1993-1996-00 G200 Range	1500 OHC 4 Cylinder 16 Valve SOHC	76mm	82.6mm
HYUNDAI			
Excel 02/90-08/94 X2	1500 SOHC – 4GDJ	75.5mm	82.0mm
Excel 09/94-12/97 X3	1500 SOHC model only – 4GEK	75.5mm	83.5mm
MITSUBISHI (16/09/17)			
Lancer 1996-2001 CE	1500 SOHC 4G15	75.5mm	82mm
Mirage 1996-2001 (14/09/17)	1500 SOHC 4G15	75.5mm	82mm

TABLE 4 – THROTTLE BODY

MAKE	BUTTERFLY SECTION I.D.
DAIHATSU	
Charade 1987-1992 G102 1.3 litre	45mm
Charade 1993-1996-00 G200 Range 1.3 litre	45mm
Charade 1993-1996-00 G200 Range 1.5 litre	50mm
HYUNDAI	
Excel 02/90-08/94 X2	41mm
Excel 09/94-12/97 X3	41mm
MITSUBISHI (16/09/17)	
Lancer 1996-2001 CE	46mm

Mirage 1996-2001 (14/09/19)	46mm

TABLE 5 – COMPUTER AND INJECTOR LIST

COMPUTERS

CAR TYPE	COMPUTER	COMPUTER BRAND	COMPUTER NUMBER
DAIHATSU			
Charade 1987-1992 G102 1.3 litre Charade 1993-96 G200 Range 1.3 litre	**HC-E**		89661-87715 89661-87730 89661-87744 (01/07/18)
Charade 1993-1996-00 G200 Range 1.5 litre	**HE-E**		89661-87758 89661-87735 (01/07/18)
HYUNDAI			
Excel 02/90-08/94 X2			39110-24550 39110-24880 39110-24881
Excel 09/94-12/97 X3			39110-22335 39110-22A00 39110-22336
MITSUBISHI (16/09/17)			
Lancer 1996-2001 CE (06/12/17)			Series 1 – MD336612 Series 2 – MD351552
Mirage 1996-2001 (14/09/19)			Series 1 – MD336612 Series 2 – MD351552

Note – *it is preferable – for the Lancer ECU to be tested and sealed by Cool Drive that you send the original key, key reader and immobiliser when sending the ECU for sealing. If not available contact Cool Drive direct prior to sending the ECU for sealing. (01/07/18)*

STANDARD FITMENT FUEL INJECTORS

CAR TYPE	FUEL INJECTOR
DAIHATSU	
Charade 1987-1992 1993-1996 G102 – 1.3 litre	195500 – 1910 (24/11/18)
Charade 1993-1996-00 G200 Range – 1.3 and 1.5 litre	195500 – 2140 (1300 – 1.3 litre) (24/11/18) 195500 – 3030 (1500 – 1.5 litre) (24/11/18) 195500 – 2040 (1500 – 1.5 litre) (24/11/18)
HYUNDAI	
Excel 89/92 X2	35310 - 24010
Excel 92/94 X2	35310 – 24570 (24/11/18)
Excel 94/97 X3	35310 - 22010
MITSUBISHI (16/09/17)	
Lancer 1996-2001 CE	CDH166 (16/09/18)
Mirage 1996-2001 (14/09/19)	CDH166 (14/09/19)

TABLE 6 - VALVE SIZES – NON EFI models - maximum two (2) valves per cylinder (16/09/18)

MAKE	MODEL	INTAKE VALVE SIZE	EXHAUST VALVE SIZE
DATSUN	1200	35.0mm	29.0mm
DATSUN	120Y, Sunny	37.0 -37.2mm	30.0 – 30.2mm
DAIHATSU	Charade	36.0mm	33.0mm

FORD	Escort MK1	35.69 – 35.94mm	31.50 – 31.75mm
HOLDEN	Torana	33.45 – 33.60mm	29.90 – 30.05mm
LEYLAND	Mini 110	29.23 – 29.26mm	25.40 – 25.53mm
SUZUKI	Swift SA	36.0mm	30.0mm
SUZUKI	Swift SF	35.0mm	28.0mm
TOYOTA	Corolla 1200	36.0mm	29.0mm

TABLE 6a - VALVE SIZES – EFI Models (16/09/18)

MAKE	INTAKE VALVE SIZE	EXHAUST VALVE SIZE
DAIHATSU		
Charade 1987-1993 G100 & G102 1.3 litre	30.00mm	33.00mm
Charade 1993-1996 G200 Range 1.3 litre	30.00mm (01/07/19)	26.00mm (01/07/19)
Charade 1996-00 G200 Range 1.5 litre	30.00mm (01/07/19)	26.00mm (01/07/19)
HYUNDAI		
Excel 02/90-08/94 X2	35.05 Head 101.6mm long x 6.6mm stem	30mm Head 101mm long x 6.6mm stem
Excel 09/94-12/97 X3	2 x 27.44mm Head 99mm long x 6mm stem	32mm Head 98.3mm long x 6mm stem
MITSUBISHI (16/09/17)		
Lancer 1996-2001 CE	26mm and 31mm (2 valves per cylinder)	33mm
Mirage 1996-2001 (14/09/19)	26mm and 31mm (2 valves per cylinder)	33mm

TABLE 7 - CARBURETTOR LIST

Carburetted Cars

MODEL OF CAR	CARBURETTOR PERMITTED – Venturi Sizes
Datsun – 1200, 120Y, Sunny	Primary 20mm,secondary 26mm.Twin Barrel Down Draught Primary
Daihatsu – 1.0 Litre 3 Cylinder	Primary 18mm, secondary 25mm. Twin Barrel Down Draught
Ford – Escort 100 MK1	Ford 1250 Single Barrel
Holden – Torana 1200 HB-LJ	Zenith 301Z. Solex 30/PSEI/6 & 7. Single Throat Down Draught
Holden – Torana 70 Series	CD 150 Zenith-Stromberg. Single Throat Down Draught
Leyland – Mini 1100 engines	1-½" S.U.
Suzuki – 1.0 Litre 3 Cyl	Primary 18mm, secondary 25mm. Twin Barrel Down Draught
Toyota – 1200 3K Series Engine	Primary 21mm, secondary 25mm. Twin Barrel Down Draught

TABLE 8 – VEHICLE DIMENSIONS

Note: *Listed measurements for the track includes the 50mm max. allowance and 160mm 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 MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM	WIDTH MM
DATSUN		New 01/07/2020				
1200 Coupe 1970-74	2300	2277 / 2323	1450	1455	3820	1515
1200 Sedan 1970-74	2300	2277 / 2323	1450	1455	3835	1515
120Y 1974-79	2340	2317 / 2363	1460	1455	3950	1545
Sunny 1979-81	2340	2317 / 2363	1540	1510	3940	1600

MODEL	WHEELBASE MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM	WIDTH MM
DAIHATSU		New 01/07/2020				
Charade XTE 80-81	2300	2277 / 2323	1510	1490	3485	1510
Charade XTE 81-83	2300	2277 / 2323	1510	1495	3510	1510
Charade CSCX 83-85	2320	2297 / 2343	1550	1520	3550	1550
Charade CSCX 85-87	2320	2297 / 2343	1550	1520	3595	1550
Charade G100 87-93	2340	2317 / 2363	1595	1575	3680	1615
Charade G200 93-96	2395	2371 / 2419	1595	1600	3750	

MODEL	WHEELBASE MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM
FORD		New 01/07/2020			
Escort MK 1970-73	2400	2377 / 2424	1470	1490	3960

MODEL	WHEELBASE MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM
HOLDEN		New 01/07/2020			
Torana HB 1967-69	2440	2416 / 2464	1505	1505	4090
Torana LC LJ 69-75	2433	2409 / 2457	1505	1505	4120
Disc Brake Model	2433	2409 / 2457	1520	1505	4120

MODEL	WHEELBASE MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM
LEYLAND MINI		New 01/07/2020			
1100 1969-71	2030	2010 / 2050	1420	1400	3176
Clubman 1100 71-73	2030	2010 / 2050	1420	1400	3220

MODEL	WHEELBASE MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM
SUZUKI		New 01/07/2020			
Swift SA 1984-88	2245	2223 / 2267	1540	1510	3585
Swift SF 1988 on	2265	2242 / 2288	1575	1550	3745

MODEL	WHEELBASE MM	**WHEELBASE MINIMUM MAXIMUM	FRONT TRACK MM	REAR TRACK MM	LENGTH MM
TOYOTA - Corolla		New 01/07/2020			
KE20 Sedan 1970-74	2335	2312 / 2358	1465	1455	3910
KE25 Coupe 1970-74	2335	2312 / 2358	1465	1455	3910
KE30 Sedan 1974-78	2370	2346 / 2394	1505	1495	3995
KE35 1974-78	2370	2346 / 2394	1505	1495	3995
KE50 Lift Back 77-78	2370	2346 / 2394	1505	1495	4120
KE55 - May use body only					

TABLE 9 – VEHICLE DIMENSIONS FOR EFI MODELS

Note: *Listed measurements for the track includes the 50mm max. allowance and 160mm 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 MM	**WHEEL BASE MINIMUM/MAXIMUM (01/07/2020)	FRONT TRACK MM	REAR TRACK MM
DAIHATSU				
Charade 1987-93 G100 & G102 1.3	2340	2317 / 2363	1595	1575
Charade 1993-96-00 G200 1.3 and 1.5	2395	2371 / 2419	1595	1600
HYUNDAI				
Excel 1989-95 X2 1.5	2380	2356 / 2404	1599	1551
Excel 1995-97 X3 1.5	2400	2376 / 2424	1630	1620
MITSUBISHI (16/09/17)				
Lancer 1996-2001 CE 2 Door	2415	2391 / 2439	1660	1670
Lancer 1996-2001 CE 4 Door	2500	2475 / 2525	1660	1670
Mirage 1996-2001 (14/09/19)	2415	2391 / 2439	1660	1670

TABLE 10 - TYRE RATINGS - THE MAXIMUM IS A (H) RATING.

TYRE RATINGS	SPEED RATING	TYRE RATINGS	SPEED RATING
A1 – A8	5-40 kmh	M	130 kmh
B	50 kmh	N	140 kmh
C	60 kmh	P	150 kmh
D	65 kmh	Q	160 kmh
E	70 kmh	R	170 kmh
F	80 kmh	S	180 kmh
G	90 kmh	T	190 kmh
J	100 kmh	U	200 kmh
K	110 kmh	H	210 kmh
L	120 kmh	V	240 kmh

19. REFERENCE PHOTOS

Flange Gasket indicating permitted manifold type for Daihatsu Charade

Exhaust Manifold Flange Gasket
Daihatsu Charade
G102 1.3 litre EFI

Exhaust Manifold Flange Gasket
Daihatsu Charade
G200 1.3 or 1.5 litre EFI

Typical Fuel Tank Protection Bar – with 25mm clearance around tank. Braced both sides.

Summary of Updates:
15/06/16
Page 14 – Section 4 – Engine – Approved Models Updated

01/07/16
Page 3 – Section 1 – Body/Rolling Shell – Item f) iv)
Page 6 – Section 2 – Roll Cage – update to AS number
Page 6 – Section 2 – Roll Cage – Item 2 Roof Hoop clarification
Page 14 – Section 4 – Engine
Sub-Section 4.1.1 EFI – ECU Sealing Process
Page 24 – Section 17 – Fuel Tank and Fuel System – Item i)

01/10/16
Page 5 – Section 1 – Body/Rolling Shell – updated steel size on Fig (ii) and Fig (iii)
Page 8 – Section 2 – Roll Cage – mounting of anti-spear plates
Page 10 – Section 2 – Roll Cage – mounting of head plates

Effective 01/07/17
Page 2 – Reference changed to www.automobile-catalog.com
Page 7 – Section 2 Roll Cage - #7 NASCAR Bars
Page 8 – Section 2 Roll Cage - #12 Foot Protection Bar
Page 8 – Section 2 Roll Cage - #18 Dropper Bar
Page 8 – Section 2 Roll Cage – Anti Spear Plates
Page 10 – Section 2 Roll Cage – Head Plate
Page 14 – Section 3 – Bumper Bars & Optional External Barwork – Rub Rail
Page 14 – Section 4 – Engine – placement of engine seal ID tag
Page 24 – Section 14 – Tyres – lubricant not permitted

Effective 16/09/17
Cover – logo update
Cover – new logo and addition of Version and Issue Date
Page 8 – Section 2 Roll Cage - #12 Foot Protection Bar

Page 15 – Section 4.1 EFI – addition of Mitsubishi Lancer
Page 16 – Section 4.1.2 EFI – passenger car fuel pump
Page 20 – Section 8 Transmission/Driveline – gearbox clarifications
Page 26 – Tables – updated to include Mitsubishi Lancer

Effective 06/12/17
Page 28 – Table 4 – Lancer ECU numbers

Effective 01/07/18
Page 4 – Section 1 – Body/Rolling Shell – l) – replacement boot floor when rusted
Page 5 – Section 1 – Body/Rolling Shell – v) – new sub frame braces outside chassis rail for cars with steering boxes
Page 16 – Section 4 – Engine - 4.1.1 – update info in relation Lancer ECU sealing
Page 16 – Section 4 – Engine – 4.1.1 – p) Engine oil pickup gauze size
Page 18 – Section 4 – Engine – 4.2 – l) OEM standard replacement electronic ignition permitted
Page 22 – Section 9 – Steering – f) – Quick release steering wheel compulsory as of 1st July 2019
Page 25 – Section 16 – Fuel – section re-written
Page 26 – Section 17 – Fuel Tank and Fuel System – e) replacement boot floor when rusted
Page 26 – Section 17 – Fuel Tank and Fuel System – l) – bracing on fuel tank protection bar
Page 29 – Table 4 – Computer – 2 x additional ECU for Daihatsu Charade

Effective 16/09/18
Page 9 – Windscreen Mesh – updated wording – 'mild steel'
Page 19 – Section 5 – Battery – updated wording on using 8mm bolts or rods
Page 23 – Section 10 – Suspension – Item i) updated wording – aftermarket caster/camber kits
Page 28 – Tables – Std Fitment Fuel Injectors – Mitsubishi Lancer CE number added
Page 29 – Table 5 – Valve Sizes – NON EFI cars – maximum 2 valves per cylinder

Effective 31/10/18
Page 31 – Section 19 – Exhaust System – Flange Gasket photos for Daihatsu Charade G102 and G200

Effective 24/11/18
Page 3 – Junior Sedan Derivation – If it is not specifically listed in the items that can be removed then it must be in place.
Page 10 – Fig 3a - Alternate Roll Cage Design
Page 17 – Section 4.1.2 o) updated wording
Page 25 – Section 17 – Fuel Tank and Fuel System – Item k) – inclusion of brace on each side
Page 28 – Tables – Std Fitment Fuel Injectors – Charade G102 1.3, G200 1.3 and 1.5 numbers updated
Page 28 – Tables – Std Fitment Fuel Injectors – Hyundai Excel X2 numbers updated
Page 31 – Section 19 – Fuel Tank Protection Bar – photos added

Effective 01/07/19
Page 3 – Class Criteria – updated Racing Rule number references
Page 4 – Body Rolling Shell – Item e) Inclusion of Hyundai Excel Dash Bar
Page 7 – Section 2 Roll Cage Material and Design Option
Page 7 – Section 2a – existing roll cage specification
Page 16 – Section 4 Engine – 4.1.1 a) Location of ECU for ease of access
Page 20 – Section 5 Battery & Electrical – Item i) Kill switch to be lever type
Page 21 – Section 6 Exhaust System – Item i) Cats for Charades must be in place – interior may be removed
Page 22 – Section 7 Cooling System – p) Cars with Rear Firewall
Page 22 – Section 7 Cooling System – q) Cars without Rear Firewall
Page 22 – Section 8 Transmission/Drive Line – b) Tail shaft loops rewritten
Page 23 – Section 10 Suspension – b) Shock Absorbers rewritten
Page 24 – Section 10 Suspension – c) Coil Spring size clarified
Page 24 – Section 10 Suspension – i) Multiple adjusters permitted
Page 25 – Section 13 Wheels – g) Maximum 50mm spacer/s permitted
Page 27 – Section 17 Fuel Tank and Fuel System – i) Mounting of Fuel Tank rewritten
Page 30 – Table 5a – Valve Sizes EFI Models – inclusion of valve sizes for 1.3 & 1.5 litre Charades

Effective 14/09/19
Page 4 – Section 1 – Body/Rolling Shell – e) All cars that have a welded in/non removable Dash bar – Dash bar must remain in place. E.g. Hyundai Excel's and Mitsubishi Lancer.
Page 13 – Section 3 – Bumper Bar & Opt External Barwork – Rear of bumper tube is determined as the inner side of the bumper tube – front and rear.
Page 16 – Section 4 – Engine 4.1 EFI Configuration – update list of EFI models permitted with Mitsubishi Mirage

Page 27 – Section 17 – Fuel Tank and Fuel System – item i) – additional wording – tanks not separated from the driver by an OEM firewall must be fully enclosed – including bottom, sides and top.
Page 28 – Section 18 – Tables – updated with inclusion of Mitsubishi Mirage 1996-2001

Effective 01/07/2020
Page 2 – updated illegal to non-compliant
Page 2 – removed CTAC from the contact process
Page 6 – List of items covered in Class Technical Manual and link to website
Page 11 – Head Plate – updated layout including updated wording for helmet clearance
Page 12 – Section 3 – Bumpers & Optional External Bar work – o) Towing Straps Optional updated p) Rub Rails – whole section reworded with new drawings
Page 22 – Section 7 – Cooling – f) and g) – updated wording on radiator tank covering and hoses
Page 23 – Section 8 – Transmission/Driveline – b) updated wording for tail shaft loops
Page 23 – Section 8 – Transmission/Driveline – f) new item – approval for replacement roller bearing
Page 24 – Section 10 – Suspension – a) b) c) d) – updated to clarify acceptable shocks
Page 25 – Section 10 – Suspension – j) – new item – reinforcement of rear stub axles for Lancer and Mirage
Page 27 – Section 14 – Tyres -whole section rewritten
Page 29 – Section 17 – Fuel Lines – c) updated wording for hoses pass d) updated fuel hoses permitted
Page 30 – Section 18 – Tables renumbered to accommodate a new table – Table 1 List of Approved/Accepted Makes/Models for class
Page 34 – Table 8 – Dimensions – now include minimum/maximum Wheelbase