

## 2020 South Mountain District Pinewood Derby® Race Rules

To *compete* for a speed trophy at the District Race your car must comply with these 2020 SMD PWD Race Rules (the Checklist Rules). All cars will be inspected at the District Check-In using the checklist on the back of this sheet. For greater detail of the Rules refer to *The Guide* at [www.Minsi-South Mountain.com/Documents/2020\\_SMD\\_PWD\\_Guide.pdf](http://www.Minsi-South Mountain.com/Documents/2020_SMD_PWD_Guide.pdf). To learn more about PWD attend the Champ Camp at the Minsi Trails Council Scout Shop on a Saturday in early January 2020. And if possible, find & attend or even create a PWD workshop.

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

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

Again refer to The Guide for expanded explanations of the District Rules.

For the final answer to questions about the 2020 SMD PWD Race Rules, reach out to the SMD PWD Chair, Chris Van Camp at 513-253-8174 (M) or at [MTSMDPWD@gmail.com](mailto:MTSMDPWD@gmail.com).

If you are mindful of the details below & adhere to the Checklist Rules, you *shouldn't* have a problem during the Check-In inspection. However if the car does not pass, the Racing Team MAY be allowed, with approval from the District Race Committee, to adjust their 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 District Race. However, the car is not eligible to win a speed trophy. The car IS eligible to win a specialty trophy.

### **Specialty Trophy Categories**

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

### **The following violations cause 99% of the problems encountered at the District Check-In**

- 1) The car's "core" MUST be constructed using the components from the Official BSA Pinewood Derby® Car kit box #17006 (2012© or 2018©) or #17000 (2009© or 2018©). These boxes include:
  - The BSA Pinewood Block      The 4 BSA Nails      The 4 BSA Wheels
  - a) *Substitutes*: the BSA Wedge & the BSA Tubes containing Wheels/Nails from a BSA Scout Shop.
  - b) Do NOT use other pinewood blocks, nails &/or wheels from any other sources.
  - c) If something breaks, ONLY go to a BSA Scout Shop & buy another kit or wedge or tube of wheels/nails. Do NOT go to any other store. Their parts do NOT pass the inspection.
- 2) The District scale is probably more precise than your Pack's scale. So BE PREPARED to remove a little bit of weight to comply with the maximum weight of 5.00 ounces.
- 3) All 4 wheels MUST be BSA Wheels that are "MADE IN USA". Only LIGHT SANDING to remove imperfections is permitted. Nothing added. Nothing covering either side of the wheels. AND All 4 wheels *MUST* touch the track at the same time & complete a full revolution: NO GAP AT ALL.
- 4) Anything on the car's underside cannot be more than 1/8" thick & no more than 1 1/2" wide. DO NOT cover the axle slots. You are ENCOURAGED to put the weight inside or on top of the car.
- 5) The axle (nail) tips MUST be visible to inspect. If an adhesive is used, make it clear.
- 6) The pinewood block's pre-cut slots MUST be used by the axles. NO OTHER axle slots permitted.
- 7) The entire car MUST meet all the dimension requirements: heights, lengths, & widths.
- 8) ONLY a dry graphite powder lubricant is permitted. It can ONLY be applied before Check-In.
- 9) The car must be safe to race. The car must not interfere with the other cars & cannot have ANY loose or fragile or dangerous parts. An unsafe car cannot even *participate* in the District Race.

# 2020 South Mountain District Pinewood Derby® Checklist Rules

## Weight/Overall Inspector

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

\_\_\_\_\_ Car **Submitted by Registered Scout**  
(A Lion to a [Former] AOL with Their Racing Team)

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

\_\_\_\_\_ **No Sticky Substance/Wet Paint**  
(No Excess Glue, 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)

\_\_\_\_\_ **Cub Scout in Class A Uniform**  
(Represent Your Pack Pride. Bring the Pack Flag.)

\_\_\_\_\_ **Scout Built This Season from Scratch**  
(NO Repeats, Repaints, Old Parts, Professional, Etc.)

\_\_\_\_\_ **BODY is BSA PWD PINEWOOD BLOCK!**  
(NO Other Woods, Blocks, Kits, Prefinished, Professional, Etc.)

\_\_\_\_\_ **If Lights 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"**  
(Caution Block's Length, Cutting Ends, Adding Lights, Pipes, Etc.)

\_\_\_\_\_ **OVERALL WIDTH ≤ 2¾"**  
(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 to Extend Wheelbase)

\_\_\_\_\_ **Underside Attachment Width ≤ 1½"**  
(AND NO Sharp &/or Abrasive Material)

\_\_\_\_\_ **Bottom Front ≤ 1" High**  
(Reduces Possible Flipping & "Quick" Starts)

\_\_\_\_\_ **Height ≤ 6"**  
(Pack May Require Lower Height)

\_\_\_\_\_ **WIDTH (Between Wheels) ≥ 1¾"**  
(Inside Edge Between Wheels on the Same Axle)

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

\_\_\_\_\_ **Front & Back Lengths = 1 5/8" & 1"**  
(From Each Axle Slot to Front or Back End)

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

\_\_\_\_\_ **Nose Width ≥ ½", Centered Front**  
(No Nose Point, Arrows. Difficult to Set Car on Starting Pin)

## Axles Inspector

\_\_\_\_\_ **AXLES are 4 BSA PWD NAILS!**  
(NO Other Axles. Magnets May be Used to Verify)

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

\_\_\_\_\_ **Smooth** (if Desired) but **Unaltered** Axles  
(ONLY "Smoothing" Allowed. ONLY Filed, Sanded & Polished)

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

\_\_\_\_\_ **DRY GRAPHITE POWDER ONLY!**  
(NO OIL! No Liquid Lubricant! Period!)

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

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

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

## Wheels Inspector

\_\_\_\_\_ **WHEELS are 4 BSA PWD WHEELS!**  
(BSA Colored Wheels Encouraged. *Made in CHINA* Won't Pass)

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

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

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

\_\_\_\_\_ **ONLY the 4 Wheels Contact the Track**  
(Wheel NOT Required to be Flat on Track. Canted Allowed)

\_\_\_\_\_ **NO WHEEL ALTERATIONS!**  
(ONLY Adjustments Allowed: Polish Wheel Bore & Wheel 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. And the Lattice)

\_\_\_\_\_ **ONLY LIGHT SANDING** Permitted  
(ONLY Remove Minor Surface Imperfections on Wheel)

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