

PACK 61 PINWOOD DERBY RULES



BASIC RULES

- 1) Only BSA approved Pinewood Derby Kits, Wheels, & axles are allowed. Non-BSA decoration kits, however, are perfectly acceptable.
- 2) Only Registered Cub Scouts who have paid their Pack dues are eligible for Trophies. All others may race in non-Trophy divisions.
- 3) All cars must be at least 85% completed by the Entrant. Parents/Adults may perform some difficult woodworking, but car design, basic construction, and decoration must be done by the Entrant. Parents (i.e. overeager Dads) do have the opportunity to compete against other adults and Pack Leaders with their own cars.
- 4) Each Car is to be assigned a racing number to be used in determining race heat position and for Design/Decor judging. Race start and finishes positions are determined by the Pack's Pinewood Derby Race computer software and Electronic Judge.
- 5) Any car that fails Weight, Size, Materials, or other Qualification requirement will be assigned to the Non-Trophy "Outlaw Division".
- 6) All cars will be eligible for Design/Decoration award per Entry Category, despite performance in the Derby and/or failing Race Inspection.
- 7) Pictures of Entrants/and or their Cars will be taken on Thursday weigh-in/test and a "Driver's License" will be issued to each entrant.
- 8) While Pit Crew repairs to damaged cars is allowed, no car can be altered after each race.
- 9) Only the Pit Crew is allowed into the Racing area. Stay Behind the flag line!
- 10) The 3rd, 2nd, and 1st Pack Champions will be eligible for the Covered Bridge District-level Pinewood Derby (hopefully in March).
- 11) Please, no wagering on Race outcomes.
- 12) Late Entrants who miss their Division starts can only race in the Outlaw or Open Class Races. Be on time!
- 13) **Decisions of the Electronic Race Judge, Race Software, Pit Crew Leader, Race Coordinator, and Pinewood Derby Committee are FINAL.** The Track-side Announcer has absolutely no decision making responsibilities so don't ask him.
- 14) No Crying, Whining, or Un-Scout-Like behavior!! There can be only 3 winners per Race Category, but the Pinewood Derby is strictly for **FUN** and building the car is literally half of the fun!

TECHNICAL RULES

- 1) Each car must weigh between **2.00 ounces** and **5.00 ounces** maximum. Weights (washers, cons, lead, etc) may be added to the body of the car to increase its weight.
- 2) Each car must be at least **4.75 inches long**, no more than **3.00 inches wide**, and no more than **6.00 inches tall** in order to properly fit and race on the Pack's track and underneath the Electronic Judge bar.
- 3) No objects can protrude from the front of the car body.
- 4) Absolutely **NO** mechanical or artificial movement is allowed. Springs, magnets, mercury, propellants, electronic devices, offensive weaponry, or similar items are **not** allowed.
- 5) **No** object may be placed between the axle head and the wheel or between the wheel and the car body (washers, bearings, bushings, sleeves, etc).
- 6) Only **BSA approved wheels** may be used on the car. The BSA logo must be plainly visible on the outside of the wheel. Wheels may be lightly polished or lightly sanded to remove normal molding imperfections. They may not be tooled or machined in any manner which will reduce the mass or weight, the initial inertia or the original shape of the wheel.
- 7) Only **BSA approved axles** may be used on the car. Axles included with the scout shop car kit are BSA approved axles. However, axles may be polished in a manner to remove burrs and decrease friction from the wheel.
- 8) Do not put oil or grease on the axles. This will only pick up dust and slow down your car. Dry graphite hobby lube works the best and will be supplied by the Pit Crew at the race.
- 9) **All decisions of the Committee are final with respect to Technical Rules.**



DECORATION RULES

- 1) All Cars must be able to have a Race Number sticker affixed to it.
- 2) There are no other Decorating Rules. Get Creative! **Have Fun!**

RACING SCHEDULE

Races are run in the following Classes for Trophies and Championship Qualifications:

Tigers
Wolves
Bears
Webelos 1 & 2

The following races will be run following the Den Trophy Races:

Den Chiefs and Boy Scout Siblings
Non-Scout Family Siblings
Adult Leader & Parents (the really cut throat competition!)
Outlaw Cars

The Pack Championship Races will then be run following the Non-Trophy races and lunch. Afterward, there will be Open Class racing for all non 1st, 2nd, or 3rd Place winners for as long as we have a take-down and clean-up crew.

Door Prizes will be awarded between each Race Division and Lunch...so stick around!



HELPFUL HINTS!

1) Read the directions that come with your kit. When that fails, follow the directions that came with your kit. Really!

PAINT YOUR CAR WELL IN ADVANCE of the race day. This allows the finish to dry thoroughly. Your car will be handled often during the race and fingerprints will be left on tacky paint.

Unused or cannibalized parts from plastic car, airplane, or military model kits can be used to decorate your car. Heck, we've had old Toddler Tennis Shoes used for decoration.

Try to remove any burrs on the wheels and axles carefully.

If you decide to put graphite on the axles yourself, be aware that it is very messy and may detract from the appearance of the car.)



INSPECTION, RACING AND MISCELLANEOUS INFORMATION

INSPECTION:

All Cars must pass initial Inspection at the proceeding Thursday night Weigh-In, in order to get a Race Number. This starts at 6:30pm in Lacy Hall, in

Cars failing the Initial inspection are allowed a one day rework period and must be inspected one hour before the first race. Cars failing this second inspection will be deemed Outlaw Cars and can only race in that division.

Race Inspection occurs until about 5 minutes to each race division. Late entrants are disqualified (once racing starts or when the final race entries are compiled). Once inspected and qualified, the car may **not** be further fine-tuned (lubricated or altered) unless otherwise allowed by the Pit Crew and Pine wood Derby Committee.

RACE INFO:

Doors Open at 8am Race day and Racing starts at 9am. Arrive **at least** 15 minutes early. Late Entrants for their Division can only race as Outlaws and Open Class.

The last race of the day is the open class and will go on as long as the Pack has volunteers to take down the track and clean up Lacy Hall.

The Racing software uses some complex algorithms to assure all cars will race in multiple lanes and mix it up as much as possible to produce the best and fairest racing results. The total times of their races (to three or four decimal places) are tracked by the computer, we use the total of their times to determine "true winners", not just which place they ended in.

By doing this, it makes a "runoff" race virtually unnecessary, as you'd have to have two or more people have the same total race time to four decimal positions, which is, of course, highly unlikely. If it occurs, we can run another runoff series.

On Saturday when they arrive, their cars will be weighed and processed, and those who did not have a number assigned will have one assigned then. From that point on, no racers will touch their cars again. Any problems that occur will be addressed by the pit-crew.

MISC. INFORMATION

Please be aware of your surroundings when attending this event. We are guests at Bethany Methodist Speedway and **must** adhere to any established rules like **No** Running or crossing the race area line. We depend on the Church facilities for our continued success as a Pack. Follow the scout law and oath at all times!

Remember, the final rule and helpful hint is to **HAVE FUN** and **ENJOY** your Pinewood Derby experience.

All decisions of the Committee are final with respect to the inspection process.

For questions or concerns related to these rules, please submit an e-mail to Race Coordinator Chuck Hague at MrkcuhC@gmail.com so that they may be passed on to the Pinewood Derby Committee to be reviewed and addressed. The Pinewood Derby Committee will make contact and discuss those concerns with the person who submitted the question or concern.

Thank you,
Pack Race Committee