



Lockport Alliance  
Church

# Pinewood Derby Rules

All cars should be registered and inspected prior to the race. Please be sure your car is complete before the final weigh in & inspection. Once a car is registered and passes weigh in and inspection the car will remain with the Church until the race date. This means there will be no changes to the car after inspection.

The Church encourages the Parent to help their son with the car but not to completely build it without the scout. The whole idea is to teach them some engineering and wood working skills. Also teach your son the fundamentals of sportsmanship, by letting your son know the Pinewood Derby is for fun – it is not all about winning.

## **Derby Rules - compliant with the Tow Path District Pinewood Derby Rules.**

### **Final Weigh in and Inspection Process: All Cars must be turned in on this date.**

Each car must pass inspection before it may be allowed to compete. Race officials will measure and weigh and inspect the cars to ensure that they meet the specifications.

If there is a problem with a car, you may attempt to correct the problem on this date and have the car re-inspected. Simple tools will be provided to correct any problems with the cars upon inspection. Once the problem is corrected, and it passes inspection, it will be allowed to race. The Church 44 Race Officials (Inspection Team) has the right to disqualify any car that does not abide by the rules as outlined.

### **Race Format:**

Cars will be raced as one pool of cars based on our Pinewood Race software.

After passing inspection, each car is assigned a number representing the rank and a number.

Each car will race in 4 heats – once in each of the track's 4 lanes.

The top 4 finalists will be awarded as the top Church finalists.

Rule Note: Only Church Race Officials (leaders and committee members) and the judges will be allowed in the track area. The Judges decision regarding the cars finishing position will be final, should the judges be unsure of a car(s) finishing position those cars will be rerun. The Judges will be the only officials to decide the finishing positions, and will not be influenced by photos, video camera, scouts or parents. Judges Decision is Final. **The Pinewood Derby teaches good sportsmanship.**

**The Pinewood Derby is all about having fun – it is not all about winning. Not every Scout's car can finish 1<sup>st</sup> place.** The most important rule is **HAVE FUN** in an environment that promotes good sportsmanship, craftsmanship, engineering, friendship, family, and safety. This is a parent - son project. They can and will need some level of help and supervision. Safety around power tools is important. If there is any uncertainty about these rules, please contact the Cub Master or committee chair.

### **Car Specifications:**

**Pinewood Derby Car Kit:** All cars in the competition must have been built for this race. Cars built from a previous Pinewood Derby year are not allowed to compete. No pre-cut, pre-fabricated, commercially cut or other form of professionally made cars or parts is permitted. **Cars must be made from the pinewood derby kit provided by the Church to the Scout.**



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## Car Specifications cont.:

**Width:** Max. Overall width (including wheels and axles) shall not exceed  $2 \frac{3}{4}$ ". Minimum width between wheels must be  $1 \frac{3}{4}$ " so car will fit onto track.

**Length:** Max. Length (including wheels) shall not exceed 7 inches. Indented noses are prohibited. Center "front bumper" must be the furthest point from the front axle (which must fall within max. length).

**Wheelbase:** The distance between the front and rear axles, center to center, must be  $4 \frac{3}{8}$ ". The official kit has pre-cut slots which are correctly spaced or new ones may be used as long as the  $4 \frac{3}{8}$ " center to center is maintained.

**Clearance:** The minimum underbody clearance is  $\frac{3}{8}$ " to successfully traverse the track.

**DO NOT** add weights to the underside of the car unless it is recessed flush with the body or it will hang up the track.

**Height:** Max. Height shall not exceed  $2 \frac{3}{4}$ ".

**Weight:** Should be brought up to but shall not exceed 5.0 ounces (as measured by race officials). Weight can be internal or external, but must not alter car specs.

**Wheels:** Only the wheels supplied in the kit may be used. The wheels may be sanded to remove the mold projection and to make wheels as smooth and true as possible. The wheels must retain the original ridge bumps on the outside edges of the wheel. No beveling, tapering, thin sanding, perforating or other modification to the wheels or wheel hub is allowed. No "wheel covers", "hub caps", or anything else that would serve as a lubricant "well" or "tap" is allowed.

**Axles:** Only the axles supplied in the kit may be used. The axles may be polished, but no washers, bushings or springs are allowed. No beveling, rounding, tapering, thinning, perforating, or any other significant altering of this shape or performance of the axle or axle head is permitted. Axles must be mounted into the wood, glued if desired.

**Lubrication:** Only dry powdered graphite (Dark Grey/Black) lubricant may be used. Oils, silicone sprays, and white powders are prohibited. Cars may be lubricated before inspection. No further lubrication is permitted.

**The Church Leaders will lubricate all car wheels before the race starts.**

**Misc.:** No starting devices, propulsions, adhesives, magnets, rubber bands, motors, jets, etc. are permitted. Metal frames and axle supports are also prohibited. There can be no loose material of any kind on the car. The car may be hollowed out and built up to the maximum weight by additional materials such as metal, hot glue, wood filler, plastic, etc., provided it is built securely into the body. Mercury is a potential health hazard and therefore cannot be used on any car.