Pinewood Derby Rules

Must use BSA Pinewood Derby Kit

Car must be original/made. Completed and/or purchased cars will not be permitted to race.

Total Car Dimensions

Wheel Base: Any as long as wheels do not exceed the 7" total length requirement

Total Car Height: Not to exceed 3" inches
Total Car Length: Not to exceed 7" inches
Total Car Width: Not to exceed 2-3/4" inches
Total Car Weight: Not to exceed 5 ounces

No loose materials of any kind are permitted in or on the car. The bottom of the car must be fairly smooth in order not to damage the car stoppage area. All weight mounted on the bottom of the car must be recessed into the body so that it appears flush with the body.

Wheels (Must be BSA wheels)

- 4 Axles & Wheels must be installed to the side of the car body directly across from one another / No more than a 45-degree angle.
- Wheels must clear the outside to outside center rail width measurement.
 - * Track Center Rail Height: 1/4" inch (7mm) *
 - * Track Center Rail Width: 15/8" inches (4.2 cm) *
- May be CnCed, lathed, polished and/or sanded to true the edge of tread, surface and circumference.
- The tread / contact surface must remain flat and parallel to the bore as humanly possible.
- No Angling, Reshaping, Canting, Round Crowning, Tapering, H-ing, V-ing, Dishing, the outside of the wheels and/or tread surface.
- Lettering must remain on the inside and outside of the wheel.
- 7.50mm minimum tread width.
- Wheels must weigh at least 2 grams on a 1/10th scale and a wheel can be removed and weighed after the race to confirm weight.
- The wheels can be trued to get to the 2 gram weight but they are not to be cut down intentionally under the weight limit and use foreign material to bring it back to weight.

Axles (Must be BSA axels)

- Minimum diameter .084
- Axles must have a nail head
- Grooves are not permitted to be cut into nail.

Lubrication

- Only dry powdered lubricants, such as graphite, may be used.
- Cars must be lubricated before registration. No further lubricants will be permitted.

The following Modifications are not allowed:

- No part of the car can extend beyond the "release peg" at the beginning to the track. This rule is normally associated with the "inverted V" design cut into the hood of the car.
- Starting or finish line devices
- Electronic or lighting devices
- Glass or extremely fragile parts
- Paint that is wet, smudges or extremely sticky
- Bearings and/or Bushings
- Sharp objects, sandpaper or abrasives on the bottom of car (We do not want any damage to the rubber stopping pads)
- Axles and/or wheels attached to any device that mechanically or alters rotation and spin
- Any part of the car to go beyond the starting peg
- Propellants.
- The car shall not ride on any type of springs.