

Pine Tree Council & District Pinewood Derby Rules

The purpose of the Pinewood Derby is to provide a positive experience for the scout, the parents, the Pack, and the Chartered Partner with emphasis on THE SCOUT.

Scouts are encouraged to build their own cars as independently as they are able.

GENERAL

The race is open to all Cub Scouts and Cub Scouts just graduated to Boy Scouts, registered in a Pack within the Pine Tree Council. The scouts will be referred to as “**drivers**” in these rules. Parents or designated guardians of the scouts will be referred to as the “**Pit crew**” in these rules.

Speed Competition. The fastest **five drivers** from each pack will be invited to race at District Derbies and the **fastest three drivers** from each District will be invited to race at the Council Pinewood Derby during Scout-O-Rama. **Racers must be present to win.**

Best of Show. There will be **Best of Show (design/beauty/artistry) entries** at the Council & District Pinewood Derbies.

All cars competing in the current year’s Pinewood Derby **must have been made for the current year’s Pack Pinewood Derby.** Cars made for any previous year’s Pinewood Derby are not acceptable.

Pinewood Derby race cars **will be built from an Official Grand Prix Pinewood Derby Kit.** This kit includes the pine wood block, axles, and wheels necessary to build a car. The purchase of machined wheels and polished axles from other suppliers is specifically prohibited. If original wheels and axles are lost or unusable, replacements are available from the Scout Shop.

Decorative items such as steering wheels, drivers, spoilers, decals and interior details are permissible as long as the finished car meets the Council Pinewood Derby rules and specifications. Drivers **must not promote the use of alcoholic beverages or tobacco products** by using decals advertising these products when decorating their race cars.

CONSTRUCTION SPECIFICATIONS

Dimensions:

- a. The **minimum width between wheels** shall be $1 \frac{3}{4}$ inches.
- b. **The maximum overall width** of the car including wheels and axles must not exceed $2 \frac{3}{4}$ inches.
- c. **Minimum clearance** between the bottom of the car and the bottom of the wheels (at the axle) shall be $\frac{3}{8}$ inch.
- d. The **maximum length** of the car shall not exceed 7 inches.
- e. The **maximum height** of the car shall not exceed $4 \frac{3}{4}$ inches from the bottom of the wheels.
- f. The **front of ALL cars will rest against the starting pin** and NO part of the race car can protrude past the starting post. **The front of the car** should be no higher than 1" above the track.
- g. The **axle slots in the car block** shall be used unless damaged. The use of the pre-cut axles locations in the official Pinewood car block is highly recommended however, if the existing slots are not used, the following dimensions must be maintained: nominal wheelbase of $4 \frac{3}{8}$ inches, dimension of $\frac{15}{16}$ inch from one end of the block to the axle, and dimension of $1 \frac{11}{16}$ inch from the other end of the block to the axle.

Weight:

- a. The car may be hollowed out and built up to the **maximum weight of 5 oz.** by the addition of wood or metal only, provided it is securely built into the body or firmly affixed to it.
- b. **No loose materials** of any kind such as lead shot are permitted in or on the car.
- c. If tape (masking, scotch, etc.) is used to hold weights on the car, it must be tightly attached to the car. Using tape to secure weight is not recommended.
- d. It is recommended that **weights on the bottom of the car** be inset so they are flush with the bottom of the wood block. **Minimum track clearance** must be followed.

Wheels and Axles:

- a. Only **Official Cub Scout Pinewood Derby** wheels, with the official B.S.A. stamp on the inside of the wheel, can be used.
- b. Only **official Cub Scout Pinewood Derby** axles can be used.
- c. Axles may be polished only and mold remnants removed by the driver and pit crew.
- d. Solid axles are strictly prohibited.
- e. Wheel bearings, washers, or bushings are prohibited.
- f. The car shall not ride on any type of springs.

- g. Wheels may be **sanded to remove the mold projection on the tread only**. This is the only wheel modification allowed. **Beveling or tapering of the wheels is prohibited**. The entire portion of the wheel must remain flat except for the outermost edge that comes rounded from the factory casting.
- h. The portion of the wheel hub that rubs against the car body may only be polished to remove castings. No other modifications to the hub are allowed.
- i. **All four wheels must sit flat on the track**. Wheel covers and hubcap type wheel covers will not be allowed.

Lubrication:

- a. Only **dry lubricant** may be used. Regular oils and silicon sprays soften the plastic wheels. We understand that the Scout Shop sells a liquid lubricant, but that will not be allowed at the Council or District Derby's.
- b. Cars are to be **lubricated before inspection/registration**. No other lubrication will be permitted.

Miscellaneous:

- a. Drivers must **register their cars during the official registration times** sent to all packs and follow all procedures specified at that time.
- b. **Cars must be freewheeling with no starting device or other propulsion**.
- c. **If a car suffers a mechanical problem** prior to a race, the participant will have up to five minutes to fix the car. If the problem occurs after a race, the participant will have five minutes or until the car races next to fix the car. If repairs cannot be made in this time frame, the car will be disqualified.

**These will be the official rules of the Pine Tree Council for the
Council and District Derby's.**

All decisions made by Council Pinewood Derby Officials will be final.