

## Overview of the Northampton District (ND) Pinewood Derby® (PWD) Race Rules

To *compete* for a *speed* trophy at the ND PWD Race your car must comply with the ND PWD Race Rules which is the *checklist* on the other side of this paper. All cars during the ND Check-In will be inspected using these Checklist Rules. For the latest info on the ND PWD refer to [www.minsitrails.org](http://www.minsitrails.org), & in the blue banner hover over “Districts”, select “Northampton District”, & scroll down the Upcoming Events Listed & select the ND PWD Race.

To learn more, find & attend or even create a PWD workshop, find that experienced Racing Team, attend the Champ Camp at the Council Scout Shop, &/or refer to [www.scoutshop.org/pinewood-derby](http://www.scoutshop.org/pinewood-derby). The more you put into PWD the more you get out of it. But be careful of irrelevant information from the web or in person. SO ...

### **\*\*\* ASK QUESTIONS WELL BEFORE YOUR PACK'S RACE \*\*\***

Reach out to your Pack PWD Chair for clarification of your Pack's rules & its race.

Refer to the *ND PWD Guide* for clarification of the ND PWD Race Rules.

For the final answer to questions about the ND PWD Race & its Rules, reach out to the ND PWD Chair, Chris Van Camp at 513-253-8174 (M) or at [MTCNCDPWD@gmail.com](mailto:MTCNCDPWD@gmail.com).

If you are following the Checklist Rules & are alert to the overlooked details listed below, you *should not* have a problem during the Inspection. However, if the car does not pass, the Racing Team (the Cub Scout & their Akela), MAY be allowed, with approval from the ND Race Committee, to adjust the car as needed on a case-by-case basis. If the car still cannot pass the Inspection & it is *safe*, it can *participate* in the ND PWD Race. However, the car is *not* eligible to win a speed trophy, but it *IS* eligible to win a specialty trophy.

### **Specialty Trophy Categories**

Best Cub Scout Theme      Most Patriotic      Funniest      Best Not A Car      Most Unique

### **These overlooked details cause 99% of the violations during the Inspection**

- 1) The car must be safe to race. The car cannot interfere with the other cars & cannot have ANY loose, fragile, dangerous parts, etc. An unsafe car, to person or property, cannot even participate in the ND PWD Race.
- 2) The car's "core" MUST be constructed using the components from the Official BSA Pinewood Derby® Car kit box #17006 (2018© &/or 2012©) &/or #17000 (2018© &/or 2009©). The components in these boxes include:
  - The BSA Pinewood Block      The 4 BSA Nails      The 4 BSA Wheels
  - a) *Alternatives*: Only from a BSA Scout Shop, the BSA Wedge & the BSA Tubes containing Wheels & Nails.
  - b) ONLY go to your Pack PWD Chair &/or a BSA Scout Shop to get a legal Kit or Wedge or a Tube of Wheels & Nails, *EVEN* if a component breaks. Do *NOT* use any other sources, they will *NOT* pass the Inspection.
- 3) You *must* construct your car. No cars &/or components from previous years, prefinished, professional, etc.
- 4) The ND scale is probably more precise than your Pack's scale. So, BE PREPARED to remove a little bit of weight (e.g., by use of putty in a hole) to comply with the maximum weight of 5.00 ounces.
- 5) The ENTIRE car MUST meet all the dimension requirements: heights, lengths, & widths.
- 6) If anything is added to the car's underside it must be no more than 1/8" thick & no more than 1 1/8" wide & centered. AND do **NOT** cover the axle slots. (Try to put weight *inside* or on *top* the back 1/3 of the car.)
- 7) The BSA pinewood block's pre-cut slots MUST be used by the axles. NO OTHER axle slots permitted.
- 8) The 2 axle slots MUST be visible to inspect. Do **NOT** cover the axles. If an adhesive is used, make it clear.
- 9) All 4 wheels MUST be BSA Wheels. Colored wheels are allowed. Only LIGHT SANDING to remove MINOR tread imperfections is permitted. *No alterations!* Nothing removed! Nothing added! No outer/inner coverings!  
ALL 4 wheels MUST be in CONTACT with the lane at the same time throughout their full rotation!
- 10) ONLY a graphite-based DRY lubricant is permitted. It cannot be applied after the Inspection.

# The Northampton District (ND) Pinewood Derby® (PWD) Checklist Rules

## Weight/Overall Inspector

\_\_\_\_\_ Guided by the **Scout Law & Oath**  
(Have Fun & Do Your Best)

\_\_\_\_\_ Car Submitted by **Registered Scout**  
(Lions to Current School Year AOLs & Their Racing Team)

\_\_\_\_\_ **Unaltered** Since Pack Inspection  
(ONLY More Graphite & Wheel Cleaning Permitted)

\_\_\_\_\_ **No Sticky Substance**  
(NO: Excess Glue, Wet Paint, Tape, Magnets, Etc.)

\_\_\_\_\_ **No Moving Weights or Liquids**  
(All Parts Solid, Secure, & Safe)

\_\_\_\_\_ **WEIGHT ≤ 5.00 OUNCES!**  
(Not Grams. Up to 5.004 Ounces Permitted. NOT 5.005)

\_\_\_\_\_ **Cub Scout** shall be in **Class A Uniform**  
(Represent Your Pack Well)

\_\_\_\_\_ **Scout Built This School Year from Scratch**  
(NO: Repeats, Repaints, Old Components, Professional, Etc.)

\_\_\_\_\_ **BODY Component is a BSA PWD BLOCK!**  
(NO: Other Material, Blocks, Kits, Prefinished, Professional, Etc.)

\_\_\_\_\_ **If Lights/Sound Attached, Turned Off**  
(However, Lights & Sounds are Encouraged for Creativity)

\_\_\_\_\_ **No Fragile or Loose Parts**  
(No Glass, Mercury, Dangerous Parts, Etc.)

\_\_\_\_\_ **GRAVITY POWERED ONLY!**  
(NO PROPULSION SYSTEM. PERIOD!)

## Dimensions Inspector

\_\_\_\_\_ **OVERALL LENGTH = 7" (Ideally) to 6 3/8"**  
(Caution Block's Length, Cutting Ends, Adding Lights, Pipes, Etc.)

\_\_\_\_\_ **OVERALL WIDTH ≤ 2 3/4"**  
(Including Wheels & the Axle Heads & Fenders, Etc.)

\_\_\_\_\_ **Wheels Do Not Extend Beyond Body**  
(Wheels MUST Remain Behind PWD Block's Front & Rear Ends)

\_\_\_\_\_ **WHEELBASE LENGTH = 4 3/8"**  
(Do NOT Make New Axle Slots or Extend Wheelbase)

\_\_\_\_\_ **Underside Attachment Width ≤ 1 1/8"**  
(Centered & NO Sharp &/or Abrasive Material)

\_\_\_\_\_ **Bottom of Nose (Front) ≤ 1" High**  
(Up Curved Nose Allowed but Higher is not Better)

\_\_\_\_\_ Height ≤ 6" (Lower the Better)  
(ND PWD BestTrack® Champ Timer Clearance is 6 1/2")

\_\_\_\_\_ **WIDTH Between Wheels ≥ 1 3/4"**  
(Inside Edge *Between Wheels* Using Same Axle Slot)

\_\_\_\_\_ **No Protrusion Beyond Starting Pin**  
(NOTHING May Extend Beyond the Starting Side of the Pin)

\_\_\_\_\_ **Block End Lengths** are between 1" & 1 5/8"  
(From Each Associated Axle Slot to the PWD Block Ends)

\_\_\_\_\_ **GROUND CLEARANCE ≥ 3/8"**  
(NO MORE than 1/8" Thickness Added to Underside of Car)

\_\_\_\_\_ **Nose (Front) Width ≥ 1/2", Centered**  
(No Pointy Nose)

## Axles Inspector

\_\_\_\_\_ **AXLES are 4 BSA PWD NAILS!**  
(NO Other Axles. Prefinished, Professional, Etc.)

\_\_\_\_\_ **2 Wheels & 2 Axles per Axle Slot**  
(Each Axle's Pair of Wheels MUST be Across from the Other)

\_\_\_\_\_ **Smooth** (if Desired) **Unaltered Axles**  
(ONLY Filed, Sanded, Polished, & Graphite Permitted)

\_\_\_\_\_ **NO BEARINGS/BUSHINGS/WASHERS!**  
(ONLY Axle, Wheel, PWD Body, & Graphite Permitted)

\_\_\_\_\_ **ONLY DRY GRAPHITE-Based Lube!**  
(NO OIL! No Liquid Lubricant! PERIOD!)

\_\_\_\_\_ **Both Original Axle Slots Used & Visible**  
(ONLY Adjustments Allowed: True Slots. Pre-Drill to Fit Axles)

\_\_\_\_\_ **Each Axle Shaft is Visible**  
(Caution the Clarity of Adhesive If Used)

\_\_\_\_\_ **NO SPRINGS/SUSPENSION!**  
(PERIOD! Not Even the Body)

## Wheels Inspector

\_\_\_\_\_ **WHEELS are 4 BSA PWD WHEELS!**  
(Colored Wheels Allowed. NO: "CHINA", Prefinished, Professional, Etc.)

\_\_\_\_\_ **Tread is Flat & Parallel to Bore**  
(NO Reshaping Tread at ALL. Lattice MUST Face Outward)

\_\_\_\_\_ Correct **LETTERS/NUMBERS** Intact  
(BSA / PINWOOD DERBY®) (OFFICIAL BSA / # / MADE IN USA)

\_\_\_\_\_ **NO MATERIAL REMOVED IN/OUT!**  
(NO: Lathe, Narrow, Lighten, Hub Stepdown Removal, Etc.)

\_\_\_\_\_ **NOTHING but 4 Wheels Contact Lane**  
(Wheels NOT Required to be Flat on Track. Canted Allowed)

\_\_\_\_\_ **NO WHEEL ALTERATIONS!**  
(ONLY Adjustments Allowed. Polish: Bore, Hub, & Tread)

\_\_\_\_\_ **NO MATERIAL ADDED** Except Graphite  
(NO: Inside/Outside Cover, Hubcap, Paint, Nail Polish, Etc.)

\_\_\_\_\_ **Outside FULLY Intact & UNALTERED**  
(Small Dotted Bumps Along Tread & Sidewall. Lattice Also)

\_\_\_\_\_ **ONLY LIGHT SANDING Permitted**  
(ONLY TO REMOVE **MINOR** SURFACE **IMPERFECTIONS!**)

\_\_\_\_\_ **NO RAISED WHEEL! PERIOD!**  
(NO GAP Under Any Wheel. Test on Smooth Rigid Flat Surface)