



# 2017 PINEWOOD DERBY RULES

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## for BSA Cub Scout Pack 766

### SUMMARY:

**Only official BSA Cub Scout Grand Prix Pinewood Derby wheels, axels and block parts are permitted. Any form of weight and graphite dry lube are permitted.**

In order to race the youth must be a registered Pack 766 Cub Scout or Sibling ( $\leq$  Age 11), unless entering the Open Class.

All cars must be built for the current Pinewood Derby Racing Season. NO REPEATS or REPAINTS.

Cars must be built by the Cub Scout racer, but adult supervision is strongly encouraged. Completed "ready to go" kits may not be used.

The Cub Scout should be present in class A uniform for their car to participate.

## **BODY:**

The main body structure must be made from the wood block from the kit supplied by the Pack. If the builder lacks the resources to cut out a car safely, attendance at a workshop is strongly encouraged. These requirements are generally needed to make sure the car fits on the track and doesn't interfere with other cars.

Requirements:

- A. Width - Not to exceed 2  $\frac{3}{4}$ ". □
- B. Length - Not to exceed 7".
- C. Height - Not to exceed 3". □
- D. Bottom - No less than  $\frac{3}{8}$ " from track surface.
- E. Wheelbase - No less than 4" (front to back) and 1  $\frac{3}{4}$ " between opposite wheels. □
- F. Front End Width - At least  $\frac{1}{2}$  inch wide.
- G. Weight - Not to exceed 5.0 ounces on scale accurate to 1/10 ounce.

## **WHEELS:**

There must be at least four wheels on the car. Each wheel must be mounted on the supplied axles, on the outside of the car. Each wheel must be attached directly to the wood car body by an axle and spin freely.

Requirements:

- A. Use only the Pack supplied official BSA wheels.
- B. **No** material may be removed from the wheels.
- C. Wheel Bore and wheel surface polishing **is** allowed.

*Please note: There are after-market modified wheels that are LIGHTENED. Cars with these wheels will not be permitted to race.*

## **AXLES:**

The supplied BSA Nail type axles are required.

Over-application of lubricant that results in excessive shedding onto the track is not allowed. Approved graphite lubricants only. NO LIQUID LUBRICANTS ALLOWED.

## **WEIGHTS:**

No lead weight allowed, as this is toxic. Any other weights, including store bought kits are permitted. This includes household items such as coins, bolts, etc.

## **MISC:**

The following items are PROHIBITED:

- A. Springs
- B. Starting devices or propellants
- C. Electronic or lighting devices that interfere with the race electronics.
- D. Liquids, wet paint, oil, sticky substance, or powders of any kind (other than graphite axle lubricant)
- E. Glass or excessively fragile parts
- F. Bearings, bushings, washers, sleeves, hubcaps or inserts attached to or in contact with the axle, body or wheels.
- G. Loose objects on car
- H. Magnets

All cars will be freewheeling with no starting devices or propulsion aids of any kind. (I.E. motors, rubber bands, impulse jets, ion drives, warp engines, etc.)

Magnets and slip weights are prohibited (Kinetic “enhancers”).

**WEIGH-INS:**

Bring a box no bigger than a shoe box to put your scout's derby car in. Padding in the box is highly recommended. It will make transport from the weigh ins and to the race much safer for your scout's creation!

Each car must pass inspection by the Official Inspection Committee before it may compete. The Inspectors will disqualify any car not meeting these rules or deemed not capable of racing. The Race Committee Chair- person decision is final. After acceptance, the cars will be impounded and only race officials will handle the cars.

Cars may be reclassified or disqualified if they are later determined by the race officials to not meet these requirements.

It is a good idea to arrive early at the weigh in, in case any rework is needed.

**REPAIRS:**

Any car losing wheels or any part that prevents it from running during the race cannot be repaired after the inspection and weigh in, unless approved by the Race Committee Chair- person.

## Ground Rules and Competition

- A. The race is open to all Cub Scouts and Webelos Scouts (and Siblings under 11 on Race day) registered in this Pack.
- B. There is also an Open class for parents/close relatives and older siblings, although no prizes for this race (just a warm feeling of accomplishment)!
- C. Each scout/sibling may enter one car. Several cars may be constructed but only one may be registered and raced. The scout may also enter cars in the Open Class.
- D. Racing schedule is auto-generated by the racing software which satisfy the Partial Perfect-N (PPN) criteria.
- E. If a car leaves its lane and interferes with another car, the race will be run again. If the same car leaves its lane a second time and interferes with another car, the race will be run again without the interfering car. The interfering car will automatically be placed last in that race and will be given a flat time of 10 seconds for that race.
- F. If a car does not get to the finish gate it will be given a flat time of 10 seconds for that race.
- G. No additional lubrication (graphite) may be added between races.
- H. The sum of the times across 4 heats is used to determine the fastest cars and the den and Pack winners.
- I. There will also be a certificate for the cars that the Pack votes are/have:
  - a. \_\_\_\_\_ Most Detailed Car
  - b. \_\_\_\_\_ Most Colorful Car
  - c. \_\_\_\_\_ Most Imaginative Car
  - d. \_\_\_\_\_ Most Humorous Car
  - e. \_\_\_\_\_ Most Realistic Car
  - f. \_\_\_\_\_ Most Futuristic Car
  - g. \_\_\_\_\_ Fastest Looking Car
  - h. \_\_\_\_\_ Best Car that's not a Car
  - i. \_\_\_\_\_ Best Driver in the Car
  - j. \_\_\_\_\_ Best Paint Job
  - k. \_\_\_\_\_ Coolest Car
  - l. \_\_\_\_\_ Sportiest Car

If you have any questions, please contact Deborah Vick or Chris Bosso.



# Guidelines & Sportsmanship Notes

## Guidelines

The Pinewood Derby is a parent-son project. Please feel free to give guidance and minimal assistance to your Scout as he builds his Pinewood Derby car. This is a chance for your son to be part of a team (he and you), and to enjoy the spirit of friendly competition with his peers. Also for your Cub Scout to enjoy the satisfaction of building his own car from the kit provided.

*A special note to all parents and scouts: Please read the following article on sportsmanship together. While everyone will be trying to win, it's always a good idea to start out by remembering the Cub Scout Motto, "Do Your Best".*

## Sportsmanship

Two things the Pinewood Derby requires each participant to learn are (1) the craft skills necessary to build a car, and (2) the rules that must be followed. Even more important, though, is how we act and behave while participating in the Pinewood Derby or any other group activity. This is called sportsmanship.

The first thing to remember about sportsmanship is that everyone's skills are a little different. You may be good at something like singing or drawing, but not as good at something else like basketball or computers. Parents have different skill levels, too. This doesn't mean that you are a good person one time and not good another time. You can always be a good person, whether or not you have good car-building skills. Remember, you and your friends are individuals first and racers second. This idea is often called having respect for others.

The second thing to remember is to follow the rules. Without rules, there would be no Pinewood Derby. You will never know if you are really good at doing something unless you follow the rules. This is often called being honest.

The third thing to remember about good sportsmanship is that there are winners and losers in every competition. You accept this when you choose to compete. There may be times when you win and feel happy, and times when you lose and feel unhappy. Being a winner is easy, and losing is sometimes hard. If you win, you must not brag or gloat. If you lose, you must not feel jealous or bitter. To be a good sportsman, you must be able to say "I did my best" and be satisfied with the results. You must also be able to appreciate and feel happy for someone else when they run a good race or build a neat car.

**Have Fun and Good Luck!**

**Cub Scout Pack 766, 2017 Pinewood Derby Race Committee**