

## Official Cub Scout Pack 213 Pinewood Derby Rules

January 28th, 2017 – EP Rock Elementary

Racing Begins Promptly at 9:00 am

### General Rules and Specifications for Competition

- ***Each participant may enter only one car. Cars properly turned in at weigh-in will be raced whether or not the Scout is present. Scouts should wear their Class A uniform (blue or tan shirt with neckerchief) on race day.***
- The car must have been built during the current year (the school year in which the Derby is held). Cars that have competed in a previous Derby are not permitted.
- After registration, inspection and weigh in the car will be impounded by race officials. You will not be allowed to access your car until after the race day is completed.
- A car losing a wheel or any part that prevents running can not be repaired after weigh-in without the authorization of race officials. It shall be at the sole discretion of race officials if a car is considered to be suitable for racing or disqualification.
- Race officials at their sole discretion may authorize repairs to a damaged car during a race when the damage is caused by a collision with another car or object.
- If a car leaves the track without interfering with its opponents, it shall be considered to have ended its heat at that point.
- If the car leaves the track in two consecutive races it will be disqualified. Exception: When a car is caused to leave the track because of a collision with another car.
- If during the race no car reaches the finish line on the track, the car that went the farthest may be declared the winner of that heat.
- If during the race a car leaves its lane and in doing so interferes with another racer, then the car at fault may be declared to have lost the race heat.
- If during the race due to any unusual track or other circumstances, the track official may at his sole discretion order a race to be rerun.
- Cars must be freewheeling with no starting devices or other type of propulsion. Magnets or slip weights are not permitted. All weights must be securely fastened to the car.
- Cars will rest against a starting pin at the starting line: therefore is it advisable that a car not made with a sharply pointed front end. Cars not able to be started on the starting pin due to design issues may be disqualified from racing.
- Lubrication of wheels will not be permitted prior to or during the race. No lubrication allowed after the car is presented, inspected and accepted for registration.
- Only race officials, scouts and the scouts parents participating in the current race may enter the immediate track area. This rule will be strictly enforced.
- Ungentlemanly or unsportsmanlike conduct by any participant or spectator will be grounds for expulsion from the competition and/or the race area.
- There will be an Open Class race for siblings, parents, or other interested parties to participate in. The Open Class will be single elimination. Open Class cars will not be checked in, however it is requested they follow the same rules as regular Derby car entrants.

### Pinewood Derby Car Dimensions

- The overall length of the car shall not exceed 7 inches.
- The overall width of the car shall not exceed 2 3/4" inches.
- The car must have 1 3/4 " clearance between the wheels.
- The car must have a minimum of 1/4 " clearance underneath the body and a hard surface so it does not rub on the track.
- The wheel-base (distance between the front and rear axles) may not be changed from the kit body distance of 4-1/4 inches.
- The overall height of the of the car will not exceed 3 1/2"

- ***The overall front of the car must be able to rest against the starting pin. No part of the car may start or surpass the vertical alignment of the starting pin. The front bottom of the car which rests against the pin can not be any higher than 1/2" above the axle line. The frontal most area of the car that will rest against the starting pin must be fairly centered and have at least 3/8" wide surface area .***

#### Derby Car Weight

- The car weight shall not exceed 5.0 ounces.
- The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided the material is securely built into the body or firmly affixed to it. No liquids or loose materials of any kind are permitted in or on the car.
- The official race weighing scale that is used at the car registration shall be considered the final weight measurement tool for all cars.
- ***Due to the toxic nature of lead.....PB(lead) should not be used. PLEASE try to avoid Lead(Pb) in cars. If used... lead (PB) must be completely sealed and safe within the car from all possible human contact before it arrives at registration. The drilling/removal of Lead(Pb) will NOT be allowed at the race venue or at check-in time due to the toxicity of the material.***

#### Wood, Wheels and Axles

- The official BSA Grand Prix Pinewood Derby wood block must be used. ***As a minimum...the official pinewood derby wood block must serve as the primary chassis foundation of any build.*** The block may be shaped in any way that is desired.
- Only the official BSA Grand Prix Pinewood Derby Kit wheels can be used. The wheels may not be cut, drilled, beveled or rounded. Only the wheels that come in the BSA Pinewood Derby kit are to be used.
- Wheels may be lightly sanded, ***slightly shaved or polished*** to smooth out molding imperfections on the tread ***area but wheels must not be reshaped or altered in any way in an attempt to lighten or minimize tread surface contact if used.***
- ***The wheel tread surface must remain flat and parallel to the wheel bore.***
- You may not change the overall wheel dimensions
- Wheel bearings, washers and bushings are prohibited
- Wheel covers, hubcaps, wheel stickers are prohibited. The end of the wheel axle must be visible for inspection
- Axles may not be altered in any way except for polishing and lubricating.
- The car must not ride on any type of springs
- Only dry lubricants such as graphite or powdered Teflon "white lube" will be allowed for lubricating the wheels. Lubricants may not foul the track.
- ***There must be at least four wheels on the car, however, it is not required that all four wheels make contact with the track surface***
- ***Each wheel must be mounted on an axle, on the outside of the car, in the vertical position. Each wheel must be attached directly to the car by an axle and spin freely. The two rear wheels and the two front wheels must be positioned directly across the body from each another. Staggered wheelbases are not allowed.***
- ***The following wheel modifications are PROHIBITED:***

***A. Rounding of wheel edges***

***B. Grooving, H-cutting or V-cutting***

***C. Altering of wheel profile***

***D. Narrowing the tread surface***

***E. Drilling sidewalls***

***F. Hollowing, sanding, or otherwise removing or modifying material from inside the wheel***

***G. Filling of any wheel surface with any type of material other than graphite***

Car Modifications Allowed

- Details such as steering wheels, exhaust pipes, fenders, a driver, decals, weights, or other accessories are permissible but must be securely fastened and must not exceed the width, length, clearances and weight specifications listed above. All details must be securely fastened. If they become loose or unattached for reasons not previously listed, they will be removed and not allowed to be reattached during the competition. ***Only official BSA wheels and axles are allowed.*** Utilize the wheels and axles that come in the box. No exceptions.

Registration and Other Pinewood Derby Race Rules

- Each car must pass a technical inspection before it may compete. Technical inspection and registration of cars occurs in **January at the Pack Meeting**
- Scouts unable to attend the official registration night may have their cars registered ahead by making arrangements with the race officials or their den leader.
- Scouts who miss the official registration night due to illness or other explainable circumstances as approved by race officials may upon approval by race officials have their cars registered by their den leader within an agreeable timeframe as designated by race officials. No registrations shall occur on race day.
- The Inspection Officials shall not allow cars which do not meet the rules to be registered ***or to compete***. If a car does not pass initial inspection, the owner will be informed of the reason... (too long, too heavy, altered wheel base, or the like). Cars which fail the initial inspection may be modified for final re-inspection in the pit area during the registration night. A full pit crew of seasoned race parents will be on hand to help ready the car for registration.
- Once a car passes inspection and is registered for the race, only race official members can touch it. No car may be altered in any way after it has been registered ***unless so advised, approved and directly supervised by race committee officials.***
- Race officials, at its sole discretion has the responsibility to qualify or disqualify those cars that do or do not meet these specifications. ***Infractions not accounted for within this guide may be imposed at the sole discretion of the Race Committee Chairperson where it may serve reason to be detrimental in the intent of fair play and good sportsmanship.***
- Any adult or scout may appeal the findings of the Inspectors to the Race Committee Chairperson but whose decision will be final.
- Cars with wet paint at the time of weigh-in will not be accepted.

Pinewood Derby 2014 Creative Categories:

- Top three in all categories place.

- Best Concept Design
- Most Unusual
- Most Patriotic
- Best Animal
- Best Cub Scout
- Best Public Service
- Best Sporting
- Most Colorful
- Judge's Choice

ALL DECISIONS MADE BY THE DERBY RACE OFFICIALS ARE AT THEIR SOLE DISCRETION AND WILL  
BE FINAL

Sportsmanship Notes

The Pinewood Derby is a parent-son project. Please feel free to give guidance and some assistance to your Scout as he builds his Pinewood Derby car. This is a chance for your son to be part of a team (he and you), and to enjoy the spirit of friendly competition with his peers as well as for your Cub Scout to enjoy the satisfaction of building his own car from the kit provided. The scouts and adult should make the car together as a project. It is not the intent that a parent show the Scout the garage door then walk away; nor is it the intent that the boy play video games while the adult cuts and sands. This should be a genuine joint venture. In most cases, the adult is encouraged to rough cut the car body. This is particularly true if power tools are used. If hand tools are used, let the Scout assist in cutting the shape. Use this opportunity to instruct the Scout on the proper use, care, and storage of the tools that you are using. If power tools are used, ensure that all safety devices associated with the tools are employed. Use this opportunity to instruct the Scout on the safe operation of power tools. Make sure that safety glass/goggles are worn by anyone around a power tool in operation. Should a scout and parent not have access to any car shaping tools or need additional building guidance, please contact your Den leader for support or for a list of other race seasoned participants who are more than willing to offer up needed help.

While everyone will be trying to win, it's always a good idea to start out by remembering the Cub Scout Motto, "Do Your Best," and have fun doing it! The thing to remember about good sportsmanship is that there are winners and losers in every competition. You accept this when you choose to compete. There may be times when you win and feel happy, and times when you lose and feel unhappy. Being a winner is easy, and losing is sometimes hard. If you win, you must not brag or gloat. If you lose, you must not feel jealous or bitter. To be a good sportsman, you must be able to say "I did my best" and be satisfied with the results. Everyone must be able to appreciate and feel happy for someone else when they run a good race or build a neat car.