

Pinewood Derby

Pack 140 Official Rules & Regulations

Pack 140 Motto for Race Day

Build it. Race it. Do Your Best.

The Pinewood Derby is one of Cub Scouting's most exciting traditions. Scouts build their own miniature race cars and compete in a fun and friendly competition that emphasizes craftsmanship, creativity, and good sportsmanship.

These rules ensure a fair and enjoyable event for all participants.

1. Sportsmanship

The Pinewood Derby is about fun, creativity, and learning. As Cub Scouts, we race not just to win, but to do our best. Each car represents the time, effort, and imagination of a Scout and their family, and every racer deserves encouragement and respect.

Our Pack follows the ideals of the **Scout Oath and Scout Law**, which guide how we compete and how we treat one another. We celebrate good effort, cheer for every racer, and remember that we are not just individuals racing cars—we are **Pack 140**, a team and a community.

2. Conduct

On race day, Scouts and families are expected to encourage one another, respect all participants, and honor the decisions of race officials. When we race with fairness, kindness, and good sportsmanship, everyone wins.

3. Eligibility

- The Pinewood Derby is open to all registered **Pack 140 Cub Scouts**.
- Each Scout may enter **one car** in the race.
- Cars should be newly built for the current scouting year.

4. Official Car Kit

- Cars must be built using the **official BSA Pinewood Derby kit** provided by Pack 140 or purchased from an official Scout retailer.
- The car body must be made primarily from the **wood block included in the kit**.
- The **official wheels and axles from the kit, or from ticket redemption, must be used**.

5. Car Dimensions

Cars must meet the following specifications in order to race.

- **Maximum Length:**
7 inches
- **Maximum Width:**
2¾ inches
- **Maximum Weight:**
5.0 ounces
- **Minimum Clearance Under Car:**
Approximately ⅜ inch (to clear the center guide rail)

The Race Committee will use the **official Pack 140 scale** to determine weight.

6. Wheels and Axles

- Only the **official Pinewood Derby wheels and axles** from the kit, or acquired thru ticket redemption, may be used.
- Wheels may not be replaced with aftermarket wheels.
- Wheels may be lightly sanded or polished to remove imperfections.
- Axles may be polished.

- The following are **NOT permitted**:
 - Ball bearings
 - Bushings Springs
 - Washers
 - Wheel bearings

7. Lubrication

Only **dry lubricants** may be used.

Allowed:

- Graphite
- Dry silicone

Not allowed:

- Oil
- Grease
- Wet lubricants

Lubrication must be applied **before the car passes inspection**.

8. Added Weight

- Cars may be weighted to reach the **5 ounce maximum**.
- Weights must be securely attached to the car.
- No loose or moving weights are permitted.
- Any material may be used for weighting provided it is safely secured.

9. Inspection

All cars must pass inspection before racing.

The inspection team will check:

- Weight
- Length and width
- Wheel clearance
- Overall safety

Cars failing inspection may be modified during the **official check-in period**.

Once a car passes inspection and is checked in, **it may not be modified further**.

10. Race Format

Pack 140 uses a **4-lane track with electronic timing**.

To ensure fairness and give every Scout multiple chances to race:

- Each car will race **once in each lane** for a total of **four heats**.
- The **elapsed time** for each run will be recorded by the track timer.
- Final rankings will be determined using the **average time of all four runs**.

This format ensures that:

- Every Scout races multiple times
- Lane differences do not affect results
- The fastest car overall wins

11. Award Trophies

- 1st place speed
- 2nd place speed
- 3rd place speed
- Best-In-Show (plurality vote)

12. Tie Breakers

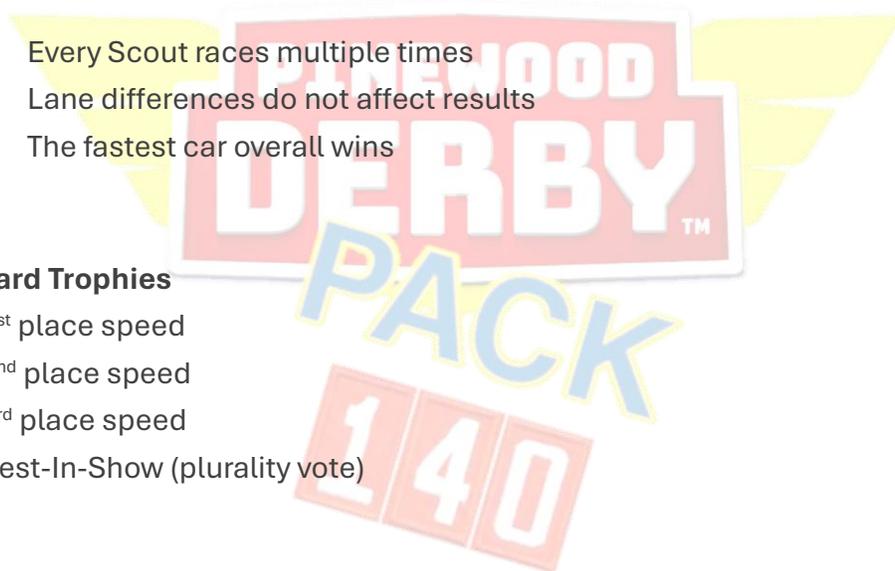
If two cars finish with identical average times:

- The **single fastest heat time** will determine the winner.
- If still tied, a **head-to-head runoff race** will be held.

13. Handling Cars

After inspection:

- Cars will remain in the **race staging area**.
- Only race officials may handle the cars.
- Scouts may retrieve their cars **after the race concludes**.



Pack 140 Pinewood Derby

Car Inspection & Check-In sheet

Scout Name: _____

Den / Rank: Lion Tiger Wolf Bear Webelos Arrow of Light

Car #: _____

Official Weight: _____ Oz.

Inspection Item	Pass Adjust	
Weight 5.0 oz or less	<input type="checkbox"/>	<input type="checkbox"/>
Length ≤ 7 inches	<input type="checkbox"/>	<input type="checkbox"/>
Width ≤ 2¾ inches	<input type="checkbox"/>	<input type="checkbox"/>
Minimum clearance under car (~3/8")	<input type="checkbox"/>	<input type="checkbox"/>
Official BSA wheels used	<input type="checkbox"/>	<input type="checkbox"/>
Official BSA axles used	<input type="checkbox"/>	<input type="checkbox"/>
No bearings / bushings / springs	<input type="checkbox"/>	<input type="checkbox"/>
Wheels rotate freely	<input type="checkbox"/>	<input type="checkbox"/>
No loose parts or weights	<input type="checkbox"/>	<input type="checkbox"/>
Car appears safe for track	<input type="checkbox"/>	<input type="checkbox"/>

If adjustments are needed, they must be completed before final check-in.

Re-inspection completed: YES

Final Approval

Car is approved for racing.

Inspector Signature: _____

Date: _____