

**NOTE:** Pack 378 attempts to follow Council & District rules as close as possible so your boy's car may pass inspection for those races as well.

The Pinewood Derby Pack Race will be held on Saturday, March 22, 2014 and is open to all Cub Scouts in our Pack whether or not they have raced in Pack Derbies before this time. On March 19th, at our Pack Meeting, we will have our test track set up so you may test your cars. There will also be an inspection station to "pre-qualify" your car.

Each car must pass inspection by the Official Inspection Committee before it may compete. The inspection committee has the right to disqualify those cars, which do not meet these specifications. In event of a disagreement over qualifications of any car, the Chief Judge will settle the dispute and his/her decision will be final. **Lack of knowledge of the official rules will not be considered a valid argument for noncompliance.** All entrants must comply with all of the rules, or they will be disqualified. Cars not meeting the specifications contained herein will be allowed to modify the car to meet the qualifications prior to registration. In the event that a car is discovered to be inadvertently in violation of a rule after racing begins, owner of such car will not be allowed to continue in the race but will be disqualified. **Boy-Owner must be present to race his car.** Any deviations from this rule must be examined on a case by case basis and ruled upon by the Chief Judge.

**Generally** there will be a 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> place winner from each of Tigers, Wolves, Bears, Webelos 1, Webelos 2 groups. These winners will then run in the overall Pack race at the end of the day, and First, Second & Third Place overall Pack winners will be awarded. Depending on quantity of cars running in a group, the amount of winners may be adjusted on race day. There may be semi-finals within groups or groupings, but no awards are expected to occur at semi-finals levels.

#### 1. GENERAL

- A. The rules in effect for the 2014 Pinewood Derby are intended to maintain the competition at a level at which most boys are capable of achieving with minimal adult intervention.
- B. In the spirit of Scouting, the amount of assistance a Scout should have with building his car should be based on his own particular maturity level. (i.e. Normally Tigers require more help than Webelos)
- C. In order to qualify for racing, car must be made with the entire BSA Official Pinewood Derby Kit as supplied, including wheels, axles and wood block. **BSA imprint must be visible on wheels.**
- D. Car must meet all of the design requirements contained herein.
- E. Car must **not** have been made before June 1<sup>st</sup> of the prior year.
- F. The Chief Judge will have the final say so on all irresolvable disputes.
- G. Although every effort will be made to adhere to the rules stated herein, changes may occur without notice due to circumstances. Chief Judge's decision is always final.

#### 2. WEIGHT AND APPEARANCE

- A. Total **weight** of car may not exceed 5 ounces as measured by a scale chosen by the Chief Judge. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided that it is securely built into the body of the car or firmly affixed to it.
- B. No loose materials of any kind are permitted in or on the car. **No mercury-weighted** cars will be allowed.
- C. Details such as steering wheel, driver, decals, or painting are allowed, as long as these details do not cause the car to exceed the maximum weight, length, width and height.
- D. All cars may be re-weighed and/or re-inspected at any time for cause, which shall be at the sole discretion of the Chief Judge.

#### 3. LENGTH, WIDTH & HEIGHT

- A. Overall **width** shall not exceed 2 3/4 inches at the furthest horizontal protrusion, whether it is the body of the car, or the wheels. The area where the axles are inserted should be approximately 1 3/4 inches wide to ensure that the wheels will fit over the guide strip on the track.
- B. Overall **length** of the car (measured from the furthest point forward to the furthest point rearward) shall not exceed 7 inches.
- C. The **wheelbase** (distance between the centers of the front and rear axles) must measure between 4 1/4 and 4 5/8 inches.
- D. The position of the **axles** is not regulated, provided that the wheelbase measurement complies with rule 3.C. above. It is not required to place the axles (nails) into the slots, which have been pre-cut in the wood block. All four wheels must be mounted in an orientation considered normal for a four wheeled vehicle.
- E. If the nose or any part of the vehicle protrudes over the starting gate and the official starter is not able to adjust for a fair start, the protruding car will not be allowed to race.
- F. **Overall height** shall not exceed 4 inches at the furthest vertical protrusion.

#### 4. WHEELS AND AXLES

- A. **No** alteration, narrowing, lathe cutting or reshaping of wheels (inside or outside) is allowed. Light sanding of wheel treads to remove irregularities is permissible. Minimum wheel diameter allowable is 1.170 inches. (most wheels measure between 1.195 to 1.200 inches.) No covers, stickers, or hubcaps will be allowed over the wheels or axles. **AXLES** – Other than removing burrs on the inside of the head and polishing that does NOT cause a measurable change. Do NOT groove, grind, sand, or file axles. The axle head must be visible. **The serrated edges of the wheel treads must remain visible.**
- B. Only the **official BSA wheels and axles** as provided in the official car kits or the official BSA wheel and axle kits may be used.
- C. Wheel bearings, spacers and washers are prohibited.
- D. The car shall not ride upon any type of springs.
- E. All cars must have 4 wheels. Three of the wheels must be touching the track surface at all times.
- F. The car must be free-wheeling with no starting or launching devices.
- G. In order for the car to avoid scraping bottom against the guide strip of the track, it should have 3/8" clearance underneath.
- H. At the discretion of the Chief Judge, any Trophy winning car may be requested to have its wheels removed and weighed to check for a minimum of 2.45 grams each. Failure to comply with request, or not meeting the minimum weight will be grounds for disqualification. Under no circumstances will any individual be held liable for damage to the car while performing this process.

#### 5. LUBRICATION

- A. Cars will be **lubricated before registration** and qualification. Cars may not be lubricated thereafter. Violation will result in ejection from the race. Re-lubrication will be permitted just prior to re-registration for the OVERALL CHAMPIONSHIP.

- B. Any type of dry lubricant is permitted. **Graphite** is highly recommended. NyOil, Krytox or any other non-dry lubricant are strictly prohibited. Violation will result in ejection from the race.

## 6. GENERAL RACE RULES

- A. Numbers will be assigned and affixed at registration. The official number shall be clearly marked and visible at all times.
- B. No one will be allowed beyond the registration area and into the area immediately surrounding the track except the officials and the boys racing. Those areas will be designated as “restricted”.
- C. Each heat will be announced. Drivers will report to the starting line and will give their cars to the Official Starter who will place the cars carefully on the track. All other persons will remain behind the barrier and will not obstruct the view of other spectators.
- D. The Official Starter will make sure that the cars are on the track properly, and then will start the race. He/she will be judge of whether the cars are properly aligned on the track, of which cars are to race, and in which lane, and of all matters in the starting area. He/she will also be the judge of “false starts”.
- E. Two cars will race at a time. Each race will be judged by two track judges. They may use the assistance of the photoelectric sensors to agree on the outcome. In the event of a tie race, it will be run again in the same lanes. If there is a second tie, the cars will reverse lanes and the race will be run again. The winner of the heat will be that racer whose car crosses the Finish Line first, as determined by the track judges.
- F. Volunteer judges may be used. Volunteer judges should not judge any race in which they have a family member racing.
- G. When the result of each heat is recorded, the drivers will take their cars back to their designated seating positions to await their next race.
- H. If during a race, a car leaves the track, runs out of its lane, interferes with the other car, or loses an axle, etc. , the race may be run again. There will be only one repeat race for this reason in any heat. If the same car has a problem again, the results of such race will stand, unless the problem car clearly interferes with the opposing car. In this case the interfering car will be declared the loser.
- I. It is expected to have one competition for each Den of Tigers, Wolves, Bears, Webelos I and Webelos II. Eligibility will be determined according to rules established by the Pack for this event. Dens may be combined, or sub-divided at the discretion of the Chief Judge right prior to race time.
- J. For racers arriving late, (after the start of the last heat of their age group) the Chief Judge **may** decide to allow participation by placing the racer in the next round of that age group if there is one, provided that the car makes an equivalent number of supervised dry runs down a track, to cause an equivalent amount of wear and graphite depletion to occur on the wheels and axles.
- K. Each Scout is allowed to register and run One Car.

## 7. REPAIRS

- A. There will be an official Pit Area for repairs and alterations. If the car does not qualify at Registration, the racer and the adult (s) with whom he came may make alterations.
- B. Necessary repairs will be permitted after racing begins, but shall take place in the official pit area under the direct supervision of the Chief Judge or designee. It is highly recommended that racers bring their own spare parts.
- C. The official in charge of the pit area will be the judge of what repairs are necessary and allowable. If wheels or axles are replaced, only those wheels or axles actually replaced may be lubricated.
- D. If a racer requires repairs, the races will be delayed until such time that his car is repaired, or he withdraws. In no case will the racing be delayed more than 5 minutes awaiting repairs. If after the general race has been delayed for 5 minutes and if the racer’s car is not repaired and ready, he will forfeit all races scheduled for him to run while he finishes repairs. The Chief Judge will then decide how to make it equitable for the opponent of the forfeited race.

## 8. AWARDS

- A. Trophies will be awarded for 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> place for each total group (year) - Tigers, Wolves, Bears, Webelos1, Webelos2.
- B. Trophy winners from each group will then compete in the overall Pack Race for 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> place Trophies.
- C. Adjustments to race groupings and awards may be made based on group size on race day.

The Race Committee accepts no responsibility for the dissemination of these rules or the lack of knowledge thereof. Every attempt is made to publish the rules and distribute them. Any problems regarding lack of understanding or knowledge of the rules will be disregarded and will have no bearing upon the decisions of the Chief Judge or the Race Committee. Additional details regarding this Pinewood Derby will be e-mailed and posted to [www.pack378.com](http://www.pack378.com) as it becomes available. If you have questions ahead of race day, contact John Kwilosz – 480-980-5429 or e-mail him at [john@recycledmicro.com](mailto:john@recycledmicro.com)  
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