



Lackawanna District Pinewood Derby Rules

These rules apply to the district races and are strongly encouraged for use in Pack events. Racers from Packs not enforcing these rules are required to meet these standards to race in district finals!

Car Dimensions-Specs

- The official BSA pine wood block must be used. The block may be shaped in any way that is desired. Precut "Kit" cars and complete premade cars are not permitted. ONLY CARS BUILT FOR THIS YEAR MAY RACE.
- Width shall not exceed 2-3/4 inches.
- Length shall not exceed 7 inches.
- The design of the front of the car shall not extend past the starting pin.
- Body to ground clearance shall not be less than 3/8 inch. Bottom mounted weights **must** be recessed in the body to maintain minimum clearance.
- The minimum distance between the inside edges of the wheels shall not be less than 1 $\frac{1}{4}$ inches.
- Weight shall not exceed 5 ounces.
- Height shall not exceed 4 inches. *Cars that will not clear the race gate due to height WILL NOT be permitted to race*
- Axles, wheels, and body shall be from the materials provided in the kit or like materials from replacement.
- Wheels may be sanded to improve operation. The decorative bumps **must** be present on the sides of the wheels. You may remove the seams and imperfections from the wheels.
- All 4 wheels **must** touch the track. Wheels must not exceed the front or rear of the car to stay within the length specifications.
- Axles may be polished or modified. No additions to axle may be made.
- Axle location is preset on the block and should not be modified.
- Corrections to the grove for the axle orientation are permitted.
- Wheel bearings, washers, and bushings are prohibited.
- No lubricating oil may be used. Axles may be lubricated with powdered graphite or silicone.
- **Application of powdered lubricant to be done outside of race venue in the Pit Repair area.**
- The car shall not ride on any kind of spring.
- The car must be freewheeling, with no starting devices.
- The car will be impounded during the race. **No work can be done on the car once it is registered and impounded.**
- If the car loses a wheel, or is otherwise damaged during a race, the racer shall have 5 minutes to make repairs. If requested an adult may assist in repairs.
- **Cars will be returned to Scouts AFTER the completion of the Final Round.** Early distribution of cars not in the final round is at the discretion of the sponsoring pack.
- **Cars not meeting specification will not be eligible for the final round** but will be permitted to race in round one. *Cars that will not clear the race gate due to height WILL NOT be permitted to race.*

Race Format

- Racing is done with cars running an equal number of times in each lane of track. ¹
- Races may be run in computer generated (normal) order (*preferred*) or back to back. In Normal order, Scouts will be randomly placed against other racers throughout the round, NOT four races and done.
- Scoring for the initial round is to be done by cumulative time.
- Final round is the eight cars with the lowest cumulative time, for each grouping.

Track

- The track is to be designed to specifications set by the Boy Scouts of America.
- Track set-up to be done by sponsoring pack
- Track inspection to be done by the District Executive.

Pit Crew

- Pit Crew members *may* have Scouts racing but are not permitted a position that handles cars in any fashion. (i.e. Announcer, computer operation, event coordinator)
- Pit Crew members (minimum number of volunteers):
 1. (2) Car inspectors - for weight and specifications
 2. (2) Paddock Crew - Transport cars from inspection station to impound area. During race one to hand out cars and one to collect cars.
 3. (2) Racing officials (computer operators) *should have good working knowledge of computer software in use.*
 4. Starter. Places cars on track and opens starting gate.
 5. Flagman. Removes cars from track and hands cars to Paddock Crew member
 6. Announcer. Calls Scouts to on-deck circle

Car Inspection

- Car inspection to be done at race check-in as follows:
 1. The car weight and dimension check. If vehicle fails, the Scout is given the option to modify the car to meet specifications or race as is. **Cars not meeting specification will not be eligible for the final round** but will be permitted to race in round one. **Cars that will not clear the race gate due to height WILL NOT be permitted to race.**
 2. Car is to be issued number and recorded as valid racer.
 3. Car is to be impounded until race. **No work can be done to car once it is registered and sent to the Impound Lot.**
- If the car loses a wheel, or is otherwise damaged, the racer shall have 5 minutes to make repairs. If requested an adult may assist in repairs.
- Cars will be returned to Scouts upon the completion of the final round. Early distribution of cars not in the final round is at the discretion of the sponsoring Pack.
- A Repair/Modification Area should be setup for Scouts to make their cars meet requirements. Cars may add powdered lubricant over the repair catch basin.
- **No Check-in after race begins** due to computer limitations.
- Provisional late registration is at the discretion of the District Representative.

Running the race

- Scouts MUST be present to race. Exceptions are at the discretion of the District Representative.
- At NO time is anyone to enter the paddock area or to handle the cars other than the Pit Crew.
- Scouts will be called by number to an on-deck area. The Paddock Crew member will present cars to the Starter. ONLY the Starter may place cars on the track.
- The Starter will release the cars.
- Once the race is determined to be a good race and times are recorded, The Flagman at the end of the track will hand the Paddock Crew member the cars. Scouts are not to remove their cars from the track
- A member of the Paddock Crew will return the cars to the impound lot.
- Once the first round is completed, there will be a short break to determine racers for the final round.

Race Officials have the final decision in any challenged outcome!

Final Round

- All the final round racers will be called to the on-deck area. This may be done by scouting level (Webelos, Bears, etc.) or all at once at the race crew's discretion.
- The racers for each Den level will be placed 1 thru 8 based on the cumulative time, with racer 1 having the lowest cumulative time and racer 8 having the eighth lowest cumulative time **of the top eight**.
- This round is run the same as the preliminary round- each car races once on each lane.

Final Standings

- Determined by the fastest average of the heats run by the cars.

In the event of computer failure, the race may be run on a contingency format.

This requires the Starter and two (or three) Pit Crew members to be at the track. The winner is determined by the two crew members at the end of the track. In a split decision the starter, or if available a third Pit Crew member breaks the tie. Once a decision is made by the three Pit Crew Judges, it is final.

Swiss style non-elimination is preferred.

This format is greatly improved by having a card for each racer on which points and opponents are recorded.

In this format, racers run in lanes one OR two only. Racers are given 1 point for each win and no points for a loss. Lane position is determined at random.

Round one

Order is determined by putting the cars in alphabetical order and splitting them in half, paring the first car from the upper pile to the first card from the lower pile and so forth.

Round two and on...

Order is determined by random draw of racers with the same point total. If racers have raced one another paring should be made. Effort should be made to ensure racers alternate lanes.

Rounds should be continued until there are 8 in the highest group. At that point the above-mentioned round 2 should be used,

Less fun for the Scouts, but also acceptable is double elimination.

The final decision on any rule's interpretation is at the discretion of the District Representative.

Their decision is final, and no appeal may be made.

¹ Equal runs in each lane may not be achieved in the contingency format.

² This rule is not enforceable at the race. It is self-enforced by Scouts to reinforce 'honesty'.

* 3/8" clearance is defined in the "Cub Scout Leader How to Book"

(33832A ISBN 0-8395-3832-4 © 2001 Boy Scouts of America 2007 Printing) on track design (Page 6-29).