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Car Kit Assembly

Your Pinewood Derby Car kit includes:

- A Pinewood Pro pinewood derby 7" car block
- Pinewood Pro's custom **PRO Speed axles**, precision machined and nickel-plated. These axles are super fast! No need to polish.
- Pinewood Pro's custom **PRO Wheels**, light weight 2g giving your car a fast start and fast rolling down the track
- Decorative Plastic parts to make your car cool!

1. Design your Car and Cut Block

Draw a car design on a template and trace it onto your car block. Using a coping saw, scroll saw, or bandsaw cut your car along the lines you drew on the block. If you are using cylinder weights, put your car in a vise and drill the weight holes first.

2. Add Weight to your Car

You need to bring your car up to 4.9oz or 5.0oz to be competitive. Put your car block, axles, wheels on a scale. This will let you know how much weight you need to add to the car to bring it up to 5oz. Speed Hint: Place weights toward the rear of the car. **Ideally your center of gravity should be about an inch in front of the rear axle slot.**

3. Prime/Paint and decorate your car

The next step is to paint your car. We suggest applying a primer coat first. The primer is not required but it provides a good base for your paint to adhere to. Next paint your car. After it dries, apply stickers or decals to personalize it.

4. Lubricate your Wheels and Axles to reduce friction

Squirt graphite into both sides of the wheel bore where the axle goes through. Insert the axle and spin the wheel to work in the graphite. Repeat this several times and do it on all four wheels/axles. Get as much graphite as possible on your axles and inside the wheel bore. This process reduces friction where the wheel rotates on the axle and is the **single most important thing to make your car fast.**

Warning! Graphite is messy! It is best to wear light gloves. Apply graphite over a paper towel and in a safe area outside. Wash your hands if you didn't wear gloves.

5. Install your Axles and Wheels

Insert an axle into a wheel and press your axles into the axle slot in your block. The wheel spacing should be about the thickness of a credit card. Repeat for all four wheels. After your axles are installed, we suggest putting a drop of glue **at the tip of the axle** to hold it in place.

That's it! Your car is ready to race.

www.pinewoodpro.com has everything you need, from free how-to guides, to our best selling book **Winning Pinewood Derby Secrets**, to a full line of pinewood derby supplies, PRO Tools and accessories.

Questions? Call us! 203-400-3713