

PACK 1800 PINWOOD DERBY RULES

ELIGIBILITY

Qualification: All registered Pack 1800 Tiger, Cub, and Webelos Scouts may design, build and enter cars that are eligible to participate in the "Cub Scout Race" event. Parents or guardians, and/or siblings, of Cub Scouts registered in Pack 1800 may design, build, and enter cars that are eligible to participate in the "Open Race" event.

Competitor Categories: All Scouts that are registered within Pack 1800, and parents or guardians with registered sons may enter this Pinewood Derby. Cub Scouts will compete with others in the same Cub Scout rank: Tigers, Wolves, Bears, Webelos I, and Webelos II. All other participants will compete in the Open Class.

Attendance: The Cub Scout MUST enter his own car. This means that the Cub Scout must be present at inspection and registration to enter his car into competition.

New Work: Construction of ALL entries MUST have begun AFTER last year's Pack 1800 Pinewood Derby Race. For example, a Scout cannot use a car that he or someone else previously used. Additionally, the car must be built primarily by the competitor (i.e. DO NOT BUY A COMPLETE CAR)

Single Entry Per Scout: Only one car may be registered by each Scout in the Pinewood Derby.

DERBY CAR CONSTRUCTION

Car Design Rules Interpretation: Interpretation of the rules described herein are at the sole discretion of the Inspection Crew members.

Materials: All cars shall be constructed from official BSA Pinewood Derby materials (wood blocks, axles, and wheels.) Kits may be purchased from the Scout Shop. **Using non-BSA materials will result in disqualification.** It must be obvious to the judges that official BSA wheels, axles, and blocks are being used. All four wheels and axles must be attached to the wood block.

Painting/Waxing: The car may be painted and/or waxed. Cars with wet paint or wet glue will not be accepted. Plating or plasticizing is not permitted.

Weight: The overall car weight including all attachments (wheels, weight, decorations, etc.) shall not exceed five (5.0) ounces as determined by the scale during pre-race inspection.

Length: The overall car length, including all attachments (wheels, weight, decorations, etc.) shall not exceed 7 inches as determined by the official dimension box during pre-race inspection.

Width: The overall car width, including all attachments (wheels, weight, decorations, etc.) shall not exceed 2-3/4 inches as determined by the official dimension box during pre-race inspection.

Underside Clearance: Underside clearance of at least 3/8 (0.375) inches and inside wheel to wheel clearance of at least 1-3/4 (1.75) inches is recommended, so that the car will run on the race track. Adequate clearance is the responsibility of the race car builder.

Weights and Attachments: Weight may be added to the car and will be considered part of the car for purposes of all measurements. "Weight" is considered to be any material on the car other than the official BSA wood block, wheels, and axles. All weight must be securely fastened to the car (no loose material of any kind), e.g. by permanent glue, nails or screws, but not by "sticky substances", e.g. tape, or tack spray. Weights shall be passive, i.e. non-moveable, non-magnetic, non-electric, non-sticky, etc.

Wheel Treatment: Wheel treatment (e.g., hub and tread smoothing and polishing) may not result in substantial removal of mass, change in shape of the wheels, or in reducing the tread (track contact) width from the original kit wheels. Tread may not be undercut to reduce track contact (i.e., no so-called "H-Tread" wheels). Wheels may not be machined to a beveled condition. Some of the original "tread marks" on the wheel face must remain intact, i.e. apparent to the inspector. The words "Official B.S.A. Made in U.S.A." and other lettering on the wheels shall remain intact and clearly visible to the inspector.

Axle Treatment: Axle treatment (e.g., polishing) may not result in substantial removal of mass or change in shape of the axles. Hubcaps, washers, inserts, sleeves, or bearings may NOT be used in conjunction with the wheels or axles. Machined axles may not be used. Pre-polished axles will be disqualified.

Axle Slots: Axles may be located ONLY in the axle slots which come pre-drilled in the official BSA Pinewood Derby wood block. No new axle holes or slots may be drilled.

Gravity-Powered: The race car may not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car. (For instance, this provision disqualifies cars with sticky substances on the front of the car and protrusions which may catch on the starting pin.)

Springs: The car shall not ride on any type of springs.

Lubricants: Only dry lubricants such as graphite or powdered Teflon® "white lube" will be allowed for lubricating the axles. *Lubricants may not foul the track.* In the interest of

fairness, only one lubrication is allowed and must be completed before registration (See “Impound” rule).

CONDUCT OF THE RACES

Race Day Rules Interpretation: On race day, the Cub Scout must make all questions of rules interpretations and procedures to the Pinewood Derby chairman or race officials promptly. Decisions of race officials on questions of rules interpretations and procedure may be appealed to the Pinewood Derby chairman. All decisions of the Pinewood Derby chairman are final. Decisions of race officials on questions of fact (i.e. the result of a specific race) may not be appealed beyond the Trackmaster and/or finish line judges.

Inspection Gauges: The race-day weigh-in and registration area will have the official scale and dimension box. That check-in equipment will be the official equipment for the race.

Car Handling Responsibility: Scouts shall be responsible to present their own cars at the weigh-in and registration.

Impound: After a car passes inspection and is registered, it will be impounded by the Pinewood Derby Race Committee until all races are completed. No car may be altered in any way or lubricated after it has been registered. Only Pinewood Derby race officials may enter the impound area until the race is complete.

Re-Inspection: A car may be officially re-inspected at any point in time during the derby for possible violations. Cars not meeting the official derby rules will be disqualified from the official standings of the race.

Reporting Violations: Observation of or knowledge of any rules violation(s) must be reported to a Derby official immediately.

Rank Races: Competition will consist of heat races within each rank (Tiger, Wolf, Bear, Webelos I, Webelos II). The final results will be based on the average of the four heat times for the car.

Open Races: Open races will be run using the same rules and procedures as the rank races. Open races will follow the rank races and precede the All-Pack Finals.

Present To Race: All Scouts must be present while their car is being raced in order to win a speed award in the rank races.

Ties/Run-Offs: In the event of a tie for any position, in either rank races, a one time run-off will be run only for those cars involved in the tie.

Lane Assignment: To equalize differences among track lanes, each car will be raced four times — one in each lane on the track. The finishing order will be based upon the average time of all four races.

Car Leaves Lane (Without Track Fault): If, during a race heat, a car leaves its lane but proceeds down the track in a manner that does not interfere with its opponent, then the race will be called normally and not re-run. If the car leaves its lane and interferes with another car, the race will be re-staged and re-run. If the same car again leaves its lane and interferes with another car, the race will be re-staged and re-run without that car.

Car Leaves Lane (With Track Fault): If a car leaves its lane, at his sole discretion, the Trackmaster may inspect the track and, if a track fault is found which probably caused the initial violation, the Trackmaster may order the race heat to be rerun after the track is repaired.

Car Damage/Repair (Without Track Fault): If, during the race, a wheel falls off or the car becomes otherwise damaged, then the SCOUT may, to the best of his ability, perform repairs with the assistance of his adult partner or a pit crew member.

Car Damage/Repair (With Track Fault): If a car is damaged due to track fault, or damage caused by another car or person, then the Trackmaster may, at his sole discretion, allow additional repair assistance to the Cub.

The Race Area: Only race officials may enter the track area. This rule will be strictly enforced.

Awards: Racers will be recognized as follows:

- a) Every participating Scout will receive a Pinewood Derby patch.
- b) Trophies will be awarded to the first, second, and third-place finishers in each rank for speed.
- c) Every car not winning a speed award will receive an award for winning its own unique category (Most Creative, Most Humorous, Most Colorful, Best Paint Job, Most Patriotic, and so on) as determined by the awards committee.
- d) The top three speed finishers in the All-Pack Finals will receive a trophy.
- e) Open racers will receive trophies, but are not eligible for the All-Pack Finals awards..

The most important components of the Pinewood Derby competition are parent/son participation, good sportsmanship, and learning how to follow rules. Parents are

responsible for recognizing and encouraging these qualities in addition to traditional racing awards.

Legal Wheels



All Others Are NOT accepted. This includes the spoked wheels you can buy at the Boy Scout Shop.

Illegal Axles

