

# Pack 231 Pinewood Derby

## Construction and weigh in rules

### Regardless of Council Rules – All Four (4)

### Wheels MUST Touch The Race Track

Tech night will be on Monday March 9th from 7PM to 8PM in the Lanigan gym. It is recommended that you come and check out your car, as we want you to have time to make changes if you have a problem with car weight or not running down the track correctly. A track will be setup for testing and help will be available to assist the Scouts. Remember that the scout should build his own car.

Final weigh-in and impound will occur on Thursday, March 12<sup>th</sup> from 7PM to 8PM in the Lanigan gym. Final weighing and tech inspection will be performed at this time. Vehicle numbers will be assigned. All cars must be turned in on Thursday. Once the cars have been weighed and inspected they will not be released until the time for the Scouts race, and then shall be returned to the impound area between races.

The Derby will be held on Friday, March 13<sup>th</sup> in the Lanigan gym. Please arrive between 5:30 and 5:45 PM racing will begin at 6PM Sharp. Food and drinks will be available for purchase during the event.

Races will be grouped by scout rank. Then the fastest Scout in each class will advance to the next race.

#### All of the rules listed below must be met to be eligible to race.

1. The car must be newly built for the current year by the Scout with parental help if needed.
2. You must use the kit provided by the pack.
3. **Width:** Overall width must not exceed 2-3/4"
4. **Length:** Overall length must not exceed 7"
5. **Ground Clearance:** Overall height must not exceed 3-1/2"
6. **Weight:** Weight must not exceed 141.75 grams (5.0 ounces)
7. No loose materials of any kind are permitted. The car may be hollowed out and built up to the maximum weight by addition of metal, provided it is securely attached to the body.
8. **Car Body:** Car bodies must use the block of wood supplied in the BSA Grand Prix Pinewood Derby Kit; Body may be shaped to a custom design within the above specs. Body may be hollowed out and built up to maximum weight, provided all additions are securely attached. The use of altered front ends of cars with "cheater bars"(anything that protrudes in front of the start gate or raises the point of contact to the starting pin) will not be allowed.
9. **Details:** such as a steering wheels, driver decals, paintings, and exterior details are permissible as long as the inclusion of these details does not exceed the length, width, weight and ground clearance specifications.

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10. **Propulsion:** The car must be freewheeling with no starting devices, *Gravity Only*
11. **Wheelbase:** May be altered. Use of the precut grooves is not required.
12. **Wheels and Axles:** No substitution for the kit wheels is allowed. The car is not permitted to ride on springs of any kind. The four (4) wheels and axles must be those supplied by the BSA in their new kits or the BSA approved “Colored” wheels. No older style wheels with the cashing marks in the tread area. **THE WHEELS CAN NOT BE TRIMMED OR TRUED OR ALTERED IN ANY WAY. NO OTHER SUBSTITUTIONS!** (competition wheels sold by hobby shops and modified wheels that have been altered will be disqualified) Thinning, knife edging, tapering, or changes to the dimensions of the wheels will cause the car to be disqualified. **DO NOT ALTER YOUR WHEELS!** Axles may not be altered in any way, except for polishing. The axles must be the steel axles supplied with the kits. (They will be checked with a magnet.) Wheel bearings, washers and bushings are prohibited. Note: more people are disqualified for abusing the wheel rules than anything else.
13. **Lubrication:** Only dry powdered Graphite may be used, Cars with any type of liquid oil, synthetic lubes, etc. will not be allowed to race. **NO GRAPHITE WILL BE ALLOWED IN SCHOOL, NO AXLE LUBRICATION WILL BE ALLOWED DURING COMPETITION.**
14. **Inspection:** Each car must pass inspection by race officials before competition. Race officials will disqualify those cars, which do not meet these specifications. Once a car is accepted, only race officials may handle it until race day. On race day only the Scout racing or the race officials may handle them. If a car does not meet the above specifications at the time of registration, it may be modified and resubmitted as long as registration is still open.
15. **Car Specifications and inspection decisions:** The cars must pass tech inspection to be able to race. The decision of the tech committee will be final.

The scout should build his own racer with guidance and minimal assistance from adults. Any car that looks like a parent helped too much may be disqualified. Generally, a parent should only cut the car out if using a power saw, final shaping, sanding and painting should be done by the Scout, depending on his abilities.

### Construction tips

- Paint the car before attaching the wheels
- Remove any burrs from the wheels and axles
- Glue any loose axles to the body
- Try to get close to the maximum weight. Lead sinkers, washers etc. may be used.
- Check out the vehicle alignment on a smooth flat surface. You can correct the performance by carefully twisting or bending the nail axles.
- Keep the ground clearance of the car to ¼” or greater.