

# Aussie Retro

## GT Coupe (GTC)

(Adapted from IRRA Regulations, 8.3.08)

### General Specifications

- 1 **Maximum Overall Chassis Width:** 3.125" (79.38mm), measured across any part of the chassis, as well as across the front and rear axles.
- 2 **Maximum Body Width:** 3.250" (82.55mm), measured at the front and rear wheel arches.
- 3 **Maximum Rear Tire Width:** 0.810" (20.57mm).
- 4 **Minimum Rear Tire Diameter:** 0.8125" (20.64mm).
- 5 **Minimum Front Tire Width:** 0.225" (5.72mm). Wheels with O-ring "tires" are prohibited. The front tire contact patch must touch the track across the full width of the tire (i.e. no coning/angling or knife-edging is allowed). Tire edges may be rounded to a maximum 1/16" radius.
- 6 **Minimum Front Tire Diameter:** 0.750" (19.05mm).
- 7 **Minimum Rear Chassis Clearance:** 0.050" (1.27mm). The entire motor bracket, rear chassis section, and gear must meet this clearance. Clearance will be measured with front and rear tires sitting flat on the test block without the guide.
- 8 **Minimum Front Chassis Clearance:** 0.015" (0.38mm), measured at the most forward part of the chassis. Clearance will be measured with front and rear tires sitting flat on the test block without the guide.
- 9 Axles (Front & Rear): 3/32" (2.38mm) minimum diameter, solid steel. Hollow axles are not allowed. Axles may only be flattened in the areas where the wheels and gear are secured.
- 10 **Bushings/Bearings:** Oilite/bronze bushings only. No ball bearings are allowed in the front or the rear.
- 11 **Minimum Weight:** 110 grams ready to race.
- 12 **Drive Type:** Inline drive only, with the motor shaft at 90° to the rear axle.
- 13 **Drive Gears:** Only production gears are allowed. The only modification allowed is the addition of a 1/8" reducing sleeve for use with a 3/32" axle.
- 14 **Maximum Front Axle Play:** 0.125" (3.18mm), as part of the maximum front track width. At no time can tires extend out past the body.
- 15 **Maximum Rear Body Height:** 1.375" (34.93mm) measured with the car on all four wheels on a test block (unsupported by the guide flag), from the tech block surface to the top of the highest point of the rear of the body, excluding any add-on spoiler. Severe raking of the body for aerodynamic effect is not allowed.
- 16 All chassis parts, including the guide flag, must be covered by the unmodified body.
- 17 The wheels shall be located in relation to the wheel arches in the body.
- 18 **Tires – Rear:** Any commercially-available black natural rubber tire, chemically-treated or untreated, on any size hub. Only WD40 or Lighter fluid can be used to clean the tyres. No "Goo" permitted. No chemical treatment allowed except by manufacturer as previously mentioned. Competitors found using "goo" or other chemical treatments to enhance the traction qualities of the tyres may receive a penalty not exceeding 25 laps. Such actions are deemed to be contrary to the spirit of the nature of vintage racing. Tyres are to be purchased at a reputable supplier, and may be glued on the rims and ground to size. Please observe this rule to make it fair for all that compete.
- 19 **Tires – Front:** Must be made of two pieces, i.e. a wheel and a tire. Front wheels may be made of any material and can have any size hub (as long as the front wheel and tire dimensions listed elsewhere in these rules are observed). Front tires must be glued to the wheels and be made of black rubber; only SBR, Wonder, and natural rubber type materials are acceptable. Front tires may be coated with cyanoacrylate adhesive ("Super Glue") or nail polish.

### Chassis

- 1 **Chassis Type:** Any personally-built or commercially-available scratchbuilt chassis in kit form or built conforming to these specifications is allowed.
- 2 **Chassis Materials:** Brass: sheet, rod, and tube; steel: wire, pin tubing, and commercial guide tongues are allowed. Steel tongues cut from center sections of Flexi chassis, such as Parma Flexi 2 or 3, JK Cheetahs, etc., may be used until January 1, 2009, but cannot be cut off any farther back than 3/8" (9.53mm) behind the front axle and are limited to a maximum 1" (25.4mm) width. Other pieces of steel used for guide tongues are limited to a maximum 1" (25.4mm) total width and 1.50" (38.1mm) total length. No other materials are allowed. Chassis parts, such as pans, brackets, guide tongues, etc., that are made using EDM, laser, or water-cutting techniques are allowed only if they are individual commercially-available components or components of chassis kits (i.e. these techniques may not be used in the private manufacture of one-off components). Materials such as printed circuit boards are not legal. Each car must have a brass rear bracket consisting of at least three sides (vertical or horizontal), with each connected side having a minimum width or height of at least .200". The motor bracket must support the motor and extend to touch the rear axle tube. The axle tube does not need to travel through the motor bracket. The motor can be screwed to the motor bracket and/or can also be soldered in place. Floating pin tubes inside another tube are allowed.

- 2 **Tape/Lead:** Lead weight may be added to a chassis but it may only be affixed to the top side of the chassis. Strapping or other tape to control or restrict movements is allowed but it may only be affixed to the top side of the chassis.
- 3 **Hinged Movements:** Other than a drop arm, all hinged movements must be oriented in only one direction on any individual chassis. A chassis may have transverse hinges (examples: Iso-fulcrum hinges and plumber hinges) **OR** it may have longitudinal hinges (example: side pan hinges) but the chassis may not have both types. The number of individual hinges is not restricted. Centerline hinges are NOT allowed.
- 4 **Front axle:** A single straight, 3/32" (2.38mm) minimum diameter, one-piece front axle is required, carrying both front wheels. The axle may be fixed or in a tube. NO hinged front wheel movements are allowed (i.e. no "L" arms). Front wheels may rotate independently.
- 5 **Guide:** A single guide flag is allowed, centered on the longitudinal axis of the chassis (i.e. no sideways "free float" or offset) and with a blade no larger than .086" (2.20mm) wide x 1.060" (27.18mm) long.
- 6 No part of the chassis, motor, gear, or other component may hang below the main chassis rail(s), which may not be bent or bowed vertically for the purpose of lowering the midsection of the frame below the level dictated by the clearance specifications.

## Motor

- 1 **Motor:** Plafit Cheetah II only to be used, and must remain unopened and unmodified.
- 2 **Exclusion Clause:** Clear violation of the motor-tampering rule may result in permanent exclusion from future Aussie Retro events of any kind.
- 3 A motor may not be changed after tech inspection at any time unless it fails during the race. A motor change between heats is NOT allowed unless the motor change was begun during an active heat. Motor changes must be approved and re-inspected by the Tech Director.

## Body

- 1 All approved GT Coupe bodies are listed in the "Approved Body Lists" section. All bodies must be representative of pre-1970 cars.  
Note: It is requested, in keeping with the spirit of retro racing, that bodies not be any less than .007" thick on the sides. Any body found to be flimsy or a detriment to marshaling will need to be corrected by the racer. Tape or body armor may be used to achieve the desired side thickness.
- 2 **Body style:** Racers are encouraged to present cars with scale realism. Bodies must be those on the approved body list. No "flattened" or "aerodynamically-improved" bodies allowed (i.e. no molded-in spoilers, wings, etc., that were not on the original full-size car or original mold). Note: molded-in spoilers may not exceed the allowed specification governing the maximum width of the body. Front wheel arches must be cut out. Rear wheel arches may be left closed if the original full-size car ran with closed wheel arches. Bodies must be presentably-painted and carry at least three racing numbers, one on each side, and one on the front. To further clarify this regulation, all bodies must be fully opaque on all sides except for those areas deemed to be windows. Windows may be tinted. The term opaque means covered by paint, tape, or other suitable material such that a finger is not visible through the paint or other covering under normal lighting. No part of the chassis may be seen when looking down on the car. from above.  
Legal openings, such as air vents, etc., may be cut out. There should be a minimum 1/16" (1.59mm) vertical component and/or part of the grill along the front edge of the body unless this element was not on the original car.
- 3 **Spoilers and Air Control:** A single, flat plastic spoiler set at any angle may be added to the rear of the body only. The spoiler's length is limited to a maximum of 1/2" (12.7mm) from the rear edge of the body and must be no wider than the outer edges of the body. No additional bends are allowed except for the one to set the initial angle. No side dams of any type are allowed. Front diplanes are not allowed. High-mounted wings are allowed if they are used on the original full-size car. Such wings must be securely attached to the body and/or chassis.
- 4 **Cockpit:** All bodies must carry a painted (at least two colors), fully-molded three-dimensional interior comprising a driver (helmet, shoulders, and arms), a steering wheel, and cockpit representation. No paper interiors. Rear windows must be painted or covered.

## Approved Bodies

<b>Model</b>	<b>Manufacturer</b>	<b>Part No.</b>	<b>Model</b>	<b>Manufacturer</b>	<b>Part No.</b>
Alfa Coupe	Alpha	485	Lola T70 Coupe	JK	
Chaparral 2D	Electric Dreams	ELEB 031	Lola T70 Coupe	Lancer	153
Chaparral 2F	Red Fox		Lola T70 Coupe	Red Fox	
Chevron B16	Outisight	420	Lola T70 Coupe	Toytech	TR173
Ferrari 330 P4	Red Fox		Lola T70 Coupe	True Scale	
Ferrari 330 P4	Toytech	TR181	McLaren M6 GT	True Scale	
Ferrari 330 P4	True Scale		Mirage GT	True Scale	
Ford GT40	JK	7082	Mirage M2	True Scale	
Ford GT40	Red Fox		Porsche 908	Toy Tech	206
Ford GT40	Toytech	TR177	Porsche 908	True Scale	
Ford Mk IV	Alpha	480	Porsche 917 SH	Electric Dreams	ELEB 024
Ford Mk IV	Electric Dreams	ELB 08	Porsche Carrera	Alpha	482
Ford Mk IV	JK	1901	Porsche Carrera	JK	1903
Ford Mk IV	Lancer	156			

Other bodies may be added, after approval.