



# WESTERN DISTRICT PINWOOD DERBY

## OFFICIAL RULES AND REGULATIONS 2024

### 1) GENERAL:

- 1A) The District Pinewood Derby will be hosted annually by the WESTERN District.
- 1B) The Derby Committee will use an approved BSA Pinewood Derby track as specified in the National BSA track guidelines.
- 1C) All cars **must be constructed this year**; no cars that raced in any other years will be permitted to race.
- 1D) The car that was used in the Pack race must be the same one used in the District race. No modifications are allowed.
- 1E) Any car that finished 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> in the Pack Race is eligible to race in the District Race

### 2) DIVISIONS:

- |                                 |                  |                    |
|---------------------------------|------------------|--------------------|
| <u>Webelos &amp; AOL</u>        | (check in) 8:30  | (race) 9:00-10:00  |
| <u>Bears &amp; Wolf Scouts</u>  | (check in) 9:30  | (race) 10:00-11:00 |
| <u>Tiger &amp; Lion Scouts:</u> | (check in) 10:30 | (race) 11:00-12:00 |

### District King-of-th- Hill Piston Championship Race 12:00

- 2A) Each Pinewood Derby Race Car will be run and timed in each of the lanes of the race track. This will prevent any unfair advantages due to particular lane conditions. For example, if the track has four lanes then each car will run in four races (one in each lane), if the track has six lanes then each car will run in six races, etc.
- 2B) The cars will be ranked in order of Total Cumulative Time (i.e. the total combined time of each run in each lane).
- 2C) Winners for each division race will be the cars that scored the lowest Total Cumulative Times.
- 2D) Top three finishers from each division will receive a trophy.
- 2E) All Scouts participating in the Derby will receive a patch.
- 2F) The top car in each division will race in a *King-Of-The-Hill* final for the District Championship. Winner of this race will receive a trophy.

**The Race Chairman in consultation with the Derby Committee reserves the right to restrict or disqualify any race car that appears to have been built primarily by an adult.**

### 3) CONSTRUCTION GUIDELINES:

- All participants must use only the materials provide in the official BSA Pinewood Derby kit. All cars (for scout divisions) must be built by Cub Scouts with a reasonable level of adult assistance and supervision.
- 3A) *Width*- The overall width of the car shall not exceed 2¾ inches.
  - 3B) *Length*- The overall length of the car shall not exceed 7 inches.
  - 3C) *Track Clearance*-There shall be a 3/8 inches of clearance between the bottom of the car and the track.
  - 3D) *Weight*- The weight of the car shall not exceed 5 ounces. The scale used at the *Race Day Inspection* weigh-in is the official scale. Scales vary slightly so be prepared to make adjustments.

3E) *Height* - For the District there is no height requirement. The height of car may be limited to the track's finish line height. Be prepared to adjust/modify the height of your car as necessary to fit the track.

3F) The car shall not ride on any springs or other such devices.

3G) The car shall be free-wheeling; no starting devices can be added.

3H) Four wheels, two on each side of the car, will be placed so they straddle the tracks lane guide.

### 3-1) AXLES (NAILS):

3-1A) Axles that come with Pinewood Derby model car kit must be used.

3-1B) If desired, any burr or seam on any surface of axles may be lightly skimmed off with a fine abrasive.

3-1C) The original diameter of axle is to be maintained.

3-1D) The axles may not be built up with any material and then turned down with a lathe.

3-1E) Bearings, washers, bushings, tubes or spacers to axles are prohibited. The wheels are designed to be and will be wobbly on axles.

3-1F) Only dry lubricant is permitted. No oil or liquid spray is permitted. Oil may soften the plastic of the wheels or damage the surface of the track.

### 3-2) WHEELS:

3-2A) Wheels of the Pinewood Derby model car kit must be used (official BSA multi-color wheels may be substituted for the standard black wheels that are provided in the kit.)

3-2B) If desired, the burr and seam on the contact surface (the tread area) of wheels may be lightly skimmed off to remove the imperfection. However, if the burr and seam are removed from the contact surface of wheels, the contact surface must be flat and square to the side of the wheels.

3-2C) The original width and thickness of contact surface must be maintained (The wheels may not be rounded, have a "V" shaped surface, or have grooves cut into the tread surface and cannot be narrowed).

3-2D) Wheels must not be altered or replaced with any other wheels.

3-2E) The raised lettering on the outside of the wheels must not be removed.

3-2F) The ribs that appear on the outer perimeter and give a look of tread must not be removed.

3-2G) No holes may be drilled through wheels to remove material and no material can be removed from inside of wheels, except burrs (see: *Rule 3-2B*, above).

3-2H) No weight may be added to wheels.

3-2I) No hubcaps may be added to the wheels.

3-2J) Wheels are designed to be and will be wobbly on axles. No alterations to wheels and/or axles that result in a reduction of this wobbliness are allowed.

3-2K) **All four wheels must touch the track surface.**

### 3-3) WHEELBASE (DISTANCE BETWEEN AXLES):

3-3A) Extended wheel bases are not allowed.

3-3B) The wheels may not extend beyond the front or rear of the car.

3-3C) The minimum length between axles shall be 4 3/8 inches.

3-3D) You may put your own wheel grooves or holes in the body of the car.

3-3E) The wheel axles must be inserted in the cars body, not added underneath the car.

3-3F) The car must maintain an underneath track clearance of 3/8" (see: *Rule 3C*, above).

#### **4) PRE-RACE INSPECTION:**

All cars must pass a pre-race inspection by the Derby Committee prior to being accepted for the Pinewood Derby.

- 4A) The car must meet the weight requirement, not to exceed 5 ounces (see: *Rule 3D*, above).
- 4B) The car will be measured by gage length, width, and track clearance (see: *Rules 3A, 3B, 3C*, above).
- 4C) The car will be given a number and placed in a starting position according to division.
- 4D) All inspections are done during weigh-in, the night before the race.
- 4E) The car will be impounded immediately after it passes pre-race inspection (see: *Impounding, Rule 5*).
- 4F) No additional work can be done to the car once it has been impounded.
- 4G) Please mark “**front**” of car if the design of the car so warrants, to eliminate confusion and aid the *Starter* in the placement of the car on the starting line. The extreme front of car must touch the starting pin. If the design of the car does not allow the extreme front of the car to touch the starting pin, the *Starter* will place the car backwards on the starting line. The *Starter's* decision is final.
- 4H) All Extras/Accessories as defined in *Rule 8A* must be attached to the car securely. Any loose items will be removed before the car is impounded.
- 4I) If for any reason a car does not pass pre-race inspection, the owner of the car will be informed of the violation(s) and will have until the ‘weigh in’ ends to make the necessary adjustments and present the car for inspection. Bring any tools you may need, as they are not provided for you. (Examples – drills, glue, weights, sandpaper, etc.)

#### **5) IMPOUNDING:**

Once the car is impounded, only race officials will be allowed to handle it, until the racers race, where they will then return their car back to the race officials.

- 5A) The car shall be placed in an official *Pit Area*.
- 5B) Race officials will deliver the car to the starting line for the start of each race.
- 5C) Once the car runs the race it will be returned to the *Pit Area* by the owner of the car. The owner of the car may stand by the finish line and return his own car to the *Pit Area* once the race is run.
- 5D) Once the car has been eliminated from the Derby, the car will remain impounded until the race is over and the awards are handed out.
- 5E) Any owner taking his car out of the *Pit Area*, for any reason, once the car has been eliminated and disqualify his car from the Derby.

#### **6) THE RACE:**

- 6A) The racers and lane assignments are randomly chosen via the computer software.
- 6B) The cars will be placed in their designated starting lanes with the front of the car touching the starting pin (see: *Rule 4G*, above).
- 6C) The race winner will be determined by the car whose nose is first across the finish line as noted by finish line. *Race Judge(s)* will observe the finish. Any discrepancies between the track results and the *Race Judges'* observations will require the heat to be run again.

#### **7) ACCIDENTS AND REPAIRING:**

- 7A) An accident will be defined as any car that while racing, leaves it's designated lane and loses a wheel and/or axle.
- 7B) If during the course of a race a car becomes involved in an accident, the owner(s) of the car and one parent/guardian will be allowed into the *Pit Area* to fix or make repairs to the car.

7C) All accident repairs will be made in the *Pit Area* only. No car(s) will leave the *Pit Area* once the car(s) have been impounded for repairs (see: *Impounding, Rule 5*). Owners' will leave their car(s) in the *Pit Area* once repairs have been completed. Race officials will deliver the car to the starting line for the start of the re-race and all subsequent races.

7D) If a car leaves its designated lane and interferes with any other car, the race will be rerun automatically.

7D-1) The same cars will re-run the race in the same lane designations.

7D-2) Race Official will grant a reasonable amount of time for owners to make repairs to the car(s) before the race is re-run.

7D-3) The race must be re-run before the start of the next division.

7E) If a car leaves its designated lane and does not interfere with any other car, the race will stand.

7F) If an Extra/Accessory (see Rule 7D) falls off a car and interferes with another car or is the cause of another car leaving its designated lane, the race will be re-run automatically.

7F-1) The Extra/Accessory, causing the violation, will be removed for the remainder of the Derby.

7G) Any Car that causes two (2) or more accidents will automatically be disqualified from the Derby.

7H) All repairs will be done under the supervision of a race official.

7I) No race official is allowed to work on cars.

#### **8) EXTRAS/ ACCESSORIES:**

Owner may place *Extras/Accessories* on the car, such as, but not limited to: a fake steering wheel, a driver, a seat, windshield, air scoop, rear fins, side pipes, fenders, etc.

8A) An *Extra/Accessory* is defined as anything added to a car that did not come with the Official BSA Pinewood Derby Car Kit.

8B) Lead weights are considered an *Extra/Accessory*.

8C) Owners must conform to the general rules regarding the length, width and weight guidelines when adding these *Extra/Accessories* (See: *Construction Guidelines, Rule 3*).

8D) Owners will be permitted into the *Pit Area*, only to remove an *Extra/Accessory* that becomes loose, unattached or broken during a race. Owners cannot work to repair or re-install an *Extra/Accessory* once the car is impounded for racing.

8E) If during the course of any race the *Extra/Accessory* becomes dislodged, unattached or falls off, and does not interfere with another car, this is not considered an accident and the race will stand.

8F) If during the course of any race the *Extra/Accessory* becomes dislodged, unattached or falls off, and does interfere with another car, this is considered an accident and the race will be re-run. (see: Rule 7F)

#### **9) MISCELLANEOUS:**

Ultimately, the decisions of the Race Chairman and/or the Derby Committee on any of the above rules are final. Un-sportsmanlike or un-scout like behavior by either parent(s) or scout(s) sets a bad example and is grounds for disqualification and immediate removal from the event.

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