



# Northland Pinewood Derby



## “Regulation Class” Rules & Requirements

1. The car's wood, axles, and wheels must come from the official BSA Grand Prix Pinewood Derby Kit (available for purchase at the Heart of America Center or on-line). Additional materials may be used to complete the car.
2. Only official BSA wheels and axles may be used. “Razor” style wheels are prohibited. Official BSA Colored wheels are allowed.
3. Wheel treads and hubs may be polished to remove burrs and manufacturing flaws, but their measurements must remain original. The tread width, wheel diameter, and hub diameter are not to be altered. Sanding a ridge or point on the tread or in the hub is not allowed. All lettering must remain visible on the inside and outside of the wheels. 7.50 mm tread width must be maintained. 4 Axles and Wheels must be installed to the side of the car body directly across from one another at no more than a 45 angle.
4. The following may not be used in conjunction with the wheels or axles: Washers, inserts, sleeves, bushings, or bearings.
5. Dry/Liquid lubricants may be used; no wet or dripping wheels or axles will be allowed. All wheel surfaces must be dry to the touch.
6. Car Specifications:
  - Maximum width – 2-3/4 inches (6.99 cm)
  - Maximum Length – 12 inches (30.48 cm)
  - Minimum width between wheels – 1-3/4 inches (4.45 cm)
  - Minimum bottom clearance underneath the body – 3/8 inch (.95 cm)

The overall length includes decorations or weights attached to the front or back of the car. The overall width includes decoration or weights attached to the sides of the car.
7. The original axle slots must remain at 4 3/8 (11.11 cm) inches from each other. The end of the car cannot exceed 1.75 inches (11.11 cm) from the axle.
8. A Track system will be used with the following dimensions: Track Center Rail Height 1/4 inches (7mm), Track Center Rail Width 1 5/8 inches (4.2 cm). Wheels must clear the outside-to-outside center rail width measurement.
9. Car weight may not exceed 5.040 oz (143g) on a digital 1/10 scale.
10. Any solid material may be used for weight (lead, tungsten, copper, steel, etc.), but it must be permanently attached and stationary on the car. Moving, sliding, or spring-loaded weights are not allowed. Liquid weights, including mercury, are absolutely not allowed!
11. Cars are to be propelled by gravity alone.
12. Once the car is weighed and registered it may not be touched by anyone other than race officials, unless a part falls-off. If that happens, the team may re-attach the part. The car must be approved by race officials before it is allowed to race again.

13. In the event a car interferes with another car during a race, the race will be re-run. If it happens again, the car will be disqualified.
14. The top 4 place winners from each class will advance to the Grand Championship Finals.
15. Racing procedures will be solely determined by race officials and will be consistent and fair for all racers. All decisions by the race officials are final and binding.
16. Spectators are expected to demonstrate good sportsmanship. A Computerized Race System will be utilized to manage the race. Each Car will race in each lane an equal amount of times to determine a composite score.
17. Pre-Race questions should be addressed to Kent Carlson, District Executive, at [kent.carlson@scouting.org](mailto:kent.carlson@scouting.org) at least 48 hours prior to the conduct of the event for resolution. Any questions within 48 hours of race day will not be answered in time for the race.
18. Have fun and good luck racing for a GREAT cause!!!

Version: 1.1 as of 3.9.2022