

2012
New Horizons District
Pinewood Derby

Rules Updates for 2012

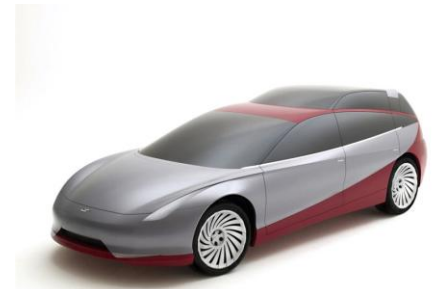
Date ***March 3rd, 2012***

LOCATION: Parkway West
High School





2012
New Horizons District
Pinewood Derby
“Rules Of The Road”



"The purpose of the Pinewood Derby is to help the Cub Scout build a team relationship with their parent or helper, experience the sense of accomplishment and the excitement of competition, learn Win/Lose good sportsmanship, and to have fun."

Source: usscouts.org

Speed Competition

1. General Rules

- 1.0 Eligibility: All registered Cub Scouts in the New Horizons District, from Tiger Cub to 2nd Year Webelos; including those 2nd year Webelos that have qualified at the Pack level but have crossed over to a Boy Scout Troop prior to the District Race day are eligible to race.
- 1.01 All cars entered must be newly built after September 1 of the current school/Scout year from the stock materials provided in the Official Pinewood Derby Racing Car Kit (part# 17006).
- 1.02 With the exception of decorative and construction items (weights, glue, lubricants, etc.) only materials from the official kit may be used.
- 1.03 Adult partner supervision, guidance and assistance is encouraged and allowed, however, Scouts should substantially, within their own abilities, build the majority of their own car. Professionally modified, “hobby shop”, or pre-modified purchased parts including, but not limited to, speed wheels, axles and bodies, even if they claim to be, or are “Official BSA” are prohibited. It is expected that all car construction and modification will be done by the Scout and his adult partner starting with the stock BSA kit.
- 1.04 Cars must be tuned or aligned by the racer, and adult partner. Cars may not be sent to third party facilities for tuning or other performance enhancements.

2. The Body

2.00 The maximum length of the car shall not exceed 7 inches. *Hint: check body length before doing any work. Stock blocks may not meet requirement right out of the box. If block is exactly 7", consider sanding a 1/16" off before beginning work. Once the car is complete, it is very difficult to make it smaller. Several coats of paint may be enough to make the final car too long.*

2.01 The maximum width (including wheels and axles) shall not exceed 2-3/4 inches.

2.02 The maximum height shall not exceed 3 inches.

2.03 The minimum clearance between the bottom of the car and the bottom of the wheels shall be at least 3/8 inch so that the car can clear the center guide strip.

2.04 The minimum width between the inside surfaces of the wheels shall be 1-3/4 inches so that the car will clear the center guide strip.

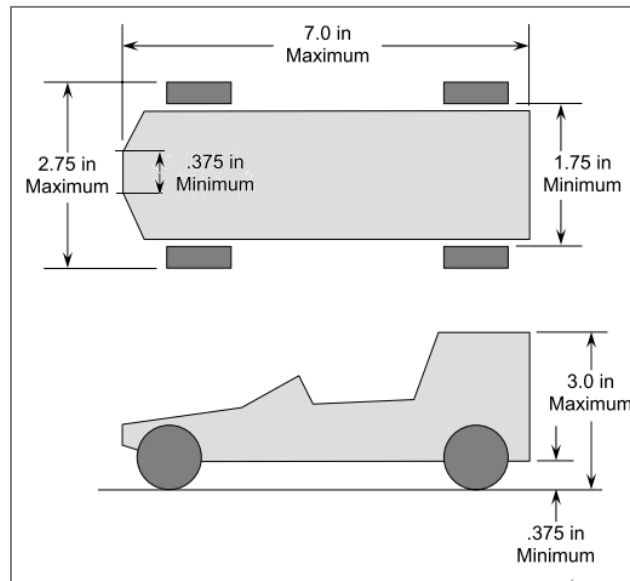


Image 1

2.05 The body of the car, the wheels or any attachment must not extend beyond the starting pin.

2.06 The front of the car that rests on the starting pin must not be narrower than **3/8 inch** in width or a cutout notch in which the starting pin will sit within. The front surface should be designed so that it is not pointed or rounded.

2.07 The maximum weight of the car shall not exceed 141.7 grams (this is the same as 5 ounces, however, weighing of the cars will be done using precise scales and will be measured in tenth's of a gram). Since all scales used during construction may not be identical, please come to the race prepared to slightly adjust the weight of the car by adding or subtracting weight. Cars must meet weight requirement using the official scales at race check-in.

2.08 Items such as steering wheels, model drivers, spoilers, decals, painting and other details are permissible as long as these details do not exceed the maximum length, width, height and weight specifications. Loose materials of any kind are not permitted on the car.

2.09 Attachments must not have the effect of a starting or accelerating device. This includes magnets imbedded in the front of the car.

Note: Only measurement devices provided by the District Race committee will be used for check-in. Any personal scales or other measuring devices brought by racers may be used while tuning the car in the pits, but will not be considered Official. Therefore, these devices will not be used to verify if a car meets the requirements. If the car is built to the EXACT min and max measurements, be prepared to make small adjustments.

3. The Wheels

3.00 Cars must run the 2009 Official BSA wheel design or newer. These are the wheels that are provided in the Official Pinewood Derby Racing Car Kit (ScoutStuff item#: 17006) and the Official Wheel/Axle Kit.(ScoutStuff item#: 175WHEEL). Wheels that are not provided in the current Official BSA kits are no longer approved by BSA. Please insure that you have a current kit. In the past, some Scouts have used a “new” kit that was several years old by mistake. These “new” kits had old parts and the car did not pass inspection.



Image 2

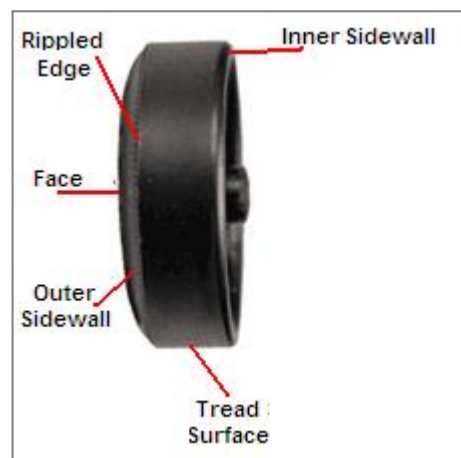


Image 3

3.01 The wheel tread may be trued, but the diameter of the wheel cannot be significantly reduced. The rippled edge (ridges) must remain intact around the entire wheel. This is a judgment call by the committee, so please do not reduce the rippled edge significantly (See image 4). We must be able to feel the rippled edge all the way around the wheel circumference. Reduction of the wheel diameter may also reduce the inner sidewall of the wheel (See image 3). Per rule 3.03, reduction of the inner sidewall in any way, thus narrowing the overall wheel width, will be a disqualification. *Hint: To avoid any issues, it is suggested that minimal work, if any, be done to the wheel tread area.*

3.02 Wheel treads may NOT be rounded, beveled, tapered, grooved, or shaped in any way. The entire wheel tread surface must sit flat against the track surface when the car is placed on the track. (See Image 4)

Below are a few examples of tread profiles that will be disqualified, although any shaped wheel tread that does not sit flat against the track surface or has been reduced will not be allowed:

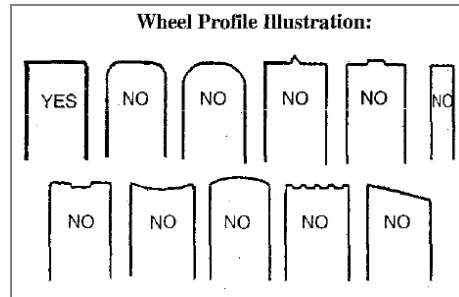


Image 4

3.03 Removal of any material from the wheel that effectively reduces the original overall width of the wheel is prohibited.(see Image 5) This includes: removal of any material from the wheel inner or outer sidewalls or face.(See Image 3) The inner sidewall is the rounded inside edge of the wheel. (See image 6) In addition, the face of the wheel that contains the BSA lettering must remain intact. All Wheels must have the complete “BSA PINEWOOD DERBY” text on the face AND the “MADE IN USA OFFICIAL BSA” text inside of the wheel completely intact. (See images 2).



Image 5



Image 6

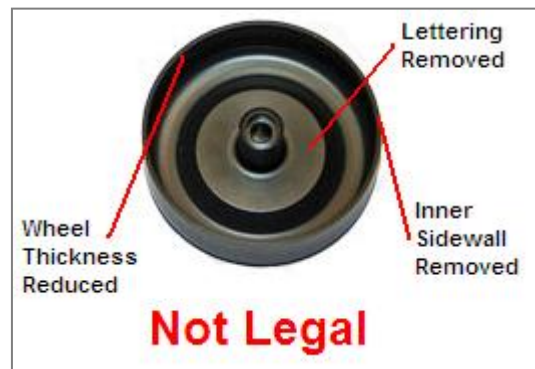


Image 7

The picture of the wheel below is what the judges will expect to see when viewing the wheel from the side. Anything else will result in disqualification. (The image below is for example only. Actual text on sidewall may differ based on the current approved wheel design)

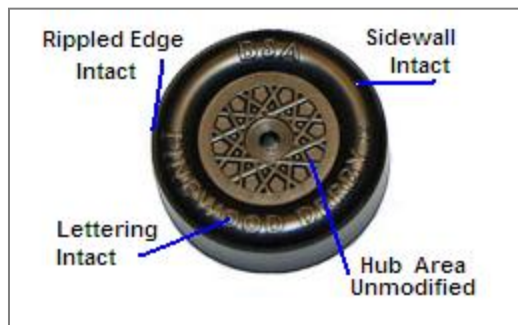


Image 8

3.04 Additional items such as wheels bearings, washers, bushings, Wheel and Hub covers are also prohibited.

3.05 The car shall not ride on any type of springs and the car must be free wheeling with no starting device or other propulsion.

3.06 Each car must include 4 “approved” wheels (wheels that meet the above criteria) and placed in the “normal” wheel position for a car. At least three (3) wheels must remain in contact with the track at all times. Although the 4th wheel does not need to contact the track, it must act as a guide to keep the car on the track against the center rail. Use of any other type of guide pin, fin or any other device is prohibited. No 3-wheeled cars.

*Note: Due to variations in the injection molds used by the BSA to form the wheels, exact minimum measurements cannot be provided. However, since only the tread surface can be trued, and no other modifications be made to any other surface of the wheel, the committee will not determine eligibility based on a measurement of a minimum wheel width, but rather a visual determination of **IF** it was modified. If it appears that it was modified beyond truing of the wheel tread, the wheel will not be allowed.*

4. The Axles

4.00 Axles should be inserted into the car body parallel to the track surface. Axles inserted at a positive or negative angle, thus tilting the wheel so that it rides on the inner or outer edge is prohibited.

4.01 Axles must be those supplied by BSA in the original car kit or stock BSA wheel/axle kit. Aftermarket or non-stock axles are prohibited.

4.02 Axles may be polished, but must not be polished/modified to the point that breakage could occur during the race.

4.03 Axle head diameter may not be reduced.

4.04 Use of axle tubes, one piece axles, springs or bearings is prohibited.

5. Lubricants

5.00 Wet lubricants such as oils, silicones or waxes are prohibited. Use only a Graphite or Graphite/Moly Lubricant.

IMPORTANT:

Do not bring graphite into the racing facility.

All lubrication should be applied outside the building or at home, and in a manner so that loose graphite does not fall off the car or wheels during registration and check-in.

The graphite will stain the floors and carpets if spilled or dropped. Clean-up of any graphite spills will be the responsibility of the scout and adult partner of that scout

6. Examples of modifications that are allowed

6.00 Modifying,(either lengthening or shortening) the wheelbase of the car by drilling axle holes or cutting new axle slots.

6.01 Adding decorative items that don't violate any of the stated rules.

6.02 Truing the tread of the wheels round by light sanding or lathing. Be careful not to reduce the wheel diameter or width or round the tread face. The tread must remain flat. See Section 3 above.

6.03 Removing the pinch marks and mold ridges on the axles

6.04 Polishing the axles and axle heads.

6.05 Polishing the inner wheel hub that contacts the axle

6.06 Modifying the surface of the axle with grooves or similar to reduce surface area contact between the wheel and axle.

6.07 Polishing wheel hubs where they make contact with the car body.

6.08 Raising 1 wheel from the track surface. 3 wheels must be contact the track surface at all times.

6.09 Adjusting the alignment of the wheels and axles

7. Rules Violations

The New Horizons Pinewood Derby District Committee has created these rules to insure a level playing field for all Scouts participating in the event. In our view, any modifications stated above as “allowed”, can be performed without “specialized” tools or skills by any Scout and adult partner. It is our goal to provide an experience where all Scouts can enjoy themselves, while also allowing them to be competitive in the racing event.

If a car is found to not meet all eligibility criteria, the adult partner will be informed, and the Scout will be allowed time to rectify the issue. Cars that cannot be modified to meet all criteria will be disqualified. If a car is disqualified and the Scout chooses to race, they may do so during the “elimination” phase of the race only. Disqualified cars will be discretely identified and will not be obvious to the other racers. An official time will not be kept and the car will not be able to advance to the “Grand Finals” phase of the races

8. Miscellaneous

These rules have been written to provide guidance to Scouts as they build their Pinewood Derby car. Although many situations are covered, it is impossible to account for each and every modification that potentially can be made. It is expected that the “intent” of the stated rules will be used as a guideline. Specific questions regarding the rules should be sent to the District Committee prior to the race for clarification. No “loopholes” in the rules will be considered on race day. If in doubt, ask.

During any race, if a car leaves its lane and interferes with another car or suffers any mechanical problems, the racer will be given no more than 5 minutes to repair the car, no times will be recorded and the race will be re-run. If the same car causes interference or breaks down again, the race will be re-run but without the offending car. During the 5 minute repair time, no other changes may be made to the car in addition to correcting the mechanical problem.

Any dispute of these rules with regard to a specific car’s eligibility to race in the District Race will be decided upon by no less than three members of the District Pinewood Derby Committee. The Committee’s decision will be final.

It is expected that all Scouts, adult partners and parents will act in a “Scout-like” manner during this event. Anyone acting inappropriately or arguing a committee decision will be disqualified and asked to leave the event.

District Use Only
Date Rec:
Check #:



2012
New Horizons District
Pinewood Derby
Registration Form



The 2012 New Horizons District Pinewood Derby will be held on **March 3rd, 2012 at Parkway West High School**

Please fill out this form completely and return it as soon as possible to Mike Bisaga at Roundtable, by mail(preferred) , or to the Council Office on West Pine with your check.

This registration form and the appropriate fee must be turned in no later than January 30, 2012.

DO NOT turn this form and payment into the Council Office on Page.

If you would like to mail this form and your check, please send them to:

Mike Bisaga | Attn: Pinewood Derby | 502 Nantucket Pointe Drive | Wildwood, MO 63040

Each pack may register a max of 1 racer for each 8 registered Cub Scouts in the Pack or 5 scouts; whichever is greater. (This **includes** Tiger Cubs). Packs may register less than 5 racers if they would like.

You must register as a pack. Individual registrations will not be accepted.

Each pack is also **required** to provide one volunteer to help staff the event. This event requires between 60 and 70 adult volunteers to serve as staff members.

NOTE: You do not need to send a list of racers with this form. We just need to total number of racers.

Please print clearly. If we can't read it, you may miss out on critical race information.
Contact phone and email must be provided. Primary communication method will be email.

All information below is required

Pack # _____ would like to register # _____ racers.

Enclosed is \$ _____ (\$12.00 x the number of racers). Please make your checks payable to the **"Greater St. Louis Area Council"**.

Our Pack Contact Person is: _____

Phone: (____) _____ E-Mail Address: _____

Please E-Mail Mike Bisaga at mike.bisaga@gmail.com if you have any questions.

NOTE:

By submitting this form, the Pack acknowledges that they are aware of and agree to adhere to the District Pinewood Derby rules for the current year. In addition, the Pack agrees to provide 1 adult volunteer on race day to help run the event.

The Pack Contact will be notified of their pre-assigned check-in times, and pre-race volunteer meeting. Check-in times and race information will also be posted on our web site.

ACCOUNT CODE: 6801-556-20



2012
New Horizons District
Pinewood Derby



Design Competition

Eligibility: All registered Cub Scouts in the New Horizons District, from Tiger Cub to 2nd Year Webelos, including those 2nd year Webelos that have crossed over to a Troop prior to the District Race.

There is NO Design Competition entry fee again this year.

The Design Competition rules are:

Cars entering the Design Competition must be newly built after September 1st of the current School/Scout year. The car must meet all of the requirements stated in the Rules of the Road for the Speed Competition with the exceptions of the length, height and weight requirements.

Registration for the Design Competition will take place any time between 9:00 a.m. and 1:00 p.m. There is no pre-registration for this event. Just register on race day.

Entrants must register their cars at the Design Tables and declare which design category they would like to enter. They will then receive an official District Pinewood Derby Design Pit Pass and District Derby patch.

Scouts are limited to entry of 1 design car.

Judging of the cars will begin at approximately 1:15 p.m. with awards being presented at approximately 3:00 p.m. If a participant is entered in the speed portion of the derby, and is eliminated prior to 1:00 p.m., the Scout may retrieve his car and enter it into the design competition by 1 pm. Cars that qualify for the Grand finals (top 50) will not be eligible to be entered into the Design Competition. Those Scouts may, however, enter another car in Design if they would like.

The Design Competition categories are:

Judge's Special: Best overall entry from all design categories. This entry is chosen *before* all other design categories are chosen. Either a car or a non-car design.

Best Automotive Design Car: Best realistic representation of an actual car with unusual attention to detail and shape.

Original Design: Best reflects the most unusual approach in other than a car design. For example, a pool table, dragon, pirate ship, submarine, fish, campsite, etcetera.

Best Concept Car: Best reflects a novel and different approach in a car design. For example, a Batmobile, jet cars, futuristic cars, manufacturer's prototype cars, etcetera.

Cub Special: Best use of the Cub Scout colors, BLUE & GOLD. Either a car or a non-car design.

Funniest Design: Most humorous approach. Either a car or a non-car design.

Cub Built: Best 99% Cub built car. Either a car or a non-car design.