# **2022 PRINCE WILLIAM DISTRICT**

**PINEWOOD DERBY**

**RULES AND REGULATIONS**

1. The car must be built within the **CURRENT SCHOOL YEAR**. Onlycars built for the 2021/2022 Pinewood Derby season are eligible for competition. This rule does not apply to the Outlaw class.
2. Cars may NOT contain components from cars built for previous years’ competitions. This rule does not apply to the Outlaw class.
3. *WHEELS AND AXLES*
   1. Car axles, wheels, and bodies must be built from oﬃcial BSA Pinewood Derby kits.
   2. Only the oﬃcial BSA wheels that come with the kit are acceptable.
      1. Oﬃcial BSA colored wheels purchased from oﬃcially licensed BSA distributors MAY be used.
   3. All BSA trademarks and other identifying insignia MUST be clearly visible on ALL wheels.
   4. “Pinecar” Wheels are NOT Oﬃcial BSA Wheels.
   5. 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. See ﬁgures below for non-exclusive examples of forbidden wheels.
   6. Bearings, washers, or bushings are NOT allowed.
   7. "Hub cap" covers are NOT allowed on the wheels.
   8. Wheels may NOT be painted, but BSA-colored wheels are permitted.
   9. Cars MUST run with ALL FOUR wheels in the original pre-cut axle slots.
   10. Cars MUST use the pre-cut axle slots. Axles must be visible to the judges. Glue and/or other materials must NOT obstruct the clear view of the axles and axle slots. (Note: Gluing is allowed, and the competitor is strongly advised to use clear drying glue.). If the axles slots are covered with weights, paint, epoxy, putty glue, or anything else, you will have to remove it to allow the judges to see the axles. Cars must use the four original axles - solid axles are not permitted.
   11. ALL FOUR wheels must be touching the race track surface at the same time.
4. *LENGTH, WIDTH, HEIGHT & CLEARANCE*
   1. Cars SHALL NOT be more than 7 inches long or 2 ¾ inches wide.
   2. The car body must clear the ground by at least 3/8 of an inch.
   3. Height SHALL NOT exceed 4 inches.
   4. The wheelbase (distance between the front and rear axles) may not be changed – Original pre-cut slots must be used.
   5. Wheels may NOT extend beyond the end of the car.
5. WEIGHT AND APPEARANCE
   1. Cars SHALL NOT weigh more than 5 ounces.
   2. The weight shown on the oﬃcial scale is ﬁnal.
   3. Mercury cannot be used as a weight and is never safe for minors.
   4. All cars must be free-wheeling with no starting aids.
   5. The car cannot ride on springs, and Magnets are not allowed.
   6. Cars must be powered by gravity only – No mechanical devices such as fans, rubber bands, propellants, battery power, or other similar devices are permitted.
   7. 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.
6. *LUBRICATION*
   1. Cars are only allowed to use dry lubricants such as graphite or Teﬂon.
   2. No lubrication will be allowed after the car has been impounded after passing the oﬃcial weighing or between races.
7. *INSPECTIONS AND DISPUTES*
   1. Each car must pass inspection, by race oﬃcials, before it is registered. Cars determined by the judges to not comply with these rules WILL be disqualiﬁed.
   2. 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.
   3. After final approval, cars will not be re-inspected unless the car is damaged in handling or a race.
   4. 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*
   1. 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.
   2. We will be racing on a four-lane (or more) 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.
   3. 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 8 seconds, and this time is not allowable in consideration for the Open Class of racing.
   4. 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.
   5. In the event of a failure of the electronic sensors, the judges will determine the winner of each race, and we will move to a double-elimination method.
   6. 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.
   7. The Race Official’s decision(s) in any race matter will be final.

