

## Ledge to Lakes District Pinewood Derby Rules

1. **Width** (including wheels, axles and anything affixed to the vehicle) shall not exceed 2-3/4".
  - a. Width between wheels shall be no less than - 1-3/4".
2. **Length** (including anything affixed to the vehicle) shall not exceed 7".
3. **Height** (including anything affixed to the vehicle) shall not exceed 3-1/2".
4. **Weight** shall not exceed 5 Ounces as determined by the official scale.
  - a. Weight may be added prior to Pack registration, but not after racing starts.
5. The axle nails shall be firmly affixed to the wood of the car body and **MUST** be placed in the original axle grooves in the supplied wooden block.
  - a. Wheelbase must be between 4-3/8" and 4-5/8". **No extended wheelbases.**
  - b. Aftermarket or pre-cut kits are not permitted.
  - c. Aftermarket axles are not permitted. (A magnet test will be performed, the axles in the kits are magnetic, most aftermarket are not.)
  - d. Beveling, tapering, thin sanding, wafering or lathe turning of the wheels is prohibited.
6. The car must have been made during the current year (year in which derby is being held) - Cannot use previous years cars
7. Wheel bearings, washers, and bushings are prohibited.
8. Axles may be lubricated with dry powdered graphite or Teflon.
  - a. **No liquid lubricants** may be used such as silicone, oil, or grease.
  - b. Lubrication must be performed prior to entering building where the races are held.
  - c. All lubrication must occur outside the building to keep the race location clean.
  - d. Once cars are registered for the race, no further lubrication may be added.
9. Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications
10. The car shall not ride on any kind of spring(s).
11. The car must be free-wheeling, with no starting devices.
12. **No loose materials** of any kind are allowed in the car, such as ball bearings or lead shot.

**Any car that does not meet these rules when checked in at the District Race will be disqualified. There will not be an opportunity to make changed to the car if it fails inspection at the District Race. Please, do not put us in a position to disqualify a car.**

**Participants of both the design and speed competition are expected to be there for the entire event to show support for your fellow Cub Scouts.**

## **District Race Event**

1. ANY Cub Scout wishing to participate in the District Race can do so. It is recommended that the PACK pays the entry fee for the top 3 winners in the speed and design categories from their pack.
2. The cars should be labeled on the bottom with the scout's name and Pack number. The fee should be paid through the Black Pug registration system.
3. The scout needs to be in attendance on the day of the district race. If for special circumstances the scout cannot make the day of the race, the Cub Scout can contact the District Executive to discuss the circumstances.
4. The Track Chairman will make sure the cars are on the track properly and then start the race. If the car is to be oriented (front/rear) a certain way that is not obvious, please write a letter F on the front of the car or mark with an arrow.
5. If a car leaves the track, runs out of its lane, interferes with another car, loses an axle/wheel, etc., the heat will be rerun. The car may be repaired as needed to attempt to complete the remaining heats (time limit of 5 minutes). If the same car leaves its lane or interferes with a car in a subsequent heat, the heat will be rerun, and the faulty car will be disqualified. Only one attempt at repairing the car will be provided. If a car leaves its lane, at his sole discretion, the track chairman may inspect the track and, if a track fault is found to have caused the initial violation, the track chairman may order the race to be rerun after the track is repaired with no violation assessed to the car.
6. Electronic timing is used at district events. The races are run using a computer that senses the car crossing the finish line. Each car will race in all lanes of the track. The length of the track may vary depending on track used. When all races are done the (6) cars with the fastest combined times from each lane will be in the finals. The finals will run each of the 6 cars on each lane of the track.
7. Cars finishing in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> will be awarded trophies.

### **Car Design with Electronic Track Timers**

Be careful about the width of the front of the car. Narrow cars have been observed to be problematic with the type of timer that we have. The track timer uses an electronic photocell sensor or "eye" which may not "see" the car at the end of the race if it is too narrow. If the timing equipment cannot recognize the car, it will result in a last place finish for that car regardless of where it finishes.

## District Creativity Competition (Judged Competition)

In addition to the speed competition a separate competition will be held to determine the "Best Design" cars. Best Design can reflect the most unusual/interesting approach in the car's design but doesn't need to be of an automotive theme (for example, a pool table, dragon, pirate ship, submarine, fish, campsite, etc.). Consideration for the District Design Award will include originality, creativity, and the percent of work completed by the scout.

1. Any Cub Scout may enter the District Design Competition IF they are not participating in the speed competition. Registration should be completed on our Black Pug registration and fee is paid at that time. The fee is \$5.00 per car for the Design Competition. It is recommended that the pack pays for the registration for the top 3 winners from their pack. The cars should be labeled on the bottom with the scout's name and Pack number.
2. As with the speed competition, the scout needs to be in attendance the day of the District Pinewood Derby. If for special circumstances the scout cannot make the day of the race, the Cub Scout can contact the District Executive to discuss the circumstances.
3. **The car should meet all the requirements as previously stated in the District Rules. Meaning, they must also meet all requirements from the speed competition.**
4. As with the speed cars, the race car should be built with involvement of the scout. Cars clearly built by an adult will not be allowed to compete in the district design contest.

The judging will be administered by the volunteers of the district event. Once the voting has been completed, the cars with the most votes will be selected as the district champions. If a tie exists at the end of the counting, the District Pinewood Derby committee members will each cast a single vote to determine the winner for that category. Note: In the case of a tie, a committee member is not eligible to vote if one of the cars is from his/her own Pack.

The top 3 cars in the design contest will be awarded trophies.

A car can only compete in speed **OR** design (not both). This is done to maximize the number of individual scouts participating at this district event. If a car qualifies for the District Pinewood Derby for both speed and design at the Pack level, the Cub Scout will need to select which competition to enter at the district Pinewood Derby.

*If you have **ANY** questions about the rules or any questions - ASK! Don't wait until race day to find out your car is illegal! Write or call with any questions.*