



# *Pinewood Derby Rules Hassanamisco District Mohegan Council*



Preface: These rules are recommended for all Pinewood Derby events in the Hassanamisco District, and will be in effect at the District-wide Pinewood Derby Run-off on March 24, 2012.

## **1. Lengths, Widths, & Clearances**

- A. Maximum overall width (including wheels and axles) shall not exceed 2 ¾ inches.
- B. Minimum width between wheels shall be 1 ¾ inches so that the car will clear the center guide strip in its lane.
- C. Minimum clearance between bottom of car and track shall be 3/8 of an inch to clear the guide strip.
- D. Maximum length of the car shall not exceed 7 inches.
- E. If desired, you may change the wheelbase (the distance between the front and rear axles). Slots or drilled holes are fine.

## **2. Weight and Appearances**

- A. The total weight of the car shall not exceed 5.0 ounces. The readings given by the official race scale shall be considered final. Cars may be hollowed out and built up to maximum weight by the addition of wood, plastic, fiberglass or metal only, provided that it is built into the body of the car and firmly attached to it. No loose materials of any kind are permitted in or on the car. Note that the car may be inverted and shaken as part of the inspection. There should be no sharp objects or materials (ex. glass) that could harm handlers or damage other cars or the track.
- B. Pre-built “kits” are not allowed. All cars should be crafted from the official Boy Scout Pinewood Derby kit that contains a regular block of wood.
- C. Mercury shall not be used for adding weight, as it is a health hazard.
- D. Details such as steering wheel, driver, spoiler, decals, painting, and interior detailing are permitted as long as these details do not exceed the maximum length, width, and weight rules as detailed above.
- E. Cars with wet paint are not acceptable.
- F. Weights may be screwed onto the cars instead of glued for easier adjustment.

## **3. Wheels and Axles**

- A. Only official Boy Scout Pinewood Derby wheels may be used. Colored wheels from the Scout Shop are permitted. The molding seam on the wheel’s tread may be removed with a light hand sanding. No other wheel changes (beveling, tapering, thin sanding, wafering, lathe turning, etc.) are allowed. Sanding a wheel spun on a mandrel is not permitted, as this alters the entire wheel, not just the mold seam. The width of the wheels where they touch the track must be at least ¼ inch and flat.
- B. The axles supplied with the kit must be used. These axles may be polished. Solid axles across the car are not allowed.
- C. Axle locks are permitted.
- D. Wheel bearings, washers, or bushings are prohibited.
- E. The car may not ride on any springs or suspension.
- F. The car must be free-wheeling, with no starting device or other means of propulsion.
- G. It is not necessary that all 4 wheels touch the track; however, all 4 wheels must be used in the design.

## **4. Lubrication**

- A. Only dry powder graphite may be used as a lubricant; other lubrications such as oils and silicone sprays are prohibited.
- B. Cars must be lubricated prior to inspection. Once a car has been inspected, no further lubrication will be permitted. No graphite may be applied after inspection or during races.

## 5. District Pinewood Derby Event Entry

- A. The race is open to all Cub Scouts (Tigers through Webelos) who are from Packs in the Hassanamisco District. The top FIVE placed winners from each Pack's Pinewood Derby event will qualify for the District Run-off held on March 24<sup>th</sup>.
- B. Alternates may be sent to the District Run-off to replace any of the top five who are not able to attend the event. No boy may race using another boy's car.
- C. Cars must be constructed for this year's race. Cars made in previous years are not permitted.
- D. The car raced in the District event must be the same car that was raced in the Pack event. No modifications are allowed to the car between the Pack event and the District event, although fixing/repairing a broken car after the last race is permitted.
- E. **Each Pack must register and deliver the cars of its racers and alternates on Monday, March 12<sup>th</sup>, 2012, at the Hassanamisco District Roundtable.**

## 6. Inspections and Disputes

- A. Final inspection will take place the morning of the District Run-off in the presence of the car owner.
- B. Each car must pass inspection by the Official Inspection Team before it may compete. The Inspection Team has the right to disqualify cars that do not meet all rules. Car owners will be informed of the reason(s) why their car was disqualified, and will be given the opportunity to modify their car to meet racing standards. Cars that have not passed inspection by the close of the check-in period (as determined by the Race Committee) will not be allowed to race.
- C. During the inspection process, a numbered sticker will be applied to the front of the car to avoid confusion as to how to place the car on the race-track. The scout will be asked to identify the front-end of the car. Be sure to allow a location for this sticker. Car owners may also take this opportunity to apply lubrication.
- D. No modifications are allowed after completing inspection. The cars will be garaged after modification and handled solely by Race Officials. Scouts will not be allowed to touch their cars until after the race events are over.
- E. Any participant has the right to appeal a decision to the Race Committee for an interpretation of these rules. The Race Committee, by majority vote, will be the final judge of these rules. In case of a tie vote, the Race Committee Chairperson will make the final decision.

## 7. Racing Rules

- A. Only race officials and scouts who are currently racing will be permitted into the track area. No one else is allowed unless approved by the Race Committee.
- B. If a car jumps off the track, that heat will be run again.
- C. If a car interferes with another car, that heat will be run again.
- D. If a car suffers a mechanical problem (ex. it loses an axle or breaks a wheel), a reasonable amount of time, as determined by the Race Committee, will be allotted for repairs, and the heat where the failure occurred will be run again. Any repairs will be performed by the car owner, with help from their parent only if allowed by the Race Committee Chairperson.
- E. The race will be a computer timed event using a 4-lane track. Each car will race 4 times, once in each lane.
- F. An electronic finish line will be used, and it will determine the winner of each race. Human judges will watch each race for any track or car malfunctions, but will not decide the winner.
- G. There will be two main heats, each comprised of half the cars entering the race. The top 10 finishers from each semi-final heat will go onto the final event, where the overall winners will be determined. Times in the semi-final heats will not be considered when determining the winners in the final event.
- H. Winners will be determined by the sum of their car's four times in the final event, with the lowest times being the best.
- H. Individual trophies will be awarded to the top 3 finishers.
- I. A "Best Pack Showing" Trophy will be awarded to the Pack that had the lowest aggregate time for all of its 5 cars in both the semi-final heats and the final event.
- J. Un-Scout-like and unsportsmanlike conduct by any participant or spectator is grounds for expulsion from the competition and/or event area.
- K. All decisions of the Race Committee Chairperson are final.

Please remember that the Pinewood Derby is a recreational event. The point is not to win, but to have an enjoyable time regardless of the outcome of the race. The Cub Scout Motto of "Doing Your Best" should be emphasized by all.