

Prairielands Council Pinewood Derby Rules (2020)

Body Specs:

R1.

- A. Width - Not to exceed 2 3/4 inches
- B. Length - **Not over 7 1/8 inches**
- C. Wheelbase – No More than 4 3/8 inches from center of front axle slot to center of rear axle slot, 7/8 from one end of body and 1 3/4 from the other end of body (normal slot location but axle holes may be drilled, you do not have to use the slots). **Cannot extend wheelbase.**
- D. Weight - Not over 5 ounces on scale accurate to 1/10 ounce (141.75 grams).
- E. Height - Not to exceed 4 inches. (car must be able to fit under finish line timer)
- F. Center Rail Width Clearance – At least 1 3/4 inches minimum along entire center length of car.
- G. Bottom Clearance - at least 3/8 inches from track, as long as it doesn't rub the track. Fender flairs with less clearance are acceptable as long as the center rail width clearance is the same in rule R1F.
- H. **Car must be built during the current year of racing, cannot use previous years Pinewood Derby Car.**

R2. Body design may be enhanced by adding other stable materials such as plastic or metal. All additions must be firmly attached and conform to the size specifications. No part of the car body may protrude in front of the starting peg.

R3. The following items are PROHIBITED:

- A. Springs, Magnets or Mercury
- B. Starting devices or propellants
- C. Electronic or lighting devices (**these can be used as long as they don't interfere with timer electronics**)
- D. Liquids, wet paint, oil, sticky substance, or powders of any kind (other than graphite axle lubrication)
- E. Glass or excessively fragile parts
- F. Wheel bearings
- G. Loose objects on car

WHEELS: Wheel Go/No Go Gauge #7530 Maximum Velocity will be used to check wheel diameter 1.170 side.

R4. BSA wide wheels are required. Outer wheel surface may be lightly sanded, shaved, or polished to remove surface imperfections and mold casting burrs, but must not be reshaped in any way in an attempt to lighten the wheel, minimize tread contact or alter aerodynamics. The fluting/ridge marks at outer edge of wheel and all other BSA markings on the inside & outside wheel area must remain visible. **Inner wheel may not be lathed or altered to lighten wheel.** Wheel hub may be coned and polished. **In order for your wheels to pass inspection they must NOT be able to fit into the Go/No Go Gauge #7530 on the 1.170 side.**

R5. The following wheel modifications are PROHIBITED:

- A. Rounding of wheel edges
- B. Grooving, H-cutting or V-cutting
- C. Altering of wheel profile
- D. Narrowing the tread surface
- E. Drilling sidewalls
- F. Hollowing, sanding, removing or modifying plastic material from inside the wheel or the outside spokes
- G. Filling of wheel surface with any type of material

R6. There must be four wheels on the car, however, **it is not required that all four wheels make contact** with the track surface. The wheels must be attached directly to axle and spin freely and oriented on side of car in area of normal slot location (but holes may be drilled and you do not have to use slots) - must meet wheelbase standard in rule R1C above for all 4 wheels.

AXLES:

R7. Axles must be used from the BSA Pinewood Derby Kit and can be de-burred, sanded and beveled for performance. Axles must not be connected to any device that mechanically alters rotation and spin.

R8. Only dry graphite may be used for lubricant. Do not get carried away with graphite so track will stay relatively clean.

SCOUT MUST BE PRESENT WITH CAR TO WIN TROPHY FOR RACE OR SHOW

(only exceptions are sickness or emergency, please plan your day accordingly to be there to the finish)