

Gulf Stream Council

Official Pinewood Derby Rules & Regulations

Each participating Cub Scout is to build a completely new car each year using an official Pinewood Derby car kit (BSA Part #17006 or Officially Licensed Kit). The dimensions of the car must meet the minimum and maximum standards. The cars will run on an aluminum, wooden, or composite track dependent upon availability. The cars will be released from a starting point at the top of the track and race down the track with the use of natural gravity only. No motorized starters, enhancers, or bearings will be used to give the car an unfair advantage. No car or any portion of a car, including, but not limited to, wheels and axles, may be used from a previous derby's car. To minimize unnecessary costs, only weights from previous cars may be used. **See OFFICIAL CHECK-IN Section.**

PARTS AND MATERIALS: Official pinewood derby car kits, weights, wheels, axles, and other optional accessories may be purchased from a BSA Store, website, or officially licensed products available from an array of vendors or websites. Please keep in mind that any purchase from the Scout Shop benefits our Council. There are hundreds of websites that sell pinewood derby parts and accessories that claim to be BSA approved. Please bring it to the attention of a race official for verification and approval prior to purchasing any items from these sites. We do not want to disqualify a scout's car for unapproved parts.

WIDTH: Maximum overall width allowable, including wheels, is 2 ¾ inches. After-market side rails are permissible as long as they do not extend past the wheels.

LENGTH: Maximum overall length allowable is 7 inches. No portion of the car will be allowed to extend forward of the starting pin/gate. The furthest point on the front of the car **MUST** make contact with the starting pin.

HEIGHT: Maximum overall height allowable is 6 inches to ensure the car can safely pass under the electronic finish timer without interference. All decorative elements, accessories, and attachments must remain within the 6-inch maximum height at all times during inspection and racing. Any part that extends beyond the height limit must be removed prior to official check-in. All components of the car must be securely attached and rigid. Hinged, flexible, spring-loaded, or movable vertical features that could extend beyond the height limit during racing are not permitted. Race officials reserve the right to measure height using an official gauge during inspection.

CLEARANCE: Minimum clearance under the body is 3/8 inch. This is measured by placing the car on a flat surface with the wheels mounted and measuring from the lowest point of the wood block to the surface. This will prevent the car from bottoming out on the track. The minimum clearance between the inside of the wheels is 1 ¾ inches. While the wheels are mounted, measure the front wheels from the inside of the wheel to its opposite front wheel. Repeat for rear wheels. This will prevent the cars' wheels from rubbing on the side of the track's center riser guide.

WHEEL BASE: Axels and axle slots cannot be moved or modified in any way and must be used.

WEIGHT: Weight cannot exceed 5.0 oz. (141.75 grams). The car may be hollowed out and built up to the maximum weight by additional wood, metal, or any other **SOLID** material, provided they are securely attached to the body of the car. No loose material of any kind is permitted in or on the car. At no time can liquids be used as a weight, as it will give an unfair advantage to that car by using inertia as an additional means of movement. Gravity is the only means of power that is permissible. Lead is permissible for weight provided that it is completely enclosed within the body of the car. Non-Toxic Official BSA weights are commercially available. Hint: thumb tacks are a good source of minute weight to get close to 5.0 Oz.

MATERIAL: The car body, wheels, and axles must be from the official Pinewood Derby car kit (BSA Part#17006 or

equivalent). The car may not ride on any type of springs. Details such as decals, pin stripes, cockpit accessories, and interior detailing are permissible as long as the car does not exceed the maximum weight. Plastic and metal detail parts are allowed as long as they are securely attached to the body and chassis and do not exceed the maximum length, width, and height.

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WHEELS: Wheels must be from the official Pinewood Derby car kit (BSA Part #17006 or equivalent) or from the optional colored Cub Scout derby wheels & axle kit (BSA Parts #17553, 17554, 17555, 17556, and 17557). Wheels may be lightly sanded only to remove bumps, burrs, and ridges. They may not be shaved or reduced in diameter or width. Wheels may not be beveled, tapered, or in any other fashion modified from the original size and shape. Wheels may not be painted. Wheel covers, bearings, washers, and bushings are strictly prohibited.

AXLES: The axles (round head nails) must be from the official Pinewood Derby car kit (BSA Part # 17006 or equivalent) or from the licensed optional colored Cub Scout derby wheels & axle kit (BSA Parts #17553, 17554, 17555, 17556, and 17557). Axles may be polished using files, sandpaper, etc., or by using the Pinewood Derby High Performance kit (BSA Part 16988) to remove burrs, scratches, and ridges. The axles may not be machined or reduced in diameter anywhere along the axle shaft. One-piece axles that extend the entire width of the car or any other substitute axles are not permitted. All four wheels need to make contact on a flat surface. The axle nail may not be bent in a way that prevents the wheel from making contact with the track.

LUBRICATION: Pinewood derby axle lubes (BSA Part #17106 and 17019) are permissible lubrications. Powdered graphite lubricant will be allowed; do not use an excessive amount. Graphite will stain most surfaces and could cause the cars to not travel down the track properly. Lubricant must be applied prior to inspection and registration of the car. No lubrication is permitted after registration or during the derby.

INSPECTION: The car must meet weight, clearance, and size requirements as stated above and use only the materials listed in these Pinewood Derby Rules or approved by authorized race officials. A pit stop (or repair table) will be provided on race day, and for the use of all participants, there will be some tools, but we suggest bringing a repair kit for last-minute repairs or modifications before final check-in. A car with illegal parts may have them replaced or removed before registration, and the car will be allowed to participate in the race providing it passes re-inspection. Any car using illegal lubricants will be automatically disqualified. If the car is broken down and the illegal lubricant is completely cleaned off the car, the car may be re-inspected by the race chairman for a determination on reinstatement.

OFFICIAL CHECK-IN: All cars competing in the Council Pinewood Derby must pass official Council check-in and inspection. At this station, each car will be weighed and officially marked on the bottom with a permanent marker indicating the race date, weight, and the official's initials. This marking verifies eligibility for the Council race and ensures the vehicle has not been altered or reused from a previous competition year. Please use a fine-tip marker whenever possible, as these cars represent significant time and effort by the Scouts who built them.

***CAR IMPOUND:** To ensure fairness and consistency across all Districts, all Pinewood Derby cars advancing to the Council Pinewood Derby shall be impounded at the conclusion of the District race. Each District shall designate one adult responsible for impounding all cars eligible for the Council race. The designated adult shall be responsible for the secure storage, transport, and official check-in of all impounded cars at the Council Pinewood Derby. Once a car is impounded, no modifications, repairs, adjustments, or lubrication of any kind are permitted before the Council race, except for powdered graphite.

DISQUALIFICATION: A car or scout could be disqualified from the race if any of the following occur:

- Any use of improper material as outlined, including, but not limited to, lubricant, wheels, axles, or body.
- Adjustments or repairs made in accordance with what is stated in the "Inspection" paragraph will permit the scout or car to remain in the race.
- Changing the car after registration, except for authorized repairs.

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- Removing the registration marking from the car. (See CHECK-IN)
- Handling any car without permission of the judge(s) or race official(s)
- Not following the instruction of the judges(s) or race officials(s)
- Not following any other rule specified for the Pinewood Derby

CONDUCT: The Pinewood Derby is a FUN event.

- It was designed to promote good Sportsmanship and competition.
- In addition, all scouts are winners, learning how to build and take pride in their creation.
- Any scout, parent, scout leader, sibling, or other spectators who use any offensive language, act in an unsportsmanlike manner, throw objects in anger, or make any threatening gestures will be removed from the race event and not permitted to return. If the offender is a scout, the scout's car will be immediately withdrawn from the race, and the scout will be asked to leave the event. The Pack Leaders will discuss possible disciplinary actions at a later time.

HANDLING: Only the Cub Scout who has entered the car or a race official may handle the cars being raced.

RACE PROCEDURE: Due to the wide array of tracks and timing methods (electronic, stop watches, etc.) Each Pack will clearly post their timing rules and race rules before the event. The decision of the **Chairperson and the timing committee is final.**

RE-RUNS: The starter will declare a re-run of the heat if a car leaves the track. When a car has left the track and requires repair, the scout and parent will be allowed up to five minutes to repair the car at the pit stop area only. If the car is damaged again in the same heat, it will be deemed un-repairable and withdrawn from the race. If a car leaves the track, the car will be allowed to rerun up to three times before it is declared un-raceable and withdrawn from the race.

PROTESTS: If a scout believes he should have a rerun, he may make a protest to the Race Chairman as to why he should be allowed to rerun. The Race Chairman will review the protest and make an immediate determination. Reasons for reruns would include, but not be limited to:

- car riding up on the center guide
- hit by another car during the race
- debris on the track
- The track came out of alignment

All protests will be considered, and the determination by the Race Chairman is final.

PARTICIPATION: Every Cub Scout must be present to race his car and receive any award. Should the need arise, the judge(s) and/or race official(s) reserve the right to allow substitutes. This will be on a case-by-case basis.

Arrow of Light Scouts: The participation of AOL Scouts in Pack Pinewood Derbies that occur after a Crossing Over Ceremony shall be up to the individual Pack. Arrow of Light Scouts will not be allowed to participate in the District or Council Races.

SUGGESTIONS: Packs have had Arrow of Light Scouts compete in an “unlimited” class locally, allowing the scouts to be creative in their builds. Please remember that this event is to promote Good Sportsmanship.

NOTE: OTHER PACK DERBY COORDINATORS MAY USE THESE RULES FOR THEIR EVENT WITHOUT REQUIRING PERMISSION. THIS STATEMENT CONSTITUTES GRANTING PERMISSION. THE ABOVE RULES MAY ALSO BE ALTERED TO FIT PACK FORMAT

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