

BLACK SWAMP AREA COUNCIL (BSAC) 2023 PINewood DERBY RULES FOR PACK, DISTRICT & COUNCIL RACES



These rules are the official rules for the BSAC Pinewood Derby and are to be used for the Pack, District and Council races.

NOTE: Rules included in the Pinewood Derby Car Kit are **not** official BSAC rules.

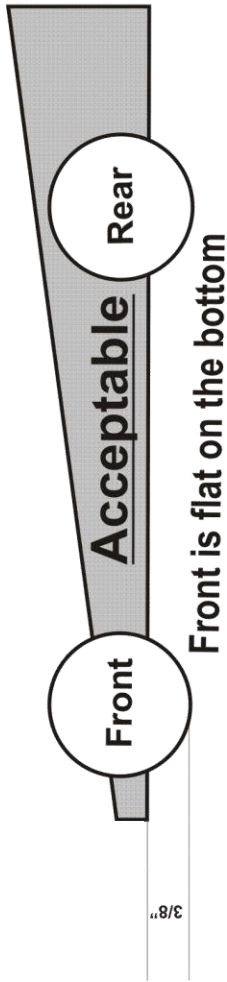
1. **Kit** - Cars must be built with the materials furnished in the **NEW** Official BSA Pinewood Derby Car Kit. **NOTE: BSA National changed the design of the wheels and axles in 2009. The Official Pinewood Derby kit must be purchased from the Scout Shop in Findlay or Lima or an official BSA Distributor. Other brands, such as Pine Car, have different axle spacing and different size parts and will be disqualified. Pre-cut cars from official BSA distributors must comply with design specifications listed below.**
 - A. A new car must be built each year BY THE SCOUT who is racing and the Scout must be present at the race.
 - B. Only one car per Scout can be entered in the Scout race.
 - C. **The same car without modifications must be used for the Pack, District and Council races.**
2. The car may not be designed in any way, which would give unfair advantage at the starting gate or hinder the track starting mechanism to add momentum.
3. **Width** - Overall car width including wheels, axles and accessories shall not exceed 2 ¾ inches. Minimum width of wheels must clear the track being run. Center rail sizes of tracks vary.
4. **Length** - Overall car length shall not exceed 7 inches. This includes any accessories attached to the car. **NOTE: Verify wood block length before starting to cut out your car, as some blocks are slightly longer than 7 inches.**
5. **Height** – The car must be able to clear the track starting gate and timing unit or end gate.
6. **Weight** - The completed car shall not exceed 5.00 ounces. The car may be hollowed out and built to a maximum weight by the addition of solid material provided it is securely built into the car.
 - A. **Weights secured by tape will not be allowed.**
 - B. Loose or liquid materials are not allowed. No movable weights. NOTE: Googly eyes are considered MOVABLE.
 - C. Details added to the car, such as, steering wheel, driver, decals etc., are permissible if they are securely fastened to the car and do not exceed the car's weight or size limit.
 - D. **Ground Clearance** – the distance from the bottom of the wheel to the bottom of the car must be no less than 3/8 inch, in order to clear track runners. The 3/8-inch clearance also applies to any weights and/or attachments on the bottom of the car. **(See diagrams on page 3.)**
7. **Shape** - The car may be of any style, but no part of the car may extend beyond the front bumper, which rests against the starting pin. (See diagrams on page 3.)
 - A. "U" or "V" shaped front ends are not allowed.
 - B. **The forward most part of the car must be the lowest part of the car.** No barge type or stepped noses.
 - C. The center of the front of the car must be at least ¾ inch wide, no pointed fronts, as viewed from above the car.
8. **Front End** – The block is made with a "short" spacing and a "long" spacing from the end to the axle slot. Either end is acceptable to be the front of the car. The shape of the front must meet the requirements.
9. **Wheelbase** - **The distance between axle slots may not be altered.** **NOTE: Wheelbase, or distance between axle slots, is different on Pine Car kits and will disqualify your car.**
10. **Axles** - Only the nails furnished with the kit are allowed. Only post-1999 Official BSA axels may be used. **Axles must be installed in the slots provided by the manufacturer.** Axles may be polished. Bending the shaft of the axle is permissible, as long as all other clearances are maintained. No other alterations to the axles are allowed. NOTE: The difference between 2009 and post-1999 is the length of the nail and the location of the crimp marks on the axle.
11. **Lubrication** - Powdered graphite is the recommended lubricant. No liquid lubricant or waxes are permitted. Lubrication must be applied to axles prior to weigh-in. **Lubrication is NOT allowed to be added after the car has passed inspection or during racing.**
12. **Design** - The car shall not ride on any type of springs, have independent suspension, or be designed as a spring. The car may not have any starting devices. The car must be freewheeling and gravity driven.
13. **Magnets** - No magnetic material may be used on the car.

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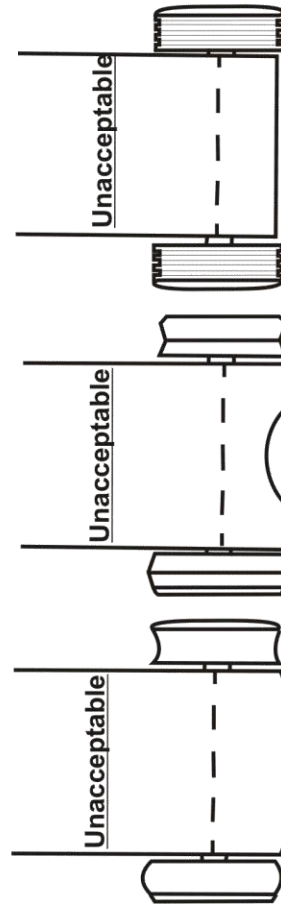
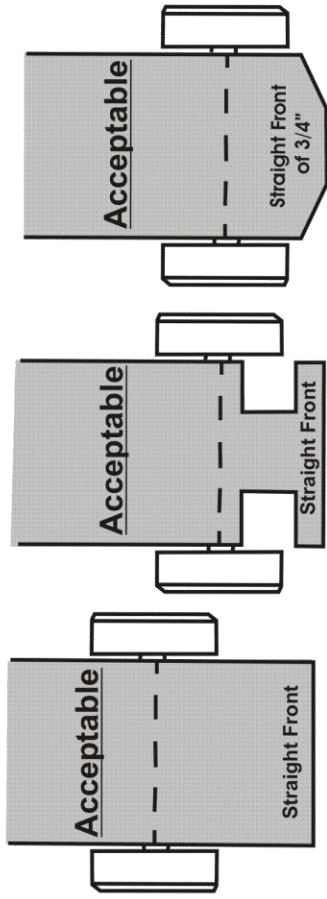
14. **Wheels** - Only the **NEW 2009** Official BSA Pinewood Derby wheels may be used. Black or colored wheels (red, blue, yellow and orange) are acceptable. All four wheels must be installed in-line with the axle slots on the derby car.
 - A. The only modification allowed is **polishing** of the tread area, but it must remain flat. The tread area may not be rounded, grooved or shaped to a point. (See diagram on page 3.)
 - B. Ridges must be untouched.
 - C. Wheel/tread/sidewall width and/ or diameter may not be shaved or altered.
 - D. Hub width and/or diameter may not be shaved or altered.
 - E. No drilling holes in the side of the wheels.
 - F. No wheel bearings, bushings or washers are allowed. The wheel must spin on the authorized axle.
 - G. No hubcaps on wheels are allowed. However, you may paint only the hubcap area and lettering of the tire.
 - H. **New tire identification hint:** Inside sidewall has three injection divots and tread area has no injection mark.
 - I. **Old tire identification hint:** Tread area has injection mark and inside sidewall has step around hub.
15. Once the car is weighed-in and accepted for competition, it will be placed in the custody of racing officials and will not be taken out until the car is scheduled to run. This applies to Pack, District, and Council level races.
16. During the racing event, cars can only be handled by a race official or by the Scout to whom they belong and only after obtaining permission from an official. At the discretion of a race official, a scout may be allowed to correct car alignment at starting gate.
17. Inspectors decisions are FINAL. **Appropriate Scout behavior is expected of everyone.**
18. Do not deviate from official rules and regulations at Pack or District events. Cars that are allowed to deviate are not guaranteed to pass at District or Council events. That means, only cars which meet the rules should be allowed to race.
19. Council event qualifiers from District races include:
 - Speed (First, Second and Third for each rank).
 - Paint/Design (up to 1 entry per rank)
 - Cars winning at the Pack and District level only compete in the next level in the category in which they received an award. That means: Speed winners compete for Speed trophy, Paint/Design winners compete for Paint/Design trophy. All categories must follow all the rules. (Paint/Design entries must also meet all the rules.)
 - Webelos 2 can participate in the Council race, even after they crossover into a Troop, as long as they have qualified for the race.
20. District race format is at the discretion of sponsoring Unit. (Example: double elimination, best time, bracket style racing)
21. Council race format will be best time, twice down each lane of the track.

Council Race will be held on April 29, 2023.

Front end design specifications:



Front end design specifications:



Must have a flat front
Wheels are rounded

Must have a flat front
Wheels are V-grooved

Must be in front of wheels
Wheels are grooved