

2024 – Time Attack Tasmania Technical Regulations

**General Regulations**

1. **Preamble**
	1. **With permission from Ian Baker (CEO of World Time Attack Challenge), Street, Club, Modified and Unlimited will follow the same rules as Clubsprint, Open and Pro-Am respectively, with a few minor changes to lower costs.**
	2. **Each automobile must remain in compliance with all provisions of the regulations contained herein and relevant Motorsport Australia regulations at all times during the event. Vehicles may be checked for compliance at any time throughout the event, refusal to comply will result in a penalty up to exclusion in conjunction with the Stewards;**
	3. **Any aspect relating to the construction, modification and/or preparation of each automobile that is not specifically authorised in these regulations or the relevant Motorsport Australia regulations is not permitted.**
2. **Vehicles**
3. Each vehicle must be a recognised model from a vehicle manufacturer (see definition);
4. A vehicle defined as an Open wheel vehicle, Clubman, Kit Car or centre-steered vehicle are NOT permitted, as determined by the event promoter, unless an exemption is given.
5. Each vehicle must have only four (4) wheels with the steering acting on the front wheels only unless rear wheel steering is originally fitted, in which case the original system may remain;
6. Each vehicle may only contain one conventional internal combustion engine, save for an Unlimited Class vehicle which may be fitted with a KERS or electrics power type device;
7. Each vehicle must comply with the Time Attack Tasmania Safety Regulations.
8. **Competitions**

The event will comprise of five competition classes

* 1. **Street**
1. Designed to be the entry level class for Time Attack Tasmania, whilst retaining some modification restrictions to contain costs;
2. Supercars as determined by the vehicle list within these regulations are not permitted;
3. Each driver must complete an Entry form;
4. All Street class vehicles must use a street legal tyre above the wear markers, excluding R Compound Tyres as listed in Appendix B;
Slick tyres are prohibited from use.
5. Street class follows the Clubsprint regulations from the World Time Attack Challenge ruleset.
	1. **Club**
6. Designed to be the entry level class for Time Attack Tasmania, whilst retaining some modification restrictions to contain costs, with a broader tyre selection.
7. Supercars as determined by the vehicle list within these regulations are permitted to enter;
8. Each driver must complete an Entry Form;
9. Club class vehicles may a street legal tyre above the wear markers, as well as R compound tyres as listed in Appendix B.
10. Slick tyres are prohibited from use.
	1. **Modified**
11. Further freedoms allowed beyond the Street and Club classes, whilst retaining some restrictions;
12. Each driver must complete an Entry Form;
13. All Modified class vehicles may use a street legal tyre above the wear markers, as well as R compound tyres as listed in Appendix B;
14. Slick tyres are prohibited from use.
15. The Modified class follows the Open regulations from the World Time Attack Challenge ruleset.
	1. **Unlimited (Invitational)**
16. Unlimited is designed to be the highest level of Time Attack Tasmania;
17. Each driver must complete an Entry Form;
18. Unlimited class vehicles may use a street legal tyre above the wear markers, R compound tyres as listed in Appendix B, and Slick tyres;
19. The Unlimited class follows the Pro Am regulations from the World Time Attack Challenge ruleset, however is open to application to the promoter;
20. The Unlimited class is an invitation/by application only class.

**Safety Regulations**

1. **Driver Safety Apparel**
	1. **As a minimum, each driver is required to wear the following which must be presented for inspection at pre-event scrutiny or scrutiny at the event:**
2. A helmet complying with the requirements for a National Speed Event in accordance with Motorsport Australia Manual Schedule D.
3. If using a Frontal Head Restraint (FHR), such as a HANS device, then the helmet must be compliant for use with a FHR;
4. Vehicles requiring a mandatory FHR are listed in Motorsport Australia Manual Schedule D, Article 1.4.
5. In an open car, goggles or a visor with a lens material other than glass to a minimum of AS1609-1981 standard are mandatory.
	1. **The use of a FHR is highly recommended.**
	2. **The use of apparel of a higher standard is highly recommended.**
6. **Apparel for each Time Attack Tasmania class**
	1. **For each Time Attack Tasmania class each driver shall be required to wear the following which must be presented for inspection at pre-event scrutiny or scrutiny at the event:**
7. All Drivers must wear apparel in accordance with Schedule D of the current Motorsport Australia Manual. This includes but not limited to:
8. Non-flammable clothing extending from neck to ankles (apparel of nylon or similar materials is forbidden). This includes long legged trousers and long sleeved shirts or tops;
9. Enclosed footwear made of all leather or sueded (no thongs, sandals or high heeled boots/shoes);
10. Each vehicle with a performance level, based on lap time quicker than a 0:59.500min lap of Baskerville Raceway must be used with the following Safety Apparel:
11. A Frontal Head Restraint, such as a HANS device of which each element of the device must comply with FIA 8858-2002 or 8858-2010 standard;
12. Vehicles requiring a mandatory FHR are listed in Motorsport Australia Manual Schedule D, Article 1.4.
13. A one piece driving suit complying with, as a minimum, FIA 1986 standard;
14. A balaclava complying with FIA8856-2000 must be worn if using an Open Face Helmet;
15. Footwear, socks and gloves each complying with FIA 8856-2000 standard.
16. **Vehicle Safety**

Each vehicle must comply, as a minimum with the Motorsport Australia Manual Schedule A and B. The following is also required for each Time Attack Tasmania class:

* 1. **All Classes**
1. A minimum of one (1) hand held fire extinguisher, with a minimum capacity of 900g, compliant with Motorsport Australia Manual Schedule H. It is HIGHLY RECOMMENDED to fit an on-board and plumbed in fire extinguisher system (fire bomb) of a minimum of 2.4litre capacity and recommended to comply with the FIA requirements;
2. A convertible type vehicle must be equipped with a hard top or a roll cage that complies with Motorsport Australia regulations, and/or meets the approval of the Chief Scrutineer.
3. Must be fitted with seat belts of a type listed in General Requirements for Cars and Drivers, Schedule I of the current Motorsport Australia Manual.
	1. **Street**
4. A four (4) point Safety Harness in compliance with Motorsport Australia Manual Schedule I, as a minimum, is highly recommended;
Note: If using a FHR the minimum is a 5 point Safety Harness in compliance with Motorsport Australia Manual Schedule I
5. A seat for the driver that is suited to the use and fitment of a Safety Harness. The use of a motor sport seat compliant with FIA standard 8855-1999, as a minimum, is highly recommended;
6. A battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine, is highly recommended;
7. Original brake lights fitted must be working when the brake is applied;
8. With no fewer than two (2) functional rear vision mirrors.
	1. **Club**
9. A four (4) point Safety Harness in compliance with Motorsport Australia Manual Schedule I, as a minimum, is highly recommended;
Note: If using a FHR the minimum is a 5 point Safety Harness in compliance with Motorsport Australia Manual Schedule I
10. A seat for the driver that is suited to the use and fitment of a Safety Harness. The use of a motor sport seat compliant with FIA standard 8855-1999, as a minimum, is highly recommended;
11. A battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine, is highly recommended;
12. Original brake lights fitted must be working when the brake is applied
13. With no fewer than two (2) functional rear vision mirrors.
	1. **Modified**
14. A minimum of a five (5) or six (6) point Safety Harness is compliance with the Motorsport Australia Manual Schedule I;
15. A seat for the driver that is of a fixed back design and recognised for use in motorsport. The use of a motor sport seat compliant with FIA 8859-1999, as a minimum, is highly recommended
16. A battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine. There must be a second switch, or a remote means of operating the main switch, from the vicinity of the base of the A pillar on the driver side, and clearly marked in compliance with the Motorsport Australia Manual.
17. Original brake lights fitted which must operate when the brake is applied;
18. With no fewer than two (2) functional rear vision mirrors.
	1. **Unlimited**
19. A minimum of a five (5) or six (6) point Safety Harness in compliance with the Motorsport Australia Manual Schedule I;
20. A motor sport seat compliant with FIA standard 8855-1999, as a minimum;
21. A battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine. There must be a second switch, or a remote means of operating the main switch, from the vicinity of the base of the A pillar on the driver side, and clearly marked in compliance with the Motorsport Australia Manual;
22. A single brake light, mid mounted, which must operate when the brake is applied and must be easily and externally visible at the rear of the car;
23. Fitted with a minimum of two functional rear vision mirrors
24. A rear vision camera system may be used in place of rear vision mirrors. Each rear view camera system must be approved by the Chief Scrutineer.
25. An on-board and plumbed in fire extinguisher system (fire bomb) of a minimum of 2.4litre capacity and recommended to comply with the FIA requirements
	1. **Each vehicle with a performance level, based on lap time, quicker than a 0:59.5000min lap of Baskerville Raceway must be fitted, as a minimum, with a motor sport seat compliant with FIA standard 8855-1999.**
26. **Roll Over Protection**
	1. **Street & Club**
27. Rollover protection is strongly recommended for Street and Club classes;
	1. **Modified**
28. Rollover protection is compulsory and must be of a minimum 4-point construction (Motorsport Australia type 2 Safety Cage (Half Cage)) in compliance with MOTORSPORT AUSTRALIA Manual; Technical Appendix – Schedule J, and meets the approval of the Chief Scrutineer;
	1. **Unlimited**
29. Rollover protection is compulsory and must be fitted with a Motorsport Australia type 3 Safety Cage (full cage) in compliance with MOTORSPORT AUSTRALIA Manual; Technical Appendix – Schedule J, and meets the approval of the Chief Scrutineer;
	1. **Each vehicle with a performance level, based on lap time, quicker than a 0:59.500min lap of Baskerville Raceway, must be fitted as a minimum with a Motorsport Australia Type 3 Safety Cage (full cage) in compliance with MOTORSPORT AUSTRALIA Manual; Technical Appendix – Schedule J;**
30. **Pre Event Scrutiny Requirements, Vehicle Equipment & Safety**
	1. **Each vehicle must be present for scrutiny in a clean, tidy and ready to start condition.**
	2. **Scrutiny must be completed before the vehicle shall be permitted to take part in the competition or it’s on track activities.**
	3. **Each vehicle that holds a Motorsport Australia logbook must present the logbook at scrutiny.**
	4. **Following scrutiny, each vehicle will be fitted with a sticker confirming that the vehicle has passed scrutineering prior to it being able to compete.**
	5. **The event promoter will be the sole judge of eligibility for each vehicle in each Time Attack Tasmania class, in conjunction with the Chief Scrutineer.**
	6. **All vehicles must comply with the General Requirements for Cars and Drivers, Schedules A and B of the current Motorsport Australia Manual and:**
31. Ensure all loose objects are removed from the vehicle;
32. Have each battery firmly clamped and the battery location identified by a blue triangle with sides of 150mm on the coachwork (Blue car = Blue triangle with white border/edge). A battery fitted in the cockpit shall have an additional blue triangle fitted on the cover of the battery or the battery itself if uncovered;
33. Be fitted with two (2) separate fastening systems on any bonnet or other panel where the leading edge can be raised, The standard double latch is sufficient for road registered vehicles;
34. Any window or windscreen fitted made from a material which is clear or, if tinted compliant with Australian Standards AS2080;
35. All vehicles must have front and rear tow hooks fitted. Obscured tow points are required to be marked with the word “TOW”;
36. All forward facing glass except the windscreen shall be completely covered with clear adhesive film, or of a colour other than red;
37. Have the engine compartment sealed completely from the cockpit;
38. Be constructed to minimize the entry of foreign matter in the driving compartment from the road or road wheels;
39. Have any propeller shaft and/or universal joint, if passing through the cockpit, fitted in a fixed casing;
40. Be constructed in a way that any longitudinal propeller shaft is protected from striking the ground;
41. Have any driving chain effectively guarded
42. Have any container within the cockpit which can hold more than 500mL of hot liquid (other than a series heater core) enclosed in a sealed compartment isolating it from the cockpit;
43. Have each fuel tank vented externally to the bodywork;
44. Be fitted with a bulkhead constructed from a flame-proof and liquid-proof material. If the material is clear it shall be a minimum of 6mm thick. This bulkhead shall effectively seal the cockpit from any fuel tank, fuel system pumps/collectors or refuelling system;
45. If fitted with any crankcase breather discharging to the atmosphere, each breather be vented in a catch tank of minimum capacity of two (2) litres for engines up to 2000cc or three (3) litres for over 2000cc;
46. If fitted with any engine radiator coolant vent discharging to the atmosphere, each coolant vent be vented to a catch tank of a minimum capacity of one litre;
47. If fitted with rigid brake pipes have such pipes made of steel bundy tubing or equivalent. The installation must be such to protect the pipes against vibration and damage;
48. If fitted with any camera/video recorder attached to the automobile it must be securely mounted and approved by the Chief Scrutineer. Suction cup mounts will not be permitted to be fitted to the external surfaces of the vehicle without the addition of a secondary tether secured to the vehicle;
49. Be fitted with a return mechanism which, which in the event of any throttle linkage failure, will close each throttle;
50. Be fitted with a driver-operable reverse gear;
51. Be fitted with a steering wheel not incorporating any wood, unless such is the original component of the automobile.
52. **During Event Scrutiny**

Each vehicle may be required, at the request of the scrutineer, to undergo any further check or inspection at any time during the event, and:

1. Any vehicle found to be leaking oil or fluids whilst competing will be suspended from the event until the Chief Scrutineer/Clerk of the Course is satisfied that action has been taken to rectify the leak;
2. Any vehicle involved in any on track incident, including fluid leaks, component failure or any form of accident must have the vehicle checked and cleared by the Chief Scrutineer before it will be allowed to continue to compete in the event. Failure to do so may result in exclusion from the event;
3. Should there be a further reoccurrence of any on track incident whilst competing then that vehicle will be deemed in breach of the regulations and may be applied a further penalty that may include exclusion from the event in conjunction with the Stewards;

**Permitted Vehicle Modifications**

All vehicles must be present as originally manufactured (see definitions) apart from the freedoms allowed in these regulations.

FURTHER NOTE:

Any vehicle that does not meet the definitions listed will need to be considered on a case-by-case basis. If your vehicle does not have shock towers, frame rails, or any other items listed or you are unclear (for example a vehicle which came equipped with push rod suspension) you must submit your vehicle modifications for approval prior to the event. Any approval granted will be at the discretion of the event promoter.

1. **Body**
	1. **Street & Club**
2. Alternative materials are permitted for the Front Bar, Bonnet, Side Skirts, Rear Bar and Boot provided they follow the same shape as the OEM part;
3. Bonnet vents are allowed solely for the purpose of engine bay cooling and provided they do not change the shape of the bonnet. Where a bonnet is integrated with the front fenders the area that covers the complete front wheel and tyre must remain unmodified except where permitted for allowed tyre fitment (refer 1.1e)
4. Alternative materials are permitted for front and rear flares;
5. Wheel arch modifications of OEM fenders to allow fitment of the control tyre are permitted;
6. OEM fenders must be of original material however flare extensions are permitted to cover the allowed tyre;
7. Each wheel and tyre must be fitted so that the upper part of the tyre, down to the flange over the wheel hub centre must be within the perimeter of the automobile when viewed vertically from above, see Drawing 1;
8. The remainder of the vehicle body must remain as per OEM;
9. Headlight assembly must remain as per OEM and be fully operational.
	1. **Modified**
10. Each wheel and tyre must be fitted so that the upper part of the tyre, down to the flange over the wheel hub centre must be within the perimeter of the automobile when viewed vertically from above, see Drawing 1;
11. Alternative materials are permitted for removable panels including the centre roof section however all bodies must follow the same shape and retain the original look and style of the vehicle;
12. It is permitted to modify the front fenders to permitted total vehicle width;
13. Modification of the front fender in the area between the wheel arch and the front door is permitted;
14. It is permitted to replace the external sheet metal of the rear quarter panel with an alternate material which may include the permitted increase to the total vehicle width. The replacement material shall be fitted no higher than the horizontal centre line point of the rear window glazing of the “C” pillar;
15. All internal sheet metal must remain as originally fitted except where it is permitted to be modified or removed in these regulations;
16. Front and rear bars may be modified to incorporate aero components. The front bar must not extend further than 150mm and the rear bar no further than 100mm rear than the bodywork of the vehicle;
17. Total Vehicle width in front view (measured at its widest point, excluding mirrors) must not exceed 250mm wider than the OEM bodywork;
18. Headlights may be removed but must be replaced with suitable decals in the original location;
19. Windows may be replaced with Lexan, except for the OEM windscreen which must be retained.
	1. **Unlimited**
20. Each wheel and tyre must be fitted so that the upper part of the tyre, down to the flange over the wheel hub centre must be within the perimeter of the automobile when viewed vertically from above, see Drawing 1;
21. Alternative materials are permitted for removable panels however all bodies must follow the same shape and retain the original look and style of the vehicle. It is permitted to replace the external sheet metal with an alternate material which may include the permitted increase to the total vehicle width and length.
22. All internal sheet metal must remain as originally fitted except where it is permitted to be modified or removed in these regulations.
23. Front and rear bars may be modified to incorporate aero components. The front bar must not extend further than 150mm forward and the rear bar no further than 100mm rearward than the OEM bodywork of the vehicle.
24. Total Vehicle width in front view (measured at its widest point, excluding mirrors and front winglets/canards) must not exceed 350mm wider than the OEM vehicle bodywork.
25. Headlights may be removed but must be replaced with suitable decals in the original location.
26. Windscreen may be replaced with Lexan but must remain in the OEM position and comply with the OEM dimensions.
27. OEM tail lights must be retained in original position and must be visible from rear (cannot be decals). The addition of a single working brake light may be fitted as a minimum if original lights are inoperable.
28. The original B pillar must be retained however it may be moved only to improve driver access.

Drawing 1:



1. **Chassis**
2. Each vehicle must retain the original firewall.
3. No fully tubular construction or composite monocoques are permitted.
	1. **Street & Club**
4. Modifications can be made to the firewall for transmission clearance, wiring or roll cage, however the resulting firewall must:
5. Resemble the original;
6. Continue to be structural;
7. Create a seal between the forward area and the cockpit; and
8. Only use material that must be of the same thickness as the original firewall and of a similar material (e.g. steel for steel, aluminium for aluminium).
9. Original shock absorber (i.e. Macpherson Strut) towers must be retained.
	1. **Modified**
10. Modifications can be made to the firewall for transmission clearance, wiring or roll cage, however the resulting firewall must:
11. Resemble the original;
12. Continue to be structural;
13. Create a seal between the forward area and the cockpit; and
14. Only use material that must be of the same thickness as the original firewall and of a similar material (e.g. steel for steel, aluminium for aluminium).
15. Original shock absorber (i.e. Macpherson Strut) towers must be retained.
16. The rear most part of the engine block must be no more than 51mm rearward of the most forward point of the mainly vertical firewall. If the vehicle is rear engine, the front most part of the engine block must be no more than 51mm forward of the most rear point of the mainly vertical firewall;
17. The firewall may be modified for clearance of the engine but must remain in the OEM position;
18. Wheel arch “tubbing” or removal of material is permitted front and rear for the sole purpose of bump clearance for tyres or cooling system ducting forward of the front shock towers;
19. Allowance for removal of material for fitment of fuel or fluid tanks, associated fittings and exhaust is permitted in the rear section of the vehicle;
20. Rear floor may be modified to accommodate rear differential in vehicles that were originally front wheel drive vehicles;
21. The floor between the wheelbase may be modified to fit a side exit exhaust. This modification must only be in the area of and for the passage of the exhaust system.
	1. **Unlimited**
22. Modifications can be made to the firewall for transmission clearance, wiring, roll cage or pedal box, however the resulting firewall must:
23. Resemble the original;
24. Continue to be structural;
25. Create a seal between the forward area and the cockpit; and
26. Only use material that must be of the same thickness as the original firewall and of a similar material (e.g. steel for steel, aluminium for aluminium).
27. Original shock absorber (i.e. Macpherson Strut) towers must be retained in the front of the vehicle only.
28. The rear most part of the engine block must be no more than 51mm rearward of the most forward point of the mainly vertical firewall. If the vehicle is rear engine, the front most part of the engine block must be no more than 51mm forward of the most rear point of the mainly vertical firewall.
29. The firewall may be modified for clearance of the engine but must remain in the original position
30. Composite/Carbon fibre materials may be used only in non-structural components unless originally fitted.
31. Forward retention of the original chassis:
32. OEM frame rails (see definitions) and front shock towers must be retained from the upper portion of the shock towers and back. Modifications are allowed solely for the addition or relocation of suspension pickup geometry and safety cage fitment.
33. Rear retention of the OEM chassis:
34. OEM floor pan and frame rails must be retained from the firewall to the forward most point of the rear wheel arch. Allowance for removal material for fitment of fuel or fluid tanks and associated fittings is permitted.
35. Modifications are allowed only as needed for the exhaust, driveshaft clearance, mounting of roll cage, seat or other safety items. Under no circumstances can any portion of the frame rails or floor pan be removed or modified from the rear of the driver’s seat forward to the firewall except as required for exhaust clearance, transmission clearance, tail-shaft clearance or the detailed addition of bushes or brackets in mounting under surfaces.
36. Wheel arch “tubbing” or removal of material is permitted front and rear for the sole purpose of bump clearance for tyres or cooling system ducting forward of the front shock towers.
37. Allowance for removal of material for fitment of fuel or fluid tanks, associated fittings and exhaust is permitted in the rear section of the vehicle.
38. Rear floor maybe modified to accommodate rear difference in vehicles that were originally front wheel drive.
39. **Minimum vehicle weights**

Minimum weight will be deemed to include liquid tanks at normal levels and with a maximum of 5 litres of fuel. All weights are without driver. All vehicle weights must be based on a “production vehicle status” and not a “factory special” with a minimum of 500 of the vehicle produced worldwide. Minimum weights for vehicles is detailed in Appendix A – Vehicle Weights Table.

* 1. **Street & Club**

Minimum weight for Street & Club will be determined by the manufacturer’s original specifications for the lightest version of that particular model of vehicle, minus 5%

E.g. Mitsubishi Lancer Evo 9 not merely Mitsubishi Lancer. Vehicles with original weight exceeding 1500kg will not apply the 5% rule but will have a minimum allowed competition weight of 1425kg. Naturally aspirated vehicles are permitted an additional 10% decrease to the minimum weight.

* 1. **Modified**

Minimum weight for Modified will be determined by the manufacturer’s original specifications for the lightest version of that particular model of vehicle, minus 15%.

E.g. Mitsubishi Lancer Evo 9 not merely Mitsubishi Lancer. Vehicles with the original weight exceeding 1500kg will not apply the 15% rule but will have a minimum allowed competition weight of 1275kg.

* 1. **Unlimited**

Minimum weight for Unlimited will be determined by the manufacturer’s original specifications for the lightest version of that particular model of vehicle, minus 20%.

E.g. Mitsubishi Lancer Evo 9 not merely Mitsubishi Lancer. Vehicles with the original weight exceeding 1500kg will not apply the 20% rule but will have a minimum allowed competition weight of 1200kg.

1. **Aerodynamic Aids**
	1. **All aerodynamic additions must be within the body parameters outlined for the relevant vehicle class;**
	2. **Strength and method of aero component fastening will be checked thoroughly at scrutineering and if found to be unsuitable, the vehicle will not be permitted to start until improvements are made to meet the approval of the Chief Scrutineer;**
	3. **Active aero including any hydraulically or electronically actuated or movable components are not permitted in any class, unless fitted as per OEM;**
	4. **All measurements have tolerance of +/- 3mm to allow for inaccuracy of hand measurements and thermal expansion;**
	5. **The following is permitted for each class:**
	6. **Street & Club**
2. A Front under tray/splitter which must follow completely the outline of the OEM front bar and may extend 50mm ahead of the vehicle OEM bodywork, no further rearward than the front axle and no wider than the original front guards, see Drawing 2;
3. Front canards/winglets are permitted but must not extend wider than 50mm beyond the OEM guards and must not extend forward of the original coachwork as described in Drawing 2;
4. An OEM rear wing or an aftermarket rear wing with up to two separate elements may be used in an unmodified form. The width of the wing must not exceed the widest part of the body. Only one aftermarket wing per vehicle is permitted;
5. The rear wing must be fitted as such to be over the body or boot in plain view. No portion of the wing can be higher than the horizontal line from the highest point of the roof sheet metal except in the case of a hatchback where the wing can be no higher than 150mm from the highest point of the wing to the roofline and must be on the rear portion of the roof;
6. No part of the rear wing may not extend further rearwards than the most rearward point of the rear bumper, see Drawing 3;
7. Rear diffuser/under tray must not extend further beyond the vehicles bodywork and forward only to the rear axle centre line;
8. Aftermarket side mirrors are permitted;
9. Side skirts may not extend inboard more than 250mm under the vehicle, see Drawing 4.

Drawing 2:



Drawing 3:



Drawing 4:



* 1. **Modified**
1. Each aerodynamic aid must fit within the outline detailed in Drawing 5, and:
2. Box A: Any aerodynamic aid forward of the front wheels must be no more than a maximum of 150mm forward and a maximum of 200mm wider each side than the OEM bodywork. It must be no higher than the highest point of the OEM bonnet. A full front under tray is permitted which must not extend further rearward than the centre line of the front axle;
3. Box B: Any aerodynamic aid (i.e. side skirt) in between the front (Box A) and rear (Box C) section must not extend further outwards than a maximum of 125mm per side wider than the OEM bodywork. It must not extend inwards past the innermost point of each side OEM chassis rail, see Drawing 6. It must be no higher than the lowest point of the OEM front doors;
4. Box C: Any aerodynamic aid rearward of the rear wheels must be no more than a maximum of 100mm rearward and a maximum of 100mm wider each side than the OEM bodywork. It must be no higher than a maximum of 250mm above the highest point of the OEM roof. An aerodynamic air fitted above the lowest point of the rear most OEM window must contain no more than two (2) horizontal elements. A rear diffuser/under tray fitted on the underside of the bodywork must not extend further forward than the centreline of the rear axle.
5. The underside of the OEM floor between the centre line of the front and rear axles must remain exposed to the airflow. It is not permitted to cover the underside of the OEM floor or otherwise alter the airflow acting in this area (i.e. by hitting a flat floor) save for where permitted in these regulations.

Drawing 5:



Drawing 6:



* 1. **Unlimited**
1. Flat floors are permitted in Unlimited class. The flat floor is not permitted to be part of the structural monocoque. Mechanical force is not permitted to be used with the design of the floor.
2. Each aerodynamic aid must fit within the outline detail in Drawing 5, and:
3. Box A: Any aerodynamic aid forward of the front wheels must be no more than a maximum of 300mm forward and a maximum of 475mm wider each side than the OEM bodywork. It must be no higher than the highest point of the OEM bonnet.
4. Box B: Any aerodynamic aid in the area of the side skirt, between the front and rear wheel, is not permitted to be wider than the maximum permitted vehicle width as per Section 1.3.e.
5. Box C: Any aerodynamic aid rearward of the rear wheels must be no more than a maximum of 300mm rearward and a maximum of 150mm wider each side than the OEM bodywork, It must be no higher than a maximum of 250mm above the highest point of the OEM roof.
6. **Engine**
	1. **All vehicles must use a Commercial Fuel, E85 or Unleaded Racing Fuel in accordance with Schedule G of the Motorsport Australia Manual.**
	2. **Engine changes during the event are permitted subject to the approval of the Chief Scrutineer.**
	3. **The Mazda 26B four rotor is considered a production engine by the promoter.**
	4. **Electrical vehicles must retain the original motor as installed by the manufacturer. Modification to the motor are prohibited.**
	5. **Street & Club**
7. Engine modifications are free except that vehicles must retain an engine from the OEM manufacturer of that vehicle and the number of cylinders or in the case of a rotary engine, rotors must remain as per OEM;
8. The use of a turbocharger or supercharger is allowed.
NOTE: For example if the vehicle is a Toyota that came with a four cylinder engine the vehicle can be fitted with any Toyota 4 cylinder engine that can also use forced induction.
	1. **Modified & Unlimited**
9. Engine modifications are free save for the engine must be based on a production engine from a recognised vehicle manufacturer;
10. The crankshaft centre line may be lowered. The engine positioning and mounts being free provided that its relationship to the firewall is not exceeded as in Article 2 Chassis;
11. The use of a turbocharger or supercharger is allowed.
12. **Cooling System**
	1. **Each cooling system hose and clamping system may be replaced with an alternate hose, pipe and/or clamping system;**
	2. **Street & Club**
13. The engine coolant radiator may be replaced with an alternate radiator of free design and size in accordance with the following:
14. A replacement radiator shall be fitted in the same location and plane as the original with forward or aft re-positioning of the radiator up to a maximum of 75mm from the OEM position permitted; or
15. For a vehicle which from the OEM is turbocharged and fitted from the OEM with a top-mount intercooler it is permitted to fit a replacement radiator in the same location as the original with forward or aft re-positioning of the radiator up to a maximum of 75mm from the OEM position permitted and the plane of the radiator in this case is free.
16. It is permitted to modify the original radiator support panels , or radiator support structures only for the fitment of the replacement radiator, the addition of fasteners and for the passage of radiator pipe work and/or hoses only within the location of the pipework and/or hoses. Engine coolant radiator fan is free.
17. A turbocharger/supercharger intercooler may be replaced of free design. Each intercooler must be fitted within the vehicle OEM bodywork. It is permitted to modify the bodywork only for the addition of fasteners and for the passage of intercooler pipe work and/or hoses only within the location of the pipe work and/or hoses;
18. It is permitted to add an oil cooler for the engine, and/or transmission/differential and/or a power steering fluid cooler. The location of an oil cooler is free provided each oil cooler is fitted within the original bodywork. It is permitted to modify the bodywork only for the addition of fasteners and for the passage of oil cooler pipe work and/or hoses within the location of the pipe work and/or hoses;
19. Additional ducting for the cooling systems is prohibited unless per OEM manufacturer fitted provided no modification is undertaken to the original bodywork, save for the addition of fasteners for duct mounting. Any additional ducting must be contained within the bodywork.
	1. **Modified**
20. The engine coolant radiator and mounting is free provided it is contained within the vehicle bodywork and within the general location of the original (i.e. in front of the engine for a front engine vehicle). The original radiator support panel or structures may be removed or replaced with alternate materials. Cooling fans are free but must be contained within the bodywork;
21. A turbocharger/supercharger intercooler and mounting is free provided it is contained within the bodywork.
22. Oil cooling is free provided each cooler is fitted within the bodywork;
23. Additional ducting for cooling systems is free provided it is contained within the bodywork. Each duct fitted must respect the modifications permitted elsewhere in these regulations in regards to the removal of materials from the chassis.
	1. **Unlimited**
24. Cooling systems and their locations are free provided they are contained within the bodywork.
25. A turbocharger/supercharger intercooler and mounting is free provided it is contained within the bodywork.
26. Oil cooling is free provided each cooler is fitted within the bodywork.
27. Additional ducting for cooling systems is free provided it is contained within the bodywork. Each duct fitted must respect the modifications permitted elsewhere in these regulations in regards to the removal of material from the chassis.
28. Modification to facilitate the fitment of cooling systems must respect the modifications permitted elsewhere in the regulations in regards to the removal of material from the chassis.
29. Ducting is permitted to be fitted externally to the bodywork provided it is contained within the permitted maximum dimensions of the bodywork.
30. **Fuel System**
	1. **All fuel systems must comply with all safety regulations required in these regulations.**
	2. **Street & Club**
31. Fuel pumps, fuel regulators and fuel lines are free;
32. One additional tank may be installed with a maximum capacity of 5 litres;
33. The OEM fuel tank may be replaced with a replacement tank in the same location as standard. The replacement tank must comply with MOTOR AUSTRALIA; Technical Appendix – Schedule N Tank of Free Design or FIA Fuel Cell requirements;
34. No removal of floor/chassis or other material to fit tank is permitted.
35. Fuel tank/system must be sealed from the cockpit.
36. Fuel tank foam and internal baffling of fuel tank permitted.
	1. **Modified & Unlimited**
37. Fuel System is free.
38. The OEM fuel tank may be replaced with a replacement tank. The replacement tank must comply with MOTORSPORT AUSTRALIA; Technical Appendix – Schedule N Tank of Free Design or FIA Fuel Cell requirements.
39. Fuel tank/system must be sealed from the cockpit.
40. **Electrical System**
	1. **Street & Club**
41. Replacement of Engine Control Modules permitted;
42. Modification of the OEM wiring harness permitted.
	1. **Modified & Unlimited**
43. Electrical System is free.
44. **Exhaust**
	1. **The complete exhaust system may be modified or replaced however the exit of the exhaust must comply with the following:**
	2. **Street**
45. It must comply with 95db @ 30m noise restrictions
46. The exhaust must exit within 100mm of the original location and shall not protrude more than 100mm beyond the rear most portion of the bodywork.
	1. **Club**
47. The exhaust must exit within 100mm of the original location and shall not protrude more than 100mm beyond the rear most portion of the bodywork.
48. If the exhaust is directed sideways the outlet(s) must be located rearward of the midpoint of the wheelbase and shall not project beyond the maximum width of the vehicles bodywork or terminate more than 50mm inwards of the coachwork. A side exit exhaust must be no more than a maximum of 200mm above the lowest point of the OEM body sill line at any point between the wheelbase. A side exit exhaust must exit in a direction away from the centreline of the vehicle.
	1. **Modified**
49. For rearward facing exhaust the outlet(s) shall be between 75mm and 600mm above the ground and within 100mm longitudinally of the rear of the bodywork. If the exhaust is directed sideways the outlet(s) must be located rearward of the midpoint of the wheelbase and shall not project beyond the maximum width of the vehicles bodywork or terminate more than 50mm inwards of the coachwork. A side exit exhaust must be no more than a maximum of 200mm above the lowest point of the OEM body sill line at any point between the wheelbase. A side exit exhaust must be contained within the modification permitted to the floor in Article 2. CHASSIS. A side exit exhaust must exit in a direction away from the centreline of the vehicle.
	1. **Unlimited**
50. For rearward facing exhaust the outlet(s) shall be between 75mm and 600mm above the ground and within 100mm longitudinally of the rear of the bodywork. If the exhaust is directed sideways the outlet(s) must be located rearward of the midpoint of the wheelbase and shall not project beyond the maximum width of the vehicles bodywork or terminate more than 50mm inwards of the coachwork. A side exit exhaust must exit in a direction away from the centreline of the vehicle.
51. **Transmission, Differential and Driveline**
	1. **Clutches and flywheel are free;**
	2. **Transmission and differential may be replaced by another of free design;**
	3. **Internal components of transmission and differential are free;**
	4. **The bell housing is free;**
	5. **Automatic transmissions if provided as an option by the manufacturer for that model are permitted;**
	6. **Street & Club**
52. Original mounting points for the Transmission and Differential must be used;
53. Transmission gear change operation is free;
	1. **Modified**
54. Driveline is free save for original number of drive wheels must be retained e.g. 2WD. 4WD.
55. OEM Mounting points for Transmission and Differential must be used except where front wheel drive has been converted to rear wheel drive.
56. Sequential shifting and paddle style shifting mechanisms are permitted in Modified Class.
57. Transmissions tunnel modifications necessary to allow fitment of a transmission are permitted.
58. Replacement tail shafts are permitted.
59. Transmission and differential oil coolers are permitted;
	1. **Unlimited**
60. Driveline is free save for 4WD which may be converted to 2WD. An original 2WD vehicle cannot be converted to 4WD.
61. Mounting points are free.
62. Paddle shifting mechanisms are permitted.
63. Transmission tunnel modifications necessary to allow the fitment of a transmission are permitted.
64. Replacement tail shafts are permitted.
65. Transmission and differential oil coolers are permitted;
66. **Suspension**
	1. **All measurements have a tolerance of +/- 3mm to allow for inaccuracy of hand measurements and thermal expansion.**
	2. **Minimum ride heights: Each fully sprung part of the automobile, except for the exhaust system, must be at least the specified height above the ground when measured at any point within the wheelbase, this includes all side skirts, splitters, bodywork etc. The automobile ride height will be measured without the driver and tyre pressures at a minimum of 20psi.**
	3. **Street & Club**
67. Each spring and damper/shock may be replaced however the number of each component per vehicle must remain as OEM;
68. Each suspension bush is free;
69. OEM mounting points of the suspension may be reinforced and altered in design but not in location;
70. Each sway bar is free;
71. Each vehicle must use OEM chassis mounting points and uprights but suspension geometry and arms are free;
72. OEM hubs/uprights must be retain on the vehicle but can be from a different model of the same make of vehicle (i.e. any Honda for a Honda or any Subaru for a Subaru etc.);
73. Uprights are free provided that the connection methods to the original OEM components is retained (i.e. connection type to MacPherson strut, or ball joint or steering arm).
74. Aftermarket suspension sub frames are not allowed.
75. Minimum ride height of 80mm measured as described in Section 11.2.
	1. **Modified**
76. Each spring and damper/shock absorber may be replaced however the number of each damper/shock absorber per vehicle must remain as OEM;
77. Suspension bushes are free;
78. OEM mounting points of the suspension on the unibody may be reinforced and altered in design and location.
79. Suspension sub frames are free, but must mount to the OEM sub frame mounting points.
80. OEM mounting points for suspension sub frames may be reinforced and altered in design but not in location.
81. Sway bars are free.
82. Suspension is free, save for the mounting points as per Section 11.4.c.
83. Minimum ride height of 65mm measured as described in Section 11.2.
	1. **Unlimited**
84. Springs and dampers may be replaced however the maximum number of springs and dampers is six per vehicle.
85. Suspension is free.
86. Minimum ride height of 50mm measured as described in Section 11.2.
87. **Brakes**
	1. **With exception of computer controlled diagonal or transverse braking systems, which are not permitted in any class unless originally fitted, the complete braking system is free except for:**
	2. **Street & Club**
88. Original mounting must be used.
89. **Tyres**
	1. **Tyre restrictions will apply to all competition classes as follows:**
90. The use of any tyre softening chemical or treatment on tyres is strictly prohibited and will result in immediate exclusion from the event.
91. Random tyre checks will be conducted throughout the event, failure to comply will result in a penalty up to exclusion.
92. Tyre sizes are defined by width(mm)/aspect ratio(profile)/diameter(inch).
93. See Appendix B for approved R compound tyres.
	1. **Street**
94. R Compound tyres are prohibited except for approved tyres listed in Appendix B.
95. Each tyre on a four (4) wheel drive vehicle must be no wider than 265 unless specified larger by the OEM for that particular vehicle, in which case the tyre must match the OEM size specification;
96. Each tyre on a two (2) wheel drive vehicle must be no wider than 295 unless specified larger by the OEM for that particular vehicle in which case the tyre must match the OEM size specification.
	1. **Club**
97. May use an R compound tyre with exception to a slick R compound tyre.
98. Each tyre on a four (4) wheel drive vehicle must be no wider than 265 unless specified larger by the OEM for that particular vehicle, in which case the tyre must match the OEM size specification;
99. Each tyre on a two (2) wheel drive vehicle must be no wider than 295 unless specified larger by the OEM for that particular vehicle in which case the tyre must match the OEM size specification.
	1. **Modified & Unlimited**
100. Any tyre listed in Motorsport Australia Schedule E – Wheels and Tyres or approved by the Event Organiser is permitted.
	1. **Unlimited**
101. May as an R compound tyre including a slick tyre.
	1. **Tyre Size Restriction for Ultra-Light Vehicles for Street, Club and Modified Classes**
102. An Ultra-Light vehicle that in a modified format as per Appendix A for vehicle class weights has a competition weight of less than 1001kg for 4WD vehicles, 901kg for RWD vehicles and 801kg for FWD vehicles;
103. Any vehicle falling into these categories the following tyre size restrictions will apply:

|  |  |  |
| --- | --- | --- |
| AWD/4WD (tyre width in mm) | RWD (tyre width in mm) | FWD (tyre width in mm) |
| <750kg = 205 tyre | <700kg = 205 tyre | <700kg = 225 tyre |
| 751kg-800kg = 225 tyre | 701kg-750kg = 225 tyre | 701kg-750kg = 255 tyre |
| 801kg-950kg = 255 tyre | 751kg-800kg = 255 tyre | 751kg-800kg = 265 tyre |
| 951kg-1000kg = 265 tyre | 801kg-900kg = 265 tyre | >801kg = 295 tyre |
| >1001kg = 295 tyre | >901kg = 295 tyre |  |

* 1. **Tyre Size Restriction for Unlimited Class**
1. Tyre size will be determined by the actual race weight of the vehicle.
2. Tyre width will be defined by the actual tread width with a +3mm allowance.
3. Any vehicle falling into these weight categories, the following tyre size restrictions will apply:

|  |  |  |
| --- | --- | --- |
| Weight | Tread Width | Height |
| Up to 950kg | 290 | 650 |
| 951 to 1050kg | 290 | 685 |
| 1051 to 1350kg | 310 | 685 |
| Over 1351kg | 340 | 710 |

1. **Wheels**
	1. **Wheels are free and size is unrestricted but must be suited to the tyre size used;**
	2. **A maximum of one metallic spacer may be used behind each wheel. Consideration must be given to wheel stud length when fitting spacers**
	3. **Street & Club**
2. Maximum spacer size is 30mm per wheel.
3. **Interior**
	1. **Local modification to interior for fitment of a roll cage is allowed**
	2. **Interior is free save for the following:**
	3. **Street & Club**
4. Complete original dash must be retained; additional switches and gauges may be added.
5. Heater core, air conditioning and related components that are not visible on the dash may be removed.
6. Original door trims must be retained.
7. Replacement instrument cluster is permitted
8. Removable steering wheels are permitted if the vehicle is fitted with a roll cage as a safety precaution with regard to entry and exit access.
	1. **Modified & Unlimited**
9. Door trims of free material and design must be fitted.
10. Window nets may be fitted and are highly recommended.
11. Driving position may be moved rearwards, but not beyond the rear foot well.
12. Each vehicle must retain a full length dashboard.
13. **Vehicle Supercar List (ineligible for Street)(Exemption may be given at promoters discretion)**

Audi R8

Ferrari – All

Lamborghini – All

Nissan GTR (R35)

Porsche – All except 924/944

Chevrolet C6 Z06, ZR1 Corvette

Dodge Viper

Aston Martin – All

Mercedes SLS or any Black series

McLaren – All

Lexus LFA

TVR – All

Ford GT

1. **Definitions**
2. **Alternate Materials** **–** Materials of suitable and acceptable strength and construction for use in motor vehicle parts and panels.
3. **Bodywork –** Refers to the exterior body of a motor vehicle as the entirely suspended part of the motor vehicle licked by the airstream.
4. **Motorsport Australia Manual –** 2019 Motorsport Australia Manual.
5. **Chassis Rail –** Box section part of the vehicle floor structure that extends from the front of the vehicle to the rear section.
6. **Dash board –** A dashboard (also called a dash, instrument panel, or fascia) is a control panel placed in front of the driver of an automobile, housing instrumentation and controls for operation of the vehicle.
7. **Drive Types:**
8. **4WD:** Four wheel drive, includes all wheel drive (AWD), any vehicle that has drive to both the front and rear wheels.
9. **RWD:** Rear wheel drive, any vehicles with drive only to the rear wheels.
10. **FWD:** Front wheel drive, any vehicles with drive only to the front wheels.
11. **Engine Control Module –** Any electronic device that controls engine operation.
12. **Firewall –** A firewall is a fireproof barrier that separates the engine from the driver and passengers.
13. **Frame Rails –** Two primary boxed sections running fore to aft of the vehicle.
14. **OEM –** Original Equipment Manufacturer – is the original manufacturer of the vehicle and/or component which is the one originally fitted when manufactured.
15. **R Compound Tyre –** A tyre which is constructed with a racing compound.
16. **Recognised Model –** A model which the organisers, at their sole discretion, recognise as a model of vehicle produced by a manufacturer to a given specification.
17. **Standard Specification –** As originally supplied from the manufacturer, including allowable production tolerances.
18. **Shock Towers –** The original manufacturer upper mounting points for the suspension shock absorber (i.e. Macpherson Strut).
19. **Sub Frame –** A structural component of an automobile that uses an additional separate structure to carry certain components, such as the engine, drivetrain, or suspension. The sub frame is bolted to the original integral monocoque, chassis or frame rails of the vehicle and may be equipped with rubber bushings to dampen vibration.
20. **Suspension Pick-Up Point –** A bracket, lug or similar mechanical component attached to, or integral with, the fully sprung part of a vehicle, to which is attached a partially unsprung suspension component, and about which such suspension component moves through an arc or solid angle consequential to normal suspension travel.
21. **Suspension Upright and Hub:**
22. **Upright –** the component that carries the hub and is connected directly to the suspension/steering control arms. The upright may carry brake components or other components as necessary.
23. **Hub –** the component which directly attaches to the wheel and is carried by the upright, via a bearing assembly. The hub, and bearing/s, may be integral to the upright or fixed to the upright and may carry the drive to the wheel.
24. **Vehicle –** A land vehicle propelled by its own means, running on at least four wheels not aligned, which are designed to be in contact with the ground. The steering must be controlled by at least two of the wheels, and the propulsion by at least two of the wheels.