



Official Building Rules: Pine Car Derby

Sunday, March 11, 2007

Family YMCA, Birmingham, Michigan

Adventure Guides

Dimensions

1. **Length:** maximum length shall not exceed 7.25 inches
2. **Outside Width:** overall outside width shall not exceed 3.25 inches.
3. **Inside Width between wheels:** minimum width between wheels on each axle shall be 1.75 inches
4. **Bottom clearance:** the bottom of the car should be 3/8 inch above the ground to prevent interference with the center guide track.

Weight

1. **Maximum:** weight shall not exceed 5 ounces (142 grams) on the Official Race Scale.
2. **Securing weights:** additional weight must be securely built into the body of the car or firmly affixed to it.
3. **Weight materials:** lead and other toxic materials should be avoided

Wheels and Axles

1. Only the official YMCA's Pinecar Derby kit wheels (black) and axles may be used. Kits must be purchased from the Birmingham YMCA. No white, clear or red wheels are allowed!
2. Beveling, tapering, sanding thin, wafering, or lathe turning of the wheels is prohibited.
3. Wheel bearings are prohibited.
4. Wheel covers are prohibited.
5. Axles may be lubricated with graphite powder, silicone, etc.
6. Spacer washers are acceptable
7. Original axle grooves must be used and cannot be moved.

Nose

1. The nose shall not be concave as viewed from above
2. A minimum of 0.25 inch flat is required to insure proper starting alignment

Lubrication

1. Cars may not be lubricated after inspection.
2. There are no restrictions on the type of lubricant.

Miscellaneous

1. Paint must be dry at the time of inspection.
2. The cars must be freewheeling with no starting device or others means of self-propulsion.
3. Cars made for a previous year are not permitted. Parts or wheels from a previous year are not permitted.

Inspection

1. Each car must pass inspection by the official inspection team before competing
2. The inspection team has a right to disqualify cars that do not meet those rules.
3. Car owners will be informed of the violation and given an opportunity to modify the car to meet the above rules.