

2017 PINEWOOD DERBY

INSPECTIONS

THURSDAY FEBRUARY 9th, 2017 (7:00 to 8:30 pm)

Good Shepherd Lutheran Church

Address: 7800 S McCarthy Rd, Palos Heights, IL 60463

- All cars **MUST** be inspected on Thursday; this makes race day go much smoother. If there is a problem please contact Bill Chapman 708 205 5705.
- After your car has been inspected, it will be placed into the “pit area” for race day – (YOU WILL NOT TAKE THE CARS HOME WITH YOU)
- The track will be available to test your cars. Note however, the more you test your car the slower it will go.

CAR SPECIFICATIONS:

- Maximum width - 2-3/4"
- Maximum Length - 7"
- Maximum Weight - Not over 5 Ounces
- Minimum width between wheels - 1-3/4
- Minimum bottom clearance underneath the body (so it does not rub on the track guide) - 3/8"
- Must have a ½ “ flat area in the front middle of the car “nose”.

RULES:

Wheel bearings, washers, and bushings are prohibited. The car shall not ride on springs. Only official Cub Scout Grand Prix Pinewood Derby wheels and axles are permitted. **Only dry lubricant is permitted.** Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications. The car must be free-wheeling, with no starting devices. Each car must pass inspection by the official inspection committee before it may compete. If, at registration., a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official weigh-in time period to make the adjustment. After final approval, cars will not be re-inspected unless the car is damaged in handling or in a race.

1. Use only Official BSA Pinewood Derby Kit wood, wheels, and nails. *(Other wheels & kits are available on the internet that give a very unfair advantage.)*
 - a. Note: BSA colored wheels will be allowed.

2. Wheels may only be lightly sanded to smooth out molding imperfections in the tread area. Beveling, tapering, thin sanding, wafering, or lathe turning of the wheels is prohibited. The decorative dots on the wheel treads may not be removed. (*Lathing of wheels can make cars much faster.*)
3. Motors, engines, or other propulsion may not be used. (*The official BSA rules do not prohibit motors but it is an unfair advantage.*)
4. All cars are to be inspected and stored safely prior to the race. (*This allows time for Scouts to make changes if needed.*)
5. Nothing can protrude past the front “nose” of the car.
6. The starting device is a stick in the middle of each lane that is flipped down to start the cars. To insure a even start all car must have a ½” flat area “nose” in front of the car. (Pointed cars will not be allowed).
7. **NOTE:** If the car design you chose has a narrow body, make sure the area where the axles are inserted into the body remains 1-3/4" wide, or wheels will not fit over the guide strips of the track.

RACE DAY

SATURDAY FEBRUARY 11th, 2017 (2:00 to 5:00 pm)

Good Shepherd Lutheran Church

Address: 7800 S McCarthy Rd, Palos Heights, IL 60463

First race runs at 2:00, please arrive no later than 1:45

AWARDS:

- Overall Pack – 1st, 2nd, 3rd, 4th
- Each Den – 1st
- Siblings – 1st
- Parent – 1st
- Awards chosen by cubs scouts (Each cub scout will be given a ticket to vote for each category)
 - Best Design
 - Most Creative

How Does the Scoring Work?

There are three racing rounds: one for Cub Scouts, a second for siblings, and a third for parents. All Cub Scouts race together regardless of grade or den, although results are tracked for best overall and best in den/grade level. Sibling and then parent entries race in a second and third round after the Cub Scouts' round is complete. The race schedule for each round is generated by computer. In order to ensure the fairest and most evenly distributed possible schedule, schedules are generated by randomly

by computer before any racing begins. Therefore, latecomers cannot be added to an existing race schedule.

The video screen will display the current racers in the blue area on top, and the “On Deck Circle” racers (those who will race next) in the red area on bottom. The full race schedule will be posted. Please watch the monitor and listen to the announcer. When your car is on deck, retrieve it from the race pit (the table where all the cars are kept between races), and take it to the starting area so you’re ready to race. Car numbers refer to the numbers assigned at the official registration, and not to decorative numbers applied to the design of the car.

A “heat” is a single race of up to four cars on the track. Each car will race in four heats, once in each lane. Each car in each heat is timed electronically to the nearest 1,000th of a second, and finishing times determine first, second, third, and fourth place within each heat. Each car’s finishing times for all four heats are added together, and that total time is used to determine finishing positions overall and by den/grade level. There is no final “best of the best” round. The screen will show “miles per hour” in addition to finishing time, but that’s just for fun, and has no bearing on the actual race results.

A car that fails to finish a heat due to stopping (or moving incredibly slowly) on the track, falling off the track, or failing to enter a heat, will have 9.99 seconds added to its overall race time for the unfinished heat.

Here are some things not to worry about:

- **Finishing position in a heat.** Your performance against three other cars in any or all heats is less important than your overall finishing time. With up to three competitors in each of four heats, you’ll be racing directly against no more than 12 other cars. Imagine you’re the 13th best car in the whole Pinewood Derby, but you end up racing against the 12 cars that are better: You might finish fourth in every heat, but still finish 13th overall. Likewise, if you’re the 13th slowest car in the whole Derby but end up racing against the 12 slower cars, you might finish first in each heat, and have a very bad overall score. So don’t get too excited or too upset about your finishing position in any one heat.
- **Stiff competition in a heat.** It doesn’t matter if you always end up racing against the fastest cars or more experienced car builders. Only your overall time compared to all other cars counts.
- **Some lanes are better than others.** Every car will race once in each lane. Any advantage or disadvantage in a lane will be shared equally by all competitors.
- **Fewer than four cars in a heat.** In some heats, fewer than four cars will race because of car damage, dropouts, computer-generated “bye” rounds, etc. Some will argue that you then have an advantage, because you can’t, by definition, come in fourth in that heat. But that doesn’t matter: All that counts is your total race time for all four of your heats, and the number of other racers has no bearing on that.

Cars are not to be touched at the end of a heat until the judge rules the heat completed.