

Pack 99 Pinewood Derby Rules

Specifications:

Length:	Not to exceed 7 inches
Width:	Between wheels – 1 $\frac{3}{4}$ inches minimum
Total Width:	Not exceed 2 $\frac{3}{4}$ inches
Weight:	Not to exceed 5 ounces
Clearance:	No less than $\frac{3}{8}$ inch and no more than $\frac{1}{2}$ inch

SCOUTS SHOULD USE THE MATERIALS SUPPLIED WITH THE OFFICIAL CUB SCOUT GRAND PRIX PINEWOOD DERBY KIT.

Rules:

Car Body:

1. The wood provided in the kit must be used. The block may be shaped any way that is desired. Additional wood elements may be added, but the core body of the car must be from the original kit block.
2. Cars may be altered or decorated using additional stable materials such as drivers, engines, exhaust pipes, or windows provided that the car meets the dimension and weight specifications.
3. No part of the car can extend past the front of the starting pin. Additionally the wheels may not extend beyond the rear of the car or past the front of the car.
4. Wheelbase can be extended.

Wheels:

1. Wheels must be the wheels included in the kit. **ONLY OFFICIAL BSA GRAND PRIX PINEWOOD DERBY WHEELS** are allowed. All markings must be intact on inside and outside of wheel. You may use the official BSA colored wheels.
2. Outer wheel surface may be sanded, shaved, lathed or polished to remove any imperfections, to true roundness, and to remove mold castings and burrs, but must **not** be reshaped in any way to minimize tread contact or alter aerodynamics.
 - a. No rounding of the wheel treads – they must remain flat.
 - b. No grooving, H-cutting, V-cutting, crowing, tapering or dishing
 - c. No narrowing of the tread surface or altering the wheel profile
 - d. No drilling sidewalls
3. Coning the hubs, truing the inside edge of the wheel, and removing the outer hub step down is allowed.
4. Wheel bore may be polished.
5. There must be at least four wheels on the car; however, it is not required that all four wheels make contact with the track surface – one wheel may be lifted from the track surface. Each wheel must be mounted on an axle, on the outside of the car, and on the vertical side of the car.

Axels:

1. Nail type axles as found in the official BSA Pinewood Derby kit must be used.
2. Modifications to the axles are allowed that include straightening, sanding, polishing, and grooving. Beveling and tapering of axle head is allowed.
3. Axles may be lubricated with dry lubricant (graphite) only to reduce friction.

4. Axles can be mounted by drilling axle holes or by inserting into the slots on car. Note: use of the pre-cut axel slots is **not** mandatory. However, make sure the car meets the clearance specifications above if alternate positioning is used.
5. No solid axles will be allowed.

Miscellaneous:

1. Cars must have been constructed this year. Cars that have been previously used in a Pack 99 Pinewood Derby may not be re-used.
2. Good sportsmanship is expected at all times by everyone present at the race.

Prohibited Items that CANNOT be used:

1. Magnets, springs or suspension systems of any type
2. Starting devices, finish line devices, propellants, or propulsion systems. Cars must be free-wheeling.
3. Liquids, wet paint, oil of any kind or sticky substances
4. Glass or excessively fragile parts
5. Electronic or lighting devices
6. Bearings, bushings, washers, sleeves, hubcaps or inserts attached to or in contact with the axle, body or wheels.
7. Solid one piece rod style axles

Inspection:

1. Official weigh-in and inspections will be held one week before the official race. The car, upon passing the inspection and weigh-in, will then be placed in a secured location until the day of the race. (**THE CAR WILL NOT GO BACK HOME WITH THE SCOUT**)
2. Cars that do not pass inspection will be given 3 days to correct the problem. It will be the responsibility of the scout to make arrangements to have the car inspected and placed in the secured location.