

**2023 OFFICIAL POWHATAN DISTRICT  
PINWOOD DERBY RULES**

11/3/2022

**Key Points:**

- Entry is limited to Lions, Tiger Cubs, Cub Scouts, and Webelos/Arrow of Light Scouts within the Powhatan District who finished first by rank - Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light - in their respective Pack Pinewood Derby competitions.
- A Scout simultaneously eligible for Race Competition and Concours Competition shall not be permitted to enter both competitions. The Scout must decide which one of these competitions to enter and be pre-registered for that competition only. The Scout may cede their first-place position to the second-place finisher of their rank and allow them to enter either the Race or Concours competition with their own car.
- All work on the race car must be exclusively that of the Scout and their parent/responsible adult. Outside work by others, professional or amateur, is prohibited, unless performed while assisting the Scout
- The Scout must be present to submit their car to inspection, register their car, and present their car for competition in all heats of the Race Competition or Concours Competition. Pre-registered Scouts not present for inspection, registration, and racing or concours judging shall be disqualified. The District Derby Chairman has the authority to waive this requirement in hardship or emergency circumstances. A justification must be provided and approved.
- The wheelbase (distance between front and rear axles) may not be changed from the kit body distance of 4 3/8 inches.
- Axles must remain straight and unbent.
- All four wheels mounted on the race car must touch the ground flat and roll when placed on a level surface.
- Cars must measure no more than 5.00 ounces
- Race cars must be no longer than 7.0 inches and no wider than 2¾ inches as determined by the official gauges during pre-race inspection. Underside clearance must be at least ¾ inches and inside wheel-to-wheel clearance must be at least 1¾ inches. Race cars, including all added weights and attachments, must stand no taller than 3.0 inches at the tallest point.
- Cars that do not meet the car design standards shall be disqualified.

**Detailed Rules:**

**I. RACE COMPETITION**

Rules in this section pertain to the Powhatan District Race Competition. For Concours Competition see Section II.

**A. ELIGIBILITY**

**A1. Qualification.** Entry is limited to Lions, Tiger Cubs, Cub Scouts, and Webelos/Arrow of Light Scouts (hereafter “Scouts”) within the Powhatan District who finished first by rank - Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light - in their respective Pack Pinewood Derby competitions. Only one Scout per rank from each Pack shall be permitted to enter the Race Competition. Only these Scouts, or designated substitutes as specified in A2, are eligible to compete in the Race Competition.

**A2. Substitute.** A Scout finishing first for their rank in Pack competition but unable to attend the Race Competition may designate a substitute Scout of their rank to enter the competition and race their (first-place finisher’s) car. Alternatively, the Scout maycede their first-place position to the second-place finisher of their rank and allow them to enter the Race Competition and race their own (second-place finisher’s) car. No othersubstitutes may be made.

**A3. Competitor Categories.** Race Competition is by rank: Lion, Tiger, Wolf, Bear, Webelos, and Arrow of Light. Scouts will compete in the Race Competition only against other Scouts of their own rank.

**A4. LDS Webelos/Arrow of Light.** LDS Webelos/Arrow of Light Scouts shall race within the Arrow of Light rank.

**A5. Pre-Registration Required.** All competing Scouts must be pre-registered, and fees paid, by their respective Packs prior to the pre-registration deadline. No late entries or walk-in entries will be permitted without explicit approval from the Powhatan District Derby Chairman or the designated Powhatan District Representative. Each Pack must pre-register its complement of Scouts by rank. Packs need not pre-register a full complement of five Scouts in order to participate; a contingent of fewer Scouts is acceptable.

**A6. Dual Derby Event Registration Prohibited.** A Scout simultaneously eligible for Race Competition and Concours Competition shall not be permitted to enter both competitions. The Scout must decide which one of these competitions to enter and be pre-registered by their Pack for that competition only.

## **B. RACE CAR DESIGN STANDARDS**

**B1. Standards Applicable to Both Race and Concours Competition.** All race cars entered into either Race or Concours Competition must meet all standards specified in this section (Section IB) of the Official Powhatan District Pinewood Derby Rules.

**B2. New Work.** Construction of all race cars, including individual parts such as wheels and axles, must have begun after the date of last year’s Powhatan District

Pinewood Derby.

**B3. Work Exclusively that of the Scout and Responsible Adult.** All work on the race car must be exclusively that of the Scout and their parent/responsible adult. Outside work by others, professional or amateur, is prohibited, unless performed while assisting the Scout. Work shall include but not be limited to design, construction, finishing, and detailing. Work for the purpose of this standard refers to work beginning with the Official Pinewood Derby Car Kit and other official BSA Pinewood Derby products (“BSA-licensed” is insufficient); and ending with the completed, finished, customized race car.

**B4. Deference to the Scout.** The parent/responsible adult shall provide oversight and guidance but is expected to assign to the Scout as much work on the race car as in his/her judgment is prudent within the constraints of safety.

**B5. Material.** Race cars shall be constructed from the parts contained in the Official Pinewood Derby Car Kit, BSA Catalog Item # 17006 (hereafter, “the kit”). Except as noted in B6, materials from the kit may be supplemented but not replaced. Race cars constructed from any other wooden block or race car kit are prohibited. Use of a pre-cut car body is prohibited. Use of an uncut block of lumber or other material in lieu of the block in the kit is prohibited.

**B6. Wheels and Axles.** The race car shall roll on official BSA Pinewood Derby wheels only. These wheels must be mounted on official BSA Pinewood Derby axle nails only. “BSA-licensed” is insufficient; the wheels and axles must be official BSA. The wheels may be the wheels that came with the kit, BSA standard black replacement wheels, or BSA replacement wheels available in different colors, BSA Catalog Items # 17553-17557. Exactly four wheels, no more and no less, must touch the ground or roll when the race car is moving.

The wheelbase (distance between front and rear axles) may not be changed from the kit body distance of 4 3/8 inches. The official kit block has pre-cut slots which are correctly spaced. If desired, these slots may be pre-drilled before they are used. However, the use of the pre-cut slots is not required.

**B7. Axle Treatment.** Polishing and de-burring of axle nails is allowed, as is axle beveling, tapering, and grooves on the axle. All work done on the wheels and axles must be done by the Scout and responsible adult. The use of pre-altered official BSA axles is prohibited. Axles must remain straight and unbent.

**B8. Wheel Treatment.** Hub and tread smoothing and polishing must not result in reduction of the wheel width from the original official BSA wheels. There must be a continuous ring of original tread marks plainly visible around the wheel. Wheels must not be machined to a beveled condition and the portion of the wheel surface contacting the track must remain parallel to the axle. No other wheel modifications

are allowed. Wheels pre-treated or pre-finished by a manufacturer or service provider are prohibited. All four wheels mounted on the race car must touch the ground flat and roll when placed on a level surface.

**B9. Added Weights and Attachments.** For the purpose of these standards, added weight is defined as any material on the race car that is not provided in the kit (B5), nor an allowable replacement wheel or axle (B6), though a spare tire no matter the source is considered added weight. Added weight will be considered part of the race car in all measurements. All added weight must be securely fastened to the race car by permanent glue, nails, screws, coin pockets, etc., but not by sticky, tacky, or adhesive substances such as wet glue, tape, or tack spray. Added weight must be passive, i.e. non-moving, non-magnetic, etc.

**B10. Race Car Weight.** Race cars shall be weighed on a digital scale, properly calibrated. Analog scales shall not be used. Race cars must measure no more than 5.0... ounces, where "0..." means repeating zeroes out to the precision limit of the scale display. Measurements are not rounded; a race car measuring above 5.0... ounces exactly will not be allowed.

**B11. Size.** Race cars must be no longer than 7.0 inches and no wider than  $2\frac{3}{4}$  inches as determined by the official gauges during pre-race inspection. Underside clearance must be at least  $\frac{3}{8}$  inches and inside wheel-to-wheel clearance must be at least  $1\frac{3}{4}$  inches. Race cars, including all added weights and attachments, must stand no taller than 3.0 inches at the tallest point. Measurements will not be rounded.

**B12. Unacceptable Construction.** All work done in constructing the race car must be that of the Scout and responsible adult. The use of any pre-manufactured part for any purpose other than added weight is prohibited. The following must not be used in conjunction with the wheels or axles: hubcaps, washers, inserts, sleeves, bearings, or springs. The following must not be incorporated into the construction of the car: protrusions or wires that extend beyond the front of the car, cuts that allow the front of the car to extend beyond the starting line, or additions to the car that cause the car's front edge to not be in contact with the starting pin.

**B13. Gravity Powered.** The race car must not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car. Sticky substances on the front of the car or protrusions that may catch on the starting pin are prohibited. Race cars must not be self-propelled. Nothing must be added to the race car that would provide any means of power other than gravity.

**B14. Lubricants.** Only dry lubricants such as graphite will be allowed for lubricating the wheels: High Speed Pinewood Derby Graphite, BSA Catalog Item # 17019; or equivalent. Lubricants must be applied before entering the Race Competition site. No lubricant may be applied to the race car after it has been registered and inspected.

## C. CONDUCT OF THE RACES

**C1. Attendance Mandatory.** The Scout must be present to submit their car to inspection, register their car, and present their car for competition in all heats of the Race Competition. Pre-registered Scouts not present for inspection, registration, or racing shall be disqualified. The District Derby Chairman has the authority to waive this requirement in hardship or emergency circumstances. A justification must be provided and approved.

**C2. Inspection.** Each race car must pass a technical inspection for compliance with the race car design standards specified in Section IB of the Official Powhatan District Pinewood Derby Rules. Inspection times by rank will be announced by Race Officials before the event.

**C3. Failure to Pass Inspection.** Race Officials will inform the Scout of the reason their race car did not pass inspection. If the noncompliance with design standards is remediable, the Scout, with the assistance of their responsible adult, may make modifications to bring the race car into compliance and resubmit their race car to inspection. Modifications will be permitted up to the stated closing time for inspection of race cars for the Scout's rank. Race cars that do not meet the race car design standards prior to that time shall be disqualified.

**C4. Registration.** Each competing race car passing inspection must be registered. Race Officials will announce registration times by rank. Scouts must be present for registration of their race cars. Race cars not registered will be disqualified, whether or not the race cars pass inspection.

**C5. Impound.** No race car may be altered in any way after the car has been registered. Race Officials will impound race cars immediately upon registration. Race cars will remain impounded at all times when not racing in heats.

**C6. Determination of Compliance with Race Competition Rules Considered Final Absent Appeal.** Determination of compliance with eligibility requirements specified in Section IA of the Official Powhatan District Pinewood Derby Rules, and race car design standards specified in Section IB of the Official Powhatan District Pinewood Derby Rules, is the sole responsibility of designated Race Officials. The decisions of these Officials are considered final unless immediately appealed as specified in C7 below.

**C7. Appeals.** The Scout accompanied by their responsible adult must make any appeals of official decisions concerning compliance with Official Powhatan District Pinewood Derby Rules promptly. All appeals must be made to either the host unit Powhatan District Pinewood Derby Chairman or to the designated Powhatan District Representative. The Chairman and District Representative will confer, collaborate and agree upon a resolution of the appeal. Absent agreement between the District

Representative and the Chairman the appeal is considered not accepted. All decisions of the Chairman and District Representative shall be considered final and may not be appealed further.

**C8. Race Car Handling.** The Scout shall be responsible for making sure their car is present when called to compete in each heat. When called, a Race Official shall pick up the race car from the impound location, carry it to the track, and hand it to the Race Official. The Race Official will place the car on the track and when ready release the competing cars to race down the track. When the heat is finished, a Race Official will lift each race car from the track. The Scout shall be responsible for receiving their car from the Race Officials at the end of the race competition. At no point is the Scout allowed to touch the track or come within a demarked area surrounding the track. Failure to follow these rules is cause for disqualification.

**C9. Damage to Another Race Car.** At the discretion of Race Officials, a Scout intentionally or unintentionally handling or damaging another Scout's race car may be disqualified, should the incident compromise the competitive capability of that Scout's race car.

**C10. Call to Race.** If when called to present their race car for a particular heat the Scout does not respond, their name shall be called a second time, and then a third time. If the Scout does not respond to the third call they will be disqualified.

**C11. Lane Assignment, Bracket Competition, and Winner.** Assuming a four-lane track, up to four race cars at a time will be raced in each heat. Each race car will race in a minimum of four heats for each bracket, once in each lane of the track. The race car's bracket time will be the car's average time across all heats of the bracket. Bracket competition will continue until every race car for that rank has a bracket time. The winner for that rank will be the race car with the lowest bracket time for that rank.

For tracks with more or fewer than four lanes, the number of race cars and the number of heats per bracket will be adjusted accordingly. If time permits given the number of scouts and number of lanes, additional heats may be added as long as each race car races an equal number of times in each lane (assuming a four-lane track, this could be increasing from four heats to eight heats).

**C12. Race Car Leaves Lane.** If during a heat a race car leaves its lane, Race Officials will determine the cause. If the cause was a track malfunction, the malfunction will be repaired and the heat re-run. If the cause was a defect in the race car, and the race car having left its lane proceeded down the track in a manner that did not interfere with another race car, then the heat will be considered valid and the results will stand. If the race car left its lane due to a defect in the race car and interfered with another race car without damage, the heat will be re-run. If during the re-run the race car again leaves its lane and interferes with another race car, the race

car leaving its lane will be disqualified. The heat will be re-run, and the remaining heats will be held, without the disqualified race car.

**C13. Car Damages Another Race Car.** If during a heat a race car leaves its lane due to a defect in the race car, and causes damage to another race car, the race car leaving its lane will be disqualified.

**C14. Car Leaves Track.** If during a heat a race car leaves the track, C12 and C13 shall apply.

**C15. Car Repair.** If during a heat a wheel falls off or the race car otherwise becomes damaged without causing damage to other race cars, the Scout with their responsible adult may, to the best of their ability, perform repairs. A two-minute repair stop will be allowed. If the race car is not repaired within the repair stop, the race car will be disqualified. If the race car is damaged due to a track fault, another race car, or other circumstances beyond the Scout's or Race Officials' control, additional time and/or repair assistance will be provided at the discretion of Race Officials.

**C16. Track Champion.** For each rank, the top four finishers will be the race cars with the four fastest bracket times. At the conclusion of the Race Competition the top four finishers from each rank, with their race cars, shall be accompanied by their responsible adults to the presentation area to receive award recognition. The number of top finishers per rank receiving award recognition may be altered to be consistent with the number of track lanes.

**C17. Tie-Breaking.** In the event of an exact tie for bracket time, the tie-breaker shall be the fastest single heat time within that bracket. Should the fastest single heat time within the bracket be likewise exactly tied, an additional runoff bracket of the tied race cars shall be held. Assuming a four-lane track, each race car will race in eight heats, twice in each lane of the track. The race car's runoff bracket time will be the car's average time across all eight heats of the runoff bracket. For tracks with more or fewer than four lanes, the number of race cars and the number of heats will be adjusted accordingly. The winner will be the race car with the fastest bracket time for the runoff bracket, or if that time is still exactly tied, the fastest single time within the runoff bracket. If at that point the times are exactly tied, multiple winners will be declared.

**C18. Behavior Disqualification.** A Cub Scout Gives Goodwill. Good sportsmanship is expected of all Scouts, responsible parents, and other representatives of the participating packs. All Race Officials have the authority to immediately disqualify a Scout should their behavior, or the behavior of their responsible adult, or the behavior of any representative of their Pack is deemed either verbally or physically disruptive, abusive, or inconsistent with the Scout Oath and Law.

Behavior-based disqualifications may not be appealed. All must keep in mind the larger goal of Cub Scouts in setting the example of good citizenship and character, demonstrating kindness and courtesy at all times.

**C19. Event Compromised.** The Powhatan District Representative shall have the authority at any moment during the Race Competition to declare a temporary halt to the event, if in his/her estimation the integrity or fairness of the competition has been compromised, such as through faulty equipment, erroneous scorekeeping, or such factor. During this temporary halt the District Representative, Derby Chairman, and Race Officials shall investigate the compromise and identify and implement remedies to ensure fairness. The Race Competition shall then resume at their discretion.

**C20. Conflicts Not Resolvable by Official Rules.** The Powhatan District Representative and Derby Chairman, collaboratively, shall resolve all questions, issues, and conflicts not addressed or resolvable by appeal to these Official District Pinewood Derby Rules. Their resolutions are to be fair and equitable, and not compromise the integrity of the event. Their decisions in these matters shall be considered final.

**C21. Awards and Recognition.** The most important values in Pinewood Derby competition are Scout/parent participation, good sportsmanship, following the rules, and doing one's best. Race Officials are responsible for recognizing and encouraging these qualities in addition to recognizing top finishers based on race times. Racers will be recognized as follows: a) Every participating Scout will receive a Pinewood Derby patch; b) Recognitions will be awarded to top finishers by rank; and c) Additional recognitions for sportsmanship and doing one's best will be awarded at the discretion of the Race Officials.

## II. CONCOURS COMPETITION

### A. ELIGIBILITY

**A1. Qualification.** Entry is limited to Lion, Tiger Cubs, Cub Scouts, and Webelos/Arrow of Light Scouts (hereafter "Scouts") within the Powhatan District who finished first by rank – Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light - in their respective Pack Pinewood Derby Concours competitions. Only one Scout per rank from each Pack shall be permitted to enter the Concours Competition. Only these Scouts, or designated substitutes as specified in A2, are eligible to compete in the Concours Competition.

**A2. Substitute.** An eligible Scout unable to attend the Concours Competition may designate a substitute Scout of their rank to enter the competition on their behalf (the car then becoming the substitute Scout's car for the purpose of the Concours Competition). Alternatively, the eligible Scout unable to attend may cede their first-place position to the second-place finisher of their rank and allow them to enter the



Concours Competition. No other substitutes may be made.

**A3. Competitor Categories.** Concours Competition is by rank: Lion, Tiger, Wolf, Bear, Webelos, and Arrow of Light. Scouts will compete in the Concours Competition only against other Scouts of their own rank.

**A4. LDS Webelos/Arrow of Light.** LDS Webelos/Arrow of Light Scouts shall race within the Arrow of Light rank.

**A5. Pre-Registration Required.** All competing Scouts must be pre-registered, and fees paid, by their respective Packs prior to the pre-registration deadline. No late entries or walk-in entries will be permitted without explicit approval from the Powhatan District Derby Chairman or the designated Powhatan District Representative. Each Pack must pre-register its complement of Scouts by rank. Packs need not pre-register a full complement of five Scouts in order to participate; a contingent of fewer Scouts is acceptable.

**A6. Dual Derby Event Registration Prohibited.** A Scout simultaneously eligible for Race Competition and Concours Competition shall not be permitted to enter both competitions. The Scout must decide which one of these competitions to enter and be pre-registered by their Pack for that competition only.

## **B. RACE CAR DESIGN STANDARDS**

**B1. Standards Applicable to Both Race and Concours Competition.** All race cars entered into either Race or Concours Competition must meet all standards specified in Section IB of the Official Powhatan District Pinewood Derby Rules.

## **C. CONDUCT OF THE COMPETITION**

**C1. Attendance Mandatory.** The Scout must be present to submit their car to inspection, register their car, and present their car for Concours Competition. Preregistered Scouts not present for inspection or registration shall be disqualified. The District Derby Chairman has the authority to waive this requirement in hardship or emergency circumstances. A justification must be provided and approved.

**C2. Inspection.** Each race car must pass a technical inspection for compliance with the race car design standards specified in Section IB of the Official Powhatan District Pinewood Derby Rules. Inspection times by rank will be announced by Concours Officials at the event.

**C3. Failure to Pass Inspection.** Concours Officials will inform the Scout of the reason their race car did not pass inspection. If the noncompliance with design standards is remediable, the Scout, with the assistance of their responsible adult,

may make modifications to bring the race car into compliance and resubmit their race car to inspection. Modifications will be permitted up to the stated closing time for inspection of race cars for the Scout's rank. Race cars that do not meet the race car design standards prior to that time shall be disqualified.

**C4. Registration.** Each competing race car passing inspection must be registered. Concours Officials will announce registration times by rank. Scouts must be present for registration of their race cars. Race cars not registered will be disqualified, whether or not the race cars pass inspection.

**C5. Impound.** No race car may be altered in any way after the car has been registered. Concours Officials will impound race cars immediately upon registration.

**C6. Determination of Compliance with Competition Rules Considered Final Absent Appeal.** Determination of compliance with eligibility requirements specified in Section IA of the Official Powhatan District Pinewood Derby Rules, and race car design standards specified in Section IB of the Official Powhatan District Pinewood Derby Rules, is the sole responsibility of designated Concours Officials. The decisions of these Officials are considered final unless immediately appealed as specified in C7 below.

**C7. Appeals.** The Scout accompanied by their responsible adult must make any appeals of official decisions concerning compliance with Official Powhatan District Pinewood Derby Rules promptly. All appeals must be made to either the host unit Powhatan District Pinewood Derby Chairman or to the designated Powhatan District Representative. The Chairman and District Representative will confer, collaborate and agree upon a resolution of the appeal. Absent agreement between the District Representative and the Chairman the appeal is considered not accepted. All decisions of the Chairman and District Representative shall be considered final and may not be appealed further.

**C8. No Racing.** Race cars entered into Concours Competition shall not be raced. Race cars in Concours Competition shall not be judged in any way on their mobility, beyond compliance with the race car design standards specified in Section IB.

**C9. Judging.** Concours Officials shall judge race cars for each rank for 1) originality of design, 2) color and finish, 3) accessories and decals, 4) use of Cub Scout motif. Equal weighting shall be given to these criteria. Scoring shall be up to 10 points for each criterion, resulting in a maximum possible score of 40 points.

**C10. No Judgment Appeals.** Concours judging is by nature subjective and as such cannot be appealed. All scoring and decisions of Concours Competition Officials are considered final and may not be contested.

**C11. Behavior Disqualification.** A Cub Scout Gives Goodwill. Good

sportsmanship is expected of all Scouts, responsible parents, and other representatives of the participating packs. All Concours Officials have the authority to immediately disqualify a Scout should their behavior, or the behavior of their responsible adult, or the behavior of any representative of their Pack is deemed either verbally or physically disruptive, abusive, or inconsistent with the Scout Oath and Law. Behavior-based disqualifications may not be appealed. All must keep in mind the larger goal of Cub Scouts in setting the example of good citizenship and character, demonstrating kindness and courtesy at all times.

**C12. Conflicts Not Resolvable by Official Rules.** The Powhatan District Representative and Derby Chairman, collaboratively, shall resolve all questions, issues, and conflicts not addressed or resolvable by appeal to these Official District Pinewood Derby Rules. Their resolutions are to be fair and equitable, and not compromise the integrity of the event. Their decisions in these matters shall be considered final.

**C13. Awards and Recognition.** The most important values in Pinewood Derby competition are Scout/parent participation, good sportsmanship, following the rules, and doing one's best. Concours Officials are responsible for recognizing and encouraging these qualities in addition to recognizing top finishers. Competitors will be recognized as follows: a) Every participating Scout will receive a Pinewood Derby patch; b) Recognitions will be awarded to top finishers by rank; and c) Additional recognitions for sportsmanship and doing one's best will be awarded at the discretion of the Concours Officials.