

# ORANGE DISTRICT PINWOOD DERBY RULES 2010 - 2011

## **Cubmasters are responsible for distributing these District Rules!!**

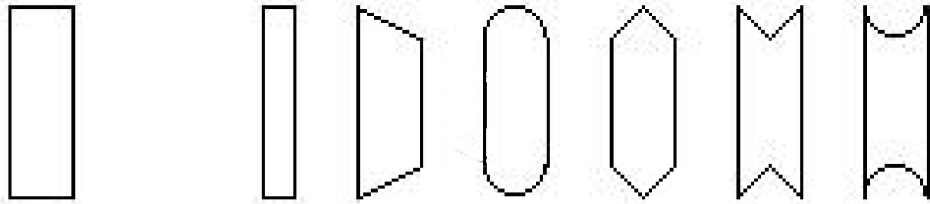
1. The following construction rules apply to all categories - Fastest, Most Beautiful and Most Original.
2. Parents are asked to REFRAIN from DIRECT WORK on building the cars. Parental participation as teachers, supervisors and coaches is strongly encouraged, but this event should have the desired benefit as a learning activity for the SCOUT. Most of the labor must be his own.
  - a. The use of power tools, especially cutting tools such as table saws, band saws, etc., is discouraged. These are extremely dangerous in the hands of Cub Scouts, and only encourage more parent participation than is necessary. The use of hand tools such as hand saws, coping saws, sanding blocks, planes, etc. is a part of advancement activities for all ranks, and should be should be encouraged for Derby building.
  - b. Packs are encouraged to hold an Open/Parents/Siblings race for family members to build cars and participate in the Pinewood Derby experience. However, there will NOT be a separate Open Category race at the District Derby.
3. Registered Cub Scouts – Tigers, Wolf, Bear, and Webelos – will be eligible to participate in the District Pinewood Derby, as will any Scout who won in any category at his Pack Derby as a Webelo, but who has since crossed over to Boy Scouts.
4. A Cub Scout or Webelos Scout may build more than one car, but may only enter one car in the race.
5. To enter the District Derby, a Scout's car must have placed in a Pack's Derby held since September 1 of the year prior to the district race. No car built prior to September 1 of that year may be entered. For example, if the district race is March 1, 2000, a car must have been built on or after September 1, 1999 and placed in a Pack race on or after that same date.
6. Each Cub Scout or Webelos Scout entrant is requested to be in official Scout uniform.
7. Each car will be entered in the category that it won in the Pack Derby - Fastest, Most Beautiful, or Most Original. A pack may be represented by a maximum of three (3) cars per category, a total of nine (9) cars per pack. Cars may only be entered in a single category at the District race. If a car wins in multiple categories at the Pack event, the Scout must choose in which category he wants to compete at the District Derby. Packs are encouraged to limit winners at the Pack level to one category as well to enable more Scouts to move on to the District competition.
8. At the conclusion of the Pack Derby, the Cubmaster (or representative) will impound the winning cars (if they are going to compete in the District Derby). The Cubmaster (or representative) will register all nine cars at the District Derby. Packs should notify the District Derby Committee of the entrant names and their categories by February 27th. Cubmasters should take care to pack and store the impounded cars to ensure that no damage occurs to their performance, appearance or finish.
9. If a car owner is unable to attend the district Derby, he may designate another Cub Scout (not adult) to stand in for him. The Scout representing the car at the Derby (owner or designee) will be known as the "car driver."
10. Once registered, NO ONE except Derby officials and car drivers may touch the cars.

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11. ALL CARS must be able to run all the way down the track and past the finish line to be entered in ANY CATEGORY.
12. EACH CAR MUST BE INSPECTED for compliance to the construction rules prior to being registered. These rules apply to ALL CATEGORIES. Once it passes inspection, the car will then be labeled with its entry number.
13. Each car MUST be built by a Cub Scout or Webelos Scout using the materials in an Official BSA Pinewood Derby Car Kit. This includes the pinewood block, axles and wheels. With the exception of decorative and construction items such as weights, glue, lubricants, and finishing materials, ONLY the materials from an official kit may be used. Separately purchased specially prepared items such as contoured pinewood blocks or machined wheels are specifically PROHIBITED. Parts and portions of cars built in prior years may NOT be used in the construction of the car.
14. The overall length of the car shall not exceed 7 inches (17.8 cm).
15. The overall width of the car shall not exceed 2 3/4 inches (7.0 cm).
16. **The overall height of the car shall not exceed 5 inches (12.7 cm).**
17. The weight of the car shall not exceed 5 ounces (141.7 grams). The recommended method of weighing cars is with a digital postal scale set to measure in grams (less than or equal to 141 grams – 3 significant digits of precision), rather than set to ounces (less than or equal to 5.0 ounces – 2 significant digits of precision).
18. Cars must have a minimum of 3/8-inch (1.0 cm) clearance from the bottom of the car to the track.
19. No loose materials are permitted on or in the car.
20. The car may be hollowed out and built up to the maximum weight by addition of weights, provided the car continues to meet the other construction requirements.
21. The car may not ride on any type of springs.
22. The car must be freewheeling with no starting devices or propulsion devices, e.g. springs, bottle rockets, balloons or CO2 cartridges. Movable weights are prohibited, as is the use of a liquid weight such as water or mercury.
23. The distance between the front and rear wheels cannot be altered. The axle cutouts provided in the blocks MUST be used. These may be redrilled, but NEW HOLES are prohibited.
24. Purely decorative items such as steering wheels, drivers, decals and paint are permissible, as long as they meet other listed requirements.
25. BSA Pinewood Derby kit axles may be polished.
26. Only DRY lubricants (e.g. graphite) may be used on axles.
27. Wheel bearings, washers and bushings are all prohibited.
28. **Weights may not be added to the wheels**
29. Rough edges and excess mold flash on the wheels may be sanded, BUT the wheels must retain 97% (1.155 inches - 29.24 millimeters) of their original diameter, and 100% of the running surface must be 90 degrees to the face of the wheel. Alteration of tread contours, e.g. rounding, is prohibited. See diagram.

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30.



**OK!!!**

**Not Acceptable**

30. Specific lubrication of the tread is prohibited.
31. The nose of the car cannot be altered (cut out) in a way that when placed on the starting gate, it is past the starting line or is ahead of another car. Cars with pointed front ends must be able to rest on their own in the starting gate without moving ahead of the starting line or other cars.
32. After passing inspection, cars will be placed on designated tables and can only be handled by the car racer and race officials. After passing inspection, cars may not be altered in any way. Note: NO lubrication may be added once the car has been checked in.
33. Cars failing to pass inspection will have until the start of the race to be modified in order to meet requirements. Alterations may only be performed in the race area by the car driver. A race official will be available to supervise. Parents are not allowed in the race area.
34. The speed ("Fastest") winners will be determined by a computerized timing system. Every car will run once on each lane, and the system will SUM the total time from running down each lane to determine the winners. The car with the lowest total time will be designated the winner.
35. The "Most Beautiful" and "Most Original" winners will be determined by a judge committee. Each judge will select three cars and assign a first, second or third placement vote. These votes are valued as follows: first place (5 points), second place (3 points), and third place (1 point). After this first tally, the top five cars (top five points) will be selected and the voting process will be repeated in consideration of the top five cars only. Judges will again choose three cars and assign their placement. Votes will be tallied using the same point system. The car with the most points will be designated the winner.
36. If a car jumps the track, there is no heat. If the car jumps 2 times in a heat, it will be disqualified.
37. In the event of a tie, all tied cars will race to determine the winner. If there are more cars than there are lanes (e.g. three cars with equal times and a 2-lane track), the cars will race in a single lane against the clock until a winner can be determined. Otherwise the cars will race against each other in each lane and their times summed as in the regulation race until a winner can be determined.
38. If a wheel comes off, a repair time of 2 minutes is allowed. Only the car driver may make repairs. NO ADULT may touch the car. Adults may provide advice and suggestions only.

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- 39.** In case of computer or power failure, winners will be decided by double elimination. A car must lose races against 2 different cars to be eliminated.
- 40.** Double elimination races will consist of 2 heats of 2 cars each. After the first heat, the cars will swap track positions and rerun. A car must win on both tracks to win the race.
- 41.** The decisions of the judges and the Derby Officials will be FINAL. All decisions will be made in the Spirit of Scouting, fair play, good sportsmanship and FUN!
- 42.** Trophies are awarded in all 3 categories.
- 43.** GOOD LUCK and HAVE FUN!