

PACK 523 OFFICIAL PINWOOD DERBY EVENT RULES AND PROCEDURES

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I. GENERAL RULES

G-1. Qualification: All registered Pack 523 Tiger, Cub, and Webelos Scouts may design, build and enter cars that are eligible to participate in the event.

G-2. Essential Materials: All cars entered shall be constructed from the "Official Grand Prix Pinewood Derby Kit" (referred to below as "the kit")

G-3. Competitor Categories: All Tiger Cubs, Cub Scouts, and Webelos Scouts that are registered within Pack 523. Cub Scouts will compete with others in the same Cub Scout Den. The first place winner in each Den will move on to the finals. We will also have runoffs between dens in the same rank, for example between the three Webelos dens.

G-4. Attendance: The Cub Scout MUST enter his own car. This means that the Cub Scout must be present at "Inspection and Registration" to enter his car into competition.

G-5. "New Work": Construction of ALL entries MUST have begun AFTER last year's Pack 523 Pinewood Derby Races.

G-6. Single Entry per Person: Only one car may be registered by any person in the Pinewood Derby.

G-7. Inspection and Registration: Each car must pass a technical inspection before it may compete. Technical inspection and registration of cars occurs during the week before the Pinewood Derby (times to be announced).

G-8. Failure to Pass Inspection: The Pinewood Derby Committee shall disqualify cars which do not meet the rules as described herein. If a car does not pass inspection, the owner will be informed of the reason his car did not pass. Cars which fail the initial inspection may be taken to the "repair" area to be modified as required. Only one official scale and ruler will be used to measure all of the cars during inspection.

G-9. Impound: During inspection, cars will be impounded by the Pinewood Derby committee. The scout will place the car in a decorated shoebox with their name / den on the outside and sealed with string. It is recommended that the scout pad the inside of the box so the car does not rock around. The Pinewood Derby committee will collect the shoeboxes and store the cars until race day. During race day, the Pinewood Derby committee will set up all cars per den so scouts

will not have their cars with them. No car may be altered in any way after it has been registered and impounded.

G-10. Car Design Rules Interpretation: Interpretation of the rules is at the sole discretion of the Pinewood Derby Committee Judges present during the Registration and Inspection process.

G-11. Race-Day Rules Interpretation: On Race-Day, the Cub Scout must make all questions of rules interpretations and procedures to the Pinewood Derby Chairman or Race Officials promptly. Decisions of Race Officials on questions of rules interpretations and procedure may be appealed to the Pinewood Derby Chairman. All decisions of the Pinewood Derby Chairman are final. Decisions of Race Officials on questions of fact (i.e. the result of a specific race) may not be appealed beyond the Trackmaster and/or Finish Line Judges. **Note: Unsportsmanlike conduct by any participant or spectator will be grounds for expulsion from the competition and/or the race area. If a spectator exhibits unsportsmanlike conduct, then he/she will be asked to leave the race area immediately.**

II. CUB SCOUT RACE CAR DESIGN STANDARDS

T-1. Material: Race cars shall be constructed for this event from the parts contained in the Official Grand Prix Pinewood Derby Kit as given out by Santa at the December pack meeting. Materials from the kit may be supplemented but not replaced. Precut kits are not allowed.

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

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, although you are allowed to cut new "axle slots." You are allowed to glue or epoxy the nails to the body. If you do cut new axle slots, the wheelbase of the car must be as the original, although either end may be designated as the "front". It must be obvious to the judges that the grooves, wheels, and the nails from the kit are being used. Axles can be deburred and polished but not shaped or machined in any way.

T-4. Size: Race cars may be no longer than 7 inches, nor wider than 2-3/4 (2.75) inches, as determined by the official gages during the Registration and 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 race track. 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. No weight or attachment may extend beyond the technical size outlined in T-4.

T-6. Wheel Treatment: Wheel treatment (hub and tread smoothing and polishing) may not result in substantial removal of mass nor in reducing the wheel width from the original kit wheels. Some of the original "tread marks" on the wheel face must remain intact, i.e. apparent to the inspector. Wheels may not be machined to a beveled condition and the portion of the wheel surface that contacts the track must remain parallel to the axle.

T-7. Unacceptable Construction: The following may NOT be used in conjunction with the wheels or axles: hubcaps, washers, inserts, sleeves, springs, bushings, or 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 such as graphite or powdered Teflon "white lube" will be allowed for lubricating the wheels. *Lubricants may not foul the track.* Do not use oil or grease on your wheels or axles.

III. CONDUCT OF THE RACES

Competition will consist of heats within each Den, and a series of final heats at the Pack level. Track officials are responsible for the proper conduct of the races.

C-1. Race Day Lubrication: Lubricants may be added to the wheels during race day between each race. It is the responsibility of the scout to add the lubricant if he desires at the pit area only.

C-2. Car Handling Responsibility: Scouts shall be responsible at the starting line for staging. Cars will be staged on the tracks by the "Starter Team." If, in the opinion of the Trackmaster, a scout's physical limitations prevent him from fully complying with this requirement, the scout may nominate an assistant of approximately the same age who serves subject to approval of the track chairman. In any case, the scout shall participate up to his limitations.

C-3. Lane Assignment: To equalize differences among track lanes, each heat will consist of a number of races equal to the number of cars running in that heat. We will run each car in a heat on each lane. Each finishing position will have a score associated with it (i.e. 1st place = 3 points, 2nd place = 2 points, 3rd place = 1 point). Points will be added together and the winner will move into the next round. During the initial rounds, two cars will be run in a heat in a double elimination fashion. There will be two races with the points added up. If there is a tie, a third race will be run with the lane assignments chosen at random. The winner of the third race will stay in the upper bracket with the 2nd place finisher going into the lower bracket. During the finals, the three final cars will be run with each car on a different track. The overall point total will determine the finish order. At a minimum, each scout will have four races down the track.

C-4. Car Leaves Lane: If, during a race, 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. If the car leaves its lane and interferes with another car, the race will be re-staged and re-run. If the same car again leaves its lane and interferes with another car, that car will be judged last place, and the race will be re-staged and re-run without that car.

C-5. Car Leaves Track: If, during a race, a car leaves the track without interfering with its opponent, it shall be considered to have ended its race at that point.

C-6. Car Repair (Without Fault): 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 with the assistance of his adult partner or Den Leader.

C-7 Car Repair (With Fault): If a car is damaged due to track fault, or damage caused by another car or person, then the Trackmaster, at his sole discretion, may allow additional repair assistance to the Cub.

C-8. No Finishers: If, during a race, no car reaches the finish line on the track, the car which went the farthest in its lane shall be declared as the race winner.

C-9. Call to Race: Competitors will be called by Den number prior to each heat. When his Den number is called, each SCOUT will retrieve his car from "pit row" and present himself, with his

car, to the Starter. If the Cub does not respond, his name will be called a second and third time. If the Cub has not presented himself in time for his heat, he will be judged as placing last for that heat. If no competitor is present, the Pinewood Derby chairman may, *at his sole discretion*, defer the heat in a manner that does not interfere with progress of the racing.

C-10. Track Fault: If a car leaves its lane, at his sole discretion, the Trackmaster may inspect the track and, if a track fault is found which probably caused the initial violation, the Trackmaster may order the race to be rerun after the track is repaired.

C-11. The Race Area: Only race officials may enter the track area. This rule will be strictly enforced.

C-12. Rewards and Recognition: The most important values in Pinewood Derby competition are parent/son participation, good sportsmanship and learning how to follow rules. The Pinewood Derby Committee is responsible for recognizing and encouraging these qualities in addition to traditional racing awards. Racers will be recognized as follows:

- a.) Every participating Scout will receive a Pinewood Derby patch and certificate.
- b.) Medals will be awarded to the top finishers in each Den.
- c.) Trophies will be awarded for the top finishers overall in the Pack.

IV. SPECIAL NOTES TO ALL CONCERNED

This project is a parent and son event, and is recommended as such by the National Boy Scouts of America. The Pinewood Derby Committee **STRONGLY SUGGESTS** that each parent emphasize this idea with your son. In all of the events, we require that the cars be built this year.

Sportsmanship:

Two things the Pinewood Derby requires each participant to learn are

- 1) the craft skills necessary to build a car
- 2) the rules that must be followed

Even more important, though, is how we act and behave while participating in the Pinewood Derby or any other group activity. This is called sportsmanship.

The first thing to remember about sportsmanship is that everyone's skills are different. You may be good at something like singing or drawing, but not as good at something else like basketball or computers. Parents have different skill levels, too. Remember, you and your friends are individuals first and racers second. This idea is often called having respect for others. The second thing to remember is to follow the rules. Without rules, there would be no Pinewood Derby. You will never know if you are really good at doing something unless you follow the rules. This is often called being honest. The third thing to remember about good sportsmanship is that there are winners and losers in every competition. You accept this when you choose to compete. There may be times when you win and feel happy, and times when you lose and feel unhappy. Being a winner is easy, and losing is sometimes hard. If you win, you must not brag or gloat. If you lose, you must not feel jealous or bitter. To be a good sportsman, you must be able to say, "I did my best" and be satisfied with the results. You must also be able to appreciate and feel happy for someone else when they run a good race or build a neat car.

Above all else, let's have fun! Enjoy the time designing, building, and decorating your son's car. THE RACE IS JUST ONE PART OF THE WHOLE EVENT.