

# NASHUA VALLEY COUNCIL BOY SCOUTS OF AMERICA

## *PINEWOOD DERBY RULES*

All cars must pass inspection to qualify for the races. Cars must have been made for this race, you may not race a prior year's car. Scouts must be present to race with two deep leadership from each pack.

### **LENGTH, WIDTH, AND CLEARANCE**

1. Cars must be built using the materials in the official BSA Pinewood Derby Kit. This includes the pinewood block, and wheels. With the exception of decorative and construction items (weights, glue, lubricants, finishing materials), only materials from the official kit may be used. Separately purchased items (contoured pinewood bodies, machined wheels) are specifically prohibited.
2. Maximum overall width (including wheels and axles) must not exceed 2 ¾".
3. Minimum width between wheels shall be 1 ¾" so the car will clear the center guide strip.
4. Minimum clearance between the bottom of the car and the bottom of the wheels shall be 3/8" so the car will clear the center guide strip. It is recommended that weights on the bottom of the car be inset so they are flush with the bottom of the wood block.
5. Maximum length of the car shall not exceed 7".
6. The wheelbase (distance between front and rear axles) MAY NOT be changed. Either grooves provided or equal distance between axles.
7. Cars may not protrude beyond the starting post.

### **WEIGHT AND APPEARANCE**

1. Weight of the car shall not exceed 5 ounces (141.7 grams). The readings of the Official Race Scale will be considered final. The car may be hollowed out and built up to the maximum weight by the addition of wood, metal, cardboard, and/or plastic, provided it is securely built into the body or firmly affixed to it, and provided that the original wood block is the dominant material used.
2. No liquids or loose materials of any kind are permitted in or on the car.
3. Using tape (masking, scotch, etc.) to hold weights on the care is specifically prohibited.
4. Details such as steering wheel, driver, spoiler, decals, painting, and interior details are permissible as long as these details do not exceed the maximum length, width, and weight specifications.
5. Cars with wet paint will not be accepted.

### **WHEELS AND AXLES**

1. Only the official Scout Grand Prix wheels and approved axle nails can be used. Replacement axle nails can be purchased from Maximum Velocity which are made to the bsa specification with the burrs removed. This change was made to accommodate families that don't have the proper tools to machine polish the axles and due to the inconsistent nature of the BSA supplied nail axles. The best option is still to polish the bsa axles as this gives the best performance. Axles may be polished. Solid axles are strictly prohibited. Maximum Velocity axles are the only approved alternative axles however.
2. Wheels may be lightly sanded to remove the mold projection on the tread. Due to the inconsistency in the bsa injection mold for the wheels, the wheels may be brought into round by shaving the high spots down if so desired. In addition light sanding is the only other wheel modification allowed. Wheels that have been beveled, tapered thin, sanded, or lathe turned and grooved will not be acceptable.
3. Wheel bearings, wheel covers (hubcaps), washers, or bushings are prohibited. Decorative fenders are permissible.
4. Car shall not ride on any type of springs. Cars must be freewheeling with no starting device or other propulsion.

### **LUBRICATION**

1. Only dry powdered lubricants, such as graphite, may be used. Regular oils and silicon sprays may soften the plastic wheels. Cars must be lubricated by the participant before final registration. The race committee will not lubricate the cars during the race.

### **CAR INSPECTION**

1. The official number will be placed on the car by the race officials.
2. Each car must pass inspection by the Official Inspection Team before it may compete. The Inspection Team has the right to disqualify those cars, which do not meet these rules. Car owners will be informed of any violations and given an opportunity to modify the car to meet these rules.
3. Cars can be re-inspected at any time. If the car does not meet specifications, it must be brought into compliance before its next scheduled race or be disqualified. A minimum of five minutes will be allowed a participant (or his designated adult) to bring his car into compliance.
4. Any participant (including a parent/guardian of a participant) has the right to appeal to the Judging Committee for an interpretation of these rules. The Judging Committee, by majority vote, will be the final interpreter of these rules. In case of a tie vote, the decision of the Race Committee Chairperson will be final.

### **REGISTRATION**

1. Upon successfully completing inspection, each boy's car is registered with a numbered sticker which is placed on the top of the car. The car is officially entered and his name and number are placed on the race schedule.

### **PIT AREA**

1. After completing registration, the cars are placed in the pit area. Once cars are placed in the pit area, they may only be removed when it is their turn to race in a heat. They must be returned to the pit area after they have completed a heat and the cars must remain in the pit area until after the race.

### **THE RACE**

1. Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience could be grounds for expulsion from the competition and/or the race area.
2. Only race officials will be permitted in the track area. This rule will be strictly enforced.
3. Race officials will place the cars on the track and return it to the pit area after the heat. All people, except the race officials, must remain behind the barrier.
4. The car whose nose is first over the finish line is the winner, you will be racing against the clock.
5. There will be enough races in an event to permit each car to run once on each lane. Normally there are four lanes, however, if a lane is damaged or otherwise unusable, then fewer lanes may be used. If for a particular event, there are fewer cars than there are lanes, then a number of lanes equal to the number of cars shall be used, and enough races shall be run to ensure that each car is run once on each lane.
6. If a car leaves the track, runs out of its lane, interferes with another car, loses an axle, etc., the heat will be rerun. If the same car gets into trouble on the second run, the contestant is disqualified and automatically loses the race. If, on the second run, another car is interfered with, the heat will be run a third time but without the disqualified car.
7. All cars are returned to the pit area by the race officials after the heat.

### **GENERAL**

1. The Cub Scout motto is "Do Your Best".
2. Our objective is to promote healthy competition and good sportsmanship. The purpose of the event is for the enjoyment of the boys, to create a car with an adult, and have fun doing it. Most of all, "have fun and do your best".
3. Awards will be announced shortly after the finish of the derby.