

PINEWOOD DERBY RULES

- Each car must pass a technical inspection during the official car registration before it may compete. This will include vehicle weight check, vehicle dimension check, wheel shape inspection, wheel axle inspection, and wheel lubrication inspection.
- The race officials have the right to disqualify those cars that do not meet the specifications, or violate these rules and regulations in any way. The cars will be impounded at check-in and returned after the race.
- If a car fails any part of the inspection, the scout and a parent or guardian will be given the opportunity to make adjustments to the car. Race officials will re-inspect the car after adjustments until the car passes inspection or until the scheduled check-in time has ended.
- Once a car is checked in it may only be handled by race officials. Once the check-in desk closes, no other cars will be accepted. Race officials have the authority to re-inspect any cars, at any time before, during, or after the race, and all cars are subject to immediate disqualification if they are found to be out of compliance with the rules.

RACE DAY PROCEDURES

- Only race officials will be allowed to enter the track area. Everyone else must remain outside of the barricaded area.
- Races are time based and shall follow the same venue. The track has lanes with electronic timers. The race order of the cars will be randomized. Races will be run in heats. The winner of each heat will race again for the championship of each rank.
- Times are determined to the 1/1000th of a second. In the event of a tie, the cars that are tied will have a runoff.
- If a car jumps off the track, leaves its lane and interferes with another car, the heat will be rerun. If the same car leaves its lane a second time and interferes with another car, that car will be disqualified.
- The decisions and rulings of the race officials are final. Inappropriate or unsportsmanlike conduct by any participant or member of the audience will be grounds for expulsion from the competition and race area.

CAR GUIDELINES

- Cars must be built using the materials in the Official BSA Pinewood Derby Racing Car Kit or the Grand Prix Pinewood Derby Axles & Wheels. This includes the pinewood block, axle nails, and wheels. With the exception of decorative or construction items (weights, glue, lubricants, finishing materials), only materials from the official kits may be used.
- Separately purchased items (including but not limited to contoured pinewood bodies, machined wheels, and full length axles) are specifically prohibited.
- The car being entered shall be a new car – not a car built for a previous race. (Except sibling races)
 1. Length, Width and Clearance
 - a. The maximum overall width (including wheels and axles) shall not exceed $2 \frac{3}{4}$ (2.750) inches.
 - b. The minimum width between the wheels shall be $1 \frac{3}{4}$ (1.750) inches. The car must clear the center guide on the track.
 - c. The minimum clearance between the bottom of the car and the track surface shall be $\frac{3}{8}$ (0.375) inch. Nothing may hang below the car. The car must clear the center guide strip on the track.
 - d. The maximum overall length shall not exceed 7 inches.
 - e. The maximum overall height shall not exceed 4 inches.
 - f. The wheel-base (distance between the front and rear axles) may be changed from the kit body distance of $4 \frac{1}{4}$ (4.250) inches. Use of either a new slot cut or drilled hole for axle locations is allowed. The two rear wheels and the two front wheels must be positioned directly across the body from each other. Staggered wheelbases are not allowed.
 2. Weight and Appearance
 - a. Weight shall not exceed 5 ounces (141.75 gm) on a scale accurate to 1/10 (0.1) ounce. **Some scales are more precise and therefore cars may have a weight of up to 5.04 or even 5.049 ounces. On a scale accurate to 1/10 (0.1) ounce these weights would still produce a weight of 5.0 ounces and are acceptable.** The reading of the official scale shall be considered final. Cars can be re-weighed and adjusted prior to check-in as time allows. **If eligible for a district race and planning to race, you must be prepared for adjustments to weight as scales may vary.**
 - b. The car may be built up to the maximum weight by the addition of solid material securely built into the body or firmly affixed to it. Liquids or loose materials of any kind (e.g. mercury and lead shot) are strictly prohibited in or on the car.

- c. Details such as steering wheel, driver, spoiler decals, painting and interior details are permissible as long as these details do not exceed the maximum length, width, height or weight specifications.
 - d. Cars with wet paint or glue will not be accepted.
 - e. The front of the car shall be clearly identified or labeled and visible from the top or front of the car. Cars not clearly marked that go down the track backwards will not be rerun.
3. Wheels, Axles, or Suspensions
 - a. Axles and wheels shall be only as provided in the Official Grand Prix Pinewood Derby Kit.
 - b. Wheels may be lightly sanded to smooth out molding imperfections on the tread or center hole areas. Beveling, tapering, thin sanding, wafering or lathe turning of the wheels is prohibited.
 - c. The nail axles supplied must be used. Axles may not be altered in any way except for polishing.
 - d. The wheel holes may be enlarged using a #43 bit to prevent splitting.
 - e. Wheel bearings, washers, bushings and hub caps are prohibited.
 - f. The car shall not ride on any type of springs.
 - g. **A car must run on all four wheels. No three wheel cars. (Note that a three wheel car includes a four wheel car with one wheel that does not consistently turn and bear the weight of the car. Such a car is not allowed.)**
 4. Starting
 - a. The car must be free-wheeling, with no starting device or other type of propulsion.
 - b. The car shall not have any recess or shaping in the front that affects its position at the starting pin.
 5. Lubrication
 - a. Only dry powder lubricants (e.g. graphite and powdered Teflon®) may be used.
 - b. Lubrication will not be allowed after the car has been checked-in or during the race.

DO NOT TAKE ANYTHING FOR GRANTED!

If you have any questions about building the car or the race, call your Den Leader, Cubmaster, Committee Chairperson, or Race Chair.

DAY OF RACE

- Scouts are asked to arrive 45 minutes prior to their race time.
- Race area will be a restricted area.
- Parents are asked to help keep their children behind the line so that everyone can watch the race.
- Order of cars in each race will be determined by race officials.
- Trophies and certificates will be awarded after all races are concluded.
- Car repairs are only allowed in the supervised repair area. Contestants will have 5 minutes to make repairs.

OTHER RULES

- Once cars are weighed in, they will be set aside and the scouts will not be able to hold them.
- If at registration, a car does not pass inspection, the owner will be informed of the reason and given time within their rank weigh-in to make corrections.
- Only the Derby officials will set up the cars and start the races.
- The racing electronics will officially determine the winner of each race.
- If a race official's ruling is questioned, a three member committee will render a final ruling. The committee will be comprised of the Cubmaster, Committee Chairman, and the Derby Chairman. If one of the committee members is not present, the Committee Chairman will appoint a replacement.
- **ALL SCOUTS AND PARENTS MUST HAVE A LOT OF FUN!**