

2018 White Horse District Pinewood Derby

GUIDELINES AND RULES



District Weigh-in/Race Registration Guidelines

- The number of cars a pack will be allowed to register for the district race will be based upon their number of registered scouts as of January 1, 2018

1-30 Scouts	6 Cars
31-60 Scouts	9 Cars
61+ Scouts	12 Cars

The **MAXIMUM** allowed registered cars is 12

- Packs will need to either designate 1-2 Parents/Leaders or come as a Single Group to bring the cars to nullify confusion during registration process
- Car registration fees are \$5 Per car and can be paid for using Cash, Council Acct. or Check (Made Payable to Garden State Council)



Basic Car Specifications

Dimensions and weights:

- Cars must have been built during the 2018 Pinewood Derby racing season using an Official BSA Pinewood Derby Kit.
- Width, including wheels and axles, must not exceed 2³/₄ inches (6.99cm).
- Length shall not exceed 7 inches (17.78cm).

- Weight shall not exceed 5.0 ounces (141.75 grams) measured on a scale accurate to 1/10th of an ounce. Overweight cars must be reduced to running weight or below before they can be entered. The official race scale shall be considered final.

- Cars must clear the center rail of the track, which is 1 5/8 inches wide by ¼ inch tall along the entire length of the car. Minimum clearance between the bottom of the car and the bottom of the wheels shall be 3/8 of an inch to avoid contact with the tracks center guide strip.

- No part of the car may protrude beyond the starting pin. The front edge of the car must not be more than 1 inch above the wheel lane of the track and be at least 1/2-inch-wide at the center of the car.

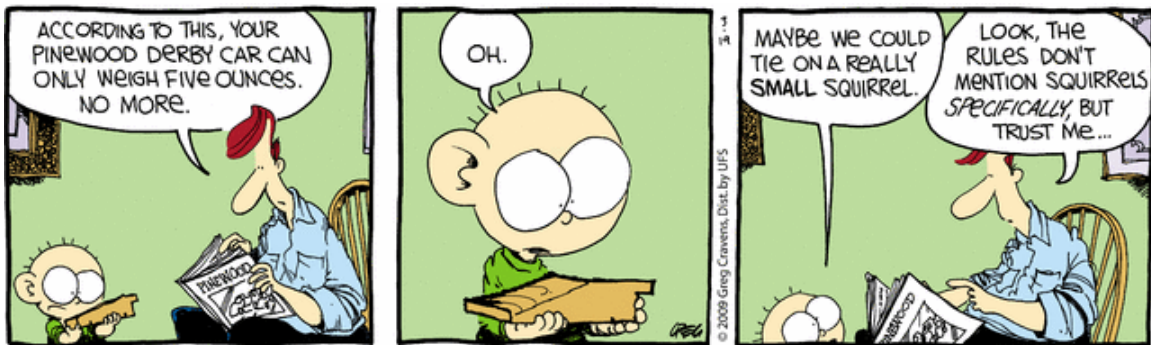
- Any details added must be within length, width, and weight limits.

- All cars must have a wheel base no less than 4 inches (101.6 mm), with the two rear wheels being positioned directly across the body from one another and the two front wheels being positioned directly across the body from one another. Maximum allowable wheelbase shall not allow any portion of the wheels to extend beyond the front or rear of the car.

- No part of the car or any attachment to the car may be capable of coming into contact with the track other than the wheels. Examples of Prohibited Items which CANNOT be used: • Magnets, springs or suspension systems of any type. • Starting devices, finish line devices, propellants, or propulsion systems • Wet paint, or Sticky substances • Glass or excessively fragile parts • Electronic or lighting devices (if lights are on the car they must be turned off)

- No Bearings or Solid one-piece rod style axles • Axles and wheels attached to any device that mechanically alters rotation or spin.

- Loose objects on car. All weight must be securely fastened or embedded in the car.



Wheels:

- Use only Official BSA Wheels; colored wheels are permitted.
 - All lettering and numbering, both inside and outside, must remain complete and be visible. No wheel covers, inside or outside, may be used.
 - The fluting and other BSA markings on the outside wheel area must remain visible.
 - Outer wheel surface (tread area only) may be lightly sanded, shaved, or polished to remove minor surface imperfections, mold casting burrs, and correct off center wheel bores; but total wheel diameter may not be reduced below 1.170 inches (29.72mm). Outer wheel surface must not be reshaped or have the contour changed in any way in an attempt to minimize tread contact or alter aerodynamics.
 - Tread surface must be flat and parallel to the wheel bore.
 - Coning the hubs and truing the inside tread edge is allowed, as long as overall wheel width is not reduced below 0.36 inches (9.14 mm).
 - No material may be removed from the inside wheel surfaces at any point.
 - Minimum outside diameter of wheel must be equal to or greater than 1.170 inch (29.72mm), in order to maintain the ridges on the outer edge.
 - Judges reserve the right to measure the wheel with calipers to verify dimensional compliance with official wheel size restrictions.
- The weight of the wheel shall not be increased or decreased except where limited amounts of material are removed from the tread or inside tread edge to remove minor imperfections. No material such as glue, fingernail polish, or tape, may be added to the inside of the wheel increasing its weight.
- Wheel Bore treatment is allowed including polishing and/or tapping. Wheel bores may not be filled and re-drilled to alter bore diameter or to achieve better fit with the axle (no material may be added to the wheels).

Please note: There are after-market modified wheels available that have been LIGHTENED. This is usually done by turning the wheels on a lathe and removing material from the inside of the wheel. These wheels are NOT allowed and can be EASILY RECOGNIZED at inspection. Cars with third party manufactured or modified wheels will not be permitted to race.



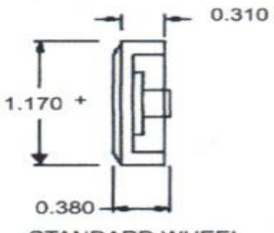





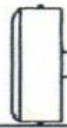




Race Operations and Miscellaneous Rules:

- If a car suffers a mechanical problem during a race (i.e loses an axle, breaks a wheel, etc...), the participant and/or a designated adult will have up to five minutes to fix the car. The race will NOT be rerun, nor can ongoing races be delayed.
- If a car leaves the track during a race, that car and any others affected will be reran in the same position(s), If the car leaves the track on the 2nd attempt then it will be judged “last place” in that race.
- If a car leaves its lane, Race Officials, at their discretion, may inspect the track and, if a track fault is found which may have caused the initial violation, the Race Officials, at their discretion, may order the race to be rerun after the track is repaired.
- In the event of Starter interference, the race will be re-staged and rerun.
- The track’s electronic timers will record finishing place for all cars in each race. In the event of technical difficulties, the Finish Line Judges will determine the order of finish.
- In the event of a mid-race timer failure, the Official Race Committee will determine the best approach to racing based on the circumstances. All decisions of the Official Race Committee are final.
- Only Track Officials will be permitted in the track area.
- Track Officials are responsible for the proper conduct of the races. Good sportsmanship and behavior is expected for all attendees. Race Officials may ask anyone not following this rule to leave.
- Please make note that all decisions of the Official Race Committee are final.



BSA PINEWOOD DERBY WHEEL RULES CLARIFICATION OF DISQUALIFYING / ALTERED WHEELS

No alteration, narrowing, lathe cutting, or re-shaping of wheels (inside or outside) is allowed!!!!

 <p>STANDARD WHEEL</p>		 ROUNDED WHEEL	 "V" WHEEL	 CUPPED WHEEL	 REDUCED DIAMETER
 "H" WHEEL	 RIBBED WHEEL	 SPEED WHEEL	 SLANTED OUT	 SLANTED IN	 KNIFE EDGE

NO LIGHTENING OF THE WHEEL IS ALLOWED


LIGHT SANDING OF WHEEL TREAD TO REMOVE IRREGULARITIES IS PERMISSABLE. WHEEL TREAD MUST BE FLAT!

MINIMUM WHEEL DIAMETER ALLOWABLE IS 1.170 INCHES.

MINIMUM WHEEL WEIGHT OF EACH WHEEL IS 2.45 GRAMS.

USE THE NAILS IN YOUR KIT




 DO **NOT** CUT A GROOVE IN YOUR NAIL.


 DO **NOT** PAINT YOUR NAIL WITH GRAPHITE.

DO **NOT** BEVEL, ROUND OR ALTER THE EDGE OF THE NAIL HEAD

YOU **MAY** REMOVE THE BURR.

YOU **MAY** POLISH THE HEAD AND ROUGH SURFACE.

YOU **MAY** ADD POWDER GRAPHITE FOR LUBRICATION.

