

CAMS AUSTRALIAN TARGA CHAMPIONSHIP TECHNICAL REGULATIONS[©] 2018 & 2019



VERSION 2- Appendix 1 Added

CHANGES FROM 2016/2017- Version 2 Update are HIGHLIGHTED IN GREY

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Valid from 1st January 2018 until 31st December 2019



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PREAMBLE

- I. **Technical Regulations:** These regulations are based on the principle that modifications to the automobile or its components other than those specified below are forbidden. For clarity, unless a modification or freedom is clearly outlined in these regulations then it is to be assumed that it is NOT allowed.
- II. **Valid Dates:** These regulations will remain valid for all Targa Australia events held between January 1st 2018 and December 31st 2019. In the cases of Competition Categories, FIA and CAMS mandated safety changes and any unforeseen circumstances, Targa Australia reserves the right to make changes to the regulations within the valid dates shown above.
- III. **Roadworthiness and Eligibility of Vehicle:** These regulations do not supersede any civil requirements/regulations, and compliance with any such provisions is the responsibility of the competitor. It is the responsibility of the competitor to ensure that at all times the vehicle conforms to these Technical Regulations, eligibility requirements and maintains roadworthiness.
- IV. **Eligible Vehicles:** All vehicles must have at least two seats and have been capable of achieving road registration when first released.
- V. **Authority to Enter Vehicle:** Vehicles may be entered only by the bona-fide (i.e. the registered) owner of the vehicle; the Entrant.
- VI. **Vehicle Identification Form:** To be classified the entrant must fully complete the 'Vehicle Identification Form' (VIF) section of the online application form. Should any detail be altered, such alteration must be notified in writing to the organisers, who reserve the right to reclassify the vehicle.
- VII. **Recognition Papers:** The motor sport bodies may produce recognition papers which will define the specification of a given model, and if such papers have been produced they must be presented at scrutiny by the competitor. Irrespective of the parts for which the present article lays down freedom of modification, the original mechanical parts necessary for the propulsion as well as all accessories necessary for their normal functioning, having undergone the normal machining operations laid down by the manufacturer for production, may be subjected to all tuning operations (e.g. finishing, scraping) but not replacement; provided that the origin of the series production part may always be established, its shape may be ground, balanced, adjusted, reduced or modified through machining. However, the modifications permitted by the above paragraph are allowed on condition that the weights and dimensions mentioned on the homologation form, recognition documents, manufacturer's manual and published specifications and workshop manuals are respected.
- VIII. **Vehicle Log Book (Except Targa Tour, TSD Trophy & GT Sports Trophy):** The production of a vehicle log book issued by CAMS is required for all vehicles entered in the event. The log book number must be recorded on the Vehicle Identity Form. Failure to present such log book when the vehicle is presented for documentation and scrutiny may cause it to be denied permission to start the event.
- IX. **Special Interest, Unregistered and Rally Permit Vehicles:** Unregistered vehicles, which are invited to compete in the event, will need to apply to the relevant State Authority, applicable for the event, to ensure registration for the event. Competitors are urged to check that their registration status is correct as some states do not allow vehicles with full rollover protection to be fully registered. These vehicles must have a Special Interest Registration, Rally Permit or Temporary Vehicle Permit depending on the state of origin. Full details of conditions and fees are available online at:
www.transport.tas.gov.au (Tasmania)
www.vicroads.vic.gov.au (Victoria)
www.transport.sa.gov.au (South Australia)
or at CAMS
<https://www.cams.com.au/motor-sport/vehicles/conditional-registration-schemes>

DEFINITIONS

Further definitions can be found in the CAMS Manual of Motor Sport.

Engine Performance Equalisation Calculations

These calculations are applied to the actual engine cubic capacity to result in the final classing of an engine: Supercharged/Turbocharged x 1.7, Rotary x 1.8, Diesel x 1.5. Example: a) 2000cc + Turbo (x1.7) = 3400cc. b) 1300cc Rotary (x1.8) + Turbo (x1.7) = 3978cc

'Free'-: As stated in FIA- Article 252

'Free' means that the original part, as well as its function(s), may be removed or replaced with a new part, on condition that the new part has no additional function relative to the original part.

Ancillary Item

Ancillary items are deemed to be as follows: starter motor, alternator/generator, power steering pump, air conditioning compressor and emissions air pump.

CAMS/FIA

Any reference to CAMS shall mean the Confederation of Australian Motor Sport Ltd and any reference to FIA shall mean the Federation Internationale de l'Automobile.

CAMS Manual of Motor Sport

Any reference to the CAMS Manual of Motor Sport shall mean the publication by this name for the relevant year that the event is taking place. The CAMS Manual of Motor Sport can be viewed at www.cams.com.au.

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.

Identical

A component will be considered as being 'mechanically identical' if it performs exclusively the original function/s in the same manner as foreseen by the manufacturer and it permits the attachment of any secondary components in the original manner and without modification of those components. In addition, for the purposes of these regulations, the material and dimensions of the component must be equivalent to the original.

Original

A component which is the one originally fitted.

Reproduction

A vehicle constructed at any time in the likeness of another vehicle replicating the period specification and appearance of the original model aside from modifications permitted within these regulations.

Recognised Model

A model which the organiser's, at their sole discretion, recognise as a model of vehicle produced by a manufacturer to a given specification. If this cannot be established to the organiser's satisfaction, the vehicle will be allowed to compete in the Demonstration Category.

Reconditioning

To repair or restore to good or close to original condition, with no mechanical or performance advantage over its original condition.

Standard Specification

As originally supplied from the manufacturer, including allowable production tolerances.

Suspension Pick-Up/Pivot 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.

- (i) *Spherical Bearing*: The geometric centre of the spherical surface about which suspension movement occurs.
- (ii) *Plain or Elastomeric Bushing*: The midpoint of the bushing along the axis of primary suspension movement.

Run-on

The provision for variation of vehicle category placement based on model commenced before a cut-off date and/or continuation after a date when an model was produced to the same specification as the vehicles constructed before or after nominated category date.

COMPETITION CATEGORIES

Each Targa event will comprise of **up to eight** competition categories and Tour's by various names:

- Targa Tour
- TSD Trophy (Time, Speed, Distance)
- Thoroughbred Trophy
- GT Sports Trophy
- Classic
- Classic GT
- Early Modern
- GT4
- GT2

Participants may enter only one of these competitions or a Targa Tour. Vehicles not eligible for any of the above can still participate in the Demonstration Category of the event.

Targa Tour

This category is reserved for vehicles manufactured from 1 January 1900 up to the first day of competition. It will follow the same course and will include the same Targa stages as the entire field participating in the event and finisher's medallions will be awarded to all finishers.

TSD Trophy

This competition is reserved for vehicles manufactured from **1st January 1900 up to the first day of competition of that event** and a **130kph speed limit applies**. A **Safety Cage structure is not mandatory but highly recommended**. The organisers reserve the right to run a **Classic TSD Trophy** competition if a minimum of ten eligible entries are received by the close of entries date. TSD Trophies will be awarded to 1st, 2nd & 3rd. A **Targa Tasmania Category Trophy will be awarded to the highest placed Classic vehicle (Category 2 to 6) at this event if a separate competition is not run**.

Thoroughbred Trophy

This competition is reserved for vehicles manufactured from **1st January 1900 up to 31st December 1985**. This competition is run under the same technical regulations as the equivalent Classic or Classic GT competition category and a **130kph speed limit applies**. A **minimum of a CAMS approved Type 2 Half Safety Cage Structure or approved manufacturer fitted half safety cage, and padding, that must comply with the requirements of the CAMS Manual of Motor Sport – General Requirements, Schedule J. This Safety Cage Structure may be of a bolt-in design**. Thoroughbred Trophies will be awarded to 1st, 2nd & 3rd. A **Targa Tasmania Category Trophy will be awarded to the highest placed Classic vehicle (Category 2 to 6) in GT Sports Trophy at this event if a separate competition is not run**.

GT Sports Trophy

This competition is reserved for vehicles manufactured from **1st January 1986 up to the first day of competition of that event**. This competition is run under the same technical regulations as the equivalent Classic, Early Modern or GT competition category based on the year of manufacture and a **130kph speed limit applies**. A **minimum of a CAMS approved Type 2 Half Safety Cage Structure or approved manufacturer fitted half safety cage, and padding, that must comply with the requirements of the CAMS Manual of Motor Sport – General Requirements, Schedule J. This Safety Cage Structure may be of a bolt-in design**. GT Sports Trophies will be awarded to 1st, 2nd & 3rd. A **Targa Tasmania Category Trophy will be awarded to the highest placed Classic vehicle (Category 2 to 6) at this event if a separate competition is not run**.

Classic

This competition is reserved for mass produced 2WD vehicles and 2WD vehicles approved by the organisers, manufactured from **1st January 1900 up to 31st December 1985 plus Run Ons (Categories 2, 3, 4, 5 & 6)**. Potential performance variations will be managed by individually setting base times for each class to determine the winners. Vehicle classes are based on engine capacity and modification level. Classic Trophies will be awarded to 1st, 2nd & 3rd. A **Targa Tasmania Category Trophy will be awarded to the highest placed Vintage vehicle (Pre 1947) at this event**.

Classic GT

This competition is reserved for GT and high performance vehicles, low volume 2WD and 4WD race and rally cars and rare vehicles of historic significance approved by the organisers, manufactured from **1st January 1900 up to 31st December 1985 plus Run Ons (Categories 2, 3, 4, 5 & 6)**. All vehicles will use the **same** base time to determine the winners. Vehicle classes are based on engine capacity. Classic GT Trophies will be awarded to 1st, 2nd & 3rd.

Early Modern

This competition is reserved for vehicles manufactured from **1st January 1986 up to 31st December 2007 (Categories 7 & 8)**. Vehicle classes are based on engine capacity. Vehicles must be commercially available as a mass produced model with a minimum of 500 units made or be a vehicle approved by the organisers. Early Modern Trophies will be awarded to 1st, 2nd & 3rd. **A Targa Tasmania Category Trophy will be awarded to the highest placed 2WD vehicle at this event.**

GT4

This competition is reserved for Four or All Wheel Drive vehicles manufactured from **1st January 2008 up to the first day of competition of that event (Category 9)**. Vehicles must be commercially available as a mass produced model with a minimum of 500 units made or be a vehicle approved by the organisers. Vehicle classes are based on engine capacity. GT4 Trophies will be awarded to 1st, 2nd & 3rd.

GT2

This competition is reserved for Two Wheel Drive vehicles manufactured from **1st January 2008 up to the first day of competition of that event (Category 9)**. Vehicles must be commercially available as a mass produced model with a minimum of 500 units made or be a vehicle approved by the organisers. Vehicle classes are based on engine capacity. GT2 Trophies will be awarded to 1st, 2nd & 3rd.

Demonstration Category

This category is reserved for any vehicles that either do not meet the regulations to compete in any other competition and results will not be shown within the Officials Results. Competitors remain eligible for a Targa Plate and Finishers Medallion.

Competition Status

For a particular competition to be held as listed above, a minimum of ten entries must be received and accepted by the entries closing date of the particular event. If this does not occur then the affected competition/s may be run as categories within the event at the sole discretion of the organisers and/or be merged together with another relevant competition to be determined by the organisers before the start of the event.



GENERAL REGULATIONS FOR ALL VEHICLES IN ALL COMPETITIONS

Safety Requirements

1. Safety Cage Structure and Padding - (Except Targa Tour & TSD Trophy)

Each vehicle must have a CAMS approved Safety Cage Structure, and padding, fitted that must comply with the requirements of the CAMS Manual of Motor Sport – General Requirements, Schedule J. Targa and CAMS encourage that an extensive Safety Cage Structure is fitted. Localised modification (e.g. by cutting, distorting, minor relocation) to the following is permitted for the fitment of Safety Cage Structures:

- Interior trim and dash board
- Relocation of a fuse box
- Modification of heater box – demisting of the windscreen must still be possible

2. Apparel (Except Targa Tour, TSD Trophy & GT Sports Trophy)

Apparel must comply with the requirements of the CAMS Manual of Motor Sport – General Requirements, Schedule D.

- i. One-piece driving suits, made from a flame retardant material, complying with at least FIA 1986.
- ii. Underwear, recommended to be made to FIA standard.
- iii. Balaclava, Footwear, socks and gloves complying with FIA 8856–2000 – **MUST BE WORN**. Navigators are exempt from wearing gloves.

3. Helmets Including Frontal Head Restraint (Except Targa Tour)

Helmets must comply with the requirements of the CAMS Manual of Motor Sport: General Requirements, Schedule D.

- i. Safety helmets must be worn by all crew members throughout all Targa stages.
- ii. Safety helmets must be in good condition (e.g. no deep scratches, chips or incorrect painting) at all times. If a helmet is considered at pre-start scrutiny, or at any time during the event, to be unsuitable or unsafe, the helmet will be rejected and must be replaced before the crew member can continue in the event.
- iii. Full face helmets must be worn in all open vehicles except the Vintage Rallye. Competitors in open vehicles must wear eye protection at all times while the vehicle is competing. Those with glass lenses of any kind are not acceptable. Lenses shall be of a plastic material, with high-impact resistance, satisfactory optical qualities and complying with Australian Standard Specification AS 1609–1981, BS4110Z or equivalent international standard.
- iv. Goggles must be configured so as to minimise the entry of dust into the eye from any angle, and be positively retained by an elastic strap behind the head or helmet. Conventional-style glasses are not acceptable as a substitute.
- iv. The use of a Frontal Head Restraint (e.g. HANS®) is compulsory as per the CAMS Manual of Motor Sport – General Requirements, Schedule D. **This is except for Vintage, TSD Trophy, GT Sports Trophy and Targa Tour, although highly recommended where it can be used appropriately.**

4. Seatbelts / Harnesses (Except Targa Tour, GT Sports Trophy & TSD Trophy)

All competition vehicles shall have a five or six point harnesses that meets the requirements, including fitment, of the CAMS Manual Of Motor Sport – General Requirements, Schedule I. FIA approved Harnesses marked as 'not valid after xxxx' may continue to be used until 31 December five years after the year stated, in accordance with the notation provided in the CAMS Manual.

5. Supplementary Restraint System (SRS) - Air Bags – DEACTIVATION (Except Targa Tour & GT Sports Trophy, TSD Trophy)

For competitors' safety, it is **STRONGLY** recommended that vehicles fitted with SRS /Airbags have these disconnected, deactivated or removed. If equipment is fitted in front of an airbags deployment area then it must be deactivated or that equipment relocated – e.g. Co Drivers navigational equipment. A label stating that the SRS/Airbag has been deactivated must be placed nearby to advise of this.

- **Targa Tour, GT Sports Trophy & TSD Trophy– vehicles that are unmodified and are not fitted with approved full Safety Cage should not modify the SRS/Airbags systems supplied by the manufacturer of the vehicle.**

6. Seats

Replacement driver and co-driver seats must be from a recognised seat manufacturer. Each seat must ensure that the required Safety Harness can be fitted in accordance with the requirements for a Safety Harness. The material from which seats are manufactured is free. It is the responsibility of the competitor to ensure seat mountings are engineered with adequate strength to withstand the forces that may be experienced during competition. Only High Tensile bolts will be acceptable for the mounting of seats. Seat in compliance with the FIA Standards 8855-1999 or FIA 8862–2009 which also incorporate winged helmet restraint elements are HIGHLY RECOMMENDED.

7. Fire Extinguishers (except Targa Tour)

Each vehicle is required to carry hand held fire extinguishers that must comply with the requirements of the CAMS Manual of Motor Sport – General Requirements, Schedule H. A plumbed in fire extinguisher system, that must comply with the requirements of the CAMS Manual of Motor Sport – General Requirements, Schedule H, may be fitted and is highly recommended. Modifications only in the local area of and only for a plumbed in extinguisher system are accepted.

8. First Aid Kits

It is highly recommended that all competitors undertake a first aid training course. Each vehicle (including Targa Tour and TSD Trophy) are required to carry on board a weatherproof emergency first aid kit, which can be easily accessed, containing at least the following;

2 x extra–large universal accident dressings	6 x safety pins
2 x large open weave bandages	2 x sterile eye pads
2 x medium open weave bandages	1 x thermo accident blanket
1 x pair dressing scissors	6 x adhesive plaster strips
1 x roll adhesive tape	1 x triangular bandage
1 x large burn dressing with a non–adhesive surface	1 x first aid manual

9. OK/SOS Signs

Each vehicle is required to carry an OK/SOS sign at all times. These will be supplied in the Road Books.

10. Reflective Warning Triangles

At least two red/orange reflective triangles, with sides at least 300mm in length, must be carried in the vehicle at all times while competing. Each triangle must be fitted securely and easily accessible by the crew. Immediately after the vehicle has stopped in a Targa stage, for any reason (including a minor breakdown), one triangle must be placed approximately 100m and the second triangle approximately 50m before the vehicle.

11. Oil Absorbent Material

Competitors are required to carry in the vehicle a 1kg bag of environmentally friendly, 100% organic, non–leaching, biodegradable oil absorbent material (this may be Kitty Litter) or 500g of specialist absorbent material.

12. Oil Leaks / Spillage

If an official requests repairs to a vehicle to prevent or eliminate oil leaks or spillage, such repairs must be carried out to the satisfaction of the Chief Scrutineer. If a vehicle continues to leak or spill oil the vehicle may be refused permission to continue or such other restriction.

13. Oil Leak Action

If a competitor damages an engine, gearbox or other component, resulting in an oil leak, they must immediately pull off the driving line and stop as soon as possible. Caution triangles are then to be shown 50m and 100m before the spillage. They are then to safely attempt to spread oil absorbent material where the bulk of the leaked oil has been deposited.

14. Bonnet Restraints

Each vehicle must have at least two independent fastening systems, of adequate strength and limited extensibility, which simultaneously hold the bonnet closed. Original manufacturer fitted bonnet catch – including secondary latch may be used provided they are in their original entirety.

15. Battery Isolation Switch

It is advisable that all vehicles be equipped with a battery isolation (master) switch, which effectively isolates all electrical circuits from the battery and stops the engine. It should be capable of being operated by the seated driver and/or co-driver. There should also be a second switch, or a remote means of operating the main switch which can be operated from outside the vehicle. This shall be in the vicinity of the A pillar on the driver's side. For vehicles without an A pillar, the switch should be in a comparable position. This external switch, or remote activation, must be clearly marked by a symbol showing a red spark in a white edged blue triangle. Where fitted this external switch, or remote activation, must work effectively.

16. Exhaust Noise

The maximum noise emission permissible is 96dB as tested by the CAMS method.

17. Towing Eyes (except for Tour)

To facilitate the recovery of a vehicle, towing eyes shall be fitted front and rear complying with the following:

- I. Internal diameter of at least 40mm;
- II. Fitted forward of the front axle and rearwards of the rear axle;
- III. Clearly visible in yellow, orange or red, the chosen colour being in contrast to the bodywork;
- IV. Tow hooks provided by the manufacturer of the car as a standard fitment may be used.

18. Headlamps

Effective headlamps must be fitted to the vehicle. Two identical headlamps must be constantly illuminated on all Targa stages. Vehicles with standard retractable headlamps may be fitted with at least two auxiliary lights, which must be fitted securely and to a standard approved by the Chief Scrutineer. All headlamps must comply with the Government regulations in the state or territory of registration. Existing lamps may be removed or replaced by other units provided their position remains unchanged. Manufacturer fitted Daytime Running Lights cannot be used in place of full headlights on Targa Stages.

19. Windscreen

A laminated windscreen must be fitted to the vehicle.

20. Rear View Mirrors

A rear view mirror must be fitted on each side of the vehicle and one internally. Rear view mirrors must be fitted to provide the driver and co-driver with a clear view to the rear of the vehicle. Mirrors used must be similar in design and no smaller in size to those originally fitted to the vehicle, except GT2 and GT4, where all mirrors must remain the same as originally fitted by the manufacturer.

PERMITTED MODIFICATIONS

These regulations are based on the principle that modifications to the automobile or its components other than those specified below are forbidden. For clarity, unless a modification or freedom is clearly outlined in these regulations then it is to be assumed that it is **NOT** allowed. Apart from these, any part worn through use or damage can only be replaced by an original part identical to the damaged one, and then only in accordance with the definition of reconditioning. All vehicles other than GT2 & GT4 must be identifiable by the homologation form data inclusive of Group N Variant Options, (not including R4 components), or the manufacturer's published specifications. GT2 and GT4 must be identifiable by the manufacturer's published specifications.

21. Manufacturer Replacement and Superseded Parts

Consumable service parts may only be replaced with genuine parts, or non-genuine parts that are identical. If a suitable part is not available, application may be made to the organisers for substitution of that part. On request the entrant must produce the organisers with a workshop manual in hard copy or electronic form within a specified amount of time.

22. Modifications during the Event

If during the event, running repairs are made to a vehicle the effect of which may render the vehicle ineligible for the competition, category or class in which it started, the vehicle shall be presented to the Chief Scrutineer for inspection prior to recommencing. If the vehicle is found to be ineligible it must be made eligible, or it will be removed from all classifications.

23. Addition of Material and Parts

Any addition of material or parts is forbidden unless it is specified or required by an article in these regulations. Any material removed is not to be reused. Restoration of body shape and chassis geometry, following accidental damage, is permissible by the addition of the materials necessary to effect the repairs (body filler, weld, metal, tape etc.); other parts which are worn or damaged are not to be repaired by the addition or attaching of material unless an article in these regulations allows appropriate freedom.

24. Chassis / Sub-frame / Monocoque

General modifications to the Chassis, Sub-Frame, Monocoque to facilitate the fitment of mandatory equipment and for the fitment of any other items permitted under specified freedoms within these regulations, are permitted.

25. Fasteners

Any nut, bolt, clamp or screw may be replaced by any other nut, any other bolt, any other clamp or any other screw and have any kind of locking device (washer, lock nut etc.) and clamps.

26. Interior

So long as they have no effect on the vehicle's behavior and that they do not influence, even in a secondary manner, the efficiency of the engine, steering, strength, transmission, braking, or road holding the following are free:

- i. The standard seatbelts may be removed. **(Except Tour, TSD and GT Sports Trophy)**
- ii. The addition of navigation instruments, measuring instruments, displays, lights and fittings
- iii. Modifications required to comply with safety requirements
- iv. Door trims may be relined without armrests and window and door openers can be relocated within the door trim if required for the fitment of a safety cage
- v. Additional interior brackets, panels and switches are free
- vi. The rear seat may be modified or removed
- vii. Carpets and roof lining may be removed
- viii. The luggage compartment cover in hatchback design vehicles may be removed
- ix. An additional horn and horn buttons may be added
- x. Additional compartments may be added
- xi. Centre consoles may be removed or modified. **(except GT2 & GT4)**

27. Steering Wheel

The steering wheel may be replaced by another, providing that it is not made of wood and complies with all relevant civil regulations.

28. Left Hand Drive / Steering Side Change

Left Hand Drive vehicles are permitted. Reversal of the driving side is permitted, on the condition that the modified vehicle is accompanied by an engineer's certificate signed by an accredited engineer accepted by an Australian road authority and approved by the organisers.

29. Pedals (Except GT2 & GT4)

Brake, clutch and accelerator pedals are free.

30. Bodywork / Spoilers / Skirts

All bodywork, spoilers and skirts must be as originally fitted to the vehicle by the manufacturer. Replacement spoilers and skirts **only** may be made from alternative materials but must retain the exact original shape and dimensions, utilising original fittings and mounting points, except GT2 and GT4, where the material must also be the same as the original part fitted by the manufacturer.

31. Underbody Protection

The fitment of underbody protection is permitted, provided that these are removable and are designed to protect and cover the Engine Sump, Gearbox and/or Transmission, only to the satisfaction of the Chief Scrutineer.

32. Cameras

Cameras and video recorders may be fitted to vehicles. These must be fitted in a safe manner. The Chief Scrutineer will be deemed a Judge of Fact on the approval of any fitting inside the cabin. Camera's must be fitted and approved at pre-event scrutiny. Cameras mounted on external body work must remain within 100mm of the profile and surface of the vehicle when viewed from the front or behind. Suction cup mountings fitted internally or externally must have an additional tether fitted. Stick on mounts must be of sufficient strength e.g. 3M[®] adhesive on GoPro[®] mount or similar.

33. Brakes- Anti-Lock Brakes, Traction Control Systems, Stability Control Systems

Anti-Lock Brake (ABS), Traction Control (TCS) and Stability Control (SCS) Systems may only be fitted to vehicles where such systems were standard equipment and supplied by the vehicle manufacturer at time of sale. Any vehicle found to be fitted with ABS, TCS or SCS that is not in compliance must have such systems disabled to the satisfaction of the Chief Scrutineer prior to the event and non-driven wheel speed sensors fitted to that vehicle may only be used to measure distance for navigational equipment. Vehicles fitted with ABS (Anti-Lock Brake Systems) and EBA (Emergency Brake Assist) systems, or any other electronic driver aids, may have these disconnected.

34. Engine Changes

Engines may be changed during the event, on application to the Chief Scrutineer and on approval of the change by the Clerk of the Course. The replacement engine must be identical in every way.

- A single engine change is allowable, with the approval of the Clerk of the Course.
- All engine changes may only take place with the written permission of the Clerk of the Course and under the scrutineer's supervision.

35. Rotary (Wankel) Engine Port Modifications

Mild/extended porting will be defined as the manufacturer's original induction port(s) per end/intermediate plate, per rotor, extended beyond the original induction port size and shape; save that it may not extend beyond the region traversed by the original rotor seal, the size and shape of such a port is free. Peripheral porting is defined as a port on a rotary engine allowing the passage of gases through the periphery of the rotor housing. Bridge porting shall be defined as where the induction is accomplished using an additional induction port per end/intermediate plate, per rotor, but not extending beyond the original outer edge of the inner water seal. Any bridged induction port that is extended radially beyond the original outer edge of the inner water seal is, for the purposes of these regulations, considered to be a peripheral port.

36. Engine and Exhaust Insulation

Insulation materials may be used to cover wires, mechanical parts, exhaust systems, turbo, tanks and the crew's cabin area. This material must not be visible when the vehicle is in a normal stationary position. The insulation must not add to the structural strength of the vehicle in any way.

37. Pistons

Pistons are free and a 1mm overbore is permitted to allow for engine block repair.

38. Spark Plugs

The make and type of spark plugs and high-tension leads are free.

39. Engine Mounts

The material of the elastic part of the engine mountings is free.

40. Oil Filter

The oil filter element/cartridge/s is free, providing the cartridge fits without modification and does not perform any function other than filtering the oil.

41. Oil Breather

If the vehicle is fitted with crankcase breather discharging to the atmosphere, such breather must be fitted with oil – trap container with a capacity of at least two litres. On vehicles with a closed crankcase ventilation system, it is permitted to disconnect or disable the breather system provided that any open breather outlets on the engine are connected to an oil-trap container, as specified. If there is no discharging to the atmosphere (i.e. the engine is totally closed) a catch tank is not required to be fitted.

42. Additional Oil / Brake Cooling

Additional air only intakes for oil or brake cooling (apart from those fitted outside the bodywork) may only be fitted using original apertures in the bodywork. It is permitted to remove auxiliary lights or blanking plates and use these apertures for cooling ducts. Fitment must be visually acceptable to the organisers.

43. Power Steering

A power steering fluid cooling system is permitted. Four Wheel Steering systems may be disabled.

44. Engine Cooling System

The radiator and associated pipes, hoses, clamps and thermostats are free in material and size, except GT2 and GT4, where the size must also be the same as the original radiator fitted by the manufacturer and use the same mounting points.

45. Battery Location (except GT2 & GT4)

The battery may be replaced and/or relocated to any position, provided that it is in an appropriate battery box and securely mounted. If mounted in the cockpit, it must be behind the front seat and of dry cell construction. A blue triangle of sides 150mm indicating the location of the battery must be placed on the vehicle outside of the vehicle.

46. Throttle Return

Except for fly-by-wire systems, on each throttle, whether butterfly, slide or other type, there must be fitted a return mechanism which, in the event of the driver operated throttle mechanism (cable, rod etc.) becoming detached, will in all cases return each throttle to the closed position.

47. Fluid Lines in Cabin

All fluid lines passing through the cabin area must be protected, covered by a metal shield or enclosed in a metal tube.

48. Fuel Tanks (Except GT2 & GT4)

Fuel tanks may be modified or replaced, but must be of safe design. A replacement tank may be fitted and located in the same area of the standard tank's location. FT3 fuel tanks are recommended. If an FT3 fuel tank is being used, a minimum amount of local modification may be made to the boot space interior to ensure an appropriate fit. An additional fuel pump may be installed and fuel lines may be modified to suit. Where a replacement tank has been fitted with access to the cabin space it must be fully sealed from the cabin space occupied by the crew. The shield must fit neatly to the contour of the interior surface of the vehicle. Alternatively a fireproof and liquid-proof case can be made to surround the fuel tank and its filler holes. An auxiliary fuel pump, to enable transfer of fuel to a swirl pot if required, is permitted. Replacement or additional fuel lines must be changed for aviation type lines if an FT3 tank is used with the route of these lines being free. Should a series production tank be used, the use of such lines is optional. The filler holes must not be located in the windows or boot lid panels. The total capacity allowed for any tank is 120 litres.

49. Cables, Lines and Electrical Protection

Fuel, oil, electrical and brake lines/cables must be protected externally against any risk of deterioration (stones, corrosion, mechanical breakages, etc.). Such protection shall not add to the structural strength of the vehicle. If the production fitting is retained, no additional protection is necessary.

50. Electrical System (Except GT2 & GT4)

The wiring harness (loom) and electrical connectors, switches, fuses and circuit breakers, starting, ignition and generating systems are free. A panel incorporating additional/replacement switches and/or circuit breakers may be added.

51. Tyres

Tyres must be legal for road use in Australia. All tyres must have a minimum tread depth of 1.5mm at any point on the tread normally in contact with the road other than at tread depth indicators. It is the responsibility of the competitor to ensure that tyres remain in conformance with any civil regulations during touring stages. In all cases, the correctly inflated tyre, shall not foul the body, suspension or steering at any point in full movement of these components.

- Tyres must be marked by the organisers at scrutineering or before the event start. It is the responsibility of the competitor to ensure their tyres are marked before the start and remain marked as so during the event.
- All tyres can be used as required and spare tyres (and rims) do not need to be carried in the competition vehicle.
- Although it is the responsibility of the competitor to ensure that the tyres are safe for use at all times during the competition, the scrutineer may, at any time, require the competitor to change tyres.

For tyre quantities allowed please refer to the event's supplementary regulations

52. Tyre Standards and Load Ratings

Tyre fitment shall be in accordance with the Tyre and Rim Association Manual or vehicle manufacturer's tyre recommendations or with the organiser's approval. Tread wear indicators as provided by the tyre manufacturer shall be the definitive indicator of tread depth. Load ratings must be adhered to.

53. Wheel Valve Caps

Each tyre valve shall be fitted with a cap which effectively prevents leakage in use. Caps with a data acquisition facility may be used.

54. Carriage of Spare Wheels / Tyres

The spare wheels and tyres fitted may be secured in the boot space, inside the driving compartment and/or on the boot lid on the following conditions;

- They are firmly secured.
- They must not protrude into the space reserved for the driver and/or co-driver.
- The rearward vision must not be obstructed.
- The fitting devices must satisfy the Chief Scrutineer as to safety and suitability.

55. Wheel Spacers

A maximum of one metallic spacer may be used behind each wheel. The use of these must not place any part of the tyre outside the wheel arch when the wheels are pointing forward. Consideration must be given to wheel stud length when fitting spacers.

56. Tinted Windows

Tinted windows are permitted in accordance with relevant State Authority vehicle regulations.

COMPETITION SPECIFIC REGULATIONS

- The following regulations are to be read in conjunction with the General Regulations.
- Any regulation listed below will supersede the General Regulation in all cases of duplication.

CLASSIC- (C)

C1. General Requirements

These regulations are based on the principle that modifications to the automobile or its components other than those specified below are forbidden. For clarity, unless a modification or freedom is clearly outlined in these regulations then it is to be assumed that it is **NOT** allowed. Each vehicle must have been manufactured before 1986, or be a model/specification which matches that of a vehicle manufactured before 1986. Each vehicle will be placed into one of three modification groups: Standard Specification (SS), Limited Modified Specification (LMS) and Modified Specification (MS). The specific requirements for these three modification groups are listed below. Each vehicle will have an 'age' category determined by the date of manufacture (except in the case of 'run-on' models). Each vehicle will be classified according to its actual engine capacity, inclusive of any permitted capacity increase and the relevant supercharging and/or rotary equivalence factors. Each category will be further divided in capacity classes as listed on page 34.

In cases where production of a model commenced before the cut-off date and continued after that date, vehicles actually manufactured after this date are considered to be eligible provided they were produced to exactly the same specification as the vehicles built before the date. This provision, known as 'model run-on,' terminates upon a change in vehicle specification having been implemented by the manufacturer. In all cases, the onus of proof in eligibility matters lies with the competitor and this must be submitted and approved by the organisers, no less than 14 days before the start of the event entered.

On approved application only, vehicles may use substitute engines, gearboxes and/or differentials due to the lack of suitable original parts. Approval will only be granted after detailed information has been supplied by the competitor and replacements parts cannot increase the overall potential performance of the car. Applications for approval need to be submitted to enquiries@targa.com.au a minimum of 90 days before first use in an event.

C2. Wheels

Wheel make and construction are free provided they meet the load carrying capabilities of the vehicle. The following size allowances apply to the standard wheel sizes available for the model of vehicle not including any options or variants:

- Wheel diameters and widths may be varied by a maximum of plus 2" from the manufacturer's specifications up to a maximum size of 17" diameter and 9" wide unless the original wheel is larger in diameter and/or width in which case the original wheel size shall be the maximum size.

C3. Wheel Speed Sensor

Classic vehicles may only be fitted with wheel speed sensors on non-driven wheels for the sole purpose of providing a distance measurement for navigational equipment.

C4. Fuel System and Hoses

Fuel pumps, fuel rail, fuel filter, fuel line diameter and hoses are free.

C5. Exhaust

The original exhaust in normally aspirated vehicles may be replaced from the engine block. The original exhaust in forced induction vehicles may be replaced from the turbo outlet. The outside diameter of all downstream pipes may be increased by 50% of the standard size.

C6. Brakes

Brake rotors, calipers, pads, hoses, fittings and fluid are free. Modifications to allow fitment of a hydraulic handbrake, pedal box and/or dual master cylinders is permitted.

C7. Fuel Requirements

Only Pump Fuel (Schedule G- 2.1) or Unleaded Racing Fuel (Schedule G- 3.2) in compliance with the CAMS Manual of Motor Sport – General Requirements, Schedule G is permitted for use.

C8. Weighing of Vehicles

The minimum weight will be checked randomly by weighing the vehicle with persons and without luggage on board, measured in accordance with these regulations. The minimum competition weight must be maintained at all times.

CLASSIC- Standard Specification (SS)

This category is for vehicles presented in the same condition as they were supplied by the manufacturer, save for limited allowances to make them more suitable for rally competition. A minimum of 1,000 vehicles must have been manufactured in the same specification over a period of five years. Special low volume or high performance' versions of vehicles are not permitted, nor are homologated competition versions or parts allowed. The organisers may produce recognition papers which will define the specification of a given model, and if such papers have been produced they define the specification and must be presented at scrutiny by the competitor.

C9. Engine

The following engine modifications are permitted. The cylinder block shall be:

- i. Original;
- ii. A mechanically identical (refer Definitions Technical) substitute block, dimensionally interchangeable; or
- iii. A replacement block permitted by the organisers for that vehicle. Substitute cylinder blocks shall be of the same type, configuration, number of cylinders and material as the original.

C10. Capacity

Boring of the cylinders as per rule 37 is permitted. The vehicle will remain classified according to its original capacity, inclusive of the relevant supercharging and rotary equivalence factors.

C11. Minimum Weight

The minimum weight allowed is the manufacturers specified kerb weight plus 150kg to allow for the crew when being weighed. The onus of proof in determining the actual manufacturer kerb weight is the competitor's responsibility.

C12. Pistons & Rings

Pistons and piston rings or, where applicable, the rotors and seals of rotary engines are free save that they must be dimensionally the same as original except for the piston diameter and piston crown dimensions and shape, which is only allowed to be varied as per C9(ii) above. The compression ratio must remain as standard.

C13. Cylinder Head

The original cylinder head may be modified by the removal of metal only. The valve sizes must remain standard.

C14. Sump

The removable section of the sump may be modified to increase capacity and internal baffles may be fitted. Sump pickups may be modified to allow for modified sump depth

C15. Camshafts

Camshaft timing and lift is free as are the timing gear/s, the timing chain and timing chain tensioning system.

C16. Rotary Engine

Modifications to rotary engines rotors, housings and end plates may be effected only by the removal of metal. Rotary engines may be modified by the use of the porting techniques 'extend' or 'mild'.

C17. Clutch and Flywheel

Clutches and flywheels are free.

C18. Ignition

The original ignition system must be retained save that 'pointless' distribution operation may be substituted for breaker points; and that freedom of mechanical and vacuum advance mechanisms is allowed, as is freedom of ignition wires, spark plugs etc.

C19. Induction

The original induction system components must be retained. The components which control the quantity of fuel entering the combustion chamber may be modified, provided that they do not have any influence over the quantity of air admitted. Replacement air filter cartridges/elements are free subject to them being identical in every size and able to fit the original housing without modification to the housing.

C20. Engine Cooling System

The original cooling fans may be removed, and replaced by the same number of electric fans. Thermostats may be removed.

C21. Ancillary

A bolt-on ancillary item may be replaced or changed.

C22. Reconditioning

Reconditioning of other engine components within the manufacturers' specified tolerances is permitted.

C23. Gearbox / Transmission / Final Drive

Automatic transmissions provided optionally by the manufacturer for that model are permitted. The fitment of a manual transmission from the same make and model to a vehicle that originally had automatic transmission is permitted. Column gearshift mechanisms may be transferred to floor shift mechanisms; the minimum necessary modifications may be made to the transmission tunnel to accommodate such alteration.

C24. Suspension

- I. Suspension components may be strengthened by the addition of metal provided the added metal follows the contour of and is in contact with the original component.
- II. Springs, torsion bars and dampers are free, save for McPherson struts where only the damping mechanism is free, provided their original mounting points and design are retained.
- III. Lever arm dampers not forming part of the main suspension components (i.e. they do not have a suspension locating function) may be replaced by telescopic dampers.
- IV. Sway bars are free other than on strut type suspensions where the sway bar acts as a control arm. In this case it is permitted to change the thickness of the bar and/or add an additional sway bar. The inclusion of spacers at the sway bar mounting points is permitted, but only by extending bolts in the original body mounts. Sway bars may only be adjustable at their mounting points.

C25. Fuel Injection

All Fuel Injection components must be standard including ECU on Electronic Fuel Injection (EFI) systems.

CLASSIC- Limited Modified Specification (LMS)

The regulations below are in addition to the freedoms allowed under Classic SS regulations:

Vehicles which do not comply with the provisions of SS Category, or are limited edition vehicles or high performance original production variants from the same period as the original, will generally be classified in the LMS Category. Any vehicle with a production run of less than 250 over a period of five years will normally not be eligible for LMS and may only be eligible in MS, subject to other relevant eligibility criteria being met. Competitors entering low-volume produced vehicles may make application for a waiver of the production number which the organisers at their sole discretion will consider on its merits. Earlier vehicles may be more likely to receive such a waiver.

C26. Capacity Increase

A maximum capacity increase of 10% above the original capacity of the engine is permitted. The vehicle will be classified according to its actual capacity, inclusive of the relevant supercharging and rotary equivalence factors.

C27. Minimum Weight

The minimum weight allowed is no more than 5% less than the manufacturers specified kerb weight plus 150kg to allow for the crew when being weighed. The onus of proof in determining the actual manufacturer kerb weight is the competitor's responsibility.

C28. Crankshaft

The crankshaft and connecting rods are free, save that the material must be ferrous or original. Crankshaft torsional dampers are free.

C29. Camshaft

Camshaft valve train components are free.

C30. Rotary Engines

Modifications to rotary engine housings and end plates may be effected only by the removal of metal. Rotary engines may be modified by the use of the porting techniques 'extend', 'mild' or 'bridge'.

C31. Ignition

The ignition system is free save that the original configuration (e.g. single coil with distributor, multi-coil pack) must be retained. Electronic engine management and programmable ignition systems are not permitted

unless fitted as original equipment. If fitted, the electronic engine management, programmable ignition system may be modified or replaced, provided the replacement system is from the same period as the original system.

C32. Cylinder Head

The cylinder head may be modified only by the removal of metal. Valve size is free. The original number of valves and method of operation must be retained.

C33. Carbureted Vehicles

For carbureted naturally aspirated vehicles the complete induction system, including carburetor is free. Additional air ducting, which does not involve modifications of the bodywork, is permitted.

C34. Fuel Injected Vehicles

Fuel Injection can only be used when originally fitted by the manufacturer to the model/series of vehicle. All items must be from the same period as the vehicles manufactured date and as fitted by the vehicle manufacturer. This includes as fitted by **only** the vehicle manufacturer in period specific competition. Electronic Fuel Injection (EFI) may not replace Mechanical Fuel Injection systems. EFI ECU's may be replaced along with the wiring harness, and additional sensors may be used. Air boxes and air intakes are free upstream of the throttle plate.

C35. Turbo and Superchargers

If fitted as original equipment, the turbo and waste gate or supercharger may be replaced by another from the same period, fitted in the same positions as the original part, or a turbo charger approved by the organisers. Induction boost level is free. An intercooler may be fitted.

C36. Forced Induction Pipes / Air Box, Hoses and Intercooler

The pipes and hoses between the air box, charging device, intercooler and the manifold are free providing that the diameter does not exceed 80mm, unless the standard size is greater, and their only purpose is to channel air unless using a carburetor fed turbocharger/supercharger system in which case metered fuel may also be channeled. The size and material of the intercooler is free, but must fit within the front bar/bodywork without alteration and use existing mounting points.

C37. Engine Cooling System

The water pump and fans are free, save for the radiator support panel which may be modified to accommodate fans.

C38. Air Cooled

Air cooled engine cooling systems are free.

C39. Internal Modifications

All other internal engine modifications, other than those specifically addressed or limited in this section are free.

C40. Gearbox / Transmission / Final Drive

- i. Internal components of the gearbox and final drive assembly, including ratios, are free, save that the original number of forward gears must be retained.
- ii. Shortened or 'quick' shifters which do not result in modification to the casings or housings are permitted.
- iii. Sequential change mechanisms are permitted if originally fitted by the manufacturer.
- iv. Full floating hubs may be fitted on vehicles with a live rear axle. A minimum modification to axle housings in order to fit such hubs is permitted and encouraged.
- v. Additional transmission and/or differential coolers are permitted provided no body modifications are required to fit them.

C41. Chassis

Seam welding is permitted. Further strengthening is permitted provided the added metal follows the contour of the original component.

C42. Suspension

- I. Hubs and stub axles may be replaced by others of the same working principle, providing that other suspension components that are required to be retained and remain unmodified are not changed or modified as a result.
- II. The elastomeric material used in suspension bushes is free. The original design of the bush must be retained, save that the position of the hole for the locating bolt within the bush is free. Rose or heim type joints and/or spherical bearings are not permitted in the suspension unless fitted as original or

- unless permitted elsewhere by these regulations.
- III. Springs, torsion bars and dampers are free provided their original design (e.g. coil, leaf, tubular, lever arm), number and location of mounting points are retained.
 - IV. Coil spring mounting platforms may be made adjustable.
 - V. The mounting bushes for dampers which do not have a guiding function are free.
 - VI. Notwithstanding, lever arm dampers not forming part of the main suspension components (i.e. do not have a suspension locating function) may be replaced by telescopic dampers.
 - VII. Front lever arm dampers forming part of the main suspension components may be disabled, but not removed or replaced, and telescopic dampers may be added to provide the damping action. In doing so, none of the original suspension components or sub-frames may be modified, other than to provide the necessary mountings for the new dampers.
 - VIII. The location of live axles is permitted only by the addition of a maximum of two fore and aft locating arms and one transverse locating arm/rod. The design, position and mounting method of these arms are free, provided no modifications to the body shell are made, other than the addition of suitable brackets bolted or welded to the outside of the body shell. The locating arms are explicitly not permitted to be mounted inside the original cockpit, and modifications enabling this such as adding a box mounting will render the vehicle ineligible.
 - IX. Adjustable strut tops which may have the effect of altering the camber and/or caster are permitted (where applicable – i.e. on McPherson strut equipped vehicles). However, no modifications are permitted to the bodywork at the point where the strut top is mounted. Spherical bearings are permitted in front strut tops.
 - X. The addition of braces for strut/damper towers is permitted, provided they are only connected to each suspension tower, and are not connected at any other point of the chassis or bodywork. Attachment of such a brace must be only by bolts. The design of the brace is otherwise free.
 - XI. It is permitted to relocate the front control arm pivot point radially by up to 25mm within the confines of the existing cross member or body panels. No metal may be removed save that directly associated with the actual pivot point relocation.

C43. Steering

- I. Power steering may be fitted.
- II. The steering ratio is free. Rack and pinion may replace steering box.

C44. Competition Body Panels

The use of any under-trays, fairings, scoops, louvers, air intakes or exits are permitted only if supplied by the vehicle manufacturer as standard equipment in original production or the competitor can prove their legitimate use in national or international competition during the period in which the vehicle was manufactured.

C45. Windscreen Replacement

Easily demountable windscreens may be replaced by another screen of a period type. Safety straps or clips on front and rear windows are permitted.

C46. Bumper Bars

Bumper bars and over-riders may be removed or replaced by ones of identical shape. Alternate material may be used but the exact shape and size must be retained.

CLASSIC- Modified Specification (MS)

The regulations below are in addition to the freedoms allowed under Classic SS & LMS regulations:

MS vehicles can be modified to a greater degree than LMS vehicles. However, the modification level of such vehicles is controlled to a level deemed compatible with the environment within which these vehicles will compete. Vehicles modified beyond the limits specified for Group LMS will be required to run in Group MS subject to the limitations of this regulation. Vehicles homologated before 1 January 1985 (including Errata) can be presented in their entirety and will be required to run in Group MS. The use of individual parts (e.g. cylinder heads) from homologated vehicles is prohibited unless otherwise permitted by the following regulations. The minimum production number is five vehicles. It is the obligation of the Competitor to prove that the minimum quantity has been produced.

C47. Engine

Other than turbo/supercharged vehicles where replacement is not permitted, the cylinder block shall be standard, or a replacement cylinder block is permitted subject to the following requirements:

- I. The replacement must be: a production cylinder block of the same configuration, with more than 2500 units sold for road use, which upon application may be approved for Targa rallies by the organisers as a suitable replacement engine; or
- II. Be a documented recognised replacement or substitute for use in this period with approval of the organisers, in which case the approved item shall be used in its entirety.

In regard to C33, C34, C35, C36, C37 and C51, following, references to 'original' shall mean the original engine fitted to that model, and not the replacement.

C48. Capacity Increase

Capacity is free except ALL G Series Porsches, which can only have a maximum capacity of 3510cc. The vehicle will be classified according to its actual capacity inclusive of any bore or stroke increases (or decreases) and any relevant supercharging and rotary equivalence factors. Rotary engine vehicles are permitted to be fitted with engines with one size larger housing available from the original manufacturer, (e.g. for Mazda engines, from 10A to 12A, or from 12A to 13B) over what was standard in the vehicle. The same number of rotors as standard shall be retained. Final turbo or rotary capacity will be the actual capacity multiplied as per the Definitions, for the purposes of class and handicap allocation.

C49. Minimum Weight

The minimum weight allowed is no more than 10% less than the manufacturers specified kerb weight plus 150kg to allow for the crew when being weighed. The onus of proof in determining the actual manufacturer kerb weight is the competitor's responsibility.

C50. Cylinder Heads

Cylinder heads are free.

C51. Rotary Engines

Modifications to rotary engines rotors, housings and end plates may be effected only by the removal of metal. Rotary engines may be modified by the use of the porting techniques extend, mild, bridge or peripheral.

C52. Sump

Dry sump oil systems are permitted. Oil filters are free.

C53. Gearbox / Transmission / Final Drive

- I. Gearboxes or transaxles may be replaced by another of free design, provided they have no more than 5 forward gears and 1 reverse gear, unless the vehicle had more than 5 forward gears as original in which case the original number of gears shall be the maximum.
- II. Sequential change mechanisms are permitted if originally fitted by the manufacturer.
- III. Automatic transmissions provided optionally by the manufacturer for that model are permitted.
- IV. Transmission tunnel modifications necessary to allow the fitment of a transmission are permitted.
- V. The bell housing is free.

C54. Suspension

The suspension type/configuration as fitted to front (except that McPherson strut may replace double wishbone when the strut can occupy the original spring/shock tower upper location) and rear must remain original (e.g. McPherson strut, dual wishbone, live rear axle, de Dion rear axle etc.), but may be modified only in accordance with the following regulations:

- i. All sprung and semi-sprung suspension components may be replaced, and/or modified. Suspensions sub-frames are free, providing they are attached exclusively at the original mounting points.
- ii. The material used in suspension bushes is free. Rose joints, spherical bearings or heim joints may replace elastomeric bushings.
- iii. Springs, torsion bars, McPherson struts and dampers and their mountings are free.
- iv. The differential housing is free
- v. Rear suspension is free, subject to the following:
- vi. Sway bars are free including adjustment

For live rear axles:

- I. The body shell may be modified to allow the fitment of brackets to mount locating arms. To that end, the minimum required amount of metal may be removed from the standard body shell to allow the construction of a forward mount for the suspension arms inside the cockpit space.
- II. It is permitted to make the appropriate modifications (such as removal of metal and welding in replacement panels of the necessary shape) in order to construct a 'turret' in the rear wheel arch, inner guard and/or boot area, the purpose of which is to accommodate and mount the top of a damper or combined spring/damper unit. The cockpit space must be effectively sealed from the outside of the vehicle in the area where such modifications are made.
- III. Suspension pivot points are free.
- IV. Adjustable strut tops which may have the effect of altering the camber and/or caster are permitted (where applicable, i.e. on McPherson strut equipped vehicles). Modifications are permitted to the bodywork at the point where the strut top is mounted to allow clearance for the strut top.
- V. The addition of braces for strut/damper towers is permitted.

C55. Bodywork

The bodywork and fittings must be as supplied by the manufacturer, including materials, save that:

- i. Front mudguards, bonnet, nose panel, boot lid or rear hatch of alternative material are permitted, provided they are of the same external shape as the original panel. The following minimum specifications of alternative materials shall be respected: aluminium – 1.25mm thick; glass, fibre glass, fibre reinforced plastic – 3mm thick.
- ii. Where a vehicle does not have access to such components, wheel arch flares may be added by bolt on- means only, provided that the increase in the total width of the bodywork is less than 100mm and that the flare may not exceed the radius of the original wheel arch opening by more than 200mm. In this case, the maximum track increase allowed is 100mm and for the purpose of wheel and tyre clearance, it is permitted to remove up to 75mm of original bodywork measured radially from the edge of the wheel arch outwards. Any cavity exposed in a door or wheel arch through the removal of metal must be covered by the addition of a metal closing panel. Any body joint protrusions must be rendered safe. The operation of any door must not be affected.
- iii. Bumper bars and over-riders may be removed, or replaced by others of the same shape, but of alternate material.
- iv. Roof vents may be added, provided they are of a style evident in competition before 1985.
- v. The material from which additional interior brackets, switch panels and other similar fittings are made is free, including the use of carbon fibre or Kevlar.
- vi. The removal of heating and air conditioning systems is permitted, providing adequate provision is made for windscreen demisting.
- vii. Other glass in all windows except for the windscreen may be replaced by any transparent material of adequate strength and not less than 3mm in thickness.

CLASSIC GT- Competition Only

The regulations below are in addition to the freedoms allowed under the Classic SS, LMS & MS regulations and apply **ONLY** to vehicles entered in the Classic GT Competition. Any other modification or freedom must be approved by Targa for acceptance in Classic GT. Each Classic GT entry must include an accurate and complete Vehicle Identification Form, which will detail eligibility:

C56. Ignition

The ignition system is free save that the original configuration (e.g. single coil with distributor, multi-coil pack) must be retained unless approved by the organisers. Electronic engine management and programmable ignition systems are not permitted unless fitted as original equipment. If fitted, the electronic engine management, programmable ignition system may be modified or replaced. It is permitted to use a twin spark plug conversion on all G Series Porsche.

C57. Induction for Electronic Fuel Injected Vehicles

Electronic Fuel Injection can only be used when fitted by the manufacturer to the model/series of vehicle. The induction system is free save that it must retain the same number of fuel injectors as originally fitted to the vehicle or an induction system proven to have been used on the vehicle type and model in competition during the period may be used subject to organiser's approval. EFI ECU's may be replaced along with the wiring harness, and additional sensors may be used.

C58. Wheels

Wheel make and construction are free provided they meet the load carrying capabilities of the vehicle. Wheel diameter and width is free up to a maximum size of 17" diameter and 9" wide unless the original wheel is larger in diameter and/or width in which case the original wheel size, in both diameter and width, is permitted to be used.



EARLY MODERN- (M)

M1. General Requirements

These regulations are based on the principle that modifications to the automobile or its components other than those specified below are forbidden. For clarity, unless a modification or freedom is clearly outlined in these regulations then it is to be assumed that it is **NOT** allowed. **Each vehicle will be placed into either Category 7 or 8 based on the date of manufacture of the actual vehicle according to its build plate (No Run On's) and will also be placed in one of three modification groups: Standard Specification (SS), Limited Modified Specification (LMS), and Modified Specification (MS).** The specific requirements for these three modification groups are listed below. The philosophy of these Early Modern regulations is to allow greater freedoms for vehicles which are demonstrably not as fast as others in their production form. Only those vehicles which have the level of performance deemed appropriate will be permitted the higher level of modifications of LMS and MS. Each category will be further divided into capacity based classes as listed on page 36.

M2. Bodywork

Alternative materials are permitted for the following panels provided they are of the exact same external shape as the original panel;

- Front mudguards
- Nose panel
- Boot lid or rear hatch
- Bonnet

Original fittings must be retained (e.g. hinges / bonnet locks). The minimum specifications of alternative materials shall be respected;

- Aluminium - 1.25mm thick
- Fibre glass/reinforced plastic 3mm thick

M3. Wheels

Wheel make and construction are free provided they meet the load carrying capabilities of the vehicle. The following size allowances apply to the standard wheel sizes available for the model of vehicle not including any options or variants;

- Wheel diameters and width may be varied by a maximum of plus or minus 2" from the manufacturer's specifications.

M4. Fuel Requirements

Only Pump Fuel (Schedule G- 2.1) or Diesel (Schedule G- 2.3) in compliance with the CAMS Manual of Motor Sport – Schedule G is permitted for use.

M5. Fuel Samples

All vehicles must be fitted for testing with a Goodridge G–Link quick disconnect coupling (part no, GQD08PP06F), which can be purchased from Competition Friction 02 6226 8877. When asked by an official for a fuel sample the vehicle will be parked as directed and is not permitted to be moved or be started from that point until the sample is taken.

M6. Minimum Weight

The minimum weight must be in accordance with the Targa Australia Minimum Weight List. These weights include allowances for crew, safety equipment and all fluids including fuel.

M7. Weighing of Vehicles

The minimum weight will be checked randomly by weighing the vehicle with persons and without luggage on board, measured in accordance with M6. of these regulations. The minimum competition weight must be maintained at all times.

M8. Driver's Seat Location

The driver's seat can be placed only as far back as to position the centre line of the driver's shoulders no further rearward than the rear most vertical plane of the B Pillar.

M9. Twin Turbo Systems

Factory twin turbocharged systems may be replaced only with the organiser's approval to a recognised control single turbo systems. (See Appendix 1 for Approved Substitutions). Exhaust manifold must be manufactured/fabricated from steel pipe or cast steel. Stainless Steel or other materials is not permitted. One external wastegate may be used and must plumb into the exhaust system. Screamer pipes are not permitted. Exhaust system size must be the same as allowed for the vehicle model and modification level entered. Turbo charger must be approved for use – by application to Targa. Targa reserves the right to apply a boost limit to single turbo applications. All other regulations must be adhered to in regards to intake, intercooler etc.

M10. Exhaust

The original exhaust in normally aspirated vehicles may be replaced from the engine block. The original exhaust in forced induction vehicles may be replaced from the turbo outlet. The outside diameter of all downstream pipes may only be up to the following sizes or percentage increases:

SS	80mm
LMS	90mm
MS	100mm

M11. Early Modern Vehicle Modification Level List:

This list is not necessarily definitive, and may be subject to addition and/or change by the organisers based on performance, via the Technical Committee whose decision is binding.

Vehicle Make	SS	LMS	MS
Alfa Romeo			All
Aston Martin		All	
Audi	R8	All 4wd Turbo models	All Other
BMW			All
Chevrolet	Corvette	All Other	
Chrysler / Dodge	Viper	All Other	
Citroen			Xsara, C4
Clubman		All	
Daytona		Coupe	
Ferrari		All	
FIAT			All
Ford	GT	Shelby, Saleen, Roush- All	All Other
Holden			All Monaro, Commodore
Honda	NSX		All Other
HSV			All
HDT			All
Hyundai			All
Jaguar			All
Lamborghini	All		
Lotus		All	
Mazda			All
Mercedes Benz			All
MINI			All
Mitsubishi		Lancer Ralliart, Evolution	All Other
Nissan		All Skyline (4WD)	All Other
Peugeot			All
Porsche	911 Turbo, all GT2	All 911 Carrera, GT3, 944	Boxster, Cayman, 944, 968
Renault			All
Subaru		Impreza WRX, STi	All Other
Toyota			Celica, Aurion, MR2
TVR		Chimaera	
Volvo			All
Volkswagen			All

EARLY MODERN– Standard Specification (SS)

M12. Suspension

- i. Springs may be replaced by others of the same type, e.g. one coil spring may replace another. Springs and spring seats are free. Torsion bars are free as are their splines. For McPherson strut suspensions it is permitted to add or incorporate a threaded sleeve to the exterior of the strut for allowing adjustment of the height of the spring seat.
- ii. Suspension bushings are free, provided that the design of the bushes is original and that they are all of an elastomeric material. The bush offset of the hole in the bush is free.
- iii. Sway bars are free other than on strut type suspensions where the sway bar acts as a control arm. In this case it is permitted to change the thickness of the bar and/or add an additional sway bar. The inclusion of spacers at the sway bar mounting points is permitted, but only by extending bolts in the original body mounts. Sway bars may only be adjustable at their mounting points.

M13. Dampers and Fittings

Dampers are free, but the number per car and attachment points must remain unchanged. The upper mount may be adjustable and incorporate a spherical bearing.

M14. Gearbox / Transmission / Differential

- i. The casings and housings must be the same as originally fitted to the vehicle.
- ii. The clutch is free.
- iii. Flywheel is free.
- iv. Final drive ratio is free.
- v. Internal gears and shafts may be replaced by non-manufacturer items – selection type must be standard e.g. dog engagement cannot replace synchromesh
- vi. Differential action is free.

M15. Electronic Control Unit (ECU)

The electronic control unit/s (ECU) and (PCM) may be replaced, re-flashed or intercepted. The wiring loom is free and additional sensors may be installed. Boost level on forced induction vehicles is unrestricted.

M16. Brakes

The brake calipers, brake rotor and mounting hardware are free. Brake lines may be replaced provide their use is only to transfer brake fluid in the brake system. The use of a single pressure limiting device is permitted. The vacuum assist of the braking system may be rendered inoperative. It is permitted to modify the servo unit by replacing the internal valve system, diaphragms and pushrods with a solid rod linking the unmodified brake pedal to the master cylinder. The fitment of an additional vacuum reservoir tank is permitted provided that the tank is mounted under the floor pan of the automobile. No additional modifications are permitted to be made except for the drilling of holes for mounting purposes and the addition of a one-way valve and vacuum line.

M17. Fuel System and Hoses

Fuel pumps, fuel rail, fuel filter, fuel line diameter and hoses are free. A swirl pot system may be used provided the fitment is acceptable to the Chief Scrutineer.

M18. Air Filter

Replacement air filter cartridges are free subject to them being identical in every size to the original and able to fit the original air box housing without modification.

M19. Forced Induction Pipes / Air Boxes, Hoses and Intercoolers

The pipes and hoses between the air box, charging device, intercooler and the manifold are free providing that the diameter does not exceed 80mm, unless the standard size is greater and their only purpose is to channel air. The original intercooler/s may be replaced with an aftermarket equivalent but must be the same size and fit in the same location using the same mounting points. Intercooler water spray systems may only be used if originally fitted to the vehicle model and must be retained in the original specification. Only water can be used in intercooler water spray systems.

M20. Turbo Chargers & Superchargers

Turbo chargers must use the original manufacturer's housings for the vehicle model and must remain identifiable as such. Internal components and dimensions may be modified. Supercharger pulley is free.

EARLY MODERN– Limited Modified Specification (LMS)

The regulations below are in addition to the freedoms allowed under Early Modern SS regulations:

M21. Suspension Reinforcement

The reinforcing of the suspension and its anchorage points by the addition of material is allowed, provided it follows the original shape and is in contact with it. The addition of mounting points or bracing is not permitted. Adjustable McPherson strut tops or adjustable upper arm may be fitted on double wishbone equipped vehicles.

M22. Cables

Accelerator cable may be replaced or doubled by another. Drive-by-wire throttle systems may be replaced by a cable-operated system.

M23. Fuel Injection

Fuel injectors and fuel pressure regulators are free for vehicles originally fitted with fuel injection.

M24. Gearbox / Transmission / Differential

- I. The number of forward gears may be increased by one additional gear ratio otherwise the internal components are free.
- II. The gear change mechanisms must be as originally specified for the vehicle, other than that shortened or 'quick' shifters, which do not require modification of casings/housings are permitted.
- III. The internal components of the differential, axles and drive shafts are free.

M25. Air Boxes and Intercoolers

Air boxes and air intakes are free upstream of the throttle plate or turbocharger. The size and material of the intercooler is free, but must fit within the front bar/bodywork without alteration and use existing mounting points.

EARLY MODERN– Modified Specification (MS)

The items below are in addition to the freedoms allowed under Early Modern SS & LMS

M26. Ignition

The distributor is free, subject to fitting the standard location.

M27. Fuel Injection

The inlet manifold, air box and associated ducting are free. Throttle bodies are free.

M28. Engine Lubrication

The lubrication system is free.

M29. Engine Internals Allowances

- I. Mechanical treatments are allowed to be made to the crankshaft and connecting rods (shot peen /chemical and heat treatment)
- II. Cylinder head inlet and exhaust ports may be modified only by the removal of metal.
- III. Valve train components, including camshafts, are free provided the number of valves and their method of actuation (OHV, OHC, and DOHC) is retained.
- IV. Ancillary pulleys and drive belts are free.

M30. Suspension

- i. Original suspension mounting points may be altered in design, but not in location.
- ii. The addition of braces for strut/damper towers is permitted, provided they are only connected to each tower, and are not connected at any other point of the chassis or bodywork. Attachment of such a brace must be by bolts. The design of the brace is otherwise free.
- II. Live rear axle equipped vehicles may be modified to incorporate floating rear hubs.

M31. Rotary Vehicles

Modifications to rotary engines' rotors, housings and end plates may be effected only by the removal of metal. Rotary engines may be modified by porting techniques 'extend', 'bridge' and 'peripheral'.

M32. Steering

Steering ratio is free.

GT2 & GT4- (G)

G1. General Requirements

The philosophy of these regulations is to keep modifications to a minimum. These regulations are based on the principle that modifications to the automobile or its components other than those specified below are forbidden. For clarity, unless a modification or freedom is clearly outlined in these regulations then it is to be assumed that it is **NOT** allowed. **Each vehicle will be placed into either GT2 or GT4 (Category 9) based on the amount of driving wheels the vehicle has.**

Each vehicle must only use components of the actual manufacturer defined model, series, type and body shape. Components from any other model, series, type or body shape are not permitted. The build and compliance plate for each vehicle will determine what the manufacturer defined model, series, type and body shape is. (E.g. Porsche Cayman 987 Series cannot use Porsche Cayman 981 Series components).

G2. Eligibility

Only modifications to the vehicle specified within these regulations are permitted; **all other modifications are forbidden.** Factory options and homologated components are not permitted except where these regulations provide specific tolerance. **GT category vehicles must meet the requirements as detailed in Competition Categories.**

G3. Air Conditioning

The air conditioning core and all parts of the air conditioner on the engine side of the firewall may be removed.

G4. Gearbox / Transmission / Differential

The gearbox must remain standard as fitted by the manufacturer. Clutch disc is free, but must retain the original number of friction plates. The flywheel is free providing that the original dimensions are retained and the replacement is of ferrous material. Differential must remain standard except if the vehicle does not have a Limited Slip Differential (LSD) fitted as original equipment in which one may be fitted providing the manufacturer's original ratio and housing is retained. The differential action is free providing that no external control of the action is possible. One additional oil cooler may be fitted for the purposes of cooling the transmission oil only, it must not be visible externally and additional ducting is not permitted. The fitment of any additional oil cooler must be to the satisfaction of the Technical Commissioner.

G5. Wheels

Wheel make and construction is free provided they meet the load carrying capabilities of the vehicle. The following size allowances apply to the standard wheel sizes available for the model of vehicle not including any options or variants:

- Vehicles originally fitted with 16" diameter wheels or smaller may increase their rim size up to a maximum of 17" diameter and 8" wide providing that no body panel modifications are required other than the internal 'lipping' of the front and rear guards.
- Vehicles originally fitted with 17" diameter wheels or larger may not increase or decrease their rim diameter or width and cannot make any body panel modifications other than the internal 'lipping' of the front and rear guards.

G6. Suspension

Coil springs and torsion bar springs may be replaced with another of the same type (e.g. coil for coil, torsion bar for torsion bar). A leaf spring may be replaced by a coil over spring and suspension damper provided the replacement coil over spring and damper is mounted using only the original existing chassis/monocoque and suspension control arm mounting points for the original damper. Where a leaf spring is replaced by a coil over suspension damper is not permitted to make any additional modification for the mounting of the coil over spring and damper. Spring platforms may be adjustable. Dampers are free, but the number per car and attachment points must remain unchanged. Electronic in-car adjustment of dampers is only allowed if originally fitted by the manufacturer and must remain as fitted in every way. Suspension bushings are free, provided that the design of the bushes is original and that they are all of an elastomeric material. The bush offset of the hole in the bush is free. The upper mount may be adjustable and incorporate a spherical bearing. Sway bars are free but must be the original design, shape and material as original and must mount in the original location using original mounting hardware and no in car adjustment is allowed.

G7. Brakes

Front calipers including mounting are free. Rear calipers must remain as fitted by the manufacturer unless fitted with a 'Floating or Sliding' style caliper in which case these calipers may be replaced with up to a two pot 'Fixed' style caliper. Electronic or original brake caliper handbrake mechanisms may be replaced with a cable-actuated handbrake using a separate caliper. Front rotor diameter and width are free, but must be of the same material as originally fitted and must fit within the organiser approved wheel. The make and compound of brake pads are free. Hydraulic brake hoses may be replaced with brake hoses of free design. Brake hose couplings are free. Rotor dust shields/backing plates may be removed or adjusted. Cooling ducts may be added and material is free, but cannot require modification to the exterior bodywork, except for removal of fog or secondary driving lights. ABS systems may only be used as originally fitted to the vehicle in their entirety.

G8. Exhaust

The original exhaust in normally aspirated vehicles may be replaced from the engine block. The original exhaust in forced induction vehicles may be replaced from the turbo outlet. The outside diameter of all downstream pipes may only be up to 80mm for a vehicle with a single exhaust as standard or a maximum of 65mm, for each pipe, for a vehicle with a twin exhaust system as standard unless original manufacturer fitment is larger, which will then become maximum size. A single system may replace a twin system however it must respect the sizes for a single exhaust.

G9. Minimum Weight

The minimum weight must be in accordance with the Targa Australia Minimum Weight List. These weights include allowances for crew, safety equipment and all fluids including fuel.

G10. Weighing of Vehicles

The minimum weight will be checked randomly by weighing the vehicle with persons and without luggage on board, measured in accordance with G9. of these regulations. The minimum competition weight must be maintained at all times.

G11. Electronic Control Unit (ECU) and Associated Wiring Loom

The electronic engine control unit (ECU) and (PCM) may be replaced, reflashed or intercepted (piggybacked). The wiring loom to the ECU must remain in place exactly as fitted by the manufacturer and may only be modified within the last 100 mm of the plug for the sole purpose of adding a piggy back unit. Provision must be made to remove any interceptor or replacement unit and reinstall the original ECU, without rewiring, in which case the engine must start and run the vehicle for a period of time as required by the Chief Scrutineer. All sensors including fuel injection and ignition system components must otherwise remain as standard. Outputs from the ECU must retain the original functions in accordance with the manufacturer's specifications. Boost levels on forced induction vehicles is unrestricted. Additional sensors for the use of data logging are **NOT** permitted.

G12. Battery Location

The battery may be replaced but must remain located in the same position as fitted by the manufacturer.

G13. Fuel Requirements

Only Pump Fuel (Schedule G- 2.1) or Diesel (Schedule G- 2.3) in compliance with the CAMS Manual of Motor Sport – Schedule G is permitted for use.

G14. Fuel Samples

All vehicles must be fitted for testing with a Goodridge G-Link quick disconnect coupling (part no, GQD08PP06F), which can be purchased from Competition Friction 02 6226 8877. When asked by an official for a fuel sample the vehicle will be parked as directed and is not permitted to be moved or be started from that point until the sample is taken.

G15. Air Filters and Intercoolers

Air filters are free providing they fit in the same way as the factory filter. The original intercooler/s may be replaced with an aftermarket equivalent but must be of the same size and material and fit in the same location using the same mounting points. The original intercooler hoses may be replaced with a different material but the design and size must remain as originally fitted by the manufacturer.

G16. Turbo Chargers & Superchargers

Turbo chargers must use the original manufacturer's housings for the vehicle model and must remain identifiable as such. Internal components and dimensions may be modified. Supercharger pulley is free.

G17. Electrical System

A panel incorporating additional/replacement switches and/or circuit breakers may be added and must be fitted into the dash or centre console.

G18. Pedals

It is permitted to modify a foot operated pedal pad, by the addition of material or a change to the pad material only. All other elements of the pedal must remain as originally manufactured.



2018/2019 CAMS AUSTRALIAN TARGA CHAMPIONSHIP MINIMUM WEIGHT LIST- EARLY MODERN, GT2 & GT4

VERSION 1- CHANGES SHOWN IN DARK GREY

ALL MINIMUM WEIGHTS INCLUDE CREW, SAFETY EQUIPMENT AND ALL FLUIDS AND FUEL										
Alfa Romeo	147 GTA	1,430								
Aston Martin	Vantage	1,560								
Audi	TTRS	1,580	R8 V8	1,660	R8 V10	1,720				
BMW	1 Series M	1,550	M3- E36, Z4	1,510	M3- E46	1,570	M3- E92	1,690	M3- E30	1,370
	M2	1,600								
Chevrolet	Corvette	1,580	Corvette C6- ZR1	1,650	Camaro	1,730	Callaway	1,690		
Chrysler / Dodge	Viper	1,710	Challenger	1,730						
Daytona	Coupe	1,350								
Ferrari	F360	1,410	F430	1,510	F458	1,610				
FIAT	Punto	1,100								
Ford	Shelby GT	1,730	Mustang	1,730	Focus XR5, RS	1,550	Falcon All EF, EL	1,630	Falcon All Others	1,730
FPV	Falcon All	1,730								
Ginetta	G40	975								
Holden	Commodore VE	1,730	All VT to VZ	1,690	All VN to VS	1,630	All VL	1,470		
Honda	Integra	1,330	NSX	1,550						
HSV	GTS, All VE	1,730	All VT to VZ	1,685	All VN to VS	1,630	All VL	1,470		
Lamborghini	Gallardo	1,650	Aventador	1,725	Murcielago	1,815	Huracan	1,700		
Lotus	Exige	1,130	Evora	1,450	Elise	1,000				
Mazda	RX-7	1,360	MPS, RX-8	1,550	MX-5- NA	1,090	MX-5- NB & NC	1,240	MX-6	1,390
McLaren	MP4-12C	1,650	650S	1,670						
Mercedes Benz	C63	1,690	A45	1,575						
MINI	Cooper	1,300								
Mitsubishi	EVO I to III	1,370	EVO IV , V & VI	1,490	EVO VII & VIII	1,540	EVO IX	1,610	EVO X	1,650
Nissan	R32 GTR	1,560	R32 GTS-t	1,430	R33 GTR	1,690	R33 GTS-25t	1,520	R34 GTR	1,710
	R34 GT-T	1,560	R35 GTR	1,900	200SX	1,475				
Peugeot	405	1,400								
Porsche	911 Carrera- 1985 to 1989	1,350	911- Carrera All Others	1,470	911 GT3 996, 997	1,545	911 GT3 991	1,600	944	1,390
	911 Turbo 996	1,680	911 Turbo 997,991	1,770	911 GT2 996 , 997	1,625	Cayman	1,500	968	1,450
Renault	Megane	1,520	Clio	1,250						
Subaru	WRX- GC, GF, GM	1,370	WRX- GD & GG	1,550	WRX- GE to GV	1,670	WRX- GP & GJ	1,670	WRX- VA	1,670
Toyota	Celica GT4	1,530	AE86	1,330	MR2	1,400				
TVR	Chimaera	1,210								
Volkswagen	Golf Gti	1,520	Golf R32 & R	1,640	Scirocco	1,500				
Volvo	S60	1,520	V70R	1,685						

IF YOUR VEHICLE DOES NOT APPEAR ON THIS LIST PLEASE CONTACT TARGA AT

enquiries@targa.com.au

CAMs Australian Targa Championship 2018-2019 Category & Class Listings- V1

Category 1	1900 - 1946
Vintage	
Class A	All Capacities

Category 2	1947 - 1961
Classic	
Class A	Up to 1500cc
Class B	1500cc to 2000cc
Class C	2001cc to 3000cc
Class D	3001cc to 4000cc
Class E	Over 4000cc

Category 3	1962 - 1965
Classic	
Class A	Up to 1500cc
Class B	1500cc to 2000cc
Class C	2001cc to 3000cc
Class D	3001cc to 4000cc
Class E	Over 4000cc

Category 4	1966 - 1971
Classic	
Class A	Up to 1500cc
Class B	1500cc to 2000cc
Class C	2001cc to 3000cc
Class D	3001cc to 4000cc
Class E	Over 4000cc

Category 5	1972 - 1976
Classic	
Class A	Up to 1500cc
Class B	1500cc to 2000cc
Class C	2001cc to 3000cc
Class D	3001cc to 4000cc
Class E	Over 4000cc

Category 6	1977 - 1985
Classic	
Class A	Up to 1500cc
Class B	1500cc to 2000cc
Class C	2001cc to 3000cc
Class D	3001cc to 4000cc
Class E	Over 4000cc

Category 7	1986 - 1999
Early Modern	
Class A	Up to 2500cc
Class B	2501cc to 3500cc
Class C	3501cc to 4500cc
Class D	Over 4500cc

Category 8	2000 - 2007
Early Modern	
Class A	Up to 2500cc
Class B	2501cc to 3500cc
Class C	3501cc to 4500cc
Class D	Over 4500cc

Category 9	2008 - Current
GT2 & GT4	
Petrol	
Class A	Up to 2500cc
Class B	2501cc to 3500cc
Class C	3501cc to 4500cc
Class D	Over 4500cc
Diesel	
Class E	All Capacities
Hybrid - Electric	
Class F	All Capacities

Competitions	Classic Specifications
TSD Trophy	SS
GT Sports Trophy	LMS
Thoroughbred Trophy	MS
Classic	
Classic GT	
Early Modern	
GT2 & GT4	
Engine Equalisation Calculations	
Supercharged/Turbo x 1.7	Rotary x 1.8 Diesel x 1.5

Appendix 1: Substitute Component Approvals

This appendix details the current substitute component approvals.

Classic – Substitute Engines

In accordance with Competition Specific Regulations; Classic; Article C1. General Requirements:

On approved application only, vehicles may use substitute engines, gearboxes and/or differentials due to the lack of suitable original parts. Approval will only be granted after detailed information has been supplied by the competitor and replacements parts cannot increase the overall potential performance of the car. Applications for approval need to be submitted to enquiries@targa.com.au a minimum of 90 days before first use in an event.

Approved Substitute Engines

Vehicle Model Make	Substitute Engine	Conditions	Approved Classification
Holden Torana LH/LX Holden Monaro HK to HZ Holden Commodore VB to VK	GM LS1 GM LS3	<p>For each GM LS engine the following conditions apply:</p> <ol style="list-style-type: none"> 1. Must retain original GM LS Bore and Stroke; 2. Must retain original GM LS Cylinder Heads, including valves and valve actuation. Valve springs are free. 3. Camshaft timing and lift is free. 4. Must retain original GM LS crankshaft. 5. It is permitted to replace each piston provided the replacement piston: <ol style="list-style-type: none"> a. has an identically shaped crown as the standard piston; b. has the same distance between the gudgeon pin centre line and the highest point of the piston crown as the standard piston; c. is of equivalent (+/- 2%) or greater weight than the standard piston, including the rings, gudgeon pin and retainer; and d. is not coated with any material unless the standard piston is coated by a material. 6. It is permitted to replace each connecting rod provided the replacement is of a solid, ferrous, and magnetic steel construction. Each replacement connecting rod shall: <ol style="list-style-type: none"> a. Have the same distance between the centre of the big end and small end as the standard connecting rod; and b. Shall be equal (+/- 2.0%) or greater in weight to the original connecting rod <p>Note: the connecting rod weight is inclusive of the small end bush, big end bearings and each required fastener.</p> 7. Must be fitted with a single carburettor which may have multiple throttle plates. 8. The inlet manifold and air filter assembly are free. 9. Must be fitted with a single ignition distributor utilising a GM Performance timing case part number 88958679. Remaining ignition system components must comply with Classic Article C56. Ignition. 10. Exhaust system compliant with C5. Exhaust. <p>All other Classic regulations remain applicable.</p>	Classic GT only

Early Modern – Twin Turbo Substitution

In accordance with Competition Specific Regulations, Early Modern; Article M9. Twin Turbo Systems:

Factory twin turbocharged systems may be replaced only with the organiser's approval to a recognised control single turbo systems. (Approved 1992-2001 Mazda RX-7, 1989 – 2002 Nissan Skyline GTR 32, 33, 34). Exhaust manifold must be manufactured/fabricated from steel pipe or cast steel. Stainless Steel or other materials is not permitted. One external wastegate may be used, unless an internal waste gate turbo charger is used. Screamer pipes are not permitted. Exhaust system size must be the same as allowed for the vehicle model and modification level entered. Turbo charger must be approved for use – by application to Targa. Targa reserves the right to apply a boost limit to single turbo applications. All other regulations must be adhered to in regards to intake, intercooler etc.

Vehicle Model Make	Substitute Single Turbo	Conditions	Approved Classification
Mazda FD RX-7 1992 - 2001	Borg Warner EFR 7670 B or C	Internal Wastegate only	LMS/MS
	Honeywell-Garrett GT3582R Honeywell-Garrett GTX3582R Honeywell-Garrett GTW3684R	Internal or External Wastegate All other Early Modern regulations remain applicable.	LMS/MS
Nissan Skyline GTR 32, 33, 34	Borg Warner EFR 8374 B or C	Internal Wastegate only	LMS Only
	Honeywell-Garrett GT3582R Honeywell-Garrett GTX3582R Honeywell-Garrett GTW3884R	Internal or External Wastegate All other Early Modern regulations remain applicable.	LMS Only
Toyota Supra JZA80 (2JZ-GTE Engine)	Borg Warner EFR 8374 B or C	Internal Wastegate only	LMS/MS
	Honeywell-Garrett GT3582R Honeywell-Garrett GTX3582R Honeywell-Garrett GTW3884R	Internal or External Wastegate All other Early Modern regulations remain applicable.	LMS/MS

CONTACT DETAILS

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