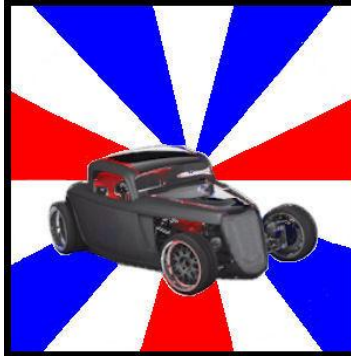


2010
Many Waters District Pinewood Derby
March 20, 2010
LOCATION: Maranatha Assembly of God Church
24799 Forest Boulevard, Forest Lake, MN

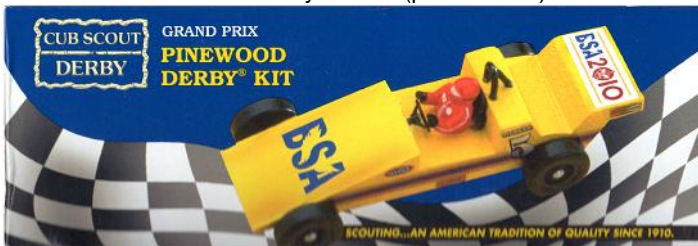


2010 Many Waters District Pinewood Derby
“Rules Of The Road”

General Rules

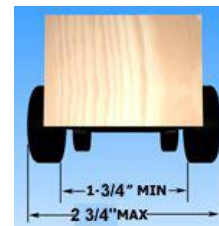
- Eligibility: All registered Cub Scouts in the Many Waters District, from Tiger Cub to 2nd Year Webelos; including those 2nd year Webelos that have qualified at the Pack level but have crossed over to a Troop prior to the District Race day. A total of 15 scouts from each Pack with no more than 3 scouts from each rank. If one of your top finishers can not attend please send an alternate.
- The race will be a timed event. The best accumulative time will determine the winner.
- After registration, inspection and weigh-in the car will be impounded. You will not be allowed access to your car until the end of the event.
- All cars must be newly built after September 1, 2009.
- Cars must be built by the Scout and his adult partner.
- **IMPORTANT:** Do NOT apply graphite to your car inside the racing facility. Do this at the Pinewood Derby Pit Area ONLY. NO Exceptions. The graphite will stain the floors and carpets.
- The Many Waters District Pinewood Derby Officials will disqualify any car that does not comply with **ALL** of these rules. If a car is disqualified, the Scout will be allowed to race the car during the “Elimination” phase of the races, but an official time will not be kept and the Scout will not be able to advance to the “Championship” phase of the races.
- During any race, if a car leaves its lane and interferes with another car or suffers any mechanical problems, the racer will be given a chance to repair the car, no times will be recorded and the race will be re-run. If the same car causes interference or breaks down again, the race will be re-run but without the offending car.
- Any dispute of these rules with regard to a specific car’s eligibility to race in the District Race will be decided upon by no less than three members of the District Pinewood Derby Committee. The Committee’s decision will be final.

BSA Official Pinewood Derby Car Kit (part #17006)



Car Body

- All cars must be built using the materials in the Official Pinewood Derby Racing Car Kit (part# 17006). With the exception of decorative and construction items (weights, glue, graphite, etc.) only materials from the official kit may be used. Items such as steering wheels, model drivers, spoilers, decals, painting and other details are permissible as long as these details do not exceed the maximum length, width, height and weight specifications. Loose materials of any kind are not permitted on the car. **Hobby Shop parts such as Pinocar, precut car bodies, Pinocar axles, Pinocar wheels, axle tubes, speed axles, bearings and springs are not allowed.**
- The maximum length of the car shall not exceed 7 inches.
- The maximum width (including wheels and axles) shall not exceed 2-3/4 inches.
- The maximum height shall not exceed 3 inches.
- The maximum weight of the car shall not exceed 5 oz's. (this is the same as 141.7 grams; however, weighing of the cars will be done using very precise scales OK'd by the District Pinewood Derby Committee).
- The minimum clearance between the bottom of the car and the bottom of the wheels shall be at least 3/8 inch so that the car can clear the center guide strip.
- No part of the car, including wheels, may extend past the front of the car body.
- The cars will rest against a starting pin; therefore the front of the car must not be smaller than 3/8 inch in width or have a cutout notch. The front of the car should not be any higher than 1/4 inch above the axle line.
- The minimum width between the inside surfaces of the wheels shall be 1-3/4 inches so that the car will clear the center guide strip.
- Car must have four (4) wheels. At least three (3) wheels must remain in contact with the track at all times.
- The wheelbase of the car may be extended.
- The car shall not ride on any type of springs and the car must be free wheeling with no starting device or other propulsion.



Axles

- Axles must be from the Official Pinewood Derby Racing Car Kit (part# 17006) or the Official Wheel/Axle Kit (part# 17007, 17553 – 17557).
- Axle imperfections (burrs and crimp marks) can be removed and axles can be polished. The axle dimensions may not be change substantially.
- The Axle head diameter may not be reduced. The axle head may not be change substantially.
- Axles must not be modified to the point that breakage could occur during the race.
- No Speed Axles, slotted axles, or axles with grooves.
- Axles may not be angled in the car body slots/holes that would cause the wheel not to run flat to the surface of the track. No canted wheels.
- Axles may be glued in place.



Acceptable

Axle Without Grooves



Unacceptable

Axle with Grooves



Wheels

- Wheels must be from the Official Pinewood Derby Racing Car Kit (part# 17006) or the Official Wheel/Axle Kit (part# 17007, 17553 – 17557).
- Wheels may be sanded or smoothed to remove imperfections and flattened but may not be reshaped or shaved. The tread must remain flat.
- The wheel diameter cannot be reduced.
- The wheel contact surface to the track must not be reduced.
- The wheel can have the bore of the hub (hole in center) cleaned of any obstructions.
- The original “tread marks” (rippled ridge edge) cannot be removed and must remain intact on the entire wheel.
- Wheel treads may not be rounded, tapered, grooved, shaped or positioned at any angle.
- Beveling, tapering, lathe turning, grooving or reducing the tread width of the wheels is not allowed.
- Wheel bearings, washers, Graphite Pads, bushings, Wheel Replacement Fins, Wheel and Hub covers are not allowed.
- Removal of any material from the wheel sidewalls or face is not allowed. The front outside wheel sidewalls & face must remain intact. All Wheels must have the “BSA” “Pinewood Derby” on the inside and outside sidewalls completely intact. Anything else will result in disqualification.
- Removal of material from the inside of the wheel is not allowed.

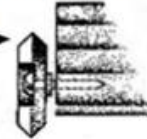
Acceptable Wheel Profile

Imperfections may be removed, but profile shall remain flat.

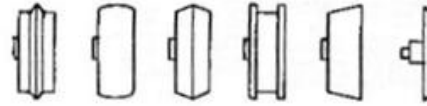


Unacceptable Wheel Profile

No Points



No Rounding



These Profiles and those deemed similar to them, will be grounds for disqualification.



Raised Letter Wheel (front)



Raised Letter Wheel (rear)

Lubricants

- Wet lubricants are not allowed: such as oils, silicones, waxes, or furniture polishes.
- Graphite Pads are not allowed.
- Use only dry lubricants; such as Graphite or Graphite/Moly Lubricant (dry).