

MANITOWOC COUNTY 4-H PINEWOOD DERBY RACE

Thursday, April 10, 2025 at 6:00 PM
 Merchants Building, Manitowoc County Expo
 4921 Expo Drive
 Manitowoc, WI 54220

The Manitowoc County 4-H Leaders Association is pleased to announce the 11th Annual Manitowoc County 4-H Pinewood Derby Race. All 4-H members, leaders and parents are encouraged to participate. Although all participants will race against each other, awards will be given by placing in the following divisions:

Cloverbuds	Elementary Division	Middle School Division	High School Division	Adult Division
Kindergarten – 2 nd Grade	3 rd – 5 th Grade	6 th – 8 th Grade	9 th – 13 th Grade	18 and older

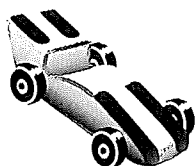
Each car must pass inspection by the official inspection committee before it will be allowed to compete. Cars that do not meet ALL these requirements will not be allowed to compete:

- The car weight shall not exceed 5.0 ounces. The official race scale shall be considered final.
- The overall length of the car shall not exceed 7 inches.
- The overall width of the car shall not exceed 2 ¼ inches.
- The car must have 1 ¾" clearance between the wheels.
- The car must have 3/8" clearance underneath the body. Use the Popsicle stick included in the car packet to check the clearance underneath the body because it measures 3/8". *(Please note, weights placed under the car may need to be recessed to allow for the required clearance!)*
- The block may be shaped any way that is desired, but the wood provided in the kit must be used and the "stamp and number" must remain visible to ensure that construction took place during the current 4-H year.
- The wheels supplied with the kit must be used. The wheels may not be cut, drilled, beveled or rounded. You may remove the seam from the wheels.
- The axles supplied with the kit must be used. They may be polished or lubricated.
- Wheel bearings, washers or bushings are prohibited.
- The car must be freewheeling, with no starting devices and must not ride on any type of springs.
- Loose weights or materials of any kind will result in a disqualification, but details such as the steering wheel, driver, decals, painting, and interior detail are permissible as long as these details do not exceed the maximum length, width, and weight specifications.

In addition to the construction requirements, the following Racing Rules will be enforced:

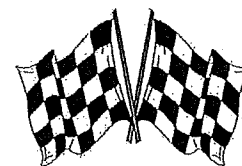
- If, during a race, a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point.
- If a car leaves its lane, at his sole discretion, the track chairman may inspect the track and, if a track fault is found which probably caused the initial violation, the track chairman may order the race to be rerun after the track is repaired.
- If, during a race, no car reaches the finish line on the track, the car which went the farthest in its lane shall be declared as the heat winner.
- If, during a race, a car leaves its lane and, in so doing, interferes with another racer, then the car at fault shall be declared to have lost the race heat.
- Only one car may be registered by any person in the Pinewood Derby.
- Only dry lubricants such as graphite or powdered Teflon "white lube" will be allowed for lubricating the wheels. Lubricants may not foul the track.

Registration Information



A registration fee of \$5 per person is due to your 4-H Club by your February meeting. The fee will cover the cost of one car kit which includes a block of wood, wheels and axles. All other materials are not provided. Car kits will be distributed to 4-H Clubs on or before their March meeting.

For more information



For more information contact the Extension, Manitowoc County Office at 920-683-4167.



INSTRUCTIONS AND HELPFUL HINTS

THE RULES

Rules vary with the organization conducting your event. Familiarize yourself with the rules of your group and then discuss your design ideas with your parent or adult partner.

THE SPECIFICATIONS

The following specifications are in accordance with the official "Cub Scout Grand Prix" guidelines but should be confirmed with your group.

WIDTH - Maximum 2 3/4 inches overall

LENGTH - Maximum 7 inches overall

WEIGHT - Maximum 5 ounces

DETAILS

You may add a driver figure, spoiler, seat, canopy, steering wheel, decals, paint or any other decorative accessories as long as these details do not cause the vehicle to exceed the maximum weight and size limits.

ATTACHMENTS

The car must be completely freewheeling. No springs rubber bands, wheel bearings or bushings, loose material or starting devices are permitted in or on the car.

INSPECTIONS

Each car will be subject to inspection by the official inspection committee of your group

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PINE-PRO GRAPHITE - A specially formulated blend to provide extra downhill speed.

PINE-PRO DECALS - Fresh, new designs to make your entry stand out from the rest.

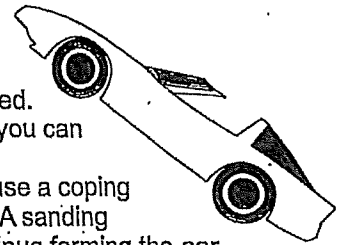
AMENCO

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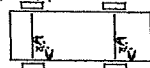
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1. Use your imagination to improve the basic design provided. There are many exciting things you can do to personalize your entry.
2. **Only with adult supervision**, use a coping saw to "fine tune" your design. A sanding block will be very useful to continue forming the car. Keep changing to a finer grit sandpaper until you have the shape and smoothness you want.
3. Several coats of sanding sealer should be applied, sanding lightly between each coat. The sealer will prevent the paint from soaking in and raising the wood grain.
4. Now is a good time to carve out the underside or drill the holes where you will affix your weights
5. Apply a light coat of your main paint color and allow to dry. Sand very lightly with a fine grit paper, apply a full coat of paint and repeat the process once more.
6. Apply your decals, pinstripe, detail parts, etc. at this time.
- 7.



AXLES

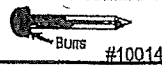
1. Make sure that the axle grooves are at a perfect 90-degree angle to the car body. This can be checked using a square, protractor or corner of a piece of paper.



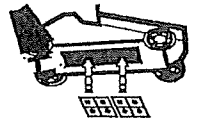
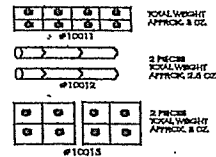
2. Pre-drill the axle grooves using a drill bit slightly smaller than the axle diameter. This should prevent the wood from splintering when you push in the axles.

3. The manufacturing process leaves a slight burr under the head of the axle. (See diagram below). This should be polished off with a fine emery cloth or file.

4. The final racing touch on your axles consists of polishing them to the smoothest finish possible so as to reduce the friction as much as possible. Use a red jeweler's rouge and you will be able to achieve a mirror-like finish.



WEIGHTS



Hollow out the bottom of your car and glue or screw the weights you need into the recess created.



Cylinder weights can be glued into 1/4" holes drilled into the rear of your car

CAUTION: Power tools can be dangerous and should only be used under strict adult supervision.

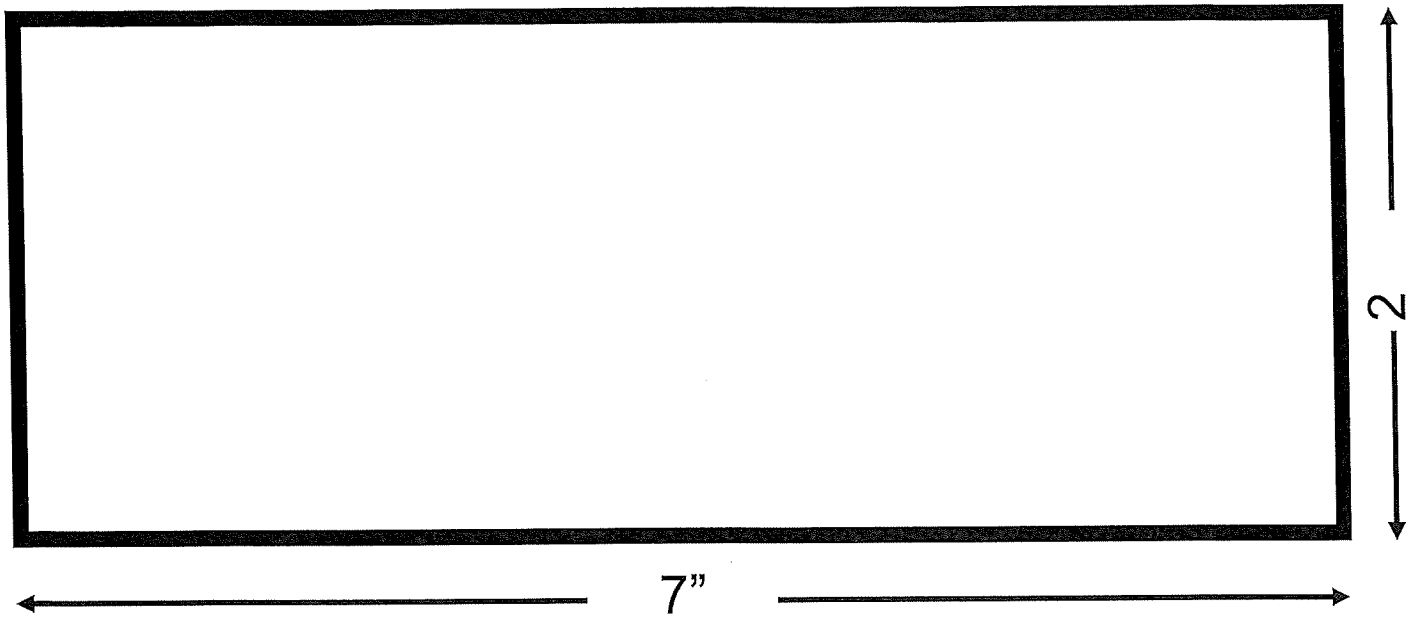
#10051 - BULK PACK,

10 COMPLETE BLOCK KITS

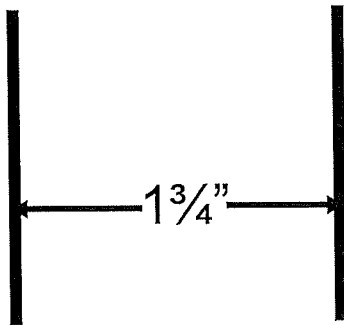
RED BANK, NJ 07701

Fax: 732 842-9532

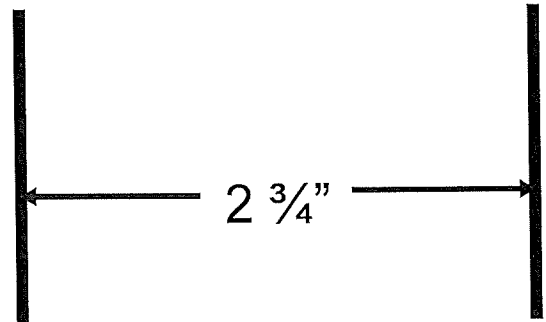
PLEASE feel free to make copies of these instructions to distribute to your participants



Car Length Should Include Any Weights Or Accessories Added



Clearance Between The Wheels



Car Width Should Include Wheels & Any Weights Or Accessories Added

Please Note:

Measurements go to OUTSIDE of black line for length and width.



Use the enclosed popsicle stick to check the clearance underneath your car. The sticks are 3/8" wide and that is the width needed to clear the race track, and make sure you go from the front to the back of the car. These sticks will also be used at the registration tables.

