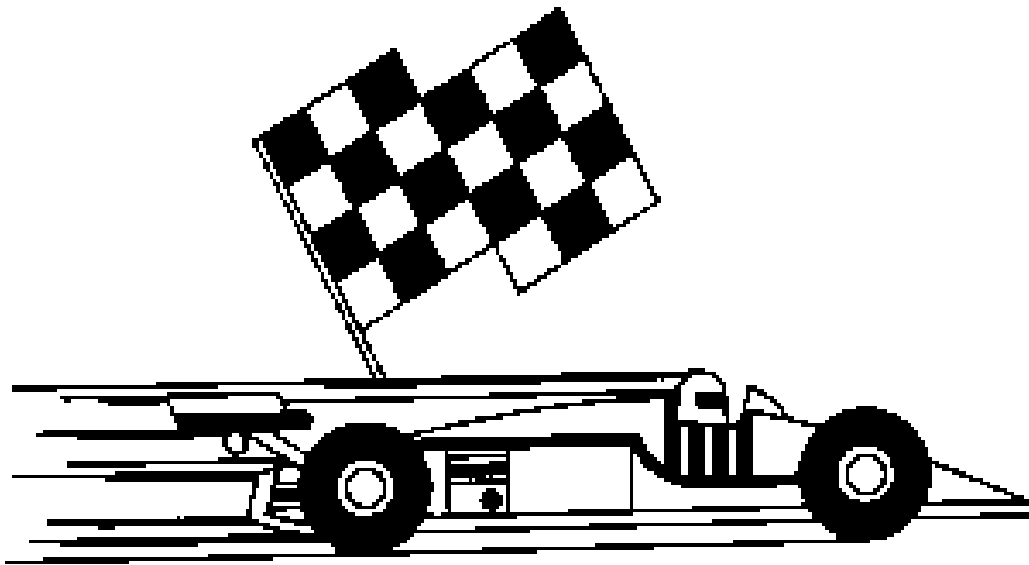


# Pinewood Derby Handbook



February 11, 2003

(General procedures for setting up and conducting a pinewood derby race. Official rules for each years race are distributed separately)

## **Derby To Do's**

At the first Pack meeting make announcements about the race. Give dates and times of workshops.

### **Workshop:**

Tools needed

Extension cords  
4 Drills  
Small Band Saw  
2 Electric Sanders Belt or Orbital  
Several wood files  
Fine jewelers files  
Outlet strips  
Several pair of Safety goggles  
Idea sheets templates/ patterns  
Sand Paper and Blocks  
Paper  
Pencils  
Rule sheets  
Dremmel Tool  
Shop Vac to clean up

### **Notes:**

- (1) Have the team meet prior to the workshop to go over the rules.
- (2) Make clear the rules about wheels and axils.
- (3) Also mention that kit cars are not allowed.
- (4) Assign each person a workstation to setup and supervise.

## **Pre Weigh-ins**

During the weeks prior to the final check-in have 2 evenings at school that the Scouts can come up and weigh the cars and test for size and track clearance.

Dremmel Tool

Thumb Tacks or small weights

Several pair of Safety goggles

Scale

Clearance Gauge

Size Gauge

## **Dates**

## **Night Before The Race Check-in**

Positions needed:

- 3 Check-in officials
- 1 Check in “expert”
- 4 Track Assemblers
- 4 Scouts to arrange chairs
- 1 PA setup
- 2 Computer setup
- 2 Garage attendants

A week in advance send out a reminder about the check in.

Have the tote boxes and garage set up first. Check labels on the garage to ensure they match the printed labels. Garage should be isolated from the spectators and no one but committee personnel are allowed to touch the cars after check in.

Inspection should ensure that non-conforming cars are not entered. Training needs to occur so the judges are aware of things to look for.

Have at least 3 trained people checking the cars for compliance.

One for clearance

One for weight

One for size

The Chairman or his delegate will decide on any questionable cars.

Once the car is checked in it cannot be touched by anyone but the garage attendant.

## **Tools needed**

Extension cords

1 Drill

Several wood files

Saw horses/ work table

Outlet strips

Several pair of Safety goggles

Rule sheets

Dremmel Tool

Thumb Tacks or small weights

Hot Glue Guns

Track

Track Accessories

## Track Setup

Need (2) 100 foot extension cords  
Vise Grips, Adjustable Wrench  
Pliers  
Masking Tape  
Duct Tape

Several team members will need to pick up and assemble the track. At least 2 pick-up trucks or large vans are required. Track and timer need to be set up and tested. The lanes may need to be adjusted to allow for a smooth running down the track. A computer with Microsoft Excel 97 or newer will be needed.

Several decorators will be needed to hang the Race décor.

## **Race Day**

Positions needed:

2 Computer Timer

1 Timer Assistant

1 Race Starter

1 Announcer

2 Garage attendants

2 Car Sorters (move car from end of track to start)

Announcer will call 12 racers to start the event. As 6 go up to race, the other 6 will be seated in chairs awaiting their race.

When they next round gets up to race, another 6 will be called to await their race.

Scouts will race 6 times. Once in each lane.

The total of all 6 runs will be your official time.

Tiger Cubs will race at 9:00 am. At approx 9:30, the Tiger scouts will receive their awards. Other races will run from youngest to oldest. Starting at about 10:00. You need to arrive at least 45 minutes prior to the start of your race.

Take a few scheduled breaks to encourage people to buy food and drinks.

All members will disassemble the track and move it to the storage location.

## **Race Rules**

### **Mission Statement:**

**The goal of the Pinewood Derby race is to ensure every boy has a chance to create a Pinewood Derby car and have it “do it’s best” in the race. Every opportunity will be given to allow the car to compete.**

Once cars are checked in no other claims of non-conformance may be made. The only exception would be if the car came apart and was found to have hidden illegal parts.

#### **Parts Falling Off:**

Cosmetic parts that fall off after check in may not be reinstalled

Weights and wheels that come off after check in may be replaced. If the same part falls off a second time, it may not be replaced. If the car is unable to be run, it will be disqualified.

#### **Wheel Breakage:**

If a wheel breaks due to the car being dropped by the scout, the remaining wheels may be moved to make the car function. If 2 or more wheels break, the car will be disqualified.

If a wheel breaks due to a track official dropping the car, the scout may use an approved replacement or may borrow a wheel from another scout that has completed the race. Derby officials will have spare stock wheels available in this event.

If a wheel breaks due to impact by another car, , the scout may use an approved replacement or may borrow a wheel from another scout that has completed the race. Derby officials will have spare wheels available in this event.

#### **Jumping the Track:**

**The track should be cleaned and inspected after every heat. Repairs and adjustments will be made as needed.**

If a single car jumps the track and crosses the finish. The time will be recorded and the car will be run by itself down the same lane. If the car comes off a second time, the time will be recorded and the car may be run **backwards** on its 3<sup>rd</sup> and final attempt. If it comes off on the 3<sup>rd</sup> attempt, the fastest recorded time will be used. A car may not be run more than 4 times down the track by itself.

If a single car jumps the track and does not cross the finish line, the car will be run by itself down the same lane. If the car comes off a second time, the time will be recorded and the car may be run **backwards** on its 3<sup>rd</sup> and final attempt. If it comes off on the 3<sup>rd</sup> attempt, the fastest recorded time will be used. If it does not make it to the finish line on three attempts, a time of 6 seconds will be entered.

If a car jumps the track and interferes with another car (s)

Car does not make it to the finish line. Car can be inspected for obstructions and re-run down the track in the same lane by itself. If it does not make it to the finish line on three attempts, a time of 6 seconds will be entered. If this occurs in more than one lane, the car will be disqualified.

## Inspection Checklist

- Car clearance
  - Car fits in Box (7 inches)
  - All 4 wheels have BSA on backside
  - All 4 axils are Official BSA
  - Car is not a KIT car
1.
    - a. The car must have been made during the current year (the year in which the derby is held).
    - b. The width of the car shall not exceed 2 3/4 inches.
    - c. The length of the car shall not exceed 7 inches.
    - d. The weight of the car shall not exceed 5 ounces.
    - e. Axles, wheels, and body wood shall be as provided in the kit.
    - f. Wheel bearings, washers, and bushings are prohibited.
    - g. The car shall not ride on any kind or type of springs.
    - h. Any details added must be within length, width, and weight limits.
    - i. The car must be freewheeling, with no starting devices.
    - j. No loose materials of any kind (such as lead shot) are allowed in the car.
    - k. Liquid lubricants are not allowed.