

Pack 1776
Pinewood Derby Tip #2
Start Building Now

Plan early! It can take a long time to build a "perfect" Pinewood Derby car. Most Cub Scouts don't have the attention span adults do, and they are unable to complete a car in a weekend. Some people believe working for more than 15-30 minutes at a time is too optimistic for Tiger Cubs, while spending an hour or two in the garage is fine for the Webelos.

Many new builders get into trouble by attempting to do too much in too short of a time period, or they damage a car (e.g., a drop of glue going onto the wheel and axle) just before the official weigh-in. Here are some ideas to make the car building process go more smoothly:

- 1) Plan ahead. Let the scout tell you what he wants to do and then help him plan how to build it. Let the scout know this is his car, and that you will work with him as opposed to doing all the work for him. The older the scout, the more work they can do by themselves. Let each scout help plan when they want to work on the car.
- 2) Divide the work into separate parts, with the scout helping set the schedule. For example, polish your axles on one day, cut the car on another day, sand the car on another day, etc. It is important for the scout to help set the schedule so he knows it takes time to accomplish some projects, and these projects don't get done when playing video games.
- 3) Build two cars at once if you have the time! This allows you to have a back-up in case your primary car breaks or is damaged during the building process.

Question: Can a car be built in under a day?

Answer: *If there is an emergency and you don't have much time, you can indeed build a car in a weekend or even a day! Assuming you prepared your axles ahead of time, here is how to do it:*

1) Use a simple speed design like a wedge, or use the entire block of wood to build something fun.

Examples or fun PWD cars include a pool table, a wad of fake \$100 bills, a package of pencils, a candy bar wrapper, etc.

2) Instead of paint (paint and clear coat can take days to dry), use a magic marker, a color stick, or a "skin" (skins are car-size decals) to decorate the car. Another idea is to glue on a printed "wrapper" (candy bar, slogan, etc.) on a smooth car body.

3) Use stick-on decals for decoration.

4) If you haven't yet filed or sanded the axles (or want to eliminate that step), and you are out of time, it is still possible to have a fast car. Take each nail and locate the ridges on it. These ridges only go partially around the shaft of the nail. The ridges are there to help keep the nail from rising out of the wood. Unfortunately, the ridges create extra friction when the car wheel rubs against them. When you mount the wheels on the car, consider placing the ridges of the nail in a "North and South" position (facing the floor and ceiling). This way the smooth side of the nail will always be touching the wheel hub when the car rolls forward, reducing friction and making the car faster. Then generously lubricate your

axles and wheel hubs with graphite to reduce friction. You can purchase graphite powder in hardware stores (they may run out around PWD time), or purchase special racing blends (it is debatable how much better they are) at the Scout Store in Pleasant Hill or from other locations. Note: Graphite powder (carbon) is slippery and dirties everything it comes in contact with, so please be careful when and where you apply it.

Where can I purchase "skins", decals, decorations (exhaust pipes, drivers, etc.), for the car?

Answer: The Scout Store in Pleasant Hill has a good selection. Many area craft stores also have these items. You can also be creative and reuse or recycle decorative items from toys and games, or print your own skins from special paper.

If you haven't already done so, start working on your Pinewood Derby car today!