

PINEWOOD DERBY RULES

For the most part we will follow the same rules that will be used for the District Race which will be held in March. The winners of the pack race will be able to enter the District Race. The boy has to be present at the district race so if they cannot attend, the position will default to the next place below them.

Pack 551 allows boys to race their cars without being in attendance. However, the boy needs to arrange for their car to be at the church by 6:00 on race night.

Registration will begin at 6:00 PM. This takes some time so you **MUST** arrive on time.

If any car violates the rules below they will be disqualified.

RULES AND REGULATIONS:

Materials: All cars must be constructed from the Official Grand Prix Pinewood Derby Kit (referred to below as the kit) as sold by the Firestone Scout Service Center, Wayne, Pa. **DO NOT BUY OR USE ANY OTHER PARTS ON YOUR CAR.**

New Work: The car must have been made during the current year – ie. Construction of entries must not have been from the previous year race.

TECHNICAL STANDARDS:

Width: The overall width of the car may not exceed 2 and $\frac{3}{4}$ inches

Width at Axles: The car body must be 1 and $\frac{3}{4}$ inches wide at the axles

Length: The length of the care may not exceed 7 inches

Height: The car may not be more than 3 inches high

Weight: The weight of the car may not exceed **5 ounces, as determined by the official race committee's registration scales. Please note: MERCURY may not be used in the car's construction.**

Clearance: The car must clear the ground by at least $\frac{3}{8}$ inches or it may bottom out on the track.

Wheels & Axles: The car must roll on wheels from the kit. Wheels must turn about the axle's nail from the kit. **It must be obvious to the judges that the wheels & nails from the kit are being used.** All 4 wheels must touch the track.

Wheels: Wheel treatment (hub smoothing and polishing) may not result in substantial removal of mass or in reducing the tread (track contact) width from the original kit wheels. Wheels tread must be cylindrical. The words "BSA Pinewood Derby" and other lettering on the wheels must stay intact and must be clearly visible to the inspector.

Wheelbase: You may NOT change the wheelbase (the distance between the front and rear axles).

Bearings: Wheel bearing, washers and bushings are prohibited.

Staging: The front of the car should be fairly straight so that the starting pin has something to grip.

Suspension: The car shall not ride on any kind or type of springs

Detailing: Any details must be within width, length, and weight limits. Any trim, color or decorative items must be in good taste. All cars must be dry at registration.

Gravity-powered: The car must be freewheeling, with no starting devices. (for instance, no car may have substances or protrusions on the front which may catch on or interact with the starting pin).

Body: No loose materials (such as lead shot) are allowed in or on the car.

Identification: The official race number (assigned at registration) must be clearly marked and visible on the car at all times.

Lubrication: Only dry lubrication may be use – powdered graphite or TELFON. Do not use “WET” lubricants such as silicone sprays or oils. No lubricants may be applied after the car is inspected!

CONDUCT OF THE RACES:

Inspection: All inspection will be conducted by one team at a special inspection area using scales and gauges provided for the event. The gauges may include a clearance block and a box into which the car will be required to fit.

Inspection Judges: The inspection judges at race day check in are responsible to evaluate each car’s adherence to the technical standards (above). Their decision may be appealed to the event chairman, who, after consultation with the inspection team, the scout, and his parent/guardian, shall render a final, binding decision.

Impounding: Once the car has passed inspection and received its number sticker, it will be placed in storage, and submitted for race day. No further lubrication or adjustment(s) may be made.

Car handling: Scouts will be responsible for taking their car from the pit area to the starting line, and returning them from the finishing line to the pit area when their heat is completed

Starter: Race officials will place all cars on the track properly, and then will start the race.

Results: All race results will be displayed as they are available.

Car leaves the Track: If a car leaves the track, runs out of it lane, interferes with another car, loses an axle, etc... the heat will be rerun. If the same car gets into trouble on the 2^{ns} run, the contestant is disqualified and automatically loses that race. If, on the 2nd run, another car is interfered with, the heat is rerun a 3rd time, without that disqualified car.

Call to Race: Competitors will be called to race by group. If a racer leaves the area and rejoins after the heats have started, placement in line will be at the event chairman’s discretion. Any scout missing a heat will have that heat scored as a loss.

THE RACE ENVIRONMENT:

Track: The race will be conducted on a 3 – lane wooded track, approximately 28 feet long, with a drop of approximately 4 feet.

Starting Mechanism: The ‘starting line’ will consist of a row of vertical pins, extending approximately 1 inch above the track’s surface and centered in each lane.

Finish Ling Sensor: The track has an electronic finish line – each lane sensor is aligned with its corresponding starting line pin, and is approximately centered in its lane.