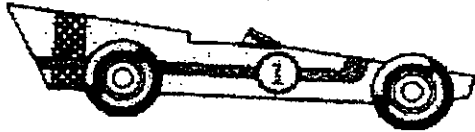


CASWELL DISTRICT OFFICIAL PINEWOOD DERBY RULES



Categories and Details of Rules

GENERAL: (Applies to all Race Day Events)

Essential Materials: All cars entered shall be constructed from the BSA Official Grand Prix Pinewood Derby Kit (referred to below as the kit) as sold by the East Carolina Council Scout Shop (Kits may be purchased elsewhere if they are of the exact type specified above.)

Competitor Categories: Cub Scouts will compete with others in the same "Cub Scout Year." In most cases this aligns with their year in school: Tiger = 1st grade; Wolf = 2nd grade; Bear = 3rd grade; 1st year Webelos = 4th grade; 2nd year Webelos = 5th grade. In cases that don't match the alignment, reconfirm the information and enter the Cub Scout according to the Cub Scout Year. In cases in which the Cub Scout year is indeterminate, enter the Cub Scout according to his grade in school. If none of these rules apply, contact the event chairman for direction. In these rules, the terms "Cub Scout Year" and "age group" are synonymous (5th grade Webelos category includes new 5th grade Boy Scouts who participated with their packs during the previous year).

Attendance: Only the Cub Scout can enter his car. This means that the Cub Scout must be present to enter his car into competition (see exception).

New Work: Construction of entries must not have begun before the previous year's District Pinewood Derby Race.

Construction: Cars must be built by the scout working in conjunction with a parent or other adult. The purpose of this event is to teach the scout new skills and to help build the bond between parent and child. Completed or substantially completed cars may not be purchased from third parties. The car must be built from the materials in the kit.

Single Entry per Car: No car may be entered in more than one event.

Pack 392 – All cars are entered into the Best Design and Derby Race.

Single Trophy per Scout: No scout may win more than one trophy. If a scout wins a trophy in the racing event, he will not win a trophy in the design event (or vice versa).

Pack 392 allows a scout to win more than one trophy.

EVENT: FASTEST CAR

Qualification:

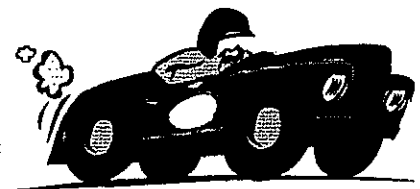
Each pack may enter one (1) Scout from each Cub Scout Year: Tiger through 2nd year Webelos.

Exception: In case of a Cub's absence, a Cub from the same pack in the same Cub Scout Year may be substituted on the day of the race. The substitute must race the absent scouts car only.

Alternately, the packs second place winner may be allowed to race his car in place of the absent 1st place winner. **No Cub Scout may race two cars.**

Technical Standards:

The inspection judges at the race day check-in are responsible in the evaluation of each car's adherence to the technical standards. Their decision may be appealed to the track chairman and the event chairman, who, after consultation with the inspection team, the SCOUT, his Cubmaster (if present) and his parent/assistant, shall render a final, binding decision.



1. Material: Racecars shall be constructed for this event from the parts contained in the Official Grand Prix Pinewood Derby Kit (Materials from the Derby kit may be supplemented but not replaced).

2. Weight: Racecars may weigh no more than five (5) ounces total weight (141.8 grams) as determined on the official scales during race day check-in. Car weight will be measured in grams, as this provides a more precise measurement.

3. Wheels and Axles: The car shall roll on the wheels from the Derby kit. The wheels shall turn about the axle nails from the Derby kit. The axle nails shall be firmly affixed to the wood of the car body. It must be obvious to the judges that the wheels and the nails from the kit are being used. The new colored wheels are Official BSA wheels and therefore are legal for use.

4. Size: Racecars may be no longer than 7 inches. The cars may not be wider than 2 3/4 inches or taller than 3 inches as determined by the official gauges during race day check-in. It is recommended that the underside clearance be at least 3/8 inches and inside wheel to wheel clearance be at least 1 3/4 inches so that the car will run on the racetrack. Adequate clearance is the responsibility of the racecar builder.

5. Weights and Attachment: Weight may be added to the car and will be considered part of the car for purposes of all measurements. "Weight" is considered to be any material on the car that is not provided in the kit. Permanent glue, nails or screws must securely fasten all weight to the car, but not by "Sticky substances", e.g. tape, or tack spray. Weights shall be passive, i.e. non-moveable, non-magnetic, non-electric, non-sticky, etc.

Technical Standards (continued):

6. Wheels: Wheel treatment (hub and tread smoothing and polishing) may not result in substantial removal of mass or in reducing the tread (track contact) width from the original kit wheels. No material is to be removed from the inside of the wheels.

The words "Official BSA, made in USA and other lettering both inside and outside the wheels shall remain intact and clearly visible to the inspector. Some of the original "tread marks" on the wheel face must be intact, i.e. apparent to the inspector. The wheels used must be from the Official BSA kit! Wheels purchased from 3rd party sources will not be allowed. Wheels that have been substantially modified will not be allowed.

7. Unacceptable Construction regarding wheels/axles: The following may NOT be used in conjunction with the wheels or axles: hubcaps, washers, inserts, sleeves, bearings.

8. Gravity Powered: The racecar may not be constructed or treated in such away that the track's starting mechanism imparts momentum to the car. (For instance, this provision disqualifies cars with sticky substances on the front of the car and protrusions, which may catch on the starting pin.)

9. Lubricants: Lubricants may not foul the track only dry graphite or dry Teflon® lubricants will be allowed.

Conduct of the Races

Track officials are responsible for the proper conduct of the races. Decisions of track officials on questions of rules interpretations and procedure may be appealed to the event chairman. Decisions of track officials on questions of fact may not be appealed beyond the track chairman.



1. Inspection Gauges: There will be one weigh-in location. One scale will be used for all races. A gauge will be used to determine correct length and width. Visual inspection will be made to determine any conditions that are not in accordance with technical standards.

2. Car Impounding: Once the car has been weighed and inspected, the SCOUT (not parent/assistant) will place his car on the table provided. At this time no additional improvements (lubrication, additional weight...) will be made to that car before or during the race.

3. Car Handling Responsibility: Scouts shall be responsible to stage their own cars on the starting line, retrieval of their cars at the finish line (once the heat/race has been called by the track official) and return their cars to the pit after their heat is finished. If, in the opinion of the track chairman, a scout's physical limitations prevent him from fully complying with this requirement, the scout may nominate an assistant of approximately the same age who serves subject to approval of the track chairman. In any case, the scout shall participate up to his limitations.

Technical Standards (continued):

- 4. Lane Assignment:** Lane assignment for each heat shall be determined by starting brackets.
- 5. Car Repair:** If, during the race, a wheel falls off or the car becomes otherwise damaged, the Cub Scout may then perform repairs to the best of his ability. The Cub Scout may seek advice for repairing the car, but may not receive any physical assistance. If a car is damaged due to track fault or the fault of another car or Cub Scout, then the track chairman may allow repair assistance.
- 6. Car Interference:** If, during a race heat, a car leaves its lane and, in so doing, interferes with another racer, then the car at fault shall be declared to have lost the race heat. (See part 9 for Exception)
- 7. Car Leaves Lane:** If, during a race heat, a car leaves its lane but proceeds down the track in a manner that does not interfere with its opponent, then the race will be called normally. (See part 9 for Exception)
- 8. Car Leaves Track:** If, during a race heat, a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point. (See part 9 for Exception.)
- 9. Track Fault:** If a car leaves its lane, at his sole discretion, the track chairman may inspect the track. If a track fault is found to have caused the initial violation, the track chairman may order the race heat to be rerun, following repair of the track (and car if needed).
- 10. No Finishers:** If, during a race heat, no car reaches the finish line on the track, the car which went the farthest in its lane shall be declared as the heat winner.
- 11. Call to Race:** Competitors will be called to race "by Scout Year". If a racer leaves the area w/o notification and rejoins the group after the race has started, placement in line is at the track chairman's discretion.
- 12. Appeals:** The Cub Scout must make all questions of rules interpretations, procedure and fact to the track officials promptly. A station at each track will be designated for this purpose.

The Racing/Track Environment:

- 1. Track Length and Drop:** The track shall have a racing surface (starting line to finish line distance) of approximately 28 feet with a drop of approximately 4 feet.
- 2. Track Slope:** The track slope shall decrease from approximately 30 degrees at the starting line to approximately 0 degrees at the finish line.
- 3. Lanes:** The track will have at least 2 lanes. Each lane will consist of a straight, smooth strip approximately 1 1/2 inches (but no more than 1 3/4 inches) wide and approximately 1/4 inches, but no more than 3/8 inches thick, centered on a smooth surface no less than 4 inches wide. Each racecar shall straddle center strip during its heat.
- 4. Starting Mechanism:** The "starting line" shall consist of vertical pins approximately 1/4 inch diameter, extending approximately 1 inch above the track surface and approximately centered in each lane.
- 5. Finish Line Sensor Location:** If the track has electronics, the "finish line sensors" shall be in alignment with the corresponding starting line pin and be approximately centered in its lane.
- 6. Finish Line Judging:** One impartial finish line judge, assigned by the track chairman, shall be stationed to re-set the electronic finish line and aid the scouts in retrieving their cars. In case of electronic finish line problems, a second impartial judge will be requested to call each heat. Both judges must then agree on a winner.
- 7. Finish Line Judge Backup:** A backup finish line judge shall be available in case a Judge needs to be excused for any reason. A finish line judge will temporarily excuse himself if he knows that one of the heat contestants is a relative, friend, or member of his pack.
- 8. Lane Selection:** If the track has more lanes than needed, the track chairman shall select the most evenly matched lanes for use by the racers. Because tracks frequently change their characteristics due to details of set-up, the determination will be made after the track has been assembled and made ready for racing on race day.
- 9. Chart Assignment:** Race assignments will be made prior to the start of each group race.
- 10. Finish Line Electronics Sensitivity:** Track Finish Line Electronics, if used, must trigger correctly if a lead pencil is passed 3/4 (0.75) inches above the track surface at a speed of 15 feet per second.
- 11. Finish Line Clearance:** Track Finish Line Electronics and other track accessories, if used, must be no closer than 3 inches above the track.



EVENT: BEST DESIGN



Qualification:

Any Caswell District Cub Scout may design, build and enter a car solely for the design competition. A scout, though, will not be allowed to enter both the design competition and race competition at the District level.

Pack 392 - All racing vehicles will qualify to be in the best design event.

Technical Standards and Conduct of Competition: Technical Standards from the racing rules apply except as follows: The block of wood from the Derby kit, or portions thereof, must be prominent in the design. "ADD-ONS" are not restricted. Special paint, decals, decorations, etc. are allowed. Wheels must be from the Derby kit but the axle nails from the Derby kit need not be used.

Pack 392 – Derby Kit wheels must be used because the same car will be racing.

Cars will be displayed for judging, side by side in assigned spaces on a display table grouped with their competitors.

The judges will select the best three cars and place 1st, 2nd, and 3rd. Judges selected are impartial members of the communities/audience of Caswell District who have been appointed by the Event Chairperson and have no relationship to any of the scouts.

The best design does not have to be a race car design.

Pack 392 - One vote per racing vehicle. One spectator for each racing vehicle will be ask judge all racing vehicles and select the best five racing vehicles and mark their votes on a provided piece of paper. The top three racing vehicles from this list will be awarded a trophy for best design. Placement will be 1st, 2nd, and 3rd

SUGGESTED TIPS FOR PACKS

BEFORE RACE DAY:

During the months preceding the District Pinewood Derby, your Pack should have a Pinewood Derby. From this pack competition you will be able to enter your Champion Cub Scout from each "Cub Year" or grade bracket to compete in the District Race. If for some reason that scout is unable to race then the runner-up of that group shall be allowed to take that spot.

The Scout qualifies for the district race. Not the Scout's car. He may race the same car that he raced at the Pack's Derby, or he may improve upon it.

Each Pack should bring its Pack flag for display in the race arena. Bring a flag stand for your flag. Each boy should, if at all possible, have on his uniform.

RACE DAY CUBMASTER:

The Cub Master or appointed adult will obtain his Pack's packet from Derby Officials at Center Court of the Mail and he will take his packet aside and attach the number card that has been assigned to each Scout to the front of the Scout's shirt. There will be a different number card for each car and event entered.

-IMPORTANT!! GIVE THE RIGHT NUMBER TO THE PROPER SCOUT. The race and judging is done by the number system only. In order to pick up the car after judging, the scout must present the number card to the Judge.

Gather boys together. Take car entered into the design category to the table designated for that event. The boy will then place his car on the proper table designated by the official.

Then proceed to racing areas for check-in and car inspection.

RE-WEIGH PROGRAM: We will try to have scales available where you can verify your own car weight and make the corrections before reporting for inspection.

TIPS FOR PARENTS:

- Know your Scout's Pack Number and Cub Scout Year.
- Arrive early! Arrive well before the end of the check-in/inspection period for your Scout Year.
- Take your Scout to meet with your Race-day Cubmaster at the race area.
- If the race-day Cubmaster is late, the pack's parents who are present should appoint a Registered Pack Leader to be a substitute. The substitute assumes all obligations and responsibilities for assuring that the Pack's Scouts receive their materials and instructions.
- Make sure that your Scout receives his racing number and goes over the rules with the Race-day Cubmaster.
- Help make sure that your Scout gets to their check-in/inspection area early.

****** SCOUTING ENCOURAGES GOOD SPORTSMANSHIP ******

**CARS WILL BE DISQUALIFIED IF THE SCOUT AND/OR HIS PARENTS DISPLAY
UNSPORTSMANLIKE CONDUCT AT THE RACE SITE.**

**ONLY THE RACE PARTICIPANTS WILL BE ALLOWED IN THE RACE ZONE ONCE
THE RACES START**

NO ADDITIONAL LUBRICANTS MAY BE USED ONCE THE CARS ARE REGISTERED!