Quinnipiac District Pinewood Derby Championships

Official Derby Car Specifications (created 2021-02-09)

All Scouts eligible to compete in their Pack race are invited to race! Every car should be built with the possibility that it WILL qualify. Each scout in your pack should be provided with a copy of this specification sheet, the District Derby staff does not want to turn away a qualifier because his car does not meet specifications. Specifications will be strictly enforced, if a car fails to pass

because his car does not meet specifications. **Specifications will be strictly enforced,** if a car fails to pass initial inspection, the scout will be given a reasonable amount of time to "legalize" the car. A reasonable amount of time will be defined by the event judges. The decisions of the judges on race day will be final.

Each car must pass inspection by the event staff before it will be allowed to compete. The inspectors have the right to disqualify those cars that do not meet specifications. When the car passes inspection, it will be impounded and no further alterations or adjustments are permitted.

The BSA Grand Prix Pinewood Derby Kit is the official kit of the District Championships. The "Pine Car" kit and similar cars will not be allowed. Failure to meet specifications will result in disqualification of the car. The decisions of the inspectors or judges will be final.

*****THE CAR MUST BE BUILT WITHIN THE CURRENT EVENT YEAR!****

Maximum overall width of completed car - 2-3/4 inches. Max. overall length of completed car- 7 inches. Wood block must remain 1-3/4" wide at axle locations.

Minimum Bottom (track) clearance - 5/16 inch. With axles and wheels installed correctly, 1 (one) layer of "flat" style pinewood weights attached directly to the bottom of the car achieves the 5/16" minimum. (gluing of weights adds thickness, please screw on weights if using this method) NOTE! This minimum clearance is for "newer" style pinewood tracks, some older tracks still need the minimum 3/8" clearance. Be sure to check what your Packs track clearance is. The gauges and templates used at the District Championships are the official specification standards of the event. The decisions of the inspectors or judges will be final.

Maximum weight - 5 ounces. The scales used at the District Championships are the official scales of the event. The decisions of the inspectors **or** judges will be final.

No loose materials of any kind are permitted in or on the car. Any weight or accessory added must be securely attached to the body with screws or glue. Weights or accessories held on by tape will not be permitted.

Accessories and details such as steering wheel, driver, fenders, airfoils, etc. are permitted provided they do not exceed maximum weight, length, and width specifications.

The addition of hubcaps or any accessory covering the wheel hubs is not permitted. Dry powdered graphite or dry powdered Teflon (BSA part number 17240) are the only lubricants allowed. Cars with excessive graphite will not be inspected! Clean cars prior to inspection!

Only the axles, wheels, and wood provided in the kit are permitted. Wheels may be lightly sanded on the flat area <u>only</u> to remove burrs and surface imperfections, but cannot be altered in any other way inside or outside. The simulated tire tread (small ridges on outer edge) must remain. Axle grooves cannot be relocated or altered in any way. 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 wooden block supplied in the kit. It must be obvious to the judges that the grooves, wheels, and the nails from the kit are being used. Solid axles are not permitted.

Axles may be glued into place, but the axle grooves cannot be filled or covered, the axles must be visible to the inspector. The ends of the nails (points) must be visible.

The car must be freewheeling, with no starting devices. Use of wheel bearings, washers, or bushings is not permitted. The suspension cannot be altered in any way. The addition or use of any kind or type of springs is not permitted. No flexible body cars are allowed, wood block must remain rigid.

The car must stage on the starting pin with the wooden block resting on the pin. NO ADDED ACCESSORIES WILL BE ALLOWED TO TOUCH THE STARTING PIN. Sharply pointed cars <u>may</u> need to be staged backwards, designs of that type should have a blunt point to prevent this.

Cooperation at the pack level will assure your racers a great day to remember. It is after all, THEIR EVENT.

ALL SPECIFICATIONS WILL BE STRICTLY ENFORCED