

Car Specifications

GENERAL

- The Pinewood Derby car shall be solely propelled by gravity, with no starting or launching devices.
- Each car shall pass inspection by event officials before acceptance for racing.
- Once accepted by event officials, cars shall be placed in a holding area off limits to all persons except event officials.
- Each car shall race at least once in each lane.
- Cars are expected to be lubricated with graphite prior to acceptance. Once a car is accepted, it shall not be lubricated except with the permission of event officials.
- The car shall have a minimum of four wheels. A minimum of three wheels shall be touching the track surface at all times.
- The car shall not use bearings, spacers, bushings, or washers on the wheels or axles.
- The car shall not ride upon any type of springs or suspension.
- The wheels shall be free-wheeling.

MATERIALS, DESIGN, AND CONSTRUCTION

- The primary structural material for the car shall be wood.
- All materials used in the construction of the car shall be securely built into the body of the car or firmly affixed. No loose materials of any kind shall be permitted in or on the car.
- Liquids in or on the car are prohibited, except for lubricants between the wheel and axle.
- Additional items, such as a steering wheel, driver, decals, painting, or other accessories may be added to the car, as long as these items do not cause the car to exceed the maximum weight, length and width, or provide assistance in actively propelling the car.
- Fenders or other body width extensions, if used, shall be shaped and placed in a manner that shall allow complete and unhindered access to the exterior of the wheel to confirm conformance with all provisions of these rules.
- The front of the car should be shaped in a manner that allows the car to contact the starting gate or pin without instability. The car shall not be shaped to allow the front of the car to protrude beyond the edge of the starting gate nearest to the car.

DIMENSIONS AND WEIGHT

A. The overall length of the car (measured from the farthest point forward to the farthest point rearward) shall not exceed **7.00 inches**.

B. The overall width of the car shall not exceed **2.75 inches** at the farthest lateral protrusions. A car shall fit entirely within its assigned lane, with no part of the car protruding into an adjacent lane.

C. The width of the car body at the points where the axles are inserted should be approximately **1.75 inches** to ensure that the wheels will fit over the guide strip on the track.

D. The car should have clearance from the lowest point on the car body to the track surface of no less than **0.375 inches** in order to allow for wheel inspection and to avoid contacting the guide strip of the track.

E. The maximum height of the car shall not exceed **4.50 inches**, in order to provide adequate clearance for common track timing mechanisms.

F. The total weight of the car shall not exceed **5.00 ounces** (141.7 g), as measured by the official event scale. *Note: it may be a good idea to build the car to just below 5.00 ounces and add weight if needed at check-in, or be prepared to remove weight to conform to the official scale reading.*