GROWN-MAN PINEWOOD DERBY

OFFICIAL RULES & REGULATIONS

Saturday, January 23, 2027 | 3:00 PM
West Lawn UMC Community Center | Open to men ages 18 and older

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1. Registration & Participation

- **Registration deadline:** Sunday, January 17, 2027. Advance registration is required; registration is free.
- Each participant may enter **one car per division** (Stock and Modified), for a maximum of two cars.
- Participants supply their own Pinewood Derby kits and materials, available online and through various retailers.
- All cars must pass inspection and weigh-in before racing.

2. Racing Divisions

- **Stock Division:** Traditional Pinewood Derby racing with standard construction rules and specifications.
- **Modified Division:** Greater freedom for creative designs, alternative materials, and custom engineering.

All cars must be powered exclusively by gravity, without additional propulsion mechanisms.

3. Stock Division - Specifications & Rules

Car specifications

Maximum weight	**5 ounces**
Maximum length / width	**7 inches / 2¾ inches**
Maximum height	**Less than 3½ inches**
Minimum width between wheels	**1¾ inches**
Minimum bottom clearance	**⅜ inch**
Wheelbase	**Standard 4⅜ inches**
Minimum front-end width	**½ inch**

Construction rules

1. Cars must use an official Pinewood Derby kit, including the original wood body, wheels, and axles.
2. The wood body may be cut, shaped, painted, and decorated. Secure additional weights are permitted within the 5-ounce limit.
3. Only official wheels and axles are permitted. Axles may be lightly filed, sanded, and polished, but not bent; nail heads must remain visible.
4. Wheels may be lightly sanded or polished to remove imperfections. Cutting, honing, narrowing, or reshaping wheels is prohibited.
5. All four wheels must be installed and touch the track. Original axle slots and wheelbase must be maintained.
6. Bearings, bushings, washers, and suspension springs are prohibited.

4. Modified Division - Specifications & Rules

Car specifications

Maximum weight	**10 ounces**
Maximum length / width	**7 inches / 2¾ inches**
Maximum height	**Less than 3½ inches**
Minimum bottom clearance	**⅜ inch**
Wheelbase / wheel configuration	**Unrestricted, subject to safe track operation**
Minimum front-end width	**½ inch**

Construction rules

1. Cars may use wood, metal, plastic, 3D-printed parts, or combinations of materials.
2. Custom wheels, axles, bearings, bushings, and other performance modifications are permitted. Wheels and axles may be reshaped or repositioned.
3. Unconventional wheel arrangements (three, five, six, or more wheels) are permitted if the car safely clears the guide rail, starting gate, and finish-line equipment.
4. Springs and suspension systems are permitted only if they do not contribute to propulsion.
5. Creative bodies, aerodynamic features, wings, spoilers, and decorations are encouraged within the size and weight limits.
6. **Gravity is the only source of propulsion.** No motors, compressed air, rockets, spring-powered propulsion, or stored-energy propulsion mechanisms.

5. General Construction & Safety

- Only dry lubricants (such as graphite or dry PTFE) are permitted; wet lubricants are prohibited.
- Cars must be free-wheeling and run without external assistance.
- All weights and components must be firmly attached, with no sharp edges or features that could damage the track.

6. Inspection & Weigh-In

Race-day check-in: 2:00-2:45 PM

- Officials will inspect each car against its division specifications; the official race scale determines weight.
- Cars that do not pass may be adjusted and reinspected before check-in closes.
- Approved cars remain in the designated pit area. No further modifications or lubrication after inspection except authorized repairs.

7. Racing & Scoring

Racing takes place on the church's **three-lane, 32-foot Derby Magic track** with electronic timing.

1. **Three timed races:** Each car runs once in each lane.
2. **Average time:** The three elapsed times are averaged. The lowest average time wins within each division.
3. **Awards:** First, second, and third place are awarded separately in Stock and Modified.
4. **Tiebreakers:** Ties affecting awards are settled by a three-race runoff, once in each lane; lowest runoff average wins.

8. Mechanical Failures & Repairs

- If a car breaks or is damaged during racing, its owner has up to **five minutes** to repair it.
- Repairs may restore function but not improve performance; repaired cars must be reinspected.
- Cars that cannot be repaired in time will be withdrawn from racing.
- If a car jumps the track or interferes with another, officials may rerun the heat; repeated problems may require repairs or withdrawal.

9. Awards & Prizes

Stock Division: First, Second, Third | **Modified Division:** First, Second, Third

Best in Show: Attendees vote for the most creative or impressive car, regardless of division.

Prizes may include gift cards to local stores and restaurants and certificates waiving registration fees for:

- Men's Mission Trip to North Carolina - February 28-March 5, 2027
- Summer Mission Trip to North Carolina - July 25-August 1, 2027
- Men's Retreat at Pocono Plateau - October 1-3, 2027