

Salish Sea District

Pinewood Derby Car Rules



Prior to the race, cars will be weighed and examined to make sure they abide by the following rules. The most important thing to remember is that the Pinewood Derby is meant as an enriching experience for the Cub Scout, and the cars should be made predominantly by the Cub Scout and not the parent. Parental guidance is obviously important but please allow your Cub Scout to build their own car as much as possible. This will leave the most lasting of fond memories.

Standard Pinewood Rules

1. **Weight** - The car's weight shall not exceed 5.0 ounces. The official race scale shall be considered final.
2. **Dimensions** - The overall length of the car shall not exceed 7 inches. The overall width of the car shall not exceed $2 \frac{3}{4}$ inches. The car must have $1 \frac{3}{4}$ " clearance between the wheels. The car must have a $\frac{3}{8}$ " clearance underneath the body. The car should not exceed $2 \frac{3}{4}$ " high.
3. **Body** - The wood provided in the official BSA pinewood derby car kit must be used. The block may be shaped any way that is desired. Grooves in wood block for the axel nail may not be altered and must be used, except for being adjusted slightly for alignment purposes or widened to prevent the axel nail from splitting the wood. New grooves cannot be cut and used elsewhere. The location of the axel grooves cannot be changed in relation to the ends of the car. This will be checked using a gauge. No portion of the block can be cut from one end and placed on the other end, resulting in a change in the car axel position relative to the ends of the car.
4. **Wheels** - Either the wheels supplied with the official BSA pinewood derby car kit or official-colored wheels from scout shop must be used. The wheels cannot be modified in any way other than to remove the single casting burr. The wheel cannot be cut, drilled, beveled or rounded in any way. If the scalloping on the outer margin of the wheel is modified in any way, the car will be disqualified. Wheel bearings, washers or bushings are prohibited.
5. **Axels** - You must use the axel nails supplied in the official BSA pinewood derby car kit as the axels. The axel nails may have burs filed off and may be polished and/or lubricated (see below). The diameter of the nail heads cannot be modified.
6. **Lubricants** - Only dry lubricants such as graphite or powdered Teflon "white lube" will be allowed for lubricating the wheels. Grease and other liquid lubricants are not allowed.
7. **Other** - The car must not ride on any type of springs. The car must be freewheeling, with no start or propulsion devices. No loose material of any kind, such as lead shot, may be used. Details such as the steering wheel, driver, decals, painting, and interior detail are permissible if these details do not exceed the maximum length, width, and weight specifications.
8. **Inspection** - Each car must pass inspection by the official inspection committee before it may compete. If, at registration, a car does not pass inspection, the owner will be informed of the reason for failure and will be given time within the official weigh-in time period to make the adjustment. After final approval, cars will not be re-inspected unless the car is damaged in handling or in a race. After final approval, each car will be assigned a number sticker that must be placed in clear view on the top surface of the car.

A couple of additional hints:

- Heavier cars usually run faster. Use weights (you can buy them at the store, or glue on washers or pennies or whatever to the bottom) to bring the car as close to 5 ounces as possible. I often get my car weighed at the Post Office or a Mail center to get a reading. It'll be weighed in at the Derby, and overweight cars are disqualified. Better to go a little light than heavy.
- Totally inept at woodworking? The rectangle makes a great bus! Just sand down the edges and paint.
- The best cars are the ones with the MOST kid participation. If adults want to make their own - you can buy a 2nd kit at the Scout Office.
- DO NOT purchase a pre-carved wood car kit from Michael's or somewhere like that. It isn't legal.
- You can glue things onto the top if you want, but be sure the length & width fit within the specifications.
- You can purchase Pinewood Derby Car Stickers or accessories (fenders, etc.) at the Scout Shop or Michael's (just NOT the car itself). These are NOT necessary & many if not most cars will not have them.
- Powdered lubricants are great for the axles. Don't use grease or oil.
- Line up the wheels carefully (might be good for Mom or Dad to do this). If your car doesn't roll straight, it'll slow down your car on the track.
- Remember always - it is the PROCESS, not the PRODUCT! If your son feels like he made the car and is proud of his work, it doesn't matter if it comes in dead last during the races. Make this fun and not frustrating.

If you have any questions, please contact me at sofnseth@yahoo.com

Have Fun!