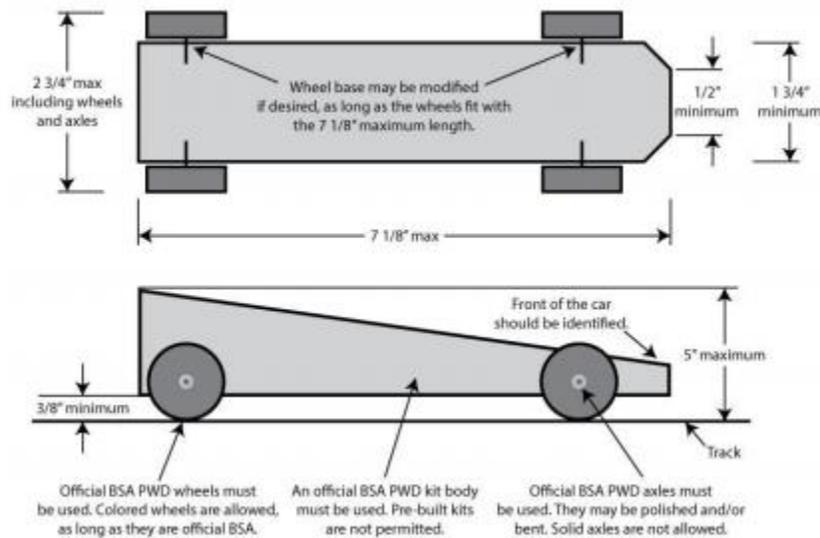


# PACK 107 OFFICIAL PINewood DERBY RULES

## CAR SPECIFICATIONS

1. Pre-built car kits are prohibited. Only official the Boy Scout Pinewood Derby kits provided by the Pack are allowed.
2. The overall width of the car (including the wheels and axles) shall not exceed  $2 \frac{3}{4}$  inches.
3. The maximum length of the car shall not exceed  $7 \frac{1}{8}$  inches.
4. The maximum weight of the car shall not exceed 5.0 ounces. Cars may be hollowed out and built up to maximum weight by addition of wood, plastic, fiberglass, or metal only; provided that it is built into the body of the car and firmly attached to it. Weights may be screwed into the car instead of glued for easier adjustment.
5. The car body must be at least  $1 \frac{3}{4}$  inches wide at the axles and the car must have a  $\frac{3}{8}$  inch clearance under the body. This is so the car will clear the center guide strip on the track.
6. The maximum height of the car may not exceed 5 inches.
7. The front center of the car (where it meets the release bar) must be at least  $\frac{1}{2}$  inch wide. The front of the car may not be a pointed edge.
8. If desired, the wheelbase (distance between the front and rear wheels) may be altered.



## WHEELS AND AXLES

1. Use only official grand prix pinewood derby wheels. Colored wheels from the Scout shop are permitted. The molding seam on the wheel's tread may be removed with a light hand sanding. **NO OTHER WHEEL CHANGES ARE ALLOWED** (beveling, tapering, thin sanding, wafering, lathe turning, etc.) The wheels where they touch the track must be at least  $\frac{1}{4}$  inch and flat.
2. Wheel bearings, washers, or brushings are prohibited.
3. The car may not ride on any type of springs or suspension mechanisms.
4. The car must be freewheeling with no starting devices or other means of propulsion.

5. Axles may be inserted into existing slots, new slots, drilled holes, or hammered into the car. It is not necessary to use the slots pre-built into the car.
6. It is not necessary that all four wheels touch the track; however, all four wheels must be used in the car design.

### **CAR ADDITIONS**

1. Details such as steering wheels, drivers, decals, paintings, spoilers, and interior detail are acceptable. The finished car with details must meet the maximum length, width, and weight rules. No loose materials of any kind are permitted in or on the car. The car may be inverted and shaken as part of inspection.
2. Cars with wet paint upon inspection will NOT be accepted.

### **LUBRICATION**

1. Only dry powder graphite may be used for lubrication. Other lubrications such as oils and silicone spray are prohibited. Cars must be lubricated prior to registration. Cars may not be disassembled during lubrication. Once a car has been registered, no other lubrication will be permitted. No graphite may be applied after inspection or during races.

### **INSPECTION AND REGISTRATION**

1. Each car must pass inspection by the Official Inspection Team before it may compete. Car owners will be advised of any violations and given reasonable opportunity to modify the car to meet the rules.
2. The Inspection Team has the right to disqualify any cars that do not meet the requirements.
3. During the registration process, a number sticker will be applied to the front of the car. The Scout will be asked to identify the front end of the car. Be sure to allow a location for the sticker. Once a car has passed inspection, it will be registered and garaged with the inspection team until race day. The Scout will not handle the car again, unless it is to make a repair during the race or to take the car home.

### **REPAIRS**

1. If a car suffers mechanical failures involving the wheels or axles during the race, and a repair can be accomplished within a reasonable time, then the race will re-run with all 4 cars again.
2. If the car cannot be repaired in a reasonable time, then the car will forfeit the race. After the races begin, all emergency repairs must be done by the Scout ONLY, with the exception of Lions and Tigers (with parental assistance). For ranks Wolf through AOL, parents may supervise repairs, but not assist. Only emergency repairs which are required for the operation of the car may be performed once the car has been checked in. Other repairs, such as those to restore a loose part or weight, will not be permitted.

## **RACE DAY GROUND RULES**

1. Cars must be inspected and registered prior to official race day and meet all car specifications.
2. Cars may be raced only once per year. No cars used in previous years will be accepted.
3. Scouts/siblings must be present on race day in order for their car to race. Those who are not present will be disqualified from the races.
4. The race will be a computer-timed event using a 4-lane track. Each car will race 4 times, once in each lane. The overall winner will be the car with the lowest sum of their four times.
5. Following the Scout race, a sibling race will be held. Participants in the sibling race may not use a car already used in the Scout race- they must race their own cars.
6. The same rules and specifications apply to sibling cars as the Scout cars.
7. Only those designated as part of the Pit Team will be permitted to touch the track.
8. Scouts are not permitted near the track on race day. They must stay behind the checkered barrier at all times.
9. Be mindful of those around you so that all may see their Scouts' race.
10. Be kind to your fellow Scouts.
11. As with all Pack events, electronic use will not be permitted, with the exception of photographing of the race.
12. HAVE FUN!