

YMCA of Arlington  
Father Child Program

Pinewood Derby  
Car Specifications

To qualify for the race, all cars must pass the following inspection criteria:

These rules will be strictly adhered to. The official judges have the right to disqualify cars that do not meet the required specifications. In addition, the judges may interpret the rules as needed and for areas not specifically covered by the previous rules. All decisions by the judges are final.

1. A new racecar kit must be purchased from the YMCA of Arlington this year. Cars from previous years may NOT be entered again, unless a separate classification is available. *Please discard any instructions or criteria that may come with the racecar kit.*  
**Boy Scout Kits are not allowed**
2. The racecar must show signs of being made by both father and child.
3. All cars must meet the following dimensional specifications:
  - a. The front edge must remain straight at least ½" across the front for the starting block to function correctly.
  - b. The axles must be mounted in the grooves provided and these grooves may not be modified.
  - c. The maximum overall length shall not exceed 7". No extensions beyond the front or rear of the car are allowed.
  - d. The distance between the bottom of the wheels and the lowest point of the car shall not be less than 3/8".
4. The weight of the car shall not exceed five (5) ounces (141.748g). Ballast may be added to the car to achieve the maximum weight as long as they are securely fastened. Any plate ballast added to the bottom of the racecar should be carefully attached to ensure undercarriage clearances.
5. The original wheels and axles furnished with the car kit must be used.
  - a. Wheels may **NOT** be altered or modified in **ANY** way
  - b. ALL four wheels must touch and roll on a flat surface.
  - c. Bearings, washers, spacers, and bushings are prohibited.
  - d. Axles may **NOT** be altered or modified in **ANY** way
  - e. Polishing the Axle ends to remove ridges or defects **is permitted**.
6. No lubricating oil may be used. Axles may be lubricated with powdered graphite only.
7. The car must not ride on any kind of spring.
8. The car must be freewheeling with no starting devices.
9. Decorative accessories, paint and decals may be used on the cars within the size and weight limitations noted above. No loose materials of any kind are allowed on the car.

**To insure that ALL cars compete equally, there are no exceptions to the above specifications**