

GENERAL: (Applies to all Cub Events)

G-1. Essential Materials: All cars entered shall be constructed from the **Official Grand Prix Pinewood Derby Kit** (referred to below as **the kit**) as sold by the Scout Service Center, 614 N.E. Madison, Peoria, IL. (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; 1st year Webelos = 4th grade; 2nd year Webelos = 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 Wotamalo District Pinewood Derby Races.

G-5. One Design Entry: The scouts "race" car will be automatically entered in the design category unless a second car is entered for design only. Then only will the special entry be judged for design.

G-6. (Deleted).

G-7. Single Car per Boy per Event: A Scout may enter only 1 car per event. If a scout only enters a "race" car, that car will be considered for the design category.

EVENT: DESIGN

Event Description:

Entrants will be judged on design, workmanship, detail, creativeness and craftsmanship in these categories: Best Detail, Best Workmanship, Best Paint job, Most Original, Most Aerodynamic, and Most Unusual with 1st and 2nd places being awarded.

Qualification:

Any Wotamalo District Cub Scout may design, build and enter a car for best design. All cars signed up to participate in the Fastest Car Event will automatically be considered for a best design category, unless a scout enters a separate car for the design event only (Rule G-7).

Technical Standards for a Car Not Entered Into Fastest Car Event:

Technical Standards T-1 Material, T-3 Wheels and Axles and T-4 Size apply except as follows:

A. The block of wood from the kit, or portions thereof, must be prominent in the design.

B. Kit axles need not be used.

Conduct of the Competition:

Every car entered will be considered for all design categories, cars will not be entered into any specific category. All Cars being evaluated will be on display in the designated impound yard, grouped with their competitors. Within each competitor category, judges will rank cars within each design category. If a car is ranked in more than one category, its award will be based on its best ranking..

Design Plaques will be awarded to 1st place winners and Design Medals will be awarded to 2nd place winners selected by judges. Judges are impartial members of the communities of Wotamalo District who have been appointed by the Event Chairman.

EVENT: FASTEST CAR

Qualification:

Each pack may enter up to four Scouts from each Cub Scout Year: Tiger through 2nd year Webelos. In case of absence a Cub from the same pack in the same Cub Scout Year may be substituted on the day of the race. The substitute must race his own car. No Cub may race two cars.

Technical Standards:

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 inspection chairman and 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, 614 N.E. Madison, Peoria, IL. 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. Official scale will go to (1) one place after the decimal point (example 5.0).

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 dimensions may not be changed substantially. The outside surface of the axle head (the non-contact surface) may not be changed substantially, such as, by by polishing, painting or filing down. **It must be obvious to the judges that the**

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, 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, inside wheel to wheel clearance of at least 1 3/4 (1.75) inches, and nose height of no more than 3/4 (0.75) inch is recommended, so that the car will run on the racetrack and trigger the finish line electronics. 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 mass or in reducing the tread (track contact) width from the original kit wheels. Wheel tread surface must be cylindrical. The words "Official B.S.A. Made in U.S.A." 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: Lubricants must be dry at the time of inspection and racing.

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. Please stress this fact to all members of your Pack: They should be prepared to make adjustments to their cars if

necessary.) Repair area will be provided.

C-2. Impounding: Once the car has passed inspection and received its number sticker, the SCOUT will place his car on the table provided, and must not lubricate or otherwise improve that car until his racing is complete.

C-3. Car Handling Responsibility: Scouts shall be responsible to stage their own cars at the starting line by eye, to retrieve their cars at the finish line (after the race has been called) and return their cars to the pit after their heat is finished. If, in the opinion of the track chairman, 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-4. Lane Assignment: Lane assignment for each heat shall be determined by the Race II program.

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. The SCOUT may seek advice for repairing the car, but may receive no other assistance. 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.

C-6. Car Interference: If, during a race heat, a car leaves its lane and, in so doing, interferes with another racer, then the cars will be reset and raced again. If a particular car jumps the track a second time without being interfered with, that car will be disqualified. (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 opponents, the car that leaves the track will have the slowest posted time entered for averaging purposes for the Race II program. (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. The racers slowest time will be added to account for averaging done by the Race II program. (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. The racers slowest time will be entered for that race to account for averaging by the Race II program.

C-11. One Averaged Time Per Contestant: A Scout can only have one average time entered for final results. If a Scout has more than (1) one "No Finish", the car will not be eligible for a "Fastest Car" trophy.

C-12. Call to Race: Competitors will be called to race "by group", as selected by the Race II program. Competitors will be notified when his race group is "on deck"; any Scout missing a heat will have their slowest heat scored for averaging purposes. Scouts must notify a track official volunteer before leaving the "pit area".

C-13. Appeals: The Cub Scout must make all questions of rules interpretations, procedure and fact to the track officials promptly. A station at each track will be designated for this purpose.

C-14. Track Champion: The Champion from each grade's track 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 just prior to the start of the Race of Champions.

C-15. Opponent Assignment: Scouts will be grouped by random by the Race II program to assure the Scouts car will have one race in each of the four lanes provided.

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: The track will have at least 4 lanes. Each lane will consist of a straight, smooth strip approximately 1 1/2 (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 vertical pins of approximately 1/4 inch diameter, extending approximately 1 inch above the track surface and approximately centered in each lane. The starting mechanism shall be of the "spring open" type which moves quickly enough that no car's motion is impeded once the gate starts opening.

R-5. Finish Line Sensor Location: All tracks will have electronic finish lines for timing purposes; the "finish line sensors" shall be in alignment with the corresponding starting line pin and be approximately centered in its lane.

R-6. Finish Line Judging: Two impartial finish line judges, assigned by the track chairman, shall be at station to verify each heat. The track's electronic finish line sensors will be the "Official Result". If the finish line judges agree that the electronics called the wrong car as winning the heat or that obviously incorrect times are posted, they shall advise the track chair to inspect the operation, effect necessary repairs, and rerun the heat.

R-7. Finish Line Judge Backup: Backup finish line judges shall be available in case a judge needs to be excused for any reason. A finish line judge will temporarily excuse himself if he knows that one of the heat contestants is a relative, friend, or member of his pack.

R-8. Lane Selection: If the track has more lanes than needed, the track chairman shall select the most evenly matched lanes for use by the racers. Because tracks frequently change their characteristics due to details of setup, the determination will be made after the track has been set up and made ready for racing on race day. Every scout will have one heat in each lane to eliminate an “Unfair” advantage.

R-9. Chart Assignment: The Race II program will maintain a race chart and a result chart of each race. (See R-12.)

R-10. Finish Line Electronics Sensitivity: Track Finish Line Electronics, must trigger correctly if a lead pencil is passed 3/4 (0.75) inches above the track surface at a speed of 15 feet per second.

R-11. Finish Line Clearance: Track Finish Line Electronics and other track accessories, if used, must be no closer than 3 inches above the track.

R-12. Competition Format: Competition will be controlled by the “Race II” program for each track. Each competitor will race (4) four times, once in each lane. The winner will be the car with the lowest overall average of the (4) four races per the Race II program.

Format Summary: 4 racers per heat. Heats are determined by the Race II program so that each competitor will have (1) one race in each lane.

EVENT: LEADER'S RACE

All adults are to build their own cars. The adults' race will be held after the Scouts' race & trophies are awarded. Any adult Scouter who is registered in the Wotamalo District may enter this race. Technical standards T-1, T-3, T-6 and T-7 do not apply to the Leaders race cars. Cars and materials from prior year's racing may not be used. The boys' cars may not be used.

EVENT: CLASSIC CARS

All Wotamalo adult leaders and adult relatives of derby participants are invited to participate in a Classic Car show and race. Cars must have been built during the entrant's youth according to then applicable Cub Scout Pinewood Derby rules. Cars will be on display in the Design area from 11:00 until race-time, about 2:15 p.m. The adults' race will be held after the Scouts' race & trophies are awarded.

Each car entered should be accompanied by an index-card giving a description, including owner's name and where and when it raced (pack, city, charter organization, and council) and the approximate date it was built.