

Montana Council Pinewood Derby Rules

"Cub Scout Class"

These will be the "only" rules. Do not use any other rules found anywhere, as they will not apply. *It is recommended that these rules be handed out when the Cub Scouts get their cars.* The Open Class rules have been put on an entirely separate page and do not apply to Cub Scouts. You can find these rules online and the local Scout Office or the District Executive will also have copies of the current rules. A number of the tips in the official BSA book on Pinewood Derby (coning the axel, machining the wheels, moving the axel slots, etc.) are NOT allowed.

It is important to understand that your car must meet these basic requirements to be eligible to race in the competition; failure to do so may result in disqualification. Each car must be submitted for a Pinewood Derby Inspection before the appropriate deadline to be eligible to race. The inspection will determine if your car complies with the following regulations and the Cub Scout will be informed before the race if there are any circumstances that would prevent the car from racing. An opportunity will be provided for the car to be modified to be in compliance. Thank you for your participation and we look forward to a great event!

The Pinewood Derby is open to all Cub Scouts! This activity allows each Cub Scout to build a Pinewood Derby car each year with the assistance and guidance of an adult. The scout pinewood derby car is an opportunity for scouts to learn and work together with their parent or scout partners. The scout usually will come up with the design and how he wants it to look. Nobody expects newer or younger scouts to create these things on their own especially on their first or second car. The more experienced cub scout the less parents should be a part of the build.

All adult leaders and relatives of the Cub Scout are encouraged to build a car of their own and enter in the "Open Class" category if they want to participate. The "Open Class" has its own separate set of rules.

Specifications

1. Pinewood Derby Kit - The entrant is to build a derby race car using the materials in an *Official BSA Grand Prix Pinewood Derby Kit* available at the Scout Office or through other official BSA vendors. The kits from the hobby shop, craft store or other vendors will not be allowed. Separately purchased pre-formed bodies are not to be used. Other materials may be used as long as the original wood block is the foundation of the car. If you use the pre-carved official BSA kits found in some crafting and hobby stores, they may not meet the requirements in the following rules.

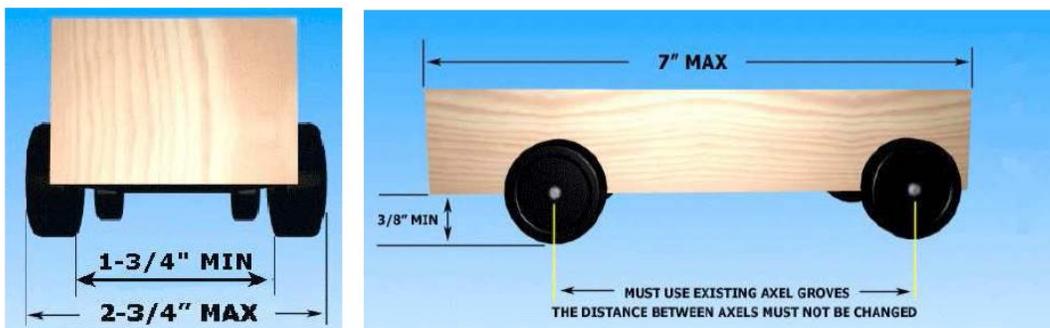
2. Springing - The derby car shall not ride on any type of springs.
3. No derby cars built in previous years will be permitted in this years' Pinewood Derby. In the event that a car is determined to have been used in a previous year's race, it will be disqualified.
4. Specific details or attachments - All attachments must be *securely fastened and they meet all other requirements size and dimensions*. The front of the car must have a vertical (flat) area to accommodate the starting gate. The starting gates are roughly 3/8" dowels and a car with a pointed front tends to slip off the dowel. If the car has this problem it can be run down the track backwards. If the car does not have a sufficient flat area to accommodate the starting gate, it will have to be entered *just* in the Best of Show Category only. No portion of the car shall extend beyond the point that touches the starting gate. The car must be freewheeling, with no artificial starting or propelling devices.
5. Wheel and Axles - Each derby car will use only the wheels and axles (nails) that come in either the *Official Grand Prix Pinewood Derby Kit* or *The Official Wheel and Axle Kit* available from the Scout Office and other BSA vendors. Wheel bearings, washers or bushings will not be allowed. No oil, grease or any wet lubricants will be allowed on the wheels and axles. Only dry powdered lubricants will be permitted to lubricate the wheels and axles. No artificial self-lubricating mechanism will be permitted. High performance axles from the Official Scout Catalog, the Scout Office or ScoutStuff.org *will be allowed*.
6. Wheel spacing - The spacing in between the wheels shall not be less than 1 $\frac{3}{4}$ " or greater than 2" in width.
7. Wheel base - The axles must be positioned on the car in the pre-cut slots already provided on each block. **No altering of the pre-cut slot will be allowed.** *Moreover, axels should not be deliberately mounted at an angle or bent to obtain an advantage. All Four wheels must make contact with a flat surface*
8. Axel coverings - No artificial coverings or decals will be permitted over the axles. All parts of the axles must be exposed.
9. Car Body Clearance - The derby car must have a clearance of no less than 3/8". If the clearance is less than the 3/8", the bottom of the car will drag on the furring strips on the track.
10. Height - The overall height of the car, after installing the wheels, shall not exceed 5". This height requirement applies for any attachments as well.
11. Width - The overall width of the car body shall not exceed 2 $\frac{3}{4}$ ". The overall width of the wheels shall not exceed 2 $\frac{3}{4}$ ". This width requirement applies for any attachments as well.
12. Length - The overall length of car shall not exceed 7". Also, be careful when adding attachments not to exceed the 7" length.
13. Weight - The overall weight of the car shall not exceed 5.00 avoirdupois ounces. No loose or liquid material of any kind will be permitted in or on the car, i.e. mercury or other forms of liquid weight. Weights held by any form of tapes are not acceptable. Each entrant is encouraged to build his derby car as near the maximum weight as possible. The official weight is determined by the scale at the council race regardless

of what the car may have weighed at a district or pack competition. Be careful to remember to add the axels and wheels when weighing car.

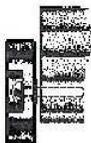
14. Make sure all cars have a Name, Pack # and District on the bottom. Please lubricate all wheels prior to sending them in.
15. Any Cub Scout car found in violation of any of these rules will be given the option of 1) fixing the car before the start of the race, 2) competing in the open class competition or 3) competing in the cub class competition under the "best of show" category only.
16. All cars must be built by cub scouts. Any cars that were built by first year boy scouts while they were a second year webelos will be allowed to compete.

Construction Rules Explanations

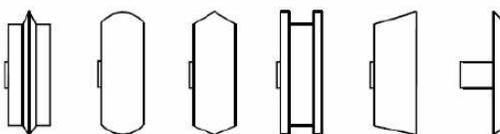
Block Dimensions: Only the original BSA Pinewood Derby Car Kit block must be used.



Wheel Modification Explanation. Refer to "Wheels" requirements in rules. The wheel surface must be flat as demonstrated below.

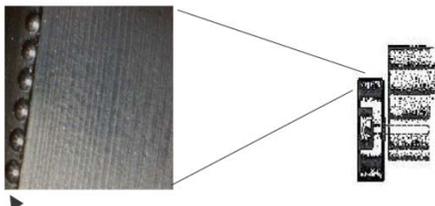


Rounding, thinning the tread thickness from the interior or exterior of the tread wall or any other or modification of the wheel will result in disqualification. Coning of the wheel hubs will not be allowed.



These are examples of unacceptable wheels.

Imperfections on the wheel surface may be sanded out, however, use extreme caution not to bevel or round the wheel surface in any way. The perimeter beading surrounding the circumference of the wheel as seen in the picture below may not be diminished or modified in any way.



All original BSA Wheel markings must be present! Use extreme caution in any wheel sanding. **All beading Must Stay intact!**