

2018 Montana Council

PINEWOOD DERBY RULES

ALL CARS MUST PASS INSPECTION AND CONFORM TO THE FOLLOWING RULES TO QUALIFY FOR THE RACE

Cars must be checked in and inspected prior to race day to qualify.



Dimensional Requirements:

- The car weight shall not exceed 5.0 ounces. The official race scale shall be considered final.
- The overall length of the car shall not exceed 7 inches.
- The overall width of the car shall not exceed 2 ¾ inches.
- The car must have 1 ¾" clearance between the wheels.
- The car must have 3/8" clearance underneath the body.

Other Construction Rules:

- The wood provided in the kit must be used. The block may be shaped in any way that is desired.
- The wheels supplied with the kit or the colored official BSA wheels must be used. The wheels may not be cut, drilled, beveled or rounded. You may remove the seam from the wheels, but the molding bumps on the outside edges must remain. No graphite coated wheels may be used.
- The axles supplied with the kit must be used. They may be polished and dry lubricated.
- Wheel bearings, washers or bushings are prohibited.
- The car must not ride on any type of springs.
- The axles must be positioned so that the axles of the front wheel pair are in the same horizontal and vertical plane, and that the rear wheel pair should be also be in their same respective x and y plane. Moreover, axles should not be deliberately bent at an angle. All four wheels must make contact with a flat surface when the car is at rest.
- The car must be freewheeling, with no starting devices.
- No loose material of any kind, such as lead shot, may be used.
- Only dry lubricants such as graphite or powdered Teflon "white lube" will be allowed for lubricating the wheels. Lubricants may not foul the track.
- Lubrication should be completed prior to checking cars in for inspection. No lubrication will be completed on race day.
- Details such as the steering wheel, driver, decals, painting, and interior detail are permissible as long as these details do not exceed the maximum length, width, and weight specifications.

On Race Day:

- Each car will be assigned a number during check-in. This number will be referenced in the heats.
- Each car shall run one heat per lane on the track. The fastest car will be determined by the fastest average of all heats.
- Should a car jump the track during the heat, but not interfere with any other car, that heat shall stand as run.
- Should any car jump the track and interfere with another car during a heat, that heat shall be re-run. Should the same car interfere again, the heat will be run a third time with the offending car removed from the heat. The offending car will not receive a time for that heat.
- Should a car become damaged during the races, it will not be repaired and all remaining heats will run without the damaged car. The car will not receive a time for any missed heats.

The spirit of the derby is that it is a son/parent project where we have FUN, explore physics of car building and learn sportsmanship from each other. So please let this be a son/parent project, not a parent/parent project – there will be an “open” race for parents and businesses. If you want to work on the aesthetics, the science, the manufacturing tools, whatever, that is great, but make sure your son does more work on the car than you.

DO YOUR BEST!! HAVE FUN!!

(These rules may be amended as required for successful racing and sportsmanship.)

