



BOY SCOUTS OF AMERICA



GRAND CANYON COUNCIL

FOUR PEAKS DISTRICT

RULES FOR THE 2013 FOUR PEAKS DISTRICT PINEWOOD DERBY

To be used by all Packs in the Four Peaks District for the 2012-2013 Program Year

Annotations in this column refer to changes from the 2012 Grand Canyon Council Rules.

New header added.

Changed to refer specifically to Four Peaks District for 2013.

Important Note: These rules are different from the standard Grand Canyon Council rules, or the rules used in Four Peaks District in previous years. They have been rewritten to minimize the potential for ambiguity or misinterpretation and to focus on what can be equitably and accurately measured, judged, and interpreted in order to provide a fair and pleasant experience for all participating Cub Scouts. These revised rules are being "piloted" at the District level to determine if they will be adopted at the Council level in future years. Thanks for working with us to improve the Pinewood Derby experience!

New preface explaining the reasons for the revised rules.

Lack of knowledge of the official rules shall NOT be considered a valid argument for non-compliance.

Retained, but moved forward & emphasized.

The District accepts no responsibility for the dissemination of these rules or the lack of knowledge thereof. Every attempt is made to publish the rules and distribute them at roundtables and have them available at the Phoenix Council Service Center and on the Four Peaks District website. Any problems regarding the lack of understanding or knowledge of the rules shall be disregarded and will have no bearing upon any decisions of the Chief Judge or the Co-Chairs.

Moved forward from 7E in the 2012 GCC Rules.

(Note: all subsequent rule number references in annotations are from the 2012 GCC Rules)

These rules are intended to maintain the competition at a level at which most boys are capable of achieving with minimal adult intervention.

Moved forward from 1A.

The District race will be open to all ranks of Cub Scouts, **regardless if they won at the Pack level.** However, we strongly encourage the top four winners from each rank from each Pack to participate in the District race.

The official car of the Pinewood Derby is the Grand Prix Pinewood Derby Racing Car. The car is available from any distributor of Official Boy Scout supplies. Cub Scouts are strongly encouraged to use the Grand Prix Pinewood Derby Racing Car; however, other car kits may be used, if the kit complies with ALL rules stated

Modified to note that the use of the Official Kit is encouraged, but not mandatory (2012 rules required the use of the Official Kit, which was unenforceable & created problems).

herein. Note that individual Packs may require the use of the official Grand Prix Pinewood Derby kit, at the Pack's discretion.

1. GENERAL

- A. All entrants shall comply with all of the rules, or they shall be disqualified.
- B. The car shall be solely propelled by gravity, with no starting or launching devices.
- C. The car shall be the same car that was used in the Pack Pinewood Derby.
- D. The car shall not have been made before June 1st of the prior year.
- E. In the case of any dispute or question regarding these rules, the determination of the Chief Judge shall be final.

Moved from Introduction into official rules.

Clarified that car must be gravity-powered. Other wording moved here from 4F. Deleted unenforceable wording re using the "entire" BSA kit.

Added clarification regarding authority of rules interpretation.

2. WEIGHT AND APPEARANCE

- A. The primary structural material for the car should be wood. The use of the block provided in the Official Grand Prix Pinewood Derby kit is encouraged, but is not mandatory.
- B. The total weight of the car shall not exceed 5 ounces.
- C. All materials used in the construction of the car shall be securely built into the body of the car or firmly affixed. No loose materials of any kind shall be permitted in or on the car. The use of mercury as any part of the car shall not be allowed.
- D. Additional items, such as a steering wheel, driver, decals, painting, or other accessories may be added to the car, as long as these items do not cause the car to exceed the maximum weight, length and width, or provide assistance in actively propelling the car.
- E. Any car may be re-weighed and/or re-inspected at any time for cause, which shall be at the sole discretion of the Chief Judge.

Revised to note that the use of the Official Kit is encouraged but not required.

Moved from 2A.

Consolidates material originally in 2A & 2B.

Moved from 2C. Clarified that accessories cannot help actively propel the car.

Moved from 2D.

3. DIMENSIONS

Section title revised for clarity.

- A. The overall width of the car shall not exceed 2 3/4 inches at the farthest horizontal protrusion, whether it is the body of the car or the wheels. The area where the axles are inserted should be approximately 1 3/4 inches wide to ensure that the wheels will fit over the guide strip on the track.
- B. The overall length of the car (measured from the farthest point forward to the farthest point rearward) shall not exceed 7 inches.
- C. The wheelbase, measured between the centers of the front and rear axles, shall be between 4 1/4 and 4 5/8 inches.
- D. The position of the axles is not regulated, provided that the wheelbase measurement complies with rule 3C above. It is not required to place the axles into slots pre-cut in the wood block.
- E. The car shall not be shaped to allow the front of the car to protrude over the top of the starting gate. If the front of the car protrudes over the starting gate and the official starter is not able to adjust for a fair start, the protruding car shall not be allowed to race.
- F. The car should have 3/8" clearance underneath in order to avoid scraping against the guide strip of the track.
- G. At the District race, the height of the car shall not exceed 4 1/2 inches (*in order to clear the timing mechanism at the end of the track.*)

Minor wording changes in 3A-3D. No dimensional changes.

Modified to address a wider range of issues where the front of the car could extend past the starting gate.

Added to address clearance requirements of track timing equipment at the 2013 District race.

4. WHEELS AND AXLES

- A. Only Official Grand Prix Pinewood Derby wheels and axles, as provided in the official car kits or the official wheel and axle kits, shall be used. No other wheels or axles shall be permitted. The BSA PINEWOOD DERBY imprint shall be visible on all wheels. The serrated edges of the wheel treads shall remain visible.
- B. All cars shall have four wheels. Three of the wheels shall be touching the track surface at all times.
- C. The wheels shall be free-wheeling.
- D. Axles shall not be altered in any way except for polishing, grinding, or filing in order to remove protrusions or other imperfections. Notched or grooved axles are prohibited.
- E. The combined weight of all four wheels shall not be less than 9.8 grams. The wheels and axles on any car shall be removable for inspection or weighing upon request of the Chief Judge or his/her designee.
- F. The minimum outside diameter of each wheel shall be 1.170 inches. No narrowing, lathe cutting, or re-shaping of wheels (inside or outside) shall be allowed. Wheel treads may be lightly sanded to remove irregularities. Wheel bores may be polished, but shall not be otherwise

Consolidates material originally in 1B, 4B

Moved from 4E.

Moved from 4F.

Added to address allowable treatment of axles, and to prohibit some types of aftermarket "speed" axles.

Moved from 4H and modified to require ability to remove wheels for inspection.

Moved from 4A. Added wording addressing wheel bores.

modified.

- G. No covers, stickers, or hubcaps shall be allowed over the wheels or axles. All axle heads shall be visible.
- H. The car shall not use wheel bearings, spacers, or washers.
- I. The car shall not ride upon any type of springs.

Moved from 4A.

Moved from 4C.

Moved from 4D.

(Note: some kits purchased from other than Official Boy Scout suppliers may have wheels that resemble official BSA wheels, but do not meet the minimum diameter or weight regulations. If in doubt, measure - or better yet, simply use the Official Grand Prix Pinewood Derby Kit!)

Added clarifying note regarding problems with aftermarket wheels.

5. LUBRICATION

- A. Cars may be lubricated before check-in. Cars shall not be lubricated after acceptance by the judges, except that re-lubrication may be permitted immediately prior to the championship race.
- B. Any type of dry lubricant is permitted. Graphite is highly recommended.

Minor wording changes.

6. EVENT RULES

Revised section title to clarify applicability.

- A. Acceptance into a Pack Pinewood Derby Race shall not automatically denote acceptance into the District Pinewood Derby Race.
- B. Each car shall pass inspection by the Official Inspection Committee before acceptance for racing. The inspection committee has the right to not accept any car that does not fully meet all specifications. If a car is not accepted, the owner shall be informed of the specific reason(s) why the car is not in compliance. Cars not accepted may be modified to fully meet all specifications and resubmitted for inspection if time permits prior to the start of racing for its rank group.
- C. In the event a car is discovered to be in violation of a rule after racing for its rank group begins, the car shall not be allowed to continue racing, and shall be disqualified.
- D. Numbers shall be assigned and affixed at check-in. The official number shall be clearly marked and visible at all times.
- E. No one shall be allowed beyond the registration area and into the area immediately surrounding the track, except the officials and the Scouts racing. Those areas shall be designated as restricted.
- F. Each heat shall be announced. Drivers shall report to the starting line when announced. If drivers have possession of their cars between races, they shall give their car to the Official Starter, who will place each car carefully upon the track. All other persons shall remain

Moved from Introduction.

Moved from Introduction.
Added wording addressing modification & resubmission.

Moved from Introduction.

Moved from 6A.

Moved from 6B.

Moved from 6C.

behind the barrier and shall not obstruct the view of other spectators.

G. The Official Starter shall make sure that the cars are on the track properly, and then will start the race. He/she shall be the judge of whether the cars are properly aligned on the track, which cars are to race, and in which lane, and of all matters in the starting area. He/she shall also be the sole judge of "false starts".

Moved from 6D.

H. Two to four cars shall race at a time. Each race shall be judged by a minimum of two Finish Line Judges. The judges must agree that the race was fair and without incident.

Moved from 6E.

I. Volunteer judges may be used. Volunteer judges shall not judge any race in which they have a family member racing.

Moved from 6F.

J. At the District race, a car's time for each lane shall be recorded. The slowest time for each car is discarded and the remaining times used for qualifying. Pack races may use a method similar to the District race, or another method as approved by the Chief Judge for that Pack's race.

Moved from 6G, revised to describe the timing system used at the District race, and allowing other methods at Pack races.

K. When the result of each heat is recorded, the drivers or designated officials shall take each car back to the starting line and give it to the Official Starter.

Moved from 6H, and revised to also allow officials to transport cars.

L. When a car has raced each lane once, the driver or designated officials shall take each car to the holding area.

Moved from 6I, and revised to also allow officials to transport cars.

M. The top four qualifying times for each rank shall race against each other for the championship.

Moved from 6J.

N. If during a race, a car leaves the track, runs out of its lane, interferes with another car, or loses a wheel, axle, or other part(s), the race may be run again at the discretion of the officials. There shall be only one repeat race for this reason in any heat. If the same car has a problem again, the results of the repeat race shall stand, unless the problem car clearly interferes with another car, in which case the interfering car will be declared the loser.

Moved from 6L. Minor wording changes.

O. The ranks are defined as:

- Tiger Cubs
- Wolves
- Bears
- first-year Webelos
- second-year Webelos.

6M split into 6O & 6P.
Reformatted for clarity.

P. District Pinewood Derby entrants shall compete in the same category as they did in their Pack competitions. For units not utilizing a two-year Webelos program, fourth graders shall compete as first-year Webelos, and fifth graders will compete as second-year Webelos.

6M split into 6O & 6P.

Q. If a driver checks in after the close of check-in for his rank group but prior to the start of racing for his rank group, the Chief Judge may allow participation if time permits. However, at the District race, cars cannot be added to a rank group once racing has begun for that rank group.

Moved from 6N, and revised to eliminate possibility of a late racer claiming an already-awarded trophy. Also notes that cars can't be added after the start of the District race (software limitation).

- R. In the event of a disagreement over qualifications of any car, the Chief Judge will settle the dispute and his/her decision shall be final.

Moved from Introduction.

7. REPAIRS

- A. An official Pit Area shall be provided for repairs and alterations.
- B. Repairs shall be permitted after racing begins, but shall take place in the official pit area under the direct supervision of the Chief Judge or his/her designee.
- C. The official in charge of the pit area shall be the sole judge of what repairs are necessary and allowable. If wheels or axles are replaced after acceptance, only those wheels or axles actually replaced may be lubricated.
- D. If a car requires repairs, that car's races will be delayed until such time that the car is repaired, or is withdrawn. Other races within the same rank group will continue while repairs are made. In no case will the racing be delayed more than 15 minutes awaiting repairs. If after racing has been delayed for 15 minutes, and no other races are possible, the racer shall be called to race, and upon failure to report to the starting line at this time, he shall forfeit.

Minor wording changes.

Wording on spare parts moved to note at end of section.

(Note: It is highly recommended that racers bring their own spare parts and tools, and be prepared to make their own repairs if necessary.)

Minor wording changes.

8. AWARDS

- A. At the District race, trophies shall be awarded to the first four place winners of each rank group.
- B. At the District race, no competition shall be provided to determine best design or appearance.
- C. Other prizes and awards may be given depending upon availability. Such awards shall be made at the discretion of the Pinewood Derby Committee Co-Chairs or their designee.

Moved from 8C. Deleted wording on re-racing of rank group.

Moved from 8D.

9. OPEN CLASS

- A. Immediately following the official District race, Open Class races may be held at the same venue.

New section defining Open Class races added in 2013.

B. There are three ranks of Open Class:

- Stock Class
- Plummet Class
- Zoom Class

C. For Stock Class cars, all standard District rules shall fully apply, with the following exceptions:

- a. Rule 1D is waived (*cars from previous years may be entered*)
- b. Rules 6M - 6Q are waived (*you don't have to be a Cub Scout - family, friends, Scout Leaders, and others are invited to participate.*)

D. For Plummet Class cars, all standard District rules shall apply, with the following exceptions:

- a. Rule 1D is waived (*cars from previous years may be entered.*)
- b. Rule 2A is modified to read: "The car shall have no exposed metal parts, except for the axle heads."
- c. Rule 2B is modified to read: "The total weight of the car shall not exceed 1 pound."
- d. Rule 2D is modified to read: " Additional items, such as a steering wheel, driver, decals, painting, or other accessories may be added to the car, as long as these items do not cause the car to exceed the maximum weight and width, or provide assistance in actively propelling the car."
- e. Rules 3B - 3C are waived (*longer cars and wheelbases are permissible.*)
- f. Rule 3E is waived.
- g. Rules 4B-4I are waived; however, Rule 4A shall still apply (*must use official BSA wheels.*)
- h. Rules 6M - 6Q are waived.

E. For Zoom Class cars, the rules for Plummet Class shall apply, with the following additional modifications:

- a. Rule 1B is modified to read: "Starting, launching, and propulsion systems are permitted; however, any method of starting, launching, or propulsion employing any sort of combustion, such as rocket engines, fuel-powered motors, or any other type of burning fuel, or that has any potential for damaging the track, spectators, or the venue, is expressly and completely prohibited" (*this is an indoor venue, and we'd like to be invited back!*)
- b. Rule 2D is modified to read: " Additional items, such as a steering wheel, driver, decals, painting, or other accessories may be added to the car, as long as these items do not cause the car to exceed the maximum weight and width."

New section on Open Class.

- F. Any Open Class car that leaves the track for any reason during a race shall be immediately disqualified (*keep this in mind when designing guidance and propulsion.*)
- G. No prizes or trophies shall be awarded for any Open Class racing (*this is purely for fun.*)
- H. A driver may register separately for each rank in Open Class, and may enter the same car in each rank; however, the car shall fully conform to the rules for the applicable rank when racing in that rank.
- I. All decisions on Open Class entries, qualifications, and/or race results made by the Chief Judge shall be final.

New section on Open Class.

The District Pinewood Derby Committee strongly recommends that district and pack officials not accept responsibility or possession of cars between races. Pinewood Derby cars should be given to their owners for them to keep between racing events.

Any questions regarding the Four Peaks District race or the District rules may be directed to:

- Richard C. Moeur, Co-Chair - (602) 909-8451, rcmoeur@aol.com
- Bob Weaver, Co-Chair - (602) 867-7043, jusbobweaver@gmail.com

Contact & co-chair information revised & updated.

version 1.3 - 12/13/2012 (minor change to 3E, added 3G to address track constraints, re-revised Open Class rules to address operational concerns)
version 1.2 - 12/12/2012 (revised 6B & 6C to clarify inspection & acceptance, revised 6Q to resolve potential issue with late entrants, revised Open Class categories)
version 1.1 - 12/07/2012 (added Open Class, changed some wording in Part 6 from "registration" to "check-in")
version 1.0 - 11/26/2012 (complete reorganization & modification of prior years' rules)

List of rule versions added for change tracking & historical reference.