Pack 89

Official Pinewood Derby Rules

1. BSA Official Pinewood Derby Kit Use
   - The wood block provided in the BSA Official Pinewood Derby Kit (hereafter, PWD kit or kit) must be used. The block may be shaped in any way that is desired.
2. Length, Width and Clearance
   - The maximum overall width of the car (including wheels and axles) shall not exceed 2¾" (2.75" or 6.99 cm).
   - The minimum width between the wheels shall be 1¾" (1.75" or 4.45 cm) so the car will clear the center guide strip on the track.
   - The minimum clearance between the bottom of the car and the track surface shall be 3/8" (0.375" or 0.95 cm) so the car will clear the center guide strip on the track.
   - The maximum overall length shall not exceed 7" (17.78 cm).
   - The car must be able to pass under the finish line (under 5″ in height)
   - The wheelbase (the distance between the front and rear axles) may not be changed from the kit body distance of 4¼" (4.25" or 10.8 cm).
3. Weight
   - The Pack 89 scale is the official scale. The reading of the official scale at weigh- in will be considered final.
   - Total car weight shall not exceed 5 ounces (141.75 grams).
   - Weights shall be passive (e.g. non-moveable, non-magnetic, non-electric, etc.) No liquids or loose materials of any kind are permitted in or on the car.
4. Appearance and Design
   - The car may not be constructed or treated in such a way that the track starting mechanism imparts momentum to the car.
   - The car must be constructed to allow the entire car to stage behind the starting pin.
   - Detailing such as wheels, steering wheel, driver, spoiler, decals, painting, or interior details are permissible as long as the details do not exceed the length, width or weight specifications.
5. Wheels and Axles
   - Only Official Pinewood Derby Wheels and Axles such as the ones provided in the PWD kit are authorized.
   - Beveling, tapering, thin sanding, wafering or lathe turning of wheels is prohibited. Wheels may not be sanded or shaped to a "V" or "U" shape. Wheels may be lightly sanded to smooth out molding imperfections on the tread area. This light sanding is the only modification allowed.
   - The wheelbase (the distance between the front and rear axles) may not be changed from the kit body distance of 4¼" (4.25" or 10.8 cm). Wheels must be in contact with the track surface and freewheeling.
   - Axles may not be altered in any way except for deburring and polishing; channeling is not allowed.
   - Wheel bearings, washers, bushings and/or hubcaps are prohibited.
   - The car shall not ride on any type of springs.
   - Wheels may be lubricated. Only dry lubricants are authorized (i.e., graphite powder). Liquid lubricants are prohibited. Lubrication will not be allowed after the car has been weighed in or during the race.

6. Registration and Weigh-In
   - Scouts must be present to enter their car into competition. The car must have been built during the current Scout year. Cars that have competed in a previous year are not permitted.
   - Scouts will complete an official car inspection checklist during the registration process. These forms will be available at registration.
   - Materials and tools for quick repairs and final weight adjustments will be available prior to registration. You are welcome to bring your own to make adjustments as needed.
   - The Pack 89 scale is the official scale for the weigh-in.
   - After the car passes weigh-in, cars will remain under control of race officials until the Pinewood Derby is completed.
   - Cars with wet paint will not be accepted at weigh-in.

7. Competition Ground Rules
   - Each Scout may enter only one car in the competition; several cars may be constructed but only one may be registered and raced.
   - Once registered, only race officials will handle cars. Race officials will move, stage, start, and retrieve cars during the race.
   - A Scout does not have to be present during the race to have their car compete.
   - Races will be run by Scout Rank/Grouping (Lion, Tiger, Wolf, Bear, Webelos, and AOL. Pack 89 Championships will include the top three cars from each Pack 89 Rank.
   - All rulings by the Race Marshall are final.

8. Race Procedures and Rules
   - The cars will race in a round robin format on alternating track lanes. Race software will determine race order and lane assignments.
   - Cars must be gravity-started and freewheeling; no starting device or other type of propulsion is allowed.
   - If a car jumps the track during the race and proceeds in a manner that does not interfere with opponents, the race will be allowed as run.
   - If a car leaves the lane and interferes with another car during the race, the race will be run again. If the same car leaves the lane and interferes with an opponent a second time, the car that interferes will be judged as last for that heat and the race will be re-run without the car that jumped the track.
   - If, during the race, a wheel falls off, or a car becomes otherwise damaged to the extent that may prevent further competition, the Scout and Akela (adult) may perform repairs. If the car can be repaired in a reasonable amount of time (within 5 minutes), the race will be run again. If not, the damaged car will be given a loss for that race. A race official will be on-hand during the repairs.

9. Awards and Recognition
   - Scouts can win medals or trophies for Speed and Style. The intent in offering Speed and Style awards is to remind Scouts that there are many different paths to success.
   - Speed awards will include 1st, 2nd, and 3rd place for each Scout Rank/Grouping, and 1st, 2nd, and 3rd place for the Pack 89 Championship. All awards will be presented at the end of the Pinewood Derby.
   - Style awards will include: Most Patriotic, Best Scout Theme, Cub Scout's Choice, Fastest Looking, Best Paint Job, Craziest Design, Best Workmanship, Most Futuristic, Top Movie/TV Show Theme, Most Decals/Stickers, Least Wood Left on Car, and Most Original Design.

10. Sportsmanship
    - Scouts should be reminded that the purpose of the Pinewood Derby is to have fun designing, building, racing, and cheering on fellow Scouts.
    - All Pinewood Derby participants and parents will behave in an appropriate manner. Any arguing will result in a car being disqualified and not permitted to continue.
    - The Race Marshall shall address any Scout or Akela (adult) concerns; rulings by the Race Marshall are final.

Pack 89 Pinewood Derby Car Inspection Form

Pack / Race Class: _____

Car Number: _____

Cub Scout Name: _____

Age: _____

Car Name: _____

Inspection Items:

- □ Car made during the current year (has not raced before)
- □ Width of car does not exceed 2 ¾ inches
- □ Height of car does not exceed 5 inches (or clears finish Line)
- □ Length of block does not exceed 7 inches
- □ Front end does not extend past starting peg (no length advantage)
- □ Wheelbase is at least 4 inches
- □ Axels, wheels are from BSA kit (wheels stamped with "BSA")
- □ Wheel width, diameter, and shape is standard (out of the box) (Wheels are not sanded/shaped to a "V" or "U" shape)
- □ Lubricant is graphite powder (no 3-in-1 or other liquid oil)
- □ Car Weight: _____ oz. (wt. must be <= 5.0 oz.)

Car Approved to Race: **Yes** **No**

Inspector: _____ _____

Printed Name Signature

Pack 89

Open Class Race

Family and Friends are Welcome to Join the Racing!

$10 Entry Fee

(All money goes to Pack 89)

- All cars must be checked in on Friday or Saturday during the allotted time
- You do not need to check your car personally
- You do not need to be present for the race
- The car weight shall not exceed 7.0 Ounces. The official race scale shall be considered the final reference point for weight
- Wheel bearings, washers, bushings and/or hubcaps are prohibited.
- Wheels may be lubricated. Only dry lubricants are authorized (i.e., graphite powder).
- Liquid lubricants are prohibited. Dry Lubricants are allows, however, lubrication will not be allowed after the car has been weighed in or during the race.
- Rules pertaining to the cars leaving the track and not reaching the finish line are the same as the standard Pinewood Derby.
- No adjustments, repairs or “tune-ups” can occur after your car has been checked in