## **Soapbox Cars**

The design of the cars is up to the builders. Should you be fortunate enough to have access to a soapbox car stored and half-forgotten in a barn or attic somewhere, you may be able to use it but all cars for the Town of Valleyview Soap Box Derby must meet the specifications described herein. Builders should keep in mind that they should be built with the intended driver in mind.

Trophies will be awarded to the winners.

BE CREATIVE.....Soap box cars will also be judged and awarded trophies in the following categories:

- Engineering
- Most Original
- People's Choice
- 1. Soapbox cars are powered by gravity only NO ENGINES OR MOTORS
- 2. The driver must sit in the car, facing forward and control the car using only hands and/or feet
- 3. The car must fit the driver. Drivers must be able to get in and out of the car and operate the steering and braking in the normal seated position without stretching or straining
- 4. The center of gravity, with the driver in place, should be as low as possible without violating the minimum road clearance (2.5") specification (including brake)
- 5. Cars must have four wheels. Minimum diameter is 6 inches. Wheels from manufacturers may not be modified but must be used "as is". Wheels may not be made of wood
- 6. Measures must be taken to prevent wheels from departing the cart when in use. Use cotter pins or other positive means to keep the wheels in place
- 7. Fasteners used in the steering and brake systems must be prevented from loosening when in use by the use of lock nuts, cotter pins, wire tying or other means
- 8. Maximum overall cart length is 72"
- 9. Maximum wheel base (distance between front and rear axles) is 56"
- 10. Maximum car body width is 40"
- 11. Maximum axle length is 44"
- 12. Road clearance to any part of the car, including fasteners, must be 2.5" minimum
- 13. Minimize front and rear overhang to prevent getting hung up on the starting ramps
- 14. All basic structure parts must be securely fastened to each other using bolts, screws or other suitable hardware. Plywood and solid wood are permitted structural materials. Particle or strand board type board is not permitted for any structural part. The basic structure is defined as the chassis on which the driver sits and to which the axles, steering and brake mechanisms, and body shell are attached. The car body or shell may be part of the basic structure. It must be made of rigid, impact resistant material
- 15. Back and forth movement of either front wheel shall be limited to 1-2 inches. Stops must be installed to prevent over steering. Steering movement must be smooth

- 16. The car must have a braking system capable of slowing the car to a smooth, short and safe straight line stop without damaging the road surface. If using drag clutches, the part touching the road must be made of wood or rubber
- 17. Cable links used in steering and brake systems must be secured and not slip under any stress
- 18. Adjusting hardware, such as turnbuckles, must be lock wired in the final adjusting position
- 19. The drivers lower torso, legs, and feet should be within the body shell. The driver should not be able to contact the road surface or the wheels when seated in the normal operating position of the car
- 20. There shall be no exposed sharp edges or points. Exposed edges that may be contacted by the driver shall be smooth. Protective cushioning material may also be fitted
- 21. Cars MUST have hooks on the front and back strong enough to pull the cars back up the hill
- 22. Build a stiff, non flexing basic structure
- 23. Try to keep cars light, but tough and strong. DO NOT ADD ADDITIONAL WEIGHT
- 24. It is recommended to incorporate hand holds for ease of handling
- 25. It is vitally important that the car can be driven repeatedly without steering and brakes adjustment
- 26. Test the steering and brake mechanisms for strength and repeatable, smooth operation
- 27. Test the cart on a sloping surface. Make certain, through testing, that the intended drivers can safely operate the car. DO NOT SHOW UP AT THE DERBY WITH AN UNTESTED CAR OR DRIVER

The specifications sheet may seem daunting, but it isn't. Help is available for any questions that you may encounter while building your car. Contact Bill Lanktree at 780-524-8598

## Race Rules

- 1. Soap box cars must meet the Construction and Safety Guidelines as described herein.
- 2. Participants MUST pre-register by September 6, 2024. Entries WILL NOT BE ACCEPTED AFTER THIS DATE.
- 3. Participants must be born on or before September 6, 2018.
- 4. Participants must be available and ready on race day at the starting location at 530 pm and remain available to race at any time until all of his/her races are finished. Participants who are not available when required to race may be eliminated from further competition. A listing of drivers will be posted.
- 5. Cars may be inspected prior to each race to ensure they are deemed safe for racing. Ruling by the inspectors shall not be challenged. Cars rejected by the inspector must be immediately removed from the starting location.
- 6. When racing, drivers must wear shoes and a helmet with a chin strap.
- 7. The race judges decisions are final and shall not be contested.
- 8. By virtue of their registration, participants, or the parents or guardians of participants who are minors, have agreed to render harmless the Town of Valleyview and volunteers assisting with the event of any consequences arising from participation in the derby.

