

Your Cub Scout should have the experience and fun of racing a car that he has built from the materials in the official BSA Grand Prix Pinewood Derby kit provided by the Pack. Adults and others should only guide and help. We will run separate races for each den and will break the larger dens in half. The top two finishers from each group will advance to the Pack Championship race to determine the top five fastest cars for 2012!. ALL CARS MUST PASS INSPECTION TO QUALIFY FOR THE RACE.

Only official BSA Grand Prix Pinewood Derby wood block, wheels, and axles are permitted. No after market high performance wheels or solid one-piece axles will be permitted (even if sold by BSA). *The only exception is the colored wheels and axels sold by BSA, which conform to the same specifications as the black wheels in the kit.*

Length, Width, and Clearance

- Width – maximum overall width (including wheels and axels) must not exceed 2-3/4”.
- Length – maximum length of the car shall not exceed 7”.
- Height – maximum 4”
- Width Between Wheels – minimum 1-3/4”.
- Bottom Clearance between car and track – minimum 3/8”

Weight and Appearance

- Weight – shall not exceed 5 ounces (141.75 grams). The readings of the Official Race Scale present at Car Check-In will be considered final.
- Details, such as steering wheel, driver, spoiler, decals, paint, fenders, and interior detail are permissible so long as these details do not exceed length, width, and weight specifications.

Wheels and Axels

- Axels – only the axels supplied with the kit may be used. Axels may be polished.
- Wheels - may be lightly sanded to remove the mold projection on the tread. ***This light sanding is the only modification allowed.*** Beveling, rounding, or tapering of the wheels is prohibited.
- Wheelbase (distance between front and rear axels) – may not be changed from the body kit distance of 4-1/4”.
- Wheel bearings, washers, or brushings are prohibited.
- Car shall not ride on any type of spring.
- Car must be free wheeling with no starting devices.
- Use of official BSA Pinewood Derby Axle Guards is permitted

Lubrication

- Only dry powdered lubricant is permitted (e.g., graphite). Other lubricates, such as oils and silicone sprays are prohibited.
- Cars may be lubricated before inspection. No other lubrication will be permitted. The only exception to the preceding is that owners of the cars in the Pack Championship may be permitted to add graphite prior to the Championship at the discretion of the Race Officials.

Check-In and Inspection

- Cars from the previous years are not permitted.
- Cars will be inspected by the Race Officials at the designated in check-in time prior to the race for compliance to the specifications. Cars will be impounded following Inspection until after the race.
- Each car must pass inspection by the Race Officials before it may compete.
- If at registration, the car does not pass inspection, the owner will be informed of the reason and provided the opportunity to make the necessary adjustments.

- The Race Officials will be available at the check-in to assist with the adding or removing of weight. To help, please bring your own weights (we will have drills and screwdrivers, etc.).

The Race

- Only Race Officials will be permitted in the track area.
- All Scouts will compete in an intra-Den competition. At the Race Officials discretion, Dens may be combined to facilitate the intra-Den competition (e.g., if one Den has significantly fewer boys than another at the time of registration).
- For each such competition, the Scouts in that Den will gather near the starting line. As the cars for a heat are announced, each Scout is responsible for "staging" his car in the Starting Gate. Those Scouts then move to the Finish Line to watch the heat. A Finish Line judge will return the cars back to the starters table after the heat has ended.
- All races are timed with the lowest accumulative time being awarded 1st, the second lowest 2nd, and so forth. An electronic sensor and software program will be used to determine and track times for all participants.
- The number of heats to be run is at the discretion of the Race Officials and will be announced on the day of the race (between 4 and 8)
- In case of a tie, a runoff of the tied cars will be conducted with the number of races equal to the number of cars in the runoff (i.e., rotation of track).
- The top two cars in each den will be impounded for the Pack Championship.
- If a car leaves the track, runs out of its lane, interferes with another care, jumps the track, or loses an axel or any other part, it is judged as finishing last. If a car interferes with another car and negatively affects that car's result, the race should be run again. In the case of lost parts, if the car can be repaired quickly, it can be run in additional heats. It is at the Race Officials discretion to re-run any heat due to problems with the track or software that are beyond the control of the racers.
- Race Officials' decisions are final.

Tips

- Decide on a design and make a drawing.
- Shape the block carefully and be sure to sand it a lot.
- Paint the body parts before assembling the car to avoid getting paint on the axles. Several coats are best but be sure to allow the paint to dry between coats.
- Add decoration (Decals are Cool!!)
- To remove burrs on the nail axles before adding wheels, use fine sandpaper or emery paper.
- If there is a mold seam on the wheels, sand very lightly. The wheels are hollow and break easily if too heavily sanded. Another danger of too much sanding is that the car will "high center" on the track.
- Use white glue or model cement to hold the pin axle in the body. Measure the distance between axles before securing.
- Fishing sinkers or other weights may be incorporated in the body to add weight, but the total weight cannot exceed 5 ounces (4.99 ounces is Best). Place the weight just ahead of the back axle.
- **HAVE FUN!!!!!!!!!!!!!!!!!!!!!!**