## Pack Pinewood Derby Rules

## General Rules:

- 1. The Pack Race is for the Cub Scouts of Pack 141 and the Frontier Girls of Troop 377.
- 2. The Open Race is for the family members of Cub Scout Pack 141 and Frontier Girls Troop 377.
- 3. Cars will race against each other to determine the fastest car.
- 4. The Race Committee will determine the race method.
- 5. Winners will not be determined until after all cars have run the predetermined number of rounds.
- 6. Trophies are awarded to the top three finishers of the Scout Race and the Open Race.
- 7. Trophies are also awarded to the Most Original and Best Show car.
- 8. All cars entered must be made from official BSA Pinewood Derby kits, which include the original block of wood, original axles and four original wheels.
- 9. Each participant may only register one car.
- 10. Each car must pass inspection at registration and cannot be alter once registration is complete.
- 11. If a car fails to pass inspection, the owner of the car will be given the opportunity, with in the official weigh-in period, to make adjustments.
- 12. Because of the design of the mechanism that determines the winner of each race, we recommend that you **do not** alter the front bottom of your car since this is the part triggers the mechanism.
- 13. If it is not obvious at the time of registration as to what is the front of a car, the participant will have to designate what is the front and the car will be marked accordingly by the Race Official.

## Car Specifications:

- 1. All cars entered <u>must</u> comply with the following specifications to compete.
- 2. Cars may not exceed 2-3/4 inches in width.
- 3. Cars must fit in the Official Pack Derby Box, which measures the length of the car (approximately 7 inches).
- 4. Cars may not exceed 5 ounces or 142 grams (1 ounce equals 28.4 grams) in weight according to the Official Pack Derby Scales.
- 5. Cars may only use axles and wheels contained in the Pinewood Derby kits
- 6. No washers or bearings may be used on the wheels or axles.
- 7. No spring suspensions.
- 8. Wheels cannot be altered to change the footprint (shape; surface area in contact with the track). Flashing (mold seams) may be removed, but wheels may not be narrowed, ridged, or otherwise altered.
- 9. The wheelbase (distance between front and rear axles) may not be modified. If the pre-cut grooves for the axles are not true (square to the chassis) the grooves may be re-cut to make them true, however, the wheelbase must be maintained.
- 10. Every effort must be made to ensure all four wheels are touching the track. Some minor play is allowed, however gross errors will be cause for disqualification.
- 11. Axles may only be polished to remove flashing (molding seams, e.g. burrs). Axles that have been modified (e.g. polished to reduce the diameter of the axle or axle heads) will be cause for disqualification.
- 12. Dry lubricants are the only authorized lubricants. No wet lubricant is allowed.
- 13. No hubcaps or wheel coverings may be used to hold in lubricant.
- 14. All weights must be securely fastened to the car.
- 15. No sliding or liquid based weights are allowed.
- 16. If a car breaks down during a race, only the repair or replacement of that part is allowed, and only if it affects the basic performance of the car (e.g., a wheel comes off). A weight coming off the car does not affect the basic performance of the car. A heat will not be re-run due to a car's mechanical failure.
- 17. No Parent will be allowed into the race or show area (impound lots) once cars have been registered, except to assist in making repairs, and then only under the supervision of a Derby official.
- 18. Any dispute, challenge of the rules, or rules decision will be taken to the Pinewood Derby Committee. The decision of the Pinewood Derby Committee is final.

Note: If you plan to enter the District Race, your car must meet the strict guidelines set forth by the District Race Committee. They may be slightly different then the Pack rules.