Modified Article	Date of Application	Date of Publication

A capitalised and italicised word in this document is defined in the FIA International Sporting Code (Code) or the National Competition Rules (NCR), including their Appendices.

Any HEADING is for reference only and has no regulatory effect.

1. GENERAL

This group is for dedicated circuit racing cars of generally free mechanical construction which utilise coachwork being recognisable as that of an eligible production car. This group is only to be used only for cars that do not comply with any other category. All new logbook applications for this category must be individually approved as meeting the minimum safety standards for a circuit racing vehicle by Motorsport Australia.

1.1 REGULATIONS:

(a) Motorsport Australia is responsible for reviewing these regulations and making representations regarding proposed changes to these regulations.

(b) All vehicles must comply with Motorsport Australia Schedules A, B and C

(c) Any aspect relating to the construction and/or modification of the vehicle which is not expressly permitted in these regulations is forbidden, unless approved by Motorsport Australia and noted in the vehicle logbook.

2. ELIGIBILITY

2.1 DEFINED CAR:

The basis for the vehicle, and name by which it is known, will be the body/chassis unit of an eligible car.

(a) The Defined Car is the production car. The make, model and year forms the basis for dimensions, shapes and features for the derived vehicle.

(b) To be eligible the Defined Car may be either a Sedan, Wagon, Coupe, Open, Utility or Hatchback series production Automobile, and must be or have been:

(i) on sale through a recognised manufacturer franchised dealer network; or

(ii) an approved automobile which otherwise does not comply with 2.1 (b) (i) above but which has been approved by Motorsport Australia.

(c) In all cases the production base model of each eligible car will be the reference for all vehicle dimensions. Where enhanced versions based on production cars have been produced by the manufacturer as a “sports or otherwise version” (e.g. GT, GTR, R, A9X, L34 etc) that may differ from the basic version in wheelbase, track width, maximum width and length of coachwork; then in all cases the dimensions of the vehicle will be based on the base version, NOT the sports version.

(d) Any Open Automobile must have been manufactured as an open automobile.

3. THE VEHICLE

3.1 CONSTRUCTION:

Each 6R vehicle may be constructed utilising either a steel tubes chassis (Space Frame construction) or metal pressing chassis (floor pan construction).

3.2 SAFETY CAGE:

(a) Each Floor Pan 6R vehicle shall incorporate a safety cage structure compliant with Schedule J.

Note: Attention should be given to the selection of the Defined Car to ensure that the requirements of Schedule J are met.

(b) The design of any Space Frame construction 6R vehicle must be individually approved by Motorsport Australia.

3.3 WHEELBASE:

The wheelbase shall be within a total difference of ±500mm of the original wheelbase position of the Defined Car and the location of the centrelines of the front and rear hubs shall be within ±300mm of that of the centrelines of the front and rear hubs of the Defined Car.

3.4 CLEARANCE:

Each 6R vehicle shall be so constructed that no part of the car shall be less than 40mm above the ground when, measured with all tyres at a pressure of 1.7 bar (25 psi).

3.5 POWER TO WEIGHT:

All 6R vehicles must be constructed so that the vehicle has at least 2kg of racing weight for every 1 HP of power at the engine.

4. COACHWORK

4.1 COACHWORK:

(a) The body shell (deemed to be all externally visible body panels) shall be unchanged in external shape except as provided for within these regulations.

(b) The silhouette of the Defined Car shall remain unmodified apart from the modifications permitted in these regulations.

4.2 MATERIALS:

(a) All body panels may be replaced by panels of optional material, retaining the external shape, proportion and silhouette of the Defined Car. Additions to replacement and modified body panels, where permitted, shall be manufactured from one of the following:

(i) Material of the same gauge and composition as the original part; or

(ii) Aluminium, or aluminium alloy, of a gauge not thinner than 1.2mm (commercial grade tolerances); or

(iii) Glass fibre and/or glass-reinforced plastic, carbon fibre and/or Kevlar composite materials of a gauge not thinner than 1.5mm.

(b) The bonnet and boot lid may be replaced and incorporated into “one-piece” panels, with surrounding panels identical in external shape to the original. If incorporated into a one-piece panel there shall be a definition line a minimum of 3mm wide defining the guard to bonnet join, pop up headlight panel, etc so as to maintain the external appearance of the Defined Car.

4.3 ROOF:

(a) It is permitted to fit an approved duct in the roof of the vehicle for cockpit ventilation. The duct shall be mounted on the longitudinal centreline of the roof and no further rearward than 150mm of the top of the windscreen.

4.4 FRONT & REAR BUMPERS AND PANELS:

(a) The rear bumper, fascia, or beaver panel may be modified to facilitate the passage of the Tow Hook or exhaust and for the fitment of a rear diffuser as defined in Article 6.1 (k). The rear facia or beaver panel may be modified to facilitate rear venting as defined in Article 4.10.

(b) The front bumper and grill may be modified to facilitate the passage of a Tow Hook but shall retain its original appearance and location in relation to the unmodified area of the coachwork down to the horizontal centreline of the front wheel hub. It may be integral with the air dam and surrounding coachwork. If the upper edge of the bumper is in line with or below the horizontal wheel centreline then the upper edge and the area 60mm below shall remain unmodified so as to keep the original appearance and identity of the defined car.

(c) The bumper or fascia returns may be splayed horizontally to merge with the front mudguard flares. No part of the bumper or air dam shall be wider than the widest point of the modified front mudguards.

The shape of the original bumper or fascia may be modified to merge with the air dam below a horizontal plane passing through the centreline of the front wheel hubs (refer Article 4.5 (b). The size and placement of ducted openings to this area are free.

4.5 MUDGUARDS:

(a) Mudguard flares, made of alternative material (refer Article 4.2) may be extended or added in order to cover the wheels and tyres as defined in Article 4.5(b) and Article 4.5(c) below. The mudguard and/or flares may be extended in width up to a maximum of 100mm per side in excess of the width of the original Defined Car. Flares may extend a maximum of 400mm forward and 600mm rearward from the reformed wheel arch. It is permitted to include a flat section in the vertical plane on the outer portion of the guard that is surrounding the wheel arch opening, to a maximum width of 30mm

(b) When viewed from above, the coachwork shall cover the complete wheels to the horizontal centreline of the hubs with the wheels in the straight ahead position. The rear extremities of the front and rear

mudguards and/ or extensions shall continue below a horizontal line drawn through the centreline of the wheel hubs down to the original lower point of the mudguard and shall cover the full width of the tyres down to the horizontal centreline of the wheel hub height when viewed from the rear with the wheels in the straight ahead position.

(c) No hole shall be permitted in mudguards other than those originally provided by the manufacturer or under these regulations.

(d) Any flares or extensions of mudguards which are less than the maximum permitted dimensions shall fit as a whole within the silhouette which would have been created by a flare of the maximum dimensions.

(e) The minimum radius on the outer upper edge of the guard shall be 5mm. Each mudguard/rear door or flare may be modified to permit the exhaust pipe outlet to pass through a cut- out/relief therein and shall have no more than 12mm clearance around the exhaust pipe at any point, such that no part of the modification is above a horizontal plane passing through the horizontal centreline of the rear wheel hub (refer Article 7.5).

(f) Louvered vents shall be permitted in the upper surface of the front mudguards/bonnet area. Each vent shall be positioned above the wheel/tyre assembly, no further forward than the leading edge of the tyre and no further rearward than the trailing edge of the tyre with the wheels in the straight ahead position. Each vent shall be no closer to the outer edge of the guard laterally than 20mm, shall be no further inboard than the inside edge of the front tyre with the wheels in the straight ahead position and have a maximum area of 600cm2 per guard. The pitch of the louvers shall be between 25mm and 40mm and no higher than 25mm above the surrounding area of the mudguard where fitted

(g) An opening is permitted in the mudguards between the rear of the wheel arch opening and the trailing edge of the mudguard.

4.6 BONNET:

(a) Up to 3 bonnet vents with a maximum combined area of 3200cm2 may be fitted. This maximum applies to any car, regardless of venting area on the eligible car. The vent/s may have a raised leading edge (inclined rearwards) to a maximum height of 40mm from the surrounding area of the bonnet and may taper down to the bonnet surface along the sides of the vent/s. Each opening may be any shape and the vent elements must limit the visibility of other components under the bonnet when viewed from the front or sides. The maximum combined vent area includes any opening between the scuttle/plenum area and the trailing edge of the bonnet (refer Article 4.6(c)). If the bonnet vents are not louvered they shall not be just a hole in the panel in that they shall be fitted with panels or ducting down to the water radiator/intercooler/oil coolers/fans so no other parts of the under bonnet are visible.

(b) A change to the shape of the engine cover shall be permitted where the position of the engine or its actual induction components (excluding brackets, linkages etc.) prevents the full closing of a panel of the original shape and size, save that the maximum increase in height must not exceed 100mm, that the lateral clearance of the alterations around the offending components does not exceed 75mm, and that the maximum width does not exceed 450mm. A panel of modified shape shall completely cover the part or parts which cause the change to be affected and shall not have external openings, except for the purpose of air intake into a sealed air box. It shall not hinder the safe operation of any part of the Automobile and shall not impair the vision of the driver.

(c) Scuttle/Plenum or bonnet to windscreen opening: Where any area of the windscreen and associated lower panel or trim is below the profile of the bonnet as viewed from the front, the windscreen and associated lower panel or trim are free in such area. Where any part of the engine block extends forward of the windscreen, a flame and liquid-proof panel shall be installed to prevent engine fluids or fire from escaping between the windscreen and bonnet.

4.7 DOORS:

(a) **Front doors:** Each front door shall retain the original external shape, size and proportion save for the modification to fit side skirts. All window regulator mechanisms may be removed. Original front door catches, and hinges may be replaced with suitable alternative fittings. Internal anti-theft locks shall be rendered inoperative or removed. The driver's window net is to be attached to the roll cage and/or chassis in accordance with Schedule I.

(b) Opening front doors must be operable from the inside and the outside.

(c) The front door/s may be cut horizontally along the full length of the door only at a height no higher than the intersecting point of the tubes that form the side intrusion protection structure and hinged at the front. This shall be classed as an opening door. The remaining fixed lower section of the door shall maintain the external appearance of the standard door down to its lowest point or to the side skirt, if fitted (refer Article 4.8(b)). The gap between the removable upper section and the fixed lower section shall be a maximum of 3mm, with the original appearance of the door to be retained.

(d) Non-opening front doors with or without removable panels must not be fitted with windows.

(e) **Rear doors:** On a four-door car, the door skins of the rear doors may be made integral with the

surrounding coachwork. On cars where the door skins do not extend around the window frame the original appearance and shape of window frame trims must be retained. The rear mudguard flares may extend over part of the surface of the door skin. The area of coachwork under the flare, which may include part of the "C" pillar, may be removed. If the original external door handles on rear doors are removed the resulting aperture must be filled.

(f) The gaps between any removable body panels or opening doors must be a maximum of 10mm.

4.8 PILLARS, ROCKER PANELS AND SIDE SKIRTS

(a) On a Space Frame construction car the original shape and area of the A, B and C pillars, rocker panels and front door frames that are externally visible when the doors are closed shall be retained. The area that is not visible below the lower window line when the doors are closed may be removed and replaced with sheeting to maintain the integrity for the sealing of the cockpit from the ingress or entry of debris and fluids.

(b) It is permitted to fit side skirts to the area between the trailing edge of the front mudguard flare and the leading edge of the rear mudguard flare. They shall be no wider than a straight line between the outer edges of the mudguard flares where the skirts meet the flares. Each side skirts shall not extend below the horizontal plane created by the floor of the Automobile and shall be a maximum of 160mm in height at any point. If this is higher than the lower edge of the door, the lower part of the door may be modified to allow the skirt to be a maximum of 160mm high at any point. Each side skirt must extend from the trailing edge of the front mudguard flare to the leading edge of the rear mudguard flare and may include vent opening/s as permitted. If no side skirt is added, a vent opening is permitted in the rocker panel area in accordance with this regulation. The cumulative area of all openings in any outer surface of each skirt, or each rocker panel if no skirt is fitted, which are licked by the air must not exceed 520 cm^2. Each such opening must be shaped such that air is exhausted, not inducted. If a side skirt is fitted the original rocker panel it is covering may be removed underneath the skirt.

4.9 FLOOR:

(a) A floor that is visible with all covers attached shall seal the cockpit from the outside of the vehicle. Any sealed floor below the engine shall have one or more openings directly below the engine to let fluid egress in the event of an engine failure or fuel leak in the engine bay.

(b) The floor may be replaced.

4.10 REAR FACING VENTS:

(a) One or more vents may be created in the rear facing areas of the vehicle rearward of the trailing edge of the roofline (including the rear windscreen, fascia or beaver panel but excluding the rear bumper, tail lights, mudguards or any extensions/flares). Any vent created by removal of material in areas other than the rear windscreen must be replaced with mesh. Any vent created in the rear windscreen must have a maximum individual area of 20cm^2 each. The maximum combined surface area of all rearward facing vents is 1,000cm^2.

(b) Should a lower height rear diffuser be fitted, it is permitted to vent through the rear bumper up to the axle centreline in the space that otherwise may be filled by a rear diffuser.

5. INTERIOR

5.1 INTERIOR:

(a) All standard interior fittings and/or trim may be removed.

(b) Any front door trim that is removed shall be replaced with a flush-fitting rigid material. Local modifications shall be permitted to facilitate fitment of safety cage members and/or anti-intrusion bars.

(c) Each side window may be removed or replaced by a suitable rigid transparent material of adequate strength (e.g., polycarbonate), which shall be of a minimum material thickness of 3mm.

(d) The rear window may be replaced by a suitable rigid transparent material of adequate strength (e.g., polycarbonate), which shall be of a minimum material thickness of 3mm.

(e) The front window may be replaced by a suitable rigid transparent material minimum of adequate strength (e.g., polycarbonate) material thickness of 6mm.

(f) It is permitted to fit NACA type ducts in side windows.

(g) For each fixed up front door window fitted that is covering the whole of the window opening, an open slot shall be incorporated into the window of a minimum size 150mm x 50mm located within 30mm of the window edge to allow the window to be removed without tools in the case of an emergency.

(h) Each passenger seat in the car may be removed and any space for other than the driver may be encroached.

(i) If the original driver's seat is removed, the replacement seat must comply with Schedule C.

(j) A crushable structure may be fitted to the outside of the chassis on the driver's and passenger's side of the Vehicle in addition to the side intrusion tubes (refer Article 3.2(b)). It is recommended this take the form of a Nomex® or aluminium honeycomb such as Ayrelite 2022® and, if fitted, shall have a minimum thickness of 50mm and a minimum volume of 5cm3. This shall be located in the vicinity of the driver's hip and may be incorporated into the chassis.

6. AERODYNAMIC AIDS

6.1 AERODYNAMIC AIDS:

(a) It is permitted to fit a spoiler or air dam on the front of the car such that no part of it shall extend more than 100mm horizontally, measured perpendicular to the coachwork at any measured point and it shall be no wider than the front flares/mudguards.

(b) A front diffuser or an air dam under-tray may be installed. Each part of the diffuser or under-tray shall be within the vertical projection of the car, including any modified coachwork.

(c) It is permitted to fit dive planes/canards on each side of the front bumper fascia/air dam in front of the wheel arch. The dive planes/canards shall be no wider than the flare/coachwork, no higher than the front wheel hub horizontal centreline and have a maximum width at any point of 200mm measured perpendicular to the longitudinal centreline of the Automobile. Each dive plane/canard shall not be extended outside the vertical projection of the front diffuser/air dam.

(d) It is permitted to fit a rear deck lid spoiler of maximum height 200mm above the coachwork where mounted, and of a width not exceeding the width of the coachwork excluding any flaring of the mudguards. It shall be fitted without interruption with the rear deck and shall:

(i) not restrict rearward vision below that required;

(ii) not extend rearwards of the rearmost extremity of the coachwork; and

(iii) only be fitted rearwards of the rear window; and

(iv) only be fixed in position and not moveable whilst the car is being driven.

(e) In the case of a car which is defined as a hatchback, the spoiler may be fitted rearwards of the centreline of the rear axle.

(f) It is permitted to fit a rear wing assembly as an alternative to and instead of a rear deck lid spoiler subject to:

(i) The wing assembly extending no further rearward than 200mm beyond the rearmost part of the original coachwork and extending no further forward than 700mm beyond the rear most point of the original coachwork.

(ii) only. The overall width of the wing assembly, including mounts & end plates, shall be no wider than the width of the vehicle at its widest point on the rear 50% of the coachwork. A single element wing shall use a maximum horizontal length of 400mm and maximum width of 1830mm, including mounts & end plates. A dual element wing shall use a maximum combined horizontal length of 400mm, width of 1600mm, including mounts & end plates and a wing element maximum gap of 40mm.

(g) Each wing mount shall not provide vertical thrust.

(h) No part of the wing assembly shall be movable or adjustable while the car is in motion.

(i) No part of the wing assembly shall be higher than a horizontal line drawn from the highest point of the roof.

(j) An aerodynamic device may not be used for any additional alternative function, e.g. for the mounting of an oil radiator, unless permitted in these regulations.

(k) It is permitted to fit a rear diffuser. The diffuser may have vertical vanes fitted. No part of the diffuser shall be lower than the lower face of the floor between the rocker panels, shall be no wider than the inside edge of the rear tyres inflated to 1.7 bar (25 psi) and shall not be higher than the horizontal centreline of the rear wheel hubs. The diffuser shall extend no further forward than the vertical leading edge of the rear tyres inflated to 1.7 bar (25 psi) and shall be no further rearward than 100mm beyond the rear-most point of the original coachwork. The rear bumper, fascia and/or beaver panel may be modified to facilitate the fitment of the rear diffuser.

(l) It is permitted to vent any oil cooler through the diffuser panel providing no part of the cooler or ducting protrudes through the diffuser lower panel, fasteners excluded, and it shall remain within the plan view of the coachwork.

(m) It is permitted to exit the exhaust through the diffuser panel subject to exhaust exit requirements in

Article 7.5 of these regulations.

7. MECHANICAL COMPONENTS

7.1 BRAKES:

The design, construction and components of the braking system shall be free save for the following:

(a) Each car in a circuit race shall be fitted with a dual circuit braking system so arranged that the pedal normally operates on the four road wheels and, in the event of leakage at any point in the system, the pedal shall still control two wheels on the same axle.

7.2 SUSPENSION:

Each suspension component and their mounting shall be free.

7.3 TRANSMISSION

The design, construction and components of the transmission and final drive shall be free.

7.4 ENGINES:

The design, construction and components of the engine shall be free save for the following:

(a) To establish total engine capacity:

(i) A multiplying factor of 1.7 applies to forced induction engines.

(ii) A multiplying factor of 1.75 applies to rotary engines.

7.5 EXHAUST:

The design, construction and components of the exhaust system shall be free save for the following:

(a) Exhaust outlets must direct exhaust gases horizontally or downward.

(b) No part of the exhaust outlets is to be higher than the horizontal centreline of the rear wheel hubs.

(c) The exhaust may exit to the side or to the rear.

(d) An exhaust that exits rearwards shall not protrude more than 20mm beyond the rearmost portion of the unmodified coachwork.

(e) An exhaust that exits sideways, each outlet shall be located rearward of the midpoint of the modified wheelbase and project a maximum of 10mm beyond the maximum width of the coachwork or a minimum of flush with the panel it is exiting through.

(f) Each exhaust outlet below the floor shall terminate no more than 50mm within the plan view of the adjacent coachwork.

7.6 WHEELS AND TYRES:

The design, construction and components of the wheel and tyre shall be free.

8. ELECTRICAL COMPONENTS

8.1 DESIGN AND CONSTRUCTION:

The design, construction and materials of the electrical and electronic system and components shall be free save for the following:

(a) The original external shape and location of all lighting and signalling equipment must be retained.

(b) Each original headlamp and turn indicator not used, shall have their replacement blended with the surrounding coachwork. Where an original headlamp and/or signalling equipment is removed, suitable decals of original size and location shall be used in their place. Front lighting and signalling equipment need not be functional. For Automobile with retractable headlights, the external shape shall be determined to be that attained should the headlights be in the parked off position.

(c) Each tail lamp and brake lamp shall remain operable, with a minimum power of 3 Watts for each tail light, and a minimum of 20 Watts for each brake light (or the LED equivalent).

9. SAFETY

9.1 FUEL & FUEL TANKS:

The design, construction and components of the fuel system shall be free save for the following:

(a) Only fuel as defined by Motorsport Australia shall be used in accordance with Schedule G.

(b) An original fuel tank may be replaced. Refer to Schedule N, for fuel tank requirements.

(c) A Bladder-type fuel tank that is mounted inside the cockpit area, and compliant with FIA FT-3 or higher specification, shall have an outer case manufactured from material with the minimum specification of aluminium 1.5mm material thickness 5005 H34; or 1.5mm material thickness 6061 T6 or steel with a 1.5mm minimum material thickness.

(d) A fuel tank mounted inside the cockpit area must have as a minimum a 20mm drain hole in the floor below the tank to allow any fuel to escape the cockpit in the event of a leak.

(e) Fuel tanks that are mounted inside the cockpit area are to be fully covered and separated from the driver by a fluid and flameproof bulkhead or cover.