

PTC -2011 Pinewood Derby Rules

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 and District of 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.

All cars competing in the 2011 District Pinewood Derby must have been made for a 2011 Pack Pinewood Derby. Cars made for any previous year pinewood derby are not acceptable.

Pinewood derby racecars 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 Pine Tree 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 racecars.

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.
- f. The use of the pre-cut axle 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
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.



- 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.
- 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. No part of the racecar can protrude past the starting post.

These rules apply to the Pinewood Derby Racecar only. There are additional regulations that apply to the local, district, and council Pinewood Derby races.