## Pack 207 Pinewood Derby Official Rules and Guidelines

(12/11/09)

We have established a set of rules and guidelines for the Pinewood Derby to help make the night go smoother. These rules are to be used in conjunction with the *Official Grand Prix Pinewood Derby Kit Rules* included with the Scout's car kit.

- Have fun! As with all Cub Scout events, the first rule is to always have fun! Be an integral part in the concept, design, and construction of your car. Be proud of what you have accomplished!
- 2. **Fairness and Good Sportsmanship**: The Pinewood Derby should be a fun event for the Scout. Win or lose, all Scouts should have fun participating and display good sportsmanship.
- Safety: The Scout, with help from an adult, should build their racecar. However, please exercise good judgment when determining which tools your son uses. For information see the Tools section here: <a href="http://hawkeyebsa.org/AboutUs/WhatWeDo/tabid/88/Default.aspx">http://hawkeyebsa.org/AboutUs/WhatWeDo/tabid/88/Default.aspx</a>
- Kits: Only cars built from the Cub Scout "Official Grand Prix" Pinewood Derby kit are eligible for competition. Cars used in previous years are ineligible.
- 5. Weight: Weight shall not exceed 5.0 ounces, but it is recommended that the car weigh as close to 5.0 ounces as possible (the heavier the car the faster the car). Weights for the cars may be found at local hobby shops. To help save time, all weight adjustments should be done at home, prior to bringing the car to the race site.
- 6. Lubrication: It is recommended that you apply dry black graphite to the axle nails. Dry graphite is the only permitted lubrication method. The black graphite will make the car go faster! Once the car has been registered, graphite may not be applied again. Please apply the lubricant at home or outside the building to reduce the mess inside the school.
- 7. **Axles**: The axle nails that are included in your "Official Grand Prix" car kit must be used (straight axles or non-official nails <u>cannot</u> be used). Limited sanding, deburring, and polishing of axles is acceptable. Straightening or purchasing new "Official

- Grand Prix" nails because they are crooked or damaged is permissible. Chroming, or any other type of special finish <u>may not</u> be applied to add a smooth finish to the nails.
- 8. Wheels: Wheels must be full width, as provided in the "Grand Prix Kit". Wheel imperfections caused by the molding process may be removed from the wheel by lightly sanding. No other modifications to the wheels are permitted. No special finish may be applied to give a smooth wheel finish.
- 9. **Body**: The wheelbase length (distance between the front and rear nails used to make the axles) <u>cannot</u> be changed or moved from the supplied kit body distance of 4-5/16". Adjusting the squareness of the slots is permissible. Drilling new holes is permissible. However, the holes need to be located in the same place. One axle must be about 1" from the front or back of the car. The Pack check-in gauge will detect axles that are spaced too far apart or in the wrong location.
- 10. **Front of the Car:** The most forward part of the car must be part of the original block of wood in its original position.
- 11. Starting Line: Cars should have a front edge that is flat and parallel with the axles to help them sit square on the racetrack. It is recommended that extreme needlepoint designs be avoided – this type of car is difficult to start and may not trip the finish line sensor accurately. Cars may run backwards if needed.
- 12. Adjustments: Once a car is registered, no adjustments can be made to the car, except to repair broken parts or to correct a rule violation. An adult is permitted to make the repair and/or correction. If a car does not make it down the track, the race officials may work on the car to allow it to complete a race.
- 13. **After Registration**: Only the race officials and designated race helpers may touch the car.

## **Car Specifications:**

Minimum width: 1-7/8" (inside to inside of wheel)

Maximum width: 2-3/4" (outside to outside of wheel)

Wheelbase: 4-5/16" (center of nail to center of nail)

Maximum height: 2-1/2"
Maximum length: 7-1/16"
Maximum weight: 5.0 Ounces

**Help building your car is available:** If you need assistance with cutting your car, please feel free to contact your Den leader for information. If you have any questions about the rules, please ask your Den Leader or Steve Rose, 337-8553.