



## 2014 Centennial District Pinewood Derby General Information and Official "Rules of the Road"

This is an optional event intended to enhance your Pack program. An entry fee of \$7.00 per Scout's car, per event will be charged, if Scout is registered by April 4<sup>th</sup>, at midnight, there is a discount of \$2.00. Fees will be collected on or before Race Day; fee must be paid for Scout's car to be eligible to race.

**Eligibility:** Each Pack in the District may send their Top Racers from each rank. (Tigers, Wolves, Bears, Webelos) It is recommended that each Pack send from their top three racers in each rank. Only Cub Scouts officially registered with a pack in the Denver Area Council are eligible to race, with the exception of Webelos who participated in their Pack Pinewood Derby, and graduated to Boy Scouts. The car entered in this race must be the same car used in the most recent Pack Pinewood Derby and have been constructed in the current year.

In order to participate, your car must fit within the **Official "Rules of the Road"**. **Your Pack guidelines may be different, so please check your car against these Rules.** There will be a small work area to make minor adjustments, but please make the proper measurements ahead of time to avoid disappointment. Once a car has been checked in it will not be touched until the race begins and then only by race officials.

### **Race Procedures:**

Each Scout must bring his car to the Check-in table. If the car fails to meet any of the rules, the Official Race Inspectors will tell the Scout the problem. Each car must pass inspection before it is allowed to compete. Race Officials may disqualify any car not meeting these rules. Any Scout may appeal the findings of the Race Inspector to the Race Chairman, whose decision is final.

After inspection is complete Race Officials will register the cars, create a race schedule, and supervise the heats. Race Officials will place the cars on the Starters Table. Scouts may not handle the cars again unless the Scout is brought to the Starters Table for minor repairs as allowed in Rule #11. If a car is taken from the Starters Table for any reason it may be disqualified.

The car whose nose crosses the finish line first is the winner of the heat; this is determined by the computerized finish line. Race Officials will review any discrepancies.

Patches, certificates, and Trophies (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> per rank) will be given out at the end of the race period. At the end of the race day a trophy will be given out for the fastest car in the District. Best of Show will be judged by a pool of judges with Trophies (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>) given out between races.

**Good Sportsmanship and Behavior is expected.** Anyone not following this rule may be asked to leave.



## 2014 Centennial District Pinewood Derby Official District Pinewood Derby "Rules of the Road"

While there are many web sites and other resources that discuss Pinewood Derby designs and many Packs have set their own rules regarding their Pinewood Derby races, the following are set as the "Rules of the Road" for the Centennial District Pinewood Derby.

In fairness to all participants, cars not conforming to these specifications will not be allowed to race.

- 1) **Materials:** Only Official BSA Grand Prix Pinewood Derby Kits may be used. Axles and wheels must be from the official Cub Scout Grand Prix Pinewood Derby Kits. Materials from the kit may be supplemented but not replaced (ie. Addition of decals, weights, exhaust pipes, drivers, etc.)
- 2) **Axles:** The axle nails shall be firmly affixed to the wood of the car body. At a minimum the pointed end of the official axle-nail must be visible to the judges. If the end of the axle is covered with weights or glue, filled with putty, painted or otherwise not clearly visible the car will not be accepted, and will not be allowed to race. Use clear cement if you feel the need to cover the entire axle with glue, as long as the axle-nail tip remains visible. NO one-piece axles (e.g. Pinecar Kit axles) or machined pins (e.g. Awana Kit axles), or skids will be allowed.
- 3) **Wheels:** Wheel treatment (hub and thread smoothing and polishing) may not result in substantial removal of mass, reducing of the thread width, or V-ing from the original kit wheels. The words "BSA Pinewood Derby". Wheel treatment (hub and thread smoothing and polishing) may not result in substantial removal of mass, reducing of the thread width, or V-ing from the original kit wheels. The words "BSA Pinewood Derby" on the wheel face shall remain intact and clearly visible to the inspector. Some of the original "tread marks: on the wheel face must be intact (apparent to the inspector). Removal of the plastic material on the inside of the wheel is not allowed. **The wheels must specifically ride flat on the track, and not be beveled to ride on a narrow ridge or tilted to ride on an edge.** All wheels are not required to touch the track surface. The following are not to be used in conjunction with wheels or axles: bearings, washers, brushings, hubcaps, inserts or sleeves.
- 4) **Construction:** Construction of entries must not have begun before the previous year's District Pinewood Derby Race.
- 5) **Entries:** A Scout may enter only on car in the race competition. The Scout must be present to check-in his car. This is a Cub Scout/adult project, to be enjoyed by both. As such, the Scout is to participate in the construction of his entry to the best of his abilities. Any technical assistance needed in building the car should be fully explained to the Cub Scout so the he will have knowledge of his car and knowledge to use in future projects.
- 6) **Car Specifications:** (as determined by the official gauges during check-in inspection)
  - Wheelbase:** Is approximately 4 3/8" (113 mm). The original kit axle slots must be used. Please check the slots to ensure that each is at a perfect 90-degree angle to the car body. You can check the groove angles by using a square, a protractor, or even a piece of paper. Lay square on block to check for squareness and alignment of slot. **"Use two hacksaw blades side by side to redress the slots. Use the edge of the square as a guide"** As in the Boy Scouts of America official Pinewood Derby Kit instructions.
  - Wheel distance:** Approximately 1.75" between the wheels
  - Overall Width:** Not to exceed 2.75"
  - Overall Length:** Not to exceed 7"
  - Overall Height:** Not to exceed 5"
  - Max Nose Height:** Not to exceed 1.25"
  - Chassis Clearance:** 3/8" minimum is recommended to clear the track. Any car with less clearance will be Checked on the track to ensure that there will be in interference with the track.
  - Overall Weight:** Not to exceed 5 ounces (142 grams) – official scale is final.



- 7) **Weights and Attachments:** No loose materials of any kind are allowed on the car. Decorations and/or add-ons are allowed, provided they are firmly attached, do not provide any motive force to the car and do not make the car exceed the maximum dimensions allowed. Cars with wet paint will not be accepted.
- 8) **Gravity Powered:** The car shall not ride on any springs or suspension system, and it must be freewheeling. The car may not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car (e.g. sticky substances on the front of the car and protrusions which may catch on the starting pin.)
- 9) **Lubrication:** No liquid lubricants, only dry graphite, either white or black. Upon check-in graphite may not be all over the car, falling off, or otherwise messy. Any excess must be wiped off prior to check-in, so as not to foul up official's hands or the track. Once the car is checked-in the Scout may not come to re-lube it.
- 10) **Front of the car:** All cars must have a designated front and rear. At check-in the Scout must designate to the Race Official the front of the car. The front will be marked, ALL CARS MUST be raced with the front going down the track first.
- 11) **Car Repair:** Within reason, and to be decided by Race Officials, if a car experiences breakage during a race, the Scout and their adult partner may be allowed a quick (up to 5 minutes) repair of the car to enable the Scout's continued participation. If the car cannot be repaired in 5 minutes it will be disqualified.
- 12) **Car Leaves Lane:** A car that leaves its lane shall be declared to have lost the heat. If a car interferes with another car, the heat will be rerun without the car at fault. However, See Rule 13.
- 13) **Track Fault:** If a car leaves its lane, at his discretion, the Race Chairman may inspect the track and a track fault is found which could have caused the initial violation the Race Chairman can order the race heat to be reran after the track is repaired.

**General Information:** Please arrive one hour before your scheduled race time, to allow for check-in and weigh-in. If a Scout and his car are late they will not race. The race format will be: each car will race 4 times, once in each lane, the computer will throw out the cars slowest time and the other three will be averaged together. It will be these times that placement is determined from. If there is a tie the Race Chairman has the discretion of either running a runoff race or taking the time that was dropped by each car, to determine placement.

**Uniforms:** All race participants are expected to be in Official Cub Scout or Boy Scout (Webelos who have bridged) Uniform.

**Behavior:** All Cub Scouts, and other children/siblings who attend, are expected to be under the guidance of an adult or guardian at all times. Children may be cautioned or asked to leave the event for misbehavior. There will be roped off areas for only Race Officials, please respect these areas and allow a clear view of the track for families of Scouts racing at the time.

**Best of Show:** Any Cub Scout wishing to bring his car to have it judged for design is welcome to bring it in. Registration is \$7 per car (if registered by April 4<sup>th</sup> fee will be \$5) and the participant will receive a certificate and patch. There will be an impartial jury reviewing these cars. There will be a 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place trophy for the Best of Show.

**Cars after Pack race before District Race:** It is recommended that the Pack Pinewood Derby Race Chairman impound the cars in his pack that will be going to the District race and hold them until the race day. This helps assure no damage or alterations are done to the car. The Pack Race Chairman can then hand over the car to the Cub Scout prior to the race check-in so that he may graphite his car and check it in himself.