



Nashua Valley Council - BSA Wachusett and Massasoit Districts



2018 Pinewood Derby Championship Race



Date: Saturday, March 31, 2018

Time: 10:00 AM – 12:00 PM – Check In (**No Late Check Ins**)
12:30 PM – Races Start

Where: Mount Wachusett Community College
Fitness and Wellness Center
444 Green Street
Gardner, MA 01440

Cost: **Online Registration Required** at events.nashuavalleybsa.org

\$10.00 each Cub Scout and Webelos Scout for the
Championship Race (includes patch and participation medal)

\$10.00 each Scout, or Sibling (**no adults**) for the Open Race
(includes patch and participation medal)

\$2.00 for each additional patch

Concessions will be available for purchase

What is the Pinewood Derby?

Every year more than a million Cub Scouts and adult partners team up to participate in a Pinewood Derby, a tradition that goes back generations. As an adult and Cub Scout design, carve, paint, weigh, refine and race the car, a bond of partnership is created. This is at the heart of the Pinewood Derby's success. In addition, Cub Scouts build confidence and take pride in their own growing skills and hard work. It all starts with a simple block of wood and the desire to Do Your Best. Once built each Pack runs their own individual Pinewood Derby at different churches, halls or even outside! Each Scout should be proud of the car they created and have hopes of making it to the next level, the Nashua Valley Council Championship Race! Win or lose at the Nashua Valley Council Championships, each Scout will have fun and should take pride in the car they dreamed up!

What should I bring?

All Scouts should bring their **COMPLETED** Pinewood Derby Car, wear their Uniform and bring their Scout Spirit! There will be time in between races; Scouts may want to bring books, coloring pages or other non-electronic activities to keep busy before and after their car races. Concessions will be available for purchase, however Scouts may want to bring snacks.

Registration

On-line registration and payment is required. You can register at events.nashuavalleybsa.org. Cost is \$10 per racer, which includes a collectable patch, participation medal and is due at the time of registration. Please make sure you specify which race the Scout will be in. **Packs who are running the Lion Program can send their Top 5 racers but 1 of the racers MUST BE A LION. All other Packs can send their Top 4 Racers (Tiger, Wolf, Bear, Webelos).** The Championship Race is for the Top Four from each Pack (unless they have run the Lion program) and the Open Race is for any Scout, Sibling or Youth who would like to race a car.

Racers can be registered at the Nashua Valley Council service center if unable to pay online, but payment for each racer is due when you register. Racers are strongly encouraged to register online.

Required Information for Registration Online

Scout's Name

Scout's Address

Phone Number

Parent's Email

Pack #

Pack Town

Den (Lion, Tiger, Wolf, Bear, Webelos)

Cubmaster's Name

Cubmaster's Email

Car Name

Championship Race or Open Race (Championship Race is for the Top Four Racers in each Pack, all other Scouts and Siblings should register for the Open Race)

Official Pinewood Derby Rules

Official NVC Pinewood Derby Rules are included in this guide.

Lion Scouts

NEW FOR 2018! Lion Scouts can participate in the Nashua Valley Council Pinewood Derby with **a wedge shaped car only**. BSA has suggested to have Lion Scouts participate in unit's Pinewood Derby races with **a wedge shaped car**. This will be the rule for the NVC Championship Races. Packs with Lions can send their Top 5 racers, 1 of which **MUST BE A LION**. For more information on Lions please visit scouting.org/lions

In Case of Cancellation

Call Nashua Valley Council at 978-534-3532, watch your emails and the District Facebook pages.

Schedule of the Pinewood Derby

(Each Race Takes Approximately 20 Minutes Depending On the Number of Racers)

2018 NVC Pinewood Derby	
Time	
10:00 AM – 12:00 PM	Check In and Inspection
12:30 PM	Opening Ceremonies
12:45 PM	Races Begin
	Massasoit Lions
	Wachusett Lions
	Massasoit Tigers
Each Scout	Wachusett Tigers
Needs To Be	Massasoit Wolves
Present For Their	Wachusett Wolves
Respective Race	Massasoit Bears
	Wachusett Bears
The Racers Who	Massasoit Webelos
Advance To The Next	Wachusett Webelos
Race Need To Stay Until	Massasoit Championship Race
Racing Has Finished	Wachusett Championship Race
	NVC Championship Race
	Open Races Begin

Any Questions?

Contact: Kevin Fuller

wachusett@nashuavalleybsa.org

C: 617-797-4679

Official Pinewood Derby Rules

OVERALL

All cars must pass inspection to qualify for the races. All cars must be built for the current Pinewood Derby Racing Season. **NO REPEATS** or **REPAINTS**. In order to race at the Council Championship, the youth must be a registered Cub Scout or Webelos Scout in a Unit of Nashua Valley Council. Cars must be built by the racer, adult supervision is encouraged. Cars may not be sent to third party facilities for tuning or other performance enhancements. The Cub Scout should be present and in uniform if possible. The race will be a timed event with the best cumulative time determining the winners.

CAR BODY

The main body structure must be made of wood. Cars that were purchased completed may not be used. Alternately, a pre-shaped block of wood, licensed by the BSA may be used with the stock BSA Wheels and Axles.

CAR SPECIFICATIONS

- **Width** - Not to exceed 2 3/4 inches; including wheels and axles
- **Length** - Not to exceed 7 inches
- **Weight** - Not to exceed 5.0 ounces on a scale accurate to 1/10 ounce.
- **Height** - Must be able to clear Championship gate
- **Clearances**
 - **Center Rail Width** - Must clear center guide rails, typically no less than 1 3/4 inches
 - **Bottom** - No less than 3/8 inches from the track surface between the center rails
 - **Other** - Fender flairs with less clearance are acceptable as long as the center rail width clearance is maintained. Weights are preferred to be inset in the body or on top of the car to aid in a safe stop at the end of the track. No part of the car or attachment to any car, which is metal, pointed, sharp and/or jagged, may be capable of contacting any part of the track.
- **Wheelbase**

The wheel base (distance between front and rear axles) **MAY NOT** be changed. The standard wheelbase of 4 3/8" must be kept. Either grooves provided or equal distance of 4 3/8" between axles.
- **Front End**
 - **Height** - The front end of the car will rest against a short starting pin. Therefore the front bottom of the car which rests on the pin cannot be higher than 1 inch above the track
 - **Width** - The front end must be at least 1/2 inch wide in the middle
 - **No "V-shaped" front end allowed.**

NO PART OF THE CAR BODY, WHEELS OR ATTACHMENTS MAY PROTRUDE IN FRONT OF THE STARTING PEG.

The car design may be enhanced by the addition of other stable materials such as plastic or metal. Any additions must be securely attached and meet the Car Specifications.

The following items are **PROHIBITED**:

- Springs
- Starting devices or propellants
- Electronic or lighting devices that interfere with the race electronics
- Liquids, wet paint, oil, sticky substance or powders of any kind (other than the dry axle lubrication)
- Glass or excessively fragile parts
- Bearings, bushings, washers, sleeves, hubcaps or inserts attached to or in contact with the axle, body or wheels
- Loose objects or objects that could become loose on the car
- Magnets

WHEELS

Use only Official BSA Grand Prix Wheels with the BSA molding mark

All lettering/numbering, both inside and outside, must remain visible. The fluting and other BSA markings on the outside wheel area must remain visible. Outer wheel surface may be lightly sanded, shaved or polished to remove surface imperfections, mold casting burrs and off center wheel bores. Outer wheel surface must not be reshaped in any way in an attempt to lighten the wheel, minimize tread contact or alter aerodynamics. Tread surface must be flat and parallel to the wheel bore. Coning the hubs and truing the inside tread edge is allowed. Tread width may not be less than 7.5 mm. You may add material such as glue, fingernail polish or tape to the inside of the wheel, but no material may be removed from the inside surface.

Wheel bore treatment is allowed including polishing and/or tapping. Wheel bores may not be filled and re-drilled to alter the bore diameter or to achieve better fit with the axle.

The following wheel modifications are **PROHIBITED**:

- Rounding of tread surface/wheel edges
- Grooving, H-cutting or V-cutting
- Narrowing the tread surface, other than truing the inside tread edge
- Drilling sidewalls
- Hollowing, sanding or otherwise removing or modifying from inside the wheel
- Filling of any wheel surface with any type of material

There must be four wheels on the car, however, it is not required that all four wheels make contact with the track surface.

Each wheel must be mounted on an axle, on the outside of the car, in the vertical position. Each wheel must be attached directly to the wood body of the car by an approved BSA axle and spin freely. No part of the wheel may overlap the center guide rail by more than 1/8 inch. The two rear wheels and the two front wheels must be positioned directly across the body from each other. Staggered wheelbases are **NOT ALLOWED**.

PLEASE NOTE: There are aftermarket modified wheels that are **LIGHTENED**. This is usually done by turning the wheels on a lathe and removing material from the inside of the wheel. These wheels are **NOT** allowed and are **EASILY RECOGNIZED** at inspection. Cars with these wheels will not be permitted to race.

AXLES

BSA Nail Type axles are required with an overall diameter of no less than .084 inches for each wheel. Some polishing and/or modification is allowed as long as the overall diameter is not reduced below the .084 requirement. Grooving of the axles is **PROHIBITED**.

Axles must not be connected to any device that mechanically alters rotation or spin. Axles must be mounted in the wood sections of the car using the precut axle grooves or grooves that keep the wheel base the original distance of 4 3/8" apart. The axle grooves can be altered for alignment purposes only.

Only dry powdered lubricants, such as graphite, may be used. Regular oils and silicon sprays may soften the plastic wheels. Cars must be lubricated by the participant **BEFORE** final registration. Racers are not allowed to lubricate their cars during the race.

INSPECTION

Each car must pass inspection by the Official Inspection Committee before it may compete. A number will be assigned to each car and placed on the car. This is the official number; all other numbers are decorative only. The Inspectors will disqualify any car not meeting these rules. The car owner will have the opportunity to correct the reasons for violations. A maximum of 15 minutes will be allowed to correct the violations. Any adult or Scout may appeal the findings of the Inspectors to the Race Committee Chairperson, whose decision is final. After acceptance of the car, only Race Officials will handle the cars. The Rules and Code of Conduct must be signed by the Scout and the parent/adult partner **BEFORE** any car is considered for inspection and registration.

WEIGHTS

The drilling/removal of Lead (Pb) will **NOT** be allowed at the race venues or at check-in time due to the toxicity of the material. **PLEASE** avoid using Lead (Pb) in the cars. If used, all Lead (Pb) must be **COMPLETELY** sealed and safe from all possible contact with the youth.

THE RACE

Only Race Officials will be permitted in the track area; this will be strictly enforced. The car whose nose is first over the finish line is the winner; cars will be racing against the clock. Each car will run once in each lane. If a car loses a wheel or breaks on the track due to design, the car will be disqualified and loses the race. **EXCEPTION:** Race Officials may authorize repairs if there is a collision of another car or object. If a car leaves the track, runs out of its lane, interferes with another car, etc., the heat will be rerun. If the same car has troubles on the second run, the car is automatically disqualified and loses the race.

Any questions or disputes of the running or results of the race shall be referred to the Race Committee Chairperson, whose decisions are final.

BEHAVIOR

GOOD SPORTSMANSHIP AND BEHAVIOR IS EXPECTED. Race Officials have the authority to ask anyone not following this rule to leave. This includes Scouts, Parents, Guardians, Siblings and other spectators at the race.

Race Day Code of Conduct

Scout Code of Conduct

- I will Do My Best
- I will cheer on my Fellow Scouts
- I will have Fun
- I will be a Good Sport, Win or Lose.
- I will be proud of my Pinewood Derby Car

Parent/Adult Partner Code of Conduct

- I understand the Pinewood Derby is about and for the Scouts
- I will encourage my Scout to Do Their Best
- I will have a Positive Attitude
- I will encourage good sportsmanship by being a positive Role Model
- I will encourage everyone to have fun, Win or Lose

Before any Pinewood Derby Car can be inspected, this form **MUST** be signed by both the Scout and the Parent/Adult Partner.

By signing below I acknowledge that I have read the Official Rules and the Codes of Conduct.

Scout Signature

Date

Parent/Adult Partner Signature

Date