

# Pack 51 Pinewood Derby Race Rules

## Inspection

ALL CARS MUST PASS INSPECTION TO QUALIFY FOR THE RACE

Following are the inspection points

1. The car weight shall not exceed 5.0 ounces. The official race scale shall be considered final.
2. The overall length of the car shall not exceed 7 inches.
3. The overall width of the car shall not exceed 2  $\frac{3}{4}$  inches.
4. The car must have a minimum 1  $\frac{3}{4}$ " clearance between the wheels.
5. The car must have 3/8" clearance underneath the body.
6. Lengthening or shortening of the wheelbase is allowed as long as it does not violate rules 1 – 5.
7. The wood provided in the kit must be used. The block may be shaped any way that is desired.
8. The wheels **must be Official BSA Pinewood Derby Wheels**
9. No "Speed" (raised rib), "H"(center of tread undercut) or "Razor" wheels allowed.
10. Wheel surface may be smoothed to remove center ridge and the inside edge maybe rounded to provide a smoother surface.
11. **Official BSA Axles are to be used.** Speed axle kits developed using Official BSA axles are allowed.
12. Wheel bearings, washers or bushings are prohibited.
13. The car must not ride on any type of springs.
14. **All four wheels** must touch the track surface.
15. The car must be freewheeling, with no starting devices.
16. No loose material of any kind, such as lead shot, may be used.
17. The car body may have no moving parts.
18. Construction of **ALL** entries **MUST** have begun **AFTER** last year's races.
19. Only one car may be registered by any Scout in the Pinewood Derby.
20. Only dry lubricants such as graphite or powdered teflon "white lube" will be allowed for lubricating the wheels. Lubricants may not foul the track.
21. Only one lubrication is allowed before the beginning of the first race and then once again before the beginning of the first race of the semi-finals and finals.
22. Details such as the steering wheel, driver, decals, painting, and interior detail are permissible as long as these details do not exceed the maximum length, width, and weight specifications.

Each car must pass inspection by the official inspection committee before it will be allowed to compete. The Inspection Committee has the responsibility to disqualify those cars that do not meet these specifications.

## Race Rules:

The following are the rules covering the race:

Competition will consist of heat races within each Den, and a series of final heats at the Pack level. Track officials are responsible for the proper conduct of the races.

1. Race Day Lubrication: There will be a lubrication table set up at the race. In the interest of fairness, only one lubrication is allowed before the beginning of the first heat race and then once again before the beginning of the first race of the finals
2. Car Handling Responsibility: Scouts shall be responsible to present their own cars at the "Pit Stop" area for lubrication, and at the starting line for staging. Cars will be staged on the tracks by the "Starter Team." If, in the opinion of the Trackmaster, 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.
3. Lane Assignment: To equalize differences among track lanes, each heat will consist of a number of races equal to the number of cars running in that heat. For den heats, this will be the number of boys in each den. For Pack elimination heats, there will be four cars in each heat.
  - a. In each heat, each car will race in each track lane used for that heat. For example, a Den heat with five cars would consist of five races with each car rotating through each lane. The heat for a den with eight boys would have eight races, with four cars "sitting out" each race on a four lane track.
  - b. From each heat, the top two cars based on cumulative time will advance to race at the in the Pack Final. The overall winner for each Den and Pack final races will be the car with the highest number of points after the final race.
4. 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 it's 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.
5. 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.
6. 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 his ability perform repairs with the assistance of his adult partner or Pit Crewmember.
7. Car Repair (With Fault): If a car is damaged due to track fault, or damage caused by another car or person, then the Trackmaster, at his sole discretion, may allow additional repair assistance to the Cub.
8. 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.

9. Call to Race: Competitors will be called by Den number prior to each heat. When his Den number is called, each SCOUT will retrieve his car from "the stage" and present himself, with his car, to the "Pit" area for lubrication. If the Cub does not respond, his name will be called a second and third time. If the Cub has not presented himself in time for his heat, he will be judged as placing last for that race heat. If no competitor is present, the track chairman may, at his sole discretion, defer the race heat in a manner that does not interfere with progress of the racing.
10. Track Champions: The 1<sup>st</sup> and 2<sup>nd</sup> place Racer from each Den shall be accompanied, with his car, from the track to the stage by his parent or other designee. The car will be impounded on the stage until the start of the Final Heats. Inspection, repair as necessary and addition of graphite, all performed solely by the Cub Scout, will be permitted prior to the start of the Final Heats.
11. Track Fault: If a car leaves its lane, at his sole discretion, the Trackmaster may inspect the track and, if a track fault is found which probably caused the initial violation, the Trackmaster may order the race heat to be rerun after the track is repaired.

### **Awards:**

The following awards will be issued

1. Each participant will receive a Pinewood Derby Participation Patch
2. The 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place winners from each Den will receive a medal
3. The 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place winners from the overall Pack race will receive trophies
4. Ribbons will be awarded for the following categories
  - a. Crowd Favorite Award
  - b. Fastest Looking Car Standing Still
  - c. Best Paint
  - d. Funniest Looking
  - e. Best Design

### **Non-Cub Scout Race**

A race for any Adult Leader, Parent, or Sibling of a Scout will be held following the Award Presentation for the Cub Scouts.

The following rules apply for the Adult Race:

1. The Adult must enter his own built vehicle. The Adult may not use the vehicle raced by a Cub Scout
2. All rules stated for the Cub Scout race apply to the Non-Cub Scout Race with the exception of:
  - a. Rules 8, 9, 11, and 14.
3. Winner will be recognized with honor, glory, and bragging rights for the next year. Also the following ribbons:
  - a. Crowd Favorite Award
  - b. Fastest Looking Car Standing Still
  - c. Best Paint
  - d. Funniest Looking
  - e. Best Design