

RALLY / ROAD

Classic Rally Cars

The Classic Rally Car regulations are designed to allow cars to be presented in competition in a similar form to that in which they appeared in the era of rally competition more than 30 years ago.

Cars in these Classic Rally Car categories (C1, C2, C3 and C4) must have been first manufactured 30 years prior to 31 December of the current year (i.e. eligibility will be on a rolling basis and new age classes will be considered for introduction each 5 years). It is intended that cars should look and perform much as they did in the period when they first started in competition, whilst allowing reasonable freedoms that recognise the age of such vehicles, the inability to source some original components and requirements for essential modern safety equipment.

Four categories of Classic Rally Car reflect the spectrum of demand from competitors and range of possible modification allowed.

1.1 MINIMUM REQUIREMENTS: All cars will be required to comply with the current requirements for rally cars, including but not limited to those outlined in Schedules A, I, J and R (refer "General Requirements for Cars and Drivers" in the CAMS Manual of Motor Sport).

MINIMUM WEIGHTS: Minimum weights for Classic Rally Cars shall be in accordance with the equivalent PRC weight less 5%. Where Classic Rally Cars compete directly against PRC or Historic Rally Cars, Organisers may specify that PRC weights apply to Classic Rally Cars.

Refer also to Rally Car Eligibility (refer "Rally/Road" in the CAMS Manual of Motor Sport).

LOG BOOKS: All cars must be subject of a CAMS Log Book.

Upon application, cars will be subject of a log book in the Historic Rally Car category, other than those Category 4 and 5 cars eligible for PRC classification (weight aside), in which case a PRC Log Book classification shall be issued.

Refer also to Schedule L of the CAMS Manual of Motor Sport, in particular the "Explanatory Note".

ORIGINAL CARS: A rally car which competed in the period and complies with FIA Appendix K and which is subject of an FIA Historic Vehicle Identity Form (until end 2006) or alternatively an FIA Historic Technical Passport and Heritage Certificate may compete in that configuration, notwithstanding that the car may not comply with these regulations.

2. IMPORTANT NOTES

2.1 ELIGIBILITY IN OTHER RALLIES: Builders of such cars must be aware that some modifications permitted in some categories of Classic Rally Cars means they may not be eligible for the PRC category and that the opportunity to use such cars may be limited to only competitions offering a Classic Rally Car category.

Classic Rally Car competitors are advised to consider ensuring their cars are able to be used in other competitions which constrain eligibility to PRC or strict HRC regulations.

2.2 MODEL RUN ON PRINCIPLE: Cars which are the same in all respects, but are manufactured after the cut off dates, may be presented as a model which was available in the earlier period. All items that are required to be retained by the regulations (eg, dash, tail and head light assemblies, body shell) shall be identical to those available on the car that was manufactured in the period.

3. C1 – AUTHENTIC CLASSIC RALLY CAR CATEGORY

Each car shall comply with Group 3C – Production Rally Cars regulations or the Historic Rally Car Regulations save for the following:

- Cars shall be 2WD only.
- Modifications and components listed on the Group 2 and 4 FIA homologations for a particular car are permitted, save where specific restrictions exist in these regulations in which case these regulations shall take precedence.
- Wheel arch flares and inner wheel arch modifications of a type used on that model in rally competition of national status in Australia or FIA International championship status in the period are permitted. Evidence of compliance with such historic fitment may be required at scrutiny.

3.1 ENGINES:

- (a) **General:** The engine used shall be as listed in a vehicle's relevant homologation papers, or be the original make of cylinder block and crankcase or option of the period from the manufacturer of the vehicle as otherwise permitted under the PRC rules or be an approved Classic Rally Car substitute until 31 December 2016, after which the vehicle is no longer eligible for C1, but may be eligible for C2. An eligible cylinder block may be fitted with a substitute cylinder head where approved until 31 December 2016 after which the vehicle is no longer eligible for C1, but may be eligible for C2.

For other than substitute engines, modifications to internal components are free. Capacity is free, but any change in capacity may result in change of capacity class.

- (b) **Cylinder Head:** The original make of cylinder head from the manufacturer of the vehicle or the homologated / period option must be employed. Modifications are free, save that the original number of valves and camshafts shall be retained.
- (c) **Substitute Engines:** A substitute engine which has been approved by the Australian Rally Commission may be used. An application for a substitute engine may be based on the engine which was either FIA homologated in Groups 1-4 or the engine which is eligible for PRC for that model.

The guidelines for substitute engines are that the engine shall:

- be produced prior to 1986;
- be produced by the same manufacturer as the original;
- have the same number of camshafts in the same location;
- have the same number of cylinders and general configuration (eg, in-line, vee etc);
- be made of the same material as the original;
- be able to be fitted in the same general location as the original. No body modification is permitted to allow the fitment of the replacement engine.

Approved Classic Rally Car Substitute Engines					
Make	Model	Year	Current Engine	Substitute Engine	Date Added
Nissan/Datsun	Violet GT (PA10)	1980-1981	LZ20	FJ20E (naturally-aspirated)	01/7/2009
Nissan/Datsun	Silvia S110	1979-1984	LZ20	FJ20E (naturally-aspirated)	01/7/2009
Nissan/Datsun	Violet 710SSS	1974-1976	LZ20	FJ20E (naturally-aspirated)	01/7/2009
Toyota	Celica TA22	1972-1975	18R-G	3SGE, Series 1 (naturally-aspirated)	20/10/2009
Toyota	Celica RA20	1976-1978	18R-G	3SGE, Series 1 (naturally-aspirated)	20/10/2009
Toyota	Celica RA40	1978-1981	18R-G	3SGE, Series 1 (naturally-aspirated)	20/10/2009
Toyota	Celica RA63	1981-1982	18R-G variant	3SGE, Series 1 (naturally-aspirated)	20/10/2009
Toyota	Corolla TE-27	1971-1974	2-TG	4-AGE 1600 16-valve DOHC	2/9/2009

(d) **Substitute Cylinder Heads**

A substitute cylinder head which has been approved for a particular model of car may be used.

The guidelines for substitute cylinder heads are that the cylinder head:

- shall have the same number of camshafts in the same location as the original/recognised engine;
- shall have no more valves than the original cylinder head;
- shall bolt directly to the original/recognised cylinder block without the need for modification to either the cylinder block or cylinder head;
- shall have no more spark plugs than the original head;
- shall not incorporate a variable cam timing system; and
- may be produced by an alternate manufacturer intended for use on the original block.

Where a substitute cylinder head is approved, it is permitted to fit a suitable replacement chain or belt drive timing system.

Approved Classic Rally Car Substitute Cylinder Heads						
Car Make & Model	Cylinder Block	Head Make	Head Source, Model and/or Designation	Valves	Configuration	Date Added
Fiat 131 Abarth	Fiat/Lancia (Series-131/132/138/ 828)	Fiat/Lancia	Fiat/Lancia models post-1988	16	DOHC	22/6/2011
Ford Escort	Ford Pinto	Cosworth YB	Ford Cosworth Sierra	16	DOHC	2/9/11

- (e) **Limitations applying to cars with substitute engines or cylinder heads**
Cars with substitute engines are not permitted the full range of modifications otherwise acceptable under the PRC regulations.

The following modification limitations apply:

- (i) **Capacity:** A maximum 17% increase in capacity over the original/recognised engine is permitted, or alternatively, a substitute engine which keeps the car in the same PRC capacity class as it would be with the standard specification original/recognised engine may be permitted. The standard stroke must be retained. A car which undergoes a capacity alteration due to a substitute engine and/or permitted modifications shall compete in the capacity class pertaining to the new capacity.
- (ii) **Cylinder Head:** Modifications may be made to the cylinder head and related components only in the following areas:
- inlet and exhaust ports may be modified by the removal of metal only
 - inlet and exhaust valve sizes and valve seats are free. The minimum modifications required to fit these items are permitted
 - valve guides may be replaced by others of alternate materials.
- (iii) **Induction:** A carburettor induction system shall be utilised, regardless of whether or not the replacement engine or cylinder head may have been fitted with fuel injection.

Cars which suffer a capacity alteration with a substitute engine and permitted modifications must compete in the capacity class pertaining to their new capacity.

- (f) **Inlet manifolds:**
Inlet manifolds, not being integral with the cylinder head casting, are free for non-fuel injected naturally-aspirated cars.

3.2 Induction

- (a) Carburettor/s is/are free for naturally-aspirated cars, subject to being of a make, type and appearance available in the period. Multiple carburettors are permitted in the ratio of not more than one throttle per cylinder. Rotary powered cars may not have more than one throttle per inlet port.
- (b) Fuel injection is not permitted unless fitted as original equipment to the make, model and year of car concerned, and where fitted, only the original fuel injection system and intake manifold shall be used, save for the ECU and wiring harness, which shall comply with the PRC regulations. Carburettor/s may replace fuel injection systems.
- (c) Turbo/supercharged cars must retain the original induction and turbocharger systems in their entirety save for inlet hoses and pipes, and air filter, which shall comply with the PRC regulations.

3.3 Gearboxes

- (a) Shall have a maximum of five forward gears. The gear selection mechanism must be as per of the period. Sequential gearboxes or systems employing electronically-activated or electro-hydraulic gear selection are prohibited. Internal components are otherwise free.

From 1 January 2017 the gearbox housing shall conform to one of the following options:

- original; or
- a recognised replica of the original; or
- homologated from an alternative vehicle of the period; or
- an alternative from the same manufacturer of the period which has been specifically approved by ARCom. Flywheel, clutch and final drive are free.

3.4 Wheels

Maximum wheel size shall be in accordance with the PRC Regulations.

3.5 Suspension

Springs and dampers are free, including their method of operation (e.g. a leaf spring may be replaced by a coil spring).

Multiple link live rear axle suspensions with up to six locating suspension links to the body shell are permitted for cars which were supplied by the manufacturer with live rear axles.*

Pivot points may be moved to allow lengthened links, save that these links shall be no further forward than the standard lateral box selection, located under the leading edge of the rear seat base.

The following modifications are authorised in order to fit such a suspension system:

- The original suspension components (eg, springs, shock absorbers) may be removed.
- The differential and rear axle assembly are free.
- The rear axle assembly may be located longitudinally by up to four individual arms.
- The rear axle assembly may be located laterally by either a Panhard Rod or Watts Linkage.
- The body shell may be modified to allow the fitment of brackets to mount such 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 cabin space. The cabin space must be effectively sealed from the outside of the vehicle in the area where such modifications are made.

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- The use of elastomeric bushings, spherical bearings and/or rose joints is permitted in locating the rear suspension.
- It is permitted 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.

* **WARNING:** Taking advantage of this modification will result in the car no longer complying with PRC and may result in limited opportunity to use the car.

4. **C2 MODIFIED CLASSIC RALLY CAR CATEGORY**

Each car shall comply with the Group 3 – Club Rally Cars regulations save for the following:

- (a) The engine shall be produced prior to 20 years prior to 31 December of the current year, ie ten years later than the current Classic Rally Car age limit.
- (b) Sequential gearboxes or systems employing electronically-activated or electro-hydraulic gear selection are prohibited.

5. **C3 SPECIAL CLASSIC RALLY CAR CATEGORY**

Each car may be 2WD or 4WD

Each car may not comply with C1 or C2, but due to their provenance or special rally historic value are recommended to ARCom for approval to be admitted to this category.

Cars that would be considered include:

- Group G, including close replicas, with CAMS log books
- Group B, including close replicas with FIA log book
- Rally cars with MSNZ log book and NZ civil registration

6. **C4 4WD CLASSIC RALLY CAR CATEGORY**

Each car shall comply with the Group 3C – Production Rally Cars regulations for 4WD vehicles and meet the Classic Rally Car manufacture cut off date.