



Li'l Rascals Gravity Gran Prix

2024 Official Rules

Gravity Gran Prix

Rev 11.08.23

Welcome to Soap Box Derby Racing. We think you'll find that this is a fun, cheap, and safe way to build and race your own car.

DRIVER'S CHECKLIST 2024

- **Registration, inspection and weigh-in** Saturday, 8/31/24 at 2:00 pm, 500 E 100 S, Payson.
- **Driver's meeting** will be held at the ramp at about 2:50 and racing begins at 3:00. We will be racing for about an hour.
- **Awards and pictures** are right after the race.

We have tried to streamline this event as much as possible. There is no entrance fee or pre-registration. Cars are electronically timed so they can run in any order—no need to conform to brackets. After each heat drivers will be towed to the top of the hill and should get right back in line to race again.

ELIGIBILITY AND REGISTRATION

The 2024 Li'l Rascals Gran Prix will be held Saturday, 8/31/24, at 3:00 pm, just south of Peteetneet School on 100 S. The race is open to everyone, regardless of age or gender. Non-residents of Payson City are welcome. Sponsors are allowed and company names, logos, etc. may be displayed on the cars.

There is no fee to race. Registration is the day of the race at 2:00 pm at 500 E 100 S (SW corner of Peteetneet). It includes an inspection and weigh-in and signing a waiver. Every driver will be issued a badge with an assigned number upon registering. This is used to track race results. Please wear it in a conspicuous place.

Competitors are divided into three divisions. Ages are not fixed, but rough guidelines are:

Colt Division: 8-13 years; Mustang Division: 13-17 years; Bronco Division: 18 years and older.

One car may be run by multiple drivers in multiple divisions provided it meets the weight requirements for each division in which it is competing. (All ballast must be bolted or otherwise securely fastened.)

GENERAL INFORMATION

Racers are to be completely gravity powered. No starting or propulsion devices of any kind are allowed. Driver must be in a seated position. No head-first configurations are allowed. Reclining to any degree is acceptable as long as driver visibility is not impaired.

Some hints and guidelines for building soap box derby cars are available on the internet. Be aware, however, that this event is in no way affiliated with The ALL-AMERICAN SOAP BOX DERBY and rules and specifications for those events do not necessarily apply.

If you have questions or comments Frank Leany at 801-477-4230 or by e-mail at fleany@gmail.com. Information, tips, and links are available at Derby.Leany.com.

VEHICLE SPECIFICATIONS

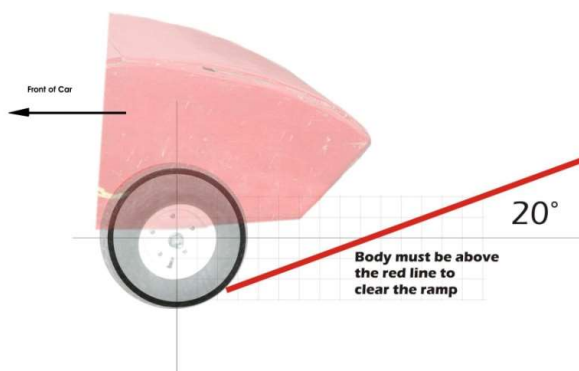
	Minimum	Maximum
Track width (outside of tires)*	24 inches	36 inches
Vehicle height	2" ground clearance	48 inches
Seating surface height	(2" ground clearance)	12" above road surface
Total vehicle length	60 inches	96 inches
Wheelbase	45 inches	72 inches
Vehicle Weight		
Colt (8-12 yrs.)	- none -	275 lbs. with driver
Mustang (13-17 yrs.)	- none -	340 lbs. with driver
Bronco (18+ yrs.)	- none -	400 lbs. with driver

**Width of body cannot project beyond maximum width*

All weight must be bolted or otherwise securely attached. No loose ballast is permitted.

Cars may be made of any material. Any metal frame elements that extend beyond the wheels must be properly blunted with a cross bar to prevent piercing in the event of a crash. Sheet metal on the body is okay. Axles and other components may be steel.

Road clearance must be no less than 2". To clear the ramp the ends of the car must be above a line 20° from horizontal from the wheel centerline. That equates to a rise of 6-1/2" at a point 18" behind (or in front of) the wheels. (4-3/8 at 12", 8-3/4 at 24")



Car must have 4 wheels and all four wheels must be in contact with the track at all times.

Cars will be towed up the ramp after each race, so a tow hook (eye bolt) should be provided for the tow strap. The hook must meet the clearance requirements outlined above.

WHEELS

This is a spec wheel event. All racers must run the specified wheels. Wheels are Harbor Freight pneumatic tires 13" x 4" with integral bearing wheels. The Harbor Freight part number changes from time to time, but it is the wheel pictured below:



Wheels fit on a 5/8" axle. A 5/8" bolt 4-1/2" long is just the right size to go through the hub. Wheels must have some sort of locking arrangement on the nut such as a pin, locknut, or an additional nut.

Wheels may be trued, balanced, etc, but no material may be removed from the wheels other than that necessary to balance. Wheels may be lubricated, but no modifications to the bearings are allowed. Any tire pressure is allowed.

BRAKES

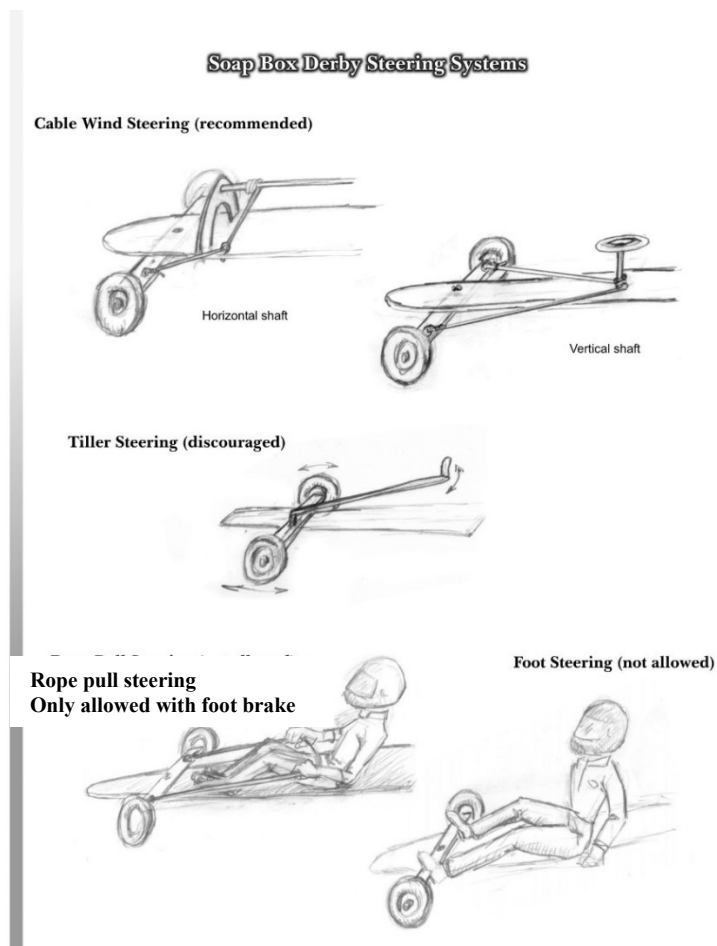
All vehicles must be equipped with adequate brakes to stop the car. The driver must be able to steer while braking. Braking tests will be conducted at the inspection to ensure that they are satisfactory. Cars without adequate brakes will not be allowed to race. Consideration will be made for those with physical limitations.

STEERING

Steering must be positively controlled. Driver should be able to steer with one hand. Pivot axle steering must have limiters that prevent the car from turning a radius tighter than 15 feet. Careful consideration should be given to the steering ratio (angle of steering wheel turn to angle of front wheel pivot) to ensure that the steering is not too sensitive.

Attachment points for the steering must be positively secured along the axis of force of the cable. Screw in eyebolts will only be permitted into solid wood—not laminate or pressed wood.

Rope pull steering is allowed **ONLY** with a foot brake. Driver must demonstrate he can control the car while stopping. Foot steering is not allowed. Cable wind steering (a cable wrapped around a cylinder that pulls on the axle as the shaft is turned) is recommended as an easy way to positively steer. Tiller steering is discouraged, especially if the car is equipped with a hand brake.



SAFETY

All drivers must wear an approved automotive or motorcycle helmet (DOT, Snell, etc.). Bicycle helmets are not allowed. Cars should have some type of floors and body structure to prevent the driver from accidentally coming into contact with the pavement. The vehicle must not have any sharp projections, loose parts or edges that might pose a safety hazard. All ballast must be securely fastened and cannot move, accidentally or with driver intervention, during the race. Anything inside the cockpit that could injure the driver in the event of a crash should be padded. Seat belts are not required.

Care should be taken to ensure that the center of gravity of the vehicle is as low as possible. The maximum height of the seating surface is 12" above the road surface. Well below that is recommended.

To maintain the safety of the event additional requirements may be imposed as conditions warrant.

Visit derby.leany.com for more information.



derby.leany.com

SPIRIT OF FAIR COMPETITION

The objective of this event is to provide fun for everyone regardless of resources. To that end the rules strive to provide maximum safety and fair competition with the fewest requirements possible.

To maintain the spirit of the rules, the racing committee will pass judgment on issues that arise that are not specifically addressed in the rules. If you have a question about whether something is appropriate, *ask*. A phone call now could prevent a disqualification at inspection time. As clarifications are made, they will be applied universally to all participants.

INSPECTIONS

The inspection will be performed at 2:00 pm on race day. Winning cars in each heat may be inspected after the heat to ensure that they conform to the rules. Helmets will also be inspected; they must be Snell or DOT approved.

RACE PROCEDURE

Unload cars on 500 E just before 100 S. Park your trucks and trailers on 500 E between 100 S and Utah Ave. Inspection and weigh-in takes place there.

Registration is just around the corner on the NW corner of the 500 E/100 S intersection.


Once your inspections is complete, waiver is signed, and you are entered into the computer you will be issued a badge. This badge is the indicator that you can race. Please wear it in a conspicuous place.

Drivers can race in any order without regard to division. After each heat cars will be towed to the top. Get back in line for your next race. If you feel like you aren't getting as many runs as others, please say something and we will work you in.



INSPECTION AND WAIVER

This is the form that is to be completed for the badge to be issued. The inspector will examine the car and helmet and fill out the top half of the form. Please read the waiver carefully before signing.

 Derby Car Inspection		Car Number or Name
<input type="checkbox"/>	1. Steering, turning radius >15'	
<input type="checkbox"/>	2. Brakes	
<input type="checkbox"/>	3. Body fully enclosed, seat ht. <12"	
<input type="checkbox"/>	4. No starting devices	
<input type="checkbox"/>	5. No sharp edges, protrusions, etc.	
<input type="checkbox"/>	6. Spec Wheels, positively secured	
<input type="checkbox"/>	7. Approved helmet	
<input type="checkbox"/>	8. Other _____ (Towhook)	
Weight	Driver 1	
	Driver 2	
	Driver 3	
Max weight Colt division: 275 lbs. Mustang division: 340 lbs. Bronco division: 400 lbs. Suggested age Colt division: 8-12 Mustang division: 13-17 Bronco division: 18+		
Inspected by: _____		Date: _____
Waiver and Release of Liability		
<p>The undersigned does hereby release, waive, and forever discharge Payson City, its assigns, employees, agents or representatives from and against any and all liability for any harm, injury, damage, causes of action or costs and expenses of any nature for which Participant may have or which may hereafter accrue to the Participant, arising out of or related to any loss, damage, or injury, that may be sustained by Participant in conjunction with Participant's involvement in this activity.</p> <p>Racing involves inherent risks that may include death or injury. Participant has signed this Release in full recognition and appreciation of the dangers, hazards and risks involved with the Activity.</p> <p>Participant certifies that she/he is physically fit and in good health and has not been advised otherwise by any qualified medical personnel. Participant is not aware of any health-related reasons or problems, which would preclude or restrict Participant's ability to take part in the Activity.</p>		
Driver Name	Signature	Guardian (if under 18)
Driver Name	Signature	Guardian (if under 18)
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<div style="display: flex; justify-content: space-between;">Gravity Gran Prix Derby Car InspectionForm printed 10/24/2023</div>		