

Chesapeake District Pinewood Derby Rules (2011)

(no change from 2010)

These rules are set forth to allow substantial creativity in design of the cars while trying to level the playing field by disallowing more advanced modifications that are beyond the means of most Cubs Scouts and their adult partners. Any questions on clarification to the rules are welcome and may be directed to Dave Oshman, Chesapeake District Pinewood Derby Chair, doshman@comcast.net, 410-335-5419.

Official Grand Prix Pinewood Derby Rules (rules in the box)

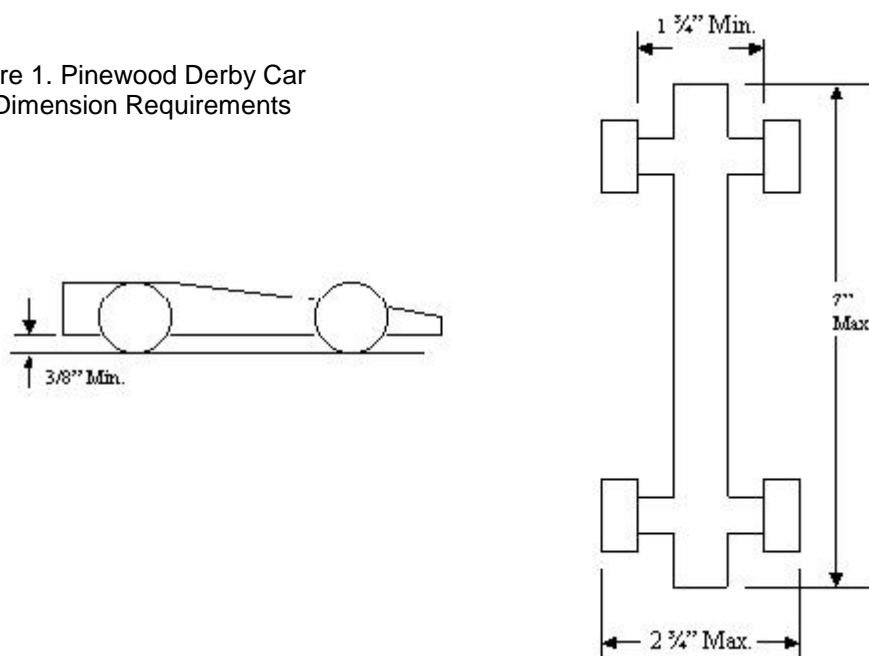
CAR SPECIFICATIONS:

- Width: - 2-3/4" - Length - 7" - Weight - Not over 5 Ounces
- Width between wheels - 1-3/4"
- Bottom clearance between car and track - 3/8"

RULES

Wheel bearings, washers, and bushings are prohibited. The car shall not ride on springs. Only official Cub Scout Grand Prix Pinewood Derby wheels and axles are permitted. Only dry lubricant is permitted. Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications. The car must be free-wheeling, with no starting devices. Each car must pass inspection by the official inspection committee before it may compete. If, at registration, a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official weigh-in time period to make the adjustment. After final approval, cars will not be re-inspected unless the car is damaged in handling or in a race.

Figure 1. Pinewood Derby Car
Dimension Requirements



Additional Rules for Chesapeake District

Participation: The top three finishers from each rank in each Pack (Tiger, Wolf, Bear, year 1 Webelos, and year 2 Webelos) in the Chesapeake District are invited to the Chesapeake District Pinewood Derby. You must be present to race!

Inspection: All cars will be inspected during check-in for compliance to the specifications set forth in these rules. Cars for each rank must be checked in during their check-in time period. Your Scouts are recommended to arrive before their scheduled check-in times. Once check-in has closed for that rank, racing will begin for that rank. If a Scout arrives after their rank check-in is completed, they will be allowed to check-in in their arrived place in line (will not be advanced to the front because they are late!). If the late Scout misses a race that they are scheduled for, they will receive a Did Not Finish for that race. Cars can be checked in early but registration preference will be given to the rank scheduled for that check-in time slot. Cars built for previous race years will not be allowed to register. All cars will be assigned a number for identification.

Appeals: The Cub Scout must make all questions of rules interpretations, procedure and fact to the track officials promptly. If a Cub Scout fails inspection for violation of one of these rules, the Scout can repair the car but must complete registration by the required time. The Scout may appeal rulings to the Inspection Chair. Rulings by the Inspection Chair are final.

Construction: All cars entered to race must be built by the Scout with possible help from an adult partner. One of the primary purposes of the Pinewood Derby is for the Scout to learn to work with tools and do their best to build something with an adult partner. Purchase of complete, pre-built Derby cars is strictly forbidden and goes completely against all of what the Pinewood Derby stands for.

Impound: Cars will be impounded when registered. After being impounded, repairs will be limited to replacement of axles/wheels that are broken/lost or pieces that have fallen off the car during the race. Time for the repairs will be limited to a maximum of 5 minutes. Cars may not be modified after passing inspection. Only Track Officials may handle cars once they are impounded, except in the case of repairs, as specified above. Cars will be placed on the track and individually aligned and double-checked prior to the start of each heat.

Body: The body in the Official BSA Pinewood Derby Kit must be used. Bodies of other materials will be grounds for disqualification. Pre-cut bodies are allowable as initial starting points so long as the pre-cut body is made from the block of wood in the Official BSA Pinewood Derby Kit. The body may be shaped, hollowed out, or built up from the original block, as long as it meets all other specifications. Any additions to the original body, i.e. steering wheels, drivers, decals, paint, weights, etc., must be firmly attached but need not be official BSA products. Axles must be inserted directly into wood (axle holes or slots) and not another material placed into or on the pinewood block.

Weight: The weight of the race-ready car must not exceed five (5.00) ounces as measured on the official scale used during registration.

Height: The maximum car height will be 3 inches. This is to ensure that the cars are able to pass beneath the track finish line detector.

Clearance: The bottom clearance underneath the car should be 3/8". This is a recommended clearance so that the car will be able to traverse any high spots on the track. If a car does not have a clearance of 3/8", it is possible that the car's bottom will hit the track in spots. This may cause substantial performance degradation. The Cub Scout will be notified if the clearance is not 3/8" at inspection and given the option to modify their car to meet this measurement. If the Scout then chooses to race it without 3/8" clearance, he will not be allowed to modify it once it has been impounded, even if the car's performance during races has suffered as a result.

Lubricants: Only dry graphite or dry graphite/moly lubricant may be used for lubrication. No liquid lubricants, waxes, polishes, soap or other lubricants are permitted.

Wheels and Axles: Wheels and axles must be the ones furnished in the official kits or available at the official Scout Shops (the new style and colored wheels are acceptable). BSA Grand Prix Pinewood Derby wheels and axles that have been altered (smoothed, machined, polished, etc.) and re-sold by third parties are not allowed. All work on wheels and axles must be performed by the Scout or adult leader. Axles may not be plated (such as with Teflon or nickel) to reduce friction or increase diameter. The head of the axle (nail) should not be modified in any way so that the inspectors can verify that they are genuine BSA axles. No washers, bushings, bearings or springs are allowed. Wheels may be sanded to remove the flashing only. While the tread surface may be smoothed, any alteration to the tread width, thickness, or shape is not allowed. The tread pattern **MUST** remain flat across the entire tread. NO V or H grooves or rounding of tread allowed. Partial reductions to the wheel diameter by shaving are allowed solely for the purpose of “truing” up the diameter of the wheel (making it more “round”). Lathes may not be used on wheels. If the ridges that are along the circumference of the wheel are gone, the tread thickness has been reduced too much and the wheel is illegal (see Figure 2). No material may be removed from the interior of the wheel. No coverings (e.g. hubcaps) are allowed on the external hub side of the wheels as this would prevent inspection of the axles and wheel hubs.



Figure 2. Illegal (left) and legal (right) wheels (note the absence of ridges on the illegal wheel).

Other: Cars must free-wheel with no stored energy or moving weights. There is no designated front or back to the supplied body, either end may be the front. The original axle slots do NOT have to be used.

The bottom side of the car's front end where it rests against the starting peg can be no higher than 1" from the track surface. This will ensure the car properly rests against the starting peg.

When staged for racing, no part of the car may stick past the starting peg.

Sticky surfaces, magnets or any other devices or methods intended to gain an advantage ("starting device" or "down-track booster") are illegal.

Determining Finalists: Racers will be divided into TIGER, WOLF, BEAR, WEBELOS 1 and WEBELOS 2 participant divisions. Finalist determination will be on a **Time** basis where average time is used with the slowest heat eliminated for each competitor to determine the three fastest finalists in each division (all computed by the race management software). Each car will race on every racing lane on the track. Individual heats may be rerun at the discretion of the race judges (in the event of a car hopping a lane which impacts another racer) – the decisions of the race judges are final (but made in the interest of fairness). Once a car has been raced, if it is not one of the three fastest in the division, it may be returned to the Scout.

Determining Grand Finalist: Finalists will be the three fastest cars in each division. These three cars will move onto the Grand Finals—the Race of Champions. The Grand Finalist will be determined in successive heats whereby each Finalist races in each lane of the track where the average time is used to determine the Grand Finalist with the slowest heat eliminated.

Sportsmanship: Cars will be disqualified if the Scout, Scout's friends or family, or adult partners display unsportsmanlike conduct at the race site.