

Pack 55 Pinewood Derby Tips and Tricks



One of the most fun parts of the Pinewood Derby is designing, building and decorating your car. Here are some tips and tricks to consider when you build yours.

When designing your car, trace the wood block onto a piece of paper. Once you create your design, cut it out and tape it to the car. When cutting the wood, simply trace the design.

The starting gate is often a “peg” that rises out of the track to keep the car from going down the track. Cars where the front end comes to a narrow point are often tilted to the left or the right on the starting gate (leaning to either side of the peg). This will slow your car down out of the gate.

More than aerodynamics, friction and alignment play a bigger role in building a speedy car. The plastic wheels in your kit may have burrs or ridges from the factory that could cause the car to “bump” as it heads down the track. It is permissible to sand down the burrs and ridges to help smooth the ride. However the overall size (diameter and thickness of the wheels cannot be altered)

The axels in your kit may also have burrs or ridges that could cause friction and slow your car down. These can also be smoothed with fine grain sandpaper.

The car is not to exceed 5 oz. You should weight your car so that it is as close to 5 oz as possible. This builds momentum going down the track.

The cars do take a beating as they “crash” into the finish line. Secure your axels to the car with glue but be sure the dried glue does not come into contact with the wheels. This could slow your car down.

There are several ways to add weight to the car. Some tape quarters to the top, some screw it to the bottom and some drill a hole and insert weights. Remember that once the car is submitted for a race it cannot be altered. If weights fall off, you may not be able to reattach them. Also, weights screwed to the bottom of the car could rub against the track and wheels. Remember: The car must have 3/8” clearance on the bottom!

Prior to the race, lubricate the wheels with graphite. This can be found at hobby stores and hardware stores. Using a dry lubricant like graphite reduces friction as the wheels spin on the axels. Note that not all lubricants are permissible – check the rules to determine what is permitted.

Avoid “playing” with your completed car prior to the race. Many times wheels and weights get loosened, or pieces fall off. However, after the races playing is encouraged!!

Ask the experts!! Older scouts who have taken part in the pinewood derby likely know a few tips and tricks as well. Ask your fellow scouts any questions about what works and doesn’t work.

Have fun!!! Win or lose, enjoy the building and racing process. Even if your car performs slowly, you can take the experience and build a better car next year! **DO YOUR BEST!**