



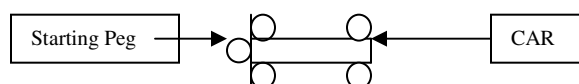
Pinewood Derby – Rules 2015

I. - Eligibility & Registration

- **Pre-race registration** can be completed on www.mac-bsa.org website under the Cub Scout Activities section or by going to www.midamericaderby.com
- **Cost is \$5 – Pre-Registration Race day registration can be done at the event – cost is \$10**
- **6 Divisions**
 - **Qualified Scout Division Mid America Council – Classes**
Tigers * Wolf * Bears * Webelos I * Webelos II
~Qualified Scouts will have raced in a Mid America Council District Race – placed 1st-3rd in their rank in order to qualify for this division – no exceptions
 - **Open Scout Graphite Division – Classes**
Tigers * Wolf * Bear * Webelos
~This Division is open to any Cub Scout from anywhere – no qualification needed
 - **Open Scout Oil Division – Classes**
Tigers * Wolf * Bear * Webelos
~This Division is open to any Cub Scout from anywhere – no qualification needed
 - **Open Division – Kids**
~Ages 1-18 – Non-Scouts open to “kid” under the age of 16 – Graphite ONLY
 - **Open Division – Adults**
~Over the age of 18 – Non-Pro – Graphite ONLY
 - **Pro Divisions (there will be 6 classes)**
~Separate Rules – Specific to Pro-Division (see Pro-Division Rules)
- Good sportsmanship is expected at all times by everyone present at the race
- Cars must have been constructed this year. **One car per person in each Division.**
 - ***Except Pro Division (unlimited number of entries)**

II. - Body Specifications

- **Width** – not to exceed 2 ¾ inches (7cm)
- **Length** – not to exceed 7 inches (17.8cm)
- **Height** – must have clearance under Finishing Gate – not to exceed 6 ½ inches
- **Weight** – not to exceed 5.0 ounces – **143.4 grams measured on Official Race Scale**
 - Overweight cars may be reduced to 5.0 ounces (143.4grams) or below before they can officially be entered, at the Race Day Check in.
- **Center Rail Clearance** – Cars must clear the center rail which is 1 5/8 inches wide by ¼ inch tall along the entire length of the car.
- **Wheelbase** – Can be extended. – Standard wheelbase is 4 3/8 inches from center of front axle to center of back axle. Any wheelbase can be used
 - Axle holes may be drilled into body of car as long as the specs are met.
- **The main body structure must be made of pinewood**
- **Body design** may be enhanced by adding other stable materials such as plastic, metal or details. All additions must be firmly attached and conform to size specifications. No loose materials will be allowed on the cars.
- **No part of the car’s body, wheels, or attachments can extend beyond the starting peg on the track what so ever.** – the length is not to exceed 7 inches.





III. – Prohibited Items that can NOT be used

- Magnets, springs or suspension systems of any type.
- Starting devices, finish line devices, propellants, or propulsion systems
- Wet paint, or Sticky substances
- Glass or excessively fragile parts
- Electronic or lighting devices (if lights are on the car they must be turned off)
- Bearings (except in Pro-Bearing Division)
- Axles and wheels attached to any device that mechanically alters rotation or spin.

IV – Wheels

- **Only Official BSA Wheels are allowed** (either new style & old style) all markings must be intact on inside and outside of wheel. You may use the Official BSA Colored wheels
- **Outer wheel surface *may be sanded, shaved, lathed or polished to remove any imperfections, true roundness, remove mold castings and burrs, but must not be reshaped in any way to minimize tread contact or alter aerodynamics.***
 - **The fluting** (small decorative dots on the edge) **must remain visible around the entire circumference.**
 - **The tread / contact surface must remain flat and parallel to the bore.**
 - **The width of the tread must not be less than 7.5mm**
 - **No removing or reducing the letters or spokes or drilling additional holes.**
- **The following wheel modifications are NOT Allowed**
 - No Rounding of the wheel treads – they must remain flat.
 - No Grooving, H-cutting, V-cutting, Crowning, Tapering or Dishing
 - No Altering the wheel profile
 - No Drilling sidewalls
 - No Filling of any wheel surface with any type of material
- **Officials will remove wheel(s) if lettering is not completely visible.**
- **Coning the hubs, truing the inside edge of the wheel, and removing the outer hub step down is allowed.**
- **Wheel Bore *treatment is allowed including polishing, sanding and / or tapping.***
 - Wheel bores may not be filled and re-drilled
- **There must be at least four wheels on the car, *however it is not required that all four wheels make contact with the track surface – one wheel may be lifted from the track surface.***
 - Each wheel must be mounted on an axle, on the outside of the car, on the side of the car.
 - One wheel can be no more than a 45° angle from the perpendicular side of the car if desired.
 - Each wheel must be attached by an axle

V. – Axles

- **Nail type but not limited to those found in the Official Pinewood Derby kit are to be used.**
- **Modifications to the Axles are allowed *that include straightening, sanding, polishing, canting, grooving, beveling & tapering of axle head as long as the Diameter of the Axle is not reduced the Diameter may not be less than .084 inches (2.13mm).***
- **Axles can be mounted by drilling Axle holes or inserted into the slots on car.**

VI – Lubrication

- **Graphite ONLY in Qualified Scout Division, Open Scout Graphite Division, Kid Division & Adult Division**
- **In Open Scout Oil Division and Pro Divisions – approved lubricants include (but not limited to) Graphite, Teflon, Nyoil, and Krytox**
- **Officials will remove wheels if in question!!! Post Race Inspection will take place**



VII. – Race Operations and Miscellaneous Rules

- **All Cars MUST pass inspection before being allowed to race based on the rules and specification stated in I. through VI.**
 - An approved inspected car will then be checked in and not be touched by anyone but the race officials. Until the cars are released by Race Officials.
 - All lubrication of wheels must take place prior to final inspection check in and before Final Race (see below)
 - Officials have the Right to Disqualify Any Car, which does not meet all of the stated rules and specifications. The Officials Decision is Final.
 - Appealing a decision – if a Race Official makes a ruling and you wish to appeal it – all Officials will be assembled and based on majority rule the decision will be upheld or overturned.
- **Each car will race once in every lane (6 times on 6 lane track and 4 times on 4 lane track)**
 - Each race is timed with electronic equipment.
 - In the event the equipment fails, the race(s) will be re-run.
 - The slowest time will be dropped and the **average of the remaining 5 times (on 6 lane track) or 3 times (on 4 lane track) will determine the results** for each racer – **Composite Time**
 - In the event of a tie(s) a run-off will be run between any of the cars needed to fill the 12 slots for the finals race for each Division using the same method of running once in each lane and taking the average of the fastest 5 or 3 times – depending on which track they are racing.
 - **12 Fastest Cars in each Division will advance to Finals Race**
 - **Each Division Finals run separately – Qualified Scout – Open Graphite Scout – Open Oil Scout – Open Kids – Open Adult – Pro Divisions**
- **Overall Trophies will be award to 1st thru 12th for each division.**
 - **Qualified Scout Division 1st – 12th**
 - **Open Scout Graphite Division 1st – 12th**
 - **Open Scout Oil Division 1st – 12th**
 - **Open Kids Division – 1st – 12th**
 - **Open Adults Division - 1st – 12th**
 - **Pro Divisions – see Pro Rules**
- **FINALS - Prior to the “Finals” Finalist cars will be allowed to be “re-lubricated” – at the Official Race Table Only – under the supervision of the Race Officials. No other modifications will be allowed, except spinning of the wheels to work the lube in.**
 - Final Races awards will be based on the average of 5 or 3 times (depending on which track you are racing) in this Final Race – dropping the slowest time using the composite time.
 - In the Event of a Tie a run-off as described above will be run.
- **Additional Trophies in Scout Divisions Only (Qualified and Open Graphite and Open Oil)**
 - **1st thru 6th for each Qualified Scout Division** –based on preliminary races only –composite time.
 - **1st – 6th Tigers**
 - **1st – 6th Wolves**
 - **1st – 6th Bears**
 - **1st – 6th Webelos I**
 - **1st – 6th Webelos II**
 - **1st thru 6th for each Open Scout Graphite Division** –based on preliminary races only –composite time.
 - **1st – 6th Tigers**
 - **1st – 6th Wolves**
 - **1st – 6th Bears**
 - **1st – 6th Webelos**
 - **1st thru 6th for each Open Scout Oil Division** – based on preliminary races only – composite time.
 - **1st – 6th Tigers**
 - **1st – 6th Wolves**
 - **1st – 6th Bears**
 - **1st – 6th Webelos**



- Additionally in the Scout Divisions Entries will be eligible to win design awards in the following categories (voted on by the present Cub Scouts) – one design award per car:
 - Best Workmanship
 - Best Paint Job
 - Most Patriotic
 - Most Creative
 - Best Scouting Theme
 - Best Overall Design
 - Most Realistic Looking
 - Most Original Design
- Best of Show Trophies will be awarded to each of the following Divisions:
 - Scout / Open Kids / Open Adult / Pro-Divisions
 - Award will be voted on by the Scouts present at the event
- During Races
 - If a car jumps the track and interferes with another car then the race will automatically have to be re-run.
 - If the same car jumps the track again, then it is disqualified (after interfering)
 - If a car jumps the track and does not interfere with another car, and finishes the race it will not be re-run.
 - If a car jumps the track and does not interfere with another car, but does not cross the finish line a time of 9.9999 seconds will be assigned to that car's race.
 - If an item affixed to a car falls off during a race, and in the opinion of the race official the car is still able to race, repairs will not be allowed.
 - If a car suffers a mechanical failure or is unable to finish, the individual will be allowed 5 minutes to make the repair under the supervision of a race official. No weight can be added to the car as part of the repair action. If the car is unfit to race after the 5 minute period, or becomes disabled after further racing, it will be disqualified and taken out of the race. No other modifications are allowed – such as re-lubing; only the repair to the item(s) can be preformed.
 - Any car that is discovered to be illegal during the competition by a Race Official will be disqualified from competition.

