

2009 Pack 199 Pinewood Derby Rules

Cars should be substantially built by the Cub Scouts with adult guidance!!
Please read the rules and instructions included in your car kit. Failure to comply with the Official Grand Prix Pinewood Derby rules and the Pack rules listed below may result in elimination.

General Rules

1. **Car Specifications:**
 - **Weight** - All cars must weigh **5 oz. or less.**
 - **Width** – **2-3/4"**
 - **Length** – **7" maximum**
 - **Width between wheels** – **1-3/4"**
 - **Bottom clearance between car and track** – **3/8"**
 - **Wheel width** - **.34"**
 - **Height** – **5-1/2" from the track/roadbed to the top (so it fits under the Finish bar.)**
2. Each car must be made from an official Cub Scout Derby GRAND PRIX Pinewood Derby Kit. No. 17006 (see kit insert and part of UPC for kit #). The car body must be made from the ready-to-carve block of wood provided. Only the wheels and axles that come with the kit may be used. Decals, accessories and weights may be added. Cars made from specialized kits and cars using wheel bearings, washers, bushings or specialized wheels will be prevented from racing, but will be eligible for design awards. Loose pieces that fall off a car during a race are not permitted. If the front of a car is designed to gain an unfair advantage at the start or interferes with a fair start, the car will be disqualified. The motion of the car cannot be mechanically enhanced – no springs, motors, rubber bands, etc., are permitted.
3. **Wheels may not be altered in any way** other than light sanding to remove the gate mark and any flashing from the mold. Excessive sanding that would reduce the required wheel width of .34" is prohibited. The tread pattern on the sidewall (the decorative dots, beading) and lettering on the sidewall must not be removed. The wheels must be attached to the car with the pins provided in the kit.
4. **Do not move the axles.** Use the nail slots already positioned on the block of wood. Adjustments can be made to ensure that the grooves are at a perfect 90-degree angle to the car body. Use wood glue or model cement to hold the pin axle to the body.
5. **Each car must pass inspection** by the Official Race Committee before it may compete. Once a car complies with the car specs listed in #1, 2, 3 and 4 above, it will be officially registered, assigned a number and impounded. Only Race Committee officials can handle cars after registration. If a car fails to meet the rules, the Cub will be told what problems exist and he will be given time within the official registration period to make adjustments. **Decisions of the Official Race Committee are final.**
6. **Lubrication:** only dry lubricant is permitted. Graphite must be applied outside of the school (custodians' request). No graphite may be used anywhere in the building. There is a new BSA white lube T102/polytetra fluor oethylene that may be used.
7. Cars will race first by den, then by rank: Tiger, Wolf, Bear, Webelos 4, Webelos 5. There will be one champion for each rank.
8. Awards will be presented after each rank races.
9. Rank champions will race for the Pack's Grand Champion Trophy.

Rank Champion Rules

1. All working available lanes will be used.
2. There will be 1 to 3 heats per den and rank, depending on the number of entries. Each car will race 3 times on randomly selected lanes.
3. Rank Champion is determined as follows:
 - a. If One Heat: Rank Champion, 2nd & 3rd place finishers are determined by the fastest accumulated time.
 - b. If Two Heats: The winner of each heat will race in a Rank Championship heat across 3 lanes. The Rank Champion is determined by the fastest accumulated time in the Rank Championship heat. The fastest second place car from the original heats will be awarded 3rd place.
 - c. If Three Heats: The winner of each heat will race in a Rank Championship heat across 3 lanes. Rank Champion, 2nd & 3rd place finishers are determined by the fastest accumulated time in the Rank Championship heat.

Grand Champion Rules

1. 5 lanes will be used.
2. Each car will race once on each of the 5 lanes.
3. Fastest cumulative time wins.
4. A tie for 1st place will be broken by 5 additional races across 5 lanes.