

Mississippi District Ranger Derby



Rules & Guidelines



These rules and guidelines are aimed at giving each boy a fair chance to win. *Let's not forget that two of the main goals of the race are to have fun and provide a project a boy and his dad, uncle, grandpa, or guardian can work on together.*

*** The Ranger Derby has two sets of rules: the car building rules and the competition rules.**

Car Building Rules

The Kits: The car shall be built in the race year from an official pinewood derby or Lego kit. All kits will be accepted as long as they meet the physical dimensions and specifications listed below.

Car Body: The race is for wooden or official Lego cars only. Molded bodies over wooden frames are beyond most parent/son teams and are therefore unacceptable. Builders may add metal weight to increase the cars weight. Wooded fenders and other wood modifications may be added for special design effects.



** Pro tip: If you build a Lego car, glue the pieces together so the car does not come apart during the race. If you are present during the race and your wooden or Lego car malfunctions on the first run, the racing official may allow only minor repair to the car.*

Physical Dimensions: Overall dimensions must not exceed the specification for kits: 2 3/4" wide x 7" long. Width between wheels - 1 3/4". Track clearance is specified at 3/8" even though the lane strips are only 1/4". This clearance is necessary to allow the car to go from the slope portion of the track to the flat portion without dragging. Fenders must not exceed wheelbase (2 3/4"). Height of the car must not exceed 3".

Wheels: Only wheels supplied with the pinewood derby kits are acceptable. All wheels must be plastic. ***The wheels may not be altered, shaved or distorted in any way. A minimal amount of sanding is permitted to get rid of any factory blemishes only.***



Axles and Axle Supports: The official kits will provide a nail, straight axle, or some provide a wood axle with screws to mount the wheels. Wheel bearings, washers, bushings, over-sized nails and screws, nonwooden supports, or any other modification (at the judge's discretion) are prohibited. Axles should be placed in the precut grooves.

Springs: The car shall not ride on any type of spring. The car must be freewheeling with no starting devices.

Lubrication: The wheels and axles may be lubricated with powdered graphite only. No liquid lubrication will be allowed. Lubrication will be allowed only before the registration process.

Weight: The car weight shall not exceed **5.5 oz.** No loose materials of any kind are permitted in/on the cars. The car may be hollowed out and built to maximum weight by adding additional material such as wood or metal provided it is securely attached or built into the body of the car. The weight may not be taped on.



Competition Rules



Track Type: The slot type track and the center rail type are legal tracks and can be used in competitions.

Inspection: Each car must be inspected and properly registered by the official inspection committee before it may compete. The inspector will weigh, measure and assign a number to each car. Some scales have different calibration and may vary slightly from your weighing device. Cars will have to conform to the official weigh-in scales, which will be the final judgment.

The inspectors have the right to disqualify any car that does not meet the official specifications. Once cars have been registered and weighed, cars may not be touched by anyone except a track official. No other adjustments can be made to the car unless so instructed by the officials.

All changes or modifications such as lubricating wheels and axles with graphite must be done prior to registration.

Racing: Once they have been registered, they will then be placed on a table with other cars in their category. They will compete according as outlined during the pre-race meeting.

If during a race, a car does not make it down the track to the finish line, it will get third place in that race or rerun if directed by a race official. The racing official may allow only minor repair if something breaks on the car only after the first run.

If a car jumps track, the race will be rerun once. If it happens again, the car will get an automatic third place.

The Derby Master and judges will do their best to determine the winner of each race. **All judges' decisions are final!** If the judges are unable to reach a decision, the race will be rerun.