



OFFICIAL PACK 533 PINEWOOD DERBY EVENT RULES AND PROCEDURES

RACE DAY

Cubs: January 19, 2008 @ 5:45 p.m.

Outlaws: January 18, 2008 @ 7:45 p.m.

Weigh-in Times: January 18, 2008 from
6:30-7:30 p.m. January 19, 2007 from
4:30-5:30 p.m.

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I. GENERAL RULES: (Applies to all Race Events)

G-1. Qualification: All registered Pack 533 Tiger, Cub, and Webelos Scouts may design, build and enter cars that are eligible to participate in the "Cub Scout Race" event. Parents or guardians of Cub Scouts registered in Pack 533 may design, build and enter cars that are eligible to participate in the "Outlaw" 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) as distributed at the November and December Pack meetings. Additional kits may be purchased from the Scout Service Center.

G-3. Competitor Categories: All Tiger Cubs, Cub Scouts, and Webelos Scouts that are registered within Pack 533. Cub Scouts will compete with others in the same Cub Scout Rank. The top three winners in each Rank will move on to the finals. Parents or guardians with registered sons may enter the Outlaw Race on Friday night.

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 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.

G-8. Failure to Pass Inspection: The Inspection 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 on Friday night may be taken home for modifications and brought back for final inspection and registration on Saturday.

G-10. Impound: No car may be altered in any way after it has been registered. After a car passes registration, it will be stored, impounded, by the Pinewood Derby Race Committee until race day.

G-11. Car Design Rules Interpretation: Interpretation of the rules described in G1 through G-10, and T-1 thru T-9 are at the sole discretion of the Inspection Committee Judges present during the Registration and Inspection process.

G12. 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. **Note:** Unsportsmanlike conduct by any participant or spectator will be grounds for expulsion from the competition and/or the race area.

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 (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 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, and MUST be placed in the original 'axle grooves' in the supplied wooden block. It must be obvious to the judges that the grooves, wheels, and the nails from the 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, 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 13/4 (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, nonelectric, non-sticky, etc.

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, 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.*

III. CONDUCT OF THE RACES

Competition will consist of heat races 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. Pit Area: The race-day "Pit area" will have a scale and length box. However, the equipment at the registration area will be the official equipment for the race.

C-2. Race Day Lubrication: You may lubricate your car in the Pit Area. In the interest of fairness, you may only lube your car prior to impounding. Once your car is impounded then no more lubrication is allowed.

C-3. Car Handling Responsibility: Scouts shall be responsible to present their own cars starting line for staging. Cars will be placed on the tracks by the "Starter Team."

C-4. Race Format:

Round 1, Rank Level Races:

In order for fairness each car will run a total of six (6) races at the Rank level (Tigers, Wolves, etc). This way each car will have one race on each lane of the track. The lowest three **cumulative times** for all six races will be the top three winners for the Rank and advance to the Pack Finals.

Round 2, Pack Finals:

Top three from each rank, 15 racers, will compete for Pack 1st, 2nd and 3rd. Each car will race in each lane (total of six races for each car) with the lowest cumulative time becoming Pack Champion.

C-5. 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. 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 given a max time (9.99 sec.), and the race will be re-staged and re-run without that car.

C-6. 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 race at that point and given a max time of 9.99 seconds.

C-7. 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 Pit Crewmember.

C-8 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-9. 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.

C-10. Call to Race: Competitors will be called by Den number prior to each heat. When his Name is called, each SCOUT will retrieve his car from "the stage" and present himself, with his car, to the "Racers Up" area. 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 given a max time of 9.99 seconds for that race heat.

C-11. 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 heat to be rerun after the track is repaired.

C-12. The Race Area: Only race officials may enter the track area. This rule will be strictly enforced.

C-14. Rewards and Recognition: The most important values in Pinewood Derby competition are parent/son participation, good sportsmanship and learning how to follow rules. The Awards 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 certificate.
- b.) A "Cub Scout Favorite" Award will be given to the car voted on by the scouts as the coolest, most awesome car.
- c) Medals will be awarded to the first, second and third-place finishers in each Rank.
- d) Trophies will be awarded for the first thru third-place finishers overall in Pack 533.

IV. THE RACING ENVIRONMENT

R-1. Track Length and Drop: The track shall have a racing surface (starting line to finish line distance) of approximately 28 feet with a drop of approximately 4 feet.

R-2. Track Slope: The track slope shall decrease from approximately 30 degrees at the starting line to approximately 0 degrees at the finish line.

R-3. Lanes: Each lane will consist of a straight, smooth wooden strip approximately 11/2 (1.50) inches, but certainly less than 1-3/4 (1.75) inches, wide and approximately 1/4 (0.25) inches, but certainly less than 3/8 (0.375) inches thick, centered on a smooth surface no less than 4 inches wide. Each race car shall straddle such a strip during its heats.

R-4. Starting Mechanism: The "starting line" shall consist of a vertical pins of approximately 1/4 inch diameter, extending approximately 1 inch above the track surface and approximately centered in the each lane.

R-5. Finish Line Sensor Location: The track has electronics called "finish line sensors" that shall be in alignment with the corresponding starting line pin and be approximately centered in its lane.

R-6. The "Big Board": Competition shall be round robin with each car racing six times, once in each lane. There will be an overhead projector showing current race and "Racers Up" for the next race. Please pay attention for your name to be ready.

R-7. Finish Line Clearance: Track Finish Line Electronics and other track accessories must be no closer than 3 inches above the track (i.e cars can be no taller than 3" high).

V. OUTLAW RACE CAR DESIGN STANDARDS

(... or "Why should the kids have ALL the fun?")

The purpose of the Parents Race event is to have a little fun, to test our Pinewood Derby tracks, and to help finance this year's Pinewood Derby. It will also help us to 'bleed' off some of our nervous competitive anxiety allowing us to be calm and collected during the Scouts race! (right?)

All adults are encouraged to build their own cars. The adults' race will be held the evening before the Scouts' race. Any parent or guardian of a Cub Scout who is registered in Pack [number] may enter this race.

P-1. Technical standards: The Technical Standards for the Cub Scout race (above) will be used in the Parents Race with the exception that items T-1, T-2, T-3, and T-7 do not apply.

P-2. Entry Fee: An entry fee of \$5.00 will be paid prior to participating in the race.

P-3. Number Of Entries: You may race as many cars as you wish as long as you pay the standard entry fee for EACH car.

P-4. The Car: You may NOT use your son's current car for this race.

P-5. Weigh-In: Cars will be inspected and registered just prior to the race.

P-6. What Do The Winners Get? Winners will be recognized with honor, glory, and Bragging Rights!

VI. 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, and 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 a little 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. This doesn't mean that you are a good person one time and not good another time. You can always be a good person, whether or not you have good car-building skills. 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.