

## Pack 29 Pinewood Derby

Sunday January 22, 2012, 4-8pm

Check-in/Snack Bar 4-5pm/Race time 6:00pm

Location: VFW Building

8607 Mission Blvd, Riverside 92509

The Pinewood Derby is open to all Cub Scouts. Each Scout is allowed to enter one car into the derby that meets the derby rules (see below), and each family is allowed to enter one car "family car" into the race. Family Cars will be raced at the end of the derby and can be as wacky and wild as you wish, the family car has no rules except width & length– Get Crazy!

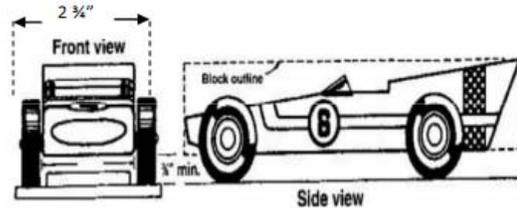
It is highly recommended that the Cub Scouts with some adult guidance should build the cars. Any technical assistance should be fully explained to the Cub Scout so that he can use that knowledge on future projects. The car must have been built in this program year; cars run in previous years cannot be raced. Good sportsmanship is expected of all participants and spectators.

Tips and Tricks for building your car can be found on the Pack website [www.Pack29.net](http://www.Pack29.net) or on [www.pinewoodderby.org](http://www.pinewoodderby.org).

### DISTRICT SPECIFICATIONS & RULES

#### Section I. Car Specifications

- A. Width: Shall not exceed 2 3/4 inches/69.85 mm
- B. Length: Shall not exceed 7 inches/177.80 mm
- C. Height: Shall not exceed 3 inches/76.20 mm
- D. Weight: Shall not exceed 5 ounces/141.75 gm.
- E. Wheelbase: Shall not exceed 4 3/8 inches/112.71
- F. Bottom Clearance: 3/8 inches between track & car
- G. Wheel Clearance: 1 3/4 inches between wheels



#### Section II. Design and Construction

##### **A. General Design**

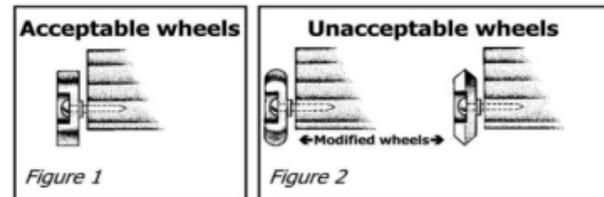
Only the Official Pinewood Derby Kit supplied by the Boy Scouts of America will be used. Kits can be purchased from the Council Service Center or a BSA authorized distributor. Pine Car and other non-BSA kits are not acceptable. Check the kit for compliance of these rules before beginning construction. Accessories can be used as long as the car meets all specifications (see Section I). Cars must be freewheeling with no starting devices. The car must be constructed to use the track's starting system (see Figure 3). Each car must pass an inspection for compliance prior to the race and may be disqualified any time during the race.

##### **B. Car Body**

The body may be hollowed out and the use of wood or metal may be used to build the car up to the maximum allowed dimensions and weight (see Section I). Details (i.e.: steering wheel, driver, etc.) will be permissible as long as they do not exceed car specifications and are firmly in place. No loose materials or moving parts will be allowed on the car. There must be 3/8 inch clearance between the bottom of the car and the track surface.

##### **C. Wheels and Axles**

Only the wheels and axle nails provided in the kit are to be used. Modifications to the wheels are not permitted (i.e. ground to a fine line, rounded, tapered, grooved or any other kind of modification (see Figure 2). Wheels may be lightly sanded to remove the burrs and mold marks (see Figure 1). Wheels must display the words BSA-Pinewood Derby on the side walls. Only the grooves provided in the block are to be used to place the axle nails. The space between the grooves must not exceed 4 3/8 inches. If the grooves are not square, damaged or are greater than the maximum allowed space return the kit to the Council Service Center for a replacement kit. The uses of washers, bearings, bushings, pacers as well as the use of solid axles, any type of springs or suspension are not allowed to be used on the car. All four wheels must touch the track surface. Powdered Graphite or BSA Axle Lube is the only type of lubricants allowed. The uses of oil, grease, silicone or liquid graphite are not permitted.



Each car must pass inspection by the official inspection committee before it may compete. If, at registration, a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official check-in time period to make the adjustment. After final approval, cars will not be re-inspected unless the car is damaged in handling or in a race.

All cars will be dry lubricated for you with dry graphite at check-in.

Each car will be raced 3 times on 3 different racetrack lanes. **The three electronic timings will be averaged for the final race standing.**