

## Pack 24 2013 Pinewood Derby Rules

### General Construction & Design rules:

1. All participants are to be in uniform.
2. BSA's official Pinewood Derby® car kit must be used. Premade cars and/or parts constructed by outside companies are not allowed, even if they are made from the official kit. However, participants may use whatever tools they wish to modify the official kit themselves.
3. The ONLY non-kit materials that may be used are weights, decorations, and colored official BSA wheels if a participant does not want to use the stock black wheels.
4. “Decorations” do NOT include a paperclip attached to the front of a car built with a “V,” “U,” or similar shaped cutout at the front! Also, any shaped cutout at the front must be closed with a piece of wood from the kit across the front of the car so the car will not have an unfair advantage in terms of where the starting pin hits the car.
5. The car must be able to sit on the track and rest squarely against the starter mechanism -- an extremely pointed shape is not allowed for this reason unless it can balance on the starting pin.
6. All cars need to be built using all four wheels from the BSA kit, two on each side, but it is not necessary for all four wheels to rest on the track surface while the car runs.

### Car Specifications:

1. Width: The overall width shall not exceed 2 3/4 inches.
2. Length: The overall length shall not exceed 7 inches.
3. Height: The overall height shall not exceed 2 5/8 inches.
4. Weight: The maximum weight shall not exceed 5 ounces as measured on the official “on-site” scale. Remember gravity is the sole power of the car, no sliding or slip weight concept or engineering/design. Weights are not just allowed, however; they are encouraged. However lead shall not be used unless it is fully encapsulated in the car. Tungsten weights and tungsten putty are available from many online sources and are a fine substitute for lead, as are the steel weights available at the Scout stores.
5. Wheel Base: the wheel base may be extended beyond the stock grooves as long as the wheels do not extend beyond the front of the body.
6. Wheels: the wheels supplied with the kit must be used. NO SUBSTITUTIONS. No bearings, shims, washers are to be used. The running surfaces of the wheels may not be altered in width, shape or diameter (into a “V” or “H” shape or rounded, for example). The flashing irregularities may be removed and the running surfaces may be polished, however. Hubs may be “coned,” beveled and/or tapered and hub bores may be polished. No holes may be drilled in the wheels to lighten them, however. The BSA lettering on the outside of the wheels must remain intact. The inside rims may be polished.
7. Axels: the axels supplied with the kit must be used. NO SUBSTITUTIONS. Aftermarket axels and solid axels that pass through the body are strictly prohibited. The stock BSA axels may be polished, tapered, deburred or otherwise modified as the participant sees fit, as long as the axels are stock and are modified by the participant.

### Miscellaneous:

1. Lubrication: The ONLY lubricants that may be used are dry graphite and/or Teflon powder. USE OF LIQUID LUBRICANT WILL RESULT IN DISQUALIFICATION because it ruins the track!!!!
2. Springing and supplemental propulsion: The car shall not ride on any type of spring or suspension and shall be propelled only by gravity.
3. Details: Details such as driver, steering wheel, decals, etc are permissible as long as they do not make the car exceed the maximum length, width, height and weight permitted. But remember – these items can slow down a car!
4. All detail items shall be securely attached to the body. Any detail item the falls off during a race will be left off for future races.
5. Any car that loses detail items that interfere with another participant’s car will be subject to disqualification.
6. If any car runs out of its lane, leaves the track or interferes with another car the heat will be re-run. If the same car repeats any of these actions it will be disqualified.
7. The only repairs allowed during the racing heats will be the replacement of wheels or axels that have come loose or broken. If repairs are made the car must be re-inspected and passed. Repairs must be completed within 5 minutes after damage occurs.

**Disqualification:** Disqualification will be determined by the Rules and Communications Team, the Registration Team and the Starters and Finishers Team. Disqualification may occur for any of the following reasons:

1. The car fails to meet any of the required specifications.
2. Unsportsmanlike conduct of the race participant or members of their family.
3. **The decisions of the Pack 24 Race Committee are final.**