

**CARS RACING IN LION, TIGER, WOLF, BEAR AND WEBELOS/AOL CLASSES MUST HAVE
BEEN MADE IN THE CURRENT SCOUTING YEAR**

CARS MADE IN EARLIER YEARS MAY RUN IN OPEN CLASS ONLY

Pinewood Derby Guidelines

1. Only one car per participant.
2. The registered participant must be present during the race.
3. All competing cars must pass inspection and be checked in prior to the start of that car's category/rank race start time.
4. All cars must pass inspection to qualify for the race. The inspection points are as follows:
 - A. The car must have been made during the current year (the year in which the derby is held).
 - B. The width of the car shall not exceed 2 3/4 inches.
 - C. The length of the car shall not exceed 7 inches.
 - D. The weight of the car shall not exceed 5 ounces.
 - E. Axles, wheels, and body wood shall be as provided in the Official BSA Pinewood Derby Car Kit #17006.
 - F. Wheel bearings, washers, and bushings are prohibited.
 - G. The car shall not ride on any kind or type of springs.
 - H. Any details added must be within length, width, and weight limits.
 - I. The car must be freewheeling, with no starting devices.
 - J. No loose materials of any kind (such as lead shot) are allowed in the car.
 - K. The official number must be clearly marked or visible on both sides of the car.
5. Each category/rank heat will be announced. Drivers will report to the starting line for car verification. Drivers will sit in designated race location during their race. All other people must remain behind the barrier.
6. The starter(s) will make sure the cars are on the track properly and then will start the race.
7. The starter(s) will report to the finish line to confirm the race was fair, the results are posted, and then move the cars into the next race.
8. If a car leaves the track, runs out of its lane, interferes with another car, loses an axle/wheel, etc. the heat will be rerun. If the same car gets into trouble on the second run, the contestant automatically loses that heat. If, on the second run, another car is interfered with, the heat will be run a third time without the interfering car.
9. When the results of the heat are recorded, the drivers will return to their seats. Advancing cars will be moved forward by the starter(s). Non-advancing cars will be returned to the drivers.
10. Awards will be announced shortly after the category/rank race for which the awards are to be given. The drivers will report to the stage for the awards as their names are called.
11. There are a total of 5 category/rank races with the opportunity for multiple heats in each category/rank. The three fastest cars from each rank (Lion, Tiger, Wolf, Bear, Webelos/AOL) will receive an award and advance to the finals. The three fastest cars in the finals will receive a special award.
12. Open division cars will follow the same rules, with the exception that the car may have been raced in a previous year.
13. Open division is for siblings, parents, and adult leaders.
14. The three fastest cars in the open division will receive an award.
15. Only dry powdered lubricant (graphite) is permitted.

OFFICIAL GRAND PRIX PINWOOD DERBY KIT

Please read these Rules and Instructions before building your car.

The Council Pinewood Derby is open to all Cub Scouts. Cars should be built by the Cub Scouts with some adult guidance. Any technical assistance should be fully explained to the Cub Scout so that they can use that knowledge on future projects. Adults are encouraged to build their own car and race in the Open Category.

CAR SPECIFICATIONS:

Width—2-3/4"

Length—7"

Weight—Not over 5 ounces

Bottom clearance between car and track—3/8"

RULES:

Wheel bearings, washers, and bushings are prohibited. The car shall not ride on springs. Only official Cub Scout Grand Prix Pinewood Derby wheels and axles are permitted. Only dry powdered lubricant is permitted. Details, such as steering wheel or driver are permissible as long as these details do not exceed the maximum length, width and weight specification. The car must be free-wheeling, with no starting devices. Each car must pass inspection by the official inspection committee before it may compete. If, at registration, a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official weigh-in time period to make the adjustment. A "pit" will be available for these adjustments. After final approval, cars will not be re-inspected unless the car is damaged in handling or in a race.

Once a car is checked in and passes inspection, the car will remain in the possession of the race officials. It is suggested dry powdered lubricant (graphite) be applied to the car at inspection before final release to officials. Cars will be returned to the owner following the last race for their category. Cars going on to the finals will remain in the possession of the officials until the finals are complete.

BUILDING SUGGESTIONS:

Check the grooves to ensure that each is at a perfect 90-degree angle to the car body. A car with untrue axles tends to steer to one side or the other, causing it to rub against the side of the lane strip, slowing it down. You can check the groove angles by using a square, a protractor, or even a piece of paper.

Lay square on block to check for squareness and alignment of slot.

Use two hacksaw blades side by side to redress the slots. Use the edge of the square as a guide.

Note: If the car design you chose has a narrow body, make sure the area where the axles are inserted into the body remains

1-3/4" wide, or wheels will not fit over the guide strips of the track.

Paint and Wheel Assembly—Apply several coats of sanding sealer; then sand entire car with a fine-grade sandpaper. Give model at least two coats of fast drying paint, in your choice of color. When paint is completely dry, sand with fine sandpaper, apply a final coat of paint and allow to dry thoroughly.

To Finish—Rub entire card with a rubbing compound. Details such as windshield, driver, racing numbers, etc. should be added now. For a super finish apply a coat of auto wax and rub to a high gloss. Pre-lubricate axles and wheels using, dry powdered lubricant. Do not use regular oil or silicone spray, since it may soften the plastic wheels. Slide wheels over axles, then gently tap them into the car body grooves with a 1/4" dowel or similar object to within 1/32" of car body. Make sure wheels turn freely.