

PACK 946 PINWOOD DERBY

RULES & DETAILS

(All of the following procedures and regulations are intended to be guidelines only in the interest of a fair and enjoyable Cub Scout event. All questions of interpretation and implementation must be made in a timely manner to the event chairman to be considered. Such grievances are to be ruled upon by a majority vote made by the event chairman, assistant event chairman, and Cub Master. No set of rules can predict all possible and unforeseen variables, thus participants agree to accept the rulings made as final and binding with no further appeal.)

GENERAL: (Applies to all Cub Events)

G-1. Essential Materials: All cars entered shall be constructed from the **Official Pinewood Derby Kit** (referred to below as **the kit**) as sold by the Scout Service Center. (Kits may be purchased elsewhere if they are of the exact type specified above.)

G-2. Competitor Categories: Cub Scouts will compete with others in the same "Cub Scout Year." In most cases this aligns with their year in school: Tiger = 1st grade; Wolf = 2nd grade; Bear = 3rd grade; Webelos = 4th grade and 5th grade. In those cases which don't match the alignment, reconfirm the information and enter the Cub Scout according to the Cub Scout Year. In cases in which the Cub Scout year is indeterminate, enter the Cub Scout according to his grade in school. If none of these rules apply, contact the event chairman for direction. In these rules the terms "Cub Scout Year" and "age group" are synonymous. The 5th grade Webelos category includes new 5th grade Boy Scouts who participated with their packs this year.

G-3. Attendance: Only the Cub Scout may enter his car or cars. This means that the Cub Scout must be present to enter his car into competition.

G-4. "New Work": Construction of entries must not have begun before the previous year's District Pinewood Derby Races.

G-5. Single Entry per Car and Scout: The same car may be entered by one scout only and each scout may only enter one car in each event.

G-6. Siblings and Adults: Cars built by adults and/or siblings may only be entered in the open class event.

G-7. Car testing, inspection, and check-in: The track will be available for a specified time on the day of the race before the derby for car testing. Once the racer is satisfied with his car, he may submit it for inspection and check-in. Once checked in, the car will be considered “impounded” and will not be available to the racer, except during specified pit stop time periods on race day. Inspection and check in will be conducted on Saturday before the race.

G-8. Parent involvement: Cars intended for competition in the Scout races **SHALL BE CONSTRUCTED** primarily by the Scout himself, with the least amount of assistance possible provided by an adult. It is understood that each Scout has different ability levels based on age. This is exactly why the boys compete primarily against other Scouts of their age group. A car built by an adult should be entered in the open class, **NOT** entered as the work of a Scout. It is unfair to the Scouts who “**DO THEIR BEST**” only to be competing against adults with greater skills or against professionally built cars and parts available on the internet. Any car entered that, in the opinion of the event coordinators, is obviously not the work of a cub scout shall only be eligible for the open class races. This determination shall be made prior to the start of the derby. Adults are encouraged to assist their boys with the fine tuning of the car, such as when using power tools or exacting the weight, but should limit their involvement in the construction of the car.

Technical Standards for cars entered into the race:

The inspection judges at race-day check-in are responsible to evaluate each car's adherence to the technical standards. Their decision may be appealed to the event chairman, who, after consultation with the inspection team, the SCOUT, and his parent/assistant, shall render a final, binding decision.

T-1. Material: Race cars shall be constructed for this event from the parts contained in the **Official Grand Prix Pinewood Derby Kit** (referred to below as **the kit**) as sold by the Scout Service Center. Materials from **the kit** may be supplemented but not replaced.

T-2. Weight: Race cars may weigh no more than five (5) ounces (total weight) as determined on the official scales during race day inspection.

T-3. Wheels and Axles: The car shall roll on the wheels from **the kit**. The wheels shall turn about the axle nails from **the kit**. The axle nails shall be firmly affixed to the wood of the car body. The axle and wheel dimensions may not be changed substantially. **It must be obvious to the judges that the wheels and the nails from the BSA's Official Grand Prix Pinewood Derby kit are being used.**

T-4. Size: Race cars may be no longer than 7 inches, nor wider than 2 3/4 (2.75) inches, nor taller than 3 inches, as determined by the official gages during race day inspection. (Underside clearance of at least 3/8 (0.375) inches and inside wheel to wheel clearance of at least 1 3/4 (1.75) inches is recommended, so that the car will run on the racetrack. Adequate clearance is the responsibility of the race car builder.)

T-5. Weights and Attachment: Weight may be added to the car and will be considered part of the car for purposes of all measurements. "Weight" is considered to be any material on the car that is not provided in **the kit**. All weight must be securely fastened to the car, e.g. by permanent glue, nails or screws, but not by "sticky substances", e.g. tape, or tack spray. Weights shall be passive, i.e. non-moveable, non-magnetic, non-electric, non-sticky, etc.

T-6. Wheels: Wheel treatment (hub and tread smoothing and polishing) may not result in substantial removal of wheel mass in order to reduce the track contact width from the original kit wheels. Wheel tread surface must be cylindrical. The words and other lettering on the wheels shall remain intact and clearly visible to the inspector. Some of the original "tread marks" on the wheel face must be intact, i.e. apparent to the inspector.

T-7. Unacceptable Construction: The following may NOT be used in conjunction with the wheels or axles: hubcaps, washers, inserts, sleeves, bearings.

T-8. Gravity Powered: The race car may not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car. (For instance, this provision disqualifies cars with sticky substances on the front of the car and protrusions which may catch on the starting pin.)

T-9. Lubricants: Only dry lubricants are allowed for ALL racing events. No oil, grease, or other liquid lubricants are allowed due to their impact on the race track surface and the plastic wheels of all cars. Only SCOUTS will be allowed to re-lubricate their cars during official "Pit Stops".

T-10. Staging: The entire car must stage behind the starting pin.

T-11. Body: The car body may have no moving parts.

Conduct of the Races:

Track officials are responsible for the proper conduct of the races. Decisions of track officials on questions of rules interpretations and procedure may be appealed to the event chairman. Decisions of track officials on questions of fact may not be appealed beyond the track chairman.

Scouts AND PARENTS should also be familiar with these rules.

C-1. Inspection Gages: All inspection will be conducted by one team at a special inspection area using scales and gages approved by the Chairman. Racers should be prepared to make adjustments to their cars if necessary.

C-2. Impounding: Once the car has passed inspection and received its number sticker, the car shall be placed on a table provided. It must not be lubricated or otherwise improved until racing is complete, and thus will not be handled by anyone other than racing coordinators. The only exceptions will be lubrication “pit stops” as provided for all competitors by the racing coordinators during the event and emergency repairs as provided for in C-5.

C-3. Car Handling Responsibility: Race officials shall be responsible for staging all cars at the starting line, retrieving cars at the finish line (after the race has been called) and returning the cars to the pit after the heat is finished. Scouts and other participants will be required to remain clear of the track and to not handle any car except during specified times and after the conclusion of the derby.

C-4. Lane Assignment: Lane assignment for each heat shall be determined by the track racing software.

C-5. Car Repair: If, during the race, a wheel falls off or the car becomes otherwise damaged, then the SCOUT may to the best of his ability perform repairs. If a car is damaged due to track fault or due to fault of another car or SCOUT, then the track chairman, at his sole discretion, may allow additional repair assistance. Since the SCOUT built it, he should be able to repair it as well.

C-6. Car Interference: If, during a race heat, a car leaves its lane and, in so doing, interferes with another racer, then the car at fault shall be declared to have lost the race heat. (However, see **C-9**.)

C-7. Car Leaves Lane: If, during a race heat, a car leaves its lane but proceeds down the track in a manner that does not interfere with its opponent, then the race will be called normally. (However, see **C-9**.)

C-8. Car Leaves Track: If, during a race heat, a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point. (However, see **C-9**.)

C-9. Track Fault: If a car leaves its lane, at his sole discretion, the track chairman may inspect the track and, if a track fault is found which probably caused the initial violation, the track chairman may order the race heat to be rerun after the track is repaired.

C-10. No Finishers: If, during a race heat, no car reaches the finish line on the track, the car which went the farthest in its lane shall be declared as the heat winner, with the next closer being second, and so on.

C-11. Appeals: The Cub Scout must make all questions of rules interpretations, procedure and fact to the track officials promptly.

C-12. Opponent Assignment: Until the Race of Champions, Scouts will be grouped with others of their rank. The track software shall determine which cars are to run in each heat. The software ensures that each car is run the appropriate number of times in each lane and electronically records the times ran by each car.

C-13. Track Champion: The Champions from each rank's heats shall be accompanied, with his car, from the track to Championship Impound by the track chairman or his designee. The car will be impounded there until the start of the Race of Champions. Inspection, repair as necessary and addition of graphite, all performed solely by the Cub Scout, will be permitted prior to the start of the Race of Champions.

C-14. No Call: If the winners of a race cannot be determined by the automated finish line due to error or equipment malfunction, then the race chairman may call the race void and order the heat re-run.

The Racing Environment:

R-1. Finish Line Judge Backup: Backup finish line judges shall be selected in case the electronic mechanism malfunctions and can not be repaired. A finish line judge will temporarily excuse himself if he knows that one of the heat contestants is a relative, close friend, or member of his den.

R-2. Lane Selection: If the track has more lanes than needed, the track software shall select the lanes for use by the racers.

R-3. Finish Line Clearance: Track Finish Line Electronics and other track accessories, if used, must be no closer than 3 inches above the track.

EVENT: OPEN CLASS:

All adults and siblings are allowed to build their own cars and enter the open class event. This race will be held after the Scouts' race. All regulations and procedures are the same for this event, except technical standards T-1, T-3, T-6 and T-7 do not apply to the open class race cars. Cars and materials from prior year's racing may not be used. The boys' cars may not be used, except the Race of Champions winner may at his own request be entered into the open class race. The winner shall be awarded the traveling "Golden Piston" trophy.

Details:

D-1. Date: The Pack 946 Pinewood Derby will be held January 30th 2010.

D-2. Location: The derby will be held at Southside Elementary in the gym.

D-3. Test 'n Tune & Check-in: From 11:00 pm until 12:30 pm, a scale and the track will be made available to make sure your derby car for final adjustments and to meet specification.

D-4. Race Start: The derby will start at 1:00 pm and will continue until all heats have been run.

D-5. Awards: Following the Pinewood Derby, the awards presentation will be held. Awards will be given for top winners in each rank level, as well as overall winners in the pack.