Aussie Retro F1 Regulations

Issued 9th September 2011

(Adapted from D3 2010 1/24 Retro F1 rules V3, 12-20-07, and IRRA F1 rules 1.1.10)

1. Intent:

The intention of this class is to provide a class of scratch-built slot cars reflecting the spirit of the mid-1960s racing era, with scale realism and low cost, to attract new and experienced racers and builders.

2. Dimensional Specifications

- 2a. Maximum Overall Car Width: 3.25" (measured across front or rear axle)
- 2b. Maximum Rear Tire width: 0.810"
- 2c. Minimum Rear Tire diameter: 0.790"
- 2d. Minimum Front Tire width: 0.375"
- 2e. Minimum Front Tire diameter: 0.625" (5/8")
- 2f. Minimum Clearance: 0.050" (measured under rear axle including gear), 0.040" under motor can at mounting bracket and 0.015" (measured at the lowest, most forward part of the chassis). All clearances measured with car standing on a flat tech board on its wheels, without guide.
- 2g. Maximum chassis width excluding front axle carrier as defined in 2h.
- 2h. When seen from above, the front axle carrier and/or any simulated suspension cannot be wider than 0.75" at its point of contact with the chassis, and no wider than 0.25" at its point of contact with the front wheel. The design of the simulated arm, made of plate and/or wire must fit inside a triangle created by these parameters. Additional cosmetic simulated wire or tubing radius rods attached to the wheel hub carrier are allowed, but their point of contact with the chassis cannot extend more than 1.5" ahead or behind the centreline of the front axle.
- 2i. No part of the chassis may extend beyond the centre of the rear axle by more than 1".

3. Chassis construction:

- 3a. Chassis type: Any personally-built or commercially available scratch-built chassis conforming to these specifications and to the spirit of the intent statement is allowed.
 Absolutely no form of pillow block construction is allowed.
 i.e. Individual sheet-metal axle holders soldered into slots cut in any form of sheet-metal support.
- 3b. Chassis Materials: Brass sheet, rod and tube, steel wire, pin tubing and guide tongues are allowed. A folded one-piece, three-sided motor bracket including rear axle carrier is mandatory. The motor may be soldered or attached to the bracket with screws. 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 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.
- 3c. Drive type: Inline drive only, with the motor shaft at 90 degrees to the rear axle as viewed from above. The armature shaft of the motor must be on the longitudinal centre line of the chassis.
- 3d. Other than a drop arm, all hinged movements must be oriented in only one direction (i.e. either side pan hinges OR a plumber hinge, NOT BOTH, meaning that a "loose" hinge may not provide movement in more than one direction). Centreline hinges (flexi hinges) are not allowed. No chassis movement, dynamic or induced, may extend the overall chassis width to more than 1-5/8".
- 3e. Axles Front: A single straight, round 3/32" 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. No "pillow-block" construction is allowed.
 Rear: A round solid, 3/32" minimum-diameter one-piece front axle is required.
 Small flats can be ground only where setscrews lock wheels or crown gear.
- 3f. Guide: One guide flag centred on the longitudinal axis of the chassis (i.e. no sideways "free float" or offset) is allowed.
- 3g: No on-board automatic liquid dispenser of any kind is allowed.

4. Motor rule:

4a. Motor: Plafit Cheetah II only to be used, and must remain unopened and unmodified.
Exclusion Clause: Clear violation of the motor-tampering rule may result in permanent exclusion from future Aussie Retro events of any kind.
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.

5. Body rules

- 5a. All approved Formula 1 bodies are listed in the %Approved Body List+section. All bodies must be representative of pre-1970 Formula 1 cars. Bodies may not be any less than .007+thick on the sides. Any body found to be flimsy or a detriment to marshalling will need to be corrected by the racer. Tape or body armour may be used to achieve the desired side thickness.
 5b Body style: Racers are encouraged to present cars with scale realism.
- No air-control devices may be added to the bodies. Bodies must be presentably painted and carry at least three racing numbers, one on each side, and one on the front.
- 5c. No part of the chassis, with the exception of scale appearing suspension or other cosmetic devices may be seen when looking down on the car from above. Legal openings, such as air vents, etc., may be cut out.
- 5d. A minimum 1/8+(3.18mm) high front grill/air intake (if present) must remain visible on the trimmed body.
- 5e. Cockpit: All bodies must carry a painted (at least three colours), fully-moulded three-dimensional interior comprising a driver (helmet, shoulders, and arms), a steering wheel, rollbar and cockpit representation.
- 5f. Moulded-in cockpits are allowed as long as they have dimensional scaling (not flat).
- 5g. Interiors must be presentably painted and realistically detailed.
- 5h. No paper interiors are allowed.
- 5i. If a Formula 1 body does not have a moulded-in driver, then the body must be totally cut out so the interior is in full view.

6. Approved Body List

ACE	Honda RA-301 - 1968	24908
ACE	Lotus 49B - 1968	24907
Lancer	Ferrari (wide)	LAN-880
Lancer	Cooper Maserati (wide)	LAN-881
Lancer	Eagle Ford Indy	LAN-974
Lancer	Lotus 49 Ford - 1968	LAN-975
Lancer	MATRA 3 litre	LAN-976
Lancer	Ferrari 3 litre	LAN-980
Lancer	Cooper Maserati 3 litre	LAN-981
Lancer	Lotus T56 Indy car	
Electric Dreams	Dynamic Eagle Westlake	
Electric Dreams	Lancer Lotus T56	
Howmet	Lotus 43	
Redfox	Cooper Maserati	D318C
Redfox	Ferrari	D319C
Truescale / Dynamic	Eagle F1 - 1967	TSR 33
Truescale / Dynamic	Ferrari	TSR 17
TrueScale / Lancer	Ferrari 3 litre	TSR 18
Truescale / Dynamic	Honda	TSR 36
TrueScale / Lancer	Lotus 49 Ford - 1968	TST 21
Truescale / TSR	Lotus Indy Turbine	TSR 19
TrueScale / Lancer	Matra 3 litre	TSR 20
TrueScale / Lancer	Cooper Maserati 3 litre	TSR 35
Outisight	Cooper Maserati	OS-430
Outisight	Ferrari Type L Narrow	OS-432N
Outisight	Lotus 49B . 1968	OS-435
Outisight	Matra Type L Narrow	OS-433N
Outisight / Dynamic	Ferrari Narrow	OS-434N
Outisight / Lancer	Ferrari ≜ ∕ intageq	OS-432N

NOTE: Extra-wide Lancer and Dynamic bodies manufactured for use on angle-winder cars in 1969 are NOT allowed.