

Michigan Boy Scouts of America Field Service Council's Common Technical Rules for Pinewood Derby Cars



Car Kit

1. The BSA National Supply Pinewood Derby Car, part # 17006, must be used.
2. Details such as steering wheels, driver decals, fenders, paintings, and exterior details are permissible as long as the inclusion of these details does not exceed the length, width, weight, height, and ground clearance specifications and race inspectors can still view wheels and axles for inspection.

Dimensions

1. The total overall width must NOT exceed 2-3/4 (2.75) inches and the total overall length must not exceed 7 inches.
2. The wheel track must be between 1-3/4 (1.75) inches and 1-7/8 (1.875) inches.
3. The clearance between the bottom of the car (including added-weights) and the flat surface on which the car is placed must be at least 3/8 (0.375) inches.
4. The car's height may be no more than 6 inches as measured from a flat surface to the highest point on the vehicle.
5. The car must not hang up on the track during the race.

Weight and Weights

1. The total weight of the racer must not exceed 5.00 ounces (141.75 grams) which shall be determined by the official scale.
2. No loose materials of any kind will be allowed on the car.
3. No taped-on weights will be allowed. Must be glued, screwed or sunk in.
4. Liquid or movable weights are not allowed. For example, the BB shots in a hollowed out compartment of the race car must be firmly attached to the race car and not loose in the compartment.
5. Weights must be attached to car body only (not to wheels or axels).

Axles and Wheels

1. The stock wheel base length of 4 13/32" must be maintained to within 1/32" tolerance.
2. The two pre-cut slots provided on the block of wood in the kit are the required location for placing the official BSA nail axles into the car. YOU MAY NOT change axle location (cannot move forward, backwards, raise or lower).
3. Wheel bearings, washers and bushings are prohibited. Body skins applied between the wheel and the body is considered as a bushing / washer.
4. The use of spring, shocks, or starting devices is strictly prohibited.
5. The Derby Car MUST be freewheeling.
6. Do not cover axle or axles.
7. Axles may not be altered in any way (except the light sanding to remove the burs).
8. The axles must be the steel axles supplied with the wheels (they will be checked with a magnet).
9. Axles MUST be aligned with each other (front right axle even with the front left axle and back right axle even with the back left axle).
10. The wheels must be those from the BSA Grand Prix Pinewood Derby Kit or the BSA approved (will have a BSA logo on them) Black or Colored wheels. NO SUBSTITUTIONS ARE PERMITTED!
11. Competition wheels sold by hobby shops and modified wheels that have been altered are not allowed.
12. Wheels CANNOT BE MODIFIED other than removing the seam from the tread area as instructed in the kit.
13. Hubcaps (such as stickers on the outside of the wheel), paint or any other markings on wheels is not allowed.
14. CARS MUST HAVE 4 WHEELS ONLY AND SIT EQUALLY ON A FLAT SURFACE!

Lubricants

1. Only dry graphite or BSA approved Teflon may be used for lubrication of wheels on axles. If any other type is used, the car will be disqualified.
2. Derby Cars must be lubricated for the last time BEFORE check-in and will race all races without further lubrication.

Design

1. Scouts and Parents must be willing to certify that, on their honor, the Scout designed the car and participated in the fabrication of the car.