



SOUTH CAROLINA BOY'S MINISTRIES

South Carolina Boys Ministry

Pinewood Derby Rules

Revised Feb 2019

The following set of rules will be in effect for all Pinewood Derbies conducted by the South Carolina Boys Ministry Pinewood Derby. Posts within the South Carolina State may elect to adopt these rules in whole or in part. However, the South Carolina State representatives conducting the South Carolina State Pinewood Derby must comply with all of these rules.

I. CAR

A. The car must be newly built for the current year. 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 considered to be any material on the car that is not provided in the kit. All weight 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 pin or 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.

Note: The wheels may not be sanded to enhance performance. The decorative dots on the wheel treads may not be removed. If wheel sanding is detected the car will be disqualified. The wheels must be attached to the car with the pins or axels provided in the kit. No cars will be accepted in the South Carolina Boys Ministry PD 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/polytetra fluoroethylene may be used to lubricate wheels. (Warning - 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 SC BM 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).

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 South Carolina Boys Ministry Chairman or his appointed replacement may disqualify any car that in their determination is not in compliance with the spirit of the Pinewood Derby.

II. TRACK

A. The race track used at the South Carolina Boys Ministry Pinewood Derby is an aluminum 35ft track built by Best Track. We use an electronic finishing device by Fast Track.

B. The track must be adjusted to be level across it's width over the entire length of the track.

C. Joints between sections of the track must be adjusted to provide a smooth transition by the car.

D. Every attempt shall be made to insure that both running lanes of the track are equal.

III. RACE PROCEDURE

A. According to the number of registrants cars may be raced by the qualifying Boy or Adult (in adult races) or those chosen to run the pinewood derby. Cars may not be raced by a parent or a stand-in. Proof of registration may be required.

B. Race officials will establish and announce the registration time schedule for the South Carolina PD. This schedule will be presented in writing no later than August (for fall) and February (for Spring). No registrations will be accepted after the deadline. Contestants in line for registration before the deadline will be accepted.

C. After the Contestant has registered, his car will be weighed, measured, and inspected to insure compliance with the above rules.

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 to the length and width limitations.

F. A contestant whose car fails any part of the inspection will be given the opportunity 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 PD site, either before or during a PD.

J. Two racing options are available 1) 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. 2) Utilize the four tack system. A contestant still must lose twice to be eliminated. The leaders may choose to do single elimination with a losers bracket if there is an overwhelming number of entrants.

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. During a bye run, the contestant will be required to run his car down each of the two (2) lanes as if in an actual race. Race officials should assign multiple bye runs in the early levels of the race so that there will be no bye runs during the later levels.

L. The official software of the South Carolina PD is Race Tender. All efforts will be put forth to make sure that the race is as fair as possible.

M. Each heat will begin with the racers being called by name to the pit table. A contestant will have three (3) minutes to report before **being disqualified**. A Race official at the pit table will give the contestants their car. The contestants or assigned worker will then take the cars to the Race Starter for positioning on the track. Cars will switch lanes between the first and second race. If a third race is required, lane selection will be determined by a coin toss. Contestants will be given time to position themselves at the end of the track before the race starts. Contestant will return their cars to the starting gate between races. Upon completion of a heat, cars that have not been eliminated must be returned to the pit table.

N. 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.

O. 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.

P. In the final heat to determine 1st and 2nd place, the winner of the heat will be declared the overall winner regardless of his previous record. Car dynamics change in time and it may be possible for a car with one loss to beat a car with no losses. The Judges decision will be final.

IV. Awards

A. Awards will be given (according to number of participation) for 1st, 2nd, & 3rd place winners in each age group (5-6,7-9,10-12,13-17, & Adult)

B. Awards will be given for best of show in two age groups (5-17 & Adults)

A note to the Adults and Leaders

The Boys Ministry Committee of South Carolina does its best to insure that each race is run fairly and there are no unfair advantages. Please understand that the main reason for this ministry is for the boys. The adults working are all volunteers. You as leaders play an important role in making this event very special for your boys. Please keep a positive attitude as it is reflected on your boys.

Please make every effort to follow the rules.

If you have any questions please e-mail the Boys Committee or call as designated on the web site.