



Ferrari Derby Car kit

1. Prepping

To prepare the car body, we suggest doing a light sanding with a fine sandpaper (220 grit or higher) to smooth the rough surfaces on your car. Next, we suggest painting the car with a **wood sealer/primer**. Any primer paint will work. This seals the wood. Priming the wood gives your car a nice smooth surface before painting.

2. Painting and Decorating

You can paint your car with any acrylic paint. We suggest brush on paint (rather than spray paint) if working with a child so they can do the painting. Spray paints are fast but difficult for a child to apply. When the paint is dry, you can apply stickers or decals. Lastly, we suggest coating the car with a clear gloss sealer to protect the paint job.

3. Lubricate your Axles

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.**

Safety Note: Graphite is messy! It is best to wear light gloves. When applying graphite, be sure to do it over newspaper and in a safe area away from food and where children play. Wash your hands thoroughly when finished.

4. Install the Axles and Wheels

Place the blue wheel spacer against the car body and slide your axles/wheels into the axle slot (for more speed raise the front left wheel – see below). Be sure to push the axle all the way in until the wheel is snug against the wheel spacer.

5. Speed Option - Raise one wheel for extra speed!

Read your rules! If your rules say, “*All four wheels must touch the track*”, then you can not raise a wheel. If you are allowed to raise a wheel, your car includes an extra axle hole above the front left axle slot. Insert the front left axle into the top axle hole...**your car will actually roll fine on 3 wheels!** Raising one wheel will make your car faster because it takes less energy to spin 3 wheels than it does to spin 4 wheels.

6. Add Weights

Place your car, axles, wheels and the **round weights** on a scale. Cut the round weights with a scissors and slide them into the weight holes. Then add the stick-on flat weight to the scale and cut it so the scale reads 4.9oz or 5.0oz. Do not exceed 5.0oz. Peel and stick the flat weight in the bottom rear of the car. **Speed Tip:** Place flat weights so the center of gravity (where car balances on your finger) 1” in front of the rear axles.

7. Bonus!

Included is a 1.5 Degree Bent Steering axle. This is the individual axle #040355 with a screwdriver slot cut in the head for easy turning. Replace the front right axle with this axle if you want to fine tune your car to go perfectly straight. Or, for experts only, use it to gently steer your car into the rail to make a rail-rider car (**experts only!** Read full details and warnings about rail riding here: www.pinewoodpro.com/rail-rider-derby-car.php)

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

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Questions? Call 203-400-3713 or email info@pinewoodpro.com