



# District Pinewood Derby Rules - 2018

Harvest District, Pennsylvania Dutch Council, BSA

This document is intended to help provide a level playing field for all competitors. Please take the time to read and follow all rules in this document. Remember, this race is about the boys. This should be a positive experience for all involved.

If you have concerns about the content of these rules, please contact the Harvest District Executive.

## **Eligibility of Scouts and Cars**

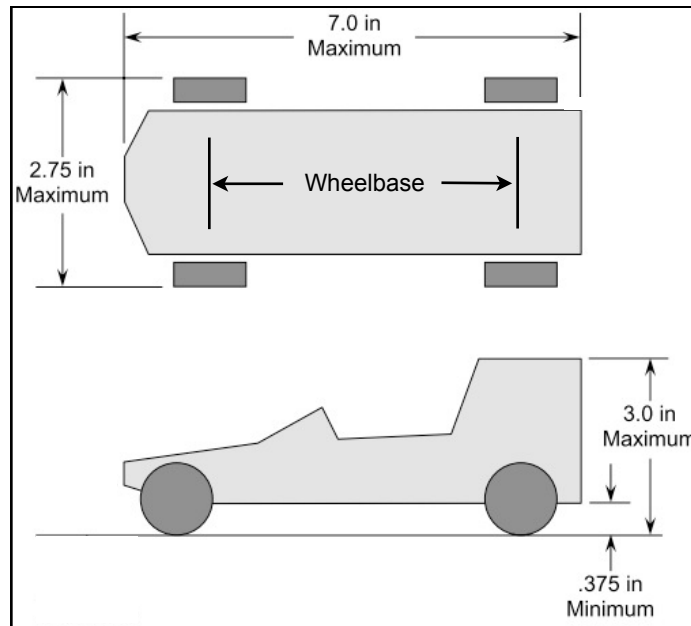
1. Currently registered Cub Scout or Boy Scout in Harvest District. Boys Scouts must have crossed over during the current school year.
2. Scout won 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> Place in his Pack's Pinewood Derby **Race or Design Competition** during the current school year.
3. Invitation to compete at District Derby is made to the Scout, not his car. If a Scout's car from his Pack race does not meet the District rules, he may modify his car or build a new one.
4. Car was built during the current school year. No car parts from previous years may be used.
5. Car was built by the Scout and his adult partner. Purchased or solely adult-made cars violate the spirit of the Pinewood Derby. **Scout's Honor** - while we cannot determine who built a car, you will always know if you truly earned your award.
6. Scout may choose to enter either District Pinewood Derby **Race or Design Competition**, but not both.
7. All Scouts must be registered no less than 2 weeks prior to the race date. No walk-ins will be permitted.
8. Scout must be **present and in uniform** to compete. You may not check-in, leave for other activities and come back later.
9. Non Scout-like conduct or remarks will be grounds for expulsion from the Derby for both Scouts and spectators.
10. Cars with wet glue, paint or finish will not be accepted for inspection.

## **Recommendations**

1. Please do not apply graphite powder to your wheel tread surface. This does not produce any noticeable improvement in performance, and creates a significant mess on the scales and track.
2. Cars may be shaped in any design you choose, but please consider the sturdiness of your chosen design, especially around the axle slots.
3. Cars may be finished and decorated as you see fit, but please choose designs that are Cub Scout age appropriate.

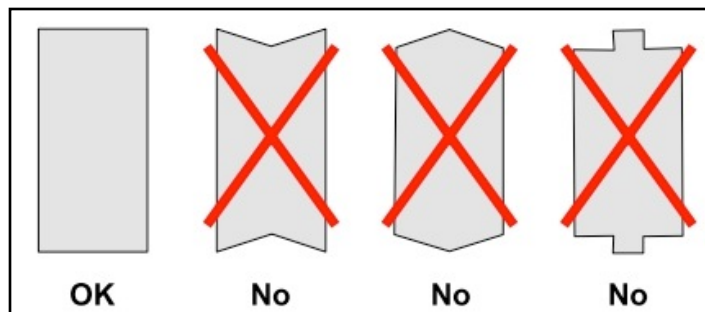
## Car Construction

1. Constructed from BSA's Grand Prix Pinewood Derby Kit.
2. Must use axles provided with original kit or from Official BSA wheel sets.
3. May use wheels from kit or colored Official Pinewood Derby Wheels from BSA National Supply Group.
4. Maximum Length = 7"
5. Maximum Width =  $2\frac{3}{4}$ "
6. Maximum Height = 3"
7. Minimum Ground Clearance =  $\frac{3}{8}$ "
8. Must preserve original wheelbase (i.e. axle slots may be trued or re-cut, but must remain original distance apart).
9. Maximum Weight = 5 oz.
10. Decorative details may be added, but must be securely attached to car.



## Wheels and Axles

1. Must use axles provided with original kit or from Official BSA wheel sets.
2. May use black wheels from kit or colored Official Pinewood Derby Wheels from BSA Supply Division.
3. Axle shaft may be sanded smooth and polished.
4. No bearings, bushings or other items may be added to the wheels, axles, or axle slots.
5. No springs or other suspension items may be used.
6. Wheel tread surface may be sanded smooth and polished. Do not sand sidewall.
7. Wheel tread profile may not be modified, tread must remain flat and smooth. (see diagram below)
8. Axles may be lubricated with dry lubricant, such as graphite.



### **Check-in Procedure**

1. All cars must pass inspection, including those entering the Design Competition.
2. Cars will be inspected by Derby staff for compliance with these rules. They will use the inspection sheet shown at the end of this document, a digital scale and a variety of tools.
3. The weight displayed on the scale used by the inspector is official and final.
4. Decision of the inspector is final. If the inspector is in doubt, (s)he may ask the Derby Chair for clarification.
5. If a car fails inspection, the inspector will explain the deficiency and the Scout will be given the opportunity to make the car compliant before the scheduled close of check-in.
6. After a car has passed inspection, it may only be handled by Derby staff, unless damaged during a race.

### **Race Procedure**

1. The race will begin as soon as practically possible after the close of check-in.
2. Only Derby staff is permitted in the race area.
3. The race will be divided into 4 periods. The 1<sup>st</sup> period will be run in a pre-determined order, subsequent periods will be ordered based on car performance. There will be a 10 minute break between periods.
4. Each car will run one time per period. Each car will run in a different lane each period. By the end of the race, each car will have run one time in each lane. It is possible that not all lanes will be used during a given heat. This is normal and does not affect the race results.
5. An electronic timing system is used to determine each car's time to cross the finish line during each heat. The final standings are determined by the car's average time across all 4 lanes.
6. If a car leaves its lane during a heat, it will be allowed to re-run the heat, in the same lane. The other cars do not need to re-run.
7. If a car leaves its lane during a heat and interferes with another car(s), all affected cars will be allowed to re-run the heat in their respective lanes.
8. If the offending car leaves its lane again, during the re-run of the heat, it will receive a 7.0 second time for that heat.
9. Any Scout whose car is damaged by a collision will be given 5 minutes to repair the damage and have the car re-inspected. Unless wheels or axles are damaged, no additional lubrication may be added.
10. If a car stays in its lane, but does not cross the finish line, it will receive a 7.0 second time for that heat.
11. Winners will be announced 15 minutes after the end of the 4<sup>th</sup> period.
12. Derby staff may remove debris from the track as needed.

### **Design Competition Procedure**

1. Each Scout competing in either the Race or Design Competition will receive a ballot upon passing inspection.
2. Each spectating Scout, in uniform, may receive a ballot by checking in at the Visitor table.
3. After check-in has closed, all Scouts in uniform may view the cars in the Design Competition, and vote for their choice.
4. No one may touch Design Competition cars while viewing them.
5. Voting will close at the end of the 2<sup>nd</sup> race period.
6. Ballots will be counted by the Derby staff.
7. In the event of a tie, all Adults in uniform will be invited to vote for their selection to break the tie.
8. If 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Place winners have been determined in time, Design Competition results will be announced at the end of the 3<sup>rd</sup> race period. Winners should report to Derby staff for pictures.
9. After the results have been announced, Design Competitors may claim their car from Derby staff.
10. Design Competitors are not required to stay after their results are announced, but they may stay if they wish.

### **Track**

1. The race system currently planned for use is a SuperTrack, configured to 42-56 feet; using SuperTimerII with RaceManager control software.
2. More information about this system is available at [www.supertimer.com](http://www.supertimer.com).

### **Disputes**

1. Any Scout participant or their parent/guardian may appeal to the Harvest District Pinewood Derby Committee for an interpretation of these rules.
2. A majority vote of the Committee will determine any dispute.
3. In the event of a tie vote, the Derby Chair will make the final determination.

### Harvest District Derby 2018 Inspection Checklist

Name: \_\_\_\_\_ Car #: \_\_\_\_\_

\_\_\_\_\_ Official Kit (Body, Axles and Wheels)

\_\_\_\_\_ Wheel Tread Profile not modified

\_\_\_\_\_ No Bearings, Bushings, Springs, etc.

\_\_\_\_\_ Dry Lubricant ONLY

\_\_\_\_\_ No loose items

\_\_\_\_\_ Test Jig

Length (max 7")

Width (max 2<sup>3</sup>/<sub>4</sub>" including wheels)

Height (max 3")

Ground Clearance (min 3/<sub>8</sub>")

Wheel Base not modified (front-back, length)

\_\_\_\_\_ Weight (max 5.00 oz.)

\_\_\_\_\_ Number and Arrow Marked on Car Bottom

\_\_\_\_\_ Give Scout DESIGN ticket and Patch

Approved by: \_\_\_\_\_