

# ATTENTION ALL PARTICIPANTS PLEASE MAKE SURE TO READ RULES COMPLETELY AS CHANGES HAVE BEEN MADE

## ENTRY

- **SCOUT DIVISION** - Any Scout (Lion, Tiger, Wolf, Bear, Webelos, AOL) within the Glacier's Edge Council, who won 1st, 2nd or 3rd in their respective rank in their Pack pinewood derby, may submit in person, as owner, (only) one car entry in the event. Scouts entering the Glacier's Edge Council Pinewood Derby must agree to these rules.
- Official Registration is on Saturday, April 14, 2018 from 8:00 AM - 2:30 PM; the Scout must be present for registration of his entry but not necessarily for the race. There will be a Scout registration fee payable to Boy Scouts of America of \$5.00 per car online prior to race day and \$7.00 per car on race day. All cars must be picked up after the event or they will be taken to the Council Service Center.
- **OPEN DIVISION** - Siblings of Scouts or Scouts within Glacier's Edge Council, that did not place 1st, 2nd or 3rd in their respective rank in their Pack pinewood derby may submit in person, as owner, a car(s) to be entered in the event. Entry constitutes agreement to these rules. Official Registration is on Saturday, April 14, 2018 from 8:00 AM - 2:30 PM; the sibling must be present for registration of his/her entry(s) but not necessarily for the race. There will be a sibling registration fee payable to Boy Scouts of America of \$5.00 per car online prior to race day and \$7.00 per car on race day. All cars must be picked up after the event or they will be taken to the Council Service Center.
- The Race Committee includes: The Race Committee Chairman, the Registration Team, and Race Officials. Appeals of any Race Committee decisions should be immediately brought to the attention of the Race Committee Chairman, who will consult with the appropriate members, and render a final decision.
- Each entry must pass inspection; then be registered with the Official Registration Team before it may compete. The inspection/registration table will be open for the above stated times.
- All cars will be inspected for the items listed in the Specifications section of these rules. An owner will be informed of any noncompliance. Modifications may be made and the car re-submitted for inspection by returning to the end of the inspection/registration line. Maintenance and/or lubrication is prohibited after inspection.
- A car that has passed inspection will be immediately considered registered. The car owner's name and unit will be recorded and a unique identification will be placed on the car so it may be visible from the top/back if at all possible.
- Once registration is complete, the car will be moved to the pit area as instructed by the Race Official. After the car is registered, repairs will be limited to replacement of axles/wheels that are broken/lost during the race. All owners and spectators will remain outside the pit and track area at all times, except as directed by a Race Official.

## SPECIFICATIONS (Scout & Open Division)

### • **Body Specifications / Dimensions**

- Width: Overall width (including wheels) shall not exceed 2  $\frac{3}{4}$  inches.
  - Do Not Alter The Width Of The Car At The Axles
- Length: Overall length shall not exceed 7 inches (17.8cm)
- Height: Overall height shall not exceed 3 inches.
- Weight: not to exceed 5.0 ounces – 143.4 grams measured on Official Race Scale
  - Overweight cars may be reduced to 5.0 ounces (143.4 grams) or below before they can officially be entered, at the Race Day Check in.
- Center Rail Clearance:
  - Cars must be clear the center rail which is 1  $\frac{5}{8}$  inches wide by  $\frac{1}{4}$  inch tall along the entire length of the car.
- Wheelbase:
  - Can be extended. Standard wheelbase is 4  $\frac{3}{8}$  inches from the center of front axle to center of back axle. Any wheelbase can be used. Wheels must be directly across from one another.
  - Axle holes may be drilled into body of car as long as the specs are met.
- Body Structure
  - The main body structure must be made of pinewood.
  - Wheelbase front and rear axles may be modified, as long as the overall length does not exceed 7 inches.
  - No part of the car can extend past the start gate.

### • **Construction and Materials**

- The car must have been constructed within the last eleven months.
- Liquids and loose materials of any kind, in or on the car are not acceptable.
- **Wheels**
  - Only official BSA wheels are allowed. Either (*either new style and/or old style*). All markings must be in tact on inside and outside of wheel. You may use official BSA colored wheels.
  - Outer wheel surface may be sanded, shaved, lathed or polished to remove any imperfections, true roundness, remove model castings and burrs, but must not be re-shaped in any way to minimize tread contact or alter aerodynamics.
    - The Fluting (small decorative dots) must be visible around the entire circumference.
    - The tread/ contact surface must remain flat and parallel to the bore.
    - The width of the tread must not be less than 7.5 mm
    - No removing or reducing the letters or spokes or drilling additional holes.
    - The following wheel modifications are NOT allowed
    - No rounding of the wheel treads – they must remain flat
    - No grooving, H-cutting, V-cutting, Crowing, Tapering or Dishing
    - No altering the wheel profile
      - No drilling sidewalls
      - No filling of any wheel surface with any type of material.
      - Officials will remove wheel(s) if lettering is not completely visible.

- Coning the hubs, truing the inside edge of the wheel, and removing the outer hub step down is allowed.
  - Wheel Bore treatment is allowed including polishing, sanding and / or tapping.
  - Wheel bores may not be filled and re-drilled
  - Any wheel sanding, shaving or lathing on the inside of wheels must leave all inside wheel lettering and mold markings in tact and visible.
- There must be four wheels on the car, however it is not required that all four wheels make contact with the track surface – one wheel may be lifted from the track surface.
  - Each wheel must be mounted on an axel, on the outside of the car, on the side of the car
  - Wheels may not be greater than 10 degree of an angle from the body of the car
  - Each wheel must be attached by an axle – no guide pins allowed
  - Wheels must be installed directly across from one another
  - Wheels may NOT be reversed – wheels must be run in standard position
  - Non-Dominant / Lifted wheels must meet wheel specifications.
- **Axles**
  - Nail type axles but not limited to those found in the Official Pinewood Derby kit are to be used
  - Modifications to the Axels are allowed that include straightening, sanding, polishing, canting, grooving, beveling, & tapering of axle head as long as the Diameter of the axle is not reduced. The Diameter may not be less than .084 inches (2.13mm)
  - Axles can be mounted by drilling Axle holes or inserted into the slots on car.
- **Accessories**
  - After market accessories and decorations are allowed as long as they are firmly attached to the car and meet all other size specifications. No excessively fragile or glass items are allowed.
- **Lubrication**
  - Graphite ONLY in all divisions
  - Approved lubricants include Graphite, Teflon
- **Prohibited Items that can NOT be used**
  - Magnets, springs or suspension systems of any type.
  - Starting devices finish line devices, propellants, or propulsion systems
  - Wet paint, or sticky substances
  - Glass or excessively fragile parts
  - Electronic or lighting devices (if lights are on the car they must be turned off)
  - Wheel bearings, wheel covers, washers and bushings are not acceptable. (However, air shields mounted firmly to the car surface on the inside of the wheels are allowed, as long as they are clear allowing vision to the judges of the inner wheel markings. They must not be affixed to the wheels and must stationary to the car surface).
  - No use of Guide Pins or such devices
  - Axles and wheels attached to any device that mechanically alters rotation or spin.

- **Logistics**

- A six-lane track with electronic timer and starting line will be employed.
- Each car will be run on each lane with the race times being totaled.
- Cars will be assigned a different lane in each heat, such that each car will have raced in all six lanes.
- An attempt will be made to prevent the same cars from racing together in different heats.
- The individual cumulative totals for the six heats will be used to determine the winners of the event.
- Each race will be announced and the cars placed on the start line by a Race Official(s).
- The Starting Line Race Official will make sure the cars are on the track properly, wait for the Computer Ready Signal from the Race Chairman and start the race.
- If a car leaves the track, runs out of its lane, interferes with another car, or otherwise fails to pass the electronic trouble on the second run, the car will be disqualified from that heat. If on the second run another car is interfered with, the race will be rerun without the disqualified car. The disqualified car will be assigned a time equal to 9.999 seconds.
- When the cars come to a complete stop at the finish line, the Finish Line Race Official will place the cars in a protective transport box and return the cars to the pit area.
- If it is the Race Chairman's opinion that the electronic timer has failed to properly perform, the race will be rerun.
- This process will be repeated until all cars from all groups have run in all six lanes.
- This process will again be repeated for the Adult/Sibling Competition upon completion of the Scout competition.

- **Awards**

- After all races have been completed, awards will be presented.
- Trophies will be awarded to:
  - 1st, 2nd and 3rd in each respective rank (Lion, Tiger, Wolf, Bear, Webelos, AOL)
  - Best in Show in each respective rank (Lion, Tiger, Wolf, Bear, Webelos, AOL)
  - 1st, 2nd and 3rd overall
  - 1st, 2nd and 3rd in open class