



Liberty
District



District Pinewood Derby - April 1, 2012

Liberty District, Knox Trail Council, BSA

The 2012 Liberty District Pinewood Derby Championship race will be held on Sunday, **April, 1th 2012** at the Elks Lodge in Natick, MA. Tigers will race at 12:00 PM. Wolf/Bear/Webelo's will race at 2:00 PM. Please arrive at least 45 minutes prior to race time so your scout can register in time to participate. Attached are the details of the derby location, times, and the rules that will be used in running the derby. Please forward this information to the parents of each boy who will be participating.

The 2012 Liberty District Pinewood Derby Chairman is John Mangino, john.mangino@hotmail.com

1. Two derbies will be run: one for Tigers and one for Wolves, Bears and Webelos.
2. Each pack can register **up to 6 scouts**. A maximum of 3 Tigers, and a maximum of 4 Wolf/Bear/Webelo's. Each Pack must have 2 Tigers competing in order for the Pack to compete.
3. Winners will be determined using an average race time method explained below. For each derby all cars will run 4 races (heats), once in each lane of a 4 lane aluminum track against varied other cars in a 1st round. Ties will be broken by a race off in the same manor.
4. The top 5 finishers in each derby will be awarded trophies. There will also be trophies awarded for "Most Creative Design" and "Best Workmanship" in each derby.

Each pack **must** provide the names and contact information of at least one adult for each derby, **two names total or one person who will volunteer for both derbies**, who will be the pack's derby-related contacts and who will be available on site the day of the race to volunteer. Select your volunteer preference from the volunteer list below and we will try to accommodate. We need at least 24 people from the participating packs to run the each derby. The District will not accept registrations for Packs that fail to provide a derby support person.

Yours in Scouting,

John Mangino, 2012 Liberty District Pinewood Derby Championship Chairman

2012 Liberty District Pinewood Derby Championship

Sunday, April 1, 2012

Details of Derby

What: Liberty District Pinewood Derby 2012 Championships

Where: Natick Elks Lodge, 95 Speen Street, Natick, MA 01760, Phone: (508-653-9792)

When: Sunday, April 1, 2012.

- Tiger registration: 11:00-11:45 AM. Race begins at 12:00 PM
- Wolf, Bear, Webelo registration: 1:00 -1:45 PM. Race begins at 2:00 PM
- Cars not registered on time will not be allowed to race.
- Concessions will be available during the event.
- All Scouts must be present and in uniform at the time of registration and during their races.
- Non-Scout-like conduct or remarks will be grounds for expulsion from the Derby for both Scouts and spectators.

Key dates/information:

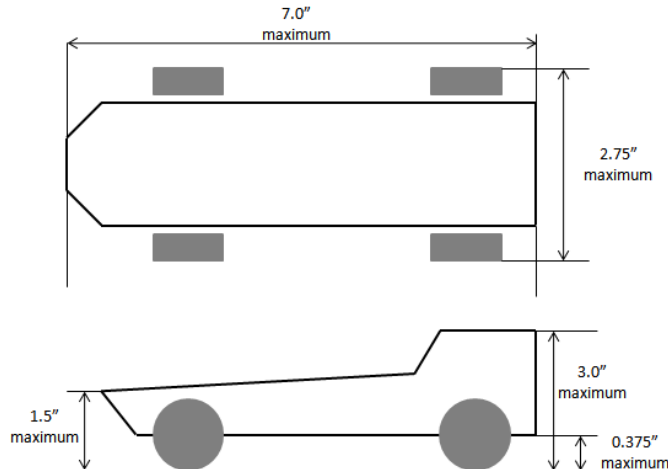
- Registration is due to council office by Monday **March 16, 2012** with a **\$45 fee/pack**.
- After **March 16, 2012** registration is \$55.
- No pack registrations accepted after **March 26, 2012**.
- Each pack can register up to a maximum of 6 scouts comprised of a maximum of 3 Tigers, a minimum of 2 Tigers, and a maximum of 4 Wolf/Bear/Webelos. Must have a minimum of 2 Tigers competing or your pack cannot compete, if your pack does not have 2 Tigers call and we will allow the pack to race.

2012 Liberty District Derby Chairman/Contact: John Mangino, john.mangino@hotmail.com

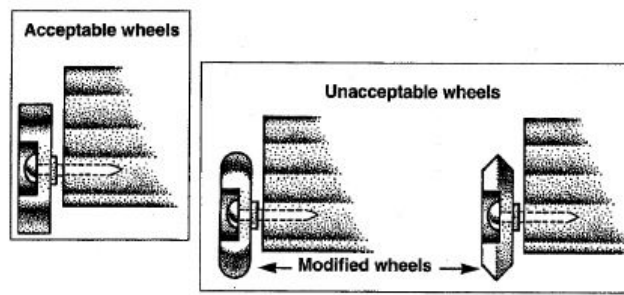
Car Construction Rules:

Cars must pass a registration checklist which meets the following requirements:

- The car must use the wood, nails and wheels as provided in an official BSA Pinewood derby kit from the current year.
- The car must weigh 5.0 oz or less as determined by the “official” registration table scale.
- The car must be 7” or less in length.
- The car must be 2.75” or less in width as measured from the outside of the wheels.
- The car must be 3” or less in height (so it can pass beneath the finish line).
- The front of the car must contact the starting pin no more than 1.5” above the track, due to the length of the pins on the starting mechanism.
- The car must have a minimum of 0.375” clearance on bottom for track clearance.



- Cars with wet glue, paint or finish will not be accepted.
- The only modification of the wheels allowed is light sanding of the tread surface area to remove molding imperfections. Do not sand the side wall. Do not remove wheel mass from inner wheel. Wheel must not be lathed, tapered, narrowed, thinned, rounded or grooved. Wheel treads must remain flat. The below figures show examples of acceptable and un-acceptable wheels. Cars must have 4 wheels, no fellers or wheel replacement bars.



- Axles may be sanded and polished. No slotting, grooving, or plating of the axles allowed. Bushings (bushings include pads between wheel and car), wheel bearings, wheel springs, custom wheels or any other suspension components are not allowed. Nail heads may not be sanded or ground to reduce circumference or size of nail head. Nails must maintain original nail point. Slotted axles such as shown below are not allowed.

- Unacceptable Axle:



- **Axles may be pulled and wheels weighted and measured with calipers if needed** on the top 5 finishers in each derby to assure adherence to derby rules. If gluing axles in place ensure that the type of glue used allows pulling of the axles without damaging the car. **No lightened wheels or 0.091" Axles.**
- Decorative details may be added, but must be securely attached to car.
- Only gravity can propel the car.
- Only graphite or white BSA certified dry lubricant may be used (**no oil**).
- Hubcaps, wheel caps or wheel coverings of any kind are NOT permitted.

Registration

- The Scout must be present at the time of registration and during the race.
- The car will be weighed and inspected for adherence to the previously mentioned Car Construction Rules. If the care does not pass, then the car will be returned to the scout. Modifications can be made in the Pit area.
- No cars will be accepted after the designated registration deadline. Be sure to allow time for modifications to meet inspection requirements.
- After passing all inspections and weigh in, a sticker with a unique number will be placed on the car. The car is considered to be registered and can no longer be handled except by track officials. The car is then taken to the staging area to await the races.
- Once registered the car will be impounded and will not be accessible until after the race, ie. no adjustments or adding graphite.
- Only scouts properly registered by their packs will be allowed to race in the Liberty District Pinewood Derby races.

Race Format:

- Winners will be determined using an average race time method explained below, with the slowest time dropped in each round. For each derby all cars will run 4 races (heats), once in each lane of a 4 lane track against varied other cars in a 1st round. Ties will be broken by a race off in the same manner.
- The race will be run on an ~40' 4 lane aluminum track with an electronic timer. Results will be immediately determined and projected onto a screen. (subject to change if needed).
- If a car should jump its lane during a heat, as determined by the Track Officials, the track will be inspected for possible problems, adjusted if necessary, and cars in the heat will be run again in the same lanes. If the same car jumps its lane a second time, and it is determined that there is no problem with the track, it will be given a time of 7.000 seconds. If another car's run was affected during the 2nd run, the offending car will be removed from the track and the heat run with the remaining cars and the offending car given a time of 7.000 seconds.
- Any car that jumps its lane a total of 3 times during the derby will be eliminated from the derby.
- For cars/heats in which a car breaks or drops parts, the same procedures as a jumped lane will be used.
- If a car stays in its lane, but does not cross the finish line, it will receive a 7.0 second time for that heat.
- Cars needing repairs for breaks or dropped parts will be given 5 minutes to accomplish repairs in the Pit area. During this time racing will continue as scheduled and heats in which the car was scheduled to run will be run at a later time during the derby. After repairs, the car will be re-

weighed. No graphite applications are allowed during repairs. Cars not repaired in the allowed 5 minutes will be disqualified. Track officials will make final determination on whether a repaired car is safe enough to run.

Awards

- Trophies will be awarded to the top 5 finishers in each derby.
- There will also be trophies awarded for “Most Creative Design” and “Best Workmanship” in each derby.

Volunteer task assignments needed for each derby:

Position	Comments
Chairman (1)	- Handles task assignment and general race leadership. He is the final judge over any race related issues.
Computer Operator (1)	- Runs the derby race software.
Announcer (1)	- Announces each race.
Starter (1)	- Track Official #1 - Places and aligns cars in start gate, runs the start gate
Stagers (2)	- Pick and place cars in staging area, receive cars from runners
Finish Line Official (1)	- Track Official #2 - Monitors each heat for any issues that may occur and places cars in a box for the runners
Registration Officials (3)	- Registers and inspects car
Pit Official (1)	- The Pit official will maintain a table where damaged cars can be repaired.
Runners (1)	- The runners bring the cars from the finish line back to the staging area
Concessions (2)	- manage the concession stand and clean up at end of race
Track Pickup and Setup (5)	- 5 people are needed to pickup and setup the track, tables, and chairs and cleanup
Breakdown and Track return (5)	- 5 people are needed to take down the track, tables, and chairs, cleanup, and return the track

Please print clearly on the registration form.

Liberty District Pinewood Derby Registration Form

Race Date: Sunday April 1, 2012

Location: Natick Elks Lodge, 95 Speen Street, Natick, MA 01760, Phone: (508-653-9792)

Due Dates: Pack Registration and payment is due to Liberty District by Monday **March 12th, 2012.**

Registration Fee: \$45. \$55 after **March 12th, 2010.** The fee covers all scouts representing your pack. Registrations will not be taken after **March 26, 2010.**

Derby Chairman/contact: John Mangino, john.mangino@hotmail.com

Schedule:

- 11-11:45am - Tiger Registration
- 11:45-12pm - Car viewing walk through
- 12-1:30pm - Tiger Derby race and Awards
- 1-1:45pm - Wolf/Bear/Webelo Registration
- 1:45-2pm - Car viewing walk through
- 2-4pm - Wolf/Bear/Webelo Derby Race and Awards

Pack town and unit number (e.g. Natick Pack 310): _____

Pack Tiger derby contact/
volunteer name/email/phone: _____

Pack Wolf/Bear/Webelo derby
contact/volunteer name/email/phone: _____

Race Class:	Scout Name	Scout Address
Tiger 1		
Tiger 2		
Tiger 3		
Wolf/Bear/Webelo 1		
Wolf/Bear/Webelo 2		
Wolf/Bear/Webelo 3		
Wolf/Bear/Webelo 4		

Please send checks and registration form to: (And email information of the registration information to the derby Chairman.)

Knox Trail Council, BSA

Liberty District PWD

490 Union Ave

Framingham, MA 01702