

# Classic Slot Car Racing Association

## 1/24 Scale Car Standards

### For Hard Bodied Cars

## GRAND PRIX AND INDY CARS

### Definitions

#### **Grand Prix Car;**

Any car which competed in an International Grand Prix or Formula 1 race.

#### **Indy Car;**

Any car which raced in the Indianapolis 500 or competed in the Indy Car series.

#### **Voiturette;**

A common, pre WWII, class of open wheeled racing car. Generally smaller than a GP car and usually powered by a 1.5 litre supercharged engine.

This class was adopted as the first Formula 1 in 1948.

These car standards were inspired by the 1/24<sup>th</sup> scale Merit Kits of the 1950's. Since that time there have been a number of kit and slot car manufacturers that have produced suitable cars and these standards have been worded to encompass all of these and any modern resin reproductions and scratch built models.

These initial standards cover only the period of the Merit Kits (1950 to 1960) and the 1.5litre Formula 1 cars of 1961 to 1965 for which there were a significant number of kit and RTR models produced.

If, however, 1/24<sup>th</sup> scale racing proves popular then the standards can be expanded to cater for other periods. For this reason the class designations have been kept inline with the 1/32 scale standards.

## CAR STANDARDS

### 1. SCALE & DIMENSIONS

All cars to be accurate 1/24 scale representations of a full size car.

As most racers are very much reliant on manufactured bodies, which are not always perfect, there is no specific requirement for exact scale length and width for body shells. They are, however, expected to be reasonably to scale. If you push the boundaries too far you may be asked to run something else.

**Wheelbase** and **Track** measurements **must** be 1/24 scale within + or - 3mm.

“Wheelbase” is the distance between the centre lines of the front and rear wheels.

“Track” is the distance between the centre lines of the left and right hand wheels at the front and at the rear of the car.

No car should exceed the maximum width permitted for each class.

Cars will be measured over the outside width of the tyres.

When the car, in race ready condition, is placed on a flat and level section of track to be used for the event all tyres must touch the track surface and roll when the car is pushed forwards.

**It is the entrant's responsibility to prove the accuracy of any car.  
If there is any doubt the scrutineer may ask you to run something else.  
The scrutineer's decision is final.**

### 2. BODIES

All body shells must be of hard plastic, glass fibre, resin, wood or similar material. Vacuum formed bodies are not permitted.

All cars must be finished in a style sympathetic to the period being represented and carry at least two racing numbers.

All cars must have clear windscreens etc fitted where they appear on the prototype. Vacuum formed windscreens and other clear parts are permitted.

All cars must have a suitably decorated and period correct, 3 dimensional, representation of a driver consisting of at least a head, shoulders, arms, hands and the upper part of a steering wheel.

Vacuum formed interiors and drivers are permitted but must be realistic.

The chassis, motor and all running gear must not be visible from above or through the cockpit opening and engine bay unless that which can be seen represents parts of the real car. Suspension components and exhaust systems for example and, on the later period cars, the rear floor and diffuser.

The slot guide must not protrude beyond the front-most point of the car when in the straight ahead position.

### 3. WHEELS & TYRES

Tyre width limits in all classes are overall.

All wheels must be representative of real wheels or have suitable inserts fitted. They must also be of a realistic diameter for the car being modeled.

Silicone tyres and sponge/foam rubber tyres are not permitted.

All tyres must be dry and free from additives whenever the car is placed on the track.

### 4. MOTORS & CHASSIS

Motor choice is free.

Chassis design and construction is free but must comply with sections 1 to 4 and any individual class restrictions.

Any chassis design which allows the wheelbase or effective track dimension to vary will be measured at both extremes of movement and must remain within the + or - 3mm scale tolerance and not exceed the maximum width restriction for the class.

On cars fitted with steering the wheelbase, track and overall width will be measured with the steering in the straight ahead position.

Minimum ground clearance will apply under the motor and the entire length of the chassis and body, unless stated otherwise. This will be measured with the car sitting on its tyres on a flat and level section of the track to be used for the event or on a flat test block which matches that track. Drive gears, and side skirts on ground effect cars, may be below the minimum ground clearance but must remain clear of the track surface at all times.

One slot guide only is permitted.

Blade designs must be no more than 25mm long and pin designs with more than one pin must have the pins within an overall length of 25mm.

Traction magnets are not permitted.

### 5. READY-TO-RUN (RTR) CARS

Any Ready-to-Run car which fully complies with the above car standards will be eligible to race unless stated otherwise by an event organizer.

Event organizers may also choose to allow Ready-to-Run cars which do not comply with the above standards to enter, and may even have separate classes or finals for these cars, but must clearly define the rules they will be applying to such cars well in advance of the event.

**The final decision on eligibility will rest with the individual event organizer.**

## **GRAND PRIX AND INDY CAR CLASSES**

Event organizers should feel free to select specific year ranges or types of car from within each class or to combine periods and classes as they see fit. The descriptions, in brackets below each heading, are intended for guidance only.

### **NOTES:**

1. In all classes except GP1 tyres must be visible from above the car.
2. In classes GP1 to GP5 any car which has side tanks/fairings between the wheels must have these mounted as part of the body and must not have any part of the chassis, or any ballast, under or in these tanks/fairings.

### **Grand Prix class GP3. 1950-1960 Grand Prix and Indy Cars**

(Any car which competed in a Formula 1 race or any other event counting towards the Drivers World Championship during this period).

- Motor orientation: Inline only\*.

\*Except that Vintage motors designed to be mounted as sidewinders can be used provided that the motor and drive gears are covered by the body.

- Minimum ground clearance: 4mm.
- Track dimensions must be 1/24 scale within + or - 3mm and must not exceed a maximum overall width of 66mm.
- Front wheels and tyres: Minimum diameter 27mm, minimum width 6mm.
- Rear wheels and tyres: Minimum diameter 29mm, maximum overall width 9mm.

Wheels must be a minimum of 17mm diameter to represent a 15 inch wheel, and can be up to 19mm diameter to represent an 18 inch wheel.

All tyres must have a realistic aspect ratio. Square section tyres will not be accepted. Recommended tyres for this class are: Ortmann 46a (Front) and 46 (Rear) but there are other tyres in the Ortmann and other manufacturer's ranges which would also be suitable.

### **Grand Prix class GP4. 1961-1965 Formula 1 Cars**

(1.5litre Formula 1 cars only).

- Motor orientation: Inline only.
- Minimum ground clearance: 4mm.
- Track dimensions must be 1/24 scale within + or - 3mm and must not exceed a maximum overall width of 70mm.
- Front wheels and tyres: Minimum diameter 25mm, minimum width 7mm.
- Rear wheels and tyres: Minimum diameter 26mm, maximum overall width 12mm.

Wheels must be a minimum of 17mm diameter to represent a 15 inch wheel as used on the early cars and 15mm diameter to represent a 13 inch wheel as used on the later cars.

All tyres must have a realistic aspect ratio. Square section tyres will not be accepted. Recommended tyres for this class are:

1961 to '63 cars - Ortmann 46a (Front) and 46 (Rear).

1964 to '65 cars - Ortmann 19e or 19d (Front) and 19d or 19g (Rear).

These are based on the 'Dunlop' tyres fitted to the Cox Ferrari 158 and BRM P261.

There are other tyres in the Ortmann and other manufacturer's ranges which would also be suitable.