

UKRRA 2016

UK RETRO RACING ASSOCIATION

Retro Sports Rules 2016

A parallel class of "Retro Sports" is introduced and raced side by side with Tottenham with a separate Points championship. Racers may race only one of the 2 classes and stick with that class throughout the full year's series. Championship points may not be swapped between Tottenham and Retro Sports.

RETRO SPORTS RULES

A. General Specifications.

1. Maximum Overall Car Width: 3 ¼" (82.55mm) with the body fitted ready to race.
2. Maximum Chassis Width: No maximum is specified but no part of the chassis, including wheels and tyres, can be visible outside the body when viewed from above.
3. Wheelbase: A minimum of 3 ¾" (95.25mm) and a Maximum of 5" (127mm), measured from the centre of the guide pivot to the centerline of the rear axle.

4. Rear Wheels and Tyres:

- A. Maximum Rear Tyre Width: 0.810" (20.57mm).
- B. Minimum Rear Tyre Diameter: ¾" (19.05mm).
- C. Rear Wheels can be made from any material and be of any diameter.
- D. Rear Tyre Material: Free choice but must not be made from, contain or be coated with silicone.
- E. Speed rubber is prohibited.

5. Front Wheels and Tyres

- A. Minimum Front Tyre Width: 3/16" (4.76mm).
- B. Minimum Front Tyre Diameter: 5/8" (15.88mm)
- C. One piece front wheels/tyres are permitted.
- D. Front Wheels can be made from any material and be of any diameter.
- E. Front Tyres must be made from rubber or plastic and coloured black.
- F. Tyres made from, containing, or coated with, silicone, urethane or other similar compounds must not be used.
- G. Tyres may be coated with cyanoacrylate adhesive ("Super Glue") or nail polish.

6. Minimum Chassis Clearance:

Measured with the car sitting on its tyres on a flat tech block with a 0.020" recess in which the guide, complete with braids, is positioned with the braids flat.

- A. Rear: 0.0625" (1.59mm). Measured under the rear axle. (*Clearance as per Tottenham rules).
- B. The drive gear may not project below the level of the bottom of the chassis..
- C. Front: 0.020" (0.508mm). Measured under the most forward part of the chassis with the guide in free air , unsupported by the tech block. (*Clearance dimension as per Tottenham rules).
- D. No intermediate part shall be lower than the front limit.
- E. All four tyres must touch and roll on a level track surface at all times.
- F. Touch and Roll Check. Scrutineers are instructed to ensure that all cars are checked, in the slot on the track being used for the event, to ensure that the Front Wheels touch the track surface and roll when the car is pushed forward.

7. Axles (Front & Rear):

- A. Minimum diameter as specified :-

Front axles;- May be made from 3/32" wire/steel only) The front axle should be one piece and soldered to the chassis in a manner to ensure it will not detach during the race. Front wheels may independently rotate on the axle. The Axle may be soldered directly to the chassis or rotate freely in a cross tube. (Detached front wheels and or axles / axle tubes must be repaired in race time)

- B. Rear Axles ;- Solid steel axles only, 3/32" or 1/8" diameter only.
- C. Hollow axles are not permitted.
- D. Front axles may have side play but at no time can the wheels or tyres extend out past the body.
- E. Axles must not protrude beyond the outside face of any wheel or tyre.

8. Bushings and Bearings: Free choice.

9. Drive Type: Free choice.

10. Drive Gears: Free choice.

11. Minimum Weight: Complete car, presented at Technical control, Ready to race.

A. Inline Chassis: 100 grams.

B. Sidewinder and Anglewinder Chassis: 120 grams.

12. Body Height:

Measured with the car sitting on its tyres on a flat tech block.

A. Maximum: Must not exceed 1 ½" (38.1mm) including any add on air control devices.

B. Minimum: The top of the front wheel arches must not be less than 25/32" (20mm) measured across the front of the car above the centre line of the front wheels.

13. Guide Lead: No maximum is specified but the body must completely cover the guide flag when viewed from above.

14. All chassis parts, including the guide flag , wheels, tyres and all other running gear, must be covered by the unmodified body, without any add on aero devices, when viewed from above.

15. All wheels must be located centrally in relation to the wheel arches in the body.

B. Chassis.

1. Chassis Type;

A. Chassis should be Scratch built from Piano Wire and Brass sheet and brass tube only, with the permitted exception of a Spring Steel Guide plate (Maximum length 1 1/4" from the centre of the guide pivot to the rear of the bracket. The addition of up to 2 "ear ring back" lead wire retainers is permitted.

B. Motor orientation may be inline, sidewinder or anglewinder.

C. Commercially available cut brass components and a spring steel guide plate may be used

D. Irrespective of motor orientation, the rear axle must be supported in a brass tube or tubes (which may contain ballraces/bushings). The axle tube (or tubes) must be supported in position by connection to the chassis rails. In Sidewinder and Anglewinder designs the Rear axle tube may not be soldered directly to the rear of the motor to provide a single assembly, however, the axle tube may be braced to the motor can to maintain gear mesh. Solid material "pillar blocks" may not be used to connect the axle tube to the chassis rails.

2. Guide

A. Only one slot guide is permitted per car.

B. The guide must be a commercially available type but can be from any period.

C. Centre line Torsion Bars will only be legal if they are solidly and visibly soldered at both ends either to pockets in the main chassis components or if soldered into tubes at either or both ends have a “free wire” distance of 4mm minimum between the tubes, additionally the tubes to be slotted crosswise and soldered, to openly display to scrutineers that it is a Torsion Bar and not a pivot.

Exclusions applying to all chassis.

A. ‘Flexiboard’ designs (i.e. Chassis with a longitudinal centre line hinge) are not permitted. The definition of “flexiboard” includes any pivot (either enclosed in a tube or free mounted and resting on another chassis component) where the pivot may be seen to be on the centre line of the chassis design and longitudinal in orientation, providing a central pivot point around which the front and rear of the chassis may be seen to pivot.

B. Spring Steel Sheet may not be used, except as a guide tongue.

C. Track Skids are not permitted.

D. Lead ballast may be added to the top surface of the chassis, but should not modify the movement of the chassis components. Other materials not specified in these rules may not be added to the chassis. Only Clear Sellotape may be applied to the Bottom of the Chassis to prevent Tarnishing of Brass. This must not modify the movement of any chassis component.

C. Motor.

1. Period Motors:

Any complete motor, or motor assembled from parts, intended for slot racing and manufactured and sold in 1972 or earlier may be used.

2. ‘C’ Cans Motors:

A. Any Mura or Champion ‘C’ can of the type without lightening cut outs around the end bell mounting may be used. Two hole type cans are the preferred option.

The can must be 0.030” (0.76mm) minimum thickness material and of standard length with no lightening.

B. Magnets must be a one piece type with a minimum length of 0.500” (12.7mm).

C. Armatures for these motors must have a minimum diameter of 0.500” (12.7mm), a maximum diameter of 0.530” (13.5mm) and a minimum stack length of 0.440” (11.18mm). Windings and comm’ timing is free.

3. End bells:

A. In the interests of reliability modern end bells of plastic based material may be used in any motor.

5. Hardware:

A. Any type of bearings, brushes, brush hoods, brush springs, spring posts and screws may be used in any motor.

B. Elephant ears for cooling are permitted.

D. Body.

1. *Body Type.*

A. Any 'vac' formed (Lexan, PETG etc) 1/24th scale replica of a real, two seat, Sports Racing or GT car built and raced before the end of 1972 and not included on the 'Banned Bodies' list (see regulation D4) can be used.

B. Bodies must be realistic and reasonably to scale. Aerodynamically improved or generic bodies in the spirit of racing in the specified period may be used providing they meet the Guidelines laid out in the Banned List (see Rule D4A).

2. *Body Finishing.*

A. To remain within the spirit of this class of racing the lower edge of the body should be cut close to the marked cut line on commercially available body shells.

B. Front wheel arches need not be cut out, but if not, must then be left transparent so that the full front wheel and tyre is visible.

C. Rear wheel arches must be cut out so that the full rear wheel and tyre is visible unless the real car had closed rear wheel arches.

D. The body must be fully painted and detailed, including all engine and mechanical detail where shown on the body shell. Authentic real car liveries or paint schemes 'in the style of the period' are preferred. Simple 2 tone fades, numbers drawn on with a pen and un-detailed interiors are not acceptable.

E. Openings, such as air vents and intakes, must be cut out or painted to look realistic.

F. The body must display at least two sets of racing numbers.

G. The body must have transparent windows and windscreens in all locations as on the real car.

H. Open top cars must have the cockpit opening fully cut out along the upper edge of the windscreen and cockpit sides.

I. The body must have a realistic three dimensional interior which includes a correctly positioned and painted driver figure consisting of at least a helmet, shoulders, arms, hands and the upper part of a steering wheel.

J. The body must be securely mounted to the chassis. Tape alone is not permitted except as a temporary repair during a race.

K. The body must cover the tread of all tyres when viewed from above.

L. The chassis, motor and all other running gear must not be visible through the cockpit opening, cabin area or engine bay.

3. *Add on Spoilers and Air Control Devices.*

A. All add on air control devices must be in a clear plastic material.

B. Rear Spoiler.

a. One rear spoiler only.

b. Must not lengthen the car by more than 1/8" (3.18mm).

c. Must not be taller than 1/2" (12.7mm) above the local height of the body shell.

d. Must not increase the overall height of the car above 1 1/2" (38.1mm) from the track surface.

e. Must not extend beyond the widest part of the moulded body shell.

C. Rear Side Dams.

a. Must not extend further forward than 1" (25.4mm) from the centre line of the rear axle.

b. Must not exceed the height of the rear spoiler.

c. Must taper uniformly so that they are level with the body at their forward end.

D. Diaplane – Front Splitter.

- a. One front diaplane only.
- b. Must not lengthen the car by more than ½” (12.7mm).
- c. Must not extend beyond the widest part of the moulded body shell.

E. Front Trim Tabs.

Either

- a. One trim tab measuring no more than ½” (12.7mm) high by 1” (25.4mm) wide may be mounted on the centre line of the body, in front of the windscreen.

Or

- b. Two trim tabs measuring no more than ½” (12.7mm) high by ½” (12.7mm) wide may be mounted on the front wheel arches (fenders).

4. *The Tottenham Sports ‘BANNED BODIES’ List:*

A. Guidelines for acceptable bodies.

The Body shape must be a reasonable 1/24th scale representation of the real car, within the logical limits of vacuum formed production, and not grossly lowered in profile. Bodies of cars raced and/or produced prior to 1973 and modified in terms of aerodynamics or flattening, including bodies which were made as ‘generics’, but excluding ‘thingies’ or ‘wing car’ bodies, should be allowed as being ‘in the spirit of the class’, provided that any such aerodynamic changes are no more extreme than that of the most extreme body approved by the IRRA for the Can-Am class. See also rules D3Da and D3Db above with regard to bodies with a moulded on splitter.

B. BANNED BODIES

There are currently no Bodies on this list.

C. The procedure for getting a body added to or removed from this list can be found in the SPORTING REGULATIONS.

AUTOMATIC RIDER TO THE ABOVE;-

If at any time the dimensional, motor or body rules change in the Tottenham Sports Class, the same changes will come into effect automatically in the Retro Sports Class to ensure parity.