



Pack 80 - Mountain View

Official 2019 Pinewood Derby Rules



UNIFORMITY OF RULES

For fairness and uniformity, all cars and participants must comply with these rules. **BY REGISTERING FOR A PINEWOOD DERBY RACE, EACH PARTICIPANT ACCEPTS THESE RULES, THE TRACK, THE SCALES AND OTHER EQUIPMENT USED, THE SCORING SYSTEM, THE LANE(S) ASSIGNED, AND ALL DECISIONS BY THE RACE OFFICIALS.** Anything not covered in these rules is at the discretion of the race officials, whose decisions are final on all issues.

PACK RACES

This Pinewood Derby shall include an Official Class for cars built by current Cub Scouts from the official BSA kit. For fairness and uniformity, only limited modifications are permitted to cars in the Official Class. The idea is for everyone to have fun on a level playing field, where the child of a single parent living in an apartment with no tools can compete on an equal basis with the child of a rocket scientist with a complete computer-guided machine shop.

All cars competing in the Official Class must be built primarily by Cub Scouts, with assistance by others only as necessary. Any car which race officials reasonably believe was not built primarily by a Cub Scout may, at the discretion of the race officials, be disqualified or be allowed to race but not be eligible for awards.

Pre-registered cars will be inspected for conformance with these rules by the Pinewood Derby chairperson.

After inspection and registration only race officials may handle the cars, which shall be placed in a holding area to be removed only for racing.

Races will be run on a four-lane track. Each car will run four times, once in each lane. The software will take the total time of the four runs for each car to determine the winners. Cars are racing against the clock and technically not racing the other cars in their heats.

A "Pit Area" will be available **only** for cars that require modification for compliance (see rule 1 below), or to repair a car that has become damaged (see rule 3 below).

Appearance Competition: There will also be awards for cars built by Cub Scouts based on the design, construction, finish and overall appearance of the cars.

Sibling Competition: The Pinewood Derby will include a Sibling Class, which will be run under these rules as if the sibling were a Cub Scout. These cars are not eligible for the Appearance Competition.

Outlaw Competition: The Pinewood Derby will include an Outlaw Class, with its own race and set of rules.

GENERAL RULES

1. All cars must pass inspection to determine conformity with these rules before being allowed to register. Cars not conforming to these rules shall not be registered and shall be returned for correction. Any car that cannot be brought into conformity by the time registration closes will not be permitted to compete.
2. After registration, no weight shall be added or additional lubrication permitted.

3. If a car is damaged during registration or a race, or jumps the track during a race, one repair period for a maximum of five minutes will be permitted. If the car is not ready to race after five minutes it may be disqualified. If a car jumps the track three times during a single race heat, it may be disqualified.
4. Cars shall be powered by gravity only.
5. No loose materials of any kind are permitted in or on the cars.
6. No lead (Pb) or other hazardous materials are allowed (weights or otherwise)
7. No part of a car may be constructed to extend beyond the back of the starting gate.
8. When a car is registered either end may be designated as the “front” but the designation may not be changed later.
9. Prior to presentation of awards, winning cars may be subjected to a teardown inspection at the discretion of the race official(s). Any car discovered during post-race teardown inspection to be non-conforming shall be disqualified, and final standings adjusted accordingly. Under no circumstances shall correction or adjustment be permitted of a car discovered during postrace teardown inspection to be non-conforming, nor shall any race be re-run.

OFFICIAL CLASS RULES:

1. The only acceptable kit for construction of cars competing in the Official Class is the official Boy Scouts of America kit consisting of a one-piece wood block car body, zinc-plated nails for axles and wide tread plastic wheels, designated as Grand Prix Pinewood Derby Car Kit. The basic body block, axles and wheels must be official BSA parts; however, decorations and accessories may be purchased through non-BSA sources.
2. Cars competing in the Official Class must be built primarily by Cub Scouts, with assistance by others only as necessary, and must have been constructed within the past 12 months.
3. Dimensions of cars competing in the Official Class must conform to the following:
 1. Width: 3 inches maximum, including wheels and axles.
 2. Track: 1~3/4 inches minimum between inside edges of wheels.
 3. Length: 7 inches maximum.
 4. Weight: 5 ounces (141.75 grams) maximum.
 5. Height: 3~1/2 inches maximum.
 6. Clearance: 3/8 inch minimum bottom clearance, inclusive of weights and accessories.
4. Cars must have 4 wheels which can only be the official BSA wheels provided with the BSA car kit. **3 wheels MUST touch the track.** Wheels shall not be modified or reshaped in any way. Wheels may be mounted on a mandrel in a drill, drill press, lathe or mill, but may only be sanded to remove molding burrs and shall not be “turned” or machined for concentricity or roundness. Wheel running surface (“tread”) must be kept flat and parallel to the track surface. **Remolding or reshaping of the wheel axle hole is prohibited.** Wafering of bearings, axle sleeves or bushings are prohibited.
5. Cars must use the official BSA axles provided with the BSA car kit. Axles must be inserted in the **original grooves** cut in the car body as provided. Re-drilling of the axle holes, particularly with a drill press or mill, is not permitted. No axle supports are allowed other than glue or putty to secure the axles in their slots. Wheelbase (lengthwise distance between the axles) may not be changed.
6. Only dry graphite or white Teflon powder lubrication may be used.