

**\*\* UPDATED FOR 2020 \*\***

**!! Please take the time to read this document in its entirety for key changes and new information !!**



# **NEUSE RIVER DISTRICT**

## **2020 PINEWOOD DERBY RULES**

### **Derby Date: Saturday, March 7, 2020**

**Opening Ceremony starts at 10:00 AM**  
**Race Time: Saturday 10:15 AM - Finish**

**District Derby Location: **Knightsdale United Methodist Church, 7071 Forestville Road, Knightsdale, NC 27545****

See District website <http://neuseriver.ocscouts.org/events/pinewood-derby> for current and future Derby details.

**DIVISIONS:**      **Lion Cubs**                      **Cubs (Wolf & Bear Combined)**  
                         **Tiger Cubs**                      **Webelos (I & II Combined)**

The District Derby will continue to use Competitions based on rank. Divisions are gender-agnostic.

**COMPETITIONS: Craftsmanship, Originality & Speed**

- Each Competition will have a 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place winner for each Division.
- The Speed winners of each Division will compete for an overall Top Speed Trophy.
- Each car may only be entered in one type of Competition.
- Alternates are invited to observe with their cars in the event they need to replace their 1<sup>st</sup> place Pack entry.

**Inspection and Weigh-In Takes Place the Evening Before the Derby:**

**Friday, March 6 6pm-8:30pm**

**Location: **Knightsdale United Methodist Church – 7071 Forestville Road, Knightsdale, NC 27545****

***Participants should bring a shoe box to store their car in for secure overnight holding area.***

**\*\*It is required by the Derby Committee to have the Cub Scouts register their cars at the primary Inspection and Weigh-In on Friday evening so that race software, judging sheets and participation certificates can be completed before race day morning, thus eliminating registration bottleneck, technical issues the day of the race and ensuring a quality program for the event.\*\***

**\*\*Ultimately, it is the Cubmaster or their designate's duty to ensure that all their Pack's cars are registered by Friday night and that all racers are present with a legally registered car by 10:00am day of race Saturday.\*\***

**\*\*In the spirit of good sportsmanship and respect of all competitors and fellow Scouts, all competition category participants should be present at the awards ceremony.\*\***



## NEUSE RIVER DISTRICT 2020 PINEWOOD DERBY RULES

### 1. Length, Height, Width and Clearance (All cars must meet these standards regardless of competition category)

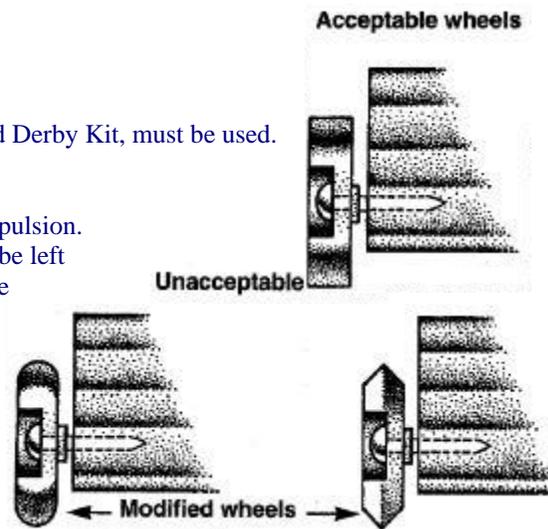
- The maximum overall width including wheels and axles shall not exceed 2  $\frac{3}{4}$  inches.
- The minimum width between the wheels shall be 1  $\frac{3}{4}$  inches so the car will clear the center guide strip on the track.
- The minimum clearance between the bottom of the car and the track surface shall be  $\frac{3}{8}$  inch so the car will clear the center guide strip on the track.
- The maximum overall length shall not exceed 7 inches.
- The wheelbase (distance between the front and rear axles) may not be changed from the kit body distance of 4  $\frac{3}{8}$  inches (some kits may be off between  $\frac{1}{8}$  inch to  $\frac{1}{4}$  inch). The pre-cut slots provided on the official BSA kit must be used!
- The maximum height shall not exceed 4.5 inches.

### 2. Car Body, Weight and Appearance

- Body wood *shall be only* as provided in the Official BSA Grand Prix Pinewood Derby Kit.
- The car must have been built during the current year (the school year in which the Pinewood Derby is held).
- The **maximum weight of the car shall not exceed 5.0 ounces**. The reading of the official scale will be final.
- No liquids 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 only, provided any additional materials are securely built into the body or firmly affixed to it.
- Details such as steering wheel, driver, decals, spoiler, painting and interior detail are permissible as long as these details do not exceed the maximum length, width or weight specifications.
- Cars with wet, sticky or tacky paint will not be accepted.
- The front end of the car must not extend past the starting post, meaning no notches, grooves, or slots that would give the car an unfair advantage at the start.

### 3. Wheels and Axles

- Only BSA approved wheels and axles*, as provided in the Official Pinewood Derby Kit, must be used.
- Wheel bearings, washers, bushings and hubcaps are prohibited.
- The car shall not ride on any type of springs.
- The car must be freewheeling, with no starting devices or other types of propulsion.
- 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**.
- Axles may be smoothed to remove surface imperfections such as burrs, but may not be altered in any other way except polishing. The head of the axle (nail) shall not be altered other than burr removal and surface polishing.
- All 4 wheels of the car must touch the track/surface.



### 4. Lubrication

- Only graphite or powdered Teflon “white lube” will be allowed for lubricating the wheels. You **MAY NOT** use any other lubricant, especially oil and silicone sprays. (Liquids, grease and sprays create an unfair advantage and can potentially mix with the paint of the car or the plastic wheels and make them tacky which will slow your car considerably over time. Liquid lubricant can also potentially foul the track ruining the racing surface for others).
- NO (re-)lubrication will be allowed after your car has completed Final Inspection and Registration.

- c) Due to safety reasons, there NO lubrication of your car will be allowed 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.)
- d) Cars that are lubricated during the race will be disqualified.

## 5. Inspection and Registration

- a) To compete in any category of the Pinewood Derby, each car must pass Final Inspection and be registered by the documented deadline.
- b) Any car from any Division being registered for a Speed competition is required to meet **all** criteria from all Sections of this document, **including 3g (i.e., all 4 wheels must touch the track/surface – no 3-wheel cars allowed).**
- c) Any car from any Division being registered for a Craftsmanship or Originality competition must meet all criteria from all Sections of this document but will **not** be weighed or have their four-wheels-down status verified at Inspection/Weigh-In, in order to expedite registration of those cars.  
**NOTE:** Individual Packs should continue to adhere to all of the rules in Section 1 through 5 above for any car being raced for any Speed competition in a Unit Derby event.
- d) Inspection and Registration deadline is the night before the Derby from 6:00 PM until 8:30 PM.
- e) ***The Inspection Committee reserves the right to disqualify cars that, in their findings, do not meet these rules.*** Any Scout may appeal the inspection to the Pinewood Derby Committee Chairperson, whose decision is final.
- f) If a car does not pass inspection, the owner will be informed of the reason his car did not pass (too long, too heavy, altered wheelbase, or the like). Cars that fail the initial inspection may be modified to bring them within specifications and brought back for re-inspection before the Final Inspection Deadline.
- g) No car may be altered in any way after it has passed Final Inspection and Registration. The cars will remain in the holding area (“garage”) and cannot be touched by anyone until time to race.
- h) An inspected car that is found to be in violation on the day of or during the race can still be disqualified except where the car may have fallen out of spec due to damage, at which time the Scout will be allowed time to fix the car as per the repair rule listed below in the Speed category of the rules.

## 6. Ground Rules and Competition Categories

- a) **EACH PACK from the Neuse River District is required to supply one adult volunteer to help on race day with this event. The adult volunteer(s) should be prepared to stay throughout the event.**
- b) **All Cub Scout derby participants must wear their Field uniform (sometimes incorrectly referred to as “Class A”).**
- c) **Each car can be entered in only one category. (ex: A car that has entered the Speed competition may not be entered for Originality or Craftsmanship.)**

### Speed:

- a) Neuse River District Pinewood Derby race will begin promptly at 10:15 AM, on Saturday morning.
- b) Good sportsmanship and good behavior are expected at all times. Pinewood Derby Officials may ask anyone (participant or spectator) not following this rule to leave the competition or race area.
- c) The Pinewood Derby is open to all Lion Cubs, Tiger Cubs, Cub Scouts and Webelo Scouts registered in Neuse River District and who won First Place in Speed, Originality or Craftsmanship in their respective group at their Pack Pinewood Derby during the current school year.
- d) Each entrant may enter only one car and one competition category in the Derby. Their car must be entered in the same category in which they won at their own Pack Derby. **Entrants must be present to race and receive trophies.**
- e) The Speed Competition will be judged using the Perfect-N Type method by racing heats within each bracket (Lion Cubs, Tiger Cubs, Cub Scouts and Webelos, each competing only within their own bracket). To equalize differences among track lanes, each heat will consist of each car racing at least one time in each lane. Each racer’s elapsed time from start to finish will be judged using electronic finishing devices and a computer software program. Winners in each bracket are determined based on cumulative elapsed race time among all heats within a given bracket.
- f) Only Pinewood Derby officials and Scouts participating in the current race may enter the track area.
- g) Each heat will be announced. Drivers will retrieve their cars from the “garage” and report to the starting line to place their cars on the designated track. The starter will start the race.
- h) The drivers will then report to the finish line to retrieve their cars for the next race and return their cars to the “garage” after the last race of their Division.

- i) Only if a car leaves the track, runs out of its lane, or interferes with another car one time it will still be allowed to re-run that particular race heat. If that same car leaves the track, runs out of its lane or interferes with another car a second time, it will automatically lose that race.
- j) A race car will be counted as last place or DNF (did not finish) in the particular race heat if it cannot make it to the finish line in the specified race lane within the timer-default limit of 10 seconds.
- k) The ONLY repair that will be allowed during the District Derby is for a wheel and axle that has come off the car. Only the driver will make the repair by hand or with a hammer. **NO glue or other adhesive substance will be used to make the repair.** The car will be disqualified if any wet glue is put upon it during race time. The driver's parent or Race Official may help by offering suggestions verbally. Only the Scout racing their car, or the Race Officials, are allowed to touch the cars.
- l) The Pinewood Derby Committee will handle any questions regarding the rules or problems that may arise during the event and their decision will be final.
- m) All questions or clarifications needed regarding the rules occurring on race day must be presented by the Cub Scout participant to a Race Official.

## Craftsmanship

- a) Cars entered for Craftsmanship will not be required to pass the weigh-in or other speed-related checks (3-wheels down, weight  $\leq$  5.0 oz.); however, **they must still conform to all other length, height, width and clearance requirements.**
- b) Cars will be judged for Craftsmanship by independent judges that have been chosen by the Pinewood Derby Committee. These judges have been instructed by the Committee and are believed to be non-biased in their judging.
- b) Craftsmanship will be based on the following:
  - **Neatness:** is the overall appearance pleasing and well-executed?
  - **Detail:** how well was the idea carried out?
  - **Colors:** do the colors blend well with the overall design?
  - **Scout Ability:** is it evident that the Cub did the majority of the work?
- c) Votes will be cast on ballot sheets and tallied by members of the Pinewood Derby Committee.

## Originality

- a) Cars entered for Originality will not be required to pass the weigh-in or other speed-related checks (3-wheels down, weight  $\leq$  5.0 oz.); however, **they must still conform to all other length, height, width and clearance requirements.**
- b) Cars will be judged for Originality by independent judges that have been chosen by the Pinewood Derby Committee. These judges have been instructed by the Committee and are believed to be non-biased in their judging.
- b) Originality will be based on the following:
  - **Unique Design:** something other than a "usual" race car design
  - **Unique Colors:** different color scheme that impacts the design
  - **Detail:** how well was the idea carried out?
  - **Scout Ability:** is it evident that the Cub did the majority of the work?
- c) Votes will be cast on ballot sheets and tallied by members of the Pinewood Derby Committee.

## 7. Awards and Recognition

- a) The most important values in Pinewood Derby competition are parent/scout participation, good sportsmanship and learning how to follow rules. The Awards Committee is responsible for recognizing and encouraging these qualities in addition to traditional racing awards.
- b) Every participating Scout will receive a District Pinewood Derby Certificate, Patch and Prize Bag.
- c) First, Second and Third Place trophies will be awarded in each category of Speed, Craftsmanship and Originality. A trophy for overall fastest car will be awarded. **Trophy winners must be present to win.**

## Coaching Hints for Parents

- Help your Scout understand the rules and specifications found in the kit and those developed by the District Pinewood Derby Committee. Your Pack may have different rules that do not meet the District rules.
- Spending time with your Scout and helping him “do his best” will be remembered by both of you long after the Derby is finished.
- Remember, the focus of this event is not to win at any cost, but for each Cub Scout to “**DO HIS BEST**” and **HAVE FUN!!**

