

PACK 356

PINEWOOD DERBY RULES



## INTRODUCTION

### *Welcome to Pack 356's Pinewood Derby!*

Pinewood Derby races are one of the most exciting and significant annual events in Cub Scout Packs. One of my fondest derby memories is the glowing face of a young lad, running toward his parents with a Third Place ribbon in his hot little hand, gleefully shouting "I Won, I Won." The race will teach boys something about nature of competition: the pride of If winning and "the agony of defeat." The Big Race, however, tends to obscure one of the primary purposes of the derby: bringing a boy and his parent (or other adult) together in a creative, shared and meaningful activity - building the car itself!

The occasions for such an activity in our society are all too rare. Perhaps the boy will not remember the Big Race in later years, but will remember his own little creation of wood and plastic and paint. He may have fond memories of his dad (or mom or Uncle) teaching him to use a saw or knife or drill, showing him how to use rough sandpaper for shaping and fine sandpaper for finishing, and teaching him to turn the spray can upside-down in a paper bag to clear the nozzle. If this process includes casual conversation, laughter, warm feelings, and maybe some hot cocoa, perhaps winning (or losing) the race is not very important in the long run.

These are some of the good values of the derbies. They can be negated, however, by an intensely competitive parent (usually Dad) who goes all-out to win, and builds the vehicle himself with little or no help from his son. A father-son project becomes a father project with his son an innocent bystander. This defeats the purpose of the derby, and teaches the Cub Scout very little.

## SPORTSMANSHIP

### *To the Cub Scout:*

Racing requires participants to learn two main things: the craft skills necessary to make your car and the rules that must be followed. There is also a third part to competition that's very important: sportsmanship. This has to do with how you act and behave while participating in the derby.

The first thing to remember about sportsmanship is that everyone's skills are a little different. Some people are better than others at certain skills. You may be good at one thing but not good at another. This doesn't mean you are a good person one time and not good another time. You can always be a good person, whether or nor you have good skills for racing. Remember, you and your friends are individuals first and racers second. This idea is sometimes called *having respect for others*.

The second thing to remember is to follow the rules. Without rules, there would be no pinewood derby. You will never know if you are really good at doing something unless you follow the rules. This is sometimes called *being fair and being honest*.

The third thing to remember about good sportsmanship is that there are winners and losers in every competition. You know this when you choose to compete. There are times when you will win and be happy, and times when you will lose and be unhappy. Being a winner is easy but being a loser is sometimes hard. To be a good sportsman, you must be able to say "I did my best" and be satisfied with the results. If you win, you must not gloat.

## **HISTORY**

### ***An Instant and Enduring Hit***

Every year more than a million boys and parents team up to participate in a pinewood derby. They carve the cars, decorate them; weigh, adjust, readjust, and fret over them, and finally race them. This partnership of parent and son has become a symbol of the event's success.

The first pinewood derby was held in 1953 by Cub Scout Pack 280C of Manhattan Beach, California, operated by the North American Aviation Management Club. The event was publicized in *Boys' Life* in October 1954. The magazine offered plans for the track and car, which featured "four wheels, four nails, and three blocks of wood."

The derby was an instant and enduring hit. It is estimated that more than 35 million parents and sons have participated in actual races. Millions more - parents, den leaders, Cubmasters, and committee members also have been involved in various ways.

The rules of the very first race stated: "The derby is run in heats-two to four cars starting by gravity from a standstill on a track and run down a ramp to a finish line unaided. The track is an inclined ramp with wood strips down the center to guide the cars."

The cars still roll that way, over forty years later, accompanied by shouts of excitement and grins of delight from both participants and spectators.

## ***Take Your Place in History***

Join the ranks of millions of Cub Scouts who have stood in the derby winner's circle. Cub Scouts just like you have been building their own cars and competing in pinewood derbies since the 1950s.

Millions of car kits have been built by Cub Scouts over the years, each one hand-crafted to reflect the style of its owner's desire. And on race day across the country, these Cub Scouts pit their entries against the cars championed by fellow den members.

## **Pinewood Derby**

The pinewood derby is one of the most popular and successful special events in Cub Scouting. Like all successful activities, it requires planning and preparation, but its value in fun and in strengthening family relationships has been proven over the years.

Pinewood derby cars are simply small model cars of specified dimensions, created, carved, and assembled by the boys, under the guidance of their parents or other family members. The cars are gravity powered and run down a regulation track. The race is run indoors.

The pinewood derby committee sets simple uncomplicated rules and familiarizes each pack family with these rules before the cars are built. Those rules are below.

## **Racing Specifications from the Kit**

- **Width.** The overall width of the car shall not exceed 2 3/4 inches.
- **Length.** The overall length of the car shall not exceed 7 inches.
- **Weight.** The weight of the car shall not exceed 5 ounces. No loose materials of any kind are permitted in the car. The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided any additional material is securely built into the body.
- **Wheel bearings, washers, and bushings** are prohibited.
- **Springing.** The car shall not ride on any type of springs.
- **Details.** 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.
- **Attachments.** The car must be freewheeling, with no starting devices.
- **Inspection.** Each car must pass inspection by the official inspection committee before it will be allowed to compete. The inspectors have the right to disqualify those cars that do not meet these specifications.

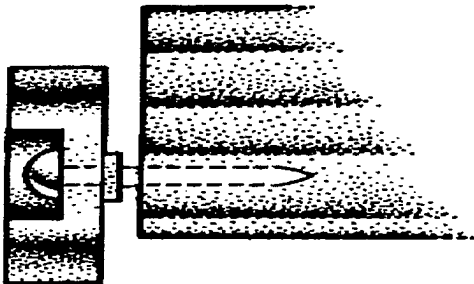
## **Pack 356 Pinewood Derby Rules**

1. All cars must pass inspection to qualify for the race.
2. The car must have been made during the current year (the Pack year in which the derby is held).
3. The width of the car shall not exceed 2 3/4 inches.
4. The length of the car shall not exceed 7 inches.
5. The weight of the car shall not exceed 5 ounces.
6. Axles, wheels, and body wood shall be as provided in the kit. Wheels are marked "B.S.A." See diagrams later for legal and illegal wheels.
7. All specification stated on the Rule Sheet included in the car kit are strictly enforced.
8. Wheel hearings, washers, and bushings are prohibited.
9. The car shall not ride on any kind or type of springs.
10. Any details added must be within length, width, and weight limits.
11. The car must be freewheeling, with no starting or running devices.
12. No loose materials of any kind (such as lead shot) are allowed in the car.
13. No electrical devices, such as battery powered lights, are allowed on the car.
14. Once the car passes inspection, it is kept by the Pinewood Derby staff and held until the day of the race. Also, the entrants name and Den are recorded.
15. Each heat will be announced. Pinewood Derby staff will place the cars on the track. All other people must remain behind the barrier.
16. The starter will make sure the cars are on the track properly and then will start the race.
17. The car whose nose is over the finish line first is the winner. Judges will select the first-, second-, and third-place winners. In general, 3 judges will judge each heat. The judges may change with other Pinewood Derby staff, to ensure an honest race. Decision of the judges is final.
18. If a car leaves the track, runs out of its lane, interferes with another car, loses an axle, etc., the heat will be rerun. If the same car gets into trouble on the second run, the contestant is disqualified and automatically loses that race. If, on the second run, another car is interfered with, the heat will be run a third time but without the disqualified car.
19. When the results of each heat are recorded, the Pinewood Derby staff will take the cars and return them to storage.
20. Awards will be announced shortly after the race. The drivers and their partners will report to the front for the awards as their names are called.

## Coaching Hints for Parents

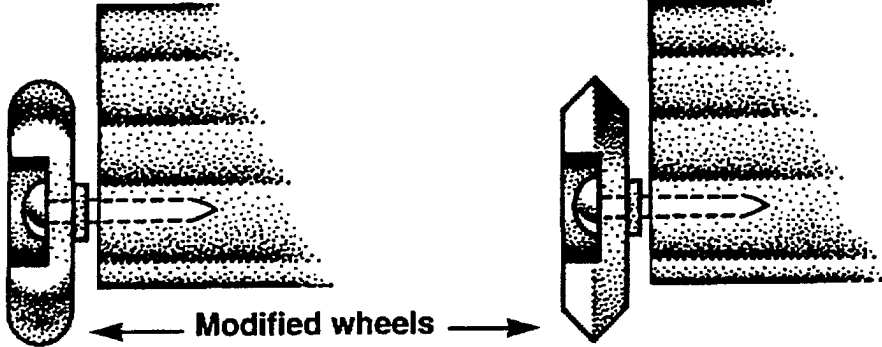
- Help your son plan a schedule to prevent a last-minute project and allow time for him to do his best.
- Help your son understand the rules and specifications found in the kit and all rules developed by Pack 356.
- As your son chooses his favorite design, help him trace it on the block of wood from the kit.
- Guide him in the use of tools in the shaping of the model and encourage him to sandpaper the model to a smooth finish.
- Help your son feel that this is a joint project, with him doing much of the work.
- Help your son understand that "doing your best" is as important as having the fastest model.
- Feel a sense of pride and satisfaction when the model and race are finished. Share it with your son. You have both earned it.
- Understand that the leaders may need your help. If you have the interest and the time, you might contact the leaders and volunteers to help or judge at the pack's big race.
- Spending time with your son, and helping him "do his best", will be remembered by both of you long after the race is finished.

# Wheels



**Acceptable wheels**

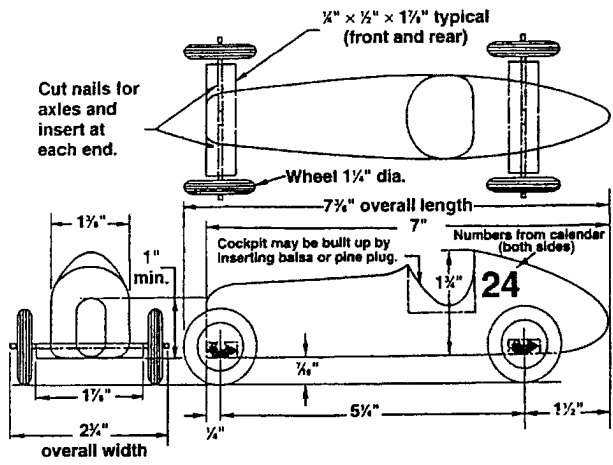
## Unacceptable wheels



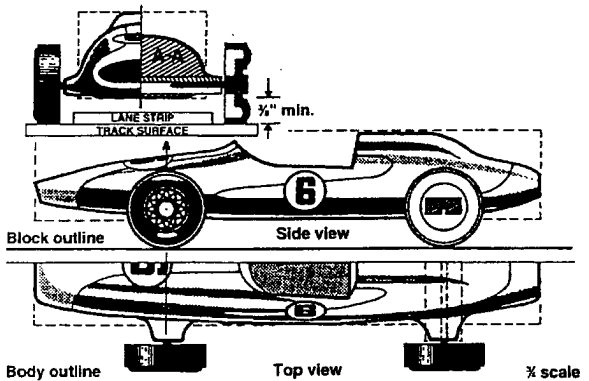
**Modified wheels**

# Classic Car Designs

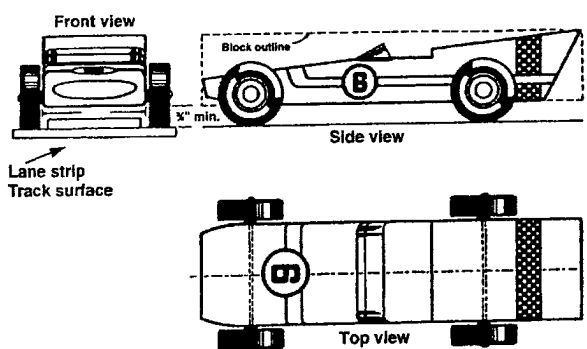
## Classic design of the '50s and '60s



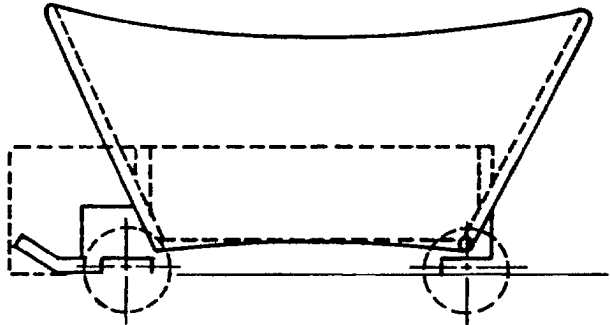
## Classic design of the '70s and '80s



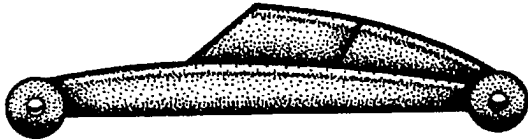
## Classic design of the '90s



# Pinewood Derby Ideas



Cut block to shape, approximately as shown.



<p>CARDBOARD</p>	<p>CUT OUT TWO CARDBOARD PANELS AND GLUE TO SIDES.</p>	<p>MAKE LADDER FROM BALSA AND TOOTHPICK PIECES.</p>
		<p>PAINT RED. GLUE ON LADDERS.</p>