

2019 Centennial District Pinewood Derby Official “Rules of the Road” April 13, 2019

While there are many web sites and other resources that discuss Pinewood Derby designs and many Packs have set their own rules regarding their Pinewood Derby races, the following are set as the “Rules of the Road” for the Centennial District Pinewood Derby. In fairness to all participants, cars that do not conform to these specifications will not be allowed to race.

CHECK-IN AND RACING SPECIFICATIONS

- 1) Materials:** Only Official BSA Grand Prix Pinewood Derby Kits may be used. Axles and wheels **MUST** be from the official Cub Scout Grand Prix Pinewood Derby Kits. Materials from the kit may be supplemented, but not replaced (ie. Addition of decals, weights, exhaust pipes, drivers, etc.)
- 2) Axles:** The axle nails shall be firmly affixed to the wood of the car body. At a minimum the pointed end of the official axle nail must be visible to the judges. If the end of the axle is covered with weights or glue, filled with putty, painted or otherwise not clearly visible the car will not be accepted, and will not be allowed to race. Use clear cement if you feel the need to cover the entire axle with glue, as long as the axle-nail tip remains visible. No ONE-PIECE axles (e.g. Pinocar Kit axles) or machined pins (e.g. Awana Kit axles) or skids, will be allowed.
- 3) Wheels:** Wheel treatment (hub and thread smoothing and polishing) may not result in substantial removal of mass, reducing the thread width, or V-ing from the original kit wheels. The words “BSA Pinewood Derby” on the wheel face shall remain intact and clearly visible to the inspector. Some of the original “tread marks” on the wheel face must be intact (apparent to the inspector). Removal of the plastic material on the inside of the wheel is not allowed. **All wheels that touch the track must specifically ride flat on the track, and not be beveled to ride on a narrow ridge OR tilted to ride on an edge.** All wheels are not required to touch the track surface. The following are not to be used in conjunction with wheels or axles: bearings, washers, brushings, hubcaps, inserts or sleeves.
- 4) Construction:** Construction of entries must not have begun before the previous year’s District Pinewood Derby Race.
- 5) Entries:** A Scout may enter only one car in the race competition. The Scout must be present to check-in their car. This is a Cub Scout/adult project, to be enjoyed by both. As such, the Scout is to participate in the construction of their car to the best of their abilities. Any technical assistance needed in building the car should be fully explained to the Cub Scout so that they will have knowledge of the car and knowledge to use in future projects.
- 6) Car Specifications:** (as determined by the official gauges during check-in inspection)
 - **Wheelbase:** Is approximately 4 3/8” (113 mm). The original kit axle slots must be used. Please check the slots to ensure that each is at a perfect 90-degree angle to the car body. You can check the groove angles by using a square, a protractor, or even a piece of paper. Lay a square on block to check for squareness and alignment of slot. “Use two hacksaw blades **side by side to redress the slots.** Use the edge of the square as a guide” As in the Boy Scouts of America official Pinewood Derby Kit instructions.
 - **Wheel distance:** Approximately 1.75” between the wheels
 - **Overall Width:** Not to exceed 2.75”
 - **Overall Length:** Not to exceed 7”
 - **Overall Height:** Not to exceed 4”

- **Chassis Clearance:** 3/8" minimum is recommended to clear the track. Any car with less clearance will be checked on the track to ensure that there will be no interference with the track.
- **Overall Weight:** Not to exceed 5 ounces (142 grams) – official scale is final.

7) Weights and Attachments: No loose materials of any kind are allowed on the car. Decorations and/or add-ons are allowed, provided they are firmly attached, do not provide any motive force to the car, and do not make the car exceed the maximum dimensions allowed. Cars with wet paint will not be accepted.

8) Gravity Powered: The car shall not ride on any springs or suspension system, and it must be freewheeling. The car may not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car (e.g. sticky substances on the front of the car and protrusions which may catch on the starting pin.)

9) Lubrication: No liquid lubricants may be used. Only dry graphite may be used. Upon check-in, graphite may not be all over the car, falling off, or otherwise messy. Any excess must be wiped off prior to check-in, so as not to foul up official's hands or the track. Once the car is checked-in the Scout may not re-lube it.

10) Front of the car: All cars must have a designated front and rear. At check-in the Scout must designate to the Race Official the front of the car. The front will be marked, ALL CARS MUST be raced with the front going down the track first.

11) Car Repair: Within reason, and to be decided by Race Officials, if a car experiences breakage during a race, the Scout and their adult partner may be allowed a quick (up to 5 minutes) repair of the car to enable the Scout's continued participation. If the car cannot be repaired in 5 minutes it will be disqualified.

12) Car Leaves Lane: A car that leaves its lane before it finishes shall be declared to have lost the heat. If a car interferes with another car, the heat will be re-run without the car at fault. However, See Rule 13.

13) Track Fault: If a car leaves its lane, the Race Chairman will inspect the track. If it is determined that the track is at fault for creating the violation, the Race Chairman can order the race heat to be re-run after the track is repaired.

SCOUT PARTICIPATION

Uniforms: All race participants are expected to be in Official Cub Scout or Boy Scout (former Arrow of Light scouts) Uniform.

Behavior: All Cub Scouts, and other children/siblings who attend, are expected to be under the guidance of an adult or guardian at all times. Children may be cautioned or asked to leave the event for misbehavior. There will be roped off areas for only Race Officials.

Please respect these areas and allow a clear view of the track for families of Scouts racing at the time.

Cars after Pack race before District Race: It is recommended that the Pack Pinewood Derby Race Chairman impound the cars after their pack race that will be going (entered) to the District race and hold them until the race day. This helps assure no damage or alterations are done to the car. The Pack Race Chairman can then hand over the car to the Cub Scout prior to the race check-in so the scout may graphite his car and check it in personally.