

# Pinewood Derby Rules and Guidelines

**Date: Saturday May 4th 2024**

**Location:** Current plan is to hold in conjunction with Spring Camporee at the Boulder County Fairgrounds. Would love to have an indoor location nearby.

## **Cub Scouts:**

Every unit can sign up 3 racers for each Rank (Lion, Tiger, Wolf, Bear, Webleos and AOL). All others who wish to race (additional scouts, adults, and siblings) will run in open class races.

## **Cost:**

The cost of the derby is \$5 per car for both the district derby and open class races. This cost goes to cover insurance, services by BSA, awards, and space rental. Some packs choose to cover the cost of their winners to compete at the district derby. Check with your pack to see if this applies.

## **Check-In Procedure**

This is TBD based upon which unit is providing the track. Volunteers will dictate when check in will occur. They may ask to have entries the night before to setup the software.

**BE PREPARED** to submit names prior to the event for software setup. This will likely make race day go smoother.

## **Awards (exact awards will depend on the budget)**

The winners from each rank will be announced and will receive an award for the fastest three cars per rank. (Assuming a 6 lane track is available) The top two fastest from each rank will then compete for the Grand Championship where two winners will receive an award.

For Open race one award for the fastest overall.

## **Food**

Bring your own or go to nearby fast food.

# Official District Pinewood Derby Rules

## GENERAL RULES:

1. The District Derby is open to all Cub Scouts registered with a pack when the pack races, including 5th graders. The Open Class division is for all scouts including Boy Scouts, Adults and siblings. Cars must be built from an official Pinewood Derby Car Kit and comply with these rules. Each car must pass an inspection by the Official Inspection Committee before it may compete. The inspectors have the right to **disqualify** those cars, which do not meet requirements as defined here.

2. Use only Pinewood Derby Kit (#17006), authorized by the Boy Scouts of America and available through scoutshop.org (<https://www.scoutshop.org/official-pinewood-derby-car-kit-17006.html>), or any official Boy Scout Distributors. Any other kit, such as those advertised in various magazines (including Boy's Life) or sold in hobby stores and even McGuckin's brand (for example Pinecar), **WILL NOT BE ACCEPTED**. If parts (such as wheels, axles, precut wood blocks, etc.) are removed from such kits and installed in the official kit, **disqualification** of said car will result. In general, use of unofficial parts for the purpose of increased performance and / or improvements of said cars, **is not allowed**.

## 3. DIMENSIONS

**WIDTH:** Overall width shall not exceed 2 3/4 inches.

**LENGTH:** Overall length shall not exceed 7 inches

The center of the front of the car cannot be pointed or indented, and must be the furthest piece forward of the front wheels; it must have a flat area of at least 1/4 (0.250) inches wide, for track starter pins, and must be (from the ground) between the minimum track clearance, and the top of the front wheels.

**HEIGHT:** Overall height shall not exceed 4 inches

**CLEARANCE:** Minimum recommended car clearance is 3/8 inches.

4. **WEIGHT:** Weight shall not exceed **5.000 ounces (141.75 grams)**. No loose materials of any kind are permitted in the car. The car may be hollowed out and built up to a maximum weight by the addition of a solid material, such as wood or metal provided it is securely built into the body.

5. **WHEEL BEARINGS:** Washers and / or bushings of any kind are prohibited.

6. **SPRINGING:** The car shall not ride on any type of springs.

7. **DETAILS:** Details such as steering wheel driver, decals, painting, and interior detail are permissible as long as those details do not exceed the maximum length, width, height and weight specifications and are securely fastened to the car.

**8. ATTACHMENTS:** The car must be freewheeling with no starting device.

**9. WHEELS: NO ROUNDING or BEVELING** of the wheel is permitted. **Milling** and **turning** of the wheels is especially **prohibited**. Therefore, use of a mandrel to turn the wheels is **prohibited**. Best advice is to leave the wheels alone! Camber must be adjusted so that at least 3 wheels touch the track. All 4 wheels must be installed.

**10. AXLE:** Axle spacing is determined by the preset grooves in the block of wood provided in the kit. Axles may be polished but cannot be plated or specially lubricated. Only dry graphite lubricant or Grand Prix Pinewood Derby Wheel and Axle Lubricant (part no. 17240) may be used as a lubricant.

**11.** All cars entered in the Pinewood Derby must have been built after September 1, 2022. Cars are to have been built by the Scouts with limited parental/ adult supervision and help. Scouts should do most of the work including painting.

**CHECK-IN RULES:**

Each car is inspected during check-in. If the weight exceeds the limit, the person checking in the car should be prepared to adjust the weight or submit an alternate car. The scales at check-in will be considered to represent the official weight of the car. Many factors can affect weight, including changes in humidity and wood absorption. The person checking in the cars should expect to have to adjust the weight of the car. **Please be patient at check-in as the process is tedious to assure fairness.** Once your car passes, you will be given a pit pass for each car to be used in retrieving your car after the races. If your car has not been given a number by the end of the weigh-in period it will be treated according to the rules under LATE ENTRIES.

**LATE ENTRIES:**

No Late entries are allowed due to significant time constraints on the event.

### **CAR REPAIR DURING THE RACE:**

1. If a wheel or weight of a car falls off during the race, the car's position in the schedule may have to be adjusted. The car will be disqualified unless a person responsible for the car (parent, Scout, leader) makes repairs within 5 minutes and it is possible to give the car a new position in the schedule. Note the car must be re-weighed following repairs and adding weight other than the piece that fell off is not allowed. Lubrication of the car is not allowed. These rules are designed to be fair, encourage good craftsmanship, and limit delays to the race. Cars needing repeated repairs might be disqualified.

2. No lubrication of cars during the race is allowed. **Cars should be lubricated prior to or during check-in. It is OK to lubricate the cars after the pack race.** Most entries apply graphite just before checking in the cars.

### **RACE PROBLEMS:**

1. **LUCK IS PART OF RACING.** If a car is interfered with during a run, for example being hit by something, another car, falls apart or hits debris on the track, the run will **NOT** be repeated.

2. If a timer error occurs, the run will be repeated to the best of the technological capability of the track.

### **COMMON PROBLEMS FOUND DURING CHECK-IN:**

1. **INCORRECT WEIGHT:** See above

2. **BEVELING OR SHAPING OF THE WHEELS:** See above

3. **LEVEL WHEELS & AXLES:** See above

4. **USE OF NON-OFFICIAL CAR KITS:** They are easily identified as the wheels and axles are different from the official car kits.

5. **INSUFFICIENT CLEARANCE:** Most tracks have a center guide rail, which is the reason for the clearance guidelines.

6. **SIZE VIOLATIONS:** Addition of weights or trim to the ends or sides of the cars may cause cars to exceed the maximum allowable dimensions.

7. **EXCESSIVE PARENTAL INVOLVEMENT:** A common complaint is that some parents have done too much of the work on their Scout's cars. The Scouts are supposed to do the majority of the work themselves. It is not fair if an adult has done much of the work on a car, which is competing against cars built by Scouts. Parents should supervise and teach. Because of the risk of damaging the car, an adult can set the weight of the car and attach the wheels. Doing more is a disservice to the Scout. If an adult wants to do more they are encouraged to build a car of their own. This is an excellent way to encourage your Scout and show him by example how to build it. It is impossible for the Pinewood Derby Committee to

judge who has done the work on the cars. We can only trust the honesty of the Scouts, parents, and leaders.

**RACE FORMAT:**

Up to 3 cars from each unit for Lions, Tiger, Wolf, Bear, Webelos, and Arrow of Light will be allowed to race in the District Derby. Your pack must determine the selection of the cars. The District Derby will run its own race with its own set of prizes. Open class will only race in the Open Class Division and will have its own set of prizes. In the District Derby Division each RANK GROUP has its own set of race heats to determine the top 3 cars of that group. These cars will be awarded prizes as First, Second & Third place in Rank. The top 2 cars in each rank group will then proceed to the Championship finals. These final ten cars will then compete for the Grand Champion and Reserve Grand Champion of the District Derby.