Pinewood derby Rules
(As of 1/29/20)

1.0: General Event and Registration Rules

1.1: Races start at 6:30

1.2: Each participant may only enter one car per event

1.3: To compete, participants must register with event staff; then check their cars in for evaluation.

1.3.1: Registration ends 30 minutes prior to event starting

1.3.2: Cars check in between ending of registration and the starting of the event.

1.4: All cars must pass full inspection for rules and safety.

1.4.1 If at any time there is reason to believe a car may risk safety, damage to individuals, track or to the venue, or is found to be in violation of any rule, purposefully or inadvertently cheating, the participant entering the car may be:

1.4.1a) Disqualified from all entered events and forced to forfeit race fees without refund if the violation is found before, during or after racing begins.

1.4.1b) If there is a small violation found during car inspection that can be corrected on site, the participant may be given the opportunity to correct the violation and re-submit the car for inspection depending on the number of entrants present at the time of the E-Derby. This determination will be made by a race official. If the car is then able to pass inspection it may be entered into the corresponding event, however after failing a second inspection the car will not be allowed to race. Second inspections will be completed only after all participants in line have had a first inspection. Subsequent inspections may be made, deeming the car enterable only if the number of participants and time constraints allows for them, as deemed necessary by a race official.

1.4.2 – After cars have passed inspection by a race official and are deemed race-worthy, they will be placed on a table or in a holding area where they cannot be adjusted or tampered with – with exception to rule 3.7 - Adjusting cars after inspection may result in participant and car disqualification and subjection to rule 1.4.1.

1.5 Both BSA Class and Open Class Events will be conducted using a bracket system. The size of the brackets will be determined on the day of the event depending on the total participation and time constraints. The brackets will be double or single elimination depending on the same constraints. Cars and participants will be placed on the bracket as the register and check-in. There will not be a qualification round and therefore cars will be ordered randomly on the bracket.
1.6 Open track time may or may not exist due to time and personnel restriction. If there is an open track time it will occur before and after the event. Race official will determine the plausibility of holding an open track time at the time of the event.

1.7 The order of events will likely proceed as follows:

1) Open racing
2) BSA Class Competition
3) Open Class Competition
4) Awards Ceremony and Open Racing.

1.7.1 This order is subject to change based on the number of participants present and time constraints.

2.0 - “BSA Class” car rules

2.1 Car width shall not exceed 2-3/4 inches.
2.2 Car Length shall not exceed 7 inches.
2.3 Car’s Weight shall not exceed 5 ounces.
2.4 Car’s Axles, wheels, and body shall be from the materials provided in the kit.

2.4a) Useable Kit Brands are Pine-Pro Brand, “Pinewood Derby” kits from Revell, and the Official BSA Pinewood Derby Car Kit.

2.5 Wheel bearings, washers, and bushings are prohibited.
2.6 No lubricating liquids or oils may be used. Axles may be lubricated with powdered graphite or silicone.
2.7 The car shall not ride on any kind of spring.
2.8 The car must be free-wheeling, with no starting devices.
2.9 No loose materials of any kind are allowed in the car.

3.0 - “Open Class” Rules

3.1 Car width shall not exceed 2-3/4 inches.
3.2 Car Length shall not exceed 7 inches.
3.3 Cars must not use any flame or fire at any time.
3.4 Cars must not risk damage to the track, individuals or the venue.
3.5 Cars must not interfere mechanically with any other car.

3.5.1 If during racing, the thrust from a car using a ducted fan or CO2 cartridge blows another car off of the track or backwards on the track, race officials will judge the lead
the offending car had on the disturbed car and based on their analysis will either repeat
the heat, move forward with the race or disqualify the offending car. Cars can use non-
flammable propellants which may disrupt other cars however if a neighboring car is
disrupted because of a sideways or perpendicularly blowing propellant or any device or
action believed to purposefully disrupt neighboring cars, the participant and car may be
subject to rule 1.4.1.

3.6 Cars cannot be handled or touched by participants or agents of the participant after being
placed on the track.

3.6.1 Cars must be able to sit on the track without assistance for the necessary stage
time prior to launch by the race official which could range from 1-15 seconds. The race
official launching the cars will have final say on how cars will be dealt with that struggle
with this rule.

3.7 “Set ‘em and forget ‘em”

3.7.1 Cars operating in this class that use batteries or other power devices for power or
acceleration may be manipulated and/or tuned by the participant or agents of the
participant between races and directly prior to placing the car on the track for launch. However, cars cannot be touched after the race official requests the cars be placed on
the track.

3.7.2 Previously cars have used CO2 cartridges as a propellant system in which the
participant would use a hammer and a nail or other means to send the car after the gate
drop or launch. While CO2 cartridges are not banned, participants cannot touch the car
between the time that the race official requests the car and the race heat has finished.
This rule is designed specifically to prevent participants from using the hammer and nail
to a CO2 Cartridge launch.

4.0 Awards

4.1 Awards will be given either at the event or at a later time.

4.2 Awards will be offered to winners in the form of cash or gift cards in the amounts specified
depending on availability.

4.3 Winners must be present at the conclusion of the Class in which they are competing in order
to guarantee presentation of their corresponding award.

4.4 The amounts of the awards and the awards offered may be added to or slightly adjusted
based on availability of funds at the time of the event.

4.5 Open Class Awards

4.5.1 Awards will be given to 1st

4.5.2 Awards are TBD

4.6 BSA Class Awards
4.6.1 Awards will be given to 1st

4.6.2 Awards are TBD

5.0 Subject to change

5.1 Within reason to be determined by the race official, these rules may be adjusted based on requirements set forth by the owner of the venue, the owner of the track and the safety-based needs.

5.2 Participants are expected to understand that this event is run by volunteers whose goal is to encourage safe and innovative engineering.

5.3 This event can be altered or cancelled by its overall governing authority which are ASME and Utah State University.

Thank you so much for your participation in this year’s pinewood Derby! We look forward to setting some speed records.