

# PINEWOOD DERBY RULES

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*The purpose of the rules is to provide a reasonable and level playing field for all contestants. Please read and heed the rules!*

*The footnotes at the bottom of the page might help clarify any confusion about the rules. If you still have uncertainty about what is allowed, please contact the Derby Committee.*

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## **Eligibility of Contestants and Cars**

- The Year 2006 Scout Competition is open to all Pack 870 Cub Scouts. In case of illness or a valid conflict, an absent scout may be represented by an authorized agent.<sup>1</sup>
- The Year 2006 Open competition is open to all Pack 870 Scouts.
- Cars in the Year 2006 Scout Competition must have been made for this race season. Cars or parts of cars such as wheels or axles, from previous years may not be used.
- We encourage the construction of Year 2006 Scout Competition cars using the block in the official Grand Prix Pinewood Derby kit.

## **Length, Width & Clearance: Inspection Template**

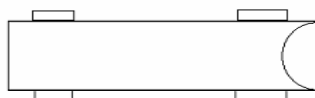
- Maximum overall width (including wheels and axles) shall not exceed 2-3/4".
- Minimum width between wheels shall be 1-3/4" so car will clear the center guide strip.
- Minimum clearance between the bottom of the car and track shall be 3/8" so the car will clear the center guide strip.
- Maximum length (including wheels) shall not exceed 7".
- Maximum height shall not exceed 3-1/2".<sup>2</sup>
- The wheelbase (distance between the front and rear axles, center to center) may not be changed from the kit body distance of 4-3/8".

## **Wheels and axles: Inspection Specifics**

- Only the wheels and axles from the official Grand Prix Pinewood Derby kit may be used.<sup>3</sup>
- Axles may be lightly filed, sanded and polished. This light sanding and polishing is the only wheel modifications allowed.<sup>4</sup>
- Wheels may be lightly sanded and polished. This light sanding and polishing is the only wheel modification allowed.<sup>5</sup>
- Only nail type axles are allowed

## Weight and Appearance

- Weight shall not exceed 5 ounces. The readings of the Official Race Scale will be considered final.
- The car may be carved, sculpted, and/or sanded in order to enhance performance and/or appearance.
- No loose materials of any kind are permitted on or inside the car.
- **A 1” square area (or greater) on the bottom of the car must remain white or light in color as to allow race officials to number the car with a black sharpie with the scout’s car number.**
- Additional materials may be added to the car for the following purposes only:<sup>6</sup>
  1. Weights may be added to increase the weight and/or alter the weight distribution of a car.
  2. Paints/decals/decorations may be added to alter the appearance and/or aerodynamics of a car.
  3. Glue may be used to adhere the axles to the car body.
  4. Wood putty, or a similar wood-like substance, may be used to repair minor damage to a car.
- Indented noses are prohibited. Cars like the one pictured below will “stage” further down the track, and thus are not traversing the same course as other cars.



## Lubrication

- Only dry powdered lubricants, such as graphite or white powder Pinewood Derby Car Lubricant, may be used. Oils and silicon sprays are prohibited.
- A car may be lubricated before inspection and, if it advances, prior to the Grand Finals. These are the only two times when lubrication is permissible. Specifically, cars may not be lubricated while competing in a set of heats. The lubrication prior to the Grand Finals will be performed under the direct supervision of a Derby Committee Member

## Ground Rules

- If a car jumps off the track, the heat will be run again. If the same car jumps off the track a second time, it will automatically lose the heat.
- If a car leaves its lane and interferes with another car, the heat will be run again. If the same car leaves its lane a second time and interferes with another car, the heat will be run again without the interfering car. The interfering car will automatically lose the heat.

- If a car suffers a mechanical problem **accidentally**<sup>7</sup> and a repair can be accomplished within 5 minutes, the heat will be run again. If not, the car will automatically lose the heat.
- If a car suffers a mechanical problem **accidentally**<sup>7</sup> and a repair can be accomplished within 5 minutes, then the car can be corrected and re-entered to run in following heats.

## Inspections and Disputes

- 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 the rules. Car owners will be informed of the violations and given an opportunity to modify the car to meet these rules.
- Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience will be grounds for expulsion from the competition and/or race area.

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<sup>1</sup> An authorized agent is defined as a sibling of a Cub Scout of similar age who is not already competing in the same set of heats.

<sup>2</sup> The official kit block has pre-cut slots which are correctly spaced. If desired, these slots may be pre-drilled before they are used. Use of the pre-cut slots, however, is not required.

<sup>3</sup> Wheels and axles not from the official kits are prohibited. Wheels and axles which have been modified by other parties also are prohibited, even if they are from the official kit.

<sup>4</sup> Beveling, rounding, tapering, thinning, perforating, or any other significant altering of the shape or performance of the axles or axle heads is prohibited.

<sup>5</sup> Beveling, rounding, tapering, thinning, perforating, or any other significant altering of the shape or performance of the wheels or wheel hubs is prohibited. Modification of the cylindrical inner wall of the wheel which contacts the axle is prohibited.

<sup>6</sup> Wheel bearings, washers, or bushings are prohibited. This includes “wheel covers” which serve to keep the wheel hubs from contacting the car body. It also includes “hub caps”, or anything else that might serve as a lubrication “well” or “tap”. The car shall not ride on any type of springs. The car must be free-wheeling with no starting device or other propulsion, such as adhesives, magnets, rubber bands, motors, jets, etc. Details such as steering wheel, driver, spoiler, decals, painting and interior details are allowed as long as these details do not exceed the maximum length, width, height, and weight. Metal frames and metal axle supports are prohibited. Axles must be mounted into the wood.

<sup>7</sup> Cars that experience technical problems in the course of normal operation will not be allowed to be repaired this is part of building the initial racer. Cars that suffer problems due to accidental actions will be allowed to be repaired under the direct supervision of a committee member, as long as it fits into the timeline specified. In both cases, the car will have to be re-registered before the completion of the races.