



2025 PRINCE WILLIAM DISTRICT PINEWOOD DERBY RULES AND REGULATIONS

1. The car must be built within the **CURRENT SCHOOL YEAR**. Only cars built for the 2024/2025 Pinewood Derby season are eligible for competition.
2. Cars shall be made from the current official BSA Pinewood Derby kit – pre-cut pinewood blocks available at many local stores are allowable as an initial workpiece, however the wheelbase **MUST** remain at the specified 4-3/8 inches. Axles for your car must be the axles that came with the current official BSA Pinewood Derby kit. Wheels must be the wheels that came from your official BSA Pinewood Derby kit but may be colored wheels which are available at the Scout Store as long as they have the official BSA mold imprint. Blades as well as wheels that are not BSA mold generated are not allowed in the Prince William Cup or Open races; these items are allowed in the Outlaw category.
3. **WHEELS AND AXLES**
 - a. All BSA trademarks and other identifying insignia **MUST** be clearly visible on **ALL** wheels.
 - b. “Pine car” Wheels are **NOT** Official BSA Wheels.
 - c. Wheels may **NOT** be sanded, cut, drilled, beveled, rounded, peaked, H’d, humped, tapered, narrowed, rounded (U’d), or altered in any way that changes the dimensions.
 - d. Bearings, washers, or bushings are **NOT** allowed.
 - e. "Hub cap" covers are **NOT** allowed on the wheels.
 - f. Wheels may **NOT** be painted, but BSA-colored wheels are permitted.
 - g. Either three or four wheels may touch the track. However, all four axles must be driven into the official slots. It is acceptable to intentionally (or unintentionally) create a three-wheel-touching car by using different heights within the slots. However, a three-wheeled car may **NOT** be created by driving the fourth wheel into the body of the car above the slot.
 - h. Drilling pilot holes within the slots (to aid alignment and avoid wood splitting) is allowed if the pilot holes are not larger than the diameter of the axles. The use of hardware to secure axles to the body of the car is not allowed.

- i. Glue may be used for axle/slot repairs or to hold axles in the slots, but no hardened glue may come into contact with the wheel. **GLUE MUST DRY CLEAR TO ALLOW INSPECTORS TO SEE ENTIRE AXLE**
- j. The axles must be visible to the inspector all the way to the tip – do not cover the axle slot on the bottom of the car. Notwithstanding the foregoing, Official BSA axle guards are allowed so long as all other rules regarding car axles are adhered to.
- k. Axles may be polished to remove burrs.

4. *LENGTH, WIDTH, HEIGHT & CLEARANCE*

- a. Cars SHALL NOT be more than 7 inches long or 2 ¾ inches wide.
- b. The car body must clear the ground by at least 3/8 of an inch.
- c. Height SHALL NOT exceed 4 and one-half inches.
- d. Wheels may NOT extend beyond the end of the car.

5. *WEIGHT AND APPEARANCE*

- a. Cars SHALL NOT weigh more than 5 ounces.
- b. The weight shown on the official scale is final.
- c. All cars must be free-wheeling with no starting aids.
- d. Suspension systems are not allowed. The car cannot ride on springs, and Magnets are not allowed.
- e. Cars must be powered by gravity only – No mechanical devices such as fans, rubber bands, propellants, battery power, or other similar devices are permitted.
- f. No projectiles are allowed, and no part of the car may intentionally detach from the car during the race or come into contact with any other car.
- g. Any device intended to give a car an unfair advantage (such as an overhang that extends past the starting post) are not allowed. (If the starting posts on one of the tracks at the District race are shorter than the posts for the scout's Pack, resulting in an unintentional overhang, the Race Official will attempt to temporarily lengthen the post. If the Race Official is unable to reach a fair conclusion, the offending car will be eliminated.)

6. *LUBRICATION*

- a. Cars are only allowed to use dry lubricants such as graphite or Teflon.
- b. No lubrication will be allowed after the car has been impounded

after passing the official weighing or between races.

7. *INSPECTIONS AND DISPUTES*

- a. Each car must pass inspection by race officials before it is registered. Cars determined by the Race Officials not to comply with these rules WILL be disqualified.
- b. Any participant (including the parent of the participant) has the right to appeal to the race committee to interpret these rules. The Race Committee, by majority vote, will be the final judge of these rules. In case of a tie vote, the decision of the Race Committee Chairperson will be final.
- c. After final approval, cars will not be re-inspected unless the car is damaged in handling or a race.
- d. If a car becomes disabled during the race, it may continue until it no longer will go down the track or is eliminated.

8. *GROUND RULES*

- a. The computer determines race pairings. Not all scouts will race each other, although an attempt is made to have all scouts race in each lane of the track.
- b. We will be racing on a four-lane track. Each car will race four times; we will try to race each car once on each lane. A finish gate will electronically determine times, and the winners will be the cars with the fastest times.
- c. A re-race will occur if a car jumps its lane during competition, regardless of whether the car interfered with another competitor. If the same car jumps its lane for a second time in that heat, that car will be given a default time of 9.9999 seconds, and this time is not allowable in consideration for the PWD Cup.
- d. If a car suffers a mechanical problem, loses an axle, breaks a wheel, etc., the heat will be run without the problem car. If the problem car can be repaired prior to the completion of the final heat, it will be permitted to run in the lanes that it would have run in during the missed heats.
- e. In the event of a failure of the electronic sensors, the Race Official will determine the winner of each race, and we will move to a double-elimination method.
- f. If a car or cars do not make it to the Finish Line, the car(s) will be assigned a time of 9.9999 seconds for the heat.
- g. The Race Official's decision(s) in any race matter will be final.