

# TARGA

## MOTORSPORT AUSTRALIA TARGA CHAMPIONSHIP® TECHNICAL REGULATIONS

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VERSION 2- Changes highlighted in grey

VERSION 3.0 – Changes highlighted in yellow

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#TARGA #TARGAtasmania #TARGAgreatbarrierreef #TARGAhighcountry

**TARGA**



**TARGA**  
**TASMANIA**



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## PREAMBLE

1. **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 NOT allowed.
2. **Valid Dates:** These Technical Regulations will remain valid for all TARGA events held between 1 January 2020 and 31 December 2023. In the cases of Competition Categories, Motorsport Australia mandated safety changes and any unforeseen circumstances, TARGA reserves the right to make changes to the regulations within the valid dates shown above.
3. **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, including eligibility requirements, and maintains roadworthiness.
4. **Eligible Vehicles:** Each vehicle must have at least two seats and have been capable of achieving road registration when first released by the manufacturer.
5. **Authority to Enter Vehicle:** a vehicle may be entered only by the bona-fide (i.e. the registered) legal owner of the vehicle (the Competitor), unless such bona fide owner has provided written consent for another person to enter their vehicle and therefore that person assumes the responsibilities of the Competitor.
6. **Vehicle Classification/Specification:** It is the responsibility of the competitor to ensure that their vehicle is presented in conformance with these Technical Regulations and the classification/specification for which the vehicle has been entered. The competitor must provide when requested any valid documents, other details or evidence to support the classification/specification of the vehicle as entered.
7. **Valid Documents:** National and International motor sport bodies may produce recognition or homologation documents which define the specification of a given model. Vehicle manufacturer produced workshop manuals, specification literature or other manufacturer validated documents may also define the specification of a given model. These such valid documents may be used to define certain specifications of components for use either as the standard specification or where such freedoms existing for modification or use of such a component.
8. **Mechanical Parts:** Irrespective of the parts for which the present regulations 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 respect the specifications as detailed in the valid documents for that make/model.
9. **Vehicle Log Book (Except TSD Trophy):** The production of a Motorsport Australia Vehicle Log Book is required for all vehicles entered in the event. 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.
10. **Road Registration:** Each vehicle must be presented with a valid registration for that vehicle as issued by an Australian State Authority. A vehicle which has been modified as a competition vehicle to suit TARGA events may not be eligible for normal road registration and may require a type of registration or permit through a scheme approved by a State Authority for such a competition vehicle. Details of the State Authority scheme/s may be found at:  
Motorsport Australia <https://www.motorsport.org.au/regulations/logbooks#>
11. **Unregistered Vehicles:** A vehicle that does not hold a valid road registration must be approved by TARGA to participate whilst covered by an Unregistered Vehicle Permit or other approval issued by the relevant State Authority in which the event is to be held. Approval must be provided by TARGA prior to any application to a State Authority.



## DEFINITIONS

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

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

**Motorsport Australia:** Any reference to Motorsport Australia shall mean the Confederation of Australian Motor Sport Ltd.

**Motorsport Australia Manual:** Any reference to the Motorsport Australia manual shall mean the publication by this name for the relevant year that the event is taking place. The Motorsport Australia manual can be viewed at [www.motorsport.org.au](http://www.motorsport.org.au)

**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

**Elastomeric Bushing:** A flexible coupling between two rigid structures that provides limited radial and axial freedom of movement. Bushings with less than 4.0mm of elastomer between the rigid structures shall not be regarded as elastomeric.

**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.

**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.

**Open Vehicle:** A vehicle without a supporting structure (fixed roof) between the tops of the windscreen pillars and those of the rear window (if fitted). A 'convertible' vehicle fitted with a fixed roof of a solid and rigid material is not considered an Open Vehicle.

**Original:** A component or specification of which is the one originally fitted by the manufacturer for the make/model of vehicle.

**Recognised Model:** A model which TARGA, at their sole discretion, recognise as a model of vehicle produced by a manufacturer to a given specification. If this cannot be established, the vehicle MAY be permitted 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.

**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.

**Standard Specification:** As originally supplied from the manufacturer for the make/model of vehicle, including allowable production tolerances.

**Spherical Bearing:** Otherwise known as a Heim or Rose joint is a mechanical articulating joint which itself has no flexibility in its coupling.

**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.

**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.



## COMPETITION CATEGORIES

Each TARGA event will comprise of nine competition categories by various names:

- TSD Trophy (Time, Speed, Distance. Speed Limited)
- Thoroughbred Trophy (Handicap)
- GT Sports Trophy (Speed Limited)
- Classic (Handicap)
- Classic GT
- Early Modern 2
- Early Modern 4
- GT Production - GTP
- GT Outright – GTO

Participants may enter only one of these competitions. Vehicles not technically eligible for any of the above MAY be permitted to participate in the Demonstration Category (listed below) of the event, in which case the vehicle must meet all the required safety standards for the competition originally entered.

### TSD TROPHY

This competition is reserved for vehicles manufactured from 1 January 1900 up to the first day of competition. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. Vehicles must be compliant for normal road registration and road usage including any modifications that have been made to the vehicle. A Safety Cage structure is not mandatory but is highly recommended. Open vehicles are permitted in TSD provided they are fitted with a minimum of a Motorsport Australia Type 2 Safety Cage Structure.

### THOROUGHbred TROPHY (HANDICAP)

This competition is reserved for 2WD vehicles manufactured from 1 January 1900 up to 31 December 1989 as shown on the vehicle ID plate. Vehicles built after this date, as shown on the vehicle ID plate, are not eligible, even if they are part of a model range that was produced before 31 December 1989. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. A Motorsport Australia Type 2 Half Safety Cage Structure is mandatory. Open vehicles are permitted provided they are fitted with a minimum of a Motorsport Australia Type 3 Full Safety Cage Structure. Potential performance will be managed by the application of a handicap for each vehicle to determine the winners. Vehicle classes are based on engine capacity.

### GT SPORTS TROPHY

This competition is reserved for 2WD vehicles manufactured from 1 January 1990 up to the first day of competition and all 4WD vehicles. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. A Motorsport Australia Type 2 Half Safety Cage Structure is mandatory. Open vehicles are permitted in GT Sports Trophy provided they are fitted with a minimum of a Motorsport Australia Type 3 Full Safety Cage Structure. Vehicle classes are based on engine capacity.

### CLASSIC

This competition is reserved for 2WD vehicles manufactured from 1 January 1900 up to 31 December 1989 as shown on the vehicle ID plate (Categories 2, 3, 4, 5 & 6). Vehicles built after this date, as shown on the vehicle ID plate, are not eligible, even if they are part of a model range that was produced before 31 December 1989. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. Open vehicles are not permitted, except for approved pre-1947 vehicles. Potential performance will be managed by the application of a handicap for each vehicle to determine the winners. Vehicle classes are based on engine capacity and modification level.

## **CLASSIC GT**

This competition is reserved for 2WD & 4WD vehicles manufactured from 1 January 1900 up to 31 December 1989 as shown on the vehicle ID plate. Vehicles built after this date, as shown on the vehicle ID plate, are not eligible, even if they are part of a model range that was produced before 31 December 1989. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. Open vehicles are not permitted. Vehicle classes are based on engine capacity.

## **EARLY MODERN 2**

This competition is reserved for 2WD vehicles manufactured from 1 January 1990 up to 31 December 2009, as shown on the vehicle ID plate. Vehicles built after this date, as shown on the vehicle ID plate, are not eligible, even if they are part of a model range that was produced before 31 December 2009. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. Open vehicles are not permitted. Vehicle classes are based on engine capacity.

## **EARLY MODERN 4**

This competition is reserved for 4WD and AWD vehicles manufactured from 1 January 1990 up to 31 December 2009, as shown on the vehicle ID plate. Vehicles built after this date, as shown on the vehicle ID plate, are not eligible, even if they are part of a model range that was produced before 31 December 2009. Vehicles must have been commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. Open vehicles are not permitted. Vehicle classes are based on engine capacity.

## **GT PRODUCTION - GTP**

This competition is reserved for vehicles manufactured from 1 January 2010 up to the first day of competition. Vehicles built before 1 January 2010, as shown on the vehicle ID plate, that are a part of a model range that continued to be manufactured after this date are also eligible. Open vehicles are not permitted. Vehicles must be (or have been) commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. All vehicles shown on the GTP Vehicle list are automatically eligible for this competition AND the GT Outright (GTO) competition. Vehicles not shown on the GTP list may be approved at any time by TARGA on application. Vehicle classes are based on engine capacity.

## **GT OUTRIGHT - GTO**

This competition is reserved for vehicles manufactured from 1 January 2010 up to the first day of competition. Vehicles built before 1 January 2010, as shown on the vehicle ID plate, that are a part of a model range that continued to be manufactured after this date are also eligible. Open vehicles are not permitted. Vehicles must be (or have been) commercially available in any number as a road registerable vehicle when manufactured or be a vehicle approved by TARGA. All vehicles shown on the GTO Vehicle list are automatically eligible for this competition only. Vehicles not shown on the GTP or GTO list may be approved at any time by TARGA on application. Vehicle classes are based on engine capacity.

## **DEMONSTRATION CATEGORY**

On the approval of TARGA any vehicle that does not meet the technical regulations to compete in any other competition may be permitted to compete in the Demonstration Category. Results for this category will not be shown within the Officials Results. Competitors remain eligible for a TARGA Plate at TARGA Tasmania and a Finishers Medallion at all TARGA events.

# **GENERAL REGULATIONS FOR ALL VEHICLES**

## **SAFETY AND OTHER REQUIREMENTS**

These requirements are applicable to each vehicle except where varied within these regulations.

### **1. SAFETY CAGE STRUCTURE**

#### **1.1 General**

- (a) Localised modification (e.g. by cutting, distorting, minor relocation) to the following is permitted for the fitment of Safety Cage Structures:
  - (i) Interior trim and dash board
  - (ii) Relocation of a fuse box
  - (iii) Modification of heater box – demisting of the windscreen must still be possible
- (b) Safety Cage padding compliant with Motorsport Australia Manual Schedule J must be fitted to each roof and roof reinforcement member of the Safety Structure. Other padding fitted must be of a flame-retardant material.

#### **1.2 Classic, Classic GT, Early Modern 2 & 4 and GTO & GTP**

Each vehicle must have a Motorsport Australia approved Type 3 Safety Cage Structure fitted that must comply with the Motorsport Australia Manual – General Requirements, Schedule J. TARGA and Motorsport Australia encourage that an extensive Safety Cage Structure is fitted.

#### **1.3 Thoroughbred Trophy, GT Sports Trophy**

Each vehicle must have a minimum of a Motorsport Australia approved Type 2 Half Safety Cage Structure, except for an Open Vehicle which must have a Motorsport Australia Approved Type 3 Full Safety Cage Structure, which is suitable for dual occupants and that must comply with the Motorsport Australia Manual – General Requirements, Schedule J.

#### **1.4 TSD Trophy**

Each open vehicle must have a minimum of a Motorsport Australia approved Type 2 Half Safety Cage Structure fitted which is suitable for dual occupants and that must comply with the Motorsport Australia Manual – General Requirements, Schedule J.

### **2. APPAREL**

#### **2.1 Full Competition Categories (Classic, Classic GT, Early Modern 2 & 4 and GTO & GTP)**

Apparel must comply with the requirements of the Motorsport Australia Manual – General Requirements, Schedule D for a National Tarmac Rally including:

- (i) A Helmet compliant with Motorsport Australia Manual, Schedule D, Level A.
- (ii) A Frontal Head restraint compliant with Motorsport Australia Manual, Schedule D, Level A
- (iii) Minimum of a one-piece driving suit, made from a flame-retardant material, complying with at least FIA 1986 – FIA 8856-2000 is highly recommended.

- (iv) Underwear, compliant with FIA 8856-2000 standard is highly recommended. Each item of apparel including underwear must not be made from synthetic materials.
- (v) Balaclava, Footwear, Socks and Gloves complying with FIA 8856–2000 are compulsory (NOTE: Regardless of the Helmet standard a balaclava must be worn). Navigators are exempt from wearing gloves.

## 2.2 Thoroughbred Trophy, GT Sports Trophy

Apparel must comply with following requirements:

- (i) A Helmet compliant with Motorsport Australia Manual, Schedule D, Level A or a Helmet of Level B standard that carries approval for the use of FHR in that it must carry an FIA FHR approved label.
- (ii) A Frontal Head restraint compliant with Motorsport Australia Manual, Schedule D, Level A
- (iii) Clothing from ankles to neck to wrists as per Motorsport Australia Manual Schedule D, Level D. Clothing of flammable synthetic material, such as nylon, is not acceptable. Level A, B or C overalls are recommended.
- (iv) Level A or shoes with leather uppers that cover the foot. Shoes which have a leather upper, but which include elasticised ankle regions are acceptable (e.g. elastic-sided work boots).

**NOTE:** apparel to higher standards is highly recommended including Gloves, Underwear etc.

## 2.3 TSD Trophy

Apparel must comply with following requirements:

- (i) A Helmet compliant with Motorsport Australia Manual, Schedule D, Level A or a Helmet of Level B standard. Where FHR is used the Helmet must be approved for the use of FHR in that it must carry an FIA FHR approved label.
- (ii) Clothing from ankles to neck to wrists as per Motorsport Australia Manual Schedule D, Level D. Clothing of flammable synthetic material, such as nylon, is not acceptable. Level A, B or C overalls are recommended.
- (iii) Level A or shoes with leather uppers that cover the foot. Shoes which have a leather upper, but which include elasticised ankle regions are acceptable (e.g. elastic-sided work boots).

**NOTE:** apparel to higher standards is highly recommended including gloves, underwear etc.

### **3. HELMET**

Helmets must comply with the requirements of the Motorsport Australia Manual – General Requirements, Schedule D and the above Apparel requirements.

- (i) A helmet must be worn by each crew member 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) Modifications to a helmet must only be in accordance with Motorsport Australia Manual, General Requirements, Schedule D Apparel, Helmet Requirements.
- (iv) Full face helmets fitted with a suitable visor must be worn in all open vehicles.

### **4. SEATBELTS / HARNESSSES**

#### **4.1 Full Competition Categories (Classic, Classic GT, Early Modern 2 & 4, GTO and GTP)**

Each competition vehicle shall have a five- or six-point safety harnesses that meets the requirements of the Motorsport Australia Manual – General Requirements, Schedule I, including fitment for the use of FHR. Standard seat belts may be removed.

#### **4.2 Thoroughbred Trophy, GT Sports Trophy**

Each Trophy competition vehicle shall have a five- or six-point safety harnesses that meets the requirements of the Motorsport Australia Manual – General Requirements, Schedule I, including fitment for the use of FHR. Standard seat belts should be retained in addition to the fitment of a Safety Harness where only a Type 2 Safety Cage is fitted (may be required for registration).

#### **4.3 TSD Trophy**

Each TSD competition vehicle shall maintain a safety harness compliant as a minimum with the requirements for a 3-point lap sash seat belt of AS 2596, ECE R16 or AS E35 standard. Standard seat belts must be retained in the vehicle.

The use of a 4 or more-point safety harness is not recommended in TSD unless the vehicle is fitted with a safety cage structure which in the event of roll over will support the roof structure of the vehicle.

#### **4.4 Safety Harness Belt Cutter**

Each vehicle must carry at least two devices that are designed for the cutting of the belt material of a safety harness. Each belt cutter must be sufficiently mounted within easy access of the driver and the co-driver/navigator, respectively.

## **5. SUPPLEMENTARY RESTRAINT SYSTEM (SRS) - AIR BAGS**

### **5.1 For competition vehicles fitted with a safety cage structure and safety harnesses**

Vehicles fitted with SRS /Airbags may have these disconnected, deactivated or removed. If equipment is fitted in front of an airbag's 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.

### **5.2 For Thoroughbred Trophy, GT Sports Trophy, TSD Trophy**

For vehicles which are not fitted with approved full Safety Cage and safety harness it is recommended to not modify the SRS/Airbags systems supplied by the manufacturer of the vehicle. Care must be taken with the fitment of additional equipment, such as navigational devices, to ensure this equipment does not impede the path of deployment of an airbag.

## **6. SEATS**

Driver and co-driver seats must be from a recognised motor sport seat manufacturer. Each seat must be of a fixed back (or squab) design and 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. Seats in compliance with the FIA Standards 8855-1999 or FIA 8855-2021 or FIA 8862–2009 which also incorporate winged helmet restraint elements are HIGHLY RECOMMENDED.

## **7. FIRE EXTINGUISHERS**

Each vehicle is required to carry handheld fire extinguisher/s that must comply with the requirements of the Motorsport Australia Manual – General Requirements, Schedule H including the requirements for the fitting bracket/s. A plumbed in fire extinguisher system, that must comply with the requirements of the Motorsport Australia Manual – 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**

Each vehicle (including Trophy and TSD) 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

It is highly recommended that all competitors undertake a first aid training course.

## **9. OK/SOS SIGNS**

Each vehicle is required to carry an OK/SOS sign at all times. These will be supplied in the events 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 within the cockpit and easily accessible by the crew. Immediately after the vehicle has stopped in a TARGA stage, for any reason (including a minor breakdown), the triangles must be placed in accordance with the safety procedures outlined in the TARGA Sporting Regulations.

## **11. OIL ABSORBENT MATERIAL**

Each vehicle must carry 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. Oil absorbent blankets or material sheets are not permitted.

## **12. 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 Standard Specification.

## **13. BATTERY ISOLATION SWITCH**

It is highly recommended 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 of 150mm sides. Where fitted this external switch, or remote activation, must work effectively.

## **14. EXHAUST NOISE**

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



## **15. TOWING POINTS**

To facilitate the recovery of a vehicle, towing points 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 Specification fitment may be used, in which case they must be fitted to the vehicle in the TOW location/s for the duration of the event.

## **16. HEADLAMPS**

Effective headlamps must be fitted to each 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 lamps, 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 and that they meet the original Standard Specifications save for the type of light emitting device (e.g. globe or L.E.D). Manufacturer fitted Daytime Running Lights cannot be used in place of full headlamps on TARGA Stages.

## **17. WINDSCREEN**

A laminated windscreen must be fitted to each vehicle.

## **18. 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.

### **18.1 TSD Trophy, GT Sports Trophy, Thoroughbred Trophy, Classic, Classic GT and Early Modern 2 & 4**

Mirrors used must be similar in design and no smaller in size to those originally fitted to the vehicle.

### **18.2 GTP, GTO**

Each mirror must remain as the original fitted by the manufacturer.

## **19. RALLYSAFE EQUIPMENT**

The fitment of RallySafe equipment to each competition vehicle is mandatory in order to monitor the speed and track vehicle positioning during the event.

## **20. NAVIGATIONAL INSTRUMENTS- TSD TROPHY ONLY**

Electronic (i.e. Monit, Terratrip etc.) or mechanically driven navigation instruments may be fitted provided that their sole function is to only provide distance and speed measurements of the vehicle. The fitment or carrying of any smart technology device that can calculate the relevant position of the vehicle on the stage is forbidden. A mobile telephone may be carried in the vehicle provided it is secured in such a way as to not be visible or usable by the crew on a stage, save for when required for emergency purposes.

## **21. FUEL SAMPLES**

Each vehicle must be fitted for testing with a Goodridge G-Link quick disconnect coupling (part no, GQD08PP06F). 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.

## **22. 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 the minimum weight applicable to the relevant category of these regulations. The minimum weight must be maintained at all times.

# TARGA

## **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 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 GTP and GTO must be identifiable by the Valid Documents inclusive of any FIA Group N Homologation Variant Options, (not including FIA R4 components), or the manufacturer's published Valid Documents. GTP and GTO vehicles must be identifiable by only the manufacturer's published Valid Documents.

### **1. 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 TARGA for substitution of that part.

### **2. 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.

### **3. 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 affect 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.

### **4. 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 where specified freedoms within these regulations are provided.

### **5. 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.

## **6. INTERIOR**

So long as they have no effect on the vehicle's behaviour 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 addition of navigation instruments, measuring instruments, lights and fittings.
- (ii) Modifications required to comply with safety requirements.
- (iii) Door trims must be fitted which effectively cover the interior surface of the original door as per the original door trim. The original trim may be modified, or an alternate trim may be manufactured from a rigid material. Trims may be relined without armrests and window/door actuating mechanisms can be relocated within the door trim if required for the fitment of a safety cage.
- (iv) Additional interior brackets, panels and switches are free.
- (v) The rear seat may be modified or removed.
- (vi) Carpets and roof lining may be removed.
- (vii) The luggage compartment cover in hatchback design vehicles may be removed.
- (viii) An additional horn and horn buttons may be added.
- (ix) Additional compartments may be added.
- (x) Centre consoles may be removed or modified.

## **7. STEERING WHEEL**

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

## **8. 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 TARGA.

## **9. PEDALS**

Brake, clutch and accelerator pedals are free. Pedal boxes are free and may be floor mounted.

## **10. BRAKES**

- (a) Front calipers including mounting are free.
- (b) Rear calipers including mounting are free.
- (c) Rotor diameter, width and material are free, but must fit within the permitted wheel sizes.
- (d) Original handbrake mechanisms, including electrically activated handbrakes, may be replaced with a cable-actuated handbrake using a separate caliper or drum mechanism.
- (e) The make and compound of brake pads are free.
- (f) Hydraulic brake hoses may be replaced with brake hoses compliant for road use and otherwise of free design. Brake hose couplings are free.
- (g) Rotor dust shields/backing plates may be removed or adjusted.
- (h) Cooling ducts may be added, and the material of a duct is free.
- (i) Brake master cylinders are free and multiple cylinders may be used in place of a single cylinder. Brake fluid reservoirs are free and must be sealed from the cockpit.
- (j) Brake boosters are free and may be removed.
- (k) Where ABS is permitted (as per Art 11. below) the ABS system may be removed or replaced with another ABS system.

## **11. ANTI-LOCK BRAKES, TRACTION CONTROL & 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. It is highly recommended that Speed Limited competition vehicles do not disconnect any standard equipment driver aids.

## **12. BODYWORK / SPOILERS / SKIRTS (EXCEPT GTP & GTO)**

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.

## **13. 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.

## **14. 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. 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.

## **15. ENGINE CHANGES**

An engine 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.

- Only a single engine change is allowable, with the approval of the Clerk of the Course.
- Each engine change may only take place with the written permission of the Clerk of the Course and may require direct supervision by a scrutineer.

## **16. 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.

## **17. ENGINE AND EXHAUST INSULATION**

Insulation materials may be used to cover wires, mechanical parts, exhaust systems, supercharger/turbocharger components, 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.

## **18. PISTONS**

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

## **19. SPARK PLUGS**

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

## **20. ENGINE MOUNTS**

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

## **21. 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.

## **22. OIL BREATHER**

If the vehicle is fitted with a crankcase breather discharging to the atmosphere, such breather must be fitted with a oil catch tank with a capacity of at least two litres for vehicle of a swept volume of less than 2001cc and three litres for a swept volume over 2001cc. 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 catch tank, 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.

## **23. 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 Chief Scrutineer.

## **24. STEERING**

- (a) A power steering fluid cooling system is permitted.
- (b) Four Wheel Steering systems may be disabled.

## **25. ENGINE COOLING SYSTEM**

The radiator and associated pipes, hoses, clamps and thermostats are free in material and size. Replacement radiators must be fitted in the same location as the original.

## **26. BATTERY LOCATION**

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 outside of the vehicle to indicate the battery location.

## **27. THROTTLE RETURN**

On each throttle (except for fly-by-wire systems) 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.

## **28. 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.



## **29. FUEL TANKS**

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 or any fuel system components 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 any window or boot lid panels. Fuel lines must be effectively sealed at each bulkhead (Forward or rear firewall) using bulkhead fittings or penetration grommets. The total capacity allowed for any tank is 120 litres.

## **30. 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. It is **HIGHLY RECOMMENDED** that all lines/cables within the cockpit are fitted within the confines of the safety cage structure to avoid any line/cable being cut in any incident.

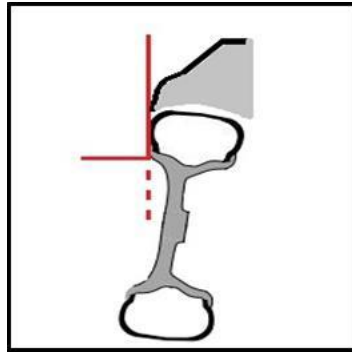
## **31. ELECTRICAL SYSTEM**

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. It is **HIGHLY RECOMMENDED** that wiring within the cockpit is fitted within the confines of the safety cage structure to avoid any wiring being cut in any incident.

## **32. TYRES**

- (a) 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.
  - (i) Tyres must be marked 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.
  - (ii) All tyres can be used as required and spare tyres (and rims) do not need to be carried in the competition vehicle.
  - (iii) 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.

- (b) Each wheel and tyre must be fitted so that the upper part of the tyre, down to the flange over the wheel hub centre must be within the perimeter of the automobile when viewed vertically from above with the steered wheels in the straight-ahead position:



### **33. TYRE STANDARDS AND LOAD RATINGS**

Tyre fitment shall be in accordance with the relevant Tyre and Rim Association Manual published annually 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. Each tyre must comply with the Load ratings applied to the standard tyre for that vehicle.

### **34. WHEEL VALVE CAPS**

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

### **35. 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;

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

### **36. WHEEL SPACERS**

A maximum of one metallic spacer may be used behind each wheel. The use of these must not affect the fitment of the tyre outside the wheel arch as per Article 51. Tyres. Consideration must be given to wheel stud length when fitting spacers.

### **37. 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.

In any case of written duplication, the Competition Specific Regulations will supersede the General Regulations.

## CLASSIC & THOROUGHbred TROPHY

### 1. GENERAL REQUIREMENTS

- (a) 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 1990. Each vehicle will be placed into one of two modification groups: Standard Specification (SS), Limited Modified Specification (LMS). The specific requirements for these two modification groups are listed below. Each vehicle will have an 'age' category determined by the date of manufacture. 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.
- (b) 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. Applications for approval need to be submitted to [info@targa.com.au](mailto:info@targa.com.au) a minimum of 90 days before the first use in an event.

### 2. WHEELS

Wheel make and construction are free provided they meet the load carrying capabilities of the vehicle. 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.

### 3. WHEEL SPEED SENSOR

- (a) Where a Classic eligible vehicle is fitted with original and standard specification wheel speed sensors only those original sensors may be used and only for the original purpose (refer to Permitted Modifications, Article 11. Anti-Lock Brakes, Traction Control Systems, Stability Control Systems).
- (b) Otherwise a Classic eligible vehicle may only be fitted with wheel speed sensors on non-driven wheels for the sole purpose of providing a distance measurement for navigational equipment.

### 4. FUEL SYSTEM AND HOSES

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

## **5. 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.

## **6. HYDRAULIC HAND BRAKE**

It is permitted to fit a hydraulic handbrake.

## **7. FUEL REQUIREMENTS**

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

## **8. ENGINE**

- (a) 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 TARGA for that vehicle. Substitute cylinder blocks shall be of the same type, configuration, number of cylinders and material as the original. Specification of substitute engine blocks may be set by the TARGA with variants permitted for SS or LMS.

## **CLASSIC & THOROUGHbred - 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 TARGA 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.

## **9. CAPACITY**

Boring of the cylinders to accept Pistons as per Permitted Modifications Article 18 is permitted. The vehicle will remain classified according to its original capacity, inclusive of the relevant supercharging and rotary equivalence factors.

## **10. 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.

## **11. 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 including piston crown dimensions and shape except that the piston diameter which is only allowed to be varied as per C10 above. The compression ratio must remain as standard.

## **12. CYLINDER HEAD**

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

## **13. 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

## **14. CAMSHAFTS**

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

## **15. ROTARY ENGINE**

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

## **16. CLUTCH AND FLYWHEEL**

Clutch and flywheel are free. Clutch actuation method may be changed from cable to hydraulic or vice versa and the actuation components are otherwise free.

## **17. 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.

## **18. 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.

## **19. ENGINE COOLING SYSTEM**

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

## **20. ANCILLARY**

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

## **21. RECONDITIONING**

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

## **22. 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.

## **23. SUSPENSION**

- (a) 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.
- (b) 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.
- (c) 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.
- (d) 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.

## **24. FUEL INJECTION**

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

## **CLASSIC & T/BRED - LIMITED MODIFIED SPECIFICATION (LMS)**

- (a) The regulations below are in addition to the freedoms allowed under Classic SS regulations:
- (b) 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. Competitors entering low volume produced vehicles may make application for a waiver of the production number which TARGA at their sole discretion will consider on its merits. Earlier vehicles may be more likely to receive such a waiver.

### **25. 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.

### **26. 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.

### **27. CRANKSHAFT**

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

### **28. CAMSHAFT**

Camshaft and valve train actuation components are free, save for method of operation as per Article C31. Cylinder Head.

### **29. ROTARY ENGINES**

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

### **30. 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/or programmable ignition systems are not permitted unless fitted as original equipment. If fitted, the electronic engine management and or programmable ignition system may be modified or replaced, provided the replacement system is from the same period as the original system.

### **31. 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.



## **32. CARBURETTED VEHICLES**

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

## **33. 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.

## **34. 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 TARGA. Induction boost level is free. An intercooler may be fitted in accordance with [Article C35](#).

## **35. 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 carburettor fed turbocharger/supercharger system in which case metered fuel may also be channelled. The size and material of the intercooler is free but must fit within the front bar/bodywork without alteration and use existing mounting points.

## **36. ENGINE COOLING SYSTEM**

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

## **37. AIR COOLED**

Air cooled engine cooling systems are free.

## **38. INTERNAL MODIFICATIONS**

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

## **39. GEARBOX / TRANSMISSION / FINAL DRIVE**

- (a) The gearbox and final drive assembly, including ratios, are free, save that the original number of forward gears must be retained. Original gearshift principle must be retained (i.e. H pattern must be retained).
- (b) Localised modifications for gearbox/transmission mounts are permitted utilising existing chassis mounting points.

- (c) Localised modifications to transmission tunnel to facilitate an alternate gear shift location are permitted.
- (d) Tailshaft/s and driveshafts are free.
- (e) Shortened or 'quick' shifters are permitted.
- (f) Additional transmission and/or differential coolers are permitted provided no body work modifications are required to fit them.

#### **40. CHASSIS**

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

#### **41. SUSPENSION**

- (a) 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.
- (b) 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.
- (c) 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.
- (d) Coil spring mounting platforms may be made adjustable.
- (e) The mounting bushes for dampers which do not have a guiding function are free.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) Full floating hubs may be fitted on vehicles with a live rear axle. A modification to axle housings only in order to fit such hubs is permitted.

- (j) 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.
- (k) 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. Safety Cage members may be fitted to suspension points in compliance with the Motorsport Australia Safety Cage regulations.
- (l) 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.
- (m) Adjustable front suspension upper arms may be fitted on double wishbone equipped vehicles, provided that Rose or heim type joints and/or spherical bearings are not used, and that elastomeric bushing material is retained in accordance with Article 41 (b).
- (n) Independent rear suspension differential and/or suspension mounting subframes may be modified and/or replaced provided the original mounting points on the chassis/bodywork are retained without modification.

## **42. STEERING**

- (a) Power steering may be fitted.
- (b) The steering ratio is free. Rack and pinion may replace steering box.

## **43. BODY WORK**

- (a) The use of any under-trays, fairings, scoops, louvers, spoilers, side skirts, 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.
- (b) Roof vents may be added, provided they are of a style evident in competition before 1989.

## **44. 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.

## **45. 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 GT - 2WD

These regulations are for Classic – GT 2WD vehicles only and are in addition to the freedoms allowed under Classic SS & LMS regulations.

### 46. ENGINE

#### 46.1 Naturally Aspirated Piston Engines - Substitute

A substitute production engine (minimum manufacture number of 2500 units) from the same manufacturer retaining the same number and configuration of cylinders (i.e. inline, horizontal or V) as the original vehicle may be fitted in accordance with the following:

(a) **Engine Capacity - Piston:**

- (i) 4 Cylinder: Maximum capacity of 2600cc swept volume.
- (ii) 6 Cylinder: Maximum capacity of 4000cc swept volume.
- (iii) 8 Cylinder: Maximum capacity of 6200cc swept volume.

NOTE: Vehicle will be classified according to its actual capacity.

A vehicle with an engine of more than 8 cylinders may be permitted a substitute engine with the same number of cylinders on application to TARGA.

(b) **Cylinder Head/s:**

DOHC may replace SOHC or OHV.

#### 46.2 Naturally Aspirated Piston Engines – Original

The original engine as fitted by the manufacturer to a make/model of vehicle may be used in which case the engine capacity is free.

(a) **Cylinder Head/s:**

Cylinder heads and valvetrain components are free but must retain the original number of camshafts and valves.

#### 46.3 Rotary Engine

(a) **Engine Capacity**

The same number of rotors as original shall be retained.

(b) **Rotary Engine Porting**

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

#### 46.4 Turbo and Superchargers

- (a) Turbo or Supercharger is permitted only if fitted as original equipment for that manufacturer make/model and only the original engine block and cylinder head/s can be used. Engine swept volume (actual capacity) is free and the vehicle will be classified based on its actual capacity including any applicable multiplication factor.

- (b) 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 TARGA. Induction boost level is free.
- (c) An intercooler may be fitted in accordance with Article C35.

#### **46.5 Induction**

Induction is free including the use of Fuel Injection, in which case Fuel Injection ECU and associated components is free.

#### **46.6 Ignition System**

Ignition system is free including the use of multi-/individual coil (i.e. CDI) systems. ECU or programmable ignition is free.

### **47. 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.

### **48. SUMP**

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

### **49. GEARBOX / TRANSMISSION / FINAL DRIVE**

- (a) Gearbox or transaxle may be replaced by another of free design, provided they have no more than 6 forward gears and 1 reverse gear.
- (b) Sequential change mechanisms are permitted and must be activated only by mechanical lever. Paddle shift, electronic or pneumatic activation is not permitted.
- (c) Automatic transmissions provided optionally by the manufacturer for that model are permitted.
- (d) Transmission tunnel modifications necessary to allow the fitment of a transmission are permitted.
- (e) The bell housing is free.

### **50. SUSPENSION**

#### **50.1 Suspension Configuration**

- (a) The suspension type/configuration as fitted to the front and rear must remain original (e.g. McPherson strut, dual wishbone, live rear axle, de Dion rear axle etc.) except that:
  - (i) McPherson strut may replace double wishbone provided the strut can occupy the original spring/shock tower upper location.

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

#### **50.2 Live rear axle rear suspension for:**

- (a) For a live rear axle, the rear suspension is free subject to retaining the type/configuration and the following:
- (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.

#### **50.3 Independent rear suspension:**

- (a) Independent rear suspension differential and/or suspension mounting subframes may be modified and/or replaced provided the original mounting points on the chassis/bodywork are retained without modification.
- (b) 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.

- (c) Rear suspension control arms are free including suspension pivot points.
- (d) Rear uprights, hubs and driveshafts are free.
- (e) Rear differential housing is free.

## **51. BODYWORK**

- (a) 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) The material from which additional interior brackets, switch panels and other similar fitments are made is free, including the use of carbon fibre or Kevlar.
  - (iv) The removal of heating and air conditioning systems is permitted, providing adequate provision is made for windscreen demisting.
  - (v) Window glass except for the windscreen may be replaced by a transparent material of adequate strength (polycarbonate) and not less than 3mm in thickness.

## **52. 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 18" 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.



## **CLASSIC GT - 4WD**

These regulations are for Classic – GT 4WD vehicles only and are in addition to the freedoms allowed under Classic SS & LMS regulations.

### **53. 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.

### **54. BODYWORK**

- (a) 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) The material from which additional interior brackets, switch panels and other similar fitments are made is free, including the use of carbon fibre or Kevlar.
  - (iv) The removal of heating and air conditioning systems is permitted, providing adequate provision is made for windscreen demisting.
  - (v) Window glass except for the windscreen may be replaced by a transparent material of adequate strength (polycarbonate) and not less than 3mm in thickness.

### **55. 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 18" diameter and 8" 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 2 & EARLY MODERN 4**

### **1. GENERAL REQUIREMENTS**

These regulations are based on the principle that modifications to the automobile or its components other than those specified below and in the General Regulations 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.

### **2. ENGINE**

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

### **3. IGNITION**

The ignition system is free.

### **4. ENGINE INTAKE**

- (a) The inlet manifold, air box and associated ducting are free.
- (b) Throttle bodies are free.

### **5. SINGLE TURBO CHARGERS**

Each turbo charger must use the original manufacturer's exhaust and compressor housings which must retain all external standard specifications. It is permitted to replace the core assembly including the compressor and exhaust turbine assemblies with a free component in which case only the internal standard specifications of the original exhaust and compressor housings may be modified. The original oil and coolant fittings may be modified only at the turbocharger core. The original waste gate or boost control actuator as fitted to the original turbo charger must be retained.

## **6. TWIN TURBO CHARGERS SYSTEMS**

Factory twin turbocharged systems may be replaced only with an approved substitute single turbocharger as approved by TARGA. Where the twin turbochargers are retained the requirements for Single Turbo Chargers apply to each turbo. A list of approved substitute single turbo chargers will be published by TARGA.

The following applies for the fitment of an approved substitute single turbo charger:

- (i) Exhaust manifold must be manufactured/fabricated from steel pipe or cast steel. Stainless Steel or other materials is not permitted.
- (ii) One external wastegate may be used, unless an internal waste gate turbo charger is used. Screamer pipes are not permitted.
- (iii) Exhaust system size must be the same as allowed for the vehicle model and modification level entered.
- (iv) TARGA reserves the right to apply a boost limit to single turbo applications.
- (v) All other regulations must be adhered to regarding intake, intercooler etc.

## **7. SUPERCHARGERS**

Each supercharger must be of the standard specification except for the drive pulley which is free.

## **8. 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.

## **9. FUEL SYSTEM AND HOSES**

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

## **10. ENGINE INTAKE, AIR BOXES AND INTERCOOLERS**

- (a) Air boxes and air intakes are free upstream of the throttle plate or turbocharger.
- (b) The pipes and hoses between a turbo charger or supercharging 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.
- (c) A vehicle originally fitted with a front mounted intercooler may replace the intercooler and the size and material of the intercooler is free but must fit within the front bar/bodywork without alteration and use existing mounting points.

- (d) A vehicle originally fitted with a top or engine bay mounted intercooler may replace/relocate the intercooler and the size and material of the intercooler is free. Where relocated it must fit within the front bar/bodywork and it is permitted to modify only the original front bar by the removal of material where at least 50mm of the original front bar must be retained in any direction. Pipes and hoses between the charge device, intercooler and manifold are free providing that the diameter does not exceed 80mm and no removal of material is permitted to fit the pipes and hoses.
- (e) 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.
- (f) The inlet manifold/s are free.
- (g) Throttle bodies are free.

## **11. EXHAUST**

The original exhaust in normally aspirated or supercharged vehicles may be replaced from the engine block. The original exhaust in turbo charged vehicles may be replaced from the turbo outlet. The outside diameter of all downstream pipes may only be up to a maximum of 90mm.

## **12. ENGINE LUBRICATION**

The lubrication system is free.

## **13. ROTARY VEHICLES**

Modifications to rotary engines' rotors, housings and end plates may be affected only by the removal of metal. Naturally aspirated Rotary engines may be modified by porting techniques 'extend', 'bridge' and 'peripheral'. Forced Induction (Turbo/Supercharged) Rotary engines may be modified by porting techniques 'extend' and 'bridge'.

## **14. BODYWORK**

- (a) Alternative materials are permitted for the following panels provided they are of the exact same external shape as the original panel;
  - (i) Front mudguards
  - (ii) Nose panel
  - (iii) Boot lid or rear hatch
  - (iv) Bonnet
- (b) Original fittings must be retained (e.g. hinges / bonnet locks). The minimum specifications of alternative materials shall be respected with the following minimum material thickness;
  - (i) Aluminium - 1.25mm thick
  - (ii) Fibre glass/reinforced plastic/composite - 3mm thick

## **15. WHEELS**

- (a) Wheel make and construction are free provided they meet the load carrying capabilities of the vehicle.
- (b) Wheel diameters and width may be varied by a maximum of plus or minus 2" from the manufacturer's standard specifications.

## **16. FUEL REQUIREMENTS**

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

## **17. MINIMUM WEIGHT**

The minimum weight will be established by the adding of the recognised kerb weight for the vehicle (not dry weight), as determined by TARGA plus 160kg to allow for the crew, safety equipment and all fluids, including fuel.

## **18. 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.

## **19. SUSPENSION**

- (a) 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/incorporate a threaded sleeve to the exterior of the strut for allowing adjustment of the height of the spring seat.
- (b) 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 it is not permitted to make any additional modification for the mounting of the coil over spring and damper.
- (c) Suspension bushings are free, provided that the design of the bushes is original, and they are all of an elastomeric material. The bush offset of the hole in the bush is free.
- (d) Original suspension mounting points may be altered in design, but not in location.
- (e) The addition of braces for strut/damper towers is permitted
- (f) Live rear axle equipped vehicles may be modified to incorporate floating rear hubs.
- (g) 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.

- (h) 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.
- (i) Adjustable McPherson strut tops and/or adjustable upper arm may be fitted on double wishbone equipped vehicles.

## **20. 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. Damper settings adjustment must not be able to be undertaken by the crew whilst they are seated in the cockpit.

## **21. GEARBOX / TRANSMISSION / DIFFERENTIAL**

- (a) The casings and housings must be the same as originally fitted to the vehicle.
- (b) The clutch is free.
- (c) Flywheel is free.
- (d) Final drive ratio is free.
- (e) Internal gears and shafts may be replaced by non-manufacturer items.
- (f) The gear change mechanisms must be as per original standard specification for the vehicle, other than that shortened or 'quick' shifters, which do not require modification of casings/housings are permitted.
- (g) Differential action is free.
- (h) Axles, drive shafts and tail shafts are free.

## **22. STEERING**

Steering ratio is free.

# GT PRODUCTION, GT OUTRIGHT & GT SPORTS TROPHY

## 1. GENERAL REQUIREMENTS

- (a) 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 in the General regulations and 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.
- (b) Each vehicle must only use components of the actual manufacturer defined model, series, type and body shape, unless otherwise approved by the TARGA. Components from any other body shape are not permitted. The build and compliance plate for each vehicle will determine what the manufacturer defined body shape is.

## 2. AIR CONDITIONING

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

## 3. GEARBOX / TRANSMISSION / DIFFERENTIAL

- (a) The gearbox/transmission must remain as per the standard specification.
- (b) The clutch friction plate/s is free, except that only the original number of friction plate/s is permitted.
- (c) The original flywheel may be replaced only by a flywheel of ferrous material except that the original dimensions must be retained.
- (d) The internal components of a differential may be modified in accordance with the following:
  - (i) **Mechanical Differential:** Mechanical differential actuation is free providing the original and standard specification differential ratio and housing is retained.
  - (ii) **External Control Differential:** For a differential with any external control (i.e. DCCD or active type differential) only the standard specification differential is permitted, or it may be replaced with a mechanical differential.
- (e) 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 transmission oil cooler must be to the satisfaction of the Technical Commissioner.

#### **4. WHEELS**

- (a) Wheel make and construction material is free provided they meet the load carrying capabilities of the vehicle.
- (b) Each vehicle may:
  - (i) retain the recognised standard sized rim in terms of diameter and width; or
  - (ii) be fitted with 18" diameter wheels, if the standard size is smaller. Width must be retained.
- (c) No body panel modifications are permitted other than the internal 'lipping' of the material on the inner front and rear guards.

#### **5. BODYWORK / SPOILERS / SKIRTS / UNDER TRAYS**

- (a) All bodywork must be as originally fitted to the vehicle by the manufacturer.
- (b) Spoilers, skirts and under trays, as fitted by the manufacturer either need to be retained or may be replaced with optional or limited-edition spoilers, skirts and under trays and/or spoilers, skirts and under trays made for another model of the same vehicle providing all new components meet the following criteria to the satisfaction of the TARGA;
  - (i) It can be shown that the replacement parts were/are made by the manufacturer for the vehicle, regardless of the model
  - (ii) That the parts are not replica or 'aftermarket' components made by a third party, even if the third party has some form of alliance with the manufacturer of the vehicle
  - (iii) That any of the new parts do not affect the vehicle's roadworthiness to maintain legal public road use.

#### **6. RIDE HEIGHT**

Each fully sprung part of the vehicle, except for the exhaust system, must be at least 100mm above the ground when measured at any point within the wheelbase. The vehicle ride height shall be measured with the crew, and all normal and necessary equipment fitted.

#### **7. SUSPENSION**

- (a) 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).
- (b) 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.
- (c) Dampers are free, but the number per car and attachment points must remain unchanged. Electronic in-car adjustment of dampers is only permitted if originally fitted by the manufacturer and must remain as fitted in every way.



- (d) 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.
- (e) The upper mount for a Macpherson Strut or damper may be adjustable and incorporate a spherical bearing.
- (f) Sway bars are free but must be the original design, shape and material and must mount in the original location using original mounting hardware. In car sway bar adjustment is not permitted.

## **8. EXHAUST**

- (a) The original exhaust in normally aspirated vehicles may be replaced from the engine block.
- (b) The original exhaust in forced induction vehicles may be replaced from the turbo outlet.
- (c) 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.
- (d) A single system may replace a twin system however it must respect the sizes for a single exhaust.

## **9. MINIMUM WEIGHT**

The minimum weight will be established by taking the standard specification recognised kerb weight for the vehicle (not dry weight), as determined by the TARGA, and adding 160kg to allow for the crew, safety equipment and all fluids, including fuel.

## **10. ELECTRONIC CONTROL UNIT (ECU) AND ASSOCIATED WIRING LOOM**

- (a) The electronic control unit/s (ECU) may be replaced, reflashed or intercepted (piggybacked).
- (b) All sensors including fuel injection and ignition system components must otherwise remain as standard.
- (c) Outputs from the ECU must retain the original functions in accordance with the manufacturer's specifications.
- (d) Boost levels on forced induction vehicles is free, provided that boost control mechanisms are as per the standard specifications.
- (e) Additional sensors for the use of data logging are NOT permitted.

## **11. FUEL REQUIREMENTS**

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

## **12. AIR FILTERS AND INTERCOOLERS**

- (a) Air filters are free providing they fit in the same way as the factory filter.
- (b) 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.
- (c) The original intercooler hose/s size must remain as originally fitted but may be replaced with a different material.

## **13. TURBO CHARGERS & SUPERCHARGERS**

### **13.1 Turbo charger**

Each turbo charger must use the original manufacturer's exhaust and compressor housings which must retain all external standard specifications. It is permitted to replace the core assembly including the compressor and exhaust turbine assemblies with a free component in which case only the internal standard specifications of the original exhaust and compressor housings may be modified. The original oil and coolant fittings may be modified only at the turbocharger core. The original waste gate or boost control actuator as fitted to the original turbo charger must be retained.

### **13.2 Supercharger**

Each supercharger must be of the standard specification except for the drive pulley which is free.

## **14. ELECTRICAL SYSTEM**

Additional/replacement switches and/or circuit breakers, which may be a Power Distribution Module (PDM), may be added.

## **15. 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, except for a vehicle originally fitted with only two seats in which case the seat position is not restricted.

## ADDENDUM 1

### EARLY MODERN 2 & 4 – TWIN TURBO SUBSTITUTION

In accordance with Competition Specific Regulations, Early Modern 2 & 4; Article 6. Twin Turbo Systems:

Factory twin turbocharged systems may be replaced only with the organiser's approval to a recognised control single turbo system. (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
Mazda FD RX-7 1992 - 2001	Borg Warner EFR 7670 B or C  Honeywell-Garrett GT3582R Honeywell-Garrett GTX3582R Honeywell-Garrett GTW3684R	Internal Wastegate only  Internal or External Wastegate  All other Early Modern regulations remain applicable.
Nissan Skyline GT-R R32, R33, R34	Borg Warner EFR 8374 B or C  Honeywell-Garrett GT3582R Honeywell-Garrett GTX3582R Honeywell-Garrett GTW3884R	Internal Wastegate only  Internal or External Wastegate  All other Early Modern regulations remain applicable.
Toyota Supra JZA80 (2JZ-GTE Engine)	Borg Warner EFR 8374 B or C  Honeywell-Garrett GT3582R Honeywell-Garrett GTX3582R Honeywell-Garrett GTW3884R	Internal Wastegate only  Internal or External Wastegate  All other Early Modern regulations remain applicable.

## ADDENDUM 2

### MINIMUM WEIGHT TABLE- EARLY MODERN 2 & 4, GTP & GTO

2022 MOTORSPORT AUSTRALIA TARGA CHAMPIONSHIP MINIMUM WEIGHT LIST EARLY MODERN 2, EARLY MODERN 4, GT PRODUCTION & GT OUTRIGHT									
ALL WEIGHTS INCLUDE ALLOWANCE FOR CREW, SAFETY EQUIPMENT AND ALL FLUIDS INCLUDING FUEL									
Alfa Romeo	147 GTA	1,400							
Aston Martin	Vantage	1,500							
Audi	TTRS	1,550	R8 V8	1,600	R8 V10	1,700			
BMW	1 Series M	1,500	M3- E36, Z4	1,500	M3- E46	1,500	M3- E92	1,600	M3- E30 1,350
	M2	1,550							
Chevrolet	Corvette	1,550	Corvette C6- ZR1	1,600	Camaro	1,600	Callaway	1,600	
Chrysler / Dodge	Viper	1,700	Challenger	1,600					
Daytona	Coupe	1,300							
Ferrari	F360	1,400	F430	1,500	F458, F488	1,550			
FIAT	Punto	1,100							
Ford	Shelby GT	1,600	Mustang	1,600	Focus XR5, RS	1,450	Falcon All	1,600	
FPV	Falcon All	1,600							
Ginetta	G40	950							
Holden	Commodore All	1,600							
Honda	Integra	1,300	NSX	1,500					
HSV	Commodore All	1,600							
Lamborghini	Gallardo	1,600	Aventador	1,650	Murcielago	1,700	Huracan	1,650	
Lotus	Exige- All	1,300	Evora	1,400	Elise	1,000			
Mazda	RX-7	1,350	MPS, RX-8	1,400	MX-5- NA	1,050	MX-5- NB & NC	1,200	MX-6 1,300
McLaren	MP4-12C	1,600	650S	1,600					
Mercedes Benz	C63	1,600	A45	1,550					
MINI	Cooper	1,300							
Mitsubishi	EVO I to III	1,350	EVO IV , V & VI	1,450	EVO VII & VIII	1,500	EVO IX	1,550	EVO X 1,600
Nissan	R32 GT-R	1,500	R32 GTS-t	1,400	R33 GT-R	1,650	R33 GTS-25t	1,500	R34 GT-R 1,650
	R34 GT-T	1,500	R35 GT-R	1,800	200SX	1,400			
Peugeot	405	1,400							
Porsche	911 Carrera	1,400	911 Turbo 996	1,600	911 GT3 996, 997	1,500	911 GT3 991, 992	1,600	944 All 1,350
	911 Turbo 997,991	1,700	911 GT2 All	1,650	Cayman / Boxster	1,450	968 All	1,500	928 All 1,500
Renault	Megane	1,450	Clio	1,200					
Subaru	WRX- GC, GF, GM	1,350	WRX- GD & GG	1,500	WRX- GE Onwards	1,600	BRZ	1,300	
Toyota	Celica GT4	1,450	AE86	1,300	MR2 ZZW30	1,100	MR2 SW20	1,300	Yaris GR 1,400
TVR	Chimaera	1,200							
Volkswagen	Golf Gti	1,450	Golf R32 & R	1,550	Scirocco	1,450			
Volvo	S60	1,450	V70R	1,550					
IF YOUR VEHICLE DOES NOT APPEAR ON THIS LIST PLEASE CONTACT enquiries@targa.com.au TO HAVE IT ADDED									

## ADDENDUM 3

### APPROVED VEHICLES LIST

GT PRODUCTION, GT OUTRIGHT & GT SPORTS TROPHY APPROVED VEHICLE LISTS			
GT PRODUCTION & GT SPORTS TROPHY		GT OUTRIGHT & GT SPORTS TROPHY	
Alfa Romeo	All	Ascari	All
Audi	All except R8- All Variants	Aston Martin	All
BMW	All except M8- All Variants	Audi	R8
Buick	All	Bentley	All
Cadillac	All	BMW	M8- All Variants
Chevrolet	Camaro- All	Bugatti	All
Chrysler / Dodge	Challenger, Charger- All	Callaway	All
Citroen	All	Chevrolet	Corvette- All Variants
FIAT	Spyder	Chrysler / Dodge	Viper - All variants
Ford	Mustang, Focus, Falcon- All	Ferrari	All
FPV	Falcon	Ford	GT
Ginetta	G40	Honda	NSX
Holden	All	Koenigsegg	All
Honda	Civic Type R	Lamborghini	All
HSV	All	Lexus	LFA- All variants
Hyundai	All	Lister	All
Infiniti	All	Lotus	Exige, Evora- All variants
Isuzu	All	Marcos	All
Jaguar	All	Maserati	All
Kia	All	McLaren	All
Lancia	All	Mercedes Benz	AMG GT- All variants
Lexus	All except LFA	Nissan	GT-R- All variants
Lotus	Elise- All variants	Noble	All
Mazda	MPS, RX-8, MX-5	Pagani	All
Mercedes Benz	All except AMG GT	Panoz	All
MG	All	Porsche	911- All variants, Cayman GT4, 918
MINI	All	Roush	All
Mitsubishi	All	Saleen	All
Morgan	All	Shelby	All
Nissan	All except GT-R	Spyker	All
Opel	All	SSC	All
Peugeot	All	TVR	All
Pontiac	All	Ultima	TARGA Specification Only
Porsche	Cayman except GT4- All variants, Boxster	Zagato	All
Renault	All		
Seat	All	GT PRODUCTION & GT SPORTS TROPHY APPROVED SUV VEHICLES	
Skoda	All	Audi	All RS Q Variants
Subaru	All	Bentley	Bentayga- All Variants
Suzuki	All	BMW	All X Variants
Tickford	Mustang	Infiniti	QX70
Toyota	All	Jaguar	F- Pace
Vauxhall	All	Jeep	All SRT Variants
Volkswagen	All	Lamborghini	Urus
Volvo	All	Land Rover	Range Rover Sport & Velar
		Lexus	RX- All Variants
		Maserati	Levante- All Variants
		Mercedes Benz	All AMG GL Variants
		Porsche	Macan, Cayenne- All variants
		Tickford	Everest
		Toyota	C-HR
		Volvo	All Polestar Variants

## CONTACT DETAILS

For further enquiries in relation to these Technical Regulations please contact the following;

- Scott McGrath- Motorsport Australia Technical Manager- [smcgrath@motorsport.org.au](mailto:smcgrath@motorsport.org.au)
- Megan Creese- TARGA Event Manager – Competitions & Tours- [megan@targa.com.au](mailto:megan@targa.com.au)

# TARGA

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