2023 Narragansett Council Pinewood Derby Rules

The Narragansett Council Pinewood Derby Committee has elected to exercise its prerogative of adding to the National BSA Cub Scout Pinewood Derby Rules. These additional rules have been deemed appropriate to minimize any special design advantages.

The objective of the Pinewood Derby is to allow a Cub Scout advised and assisted by an adult to design and build a new wood car each year from the Official BSA Pinewood Derby Kit. The Pinewood Derby is not intended to be a contest of expensive and exotically built cars using special fabricated components of metal, plastic, or wood. (This includes the addition of any type of power source as well as lights and any light reflective material.) These cars are subject to disqualification.

The purchase of speed axles, light weight wheels, and any wheel modifications beyond minor sanding and polishing are prohibited. Cars, wheels, or axles may not be worked by commercial third party facilities for tuning or performance enhancements. (Wheels modified and lightened by removing material from inside of the wheel are easily recognized during inspection.) Cars with illegal wheels and axles will be disqualified during check in and technical inspection.

A Pinewood Derby car purchased fully completed and ready to race is prohibited. These cars are subject to disqualification.

The Regional and Council Pinewood Derby is by advanced registration only.

Special Additions:

A. During the check-in period if an illegal tire is discovered, the tire and axle will be removed from the car. The axle will then be inspected and if it is also found to be illegal, the car will be immediately disqualified from racing with NO allowance to repair.

B. Any cuts to the outside of the axle head is prohibited.

C. Due to the difficulty of finding illegal axles during check-in and their increased use despite being prohibited, there will be a post race inspection. After the end of the Regional Race, all trophy winning cars are subject to having their tires removed for closer inspection. Tire removal will only occur in questionable situations.

D. At the Council Championship Race, all trophy cars will have their tires removed for inspection since this will be the last race for these cars.

E. After any post race inspections, the discovery of an illegal axles and tires will disqualify the car from a trophy finish. The car will be put in last place changing the order of finish. (This will be done in a discreet manner to avoid any embarrassment.)

F. The axle shaft may be bent to build a rail rider car.

G. Exception to rule 11 below. The use of the Pinewood Derby Pro Hub Shaver Tool (BSA Item # 610797) is allowed. The shaver ensures accurate rotation by squaring the outer wheel hub to the wheel bore.
Any questions should be directed to the Narragansett Council Pinewood Derby Committee: jas02911 at Yahoo

1. The car overall width must not exceed 2 3/4 inches and overall length must not exceed 7 inches.
2. The width between wheels is 1 3/4 inches and the bottom clearance between the car and the lane guide strip on the track must be 3/8 inches. Any added weights on the car bottom must be recessed into the car body to meet the bottom clearance of 3/8 inches. It is recommended that screws are used to secure the weight to the car.
3. The car must be able to pass under the various types of finish lines used in racing and therefore the car height must not exceed 3 inches.
4. The car weight shall not exceed 5 ounces. No loose materials of any kind are permitted in the car. The car may be hallowed out and built up to the maximum weight by the addition of wood or metal provided it is securely built into the body.
5. Wheel bearing, washers, any type of wheel weight, and bushings are prohibited.
6. The car shall not ride on any type of springs.
7. Details such as steering wheel, driver, decals, painting, and interior detail are permissible as long as they are within the length, width, and weight specifications.
8. The car must be freewheeling with no starting devices.
9. The wheelbase (distance from the center of the front wheel/axle to the center of the rear wheel/axle on the same side of the car) shall not exceed 4 1/2 inches.
10. The axle from the Official BSA Pinewood Derby Kit may only have the burrs and ridges smoothed and polished. No slotted axles are allowed. The head of the axle can not be modified by pushing it outward away from the wheel. The axle head can not be reduced in size or its shape changed. The axle shaft can't be reduced in size. The axle shaft may be bent to allow for rail riding.
11. Wheels must be from the BSA Pinewood Derby Kit or a purchased BSA accessory and be labeled BSA Pinewood Derby. The wheels can have the bore of the hub (hole in center) cleaned of any obstructions and the wheel tread surface may be smoothed. The outer and inner wheel edge may also be smoothed. The wheel tread area must not be reduced, only smoothed. The wheel may NOT be reshaped on the inside surface or the outside surface. All BSA wheel details must be completely visible.
12. Rule 11 does not allow you to physically modify the inside or the outside of the wheel. The wheel width and height may not be reduced. Rule 11 only allows the smoothing of any manufacturing imperfections.
13. The forward most edge of the car must be ¾” (.75 inch) wide in order to rest against the rear of the starting gate pin (in center of its lane). If the front of the car is pointed and doesn’t meet this measurement, the car will race with the rear end becoming the front. If the rear end is also less ¾” of an inch, the car will not race.
14. The forward most edge of the car must be the one piece wood block from the Official BSA Pinewood Derby Kit and must not be altered to raise the car’s contact point to the starting gate. No modifications (No cheater bars or front end spoilers) which allow a faster start are permitted. The car’s front edge must be completely behind the starting gate. The car must have at least one front wheel touching the track surface when resting against the starting gate. No fast start designs allowed.
15. The Pinewood Derby is a competition for cars having no more or no less than 4 wheels. Extra wheels may not be used as an accessory. It is not required that all four wheels make contact with the track surface.
16. Older style Official BSA Pinewood Derby cars built from multiple wood block kits as issued prior to 1977 will not be allowed to race.
17. Only dry powder lubricants are permitted and all types of liquid lubricants including all greases and oils are prohibited.
18. The car must be able to rest in the starting gate, travel down the track, and finish the race in its assigned lane or the car will be disqualified.
19. Each car must pass inspection by the Pinewood Derby Race Officials before it will be allowed to race. The Pinewood Derby Officials have full authority to request removal of any coverings to allow a complete car and wheel inspection. The scale used on race day is the only official scale. If a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official check in time period to make any adjustments. If the car is not able to meet specifications, it will be disqualified. The race start time will not be delayed.
20. All interpretations and judgments related to the rules are the sole prerogative of the Narragansett Council Pinewood Derby Committee and shall be final.

Competition Instructions

The top racers from each pack will move on to the Regional Race, the Cub Master will register the Scouts. The Cub Master is responsible to fully inspect all cars before they are registered for the Regional Race. Registration must be completed online in advance of the race.

Category Trophies will be awarded at the Regional Pinewood Derby Race as follows: Best Paint Job, Most Aerodynamic, Most Scout Spirit, Most Realistic, Most Accessorized, Most Humorous, Most Patriotic, Most Original, The Car Most Likely Built by a Cub Scout, and Judge’s Choice.

1. All lubrication or other service must be completed prior to presenting the car for technical inspection because all cars will immediately be impounded for the duration of its eligibility to race.
2. If a registered owner is unable to attend the Regional Pinewood Derby or is not physically able to race his car, he may designate another Cub Scout to act in his place. This person will be called a handler.
3. Car owners or handlers must present their car for check in and technical inspection during the announced time on race day or risk being shut out.
4. Cars must be capable of accepting and retaining its assigned car numbered decal.
5. Car owner or handler must retain his issued Pit Pass numbered decal, in readable condition, on the upper right front of the Cub Scout Uniform Shirt.
6. Car owners and handlers must stay alert for the call of their number during the race.
7. Any car owner or handler touching a car other than his own will be automatically disqualified.
8. If the Pinewood Derby Track is on the floor, any car owner or handler bumping or stepping on or across the Pinewood track as well as anyone causing such action will be subject to disqualification.
9. Any adults or Scouts displaying poor behavior or poor sportsmanship are subject to ejection from the racing premises. It is required that all Packs provide a copy of these rules to all the parents with the BSA Pinewood Derby Kit.

Revision date 12/27/2021