

Cub Scout Pack 75

Official Pinewood Derby Rules

BUILDING YOUR CAR

The general guidelines for building your car are the same as what you received in your Pinewood Derby Car Kit. They are as follows:

CAR SPECIFICATIONS:

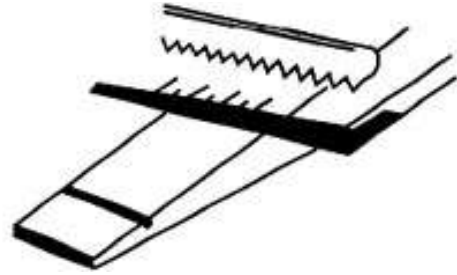
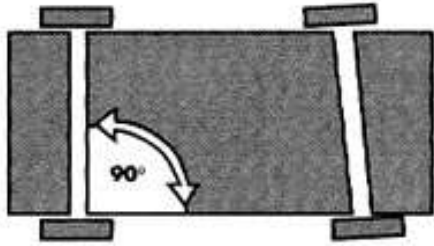
- Max Width: - 2-3/4"
- Max Length – 7"
- Max Weight - 5 Ounces
- Width between wheels – 1-3/4"
- Bottom clearance between car and track - 3/8"

RULES

Wheel bearings, washers, and bushings are prohibited. The car shall not ride on springs. Only official Cub Scout Grand Prix Pinewood Derby wheels and axles are permitted. Only dry lubricant is permitted. Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications. The car must be free-wheeling, with no starting devices. Each car must pass inspection by the official inspection committee before it may compete. If, at registration, a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official weigh-in time period to make the adjustment. After final approval, cars will not be re-inspected unless the car is damaged in handling or in a race.

BUILDING INSTRUCTIONS

Check the grooves to ensure that each is at a perfect 90-degree angle to the car body. A car with untrue axles tends to steer to one side or the other, causing it to rub up against the side of the lane strip, slowing it down. You can check the groove angles by using a square, a protractor, or even a piece of paper. Lay square on block to check for squareness and alignment of slot. Use two hacksaw blades side by side to redress the slots. Use the edge of the square as a guide.



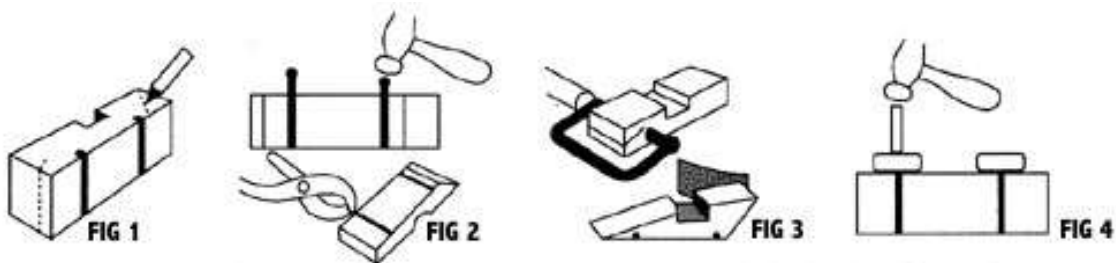
Choose your favorite design, then mark the block accordingly (See Figure 1). Lay car body on the side, then gently drive the axles into the grooves within 1/4" of the axle head. Axles should fit tight. With a pair of pliers, remove axles by pulling and turning gradually (See Figure 2). Repeat on the other side of block. Most of the cutting can be done with a hand saw, then finished with sandpaper (See Figure 3). Details such as fins and scoops should be added now. Any additional weight needed to achieve a total of 5 ounces should be built into the car.

NOTE: If the car design you chose has a narrow body, make sure the area where the axles are inserted into the body remains 1-3/4" wide, or wheels will not fit over the guide strips of the track.

PAINTING AND WHEEL ASSEMBLY

Apply several coats of sanding sealer; then sand entire car with a fine-grade sandpaper. Give model at least two coats of fast drying paint in your choice of color. When paint is completely dry sand with a fine sandpaper, apply a final coat of paint and allow to dry thoroughly.

TO FINISH, rub entire car with a rubbing compound. Details such as steering wheel, windshield, driver, racing numbers, etc., should be added now. For a super finish apply a coat of auto wax and rub to a high gloss. Pre-lubricate axles and wheels using dry powdered lubricant. Do not use regular oil or silicone spray, since it may soften the plastic. Slide wheels over axles, then gently tap them into the car body grooves with a 1/4" dowel or similar object to within 1/32" of car body. (See Figure 4). Make sure wheels turn freely.



PACK 75 RACE DAY RULES

The car must be newly built for the current Cub Scouting year. While parental supervision and assistance in the construction of the car is encouraged (especially when using power tools), it is important for the Scout himself to participate in the construction of his own car.

After the Scout has registered, his car will be weighed, measured, and inspected by the pack Pinewood Derby "Pit Officials". This process will be conducted in order to ensure compliance with the racing rules.

Only official Cub Scout Grand Prix Pinewood Derby wheels and axles (the ones that came in your box) are permitted, or those from an official Pinewood Derby wheel replacement kit. Wheels should not be altered in any way, except that mold projection defects on wheel treads may be removed by sanding lightly. Wheels that are significantly narrower than the official wheel width of 0.34" might be disqualified.

A digital scale will be designated as the "official race scale" and will be used to weigh cars. The scale must be able to resolve at least .1 ounce. Cars will not be accepted if their weight exceeds five (5) ounces by even the smallest resolution of the official race scale.

A Cub Scout whose car fails any part of the inspection will be given the opportunity to make adjustments to the car. Cars will be reweighed, measured, and inspected until they comply or until the scheduled race starting time. Any car unable to pass inspection before the start of the race will be disqualified. No exceptions.

After the car has passed inspection, it will be "impounded" while the Cub Scout awaits the start of the racing. Once the car is impounded, it may not be re-lubricated or modified in any way unless a wheel is damaged or becomes dislodged during a race.

In the event of a breakdown of a car during the race, the participant will be given five (5) minutes to repair the car. Only the damaged portion of the car may be modified. The Scout must do work with assistance from his parent or guardian. Pinewood Derby Pit Officials will re-inspect any car that is serviced during the race. The Race Officials may choose to continue with other race heats to avoid long delays in the race schedule. The damaged car must be raced before the race proceeds to the next level of elimination.