



## 2019 Pack 843 Pinewood Derby Rules

All cars must pass inspection to qualify for the race. The inspection points are as follows:

1. PINewood DERBY CARS must have been made in the 2018-2019 program year.
2. Scouts must use the standard BSA Cub Scout Pinewood Derby kit with the wide wheels.
3. Wheels must be official BSA Pinewood Derby wheels, in any color.
4. Axles and body wood shall be as provided in the kit. **NOTE: Only the nail axles that come with the BSA kit are acceptable.**
5. You must use the slots that come with the car. You may true up the slot but they must not be moved. If they are moved the car will be disqualified.
6. Wheel bearings, washers, and bushings are prohibited.
7. Wheel may not be altered in any way. Mold projections on the wheel treads may be lightly sanded off, but the width of the wheel tread must not be made narrower or rounded.
8. The car shall not ride on any kind or type of springs.
9. Any details added must be within length, width, and weight limits.
10. The car must be freewheeling, with no starting devices.
11. No loose materials of any kind (such as lead shot) are permitted on the car.
12. Oil, grease, or silicone spray should NOT be used on the wheels or nail axles. Only powdered graphite is permissible as lubricant on the nail axles.
13. If setting weights under the car make sure they are recessed (the car has to have clearance underneath for the track guide). Do not move the wheels in or out for the same reason.
14. The width of the car shall not exceed 2 3/4 inches.
15. The length of the car shall not exceed 7 inches.
16. The weight of the car shall not exceed 5 ounces.  
**NOTE: All cars will be weighed on the official Pack scale. Any car weighing over the 5.0 ounces must be adjusted at weigh-in. Tools will be available for a parent or guardian to trim excess weight from the car.**
17. A parent or adult guardian must be present with the Cub Scout during weigh-in and registration  
**NOTE: Weigh-in will be held between 6:30pm and 8:00pm on January 18, 2019.**  
The car will be weighed and turned over to the race official until race day. Please bring a shoebox to store your car.
18. Cars that were not present at the weigh in will not be permitted to race, unless prior arrangements were made with the Race Committee.

19. The position of the wheels on the block of wood cannot be moved forward, backward, up, down, in or out.

### **Race day format -- January 19<sup>th</sup>, 2019**

Race times area as follows:

- 9:15 AM Webelo II Arrow of Light (Fifth Grade)
  - 10:15 AM Webelo I (Fourth Grade)
  - 11:15 AM Bears (Third Grade)
  - 12:15 PM Wolves (Second Grade)
  - 1:15 PM Tigers (First Grade)
  - 2:15 PM Lions (Kindergarten)
  - 3:15 PM Winners Race
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- The Top 3 winners of each Den level will race at 3:15 PM to determine the top 3 racers in the Pack.
  - All Racing Scouts will be asked to sit together in the Pit Area. Each Den will be asked to provide a representative to help them transition between the Pit and Starting/Finish Line positions.
  - Upon notification, each Scout will take their car from the Pit Area to the Starting Gate. The Starter will then position the car at the starting gate, and the Scout will take his position at the Finish Line to await the running of the race. Following the heat Scouts will then be asked to return the car to the Pit area and wait for their next race.
  - In the event a car jumps the track (as determined by the two track officials) we will re-run the heat. If the same car jumps the track a second time, but crosses the finish line its time will stand. If it does not cross the finish line it will be awarded a final time of 5.0 Seconds.
  - If there is a problem with the timing measurement of any lap, the race organizers will rerun the lap until a successful timing is achieved.
  - Any car that is damaged during a race or in the transfer of a car to/from either the starting or finishing gate will have 5 minutes to repair the damage, and we will re-run the heat. If the car breaks down a second time during a race but crosses the finish line its time will stand. If it does not cross the finish line it will be awarded a final time of 5.0 Seconds.

### **Winners will be determined by:**

1. Each scout will have 8 races. The times will be totaled up for each racer and the racer with the fast time (lowest race total) is the winner.
2. In the event of a tie for any of the top three Pack/Den Awards, a one race run off will determine the winner. A random drawing will determine the two or three tied contestant's lanes.
3. There will be awards presented for the fastest three cars within Pack 843.
4. The fastest 3 cars within a Den level (Lions, Tigers, Bears, Wolves, Webelos 1 & 2).
5. A Best-of-Show Car will be awarded to each den level.

