2021 Official Pinewood Derby Rules and Regulations

*These rules apply to the Sagamore Council District Races. Packs may choose to enforce their own set of regulations, but racers in the District Races on Mach 20 (or alternate dates if they are altered) must adhere to these standards.

The District Race is an open championship to all Scouts in each district. Arrow of Light Webelos who participated in the pack race but have crossed over may still participate. Top finishers in each of the den races/heats will go on to the District Championship Race. Awards will be given out for the den races and championship heats along with best design!

Parents and leaders are reminded that the goal of the Pinewood Derby is to help the Scouts learn how to use basic tools and execute their own design! Parents should *help* but are reminded that the real value of the Pinewood Derby isn't in the trophy but the experience.

<u>PARTS AND MATERIALS</u>: Each participating Cub Scout is to build a completely new car each year using the official pinewood derby car kit (BSA Part #17006). No car or any portion of a car including wheels and axles, may have been used in any previous year's derby. Upon the request from a judge or race official, the scout will need to provide proof of a car being newly built. Official pinewood derby car kits, weights, and other optional accessories and kits may be purchase from Boy Scouts of America approved distributors, the Sagamore Council Service Center, Cary Camp Trading Post, or www.scoutshop.org.

WIDTH: Maximum overall width allowable, including wheels, is 2 ¾ inches.

<u>LENGTH:</u> Maximum overall length allowable is 7 inches. No portion of the car will be allowed to extend forward of the starting gate.

<u>CLEARANCE</u>: Minimum clearance under the body is 3/8 of an inch. Minimum clearance between the inside of the wheels is 1 ¾ inches.

HEIGHT: 5 inches

<u>WHEEL BASE</u>: Wheel base is to be approximately 4 1/4 inches. This is measured from the center of each axle, front to back as present in the official pinewood derby car kit (BSA part #17006).

<u>WEIGHT</u>: Weight cannot exceed 5.00 oz (141.75 grams). The car may be hollowed out and built up to the maximum weight by additional wood, metal or any other material, provided they are securely attached to the body and chassis. No loose material of any kind is permitted in or on the car including, but not limited to, liquids. Materials that could potentially be health hazards are not permissible to be used as weight. Lead is permissible for weight provided that it is completely enclosed within the body of the car.

MATERIAL: The car body, wheels, and axles must be from the official pinewood derby car kit (BSA Part #17006). 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 and they are BSA standard products. 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.

<u>WHEELS:</u> Wheels must be from the official pinewoods derby car kit (BSA Part #17006_ or from the new optional colored Cub Scout derby wheels and axle kit (BSA Parts #17553, 17554, 17556 and 17557) and maybe polished using files, sandpaper, etc, or by using the pinewood derby high performance kit (BSA Part #16988) to remove burrs, scratches, 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 from the new optional colored Cub Scouts derby wheels and axles kit (BSA Parts #17553, 17554, 17555, 17556, and 17557) and 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. Substituted axles will not be permitted.

<u>LUBRICATION:</u> Pinewood derby axle lube (BSA Part #17106) and graphite are the ONLY permissible lubrication. All other forms of lubricant (oils, etc.) are strictly prohibited. Any lubrication on exposed surfaces of the wheels, body or chassis is prohibited. Lubricant, if used, must be applied prior to inspection and registration of the car. No lubrication is permitted after registration or during the derby.

<u>INSPECTION</u>: The car must meet weight, clearance, and size limitations as stated above and use only the materials specified in the parts and materials sections above. A repair table may be made available to adjust prior to registration. A car with illegal parts may have them replaced and will be allowed to participate in the race with only legal parts. Any car using illegal lubricants will not be allowed to participate.

<u>DISQUALIFICATION</u>: Per the judge(s) or race official(s), a car or scout will be disqualified and not allowed to race if any of the following occur:

- 1. Any use of improper material as outlined above, including, but not limited to: lubricant, wheels, axles or body wood.
- 2. Changing the car after registration, except for authorized repairs.
- 3. Removing the registration sticker from the car.
- 4. Handling any car without permission of the judges or race official(s).
- 5. Not following the instruction of the judge(s) or race official(s).
- 6. Not following any other rule specified for the pinewood derby.

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

THE DECIDIONS OF THE JUDGE(S) AND/OR RACE OFFICIAL(S) AR EFINAL. IF ANY SCOUT OR SPECTATOR SHOW UNSPORTSMANSHIP LIKE CONDUCT OR ARE DISRUPIVE TO THE FLOW OF THE RACE THEY WILL BE ASKED TO LEAVE THE RACING LOCATION IMMEDIATELY.