

# Chippewa Valley Council- BSA

## Official Pinewood Derby Rules and Specifications



The Pinewood Derby is an event intended for family participation. Cub Scouts, their parents, and friends join together to design and build a miniature race car. While building the fastest car is a goal of many, the real winners are the majority of Cubs who have learned new skills and developed a positive bond with their parents or others as they build their cars. It is a joint venture where the Scout is expected to do most of the work. The Cub Scout WILL NOT have this positive experience if his car is assembled by parents or other skilled adults.

All participants must be made aware that the instructions enclosed in the Official BSA Kit are only suggestions. While a Pack may establish any rules it likes for use at its own Derby events, the District rules included in this document shall be in effect at all District races. Failure to adhere to them will result in disqualification (and disappointment) if scouts advance to the District race.

- The pinewood derby car shall be constructed from official BSA components. The block of wood, wheels, and axle(nails) may be purchased in a kit or separately but must be official BSA components. The use of any other wood block, wheels, or axles is strictly prohibited. Additional wood and other materials may be added to the wood block to add accessories to the car.
- All cars entered in the Derby are to be built and finished by the Cub Scout during the six months prior to the District Race. We encourage the car to be built brand new.
- The Cub Scout should be present at the Derby for his car to run. However, if an emergency arises another Cub Scout of the same rank may serve as a substitute and race the car on behalf of the Cub Scout who cannot attend.
- On the day of the Derby, before final registration, the Cub Scout may add dry graphite only to the axle and wheels. No other lubrication is allowed. This is the only time the car can be lubricated during the Derby.
- The car will only be handled by track officials after it is registered. After the race, the car will be returned to the judge's table. No repairs or modifications can be made after inspection or during the race.
- Decisions of the Derby Committee are final.
- Each car must pass all Derby Committee inspections before being registered and allowed to race.
- If during inspection, or at any time before the start of the race, a car does not meet these specifications, the builder will be allowed to correct these areas of violation as long as modifications are completed and inspected before the end of the 1<sup>st</sup> heat of the race.
- If a car leaves the track during a heat, the heat will be declared no contest and will be rerun. If the same car leaves the track again during the rerun heat, it will be disqualified. The only exception to this rule is if track debris or the track itself causes the problem.

**REMEMBER THAT ALL DECISIONS OF THE DERBY COMMITTEE ARE FINAL. FOLLOWING THE RULES IS THE BEST WAY TO TRY TO BE FAIR TO EVERYONE.**

### PINEWOOD DERBY ASSEMBLY SPECIFICATIONS

#### DEFINITIONS

**Cub Scout Construction:** Adults may provide guidance, construction and safety tips, or demonstrate steps involved in construction, but should keep in mind that the Derby is a race matching the products of 7 to 10 year-old boys. Safety considerations must be observed at all times and no Scout should be asked to do more than is deemed reasonable and safe.

**Wheels:** Only the Official BSA wheels issued in the calendar year may be used. The wheel tread surface may not be altered except being a flat surface. FLAT MEANS FLAT. Rounding the tread area to minimize wheel surface contact is not allowed. Wheels judged to be in violation of these rules will have to be replaced before the car will be allowed to race. No narrowing or rounding of the wheels or tread surface is allowed.

**Axles:** Only the axles supplied in the BSA kits may be used. Polishing to remove small burrs is allowed. Axles judged to be in violation of these rules must be replaced before the car will be allowed to race.

#### FINAL CAR ASSEMBLY

- The front of the car may not have slots or indentations past the starting position of the car. The front center of the car must touch the starting pin.
- The width of the car can be no less than 1 ¼ inches and no more than 2 ¾ inches.
- The length of the car can be no less than 5 inches and no more than 7 inches.
- The wheel base may be altered as long as the wheels do not extend past the body of the car. The wheels must stay within the car body and no part of the wheel shall be outside the body of the car.
- The inside spacing between each wheel pair must be 1 ¾ inches and the wheels must be mounted at points on the body that will support this spacing.
- The clearance under the car shall be 3/8 inch with the wheels on.
- The weight of the car shall not exceed 5.00 ounces, as measured by the District Derby Committee Scale.
- Wheel bearings, washers, and bushings are prohibited.
- Any details added must be within the length, width, and weight specifications. The wheels shall not be covered with any substance, decal, or material that would obscure the wheels during inspection.
- The car shall not ride on any type of spring.
- The car must be freewheeling, with no starting devices.
- No loose materials of any kind (such as lead shot or coins) are allowed in or on the car. No liquid, moving weights or hazardous materials will be allowed.