



Pack 160 2010 Pinewood Derby

The rules documented below are the official rules for Pack 160's 2010 Pinewood Derby. These rules supersede any and all other rules (such as those included in the car kits). The rules are intended to ensure fair competition among all our scouts.

*Rules are strictly enforced.
Cars that violate any of the rules will not be allowed to compete!*

Dates to Remember

Weigh-In Friday, January 15, 2010 @ 7pm - Marshall W. Errickson Kinder-Cafe

Race Day Saturday, January 23, 2010 @ 11am
(snow date January 30, 2010 @ 11am)

Rules

1. Each scout may enter one and only one car in the races.
2. Any car that has been entered in a prior derby may not be re-entered
3. Overall width, including all accessories, shall not exceed 2 ³/₄ inches.
4. Overall length, including all accessories, shall not exceed 7 inches.
5. Wheels shall be set between 2 and 2 ³/₄ inches apart.
6. Total weight of the car shall not exceed 5 ounces. Each car's weight will be determined by the committee using the official digital scale at the weigh-in.
7. Clearance under the car shall be 3/8 inches or more. This is necessary to clear the timing mechanism at the end of the track. ***Beware of applying weight to the bottom of the car! Weights should be recessed for clearance.***
8. Decorations and accessories are allowed and encouraged, but they must be secure and fit within the allowed dimensions.
9. No loose material, inside or out, is allowed in or on the car.
10. No liquid lubricants or greases are allowed. Only powdered type lubricant is permitted.
11. Wheels and axles provided in the kit must be used. No bearings, washers, springs, bushings, or other modifications to the axle or wheels are permitted.
12. You must use the axle grooves as pre-cut in the block. The centers of the axle grooves must be left visible.
13. Wheels may not be sanded or altered so as to change their shape or cross-section. Light sanding to remove burrs is permitted.
14. The car must run by gravity only. No starting mechanisms are allowed.
15. Cars **must** be brought to the weigh-in and checked in with the committee. After a car has been checked in, it will be retained by the committee until called to the heats at the Derby. No one may alter the cars during this period.

16. Scouts must be present on Derby Day when called to a heat in order to have their car compete, unless prior arrangements are made with the den leader.
17. We will be using electronic timer software to run the races. Each scout will run in four heats, and the pack and den winners will be determined solely from the fastest average times.
18. Finally, be sure to let your scout do as much work on his car as he can do safely under your supervision, including the design work. (Don't forget, there is a parent race.) The goal is to accomplish something together, *and to have fun!*

Construction Tips

- As long as your wheels are straight and spin smoothly, many people feel that weight is the most important factor for a fast car. Many people attempt to get as close to 5 ounces as possible without going over.
- The car may be hollowed out and weights inserted, or weights may be attached to the exterior.
- Be sure you have a way to add or subtract weight from your car at the weigh-in. Remember, the weight of your car is determined by the official scale on weigh-in night. Many people find it necessary to fine-tune the car's weight at that time.
- Gently push the axle (nails) into the axle groove – don't force them in. Ensuring the wheels are straight is one key to a fast car!
- Be careful not to remove too much wood near the axle grooves so that the wood won't break when you push in the axles.
- Don't push the axles and wheels on more often than necessary. Each time you push the axle in, the groove becomes looser and the wheels become less steady! It is best to push in the axles once, and then remove them before you start carving your block. Once your car is complete, push the axle and wheels on being careful to keep them straight and even.
- If you need spare parts, check with a committee member. You can also purchase a new kit at a hobby shop or a Scout store, but it must be an official Pinewood Derby kit. The key is that the axles, wheels, and axle grooves must match the kits you receive from the pack.

The "Open Division"

This year we will continue with the tradition of having an "open" division in which both parents and siblings are encouraged to participate. Cars which are entered to run in this division are subject to the same rules and restrictions as the scout's cars. They should be submitted on the official weigh-in day.



Good Luck!