C

TECHNICAL RULES & REGULATIONS

2026

1 COMPETITION VEHICLES

1.1 VEHICLE ELIGIBILITY

Eligible models must have been considered a “production car” and have had a minimum build run of 600 units in their model year. Vehicles must be constructed by a major vehicle manufacturer and currently/previously available as a homologated and factory available vehicle.

Eligible body styles include: coupe, sedan, convertible or wagon and have no more than 5 doors.
· All vehicles must be rear wheel drive only.
· Kit cars, or space frame chassis are prohibited.
· Vehicles of any manufacturer are allowed as long as they meet the conditions
· Four-wheel drive vehicles modified to rear wheel drive are permitted.

Front wheel drive cars can be converted to RWD drive may be included but which encourages manufacture participation in the sport. Please consult with Scrutineer for technical regulations with this as OEM parts need to be used from that same manufacture.
Vehicles must maintain the original OEM unibody and/or frame structure between the OEM front and rear suspension mounting points.

Vehicles that do not meet the above eligibility criteria must petition for approval from the NDC . No trucks (other than ‘bakkies’) or SUVs will be allowed. ‘Bakkies’ are allowed (entered bakkies will have to pass scrutineering) and apply to Organisers for eligibility to compete.

Vehicles must be made from metal construction. Vehicles with aluminum construction must contact the NDC for roll cage specifications.

2 CHASSIS & SUSPENSION

2.1 Basic Chassis Design

The vehicle chassis (original OEM floorplan), frame and/or unibody must remain unmodified between the vertical planes created by the original forward most and rearward-most suspension mounting points. Unibody or chassis may be seam welded.
Front suspension examples are in Figure 1 and 2.
Rear suspension examples are in Figures 3 and 4.
Plating of chassis is prohibited.

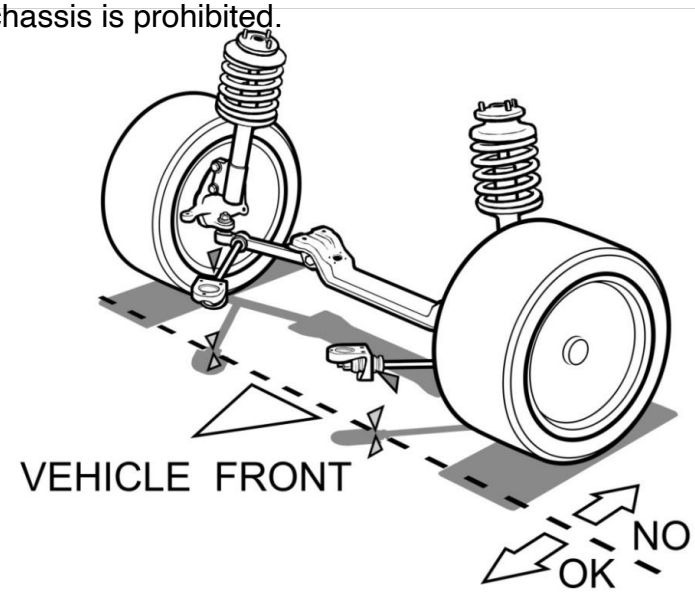


Fig. 1

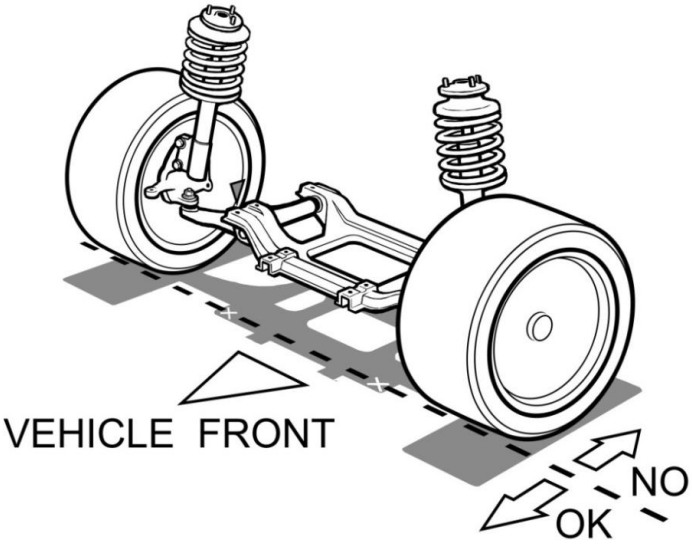


Fig. 2

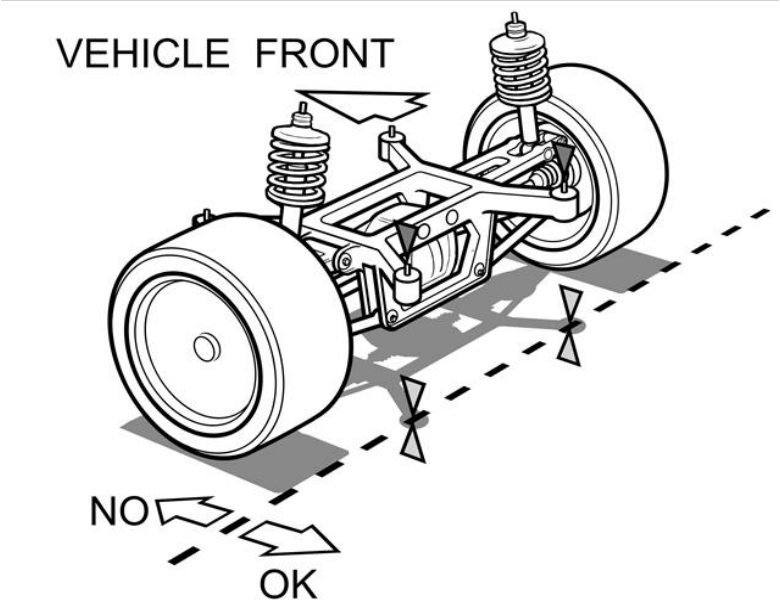


Fig. 3

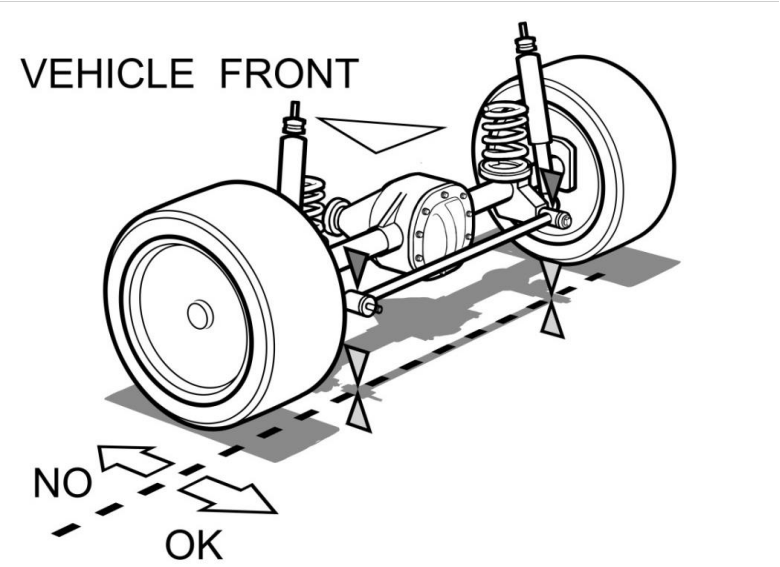


Fig. 4

Items in the unmodified zone that are allowed to be removed can include original rear window parcel shelf, various tabs and/or mounts for unused OEM steering columns, unused OEM windshield wiper mounts, and the exterior roof panel can be replaced with a composite panel. Any other items or structures must receive prior approval in writing from SCRUTINEER/Competition Director.

Rear suspension tower cross-members located at the top of the rear suspension towers may be removed from the unibody only if a suitable replacement structure of equivalent strength is installed.

No part of the engine casing may cross the vertical threshold of the original firewall into the transmission tunnel.

No other modifications may be made to the vehicle chassis, frame, or unibody.

Any holes in the firewall must be of the minimum size for the passage of controls and wires and must be completely sealed to prevent the passage of fluids or flames from the engine compartment to the driver's compartment.

FIREWALL AND TRANSMISSION TUNNEL MODIFICATIONS-

Modifications of the stock, OEM firewall and transmission tunnel are in Figure 5:

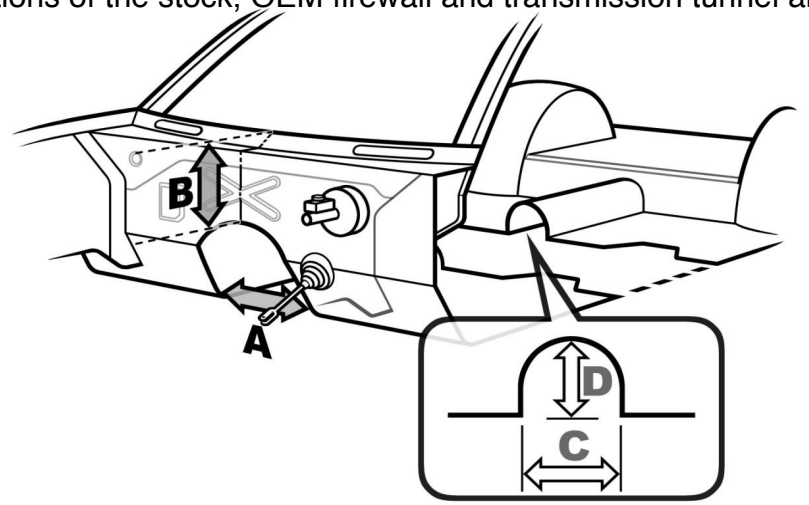


Fig 5.

Dimension A: Tunnel Width may be no wider than 457.2 mm

Dimension B: Minimum dimension of 254 mm between the bottom of the windshield and the top of the transmission tunnel.

Dimension C: Modifications to drive shaft tunnels behind the engine firewall vertical plane should not exceed an overall width of 254mm.

Dimension D: Modifications to drive shaft tunnels behind the engine firewall vertical plane should not exceed an overall width of 254mm.

Taper Length from the firewall to the end of the transmission tunnel into the beginning of the drive shaft hump may be no longer than 914.4 mm.

Modifications to firewall and transmission tunnel must be done with .036-inch (.91mm) steel or .059-inch (1.5 mm) aluminum.

3 ROLLCAGES

3.1 GENERAL

The basic purpose of the roll cage is to protect the occupant if the car turns over, runs into an obstacle, or is struck by another car. It shall be designed to withstand compression forces from the weight of the car coming down on the rollover structure and to take fore/aft and lateral loads resulting from the car skidding along on its rollover structure.

Rollcages are mandatory and must be fitted to competition vehicle/s exempt **PRO1/GRASS ROOTS LEVEL** class (Street Legal Cars will be accepted and scrutineered on a 1 on 1 safety guideline)

Bolt in Roll Cages are allowed but must pass all technical safety requirements (9.4) and the inspection by the Chief Scrutineer. Bolt in roll cages compliant with FIA Schedule J standards and regulations are allowed.

The safety cage structure shall not unduly impede the entry or exit of the driver/crew. Any tube forming part of a safety cage structure shall not carry fluids or any other materials.

3.1.1 PADDING

Forward braces and portions of the main hoop subject to contact by the occupant's helmet (as seated normally and restrained by seatbelt/shoulder harness) shall be padded with non-resilient material.

3.1.2 WELDING

All roll cages must be based on a single Main Hoop of one (1) continuous length of tubing with smooth continuous bends and no evidence of crimping or wall failure. The radius of bends in the roll cage hoop (measured at centerline of tubing) shall not be less than three (3) times the diameter of the tubing. Welds shall be continuous around the entire tubular structure.

All welds shall be visually inspected and shall be acceptable if the following conditions are satisfied:

- The weld shall have no cracks.
- Grinding down of welds is prohibited.

- Thorough fusion shall exist between weld metal and base metal.
- All craters shall be filled to the cross section of the weld.
- Undercut shall be no more than 0.01 inch (0.25mm) deep.
- Aluminum bronze or silicon bronze welding technique is permitted, but extreme care shall be used in preparation of parts before bronze welding and in the design of the attaching joints.
- A small portion of the cage may permeate the firewall as at a brace maybe be used between the strut tower and the firewall.

Forward braces and portions of the main hoop subject to contact with the occupant's helmet (as seated normally and restrained by harness/seatbelt) shall be padded with a non- resilient material. Ethafoam or Ensolite, or other similar material with a minimum thickness of 12.7mm is required.

3.1.3 ROLLCAGE SPECIFICATIONS

All rollcages can be either MIG or TIG welded. All welds must show good signs of penetration and all tubes must be fully welded 360 degrees. All welds will be inspected for quality. Rollcages can be of a bolt-in type or a weld-in type.

3.2 MATERIALS

Cold drawn seamless steel, preferably clubman 500 specialist tube: T45 steel, Seamless SAE 1020 or 1025 mild steel tubing, DOM, and/or chromoly.

3.2.1 INSPECTION HOLE-

An inspection hole at least 3/16 inch diameter, but no greater than 1/4 inch diameter, shall be drilled in a non-critical area of a tube to facilitate verification of wall thickness.

3.3 TUBE DIMENSIONS

Main hoop -

CDS - minimum of 1 3/4 '' (44.45mm) 12g (2.66mm) CD Maximum of 2'' (50.8mm) 12g (2.66mm) CDS (10g 3.4mm also permitted)

T45- 14g (1.9mm) 1 3/4'' (44.45mm) (12g 2.66mm also permitted)

(All T45 must be supported with certificate of conformity)

Rest of rollcage -

CDS - minimum of 1 1/2 '' (38.1mm) 12g (2.66mm) CDS Maximum of 2''

(50.8mm) 12g (2.66mm) CDS (10g 3.4mm also permitted) CDS

T45 - minimum of 1 1/2'' (38.1mm) 14g (1.9mm) Maximum of 2'' (50.8mm) 14g (1.9mm) T45 (12g 2.66mm also permitted) (All T45 to be supported with certificate of conformity It is recommended that rollcages are made entirely from 1 3/4'' tubing throughout.

3.3.1 TOLERANCES

Tube diameter will have a tolerance of +/- 1mm wall thickness of the tube will have a tolerance of -0.25mm

THE SCRUTINEER CAN AND WILL DRILL HOLES IN ROLLCAGES TO INSPECT TUBE THICKNESS, AT ANY TIME AND IF NEED BE.

3.3.2 BENDS

All bends must show no signs of crimping, or wall failure. All bends should be produced by a roller draw or mandrel type bender. The use of press type benders is not permitted. All bends must be produced in a cold state. No heat manipulation to be used. The radius of bends in the rollcage hoop will be no less than three times the diameter of the tubing.

All sections of the rollcage must be constructed from one continuous piece of tubing.

3.3.3 ATTACHMENTS

A minimum of six points attaching to the floor, there is no maximum amount of points but anything over 8 points should be checked with the Scrutineer before installation.

3.3.4 MOUNTING PLATES

All mounting plates must be made from 3mm thick, mild or stainless steel.

Surface areas-

MAIN HOOP - minimum of 120cm squared. (e.g., 12x10cm)

FRONT LEGS - minimum of 120cm squared (e.g., 12x10cm)

REAR STAYS - minimum of 60cm squared (e.g., 6x10cm) - Rear stays to be mounted as near to the rear turret as possible.

No single side of a mounting plate can be less than 2 inches. No single side of a mounting plate can be more than 8 inches. Mounting plates can be extended onto vertical planes.

Tubes can be mounted onto boxed plinths as long as the plinth attaches onto a mounting plate as described above of 120cm squared for front sections, or 60cm squared on rear stays.

All plinths must be closed in, and fully welded. Plinths must not be more than 5 inches high from the mounting plate. All plinths must be made from 3mm thick steel.

Front triangulation onto the front turrets - all tubes must attach to a 3mm thick plate, not less than 60cm squared. The hole in the bulkhead for the tube to pass through must be filled after tube is fitted, with a welded plate around the tube to stop any fires or fluids from entering the driver compartment.

3.4 BOLT IN CAGE MOUNTINGS

All bolt-in rollcages must be mounted to footplates welded to the body shell to the same specification as above. If a bolt in rollcage is to be mounted on plinths then plinths must be fully boxed off and captive nuts welded on the inside to secure the rollcage.

All plinths must be made from 3mm thick steel. All fixings must be a minimum of 8mm bolts (10mm recommended) and be an ISO rating of 8.8 or higher. Each footplate must have a minimum of 3 bolts securing the rollcage. In all cases, rollcage front legs must not be bent in to avoid the dashboard. (fig.4) Gusseting can be used to secure weld in rollcages to the body shell. Weld in rollcages can be welded directly to the body shell in any place that it touches.

3.5 ROLLCAGE CONSTRUCTION

All rollcages must consist of a minimum of 6 mounting points to the floor. They must also incorporate a diagonal member. Which must be attached to the main hoop above the drivers head and continue either onto the rear stay on the opposite side, or onto the main hoop on the opposite side. As close to the footplate as possible. (fig 6 and 2) If the rear diagonal is mounted onto the rear stay, and there is a harness/turret brace bar available then the diagonal should intersect with the harness bar if possible. (See pic 1.)

Rollcages must also include a minimum of 2 door bars in each door aperture. They can be arranged in a cross arrangement or run horizontally across the door parallel to each other.

In this instance the parallel bars must be attached to each other with a minimum of 3 vertical tubes evenly spaced down the door aperture. (fig. 9) All rollcages must be based upon a main hoop, which connects to the floor and follows the shape of the vehicle up and over the drivers head, as close to the roof and pillars as possible. It must also include a set of front legs, connected with a tube across the top of the windscreen. There must also be 2 rear stays connecting from the main hoop back down to the rear turrets.

The other compulsory items are the diagonal member as described above, and twin door bars as described above.

Rollcages can have as many extra reinforcement bars as long as they are included for safety. Extra bars must intersect with other tubes wherever possible or be no more than 100mm away from the next tube where possible. There may be exceptions to this rule, if in doubt contact the Scrutineer before installation.

3.5.1 BASIC CONSTRUCTION

As mentioned on the first page, it is recommended that rollcages should be constructed entirely of 1 3/4 '' diameter tubing. But it is not compulsory, apart from the main hoop.

3.5.2 MAIN HOOP

The main hoop must be bent from one continuous piece of tubing. The minimum diameter of the tubing will be 1 3⁄4 '' (44.45mm) CDS. The minimum wall thickness will be 12 gauge (2.66mm) CDS. If the rollcage is to be constructed from T45 tube then the main hoop can be constructed of a minimum of 1 3⁄4'' 14g (1.9mm) tube. See first page for maximum dimensions.

The main hoop will not have more than 5 bends, including one in the middle if needed to achieve a good fit to the roof. The main hoop will be a mirror image from the centre line. The main hoop will be as close to the shape of the body shell as possible. The legs that attach to the footplates must extend from the footplate as close to 90 degrees as possible on both axis. +/-10 degrees (fig. 1)

3.5.3 FRONT LEGS

The front legs will be constructed from a minimum of 12 gauge (2.66mm) 1 1⁄2'' (38.1mm) CDS, If they are to be constructed from T45 then a minimum of 14 gauge (1.9mm) 1 1⁄2'' (38.1mm) must be used. For maximum dimensions see first page. The front legs may not be bent in toward the driver to avoid the dashboard. (fig 4) Where the front legs attach to the floor in the drivers foot well area, the angle must not exceed 90 degrees to the footplate. (fig 5) Front legs shall be identical in construction on both sides, as a mirror image of each other. Front legs can, and are recommended to pass through the dashboard.

3.5.4 DOOR BARS

Must be constructed from a minimum of 1 1⁄2'' (38.1mm) 12 gauge (2.66mm) CDS Or if T45 is being used then 1 1⁄2'' (38.1mm) 14 gauge (1.9mm) can be used. For maximum dimensions see first page. All vehicles must run 2 door bars for each door aperture. They can be of a cross type, or can be mounted horizontally and parallel to each other, in this case, the horizontal bars must be attached with at least 3 vertical tubes evenly spaced across the door aperture. Door bars can be extended into the outer door skin. Door bars must not be higher than half the height of the door opening at the point where they become visible in the aperture.

3.5.5 REAR STAYS (MAIN HOOP SUPPORTS)

The rear stays must be constructed of a minimum of 1 1⁄2'' (38.1mm) 12 gauge (2.66mm) CDS. Of if T45 is to be used then 1 1⁄2'' (38.1mm) 14 gauge (1.9mm) can be used. For maximum dimensions see first page. The rear stays will be mounted as close to the centre of the main hoop, main bend as possible. And will intersect with the front legs. The angle of the rear stays will be no less than 30degrees from the horizontal or vertical. There shall be no bends in the rear stays. (fig 3) The rear stays should be mounted as close to the rear turret as possible. If rear stays cannot be used due to a rear bulkhead then the main hoop must be attached to the B pillar with brackets made from 3mm thick steel, and will bolt into the original seat belt anchorage points.

3.5.6 DIAGONAL MEMBER

All cages must have a diagonal member incorporated into the design. The diagonal must always be mounted onto the underside of the main hoop above the drivers head, not more than 100mm from the next tube, and mount to the rear stay on the opposite side, or onto the opposite side of the main hoop as

close to the mounting foot as possible. If a harness bar/turret brace tube is fitted then the diagonal member should be trapped by this bar and point to the centre of the intersection. (pic 1)

It is recommended to install a dash bar brace that braces the front legs, but not compulsory.

There are three configurations of rollcage construction that can be used. They are as follows.

3.5.7 STD MAIN HOOP WITH FRONT LEGS. (fig 7)

This is the most common configuration and is also the recommended way of constructing a rollcage. It will consist of a main hoop joining to the floor near the b pillar, and will continue up and over the drivers head, staying as close to the body shell as possible. All main hoops will be supported with 2 rear stays to the rear turrets.

There will be a pair of front legs which will start from the A pillar area in the drivers foot well. They will continue as close to vertical as possible from the mounting plate, and then follow the angle of the screen pillar and continue over the drivers head. They will join onto the main hoop, as close to the centre of the main hoop main bend as possible. And will intersect into the rear stays.

The front legs will be joined with a tube that runs across the top of the screen. Notes. The screen bar must not have more than 5 bends. 2 each and 1 in the middle. Less than 5 bends is permitted. The front legs must not be bent in to avoid the dash.

The front legs must not be attached to the footplate at over 90 degrees to the floor. (See diagram) The screen bar should be a mirror image from the centre line. Front legs should be identical in construction.

Rear stays may not have any bends.

3.5.8 FRONT HOOP STYLE CONSTRUCTION

This type of roll hoop will start from the A pillar area in the driver's foot well, the tube will continue as near as vertical as possible from the footplate to the screen where it will follow the angle of the screen up to the roof where it will continue across the top of the screen and back down passenger side. The front hoop will be connected to the main hoop with two horizontal tubes, which will intersect into the main hoop as close to the centre of the main hoop, main bend as possible. They will also intersect with the rear stays.

Notes: The front hoop must not have more than 6 bends and must be a mirror

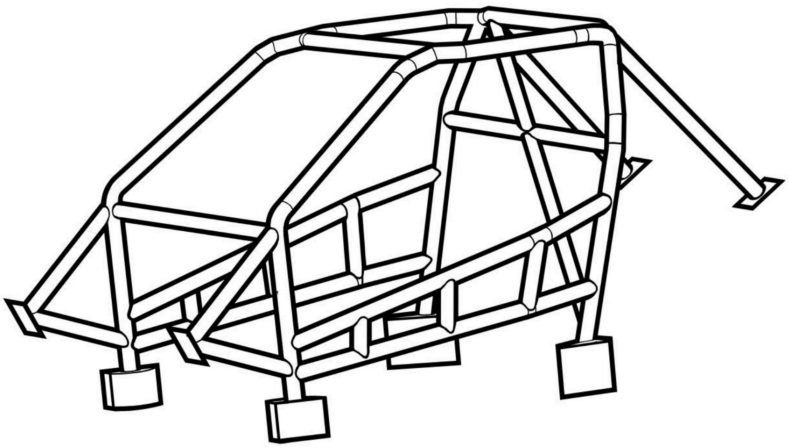
image from the centre line. The front legs must not be bent in to avoid the dashboard. The front legs must not attach to the footplate at over 90 degrees. Connecting tubes to the main hoop must not have more than 2 bends.

3.5.9 HALO TYPE CONSTRUCTION

This type of roll hoop construction shall consist of a halo type hoop which connects to the main hoop as close to the centre of the main hoop, main bend, and will intersect with the rear stays.

The halo hoop will continue from the main hoop along the top of the door and will follow the top of the screen round and to the other side. The halo hoop will be supported by tubes running down the screen pillar and to the floor near the A pillar.

The halo hoop will not have more than 4 bends. The front support bars will have no more than 2 bends. The halo must be a mirror image from the centre line, and the front supports will be identical in construction. The front supports must not be bent in to avoid the dash.



RIGHT HAND DRIVE CONFIGURATION

3.5.10 NOTES

All rollcages should follow the guidelines in this rulebook… The Scrutineer can fail a rollcage if he deems it to be unsafe in any way, even if the guidelines have been followed.

Tube thickness and diameter will be checked and any rollcages not meeting the minimum or maximum standards will not be passed.

Any person wishing to construct a rollcage from T45 tubing will be required to produce a certificate of conformity for the material used. A pass will not be issued without this paperwork.

It is wholly the responsibility of the driver to ensure the rollcage is built to a high standard and the Scrutineer will not be held responsible for any injury or accident, or damage to vehicles caused by an unsafe rollcage, after passing scrutineering. If you are unsure of any of the guidelines or have any queries then do not hesitate to contact the chief Scrutineer at any time.

It is highly recommended that before any rollcage is installed that you contact the Scrutineer.

3.6 BALLAST

Ballast must serve only the unique purpose of adding weight to a vehicle.

A vehicle may have up to 22kg of ballast weight added to it.

Ballast must be mounted ahead of the rear axle. Blocks must weight no less than 2.2kg each and cannot be made of liquid of any type, pellets or any other granulated material.

Ballast must be securely bolted in place with a minimum of one 12mm diameter grade 8 bolt.

No weight shifting devices are allowed including but not limited to hydraulic or electronic devices.

Dislodged weight ballast cannot be returned to the vehicle for weight in purposes.

4. SUSPENSION AND BRAKES

A. In-cockpit / Driver adjustable suspension will not be allowed. Examples include but not limited to sway bars and electronic shock / damper adjusters such as the Tein EDFC.

B. No suspension changes or adjustments will be allowed between runs by any means including remotely. No actuators, servos, or motors of any kind will be allowed.

C. Driver adjustable brake bias is allowed.

4.1 FRONT SUSPENSION

OEM front sub-frames and cross members must be stock and available on the exact year make and model that is competing in the NDC.

Original suspension design type must remain: Double wishbone, MacPherson strut etc.

Suspension relocation brackets that move suspension points or pivots regardless if they are bolt into the chassis will **NOT** be allowed.

MacPherson strut upper mount pivot must remain within the dimensions of the OEM bolt circle (Inner bolt PCD) on the chassis. Refer to Figures 6a and 7a. The OEM pattern on the chassis must remain unaltered and be the only means of mounting the upper strut mount. All OEM bolt holes must be present and utilized. Vehicles with MacPherson upper strut mounts not represented in the illustration must contact the NDC Technical Department.

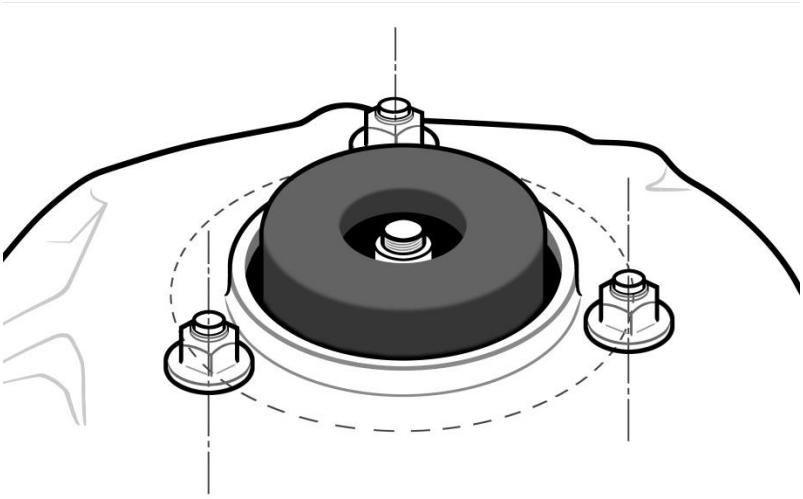


Fig 6a.

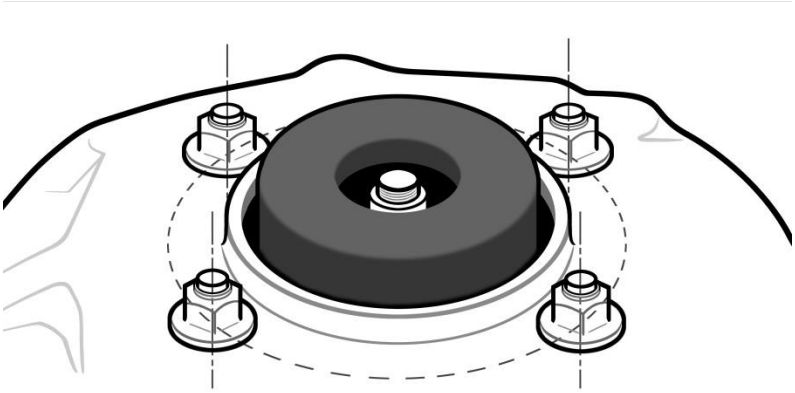


Fig 7a

Front subframe must remain in the factory location: no relocation of the subframe on any plane will be allowed

All original suspension mounting tabs must remain in the original position. NO cutting, welding, bending, drilling or modifications of any kind will be allowed. This will be measured center to center from the original pivot point to the new pivot point. Please refer to Figure 8. This rule only applies to vehicles with a rear subframe

Front subframes may only be modified to directly allow for oil pan/ starter clearance and steering rack relocation. The front subframe must retain intact on at least one major member on one face that spans the entire width of the subframe, thereby keeping the original dimensions of the subframe intact. Any other modifications, cutting, welding, strengthening, etc is not allowed.

4.2 STEERING

Modifications of steering components (steering rack, tie rods, etc) are free. This includes mounting the rack to the front subframe.

4.3 REAR SUSPENSION - LIVE AXLE

The original chassis mounting points must remain unaltered and in the original factory position. Suspension relocation brackets that move suspension points

or pivots regardless if they are bolt in to the chassis will **NOT** be allowed.

Original suspension design must remain: 3 link, 4 link, etc.

4.4 REAR SUSPENSION - INDEPENDENT

OEM Rear sub-frames and cross members must be stock.
Original suspension design type must remain: 3 link, 4 link, strut, etc. Modified or aftermarket suspension parts, including hubs, are allowed.

Rear subframe must remain in the factory location: no relocation of the subframe on any plane will be allowed.

All original suspension mounting tabs must remain in the original position. NO cutting, welding, bending, drilling or modifications of any kind will be allowed including subframe bushing to chassis mounts.

Additional mounting tabs may be added to relocate the suspension arm mounting points a maximum of 50.8mm on any plane from the original mounting position. This will be measured center to center from the original pivot point to the new pivot point.
Please refer to Figure 8. This rule only applies to vehicles with a rear subframe

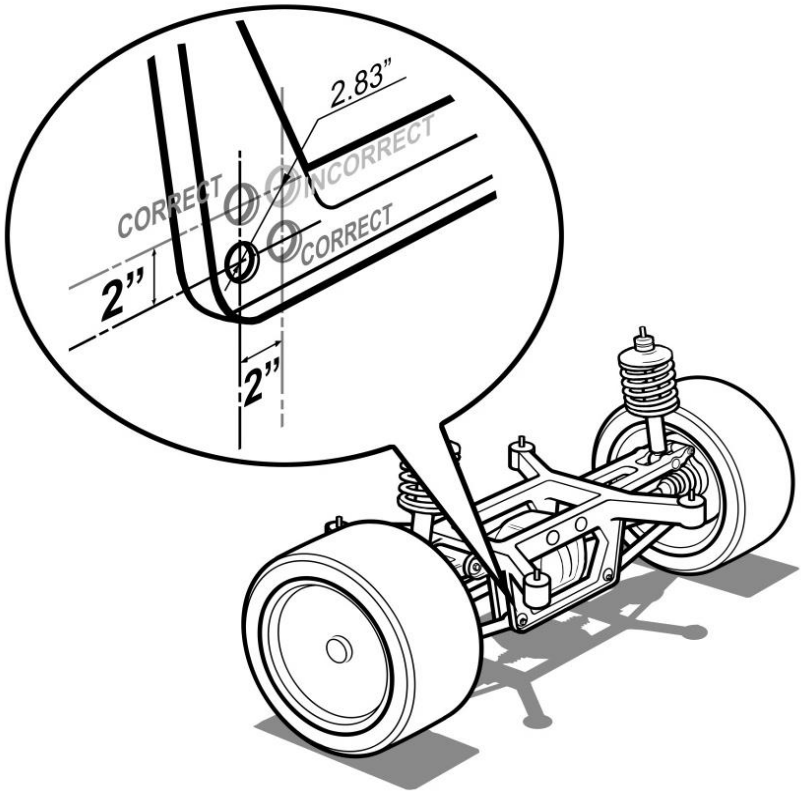


Fig 8.

4.5 MODIFIED OR AFTERMARKET SUSPENSION PARTS

Modified or aftermarket suspension parts, including hubs, are allowed.

4.6 WHEELS

Beadlocks, wheel screws and any additional form of attachment device between wheel and tire is prohibited.

4.7 BRAKE SYSTEM

The primary brake system must operate all 4 wheels.

Dual master cylinders pedal assemblies are allowed.

Driver adjustable brake bias is allowed.

Secondary hydraulic e-brake systems are allowed either as a fully separate system or as a pass-through system.

Secondary Brake system / E-brake must only operate the rear wheels.

5. DRIVETRAIN

5.1 ENGINE

Engine, transmission ECU and/or final drive modifications are free, but only the rear wheels may propel the vehicle and may only run on gasoline (pump fuel), diesel, and ethanol blends. All other fuels require written approval from the technical manager.
All fluid systems must be free of leaks.

5.2 COOLING SYSTEM

Cooling system modifications are free but must be fully closed and free of leaks.

Automatic water sprayers will be allowed during competition, but must not be leaking on the track, starting line, or grid area.

If cooling system lines are routed in the driver's compartment or a trunk area that is open to the driver, they must be separated from the driver by a crushable metal enclosure made up of 1mm steel, or 1.5mm aluminum. The floor of the enclosure must be designed to prevent accumulation of fluids.

Cooling systems shall be filled with water only. "Water wetter" is allowed.

Radiator catch tanks with a minimum capacity of one (1) litre are required. Catch tanks must be securely fastened and sealed from the driver's compartment.

5.3 OIL SYSTEM

Oil system modifications are free but must be fully closed and free of leaks.

If the oil tank is located in the driver's compartment area, or a trunk area that is open to the driver, it must be separated from the driver by a metal enclosure made up of .9144 mm steel, or 1.4986mm aluminum.

The floor of the enclosure must be designed to prevent accumulation of fluids.

Oil catch tanks with a minimum capacity of one (1) quart are required. Catch tanks must be securely fastened and sealed from the driver's compartment.

All engine components and exterior components that support engine operation such as oil cooler, Accu-sump, dry-sump tank, oil filter, and oil lines must be protected and within the confines of the factory frame rails and factory bumper or tubular bumper structure.

5.4 FUEL TANK/ CELL

The fuel system design is free, but engines may only run on gasoline, diesel, and ethanol blends. All other fuels require written approval from the technical manager.

Safety Fuel cells are required for all vehicles with a relocated fuel tank. Safety fuel cells shall consist of a bladder enclosed in a metal container. If the factory fuel tank is retained, it must be mounted in the factory location in the factory manner while being enclosed by the factory sheet metal.

Drag race style fuel cells with bottom mount sumps and or fittings are prohibited. Fuel cells meeting SFI 28.1 are recommended.

Fuel tank/cell must be separated from the driver's compartment by a permanently mounted steel or aluminum bulkhead.

The bulkhead in a hatchback vehicle must be affixed to the chassis and no movable structure or panel such as the hatch will be allowed as part of the bulkhead. Fuel cells may be installed in the interior of the vehicle, preferably within the confines of the roll cage structure.

The floor pan may be modified to fit a fuel cell and lines.

Fuel cells must have a flapper valve installed to prevent spillage in the event of a roll over. Fuel System must not leak on the track, starting line, or grid area.

Installation of Discriminator valves may be required on vent lines to prevent fuel leaks.

FUEL LINES

Fuel lines and fittings must be high-pressure type and routed in such a way that do not interfere with moving parts and be securely insulated and attached to the unibody or chassis.

No fuel lines may be routed through the driver's compartment unless passed

by the NDC Chief Scrutineer and deemed safe.

Teams may install dry-break fuel-filler attachments in the rear quarter windows or into the rear windshield or trunk lid to facilitate re-fueling from outside the vehicle.

The fuel filler tube between the fuel filler neck and the fuel cell, or tank, must be bulk-headed with .9144 mm steel or 1.4986 mm aluminum and sealed. There shall be a flexible tube between the fuel filler neck and the fuel cell/tank to allow for misalignment of the tube as the result of an accident as well as a one-way “flapper” valve.

5.4.1 NITROUS OXIDE

- Nitrous Oxide bottles must be securely mounted and protected within the confines of the factory frame rails and factory bumper or tubular bumper structure.
- All Nitrous bottles must be recertified every 5 years and stamped to indicate the last inspection date.
- All Nitrous bottle must be stamped with minimum DOT -1800-pound rating.
- The use of commercially available thermostatically controlled bottle warmers is accepted. The use of any other method of externally heating nitrous bottles is prohibited.
- The use of plastic bottle brackets is prohibited. Nitrous bottles located in the driver compartment must have a “BLOW DOWN TUBE” which consists of a pressure relief valve (Example from NOS- Part number NOS 16169) and be vented to the outside of the driver compartment (Example from NOS- Part number NOS 16160).

5.5 EXHAUST SYSTEM

Exhaust system modifications are free, but recommended exit point is aft of the rear axle or in the original location. Mufflers are not required.

Exhausts exiting off of the side of the vehicle afore the rear axle and/or through the bonnet openings must have a X-weld at the exit opening. Fig 11.1 (see attached)

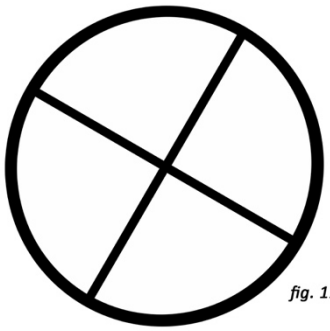


fig. 11.1

5.6 STARTER

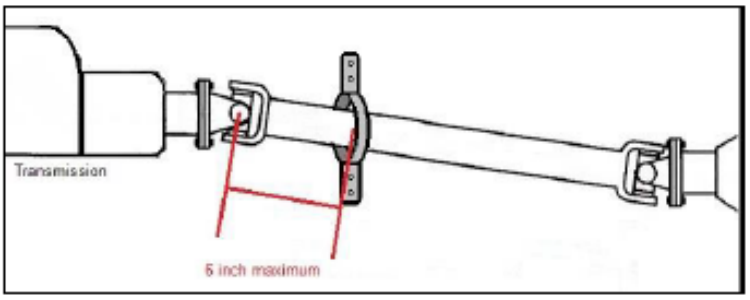
All cars must be equipped with an on-board starter and power supply which must be in working order at all times.

5.7 TRANSMISSION

All vehicles must be equipped with a functioning reverse gear.
Transmission and/or final drive modifications are free, but only the rear wheels may propel the vehicle.

5.8 DRIVESHAFT

All vehicles must have a driveshaft retaining loop mounted with 150mm of the forward most universal joint and be securely attached to a body or frame structure.



The driveshaft loop may be made of minimum 6.35mm steel x 50mm wide strap or 23mm x 1.65mm steel tubing and be securely mounted in case of universal joint failure.

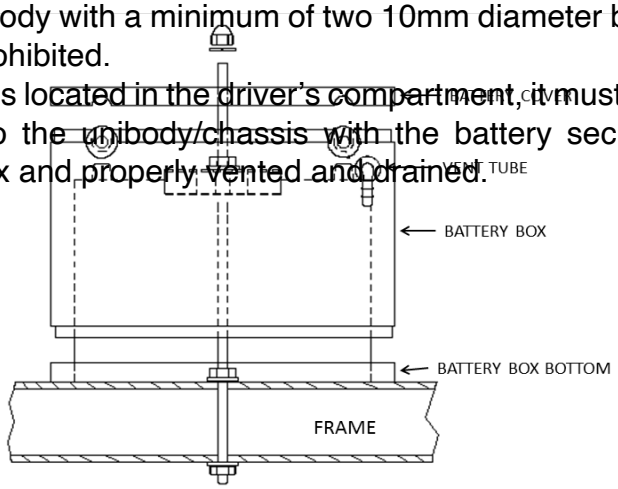
5.9 TRACTION CONTROL

- Traction control and other non-specified “driver aids” are not allowed. Including but not limited to speed sensors, linear transducers, driveshaft rpm, and steering position. Wheel speed and driveshaft sensors must be removed.

6. ELECTRICAL SYSTEM

6.1 BATTERY

- The battery must be securely mounted and the positive terminal completely insulated to avoid contact with any other metal parts.
- Batteries may be relocated. Relocated batteries must be fastened to the frame or unibody with a minimum of two 10mm diameter bolts. J bolts or hooks are prohibited.
- If the battery is located in the driver's compartment, it must be in a sealed box bolted to the unibody/chassis with the battery securely fastened inside the box and properly vented and drained.



(2) 3/8" THREADED RODS TO PASS THROUGH BATTERY BOX AND HOLDDOWN TO SECURE THE BATTERY TO THE VEHICLE'S FRAME

6.2 MASTER CUT-OFF

- A Master electrical cut-off switch, wired to completely shut off all engine and electrical system function (except for electrically operated fire suppression systems, if applicable) is mandatory and must mounted outside the vehicle, and is to be clearly marked with the appropriate "OFF" markings.
- The electrical terminals of the cut-off switch and/or any relays used in the circuit must be sufficiently insulated.

7 BODY EXTERIOR

7.1 BODY PANELS

- Vehicles must maintain the OEM look and feel and be clean, free of damage and presentable for competition.
- All bodywork must be painted or covered, securely latched and/or fastened and not loose in any manner.
- Over fenders are permitted and should be installed as in Figure 10

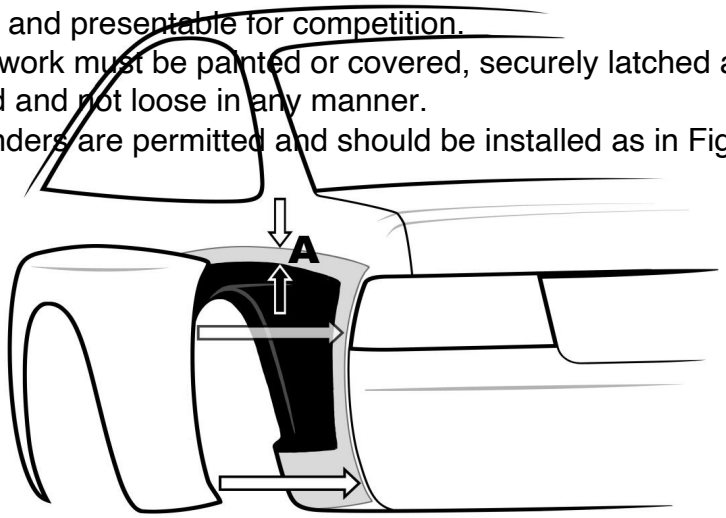


Fig 10.

- One-piece front ends are not permitted.
- Bumper bars must remain in the confines of the body lines and body work, without additional covers or body work extensions in order to do so.
- Aftermarket body panels, front and/or rear fascia's, side skirts and wings, etc are permitted; body work that is not designed as OEM or an OEM replacement of the original make and model of the vehicle must be approved by the CoC/COMPETITION DIRECTOR or SCRUTINEER.
- The outside door latch/lock operating mechanism may be removed or modified. If it is not in the original location, the door must be operable

from the exterior and the opening mechanism must be clearly visible and/or marked for access by safety personnel.

7.2 DOORS

- Doors must be mounted to the chassis with unmodified factory hinges. (quick release doors are prohibited)
- Doors must use the factory latch mechanism
- The inside and outside door latch/ lock operating mechanism must be functional and readily accessible for the driver to exit the vehicle.
- Doors with an exposed interior must have the sharp edges removed or covered.

7.3 WING AND DIFFUSER SYSTEM

- No vertical aerodynamic elements may be added other than, 2 (two) wing standoffs and 2 (two) wing end plates. The size of each of these my not exceed 305x407mm in size per unit (dimension, not surface area).
- The installation of these devices may not obstruct the view, from any angle, or operation any of safety device, signaling light, indicator, or other equipment.
- Diffusers are allowed.

7.4.1 WINDOWS and WINDOW RESTRAINTS

- Door, quarter and rear window must be OEM glass, clear/polycarbonate with minimum thickness of 3.175 mm and securely bolted in place.
- Side windows shall have a window net, clear O.E.M. glass, or a piece of clear Lexan/polycarbonate in place of both front window openings whenever the vehicle is on-track.
- Side windows and rear windows must be clear, *use of tint or wrap is prohibited.*
- Competitors may choose to use arm restraints in lieu of side windows or a window net. Competitors with convertible vehicles must use arm restraints.

7.4.2 WINDSHIELD

- Windshields must be installed and OEM glass or OEM replacement

material - Non-glass, Lexan or Polycarbonate replacement windshields must be a minimum 2mm thickness, be adequately mounted, and have supplemental, vertical bracing securely mounted down the center of the opening, inside the vehicle.

- Windshields must be clear, *use of tint* is prohibited.

7.5 WIPERS

- Cars must have a functioning windshield wiper.

7.6 MIRRORS

- Two external, rear-facing mirrors are required, and must be positioned so that the driver can see objects along both sides of the vehicle.
- OEM mirrors in the OEM mounting position are encouraged.

7.7 HOOD PINS

Two (2) hood pins, equally spaced across the front of hood, are required within 609.6 mm of the leading edge of the hood. Additional hood pins, i.e. at the back plane of the hood, are also recommended. The original stock latch must be removed.

7.8 DECALS

All required NDC and/or other decals or markings must be present in the specified location. The NDC windshield banners are required.

*The NDC the right to have any decals, marks, or other items removed or covered at their discretion.

7.9 DECAL PLACEMENT

All competing cars must carry the following mandatory Decals or marks, as well as any other decals as mandated by the NDC via supplemental regulations, memos, and other communications.

1. Two (2) assigned car numbers: One (1) on each side of the car in a colour, utilizing the approved NDC Number Board 2. One (1) official NDC windshield banner. 3. One (1) TV Partner/Primary Partner Logo on vehicle as specified. 4. All mandatory contingency decals as appropriate. 5. Competitors may also be required to carry event specific sponsor decals or marks.

It is recommended that all drivers and teams must carry a NDC patch on the uppermost right chest of the driver's and teams uniform.

7.10 TOWING APPARATUS

All cars must have a minimum (1) front and (1) rear permanently installed towing apparatus (eye, strap, cable, etc.) with a minimum hole diameter of two inches and be in a contrasting color to surrounding body work.

The apparatus shall be strong enough to withstand the weight of the vehicle being pulled from non-racing surfaces such as gravel traps, approximately equal to 2.2 TONS.
Tow apparatus made from webbing under no circumstances may have bolts or rivets through webbing. Use of a 3 bar buckle or sewing is required on webbing designs.
Tow apparatus must be a unique-purpose device. Using other structures i.e; a wing, body panel, or wheel is not allowed. The use of factory “tie down loops” is not permitted.

Tow apparatus must be easily accessible if the car is stopped in a gravel bed without removal or manipulation of body panels or other bodywork.

Tow apparatus must not protrude more than 50mm beyond the furthest forward or rearward dimension of the bodywork or otherwise are hinged and/or collapsible in order to create a blunt surface.

Tow apparatus must be clearly marked with an arrow in a contrasting color to the body color by using paint or by using a decal.

7.11 LIGHTS

7.11.1 OEM LIGHTS

All OEM lights and or aftermarket lights and markers must remain in place. At least one (1) brake lights, taillights (rain lights), and headlights must function normally. The use of electrical cut-off switches, or any other device that renders the brake lights inoperative in any way, is *strictly prohibited*. A minimum of one (1) *headlights must work also for nighttime events.*

Rearward facing strobe lights of any color are strictly prohibited.

FRONT BRAKE LIGHT
Each vehicle must have a brake light that is visible from the front of the vehicle, and from above. They are 36 inches long LED strips and must remain 36 in length. They are to be mounted at the base of the vehicle roof, at the top of the windshield. They are to be mounted above the top windshield banner and the strip should run along the top of the windshield and be centered. The light must

be connected to the existing brake light circuit.

8 BODY INTERIORS AND DRIVERS COMPARTMENTS

8.1 INTERIOR

The interior of the vehicle must be clean and professional in appearance.
All non-essential and/or loose items must be removed.
Any removable equipment such as spare tires, tools, bins, etc., shall be removed along with attaching hardware, brackets and covers.

It is recommended that all carpeting and/or sound deadening material must be removed.
Supplemental Restraint Systems (SRS) must be removed.

8.2 DASHBOARD

The dashboard must be either stock or stock replacement. Replacement must be same dimension and position of stock dashboard.
The modification of gauges is free.

8.3 STEERING WHEEL/SHIFT KNOB

Any steering wheel except wood rimmed types may be used. Any shift knob may be used.

9. DRIVER'S SAFETY EQUIPMENT

9.1 HELMET

All occupants must wear a safety helmet during on-track sessions. Only helmets certified to meet the following standards are permitted:

- Snell Memorial Foundation – SA2005, SA2010,SAH2010
- SFI Foundation – Spec 31.2, Spec 31.2A
- FIA 8860-2004, 8860-2001

Full-faced helmets are required. If driver or passenger wear an open-face helmet, a fire-resistant material balaclava is compulsory.

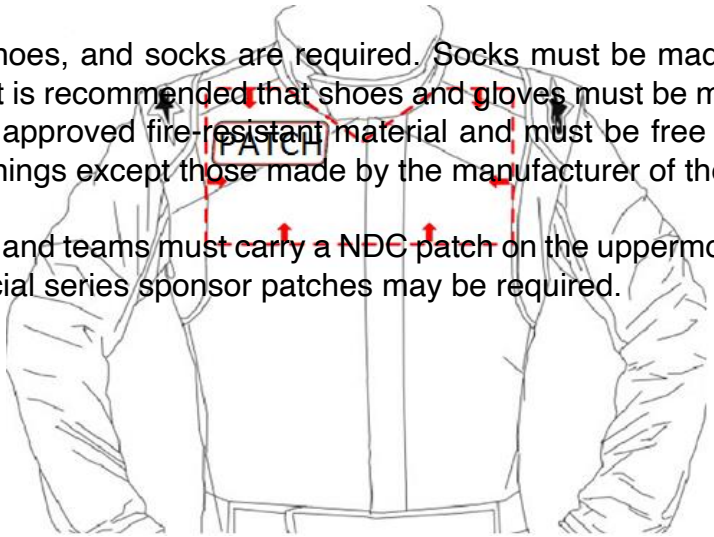
Helmet chinstraps must be buckled or fastened while on course.

Hair protruding from beneath a driver's helmet must be completely covered by fire-resistant material. Drivers with facial hair must wear face shields of fire-resistant material (i.e. balaclava or helmet skirt).
Accident-damaged helmets shall be given, or sent, by the driver, or his representative, to the NDC. It will be forwarded to the certifying organization for inspection. Details of the accident should be included.

9.2 DRIVING SUIT

One-piece driving suits are required and must be made of fire-resistant material and certified to SFI spec 3.2/A/5 or greater, or homologated to "FIA 2000" specs, which effectively covers the body, including neck, ankles and wrists. Multi-layer driving suits are recommended.

Fire-resistant underwear is recommended.



Gloves, shoes, and socks are required. Socks must be made of fire-resistant material. It is recommended that shoes and gloves must be made of leather, or any other approved fire-resistant material and must be free of holes, tears or other openings except those made by the manufacturer of the equipment.

All drivers and teams must carry a NDC patch on the uppermost right/left chest. Other official series sponsor patches may be required.

9.3 EYE GLASSES

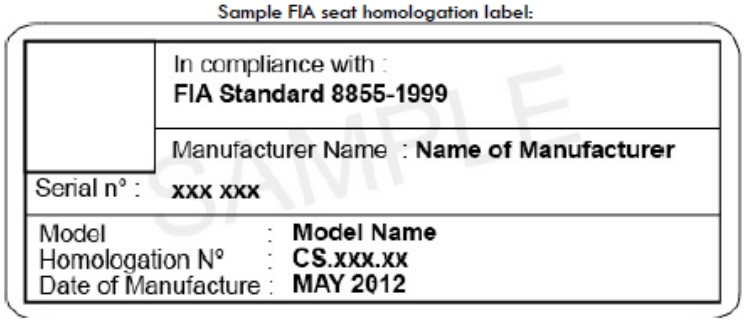
Any corrective eyeglass material used shall be of safety glass-type and meet all such RSA Government standards.

9.4 SEATS

All cars must have at least two seats, one for the driver, and one for a passenger. Each of the two required seats must be homologated to FIA standard 8855-1999. The usable life of an FIA homologated seat will be 5 years from the date of manufacture indicated on the seat label.

Sample FIA seat homologation label:

Sample FIA seat homologation label:



The homologation labels must be visible

9.4.1 SEAT SUPPORT

Seat supports shall be of the type listed on FIA technical list (lateral, bottom, etc). Welded direct or bolted into seat rails. All to be solid mounted and no give in the SEAT.

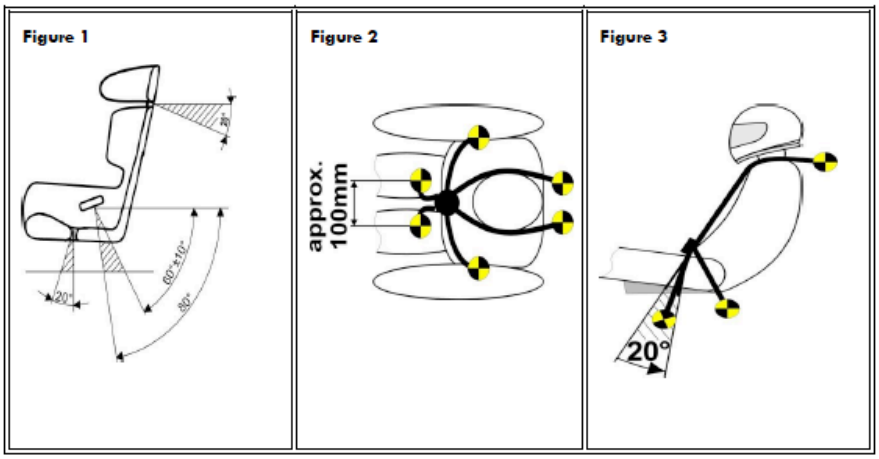
9.5.2 MOUNTING HARDWARE

All hardware used in the mounting of seats, or other structural supports shall be SAE Grade 5 or better with a 5/16" minimum diameter.

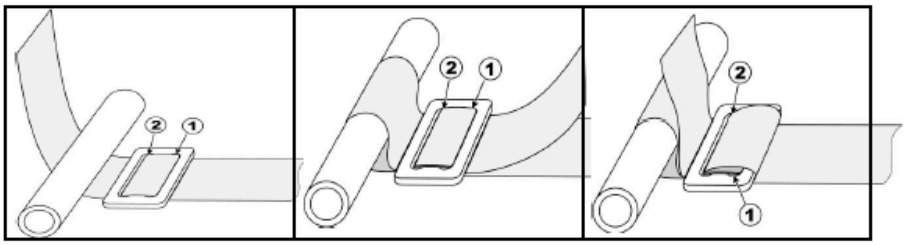
9.6 SEAT BELTS

All cars are to have a minimum 4 Point Harness and to be FIA Approved [75mm (3 Inch) belts and all pins are to be inserted] or be passed by the Chief Scrutineer as safe and as properly mounted. All harness attachments are to be attached to eyebolts, rollcages and positioned in the same locations and angles as below.

Eyebolts are required for harness mounts but if standard eye bolts are not used, any extra mounts must be of a plate type with a welded captive 7/16 UNF nut. The plate must be minimum of 25cm squared (5x5cm) 3mm thick, the plate must be fully welded on the underside of the vehicle body, so as to trap the floorpan between the plate and the eyebolt.



The figure below is the preferred method for harness attachment to harness bar.



9.7 ARM RESTRAINTS

**Occupants may choose to use arm restraints in lieu of the required window or window net. Occupants of open cockpit cars must use arm restraints.*

9.8 HEAD AND NECK RESTRAINTS

It is recommended that a system of head restraints to prevent whiplash and rebound and also to prevent the occupant's head from striking the underside of the main hoop shall be installed on all vehicles. Racing seats with integral headrests shall also meet this requirement and have a support to the main hoop.

The head restraint on non-integral seats shall have a minimum area of thirty-

six (36) square inches and be padded with a non-resilient material such as Ethafoam® Ensolite®, or other similar material with a minimum thickness of one (1) inch. Padding meeting SFI spec 45.1 is recommended.

Head and neck restraints certified in accordance with SFI 38.1, FIA 8858-2002 or 8858-2010 are recommended.

**Hans-Devices are also highly recommended.*

These must be solid mounted as the regulations develop constantly over the next few years we want to make sure we have the highest level of safety available in this sport to make sure constant levels of safety are attained. We are recommending drivers slowly start using the above over the next two to three years with an aim to make them compulsory in 2026.

The anchor pickup points for the HELMET and the HANS device labelled on number 3 are the only areas where it must be attached to the helmet.

9.9 FIRE SUPRESSION SYSTEM

All cars must have an on-board fire extinguishing system.
The bottle must be mounted so that it can be removed easily for verification of full charge by weighing.

A nozzle outlet must be directed into the driver compartment but must not be pointed directly at the driver. There shall also be a nozzle outlet in the fuel cell compartment and in the engine compartment.

If the fuel cell compartment is under the car, or the stock fuel tank is being used, the third nozzle shall be pointed at the point where the fuel lines come into the cockpit. If no fuel lines enter the cockpit, the nozzle shall point at where the fuel/sender lines come off fuel tank, or fuel cell, or at the OE fuel tank access panel.

All fire systems shall be *serviced and recertified every year*. The proof of this service shall be printed on the exterior of the bottle. Only fire extinguisher systems specifically approved by the FIA on Technical List No.16, or those meeting SFI spec 17.1 will be permitted.

INFORMATION THAT MUST BE VISIBLE ON THE CONTAINER:

- *Capacity*
- *Type of extinguishant*
- *Weight or volume of the extinguishant*
- *Date the extinguisher must be checked, which must be no more than two*

years after the date of filling, or the date of the last check.

9.9.1 FIRE SYSTEM MOUNTING
All extinguishers must be adequately protected and must be situated within the driver's compartment.
In all cases, their mountings must be able to withstand a deceleration of 25g.
All extinguishing equipment must withstand fire.

9.9.2 TRIGGERING DEVICES
Any triggering system having its own source of energy is permitted; provided it is possible to operate all extinguishers should the main electrical circuits of the car fail.

The driver, when seated normally with the safety belts fastened, and the steering wheel in place, must be able to activate the fire system, by means of a spark proof breaker switch, or a manual push/pull apparatus.
This switch/apparatus must be located on the dashboard, or center console, and must be marked with a letter "E" in red, inside a white circle of a least 2 inches in diameter, with a red edge.

If the fire system activation switch used by the driver is located within 12" of one of the front door window openings a second fire system activation switch is not necessary.

Otherwise, a second fire system activation switch/apparatus must be fitted for external access. It also must be marked with a letter "E" in red, inside a white circle of at least 2 inches in diameter, with a red edge. The approved locations for the second switch are; along the A-pillar, along the B pillar, or on the windshield cowl. The second fire system switch shall be located in close proximity to the second master electrical cut-off switch.

9.9.3 NOZZLES
The nozzles shall be of the same number and type as those specified by the manufacturer for use with the type of extinguishant being used in the system. Additionally, the nozzles shall be in the locations specified by the manufacturer.

9.9.4 SAFETY PINS
The firing safety pin(s) shall be removed before the vehicle leaves pre-grid.

10 TYRES

10.1 TYRE ELIGIBILITY

Tyres must be DOT/E-Marked approved and have a minimum production run of 2,500 tyres, and the tyres must be available in RSA at regular retail outlets OR REGISTERED ON THE LEGAL TYRE LISTINGS AS ATTACHED.

Tyres must be available in RSA over the counter as a walk-in customer or as above stated.

Racing slicks, and cut slicks are not allowed to be used; semi-slicks may be used on the front ONLY. Tyres marked for racing use only are not allowed. Tyres showing signs of removed sidewall markings may be assumed to be illegal…T

All Tyres - Maximum Width for is 265mm is applied across all these tyres. A discrepancy of 10mm is allowed to tyre teams should there be a short supply order of these particular tyres in supply. Should these be a tyre supply issue for the team/driver a formal email from the Tyre Manufacture will need to be sent to the NDC organisers.

10.2 TYRE-MODIFICATIONS

Any attempt to modify tyres in any manner is prohibited. “Grooving” or “Shaving” of tyres is prohibited.

The use of traction compounds or any other substance that may alter the physical properties of the tire are prohibited.

Tyre warmers or any other means of artificially altering the tyre temperatures are prohibited.

*Tyres must meet a minimum durometer reading of 49, hot or cold, at all times during an EVENT, measured using an ISO868 or ASTM D2240 compliant Type A durometer.

11 MISCELLANEOUS REGULATIONS THAT NEED TO BE NOTED

- Ball joints, suspension bushes and wheel bearings must be in good condition.
- Side mirrors must remain.
- Vehicles must retain a passenger seat.
- Cutting of the main chassis rails is prohibited.
- All exterior performance parts, excluding wing mirrors but including rear spoilers and wings must not exceed the body width of the vehicle.
- The original dashboard can remain intact (apart from rollcage alterations) or can be replaced by a replacement unit built to similar or better standards/appearance to the OEM unit. Instruments are free to change
- All steering, drive train, wheels and brakes are free to change
- Catch tanks for oil and water must be installed and securely fastened with its contents easily visible on inspection. (All water and oil breathers must be connected to the catch tank) If not this is immediate disqualification.

12 SCRUTINEERING

Each vehicle will have to be scrutinized at each round of the competition. It is your own discretion that your car is scrutinized in time.

The car must be fully available (unlocked) for inspection during the period specified in the event timetable or crew must be present – the scrutineers can inspect the car if unattended, but the driver is responsible for ensuring bonnet pins etc., are replaced.

The driver is responsible for ensuring the car fully complies with the regulations – being passed by the Scrutineer is not a guarantee it to be fault free – every detail cannot be checked every time. On completion of the scrutineer's inspection an SD Log will be noted for your car and you will receive a pass

stamp, which will be attached to the vehicle.

The car must not be taken onto the track without a valid scrutineering label unless specifically authorized by a MSA/SD Official. If a vehicle fails its initial scrutineering inspection it may be re-entered after all competing vehicles have been inspected.

In the event of an accident / damage to the vehicle, the organizers reserve the right to re-inspect the vehicle before returning to the circuit.