

# 2015 Thunderbird District Pinewood Derby



Official Race Packet

# Official Thunderbird District 2015 Pinewood Derby Rules and Regulations

Please read the following rules and regulations carefully to ensure that your car complies with all of the specifications/rules. These rules may be different than the rules traditionally used by your Pack. All Packs are encouraged to use these rules set by the Thunderbird District Pinewood Derby Committee. In this way your Pack Pinewood Derby, and your District Pinewood Derby will use the same rules.

## General

1. Cars must have been made for this Scout year, meaning they have been built after the start of the current school year, for entry in the Pinewood Derby. Cars made in prior Scout years are strictly prohibited.

## Length, Width and Clearance

2. Cars shall be built using the materials in the Official BSA Pinewood Derby Kit, or the Official BSA Replacement Parts Kit. This includes the pinewood block, axles, and wheels (including official BSA colored wheels). With the exception of decorative and construction items (weights, glue, lubricants, finishing materials), only materials from the official kits may be used. Separately purchased items (contoured pinewood bodies, machined wheels, and single piece axles) are specifically prohibited. **Use of the new Official BSA pre-cut (contoured) body kits, although not illegal, is strongly discouraged because it does not align with the goals of this event which is to build a car from the kit provided.**

3. Maximum overall width (including wheels and axles) shall not exceed 2-3/4".

4. Minimum width between wheels shall be 1-3/4" so the car will clear the center guide strip.

5. Minimum clearance between the bottom of the car and the bottom of the wheels should be 3/8" so the car will clear the guide strip. It is recommended that weights on the bottom of the car be inset so they are flush with the bottom of the wood block.

6. Maximum length of the car shall not exceed 7". Please check the block, as they are not all the same size.

7. Maximum height of the car shall not exceed 5-1/2".

8. Axles/wheels may be relocated from the original axle slot locations, but the original wheel base (distance between the axles) shall be maintained at 4-3/8". The wheel base may not be staggered.

9. Cars shall not protrude beyond the starting line mechanism.

10. Cars shall have a minimum of a 1/4" flat bearing surface on the front of the car to align with the starting line mechanism. (The nose of the car cannot come to a sharp point.)

### **Weight and Appearance**

11. Total weight of the car shall not exceed 5 ounces. The readings of the Official Race Scale shall be considered final. All Packs must have a 5oz tare weight.

12. No loose materials of any kind shall be permitted in or on the car. All weights shall be attached with screws, nails, glue, etc – tape is not permitted.

13. Details such as steering wheel, driver, spoiler, decals, painting, and interior details are permissible as long as these details do not exceed the maximum length, width, and weight specifications.

### **Wheels and Axles**

14. Only the Official BSA Scout Grand Prix wheels and axles can be used. Axles may be polished and the burrs removed from the axle heads; but the axles cannot be grooved in any way. Solid, or one-piece, axles are strictly prohibited. All four wheels must fully contact the track surface.

15. Casting burrs may be removed from the wheels with sandpaper, but wheels cannot be modified in any other way. They must be raced right out of the box/kit. Wheels shall not be machined, wafered, beveled, ridged, crowned, drilled, or altered in any way. The wheel tread (outside surface) may not be polished, treated, graphite polished, or altered in any way to conceal marks or modification(s) of any kind. (See Explanatory Notes regarding wheels at the end of these rules.)

16. Hubcaps, stickers and wheel covers are prohibited.

17. Wheel bearings, washers, or bushings are prohibited.

18. Car shall not ride on any type of springs. Cars must be freewheeling with no starting device or other propulsion.

### **Lubrication**

19. Axles may be lubricated with powdered graphite or powdered PTFE Lubricant only. No other lubrication shall be permitted. Liquid, gel type and grease type lubricants are strictly prohibited. Cars that have been lubricated with liquid, gel type or grease type lubricants will be disqualified and not allowed to run.

20. Cars shall be lubricated before they are submitted for inspection.

### **Race Day**

21. Cars shall be inspected during registration for compliance to the specifications.
22. Each car shall pass inspection by the Official Inspection Team before it may compete. The Inspection Team has the right to disqualify those cars that do not meet these rules. Car owners will be informed of any violations and given an opportunity to modify the car to meet these rules. All modifications must be completed by the time registration ends for that rank.
23. Any participant (including a parent or guardian of a participant) has the right to appeal to the Race Committee for an interpretation of these rules or the race results. The Race Committee, by majority vote, will be the final interpreter of these rules or the race results. In case of a tie vote, the decision of the Pinewood Derby Committee Chairperson will be final.
24. Un-scoutlike conduct or behavior by any race participant or member of the audience may be grounds for expulsion from the competition and/or the race area.

### **The Race**

25. Only race officials shall be permitted in the track area. This rule will be strictly enforced.
26. If a car suffers a mechanical problem *during* a heat (loses an axle, breaks a wheel, etc), the participant or a designated adult will have up to five minutes to fix the car. The heat will be rerun.
27. If a car suffers a mechanical problem *after* a heat, the participant or a designated adult will have five minutes or until his next scheduled heat to fix the car.
28. If a car interferes with another car during a heat, that heat shall be rerun. If the same car causes interference a second time, a third race shall be run without the interfering car.
29. Proxy racing (a stand-in scout, racing a Scout's car) shall be allowed.
30. Full CLASS "A" uniform, as determined by their Pack, is recommended for all racers.

**\*PLEASE! THIS RACE IS FOR THE BOYS, NOT THE ADULTS.**

**In a society where your son is often taught that "winning is everything", Cub Scouting teaches him to "do his best".**

**\*Please note that adults are able to race in the modified division.**

## Explanatory Notes Regarding Wheels

There are many websites that sell various forms of speed wheels – or “cheater wheels”. There is even one site that provides five levels of machined BSA wheels so that you can determine how much or how little you want to cheat, because that is what you are doing by using these illegal wheels – cheating.

**If you buy new wheels from a hobby shop or an online source, you are violating these rules. Only the official BSA wheels that come in the official BSA Pinewood Derby Kit or the official BSA Replacement Parts Kit can be used on a Scout’s Pinewood Derby car.**

If you buy one of the devices that uses a blade to machine your wheels you are violating these rules.

If you reduce the diameter or the width of the wheels you are violating these rules.

If you change the shape of the wheels to reduce the amount of the wheel that touches the track you are violating these rules.

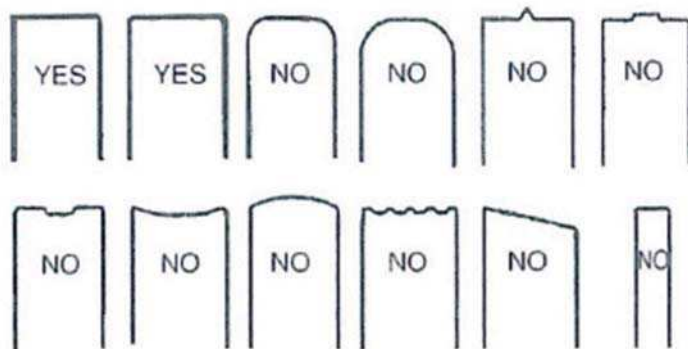
If you drill holes into the sides of the wheels you are violating these rules.

If you modify the wheels in any way you are violating these rules.

Wheels will be inspected for any sign of modification, and cars with modified wheels will be disqualified at Inspection.

Modified wheels shall be replaced with official BSA wheels in order for the disqualified car to Race in the Scout division. If the participant does not want to change the wheels, the car can be run in the modified division.

### Wheel Profile Illustration:



**Participants**

The Thunderbird District Pinewood Derby will include the top three Scouts from each rank (Tiger, Wolf, Bear, Webelos I and Webelos II) from each Pack in the District as determined by the individual Pack Pinewood Derbies.

**District Pinewood Derby Date** Sunday, April 26th 2015

**Location:** Monmouth Regional High School Gym 535 Tinton Ave Tinton Falls, NJ. Please park in the main lot and follow the signs for the gym entrance.

**Registration & Race Times**

Tigers:	Check in 12:00	Race: following inspections
Wolf:	Check in 1:00	Race: After Tigers
Bear:	Check in 2:00	Race: After Wolf
Webelos I:	Check in 3:00	Race: After Bears
Webelos II:	Check in 3:00	Race: After Webelos I
Modified	Check in 3:30	Race: After Webelos II

Awards for 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> place winners will be handed out immediately following the completion of the last race in the respective division.

**\*PLEASE NOTE: DEPENDING ON THE NUMBER OF SCOUTS REGISTERED, THE TIMING OF THE RACE TIMES MAY BE ADJUSTED AS NEEDED\***

For additional information contact our Pinewood Derby Committee Chairman Mike Provenzano via email at [mikepro0517@gmail.com](mailto:mikepro0517@gmail.com)

## 2015 Thunderbird District Pinewood Derby Rules (Modified)

1. **Eligibility:** This race is open to all who wish to participate; there will be a 5.00 entry fee per car.
2. **Wet paint:** A car with wet paint WILL NOT be allowed to race.
3. **Width:** Maximum overall width allowable is 2  $\frac{3}{4}$ " from outside to outside of wheels maximum body width is 1  $\frac{3}{4}$ ". Height: Maximum height of car is 2  $\frac{3}{4}$ ".
4. **Length:** Overall length shall not exceed 7". A car shall not extend beyond the starting line.
5. **Clearance:** Cars must have  $\frac{3}{8}$ " minimum clearance under the body, 1  $\frac{3}{4}$ " minimum clearance between the inside of the wheels.
6. **Weight:** No restrictions. No loose materials of any kind are permitted in or on the car. The car may be hollowed out and built up to maximum weight by the addition of wood or solid metal only, provided it is securely built into the body or chassis. (Liquids are considered loose materials.) Using tape to hold weight on the car is prohibited.
7. **Materials:** No restrictions
8. **Wheels:** No Restrictions.
9. **Attachments:** The car must be free-wheel with no starting devices or magnets in the front end.
10. **Lubrication:** ONLY dry powdered lubricants such as powdered graphite may be used as lubrication. Lubrication of cars will be allowed only before inspection and weigh-in. No lubrication will be permitted after inspection and no lubrication will be permitted on exposed surface of wheels. **Cars that have been lubricated using wet lubricants will not be allowed to run.**
11. **Tech Inspection:** Each car must pass tech inspection by the official inspection team before it may compete. The inspectors have the right to disqualify those cars which do not meet these specifications. The decision of the chief race official will be final. **Cars that do not pass tech inspection will not be allowed to run.**
12. **Handling:** Cars will not be handled by the participant once the car has passed tech inspection, designated race officials and the starter will handle the cars.
13. **Leaving track:** If any car jumps the track the pass may be re run by decision of the race officials.

14. **Restricted area:** All personnel, except race officials, must be clear of the “track” area.

15. **Judging:** Any participant (including a parent or guardian) has the right to appeal to the race officials for an interpretation of the rules. The race officials, by majority vote shall be the final interpreter of the rules. In case of a tie vote, the decision of the chief race official will be final.\*

16. **Mechanical Issues:** If a car suffers a mechanical problem during a pass (looses an axel, breaks a wheel etc..) the participant or designated adult will have up to five (5) minutes to fix the car. The pass will be re run.

If a car suffers a mechanical problem after a pass, the participant or a designated adult will have five (5) minutes or until the car’s next scheduled pass to fix the car. The pass will not be re run.

17. **Race Format:** The race format will be announced prior to the races based on the number of entries. Each car will run at least once on each lane of the track.



# 2015 Thunderbird District Pinewood Derby Official Entry Form

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PACK: \_\_\_\_\_

DATE OF OUR PACK DERBY: \_\_\_\_\_

**Each participant in the district derby will receive a patch on race day!!**

**Here are the Winners of our pack race:**

TIGER 1<sup>st</sup>: \_\_\_\_\_

TIGER 2<sup>nd</sup>: \_\_\_\_\_

TIGER 3<sup>rd</sup>: \_\_\_\_\_

WOLF 1<sup>st</sup>: \_\_\_\_\_

WOLF 2<sup>nd</sup>: \_\_\_\_\_

WOLF 3<sup>rd</sup>: \_\_\_\_\_

BEAR 1<sup>st</sup>: \_\_\_\_\_

BEAR 2<sup>nd</sup>: \_\_\_\_\_

BEAR 3<sup>rd</sup>: \_\_\_\_\_

PLEASE E-MAIL THIS COMPLETED FORM TO [cquakenb@bsamail.org](mailto:cquakenb@bsamail.org) or FAX to 732-536-2850 Attn: Chris Quakenbush

WEBELOS1 1<sup>st</sup>: \_\_\_\_\_

WEBELOS1 2<sup>nd</sup>: \_\_\_\_\_

WEBELOS1 3<sup>rd</sup>: \_\_\_\_\_

WEBELOS2 1<sup>ST</sup>: \_\_\_\_\_

WEBELOS2 2<sup>nd</sup>: \_\_\_\_\_

WEBELOS2 3<sup>rd</sup>: \_\_\_\_\_

We need volunteers to help run this event; positions include check in, inspection, starter, car handlers and help with setup and break down. Please list 2-3 adult volunteers from your pack.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Payment: \_\_\_\_\_ Please deduct fee of 5.00 per entry from our unit account.

\_\_\_\_\_ Check Enclosed

Unit Contact Person: \_\_\_\_\_

Position: \_\_\_\_\_

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