

# Pack 167 Pinewood Derby

## Two Competition Categories:

**Race** – Scoring based on cumulative time of each car, which will race in all lanes of the track.

1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Place trophies awarded by rank. 1<sup>st</sup> and 2<sup>nd</sup> place finishers of each rank advance to Blackhawk Area Council competition to race Pack winners across council.

**Design** – Judged by a random selection of 3 or more guests/parents that are not affiliated with a scout in the rank being reviewed.

1<sup>st</sup> Place trophy awarded to Overall Best Design by rank and winner will advance to Blackhawk Area Council competition to compete against Pack winners across council.

1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Place certificates awarded by rank for each of the following:

- Creative/Theme
- Paint Job
- Race Body Design

## Pack 167 Derby Times & Race Rules

Event	Rank	Starting times
Registration	Webelos II (7)	8:30 am
Race	Webelos II	9:00 am
Registration	Webelos I (26)	9:00 am
Race	Webelos I	9:30 am
Registration	Tiger (14)	11:00 am
Race	Tiger	11:30 am
Lunch		12:30 pm
Registration	Bear(17)	1:00 pm
Race	Bear	1:30 pm
Registration	Wolf (24)	2:00 pm
Race	Wolf	2:30 pm

**You must register before the first race starts. After that, you will not be allowed to enter the race. All drivers (scouts) must be there to register 30 minutes before race time.**

**Starting time:** The above starting times will allow for all scouts to register.

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

**Inspection and Registration:** Each car must pass a technical inspection before it may compete. Technical inspection and registration of cars occurs on Derby Race Day.

**Late Registration and Inspection:** If a Scout fails to register his car prior to the start of the race on race day, his car may not be registered. No exceptions.

**Failure to pass inspection:** The Inspection Committee shall disqualify cars that do not meet the rules as described herein. If a car does not pass inspection, the Scout/Parent will be informed of the reason his car did not pass. Cars which fail the initial inspection may be modified and brought back prior to the start of the race for final inspection and registration.

**Single entry per person:** Only one car may be registered by any one Scout in the Derby.

**New work:** Construction of all entries **MUST** have begun during this Cub Scout year. For example, last year's cars cannot be reused.

**Car leaves the lane:** If, during a race heat, a car leaves its lane, the race will be restaged. The car will be checked out again and the race will be re-run. If the same car again leaves its lane, that car will be judged last place and the race will be restaged and re-run without that car.

**Car leaves the track:** If, during a race heat, a car leaves the track, the race will be restaged. The car will be checked out again and the race will be re-run. If the same car again leaves the track, that car will be judged last place and the race will be restaged and re-run without that car.

**Car repair (without fault):** If, during a race heat, 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 Crew member. The race will be paused for a maximum of 5 minutes. If the car can be repaired, the race will be re-run with that car. Otherwise, that car will be judged last place and the race will be restaged and re-run without that car.

**Car repair (with fault):** If a car is damaged due to track fault, another car or person, then the Trackmaster, at his sole discretion, may allow additional repair assistance to the Scout. Time for this repair will be at the discretion of the Derby Master.

**No finishers:** If, during a race heat, no car reaches the finish line on the track, the car that went the farthest in its lane shall be declared the heat winner.

**The race area:** Only race officials may enter the track area. This rule will be strictly enforced.

**Race day rules interpretations:** On race day, the Scout must make all questions of rules interpretations and procedures to the Derby Master or Race Officials promptly. Decisions of the Race Officials on questions of rules interpretations and procedures may be appealed to the Derby Master. All decisions of the Derby Master 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 or Finish Line Judges. Unsportsmanlike conduct by any participant or spectator will be grounds for expulsion from the competition and/or race area.

# Blackhawk Area Council Pinewood Derby Car Regulations

**Attention Pack Leaders:**  
It is your responsibility to inform the parents and Cub Scouts of your pack of these regulations.

1. **The car must be constructed using the materials supplied with regulation Grand Prix Kit #17006.**
  2. The car run in the Council Pinewood Derby shall be the identical car run by the entrant in his own pack derby, and it must have been constructed after April 17, 2010.
  3. **Length:** Overall length shall not exceed 7 inches.
  4. **Width:** Overall width shall not exceed 2¼ inches.
  5. **Weight:** Maximum total weight of car, including driver, trims, weights, etc., shall be 5 ounces.
  6. **Height:** Cars shall not be higher than 3". This is measured from the bottom of the wheels to the top of anything on the car. This is so all Pinewood Derby Cars will clear all timing devices.
  7. **Wheels:** Wheels must those supplied in regulation kit #17006 or BSA Official Replacement wheel kit, sold separately. No modification of wheels will be allowed, except that burrs or excess plastic from the factory molding process (if any) may be removed or sanded. Wheels must be original width thickness and height and the tread surface must remain flat so that the whole tire surface can simultaneously meet the track surface. Tapering or coning of the outside surface of the wheel hub is allowed. **Wheels may not be shaved.**
- The axle bore of the wheel may not be bushed, sleeved, lined, or otherwise modified to change the basic wheel-to-metal axle interface other than the application of a dry non-permanent spray-on, brushed-on, or dusted lubrication compound. Bushings, sleeves, permanent coatings, thrust washers, and enclosed axles (hub caps) are prohibited.
8. **Axles:** Axles must be those supplied in regulation kit #17006 or BSA Official Replacement kit, sold separately. Burrs on the underside of the axle head and ridges on the axle shaft (if any) may be removed. **If the underside of axle head is to be tapered, be careful not to reduce the diameter of the axle head.** Polishing of the axle shaft is allowed. The mating surface of the axle may **not** be bushed, sleeved, or lined. Only a dry non-permanent spray-on, brushed-on, or dusted lubrication compound is allowed. Bushings, sleeves, permanent coatings, thrust washers, and enclosed axles (hub caps) are prohibited. **Axles must be mounted on the car body so that wheels are directly opposite of one another.**
  9. **Track Clearance:** The car must have an under-body and in-between-wheel clearance which will allow it to travel freely over a track lane strip which is ¾ inches maximum in height and 1¼ inches maximum in width.
  10. **Suspension:** The car shall have a solid suspension consisting of the wheels and axles rigidly mounted to the car body. No springs, linkages, shock absorbing materials or other constructions which provide a non-rigid or floating-type suspension are permitted.
  11. **Details:** Details such as steering wheel, windshield, driver, exhaust pipes, trim, etc., are permitted as long as they are rigidly mounted to the car body and do not exceed the overall car specifications.
  12. **Starting Devices:** The car may not incorporate any devices which may assist starting. These shall include, but are not be limited to, magnets, liquids, spring mechanisms, etc. There shall be no loose components within the body of the car. The car must also be free-wheeling.
  13. **Front Edge:** The front edge of the car must rest against the starting peg on the track so that the entire car is behind the peg.

Just like any real race car, all four wheels should meet the track surface. If the flat surface of the tire is to be sanded, be careful not to round the corners (crown) or the wheel. Any rounding of the crowns will result in disqualification. An edge should still be present. See illustration below.

