



2012 Catoctin Mountain District Super Derby OFFICIAL BUILD RULES

Derby cars are small pinewood models of specified dimensions, **designed and carved by Cub Scouts** under parental guidance, and raced by the Cub Scout under Scout Leadership supervision. The pinewood derby cars are gravity powered and run unaided down a regulation racetrack to a finish line. A strip placed down the center of each lane guides the cars in a straight path.

- 1. Pinewood derby cars must be built and qualify at the Pack Derby during the same program year as the Catoctin Mountain District Super Derby race.
- 2. Any Pinewood Derby Kit may be used as long as BSA (Boy Scouts of America) Wheels and Axels are used. (This year there is two different wheel sets from BSA, see attachment for more information.)
- 3. Only the axles (nails) contained in the official pinewood derby kit can be used as the pinewood derby axles. However, the axles can be sanded or polished, and affixed (glued, etc.) to the underside of the pinewood derby car. (How to check BSA nails. Leave Nail tips exposed)
- 4. No magnets are allowed to be used on or in the Pinewood Derby Car.
- 5. You may not change the wheel dimensions. Wheels may not be rounded, pointed, concaved, shaved or otherwise modified. You may, however, sand the tread or tire contact area of the wheel to smooth out the rough spots. Wheel bearings, washers, and bushings are prohibited. The car will not ride on springs of any type. Wheel covers or hub caps are prohibited, the head of the nail must be viewable for inspection. The axels (nails) maybe polished and stamping imperfections removed but the shape and size of the head may not be altered. The recommended wheel and axle lubricant is dry, powdered graphite.
- 6. **EXTENDED WHEEL BASE/ CAR BODY:**
The axel grooves provided in the block of wood **do not** have to be used. The wheel base may be altered. The total overall length of the car may not exceed 7 inches.
- 7. **The only acceptable lubrication is dry powder lubricants.** Oil, grease, silicone spray, or other lubricants are not permitted on the pinewood derby car's axles or wheels.
- 8. No loose materials or liquid of any kind are permitted on or in the pinewood derby cars. (Loose material used for weights is the most frequent violation of this rule. **If the car rattles it fails**)
- 9. The overall pinewood derby car width shall not exceed 3 inches. The overall pinewood derby car length shall not exceed 7 inches. The overall pinewood derby car height shall not exceed 4 inches.
- 10. The unobstructed clearance of the pinewood derby car must be 3/8 inch or more from the total underside of the car to the base of the wheels. (This is for track clearance)
- 11. The pinewood derby car shall not exceed the standard 5.00 ounces (Avoirdupois ounces, not troy ounces) or 141.75 grams. The weight of the pinewood derby car should be close to 5.00 ounces prior to coming to the derby; however, the pinewood derby car weight may be adjusted during registration at the Pit Table.
- 12. **Direction of Travel** will be marked on car and easily identifiable. (**On bottom is fine**)
- 13. Cars not meeting the official derby rules will be disqualified from racing. Alterations may be attempted during the registration time before the start of the first heat. There will be a workshop area with some tools and supplies to make modifications.

