IVINS CITY HERITAGE DAYS SOAPBOX DERBY RULES AND REGULATIONS

There are five basic requirements for derby cars and participants:

1. Gotta Go!

* Each derby car must be gravity powered. No motors or engines. Cars will be started from a standstill at the starting line with no ramps but may be allowed a single standing push. Cars must be no longer than 6 feet, no wider than 4 feet, and height must be less than the width. There are no limitations on materials or designs but most are generally made of wood. When using wood it is suggested that you use screws rather than nails and be sure to use plenty of wood glue. All cars must have four wheels (max.20 inches) and each must touch the ground at all times. *Cars should be built to endure several races without major adjustments.*

2. Gotta Turn!

* Simple pivot steering is the most basic and common steering system. Basically, the front axle is a solid piece that rotates about a single pivot in the center. This system is the most simple to construct and is quite adequate since you will not need a big turning radius.

* Four bar linkage is like a steering mechanism that you might find in your automobile. It is more complex and harder to construct and thus it is seldom recommended. Whatever method of steering you use, it is not wise to limit it to the range of your car. The derby will be run on a straight course so that there will be little need for sharp turns. Please do NOT design your car to turn on a dime, it is not safe and may cause your car to flip.

3. Gotta Stop!

Your car MUST have a breaking system capable of slowing the car to a smooth, short and safe straight line stop without damaging the road surface.

* Skid pad on the wheels is a very basic, yet very effective braking method. In this method, you set up a pad or brake shoe that rubs against the wheels to stop the car. This is the most preferred method for cars made from scratch because of its effectiveness and simplicity.

* A skid pad on the ground is similar to the first option, but instead of a pad contacting the wheels, it contacts the ground. This method is a little more complex to construct and probably less effective than the pad on the wheels method. However, this is the method that was first used in soapbox racers.

* Caliper brakes on the wheels are like your basic bicycle brakes. This method works great although the construction needs to be fairly concise for the brakes to be effective.

* Anchor or parachute could be used - but, <u>Just for fun!</u> Regardless of the braking system that you choose the most important thing is that the car must be able to stop. Good brakes will go a long way in preventing crashes.

4. Gotta be Safe!

* Helmets (with chin strap) are a must! Please do not alter helmets in any way that would change their effectiveness. **Cars will not be allowed on the track unless the driver is wearing a helmet.** Elbow pads are also strongly encouraged. It is also recommended that the driver wear long sleeves and pants and close-toed shoes to reduce possible road-rash.

* Driver must sit in the car, facing forward, and control the car using only hands and feet. The driver should not be able to contact the road surface or the wheels when seated in the normal operating position.

Cars must have had a test run prior to day of race to ensure ability for safe driving.

5. Gotta have Permission!

* <u>ALL DRIVERS</u> must sign a waiver/permission form prior to their race. All drivers under the age of 18 must have the permission slip signed by their parent. These forms can be obtained at time of car registration or the morning of the race at check-in.

* A car may be entered in both age categories, which are 7-15 and 16 and up, but must have a driver that meets that age requirement.

IVINS CITY 2017 HERITAGE DAYS SOAPBOX DERBY ENTRY FORM

Name of Participant	Age
Address	Telephone number
Please list identifying information on your car. (Color, name or nu	umber)
Name of Parent or Legal Guardian (if under 18)	Telephone number
 Please check each box as you have reviewed th I have read and understand the rules and regulat comply. My car will be constructed as outlined (have work considered eligible to drive. I will have performed a test run with my registered condition-ready to race) prior to racing day. A test provided if you desire to use it. I agree to conduct myself appropriately, demonst refraining from inappropriate conduct, and will accertacing judges will be final and uncontested. 	tions of the derby and agree to king steering and brakes) and be d derby car (in its completed <i>run date, time, and place will be</i> trating good sportsmanship and

I acknowledge all personal information to be correct and agree to the terms listed above.

Signature of Applicant or Parent / Guardian if under 18 years of age.

Date

IVINS CITY 2017 HERITAGE DAYS SOAPBOX DERBY waiver & permission form

Name of Driver	Age
Address	Telephone number
Name of Parent or Legal Guardian (if under 18)	Telephone number

Please check each box as you have reviewed the information.

□ In consideration of my desire to be a participating driver in the 2015 Heritage Days Soapbox Derby race and after having read and agreed to all the terms of the Derby's rules and regulations, I waive any and all claims for myself and my heirs against Ivins City, Ivins City officials, and any volunteers and sponsors of this event for any injury or illness which may directly or indirectly result from my participation. I further state that I am in proper physical condition to participate in this event.

□ I agree to conduct myself appropriately, demonstrating good sportsmanship and refraining from inappropriate conduct, and will accept that all decisions made by the racing judges will be final and uncontested.

Signature of Applicant

Signature of Parent / Guardian if under 18 years of age.

Date