

Coharie District

TUSCARORA COUNCIL OFFICIAL CUB SCOUT PINWOOD DERBY RULES AND REGULATIONS

2020

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The rules contained in this packet pertain to the Coharie District Pinewood Derby only. It is recommended that the Pack Pinewood Derby follow these rules. If not, the winning cars that will race in the district race may not conform to these rules and WILL BE disqualified.

There will be no exception due to the Pack using different or outdated rules.

General Rules

1. **Qualifications:** The 2020 Coharie District Pinewood Derby will be a “**Timed Event**” race and is open to Scouts registered in the Coharie District who placed 1st, 2nd, and 3rd in their Pack’s Pinewood Derby race for the current year.
2. **Participants:** The Cubmaster or the Pinewood Derby representative for each Pack participating must submit a list of the names of Scouts who placed this year in their Pack’s race to the Coharie District Pinewood Derby Committee prior to the day of the race.
3. **Uniform:** all participants must wear Cub Scout Class A Uniform shirts. Pack tees shirts are not acceptable attire for race day.
4. **Essential Materials:** All cars entered shall be constructed from the current official BSA Pinewood Derby kit.
5. **New Work:** Construction of all entries must have begun after last year’s Pinewood Derby race and be the same car that placed in their Pack’s race with no alterations done to the car between the Pack race and the District race.
6. **Single Entry per Person:** Only one car may be registered by any Scout for the district Cub Scout race and this must be the same car that placed at their Pack’s Pinewood Derby race for the current year.
7. **Attendance:** The Cub Scout and their adult partner must be present to race their own car. No drop offs (someone else racing their car for them) allowed. Conflicts with other events, such as birthday parties, sports events, or other activities that the Scout chooses to attend does not qualify for representation by a substitute Cub Scout. All circumstances regarding the eligibility of substitution are subject to the approval of the Coharie District Pinewood Derby Committee in advance.
8. **Car Specification**
 - a. Width – the overall width of the car may **NOT** exceed **2 ¾ inches**.
 - b. Height – the overall Height of the car may **NOT** exceed **4 ½ inches**.
 - c. Length – the overall length of the car may **NOT** exceed **7 inches**.
 - d. Weight – the weight of the car may **NOT** exceed **141.75 grams**
NOTE: this is different from the rule in the kit.
 - e. Width between wheels – **1 ¾ inches**.
 - f. Bottom clearance between car and track – **⅜ inch**. Do not attach weights to the bottom of the car unless you allow space by carving into the block of wood.

9. **Inspection and Registration:** The Cub Scout must personally enter their own car. This means that the Cub Scout must carry their own car ***and be present*** for the registration and inspection to enter the car into the competition. The Scout's adult partner may accompany them through the registration and inspection processes but cannot handle the car. Each car must pass a technical inspection before it can compete.
10. **Failure to Pass Inspection:** The Inspection Committee shall disqualify cars which do not meet the rules described herein. If a car does not pass inspection, the Scout team will be informed of the reason the car did not pass. Cars must be taken outside or to a specified area for repairs and then returned for re-inspection.
11. **No Late Registration:** Cars must be registered online by March 20, 2020. If a Scout has not registered before the deadline (i.e. late arrival), the car will be disqualified from the race.
12. **After Inspection:** After the car has passed inspection, the car cannot be altered in any way (this includes adding graphite, weight, etc.) and the Scout must take their car to the Pitt area themselves. Should the car be damaged by being dropped before reaching the Pitt area, the race committee must be notified, and 5 minutes will be given for repairs. The car must again pass inspection before being taken to the Pitt area.
13. **Pitt Area:** The Cub Scout must take their car directly to the Pitt area provided by the Race Officials and place it in the position decided upon by the Pitt area supervisor. Once it is in place, the car cannot be moved until it is time for that car to race.
14. **Removal of Cars:** Only the Cub Scout may handle their own car. This includes but not limited to registration, inspection, taking it to the Pitt area, and to the race track. Due to unforeseen circumstances at the Pitt area, should the cars need to be moved prior to the race, only the Race Chair and/or designated race officials may move the cars.
15. **Disqualification:** Any car not conforming to these official rules will be disqualified.

Cub Scout Race Car Design Standards

1. **Material:** Race cars shall be constructed from the parts contained in the current official BSA Pinewood Derby kit. Cars made from other kits will not be accepted.
2. **Weight:** Race cars must not weigh more than five (5) ounces (141.75 grams) total weight as determined on the official scales used at the derby during the pre-race check-in.
3. **Wheels and Axles:** The car shall roll on the wheels from the kit and must use all four (4) wheels. The wheels shall turn about the axle nails from the kit. The axle nails shall be firmly affixed to the wood of the car body and must be placed in the original “axle grooves” in the supplied wooden block. If it is determined that the “axle grooves” are not straight, new ones may be cut on the opposite side of the block directly across from the original grooves. Axle positions may not be altered (moved forward, back, or angled). They must remain in the original position. It must be obvious to the judges that the grooves, wheels, and the nails from the kit are being used. Axles cannot be altered in any way except they may be lightly polished to remove burrs.
4. **Size:** Race cars may be no longer than seven (7) inches or wider than $2\frac{3}{4}$ inches as determined by the official gages during the registration and inspection process. Underside clearance of at least $\frac{3}{8}$ inch and inside wheel to wheel clearance of at least $1\frac{3}{4}$ inches is recommended so that the car will run on the race track. Maximum overall height is $3\frac{1}{2}$ inches.
5. **Front Design:** Cars with pointed fronts must be a minimum of $\frac{1}{4}$ inch wide at the point for placement on the starting pins and for the electronic timer to pick up on the car at the finish line. Open front cars (a channel cut out of the middle between the front wheels giving it a “U” or “V” shape appearance) and the use of a “quick start” bar is prohibited. The entire car including wheels must stage behind the starting pin.
6. **Weights and Attachments:** 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. All weight must be securely fastened to the car (i.e. permanent glue, nails, and screws) but not be “sticky substances” like tape or tack spray. Weights shall be passive (i.e. non-moveable, non-magnetic, non-electric, non-sticky, etc.). We do not recommend melting or sanding lead. Melting and sanding lead is dangerous because of the dust and fumes being inhaled into the lungs.

7. **Wheel Treatment:** Official BSA "wheels should not be modified in any way" and may **NOT** be tapered. Do **NOT** sand at angles or round off wheels. The outside beaded edge must be visible. Do **NOT** grind wheels down. Machined wheels will not pass inspection. Official BSA axles may be polished lightly but **NOT** ground down or altered. **NO hubcaps or washers.**
8. **Unacceptable Construction:** The following may not be used in conjunction with the wheels or axles: hubcaps, washers, inserts, sleeves, bearings, springs, suspension, and anything else that did not come with the official kit.
9. **Gravity Powered:** The race car may not be constructed or treated in such a way 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.) The car must be freewheeling, driven entirely by gravity with no starting devices.
10. **BSA Markings:** All BSA markings, both inside and out, must be visible and no alterations made that would result in disfiguring the markings. This includes sanding and polishing.

Conduct of the Races

1. **Inspection and Registration:** Cub Scouts must register their car personally and be present at the inspection. The Inspection Committee will use the official scale with a five (5) ounce master weight (used for scale calibration) and length box.
2. **Race Day Lubrication:** Lubrication must be done outside or in a place specified by the host Pack before inspection. Only dry lubrication is acceptable. Cars may not be lubricated once they have passed inspection.
3. **Car Handling Responsibility:** Cub Scouts will be responsible for carrying their cars to registration and inspection. Once the car has passed inspection, the Scout will take their car to the Pitt area and turn it in. Only the car will be turned in. Carrying cases, boxes, etc. will not be accepted at the Pitt area. The Scout is then responsible for retrieving their car from the Pitt area, carrying it to the track area and placing their car on the track. After the Scout's race has ended, the Scout is to return the car back to the Pitt area. If, in the opinion of the Race Official, a Scout's physical limitations prevent them from fully complying with this requirement, the Scout may nominate an assistant of approximately the same age who serves, subject to approval of the Race Official, as the Scout's representative. In any case, the Scout shall participate up to his or her limitations.
4. **Staging:** The entire car must stage behind the starting pin.
5. **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. If the car leaves its lane and interferes with another car, the race will be re-staged and re-run. If the same car again leaves its lane and interferes with another car, that car will be judged last place and the race will be re-staged and re-run without that car.
6. **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.
7. **Track Fault:** If a car leaves its lane, the Race Official, at their sole discretion, may inspect the track and, if a track fault is found which probably caused the initial violation, the Race Official may order the race heat to be re-run after the track is repaired.
8. **Car Repair (Without Fault):** If, during the race, a wheel falls off or the car becomes otherwise damaged, then the Scout may, to the best of their ability, perform repairs with the assistance of their adult partner with a five (5) minute time limit to complete the repairs. No lubrication or added weight may be added to the car when repaired. The car must pass inspection before it is allowed to race. If the repairs are not completed within the time limit, the car will be disqualified.

9. **Car Repair (With Fault):** If a car is damaged due to track fault, by another car, or person, then the Race Official, at their sole discretion, may allow additional repair assistance to the Scout with a five (5) minute time limit. No lubrication or added weight may be added to the car when repaired. The car must pass inspection before it is allowed to race. If the repairs are not completed within the time limit, the car will be disqualified.
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. **The Race Area:** Only race officials and Scouts currently racing at the time are allowed in the track area. All other spectators must remain in the spectator area while the races are conducted. Violation of this rule will result in being asked to return to the spectator area, disqualification for the event, or removal from the grounds as seen fit by the Coharie District Pinewood Derby Committee officials. This rule will be strictly enforced.
12. **Track Damages:** Any person other than those responsible for the track setup and installation caught stepping on or otherwise touching or abusing the track is subject to disqualification and/or expulsion from the competition area.
13. **Sportsmanship:** Good behavior and sportsmanship is expected. Race officials may ask anyone not showing good sportsmanship to leave.

Special Notes to All Concerned

This project is a parent and son event and is recommended as such by the National Boy Scouts of America. The Coharie District Pinewood Derby Committee **STRONGLY SUGGESTS** that each parent emphasize this idea with your son. In all of the events, we require that the cars be built this year.

Sportsmanship:

Pinewood Derby racing requires each participant to learn 1) the craft skills necessary to build a car, and 2) the rules that must be followed. Even more important, though, is how we act and behave while participating in the Pinewood Derby or any other group activity. This is called sportsmanship.

The first thing to remember about sportsmanship is that everyone's skills are a little different. You may be good at something like singing or drawing, but not as good at something else like basketball or computers. Parents have different skill levels, too. This doesn't mean that you are a good person one time and not good another time. You can always be a good person, whether or not you have good car-building skills. Remember, you and your friends are individuals first and racers second. This idea is often called having respect for others.

The second thing to remember is to follow the rules. Without rules, there would be no Pinewood Derby. You will never know if you are really good at doing something unless you follow the rules. This is often called being honest.

The third thing to remember about good sportsmanship is that there are winners and losers in every competition. You accept this when you choose to compete. There may be times when you win and feel happy, and times when you lose and feel unhappy. Being a winner is easy, and losing is sometimes hard. If you win, you must not brag or gloat. If you lose, you must not feel jealous or bitter. To show good sportsmanship, you must be able to say "I did my best" and be satisfied with the results. You must also be able to appreciate and feel happy for someone else when they run a good race or build a neat car.