## Pack 754 Pinewood Derby Car Race Rules

- 1) All cars, wheels and axles must be from the BSA Model Kit ONLY. Only BSA official parts are permitted. **No parts manufactured, modified or machined by any third party are allowed.**
- 2) All **cars must be made by the Scouts.** Parents or other adults may give assistance, but the Scout should do the main work designing and building the car.
- 3) No car will be permitted to race without the racer [the Scout] present.
- 4) All cars must **pass inspection** to qualify for the race. The inspection points are as follows:
  - a) The car must have been made by the Cub Scout during the current year. Cars cannot be reused.
  - b) Dimensions of the car shall not exceed 7 inches long by 4 inches tall by 2-3/4 inches wide including the wheels. Wheels must be at least 1 5/8 inch apart; track clearance at least 3/8 inch.
  - c) The weight of the car shall not exceed 141.7 grams (5.00 ounces). No loose, moving or liquid weight is permitted. The official weight is determined by the district scales at check-in. Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications (and firmly attached).
  - d) Scouts may sand and polish their own wheels and axles. Wheel bearings, washers and bushings are prohibited. Grooved or machined axles or wheels are prohibited.
  - e) The running surface of the wheels must be flat. Rough edges and mold marks may be removed. Wheels may be polished. Coned hubs are allowed. Do not reduce the weight of the wheels. The beading must be intact. Wheels modified beyond what a Scout can do WILL NOT BE ALLOWED TO RACE. Specifications of the wheel will be based on the year the wheel was manufactured. Wheels that have been rounded, thinned, wafered, machined, lathed, weight reduced or otherwise modified will not be allowed.
  - f) New axle holes and differing wheel bases are allowed. The car must be freewheeling. **ALL FOUR WHEELS MUST TOUCH AND ROLL FLAT ON THE TRACK**. No canting or "rail riding".
  - g) The front of the car must have a flat area to accommodate the starting gate. The flat surface must be perpendicular to the bottom of the car so there is no starting advantage.
  - h) No part of the car may extend past the starting gate. The car shall not ride on any kind of spring. No starting devices are allowed
  - i) Axles may be lubricated with **dry lubricants only, i.e. graphite.** All lubricants must stay on the car and must not foul the track. **Oil based or liquid lubricants are strictly prohibited.**
  - j) No hubcaps are permitted.
  - I) Any Scout car that does not meet these specifications will be given the option of fixing the

car before final check-in.

- 5) Once the car has been weighed and inspected, the car will be placed on a table to await the start of the race. Once checked-in, only the designated pit crew may handle the cars until after the race. No further modifications can be made to the car. If the judges see a problem, it is at their discretion to ask the Scout to correct the problem. Every attempt will be made to allow each Scout to race.
- 6) Each heat will be announced. The Starter/judge will make sure the cars are on the track properly and then the race will start.
- 7) Pinewood Derby Cars that have loose parts either will have to remove the loose parts or the car will not be able to race. Cars that can't stay on the track during the race will not be able to race.
- 8) If a rule violation is suspected at any time, the car will be examined by the Race Official, which may include removal of axles or wheels for inspection if required. Race Officials may disqualify cars that do not comply with the rules, or move the car to the Outlaw Race at the judge's discretion.