## Pack 318 Pinewood Derby Rules

## (2017-2018)

***Scout and Sibling Cars:***

**Summary:**

Dress code……………………………..Class A (full uniform). Scouts not in uniform will not be allowed to race

Maximum Weight..................................No more than 5.00 oz (cars may weigh less, but cannot weigh more—see C below)

Front Shape............................................No notched front ends (no part of car may extend beyond the starting gate—see F below)

Length................................................... 7.0 Inches Max

Height....................................................3.0 Inches Max

Width.....................................................2.75 Inches Max

Track Clearance.....................................3/8 inches (bottom of car to ground)

**Details:**

### 1. Length, Height, Width and Clearance

1. The maximum overall width including wheels and axles shall not exceed 2 ¾ inches.
2. The minimum width between the wheels shall be 1 ¾ inches so the car will clear the center guide strip on the track.
3. The minimum clearance between the bottom of the car and the track surface shall be 3/8 inch so the car will clear the center guide strip on the track.
4. The maximum overall length shall not exceed 7 inches.
5. The wheelbase (distance between the front and rear axles) may not be changed from the kit body distance of 4 3/8 inches (some kits may be off by as much as 1/8”). The pre-cut slots provided on the official BSA kit do not have to be used but the wheelbase may not exceed the stock wheelbase.
6. The maximum height shall not exceed 3 inches (this is due to the height of the finish line timer).

### 2. Car Body, Weight and Appearance

1. Body wood shall be only as provided in the Official BSA Grand Prix Pinewood Derby Kit. Other additions (fenders, driver, decals, spoiler, painting and other stylistic details) are allowed, but must not cause the car to violate any of the dimensional guidelines listed herein. Materials other than wood may be used on the body of the car.
2. The car must have been built during the current year (the school year in which the Pinewood Derby is held). Scouts may NOT re-use a car that was raced in previous years.
3. The maximum weight of the car shall not exceed 5.00 ounces. The reading of the official scale will be final.
4. No liquids, semi-solids or loose materials of any kind are permitted in or on the car. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal, provided any additional material is securely built into the body or firmly affixed to it.
5. Cars with wet paint or wet glue will not be accepted.
6. The front end of the car must be flat at its leading edge (where the car engages the starting bar). No part of the car may extend beyond this front edge, as extensions or protrusions may trigger the finish line ahead of the car and could give the car an unfair advantage.

### 3. Wheels and Axles

1. Only BSA approved wheels and axles, as provided in the Official Pinewood Derby Kit, must be used.
2. Wheel bearings, washers, bushings and hubcaps are prohibited.
3. The car shall not ride on any type of springs.
4. The car must be freewheeling, with no starting devices or other types of propulsion.
5. Wheels can be sanded to remove surface imperfections, but the treads must be left flat. Beveling, tapering, narrowing, thinning, thin sanding or wafering of the wheels is prohibited.
6. Axles can be smoothed to remove surface imperfections, but not altered in any way except polishing. The head of the axle (nail) shall not be altered other than smoothing and polishing.
7. All 4 wheels of the car must touch the track/surface.

### 4. Lubrication

1. Only graphite or powdered Teflon “white lube” will be allowed for lubricating the wheels. You MAY NOT use any wet lubricant, especially oil and silicone sprays. Liquids, grease and sprays can foul the track, ruining the racing surface for others.
2. There will be NO lubrication after your car has completed Final Inspection and Registration.
3. Due to safety reasons, there will be NO lubrication of your car in the race area or within the structure in which the derby event is being held. Graphite on the floor creates a hazardous slipping condition where people are walking and is difficult to remove from carpet.

## *Parent Cars:*

## Parent cars *must meet all* of the rules listed in section 1.

## Parent cars *are not subject to rules 2C and 2D*

## Parent cars *are not subject to any rules in section 3*

## Parent cars *must meet all* of the rules listed in section 4

## Innovation is strongly encouraged in this class. Designs that make the cars faster or more interesting are also encouraged—however, *modifications that interfere with other competitors’ cars are not allowed*.

## Check-in

* The car must be checked in on Friday night--to be qualified for any awards and to race. If you are unable to check in your car, please inform your den leader to make arrangements for another adult to check in your car.
* No Saturday morning check-ins will be allowed.
* Bring your vehicle in a shoebox for overnight storage after check-in. Please put your name on the box!
* Do not put your name on the car.
* Please no wet glue or sawdust on the car at check in time.
* We will have a pit crew available for last minute weight and clearance adjustments.
* A number sticker (identifying the car, the scout and his rank) will be placed on the Scout’s car after he completes registration. Once the car completes check in, no one but the Scout or a race official is allowed to touch the car until after the race. No one can pick the car up except the judges Saturday morning or the scout preparing to race.
* Your scout is the only one who can race his car, unless arrangements have been made with the race officials before the race.

## Racing

* The ONLY repair allowed during the Derby is for a wheel and axle that has come off of the car. Only the driver will make the repair by hand or with basic hand tools. NO glue or other adhesive (tape is allowed) will be used to make the repair. The car will be retired if the driver places any wet glue on the car during the race. The driver’s parent or Race Official may help by offering suggestions verbally. Only the Scouts racing their cars or the Race Officials are allowed to touch the cars after check-in. The Race Committee may also designate a pit crew for the race that would be allowed to help drivers.
* If the wheels/axels of a car come off for a second time during the race the car will be retired.
* Scouts need to wear their Class A uniform to race.

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## Awards

Trophies will be awarded for Craftsmanship, Originality and Speed. 1st, 2nd and 3rd place trophies will be awarded for Tigers, Wolves, Bears, Webelos 1 and Arrow of Light (formerly Webs 2). These will be awarded after each rank completes their competition. There is a Pack speed trophy, which is for the fastest car in the Pack and a Slug award, for the slowest car in the Pack, which is awarded at the first Pack meeting after the race. 1st, 2nd and 3rd place trophies for siblings will be awarded. Adults race for bragging rights. Siblings and Adults are not eligible for the Pack speed and Slug trophies.

* *Craftsmanship*-judged by 3 independent judges on neatness, detail, color and scout’s ability.
* *Originality*-Judged by three independent judges on unique design, unique color, detail and scout’s ability.
	+ Note: A scout can only win one trophy for either originality or craftsmanship, in addition to speed. If a scout qualifies for both a craftsmanship AND an originality award, the award with the highest point total will be given to that scout. *For example, Billy scores 97 points for Craftsmanship, 95 points for Originality and Bobby scores 90 points for Originality. Billy will be awarded first place for Craftsmanship and Bobby will be awarded first place for Originality.*
* *Speed*-determined by a car’s average speed after running on each lane of the track (6 races total).

**The Slug Award**: There will be a slug award to the car with the slowest overall speed average. Slug competitors *must cross the finish line under their own power in all six races*. A car that does not cross the finish line in one or more races cannot be considered for the slug award.

The following ranks will advance to the District Derby:

Tigers - First Place for each category.

Wolf/Bear - First Place for each category based on total points/speed for the combined age group.

Webelos (I/II) - First Place for each category based on total points/speed for the combined age group.

**Common Questions/Issues**

* Cars that do not qualify at check in must be adjusted to meet the guidelines before check-in ends. Late check-in (the day of the race) is only allowed for true emergencies. Last-minute tweaking of a car that did not qualify at Friday check-in is NOT a valid reason to ask for a Saturday check-in.
* Cars that do not meet the guidelines will not be allowed to race. The judges’ decisions are final.
* Cars that fall out of the guidelines during racing will be given an opportunity to address the issue, but if they remain in violation of the rules, they will be removed from competition. For example, after racing, one of a car’s wheels does not touch the track. The car cannot race again until this is addressed.
* The judges reserve the right to allow exceptions to rules in the spirit of competition. See PWD Chairman’s message below:

*Racers,*

*Pinewood Derby should be fun. All boys who want to race should be able to race. As such, a car built by a Cub Scout sometimes doesn’t meet the letter of the law. All racers will be given an opportunity to remedy any rule violations at check-in. After years of officiating, the judges are well aware of the difference between accidental violations and intentional violations.*

*No judge wants to disqualify a car during the race, so a car that was built entirely by the Scout may be given more latitude than a car that was obviously built by a parent and any rule violations seem to be intentionally done to give the car a speed advantage over other cars.*

*While all cars must meet the basic guidelines, cars that are competitive for the speed trophies will be held to a higher standard than cars that are obviously competing for originality or craftsmanship and have not been built for maximum speed.*

*The trophy winners in speed in each age group will be re-evaluated for rules compliance prior to the award ceremony, much like a NASCAR or Formula 1 car is re-checked after it wins a race.*

*Parents who would like to stretch or break the rules are strongly encouraged to build their own cars and compete in the parents’ “unlimited” class, where the rules are lax and innovation is strongly encouraged.*

*With any question about Derby rules, all of the judges and the parent will be consulted, but as the Derby Chairman, I will make the final decision. If, at any point during construction, you have any questions about a rule or the race, please feel free to call or email me.*

*Good luck and good racing,*

*James Eyster*

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