

HEART OF NEW ENGLAND COUNCIL

OFFICIAL PINEWOOD DERBY RULES

OVERALL

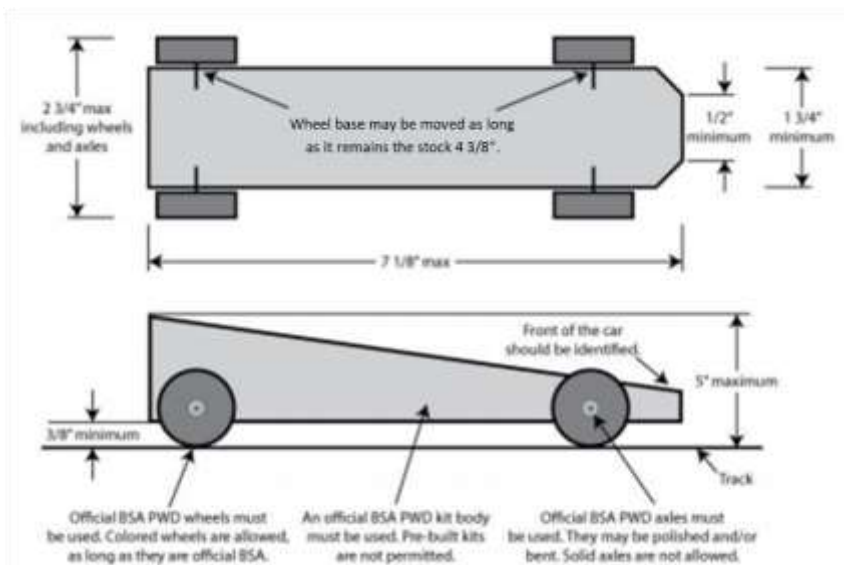
- ❖ Youth entering the Council races must be registered with a Cub Scout unit within the Heart of New England Council.
- ❖ Cars must be built by the Scout racing it, but adult supervision is encouraged.
- ❖ All cars must pass inspection and be registered to qualify for racing.
- ❖ Cars may be raced only once per year. All cars submitted must be built for the current Pinewood Derby Racing Season. No cars used in previous years will be allowed.
- ❖ The Cub Scout should be present in Field Uniform if possible.
- ❖ Cub Scouts and their parent/adult partner must read, agree to, and sign the Heart of New England Council Race Day Code of Conduct (attached).

PINEWOOD DERBY CAR KITS

- ❖ Only the Official BSA Pinewood Derby car kits may be used. Pre-built car kits are **prohibited**.
- ❖ As an alternative to the block of wood, a pre-shaped block of wood licensed by the BSA may be used with the stock BSA wheels and axles.
- ❖ Cars may not be sent to third party facilities for tuning or other performance enhancements.

CAR SPECIFICATIONS

- ❖ **Width** - Not to exceed 2 3/4 inches; including wheels and axles.
 - ❖ **Length** - Not to exceed 7 inches
 - ❖ **Weight** - Not to exceed 5.0 ounces on a scale accurate to 1/10 ounce. Weights are preferred to be inset in the body or on top of the car.
 - ❖ **Height** - Not to exceed 5 inches
 - ❖ **Axles** - body must be at least 1 3/4 inches wide at the axles to clear center guide rails
 - ❖ **Body Clearance** - must be at least 3/8 of an inch to clear center guide rails
 - ❖ **Front End** - the front center of the car (where it meets the release bar) must be at least 1/2 inch wide and no higher than 1 inch off the track. The front of the car may not come to a point or be a "v" shape.
 - ❖ **Wheelbase** - The wheel base (distance between front and rear axles) **MAY NOT** be changed. The standard wheelbase of 4 3/8 inches must be kept. Either using the grooves provided or equal distance of 4 3/8 inches between axles.
 - ❖ **Other** - Fender flairs with less clearance are acceptable as long as the center rail width clearance is maintained. No part of the car or any attachments may be capable of contacting any part of the track.
 - ❖ **Other** - No part of the car body, wheels or attachments may protrude in front of the starting pin.
- ❖ Please see image on next page for guidance:



WHEELS AND AXLES

- ❖ Use only Official BSA Grand Prix Wheels with the BSA molding mark.
- ❖ All BSA lettering, numbering, and markings must remain visible, both inside and outside the wheels.
- ❖ Colored wheels may be used, permitting that they are official BSA wheels.
- ❖ The outer wheel surface may be lightly sanded, shaved, or polished to remove surface imperfections, mold casting burrs and off-center wheel bores.
- ❖ The tread surface must be flat and parallel to the wheel bore, with a width no less than 7.5mm.
- ❖ You may add material such as glue, fingernail polish or tape to the inside of the wheel, but no material may be removed from the inside surface.
- ❖ Wheel bore treatment is allowed including polishing and/or tapping. Wheel bores may not be filled and re-drilled to alter the bore diameter or to achieve better axle fit.
- ❖ Axles must be maintained at 4 3/8 inches apart. The axle grooves may be altered for alignment purposes only.
- ❖ Some polishing and/or modification of the axles is allowed if the overall diameter is not reduced below 0.084 inches.
- ❖ It is not necessary that all four wheels touch the track; however, each wheel must be mounted on an axle, on the outside of the car, in the vertical position. Each wheel must be attached directly to the wood body of the car by an approved BSA axle and spin freely.
- ❖ No part of the wheel may overlap the center guide rail by more than 1/8 inch.
- ❖ The two rear wheels and the two front wheels must be positioned directly across the body from each other.
- ❖ **THE FOLLOWING WHEEL AND AXLE MODIFICATIONS ARE PROHIBITED:**
 - ❖ Rounding of tread surface/wheel edges
 - ❖ Grooving, H-cutting or V-cutting
 - ❖ Narrowing the tread surface, other than truing the inside tread edge
 - ❖ Drilling sidewalls
 - ❖ Hollowing, sanding or otherwise removing or modifying from inside the wheel
 - ❖ Filling of any wheel surface with any type of material
 - ❖ Reshaping the outer wheel in any way to lighten the wheel, minimize tread

- ❖ contact or alter aerodynamics
- ❖ Grooving of the axles
- ❖ Staggered wheelbases are not allowed
- ❖ Aftermarket modified wheels
- ❖ Bearings, bushings, washers, sleeves, hubcaps, or inserts attached to or in contact with the axle, body, or wheels
- ❖ Spring and/or suspension systems
- ❖ Starting devices or other means of propulsion
- ❖ Devices that alter the rotation or spin of the axles

CAR DESIGNS AND ADDITIONS

- ❖ The car design may be enhanced by the addition of other stable materials such as plastic or metal. Any additions must be securely attached.
- ❖ Details such as steering wheels, drivers, decals, paintings, spoilers, and interior detail are acceptable.
- ❖ The finished car with all additions must meet the maximum length, width, height, and weight specifications.
- ❖ No loose materials of any kind are permitted in or on the car. Cars may be inverted or shaken as part of inspection.
- ❖ Any paint used in the car design must be dried prior to inspection.
- ❖ **THE FOLLOWING ADDITIONS ARE PROHIBITED:**
 - ❖ Electronic or lighting devices that interfere with the race electronics
 - ❖ Liquids, wet paint, oil, sticky substances, or powders of any kind (other than dry axle lubrication)
 - ❖ Glass or excessively fragile parts
 - ❖ Loose objects or objects that could become loose on the car
 - ❖ Magnets

WEIGHTS

- ❖ The drilling/removal of Lead (Pb) will **NOT** be allowed at the race venues or at check-in time due to the toxicity of the material. **PLEASE** avoid using Lead (Pb) in the cars. If used, all Lead (Pb) must be **COMPLETELY** sealed and safe from all possible contact with the youth.
- ❖ Weights are preferred to be inset in the body or on top of the car. Weights may be added on the outside of the car, pending the completed car meets all specifications.

LUBRICATION

- ❖ Only dry powdered lubricants, such as graphite, may be used.
- ❖ Other lubrications such as oils and silicone sprays are **prohibited**.
- ❖ Cars must be lubricated by the participant prior to inspection.
- ❖ Once a car has been registered, no other lubrication will be permitted.

INSPECTION AND REGISTRATION

- ❖ The 'Race Day Code of Conduct' must be signed by the Scout and their parent/adult partner before their car will be considered for inspection and registration.
- ❖ Each car must pass inspection by the Official Inspection Team before it may compete.
- ❖ Car owners will be advised of any violations and given a maximum of 15 minutes to correct any violations.
- ❖ The Inspection Team has the right to disqualify any cars that do not meet the specification requirements.
- ❖ Any Scout or their parent/adult partner may appeal the findings of the Inspection Team to the Race Chairperson, whose decision is final.
- ❖ During the registration process, a number sticker will be applied to the front of the car. This will be the official number; all other numbers are decorative only.
- ❖ Once a car has passed inspection, it will be registered and garaged with Race Officials until race day.

RACE DAY

- ❖ Only Race Officials will be permitted to handle cars or be in the track area; this will be strictly enforced.
- ❖ The car whose nose is first over the finish line is the winner in that heat.
- ❖ The race itself will be a computer-timed event using a 4-lane track. Each car will race four times, once in each lane. The overall winners will be determined by the best cumulative time for all four races.
- ❖ If a car loses a wheel or breaks on the track due to design, the car will be disqualified and loses the race.
 - ❖ **EXCEPTION:** Race Officials may authorize repairs if there is a collision of another car or object.
- ❖ If a car leaves the track, runs out of its lane, interferes with another car, etc., the heat will be rerun. If the same car has troubles on the second run, the car is automatically disqualified and loses the race.

BEHAVIOR EXPECTATIONS

- ❖ Follow the Scout Oath & Law.
- ❖ Be mindful of those around you who are also watching the races.
- ❖ Show good sportsmanship; we are all here to have fun!
- ❖ Race Officials have the authority to ask anyone not following the rules to leave. This includes Scouts, parents, adult partners, siblings, and other spectators at the race.

HEART OF NEW ENGLAND COUNCIL RACE DAY CODE OF CONDUCT

SCOUT CODE OF CONDUCT

- ❖ I will *Do My Best*
- ❖ I will cheer on my fellow scouts
- ❖ I will have fun
- ❖ I will be a good sport, win or lose
- ❖ I will be proud of my Pinewood Derby Car

PARENT/ADULT PARTNER CODE OF CONDUCT

- ❖ I understand the Pinewood Derby is for and about the Scouts
- ❖ I will encourage my Scout to Do Their Best
- ❖ I will have a positive attitude
- ❖ I will encourage good sportsmanship by being a positive role model
- ❖ I will encourage everyone to have fun, win or lose
- ❖ **I understand that race officials have the right to ask me to leave if my scout, my family, my guests, or myself cannot follow the code of conduct.**

Before any Pinewood Derby Car will be accepted for inspection and registration, this form MUST be signed by both the Scout and the Parent/Adult Partner.

By signing below, I acknowledge that I have read and agree to the HNE Council's Official Pinewood Derby Rules and Race Day Code of Conduct.

Scout Name

Date

Parent/Adult Partner Name

Date