**Western Massachusetts Council-BSA**  
**OFFICIAL**  
**Pinewood Derby Rules 2020**  

*Updated 01/14/2020*

**Length, Width, and Clearance**

1. Cars must be built using the materials in the Official Pinewood Derby Kit. This includes the pinewood block, axles, and wheels. With the exception of decorative and construction items (weights, glue, lubricants, finishing materials), only materials from the official kit may be used.

Wedge-shaped bodies and colored wheels are allowed *IF* purchased from an official scout store.

2. Parents are encouraged to help their cubs in the construction of their derby car, *but are requested* *not to build the cars for them*.

3. Maximum overall width (including wheels and axles) must not exceed *2 3/4"*.

4. Minimum width between wheels shall be *1-3/4"* so the car will clear the center guide strip.

5. Minimum clearance between the bottom of the car and the bottom of the wheels shall be *3/8"* so the car will clear the center guide strip. It is recommended that weights on the bottom of the car be inset so they are flush with the bottom of the wood block.

6. Maximum length of the car shall not exceed *7"*.

7. Maximum height of the car shall not exceed *3-3/4"*.

8. The wheelbase (distance between front and rear axles) may not be changed from the body kit distance of *4-1/4"*. Cars may not protrude beyond the starting post. The forward most edge of a car is to rest against the rear of the starting gate pin in the center of its lane (sharp pointed cars tend to have trouble lining up properly). Under no circumstances is any portion of the car to extend past the starting gate pin.

**Weight and Appearance**

9. Weight of the car shall not exceed *5 ounces (141.7 grams)*. The readings of the Official Race Scale will be considered final. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided it is *securely built into the body or firmly affixed to it*. *No loose materials of any kind are permitted in or on the car.*

10. Using tape (masking, scotch, etc.) to hold weights on the car is specifically prohibited.

11. Details such as steering wheel, driver, spoiler, decals, painting, and interior details are permissible as long as these details do not exceed the maximum length, width, and weight specifications.

12. Cars with wet paint will not be accepted.
Wheels and Axles

13. **Only the official Scout Grand Prix wheels and axles can be used.** Axles may be polished. Solid axles are strictly prohibited.

14. Wheels may be lightly sanded to remove the mold projection on the tread. This light sanding is the only wheel modification allowed; the wheel “surface” (That portion which contacts the track) must remain flat and parallel to the axle. Beveling or tapering of the wheels is prohibited. This means no rounding, no grooving, no cutting or shaping of the wheel. As a general guideline, the “tread” (or stippling) around the outside edge of the wheel must remain unaffected. **This rule will be strictly enforced.**

![A Sampling of Disqualifying / Altered Wheels](image)

15. Wheel bearings, washers, or bushings are prohibited.

16. Car shall not ride on any type of springs.

17. Cars must be freewheeling with no starting device or other propulsion.

Lubrication

18. **Only dry powdered lubricants, such as graphite, may be used.** Regular oils and silicon sprays may soften the plastic wheels.

19. Cars may be lubricated before inspection. No other lubrication will be permitted.
Race Day

20. Cars will be inspected at registration on Race Day for compliance to the specifications. Once the car has passed inspection and received its number sticker, the car will be placed, by the inspection team, in a staging area and improvement to that car is prohibited.

21. Each car must pass inspection by the Official Inspection Team before it may compete. The Inspection Team has the right to disqualify those cars, which do not meet these rules. Car owners will be informed of any violations and given an opportunity to adjust the car to meet the rules.

22. Cars can be re-inspected at any time. If the car does not meet specifications, it must be brought into compliance before its next scheduled race or be disqualified. A minimum of five minutes will be allowed a participant (or his designated adult) to bring his car into compliance.

23. Any participant (including a parent/guardian of a participant) has the right to appeal to the Judging Committee for an interpretation of these rules. The Judging Committee, by majority vote, will be the final interpreter of these rules. In case of a tie vote, the decision of the Race Committee Chairperson will be final.

24. Ungentlemanly or un-sportsman like conduct by any participant or member of the audience could be grounds for expulsion from the competition and/or the race area.

The Race

25. The District race is open to all Cub Scouts and Webelos Scouts currently registered. Check with your District Race Coordinator for the number of unit invitees (ie. top qualifier or top three qualifiers) to run in each category of the District Derby (Lions, Tigers, Wolves, Bears, Webelos). In the event an invitee cannot attend a pre-registered alternate will be allowed to run.

26. The Council Race is open to the top 3 qualifiers of each rank (Lions, Tigers, Wolves, Bears, Webelos) from the District Derby. In the event an invitee cannot attend a pre-registered alternate will be allowed to run.

27. Cars must have been made for this race. Cars must be built after January 1st of the same calendar year of the race for entry in the District Pinewood Derby.

28. Only race officials will be permitted in the track area. This rule will be strictly enforced.

29. If a car suffers a mechanical problem during a heat (loses an axle, breaks a wheel, etc.), the participant along with a designated adult, will have up to five minutes to fix the car. The heat will be rerun only if it has affected the outcome of other racers on the track.

30. If a car suffers a mechanical problem after a heat, the participant along with a designated adult, will have five minutes or until its next scheduled heat to fix the car. The heat will not be rerun.

31. The official track computer will determine the winner of the heat.