

PINE CAR DERBY RULES

1. CAR DIMENSIONS:

- a. Overall Length shall not exceed 7". No part of the car's body, wheels, or attachments can extend beyond the starting peg on the track what so ever.
- b. Overall Width shall not exceed 2 ¾".
- c. Car must have 1 ¾" horizontal clearance between the wheels.
- d. Car must have 3/8" vertical clearance between the wheels (under the car).
- e. Car Axle Spacing shall be 4.40" +/- 0.1". It is strongly recommended that the original block axle location be utilized. If axle spacing, height or location is modified it is at the competitor's own risk.

2. WEIGHT RULES:

- a. Cars Total Weight shall not exceed 5.0 ounces (143.3 grams).
- b. The official race scale that is used at car check-in shall be considered final.
- c. The official race shall be made available to all participants during evenings for the entire week prior to race day.

3. CAR MODIFICATIONS:

- a. The official pine wood block must be used. It should be a BSA (Boy Scouts of America) kit. Recommended places to purchase your starter block:
 - i. Boy Scouts of America Store:
 - ii. Checkered Flag Hobby Shop
 - iii. Hobby Lobby
- b. The block may be shaped in any way that is desired.
- c. Official BSA wheels must be used. Wheels must be directly across from one another. The wheels may not be cut, drilled, beveled or rounded (Tread Surface must remain flat). You may remove the seams and imperfections from the wheels.
- d. Axles are to be nail type axles but not limited to those found in the Official Pinewood Derby Kit are to be used. Modifications to the Axles that are allowed include: straightening, sanding, polishing, canting, grooving, beveling & tapering of the axle heads as long as the Diameter of the Axle is not reduced. The diameter may not be less than 0.084" (2.13mm). Axles can be mounted by drilling Axle holes or inserted into the slots on car.
- e. The wheels may not extend beyond the rear of the car or past the front of the car.

4. PROHIBITED ITEMS:

- a. Magnets, Springs or Suspension Systems of any type.
- b. Starting Devices, Finish Line Devices, Propellants or Propulsion Systems
- c. Wet Paint or Sticky Substances
- d. Glass or Excessively Fragile Parts
- e. Electronic or Lighting Devices (If lights are on the car they must be turned off)
- f. No Bearings
- g. No Guide Pins or Such Devices
- h. Axles and Wheels attached to any device that mechanically alters rotation or spin.

5. OTHER RACE RULES:

- a. Axial Lubrication may be used. However, it shall be applied prior to submission of car, shall not in any way damage the track. Only graphite or NyOil will be allowed. A designated location in the Cafeteria will be assigned for Pre-competition installation.
- b. Once a car passes inspection and is entered into the race, only race committee members can touch it.
- c. If the car loses a wheel, or is otherwise damaged, the racer shall have 5 minutes to make repairs on site.
- d. Each car must pass inspection by the official inspection committee before it will be allowed to compete.
- e. The inspection committee has the responsibility to disqualify those cars that do not meet these rules.
- f. Lead Car Inspector has the final word to disqualify those cars that do not meet the rules.
- g. ANY MODIFICATION WHICH MAY CAUSE DAMAGE TO THE TRACK MAY BE GROUNDS FOR DISQUALIFICATION.**
- h. Should the track or time equipment malfunction in any way during a race. The effected cars will be allowed to run a secondary race in their original race lanes for timing. If the car caused the malfunction, then the time will be recorded as a DQ (Disqualification). Only one additional secondary race will be run per round, per a car.