

2025 RULES BOOKLET Saturday, May 10th, 2025

Last day to register is Monday, May 5th, 2025

PRESENTED TO YOU BY SELA RACING. www.seladerby.com

For more Information please contact the SELA Council Pinewood Derby Committee at seladerby19@gmail.com

SELA Pinewood Derby Racing Series Official Competition Rules

Rev. 7, 2024

Introduction:

The BSA Southeast Louisiana Council is honored to have you participate in the SELA Pinewood Derby Racing Series Pinewood Derby. The Pinewood Derby has been a part of the Cub Scout Program since 1953. As its popularity has grown over the last 70 years, the Pinewood Derby has evolved, and different Councils have adopted different rules for competition. To maintain fairness and ensure that this event is truly representative of all Cub Scouts and allows all qualifying Scouts to compete on an equal racing field, only stock cars will be allowed for the Scouting competition. Additional car classes, such as outlaw or pro stock, may be arranged based on interest and participation.

These rules are designed to provide a comprehensive set of guidelines which will allow all scouts to build a competitive car with reasonable effort and little expense using only the parts supplied in the official Pinewood Derby kit. There are ways to push the limits of the specifications, and SELA officials are well aware of the many techniques used to do this. Know that the cars will undergo a rigorous pre-race technical inspection process, as well as an invasive post-race inspection for those cars that place. If you choose to push the limits of the specifications, keep in mind that if the car does not comply with ALL specifications, the car will not be allowed to compete and/or may be disqualified. **PLEASE think about the scout**.

A note to SELA packs:

If your pack plans to have a pinewood derby event, please consider instituting rules consistent with these <u>Stock Car Class Rules</u> so that scouts who wish to participate in Council level races will have cars that are eligible to pass SELA technical inspection. These rules attempt to closely match those used for National Pinewood Derby Stock Car Class competitions. Cars competitive in this series might also be compliant and competitive at that level, but ultimately subject to those explicit rules.

Participation & Qualification for Stock Car Class:

Participation in the SELA Pinewood Derby Racing Series <u>Stock Car Class</u> is open to all registered Cub Scouts.

To qualify, eligible youth must be registered as a Cub Scout at some point since January 1st of the previous year. Any Scout that began the calendar year as a Webelos Scout is also eligible to compete. This is to cover Cub Scouts who may have crossed over to the Scout BSA program.

Registration will be through the SELA Council website only! NO WALK-UP REGISTRATIONS.

Check-in and Inspection:

Upon arrival, racers will report to the check-in table. Racers will be given a car number, race information, and an inspection sheet. The car's number sticker will be placed onto the top of the car and on the inspection sheet.

Next, an inspection will be performed on all cars to determine the car's eligibility to competitively race in the SELA Pinewood Derby Racing Series, both at District and Council races. Each car entered in a SELA Pinewood Derby Racing Series race must pass inspection by the SELA Pinewood Derby Racing Committee on race day. Please understand that passing inspection at the district level does NOT exclude the requirement to be inspected at the Council or State race.

If the car does not pass tech inspection, the racer will be advised as to why it did not pass inspection. The racer will have the opportunity to make corrections or adjustments so that the car will meet the class rules. Alternatively, if the racer chooses, the car may be entered into a different class (if available).

If the racer is able to correct or modify the car to meet all class rules, the car can then be returned to the tech inspection queue. Tools or parts will not be provided by SELA officials.

To ensure reasonable event flow, **a car will only be allowed 3 inspection cycles** in succession: the first initial inspection and then two re-inspections.

Cars that must be reinspected shall return to the end of the tech inspection queue and wait for all other participants to pass tech. This rule is subject to change as it will be predicated on how many cars enter the event.

NOTE: Following all racing events, cars that placed (1st, 2nd or 3rd) in their respective division will be subjected to a post-race inspection process. This will be a more thorough and invasive inspection process, including requiring the racer to remove wheels and axles to ensure compliance with all written wheel and axle specifications. SELA officials may also ask that a small section of the car be scraped or drilled to ensure compliance with the wood body requirements.

Any car that does not pass post-race inspections will forfeit its place in the official standings and be disqualified from the event. The next fastest car from that division will assume the vacant position and undergo a post-race inspection, and all subsequent car positions will move up accordingly.

Officials have the right to disqualify any car, racer, or racing team that does not meet all stated rules and specifications or displays un-scouting like conduct. A Scout is Trustworthy, Loyal, Helpful, Friendly, Courteous, Kind, Obedient, Cheerful, Thrifty, Brave, Clean, and Reverent.

The SELA Official's decision is final, and the racing committee will make all final eligibility decisions.

<u>Once the car passes Inspection</u>, it will be entered into a regular race round for its respective rank/class and <u>only race official will be allowed to handle the car</u>.

The car will be placed in a designated staging location and will remain in the possession of the SELA Pinewood Derby Staff until all races have been completed, results have been tallied, design judging finalized, and post-race inspections have been completed. Cars will then be returned to the racers. Only SELA Race Officials will be allowed to handle the car until after the final Award Ceremony and postrace inspections have been completed. This includes all race staging, car movement, and race related proceedings.

Stock Car Class Car Rules & Specifications

PLEASE READ THESE RULES CAREFULLY AND COMPLETELY

Questions regarding car specs and rules can be directed to the SELA Pinewood Derby committee (www.seladerby19@gmail.com) up to 2 weeks prior to the race date. Due to the extensive preparation required to host this event, questions submitted within the 14 calendar days prior to the race via email, phone, text, social media, semaphore, Morse code, smoke signals, or any other medium will not be addressed. Questions or issues submitted, without response from the SELA Derby Staff, does not constitute acceptance, compliance, or assent with the request.

Car Eligibility

- Only the Official BSA Pinewood Derby Kit or official BSA components purchased through an authorized BSA retailer such as a Scout Shop may be used to build the car. This consists of the BSA [ponderosa/yellow pine] wood block, wheels, and axles.
- Cars must have been built during the current Pinewood Derby racing season. No cars raced in previous seasons allowed.
- Non-official BSA parts or kits sold by an unofficial BSA retailer are prohibited.
- Precut kits or cars purchased whole or in part from another racer, company, internet entity, or other, are strictly prohibited.
- The ONLY Exceptions the 5 "Pinewood Derby" brand precut cars sold at Scout Shop are allowed (see page with Scoutshop Precut Pinewood Derby Cars). These are the Wedge, Muscle Car, Stock Car, Tank Car and Sports Car. No Other Exceptions!
- Cars must be constructed by the racer and an adult. Scouts Honor.

Car Specifications, Dimensions and Weight

Technical Inspection Notes:

- Jigs, go/no-go gauges, calipers, rulers, magnets, feeler gauges, and scales will be used to determine the car's dimensions and weight. If any measurement is not within the allowed tolerance, the car will not pass inspection and will not be allowed to compete in the stock car class.
- Any adjustments, modifications, lubrication application, or any other changes to the car must be completed by the racer before the car is inspected.
- It will be up to the racer to alter or modify the car to meet technical inspection requirements. If the gauge does not fit over the wheels, or if the car does not fit in the measuring jigs, it will be

the racer's responsibility to remove the wheel or alter the car so that the measuring tools can be used.

- Be prepared to pull one (or more) wheels and axles for inspection.
- Each racer will have three (3) opportunities to pass inspection; one initial inspection and two (2) additional inspections.
- Once a car passes technical inspection, it will be placed into a staging location and no further adjustments, additions, alterations, or modifications will be allowed.
- Once a car is in the staging location, only SELA Race Officials will be allowed to handle the car.
- Any car that places in its class will be required to undergo a post-race inspection that includes removal of wheels and axles.

A.) Car Dimensions:

- 1. Total length of the car shall not exceed 7 inches (177.8mm). This includes any bumpers or cosmetic decorations attached to the car.
- 2. No part of the car may protrude beyond the track start gate starting pin.
- 3. Front of car where contacting starting pin must be a minimum 1/4 inch (6.3mm) wide (to facilitate proper staging). No point contact with starting pin. **No pointed cars.** (See diagram at end)
- 4. Front of car where contacting starting pin should be a less than 1.75 inches above center rail. Starting pin is approximately 2 inches high when set.
- 5. Total width of the car, including wheels, axles, and any fenders or cosmetics, must not exceed 2³⁄₄ inches (69.9mm).
- 6. Total height of the car must not exceed 6 inches (152.4mm).
- Cars must clear the center rail of the track. Center rail is 1-5/8 inches (41.3mm) wide by ¼ inch (6.35mm) tall.
- 8. Minimum clearance between the entire bottom of the car and the track surface (bottom of the wheels) shall be 3/8 of an inch (9.5mm).

B.) Wheelbase:

- 1. <u>Wheelbase may not be altered</u> from original BSA wooden block slot location. Factory slot wheelbase is 4-3/8 inches (111.1mm).
- 2. No shifted wheelbase allowed. Jig will be used to measure if wheelbase is in stock location.
- 3. Factory axle slots must be used.
- 4. No extended wheelbase cars.
- 5. Original slots may be drilled or filled to support and square the axles. (See #6)
- 6. Original axle slots **must remain visible** and measurable to check wheelbase.
- 7. All four (4) wheels must maintain full, flat tread contact with the track surface. (See #8)
- An allowance of ± 0.020 inch (0.51mm) for 4-wheel contact will be measured by feeler gauge (See #13).
- 9. No canted axle holes. (See #7)
- 10. No offset axle holes.
- 11. No hardened inserts allowed.
- 12. No three (3) wheeled cars.
- 13. No raised wheel cars.

C.) Wheels:

- 1. Only original BSA wheels manufactured in the USA are allowed.
- 2. Colored official BSA wheels made in the USA are allowed.
- 3. No aftermarket wheels allowed.

- 4. No wheels from pre 2020 kits are allowed.
- 5. Wheel diameter must not be less than 1.170 inches (29.72mm).
- 6. The outside diameter must maintain the ridges (tread bumps) on the outer edges.
- 7. Wheel width must be no less than 0.360 inches (9.14mm).
- 8. Wheel tread must be a minimum of 0.036 inches thick across full width and remain parallel with axle bore.
- 9. Wheel must weigh between 2.45g and 2.85 grams (0.0864 oz and 0.1005 oz).
- 10. ALL original BSA markings, lettering, ridges, spokes, and fluting must be visible and unaltered.
- 11. Filling and re-drilling of hub is not allowed.
- 12. Wheel covers, inside or out, are not allowed.
- 13. Reversed (inside out, hub facing away from car body) wheels are not allowed.
- 14. Turning, polishing, or truing outer tread is allowed (if all tolerances and markings are maintained).
- 15. Reshaping outer wheel surface or changing the contours (to minimize contact or alter aerodynamics) is not allowed.
- 16. Truing inside tread is allowed. (See rule #7)
- 17. Coning hubs is allowed.
- 18. Polishing hubs is allowed.
- 19. No thrust washers allowed.
- 20. No wheel bearings allowed.
- 21. No oil allowed.

D.) Axles:

- 1. Only original BSA axles from current year kits are allowed.
- 2. No aftermarket axles are allowed.
- 3. No axles from pre 2020 kits are allowed.
- 4. No grooved axles are allowed.
- 5. No slotted axles are allowed.
- 6. Deburring and polishing axles under head and along shank where wheels contact is allowed.
- 7. No altering of axle tips or tip chamfers are allowed.
 - a. You can not change or alter the nail tips.
 - b. You can not change the axle length.
- 8. Truing round of axle head is allowed.
 - a. Axle head diameter must not be less than 0.180 inches.
- 9. Coning axle head is allowed.
- 10. Only dry lubrication (such as graphite) is allowed on axles/wheels. NO OIL!
 - a. NOTE: if oil is suspected, graphite must be applied to all wheels before the car can be registered.
- 11. No axle bearings allowed.
- 12. No axle washers allowed.

E.) Weight:

- 1. Total weight of car must not exceed 5.0 ounces (141.7g).
- 2. Weight includes all parts of the car that will be attached during the race. No items (including graphite) will be added or removed once car has passed technical inspection.
- 3. All weight must be firmly attached to the car by adhesive or mechanical means.

IMPORTANT NOTE: A scout is trustworthy and obedient.

- However, the cars will be inspected according to every one of these rules.
- Non-compliance with any of the rules will prohibit the car from competing. Please do not expect that minor violations will be ignored. "I did not know" is not an accepted argument.
- If you intend to push the limits on specifications, consider what will happen if you miscalculate and can not pass inspection, and the car is ruled ineligible to compete. **Think about the scout**.
- Please read ALL rules and be sure you understand and abide by them. If you are not clear about any rule, please reach out to SELA Pinewood Derby committee (seladerby19@gmail.com.com) no later than 2 weeks prior to the race date.
- SELA Derby Committee has the final say on any disputed matter.

Race Operations and Miscellaneous Rules:

- 1. 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 three minutes to fix the car. The race will NOT be rerun, and ongoing races will not be delayed.
- 2. If a car leaves the track or its lane during a race, or if a car interferes with another car, the race will be rerun.
- 3. If the same car leaves the track or interferes with another car a second time, or causes damage to another car, that car will be judged "last place" for that race.
- 4. If a car causes damage to another car and the other car is unable to continue racing as a result of the damage, the offending car will be disqualified.
- 5. 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.
- 6. In the event of Starter interference, the race will be re-staged and rerun.
- 7. 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.
- 8. Only Track Officials will be permitted in the track area.
- 9. Track Officials are responsible for the proper conduct of the races. Good sportsmanship and behavior are expected for all attendees. Race Officials may ask anyone not following this rule to leave.
- 10. All decisions of the Official Race Committee are final.

Race Methodology:

Regular Racing and Winners' Cup Runoff

- 1. Each car will compete within the respective rank of the scout.
- 2. Each car will race once in each lane. Each race is timed with electronic equipment. In the event the equipment fails, the heat(s) will be re-run.
- 3. The slowest heat time will be dropped and the accumulation (cumulative total) of the remaining times will determine the standings for each racer.
- 4. Regular Racing rounds will be created based on attendance, check-in and inspection order, and other event and logistic factors.
- 5. Runoff rounds (finals) will be created based on Regular Race Winners.
- 6. At the conclusion of a round, that round's standings will be displayed on the video wall. Multiple rounds in a Racing Series may be required to accommodate all entrants.
- 7. At the conclusion of regular racing, data from all rounds will be combined if multiple rounds were needed.

Determining Regular Racing Winners

In the Stock Car Class Series, the top 3 fastest cars from each Rank will be crowned the winners and receive trophies. This will be the 1st, 2nd, and 3rd place Lions, Tigers, Wolfs, Bears, Webelos I's, & Webelos II's.

Winner's Cup Runoff – Fast 18 Finale for Overall SELA Champion

Stock Car Winners' Cup Runoff round, the top 3 fastest cars from each Rank (Regular Race Winners) will compete for the Overall SELA Champion. Ranks will not be broken out.

This will be run with the same race methodology as the regular racing, using the same standing method.

The fastest car determined by cumulative total time during the Finals runoff round (after dropping the slowest heat time) will be awarded the Winners' Cup – Overall SELA Champion

Trophy Ceremony

Trophies will be awarded at the conclusion of the Fast 18 Finale. Stock Car Race – SELA Champion Winners: 1st, 2nd, and 3rd Place - Lions 1st, 2nd, and 3rd Place - Tigers 1st, 2nd, and 3rd Place - Wolves 1st, 2nd, and 3rd Place - Bears 1st, 2nd, and 3rd Place - Webelos I 1st, 2nd, and 3rd Place - Webelos I 1st, 2nd, and 3rd Place - Webelos II/Arrow of Light

Stock Car Winners' Cup Runoff - Fastest 18 from Stock Car Race Winners' Cup – Overall SELA Champion

Additional Notes:

It is your responsibility to ensure that your car is in compliance with all stated rules!

A Word of Caution: There are many aftermarket kits, cars, modified wheels, axles, and other items available on the internet and at unsanctioned hobby shops. These cars and modified parts are NOT allowed and can be EASILY RECOGNIZED during inspection. <u>Cars with third-party manufactured or modified parts will not be permitted to race.</u> Again, please think of the scout.

Any item which is not included in an official BSA Pinewood Derby Car Kit or not purchased through an authorized BSA retailer, except cosmetic items or fenders, are not allowed. The BSA kit includes the [ponderosa/yellow pine] wood block, wheels, and axles. **NO substitutions for these items!**

Other non-compliant items include: magnets, springs, washers, bearings, bushings, nylon shims, axle guards, wheel weights, wheel well weights, inner or outer wheel covers or air dams (also known as air deflectors or air shields), starting devices, finish line devices, propellants, or propulsion systems.

Wheels and Axles determined by the Inspectors to be out of compliance must be replaced to compete. Official BSA <u>wheels and axles will not be available from SELA Council Racing</u>.

For more information, please contact SELA Racing at: seladerby19@gmail.com For the most up to date details, please visit our website: **seladerby.com**

Revision History		
Date	Revision #	Reason
1/25/22	5	Complete revision of rules for 2023
9/11/22	5.1	Updated registration requirements. Clarified that only official BSA components are allowed. Stated that wheels and axles will not be supplied.
6/3/23	6	Clarified mandatory use of factory axle slots. Added post-race inspection details.
9/1/23	6.1	Updated email address and stipulated only 5 Scoutshop precut cars are allowed. Added images of precut cars.
4/24/24	_	Clarified axle requirements to only current production. Clarified wheels to only current USA production. Clarified shifting wheelbase. Added disqualification for damaging another competitor's car. Added note
1/31/24	7	about starting pin height.

Scoutshop Precut Pinewood Derby Cars









SELA Council Pinewood Derby Wheel Guide

The following diagram/picture offers wheel measurements and examples of disqualifying wheel modifications and wheels. Only BSA wheels will be allowed.



CLARIFICATION OF DISQUALIFYING / ALTERED WHEELS



These wheels are typically purchased at a non-BSA retailer and are not legal for use in SELA Council Derby.

As a point of reference, below is an image of Official BSA wheels and axles purchased at an official BSA retailer. The inspection committee will be looking for the factory inside & outside BSA lettering & numbering. Spokes, ridges and all other BSA markings must remain intact. No slotted or grooved axles will be allowed.





Slotted and/or grooved axles are not allowed.

SELA Council Pinewood Derby Racing Series Car Dimensions

