

Pine Tree Council

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 the emphasis on THE SCOUT.”

GENERAL

The race is open to all Tiger Scouts, Cub Scouts and Webelos Scouts (1st year, 2nd year or just graduated to Boy Scouts) registered in a Pack in 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.

There will be **NO** Best of Show entries at the Council Pinewood Derby. Only the fastest three drivers from each District will be allowed to race. We encourage you to recognize your Best of Show car at the Pack and District levels.

All cars competing in the current year's District Pinewood Derby must have been made for a current year's Pack Pinewood

Derby. Cars made for any previous year Pinewood Derby are not acceptable.

Pinewood Derby race cars will be built from an **Official Grand Prix Pinewood Derby Kit**. This kit includes the pinewood block, axles, and wheels necessary to build car. The purchase of machined wheels and polished axles from other suppliers is specifically prohibited.

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 are encouraged not to promote the use of alcoholic beverages or tobacco products by the use of decals advertising these products when decorating their race cars.

CONSTRUCTION SPECIFICATIONS

Dimensions:

- a. The minimum width between wheels shall be 1 3/4 inches.

- b. The maximum overall width of the car including wheels and axles

must not exceed 2 3/4 inches.

- c. Minimum clearance between the bottom of the car and the bottom of the wheels (**between the wheels**) shall be 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 3/4 inches from the bottom of the wheels.

It is strongly recommended that each Unit assign a responsible adult who will take possession of the top three race cars at the conclusion of the District's Pinewood Derby until the Council's Pinewood Derby. The two main reasons for this is to prevent damage and alterations to the three cars that will race at the Council Derby. The cars will be brought to the Council Derby

by the adult and given back to the Drivers prior to Registration on the morning of the Derby.

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. To ensure this all cars must be at least 1 inch high above the track and at least 1/2 inch wide.

g. 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 3/8 inches, Dimension of 15/16 inch from one end of the block to the axle , and Dimension of 1 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, 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.

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.

- 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. Examples of acceptable and unacceptable wheels are shown below.



UNACCEPTABLE WHEELS



ACCEPTABLE WHEEL

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 allowable. The portion of the hub that rubs against the car body may not be rolled or beveled in any way and shall remain flat. If in the act of polishing, the hub becomes rolled or beveled, the hub will be deemed non-conforming and the wheel will need to be replaced with a conforming wheel.

i. All Four Wheels Must sit flat on the Track. Wheel covers and hubcap type wheel covers will not be allowed and driver must remove them before racing at the District competition.

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 Derby!

b. Cars are to be lubricated before inspection/registration. No other lubrication will be permitted.

Miscellaneous:

a. Cars must be freewheeling with no starting device or other propulsion.

b. 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 rules apply to the Pinewood Derby Race car only. These will be the official rules of the Pine Tree Council for the Council Derby.

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