

# 2020 Mecklenburg County Council Pinewood Derby Championship at NASCAR Hall of Fame on March 21, 2020

## **Championship Race**

### I. The Scouts:

- A. Only those Cub Scouts who were registered and active Lions, Tigers, Wolves, Bears, Webelos and Arrow of Lights are allowed to enter the Council Championship Race.
- B. Each Pack can enter cars from their top den finalist to include three Lions. three Tigers, three Wolves, three Bears, three Webelos and three Arrow of Lights for a total of eighteen cars. One alternate for each rank can be listed in case a Scout is not able to participate on Race Day. Maximum of eighteen cars will be able to race on Race Day from each Pack.
- C. All entrants are required to wear their Class "A" Cub Scout BSA uniform on Race Day.
- D. All Pack winners must be registered for the Council Championship Race and fees paid (if any are required) no later than 14 days before the Council Championship Race. Late entries will be accepted up to 7 days before Race Day with an additional late fee of \$20 per car. **No entries will be accepted after 7 days before the race.**

### II. Rules in the box:

- A. Wheel bearings, washers, and bushings are prohibited.
- B. The car shall not ride on springs.
- C. Only official Cub Scout Grand Prix wheels and axles are permitted (more on this later).
- D. Only dry lubricant is permitted.
- E. Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width, and weight specifications.
- F. The car must be free-wheeling, with no starting devices.
- G. Each car must pass inspection. If a car does not pass the inspection, the owner will be informed of the reason for failure, and will be given time within the official weigh-in time period to make the required adjustments. If a car does not pass inspection, it will be disqualified.
- H. After final approval and check-in, cars will not be re-inspected or otherwise returned to the owner unless the car is damaged in handling or during a race.

### III. Car specifications:

- A. Pinewood Derby Kit: Each entry shall be constructed from an Official BSA Derby Car Kit for the current year. A new car must be constructed for each year.
- B. Pinewood Derby Car shall not use a synthetic body frame and body shell with wood inserts. Body shall be shaped from the wood block provided in Official BSA Derby Car Kit and be 95% wood. Cars not adhering to this rule will not be allowed to race.
- C. Car Overall Dimensions: Each entry will be placed into a checking device. The overall length of the car shall not exceed 7 inches including accessories. The overall width of the car with axles/wheels installed shall not exceed 2 3/4 inches. The car must have a minimum of 1 3/4 inches of clearance between the wheels. The car must have a minimum of 3/8 inch clearance underneath the entire body so it does not rub on the track. The maximum height of the car shall

- not exceed 2 5/8 inches this is not a typical specification but is important due to the limited clearance under the timing mechanism used at the finish line.
- D. Car Weight: The maximum weight of the car shall not exceed 5.0 ounces or 141.748 grams. The limit is strict 5 ounces with no "close enough" exceptions the scale must read a maximum of 5.0 ounces or 141.748 grams. Given variability in scales, racers need to be aware that weighing to exactly 5 ounces on a different scale may result in over-weight at time of inspection and check-in, thus requiring weight to be removed or added to achieve 5 ounce maximum. If racers plan on adding weight at time of check-in, please be sure the weight is secured appropriately and any attached weights do not violate car specifications.
- E. Car Body: The wood block provided with the kit must be used. The block may be shaped any way that is desired. Note the track utilizes a launching mechanism that holds the car in prelaunch position at the center of the front of the car. No part of the front of the car will be allowed to extend past the starting pin and the full 7 inches of car shall be behind starting pin.
- F. Car Wheels/Axles: All four Wheels/Axles that are supplied in the box must be used ( NO aftermarket high performance Wheels/Axles will be allowed ) and attached to the sides of the car with two at front of the car and two at back of the car. The original shape of the wheels and axles must be maintained. The wheels may not be cut, machined, lathed, drilled, beveled or rounded. You may remove the seams and imperfections from the wheels. Tool marks and other imperfections may be removed from the axles. Axles can be polished and lubricated with dry lubricant.
- G. Car Wheel Position: Racers can adjust axle fore/aft axle placement as long as wheels do not protrude past front/back of car body. Pre-cut axle slots in the raw block of wood do not have to be utilized. If custom slots/holes are created, remember 3/8 inch clearance specification must be maintained. It is not necessary that all 4 wheels be in contact with the track but bottom clearance specification between car and track of 3/8 inch must be maintained.
- H. Car shall not have any loose or moving parts.

#### IV. The Derby:

- A. The car entered into the Derby must be built the year of the race season. **NO REPEATS or REPAINTS allowed.**
- B. Race Officials reserve the right to verify that the body of the race car is wood including drilling and/or removing paint.
- C. A complete car purchase from third party is not allowed.
- D. The car entered into the Derby may not be sent to third party facilities for tuning or other performance enhancements.
- E. The race will be run utilizing a 4 lane track with an electronic timing system. Each car will race on each lane for a total of 4 races. All times will be added together and then averaged to determine each car's official time.
- F. All entrants must be checked-in and impounded in pits within the allotted check-in period. No entrant for any race will be accepted after Official Check-in period is closed.
- G. All alternate racers will have their cars checked—in during the same Official Check-in period as the main racers and have them put into an alternate pit area. Once racing starts, alternates cannot be substituted for official entrant.
- H. After a car goes thru Official Check-in and placed into impound in the pits, it cannot be touched by anyone other than Race Officials.
- I. Under no circumstances will any lubrication be applied to any axles or wheels once car is placed into the impound pits. This includes a car that has lost an axle or wheel during a race and has been allowed by the Race Official to be repaired.
- J. Anyone touching or attempting to touch another racer's car without expressed permission of the car owner/racer and under supervision of Race Officials, will be asked to leave the race area. If this person is a racer, his car will be disqualified.
- K. If a car is broken during the derby, at the sole discretion of the Race Official, may allow it to be repaired and re-check-in to the Race Official for re-inspection.

- L. If during the race a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point and given the maximum time for race in software.
- M. If during a race a car leaves its lane, at the sole discretion of the Race Official, the track may be inspected and if the track is found at fault which caused the initial violation, the Race Official may order the race to be rerun after track is repaired.
- N. If during a race no cars reaches the finish line on the track, the car that went the farthest in its lane shall be declared as the heat winner.
- O. No car will be allowed to be entered in the Derby unless the Cub Scout owning the car is present at race. The Cub Scout racing the car must be the individual entering the car for inspection and official check-in.
- P. Any person displaying poor behavior, making negative comments or showing bad sportsmanship will be asked to leave race area. Parents need to remind Scouts the qualities of good sportsmanship.
- Q. Decisions made by Race Officials and Judges shall be final.