

# Cub Scout Pack 396 Pinewood Derby Rules

**“The Pinewood Derby was started to promote learning, competition, and sportsmanship.”**

*- Second Place finisher*

**Learning is an important part of Pinewood Derby races. The Scouts should not only learn about such concepts as friction and gravity, but they should learn how to work with tools safely. Depending on the experience of the Scout, it may be necessary for adult supervision while building the Pinewood Derby car. Building a Pinewood Derby car is a great way for an adult and a Scout to spend time together!**

**Just remember that in competition, there is always a person that wins and a person that loses. Competition drives us to do our best. By participating and competing, we broaden our knowledge, and skills to become a better person. The only loser is the person that refuses to better him or herself.**

**Sportsmanship involves both following the rules and how you behave at the Pinewood Derby. No matter how your car performs, you want to behave in a manner that will allow you to feel good in the days to follow. It is important to follow the rules in the Pinewood Derby car kit and any rules established by our Pack Committee.**

## Pinewood Derby Rules and Regulations

The purpose of the rules and regulations is to provide a reasonable and level playing field for all contestants. Our rules closely follow the Hou Koda District rules. If your car conforms to our rules, then it should also qualify under the Hou Koda District Rules.

Please read and heed the rules!

The notes at the end of these rules might help clarify any confusion you have. If you still have uncertainty about what is allowed, please contact any leader in the Pack for clarification.

These rules and regulations may be modified by your Pack Committee to provide a suitable program for our Scouts.

## Eligibility of Contestants and Cars

The Pinewood Derby Competition is open to all registered Pack 396 Scouts. In case of illness or a valid conflict, an authorized agent may represent an absent Scout. **(See Note 1)**

Only cars created and built from the Official BSA Pinewood Derby kit will be allowed.

Pinewood Derby Cars in the 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.

Prior to racing, all cars will be checked in with a technical inspection that includes certification of weight, length, height and clearance. Once a car has cleared technical inspection, it will be impounded for racing.

## Length, Width & Clearance

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 7-1/4".

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". You must use the existing axle slots provided by the manufacturer. **(See Note 2)**

Maximum height shall not exceed 4". **(See Note 3)**

## Wheels and Axles

Only the wheels and axles from the official BSA Pinewood Derby kit may be used. **(See Note 4)**

Axles may be lightly filed, sanded and polished. This light filing, sanding and polishing is the only axle modification allowed. **(See Note 5)**

Wheels may be lightly sanded and polished. This light sanding and polishing is the only wheel modification allowed. **(See Note 6)**

## Weight and Appearance

Weight shall not exceed 5 ounces or 104.5 grams. 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.

Additional materials may be added to the car for the following purposes only **(See Note 7)**:

- a. Weights may be added to increase the weight and/or alter the weight distribution of a car.
- b. Paints/decals/decorations may be added to alter the appearance and/or aerodynamics of a car.
- c. Glue may be used to adhere the axles to the car body.
- d. 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 silicone sprays are prohibited.

A car must be lubricated prior to passing technical inspection and before being impounded in the pit area. Cars may not be lubricated after being impounded.

## 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 (**SEE NOTE 8**) during the race, and a repair and re-inspection can be accomplished within 5 minutes, the heat will be run again. If not, the car will automatically lose the heat.

Any car that is repaired due to a mechanical problem (**SEE NOTE 8**) during the race will be subject to a re-inspection by a Race Official. If the car does not pass the re-inspection within the allotted 5 minutes allowed for the repair, the car will automatically lose the heat. If the car successfully passes re-inspection prior to its' next scheduled heat, it will be allowed to re-enter the race without penalty.

## 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 that 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.

### NOTES:

1. An authorized agent is defined as a sibling or a Cub Scout of similar age who is not already competing in the same set of heats.
2. The official kit block has pre-cut slots which are correctly spaced. The actual use of the pre-cut slots is required.
3. 4" is the maximum height for cars competing in Pack 396 Pinewood Derby. We do not have control over the height of the finish lane gate used at the District races. For some gates, the maximum height is 2-3/4".
4. Wheels and axles not from the official kits are prohibited. Wheels and axles that have been modified by other parties also are prohibited, even if they are from the official kit.
5. Beveling, rounding, tapering, thinning, perforating, or any other significant altering of the shape or performance of the axles or axles heads is prohibited.
6. Beveling, rounding, tapering, thinning, and 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 that contacts the axle is prohibited.
7. 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 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.
8. Legitimate mechanical problems will be determined on a case-by-case basis by the Race Officials. In general, a wheel or body part falling off the car will qualify for repair during the race. Wanting to apply additional lubrication to the wheels during the race IS NOT a legitimate mechanical problem.

## 2004 Pinewood Derby Scoring Scheme

1. Each car will race a minimum of eight (8) times, once on each lane. Lanes will be assigned randomly. To the best of our ability, cars will not race against the same car in more than one heat.

2. Scoring is based upon cumulative time. The car with the lowest cumulative time will be judged the fastest car.

### 3. Awards

- a. There will be three (3) racing awards presented to the fastest cars in the overall Pack.
- b. There will be three (3) racing awards presented to the fastest cars in each rank.
- c. Certificates will be awarded to cars for the following judged categories. Judging is to be done by a panel of adults selected on race day. Note, not all categories may be awarded, and not all certificates in each category may be awarded. Unless otherwise noted below, there are three (3) certificates available in each category. Additional certificates may be awarded.

- a. Best Overall Scout Theme
- b. Best Monthly Theme (monthly theme is 'Home Alone')
- c. Most Realistic Looking
- d. Most Patriotic
- e. Fastest Looking
- f. Coolest Looking
- g. Wildest Looking
- h. Muscle Car
- i. Plainest Looking
- j. Weirdest Looking
- k. Most Flashing Lights or Most Lights if no flashing lights
- l. Reddest Car
- m. Orangest Car
- n. Yellowest Car
- o. Greenest Car
- p. Bluest Car
- q. Best Brownsburg (Bulldog / Purplest) Theme
- r. Best Resemblance to a NASCAR
- s. Best Resemblance to an INDY Car
- t. Best Non Car
- u. Most Cartoonish
- v. Best Sports Theme