



2009 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 and axel spacing is 4 3/8". For example **Pinewood Pro precut kits can be used as a starting point, but the cub must still use BSA wheels and axels (nails).**
- 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 in the slots which were precut into the car.
- 4. Wheel bearings, washers, hubcaps, bushings, shims, etc., are not permitted for use on the wheels or axles..

• 5. Only the wheels contained in the official BSA pinewood derby kit can be used as pinewood derby car wheels. The wheels can not be modified into shapes such as “V” or “U” or Thinned to reduce friction or weight. Only imperfections can be removed from the wheels. The installation of weights in the wheels is not permitted. Purchased ultra wheels will not be allowed to race. See the last page for example.

• 6. Axle slots have been precut into the wood block provided in the kit. Axle slots must be spaced to the original 4 3/8” spacing. The slots may be relocated (moved forward or back) but must maintain the 4 3/8” spacing

• 7. No part of the car can extend beyond the starting post and the front of the car must be no higher than 1/2” off of the track where it contacts the starting post.

• 8. Oil, grease, silicone spray, or other lubricants are not permitted on the pinewood derby car’s axles or wheels. **The only acceptable lubrication is dry powder lubricants.**

• 9. No loose materials 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**)

• 10. 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 3 inches.

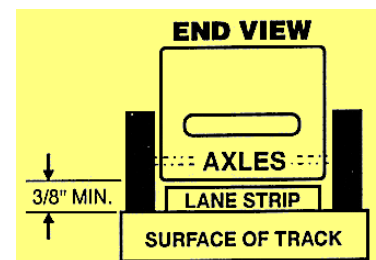
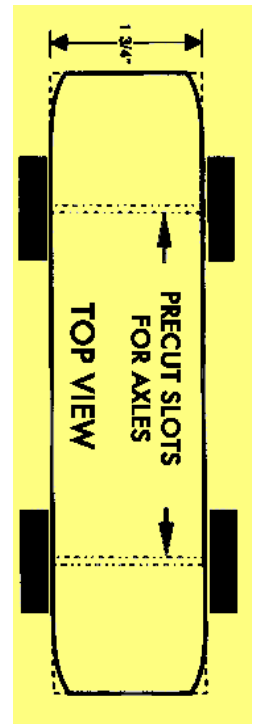
• 11. The unobstructed clearance of the pinewood derby car must be 3/8 inch or more from the total underside of the car to the base of the wheels. (This is for track clearance)

• 12. The pinewood derby car shall not exceed the standard 5 ounces (Avoirdupois ounces, not troy ounces) or 141.75 grams. The weight of the pinewood derby car should be 5 ounces prior to coming to the derby; however, the pinewood derby car weight may be adjusted at the registration Pit Table during registration.

• 13. The pinewood derby car can be painted and/or waxed to finish the car for the purpose of reducing air friction. Plating or plasticizing of any part is not permitted.

• 14. **Direction of Travel** will be marked on car and easily identifiable.

• 15. 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.



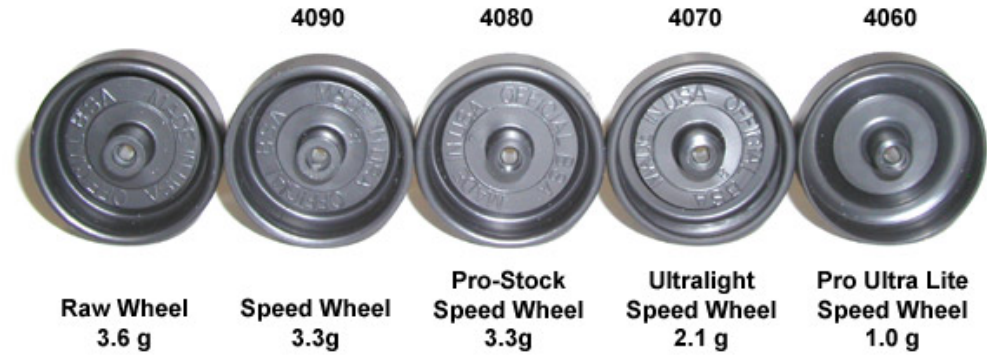
This is an example, I will not list every manufacture that is out there.

The following is from Maximum Velocity Inc. The only wheels accepted at CMD Derby is the 4090/4091 style.

Model	Trued Tread	Coned Hub	Trimmed Edge	Reamed Bore	Weight Reduced
4090/4091	Yes	No	No	No	No
4080/4081	Yes	Yes	Yes	Yes	No
4070/4071	Yes	Yes	Yes	Yes	Yes
4060/4061	Yes	Yes	Yes	Yes	Yes



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