

# Pinewood Derby Construction Steps

1. **Design the Car** - Design on paper first.
2. **Shape the Car** - Band saw, coping saw, sanding usually work best. (Do not make car so thin that added molten weight will burn through the body.)
3. **Add Weight** - Car weight should not exceed 5 oz. If you are melting lead, it is a good idea to add weight BEFORE painting the car. **Assistance with adding weight will only be available at the test day. There will be no assistance or materials for weight other than on that date.**
4. **Paint the Car** - Spray paint works best.
5. **Mount Wheels** - Do not have the boys tap axles into the car without sanding the point of the axles. Otherwise the axle groove can become misshaped and cause the wheels to fall out. With help, the boy should gently tap the axles and wheels in to the groove. The wheels should be square with the car and spin freely. The best lubricant for wheels is powdered graphite. Avoid liquid lubricants, they attract dirt and slow the car down.
6. **When complete** - DON'T PLAY WITH THE CAR!

**REMEMBER, THIS IS SUPPOSED TO BE A "FUN" EVENT**

**CAR DESIGNS, BUILDING TIPS, HELPFUL HINTS, ETC.**

**ARE AVAILABLE ON THE GROUP WEBSITE.**

Go to [www.2047.org](http://www.2047.org) select **Stockade**

If you have any questions, need replacement parts or require assistance

**Jim at 662-0335 or [jim@2047.org](mailto:jim@2047.org) email**

## Important Dates

Kit's available for purchase until February 1st. Cost is \$10/kit.

**Need help making the derby car?**

**Derby Car Help Days**

**Saturday, January 16, 11-2**

**Saturday, January 23, 11-2**

**Saturday, January 30th** - Test Day (voluntary) 11-2

**Tuesday, February 2nd** - Tuesday Stockade Due Day

**Wednesday February 3rd** - Wednesday Stockade Due Day

**Tuesday, February 9th** - RACE DAY FOR STOCKADE AND TC

**Wednesday, February 10th** - **No Stockade** (Pioneer Girls Derby)

**Saturday, March 5th @ 9am** - REGIONAL FINALS FOR TOP 5 RACERS

The following rules apply to the construction of cars for our race Pinewood Derby. The Pinewood Derby Race is open to all registered and active member's of Stockade #2047. Only one car is allowed per Stockader and **the car needs to have been purchased this year.** It is intended that each stockader who enters a car be present at the race, however if illness or a prior commitment prohibit the stockader's attendance his car can be raced for him.

1. **Car width and overall length shall not exceed 7" long x 3" wide including wheels, axles and attachments. Minimum bottom clearance between car and track is 3/8".** No part of the car may extend beyond the starting gate. (Indented car noses are prohibited.) Any attachments must fit through the finish line at our race and regional finals.
2. Total car weight shall not exceed **5 ounces** (142 grams).
3. The wheelbase (the distance between front and rear axles and the distance between the right and left wheels) or axle position may not be changed from the kit body nor may the wheelbase position on the car body be changed.
4. The wheel axles must be placed in the provided slots.
5. Only Official CSB Pinewood Derby car kits **purchased this year**, including axles and wheels, as provided by our CSB Unit will be allowed. (Defective or broken parts will be replaced.)
6. Details such as steering wheel, driver, decals and painting are encouraged as long as these details are securely attached to the car and these details do not cause the car to exceed legal car weight and dimensional specifications.
7. Cars must have been made for this race this year. Cars made for a previous race, year or group will not be permitted.
8. Wheels and axles may be lightly filed, sanded and/or polished to smooth and true them, however original wheel diameter and width must be reasonably maintained and the wheels must remain flat. Wheel's cannot be filled with weight, tapped, or altered except as stated above.
9. A maximum of 2 washers per wheel are allowed and can be purchased at a hardware store. Bearings, bushings, springs, and propulsion devices are prohibited.
10. Stockader's name should be written on the bottom of the car. Cars will be numbered at stockade prior to the race. There should be no numbers on the car when handed in.
11. Cars with wet paint or missing wheels will not be accepted.

**Remember, building and racing cars for the Pinewood Derby is supposed to be fun and educational, don't forget the fun!** Supervise your Stockader, help him, but let him do as much of the construction as possible. Let him feel that it is his project, not yours. Supervise the use of any power tools. Follow the rules. Take some time to build a car with your son, bring family and friends to join us all on race day.

**A Test day will be held prior to the cars being due. This is the ONLY time weight and scales will be available to test the cars.** Test day will allow the Stockader's to test run, and add weight. We will have the manpower and materials to add weight to the cars. The test day is a great time to see how your car performs, check and adjust car weight and to get racing tips.

**Car due day for the Pinewood Derby will occur a week before the race.** All competing cars must be submitted at this time. Cars will be carefully inspected, measured and weighed to ensure that they meet the rules regarding car construction. Car weight may be adjusted by the owner at registration, scales and a hand drill will be available. Cars which do not pass inspection will not be accepted. The Chairman may, at his discretion, allow cars which fail inspection to be resubmitted after being brought promptly into conformance with the rules. Disputes will be resolved by the Stockade Leadership with the Chairman's decision being final. Cars will be returned at the completion of the race.