

PINEWOOD DERBY RULES

The following set of rules will be in effect for all Pinewood Derbies conducted by the Western North Carolina Church of God Boys Ministry Pinewood Derby.

I. CAR

- A. The car must be newly built for the current year. **Stock Division cars are the Pine Derby Car Kits from Boy Scouts of America and Modified Division is anything that has been changed from a standard stock car.** The contestant racing the car **should** substantially build the car. Parental supervision in the construction of the car is encouraged.
 - B. The body of the car must be made from wood. Wheels may not be designed to ride upon the guide strip of the track. If the front of the car is designed to gain an unfair advantage at the start or interferes with a fair start, the car will be disqualified.
 - C. Weight may be added to the car and will be considered part of the car for purposes of all measurements. "Weight" is regarded as any material on the car that is not provided in the kit. All weights must be securely fastened to the car, e.g. by permanent glue, nails or screws, 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.
 - D. The axles of the car must be either a pin or a straight axle. Axles must be firmly attached to the car. The use of a flexible suspension system of any type is prohibited.
 - E. The official wheel width is 0.34". DO NOT MOVE THE AXLES -use the axel slots already positioned on the block of wood. Use wood glue or model cement to hold the pin axle in body. The wheels must be designed for Pinewood Derby. **Wheels may not be altered in any way.** Mold projection defects on wheel treads may be removed by sanding **lightly**. All four wheels must touch the track. **Note:** Official BSA wheels and axles must be used. The wheels may not be cut, drilled, beveled, or rounded. You may sand the seams and imperfection from the wheels. The axles may be polished. The wheels must be attached to the car with the pins or axles provided in the kit. No cars will be accepted in the WNCOCG Competition where bearings, washers, or spacers are used as part of the wheel assembly.
 - F. Lubrication -only graphite powder or the new B.S.A. white lube T102/polytetrafluoroethylene may be used to lubricate wheels. (Warning
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-other lubricants may damage the plastic wheels and keep them from turning freely.) The uses of WD-40 or other liquid types will cause the car to be disqualified. The WNCCOG Committee will NOT provide graphite powder lubricants. Once the car is impounded, it may NOT be re-lubricated. Graphite must be applied outside of the race area. No graphite may be applied anywhere inside the building.

- G. The total weight of the car may not exceed 5 ounces. The maximum width of the car, including wheels, may not exceed 2.75 inches. The maximum length of the car may not exceed 7 inches. The motion of the car may not be mechanically aided (motor, springs, rubber bands, etc. are prohibited). (1 $\frac{3}{4}$ " clearance between wheels, $\frac{3}{8}$ " clearance underneath.)
- H. There must be no moving parts on the car. This includes bearings, bb's or moving weights. If this is found, a car could be disqualified.
- I. The WNCCOG TEAM may disqualify any car that, in their determination, is not in compliance with the spirit of the Pinewood Derby.

II. TRACK

- A. The racetrack used at the WNCCOG Boys Ministry is 35ft track.
- B. The track must be adjusted to be level across its width over the entire length of the track.
- C. Joints between sections of the track must be adjusted to provide a smooth transition for the car.
- D. Every attempt shall be made to ensure that both running lanes of the track are equal.

III. RACE PROCEDURE

- A. According to the number of registrants, cars will be raced by the WNCCOG Boys Ministry team, Pine Derby Chairman, or his associates.
 - B. Race officials will establish and announce the registration schedule for the WNCCOG Boys Ministry Pine Derby. This schedule will be presented in writing at registration.
 - C. After the Contestant has registered, his car will be weighed, measured, and inspected to insure compliance with the above rules.
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- D. A single balance (scale) will be used to weigh cars. The balance must be able to resolve at least .01 ounce. Cars will not be accepted if their weight exceeds five (5) ounces by even the smallest resolution of the balance.
 - E. A wood, plastic, or metal jig will be used to determine if the car complies with the length and width limitations.
 - F. A contestant whose car fails any part of the inspection will be allowed to make adjustments to the car. Cars will be re-weighed, measured, and inspected until they comply or until the scheduled race starting time.
 - G. After the car has passed inspection, it will be taken by a race official to the pit table to await the race. **Cars may not be handled after inspection until they are scheduled to race.**
 - H. Cars will be protected from handling by anyone except the race officials and the car owner.
 - I. **No additional lubrication may be applied to the car at the Pine Derby site, either before or during a Pine Derby.**
 - J. PD's will be double elimination events. Each heat of the PD will be a best of two (2) out of three (3) races between the contestants cars.
 - K. Bye runs may be used when there is no opponent because of an uneven number of boys participating. A bye run is defined as a race with no opponent. Bye runs should be kept to a minimum.
 - L. In the event of a breakdown of a car during the race, the participant will be given five (5) minutes to repair the car. **Only the damaged portion of the car may be modified.** Work must be done by the contestant with assistance from his parent or guardian. Race officials shall re-inspect any car that is serviced during the race. The Race officials may choose to continue with other race heats in order to avoid long delays in the race. The damaged car must be raced before the race proceeds to the next level of elimination.
 - N. In the event that a car "jumps track". The race will be re-run. If a car jumps track twice then the other car will be declared the winner. If it is determined that the cause of the problem is the track then the contestants will be allowed to switch lanes with no penalty.
 - O. In the final heat to determine 1st and 2nd place, of the finalist has not
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been defeated, he must be defeated twice to be declared the winner. The Judges decision will be final.