

TROOP 80
OWASSO CITY WIDE PINEWOOD DERBY RULES

Revised January 1, 2022

1. GROUND RULES

- a. The race is open to all Cub Scouts registered in a participating pack.
- b. Cars must have been made for this race. No cars made for a previous derby.
- c. The race will be a timed race using an electronic timer.
- d. Heats consist of 3 cars and 3 races. Each car will run in each of the 3 lanes. The 3 times will be averaged, and that time will be used to determine the winner of the race.
- e. If a car jumps off the track, the heat will be run again. If the same car jumps off the track again, it will be removed from the race and the car owner will be informed of the violation and given a limited time opportunity to modify the car to meet these rules and ran in a latter heat.
- f. If a car leaves its lane and interferes with another car, the heat will be run again. If the same car interferes again, the heat will be run again without that car. The car owner will be informed of the violation and given a limited time opportunity to modify the car to meet these rules ran in a later heat.
- g. If a car suffers a mechanical problem that prevents it from safely racing and a repair can reasonably be made by the car's owner an opportunity will be given to repair and race in a later heat. If the car is judged by Troop 80 as not being able to be reasonably repair the car it will be disqualified.

2. LENGTH, WIDTH, & CLEARANCE-(specs are in place to ensure track clearances)

- a. Maximum overall width (including wheels and axles) shall not exceed 2 $\frac{3}{4}$ ".
 - b. Minimum width laterally between the inside edges of the wheels shall be 1 $\frac{3}{4}$ ".
 - c. Minimum clearance between the bottom of the car and the track shall be $\frac{3}{8}$ "
- Note: items b & c are so the car will clear the center guide strip.**
- d. Maximum length shall not exceed 7". No part of the car may extend past the start gate.
 - e. Total height of the car cannot exceed 4 $\frac{3}{4}$ " (track end gate clearance).
 - f. The wheelbase may be changed (The distance between the front and rear axle).

3. WEIGHT AND APPEARANCE

- a. Weight shall not exceed 5 oz. (141.75 grams). The readings of the official Troop 80 race scale will be considered final.
- b. The car may be built up to max. weight by the addition of wood or metal only. No liquids.
- c. Details such as steering wheel, driver, engine, spoiler, windshield, decals, painting and interior details are permissible as long as these details do not exceed the maximum length, width, and weight.
- d. Details and weight must be securely affixed to car. No loose or shifting materials of any kind are permitted.
- e. Cars with wet paint will not be accepted.

4. WHEELS AND AXLES

- a. "ONLY" the official BSA Scout Grand Prix wheels and axles can be used. (Wheels and axles provided in BSA kit box or official BSA accessories.)
- b. Wheel bearings, washers, or bushings are prohibited.
- c. The car shall not ride on any type of springs.
- d. The car must be freewheeling with no starting device or other propulsion.
- e. No axle holding devices may be used. The nails MUST be in the wood provided in the BSA kit.
- f. No hub caps are permitted.
- g. Wheels must remain flat. No "Tapering", "Beveling", "Shaving (narrowing)", or other modification of the wheels
- h. Cars must have 4 or more wheels

5. LUBRICATION

- a. Only powdered lubricants, such as graphite, may be used.
- b. No liquid lubricants are allowed. Oils and spray lubricants may melt the plastic wheels and get on the track.
- c. Cars may be lubricated before inspection. No further lubrication will be permitted.

6. INSPECTION AND DISPUTES

- a. Each car must pass inspection by the Troop 80's official inspection team and scale before it may compete. The inspection team has the right to disqualify those cars which do not meet these rules. The car owner will be informed of the violations and given a limited time opportunity to modify the car to meet these rules at time of check in.
- b. The car owner has the right to appeal the inspection team's interpretation of these rules. In a case of disputes Troop 80 Adult leadership will make a final ruling.

7. MISCELLANEOUS

- a. At official Weigh-in weight may be taken off cars found to be over-weight. At the discretion of race officials, adding weight to cars found to be underweight may be allowed if check-in time allows.
- b. Once cars have been inspected and registered, cars will stay in the possession of Troop 80 until the end of the race.
- d. **No graphite will be allowed in the building** (please apply prior to arriving at check-in or go outside).