

## Arrohattoc/Crater District Pinewood Derby General Rules

1. All participants must build a new car each year. Cars used in a previous year, if discovered will be disqualified. Prebuilt purchased cars are not allowed.
2. A Scout is allowed to enter only one car.
3. All Scouts from a unit are eligible to participate.
4. Registration times are absolute with no exceptions. Scouts are encouraged to pre-register on-line by March 1 through Black Pug to ensure they are registered on time, but walk-ins will be allowed.
5. A Scout can only participate in one division each year and must be present at check-in and the race to have his/her car raced.
6. The race committee will determine additional rules to be followed, if needed and will share this information with all units.
7. Six divisions for Scouts will be raced: Lions, Tigers, Wolves, Bears, Webelos, Arrow of Light. There will be an "outlaw" race for adults and siblings to enter.
8. The decisions of the race committee, and any necessary interpretations of the rules, or judgements not covered by these rules, are final and will be made with the best interest of all concerned.
9. The scale use by the race committee is the official and final weight determination device regardless of how your car weighed during your unit race or at home.
10. All cars will be weighed the day of the race by the race committee.
11. All races will start as close as possible to posted times.
12. The Scout must be present to race and enter his/her own car into competition. Official Scouting America uniforms are highly recommended for all Scouts.

## Construction Rules

1. Each car will be constructed from the materials provided in the official Scouting America Pinewood Derby race kit. Cars cannot be constructed from Pinecar or Revel kits.
2. Overall WIDTH shall not exceed 2  $\frac{3}{4}$  (2.75) inches.
3. Overall LENGTH shall not exceed 7 inches.
4. Maximum HEIGHT is 5  $\frac{1}{4}$  (5.25) inches due to the height of the finishing gate.
5. Length and width will be measured on the day of the race.
6. WHEELS can be trued and polished, however they cannot be rounded or beveled. Wheels may not be altered by the use of a lathe. Such actions will result in disqualification. The appearance of the wheels must be essentially the same as they come in the kit with only minor shaping to make them run smoothly. No wheel covers are allowed.
7. AXLES must be the ones provided in the official BSA kit. Axles may be sanded or polished to remove any sharp edges.
8. The overall WEIGHT of the car shall not exceed 5.0 ounces as determined by the race day scale. It is recommended that no weight is to be added to the bottom of the car unless the weight is "recessed" into the body. Weights or objects dislodged during the race cannot be placed back on the car during the race.
9. Weights, washers, spacers, or bushings on the wheels are not allowed.
10. No types of springs or shock absorbers are allowed.
11. No starting device of any kind is allowed.
12. A minimum of 1  $\frac{3}{4}$  (1.75) inches between the inside of the wheels is needed to allow the wheels to clear the groove in the track.
13. A car must have a minimum of 3/8 inches of clearance between the bottom of the wheel and the bottom of the car to ensure that the car will not touch the guide strip on the track.
14. No lubricating oils or grease may be used. Axles may be lubricated with powdered graphite, PTFE, or silicone.
15. Each car must pass inspection by the race committee before it is allowed to compete. The inspection team has the right to disqualify those cars which do not meet specifications.

## Race Procedures

1. Each Scout must be present to have their car raced.
2. If a car breaks down or if anything falls off of the car during the race, it cannot be repaired unless the damage is caused by another car, in which case the Scout will have five (5) minutes to complete any necessary repairs.
3. Lane placement will be by random selection. A fair rotation of the lanes will occur during elimination heats.
4. The race will employ a double elimination format. A Scout will have to lose (come in 4<sup>th</sup> place) twice to be out of the race.
5. The order of finish in each race will be determined by a photoelectric cell located at the finish line that is triggered as soon as any part of the car blocks out enough light to activate the sensor.
6. Any malfunction of a car due to the fault of the track or any race committee person will be allowed to be re-raced.
7. If a car interferes with another car due to the fault of the car, the wrecking car will be ruled as finishing last and the other cars will be allowed to continue to race in the next heat. Cars leaving the track or wrecking on their own will be scored in 4<sup>th</sup> place.
8. After the car has passed the check-in inspection, it will be placed in the proper holding area (impound) and the Scout, their parents or other adult(s) will not be allowed to touch or modify the car.
9. All cars not finishing in 1<sup>st</sup> place for their division will be returned to the Scout after the division race. The winning car for each division will remain impounded until after the final race for the district.
10. The Scout must bring all questions to Race Officials promptly. If a question comes up which is not covered in the rules, the race committee will make a decision which will be a fair as possible and will be final.
11. Race committee decisions are final.