



**OFFICIAL REGISTRATION PACKET**  
**THE IMMANUEL DOWNHILL DERBY**

1300 East Beltline, SE  
Grand Rapids, MI 49506

**Derby Day is Saturday, June 4, 2016**  
**Rain Date is Saturday, June 18, 2016**

The Immanuel Downhill Derby is open to the entire community!  
Anyone age 6 to 90 is welcome and encouraged to participate!

Registration is through the Immanuel Reformed Church derby committee.  
The registration fee is **\$15** per driver. Checks should be made payable to Immanuel Reformed Church.  
ALL DRIVERS MUST SIGN THE LIABILITY WAIVER BEFORE RACING.

Competitors are divided into four classes.

**Colt class:** 6-11 years

**Mustang class:** 12-17 years

**Stallion class:** 18-49 years

**Super Stallion class:** 50 years and older

A single car may compete in multiple age classes but **a car may not be registered more than once in the same age class.**

### Car Building

Car Construction and Specifications for building a derby car are available in a separate packet.

A car building day will be held on **Saturday, May 14** in the upper parking lot.

There is a \$40 charge for materials. Since Immanuel does not want this to be a hardship for anyone, scholarships are available to help cover this cost.

Any questions concerning building instructions or supplies should be directed to Bob Hager at 616-949-0719 or 616-890-5122.

### Inspections and Practice Runs

AT LEAST ONE PRACTICE RUN is REQUIRED for all new participants and encouraged for returning drivers. We want drivers to feel comfortable with the course, the ramp and to also practice steering and braking the car. The practice runs will also allow time for any modifications to be made to the derby cars before race day. Please **bring your car and helmet** to the Immanuel Reformed Church upper Parking Lot on the any of the following dates:

**Wednesday, May 25 6:00-7:30 pm**

**Thursday, June 2 6:00-7:30 pm**

**Friday, June 3 5:00-7:00 pm**

The 2016 derby committee

Bob and Linda Hager at 616-949-0719 or [rlhager@sbcglobal.net](mailto:rlhager@sbcglobal.net)

Fred Winter at 616-466-3085 or [f\\_winter@msn.com](mailto:f_winter@msn.com)

Dan Haskins at 616-365-0030 or [dhaskins@procaresystems.com](mailto:dhaskins@procaresystems.com)

Jil Le at 616-340-6495 or [jillellenle@gmail.com](mailto:jillellenle@gmail.com)

## IMMANUEL DOWN HILL DERBY DRIVER REGISTRATION FORM

Name of Driver:	Age of Driver:
Mailing Address:	Telephone Number: E-Mail:
Please list car number and/or identifying information that will be on your car (color, name, markings, etc.)	
Name of Parent or Legal Guardian:	Telephone Number: E-Mail:
Please check each box indicating you have read the information below:	
<input type="checkbox"/> I have read and understand the rules and regulations of the derby and agree to comply. <input type="checkbox"/> I agree to pay the required registration fee. <b>(checks payable to Immanuel Reformed Church)</b> <input type="checkbox"/> I agree to conduct myself in an appropriate manner and demonstrate good sportsmanship. <input type="checkbox"/> I or my legal guardian have signed the appropriate waiver/release form and agree to abide by it.	
This completed form along with your Registration fee of <b>\$15 per driver</b> can be turned in to the derby committee or mailed to Immanuel Reformed Church <b>DERBY</b> , 1300 E. Beltline, SE, Grand Rapids, MI 49506	

### Activity Participation Agreement Immanuel Reformed Church 2016 Downhill Derby

**Participant Information** *(To be completed by participant or authorized guardian)*

Name of participant: \_\_\_\_\_

Name of parents/guardians: \_\_\_\_\_

**Participation Agreement**

I acknowledge that participation in the activity identified above involves risk to the Participant (and to Participant's parents or guardians, if Participant is a minor), and may result in various types of injury including, but not limited to, the following: sickness, bodily injury, death, emotional injury, personal injury, property damage and financial damage.

In consideration for the opportunity to participate in the activity described above (the "Activity"), the Participant (or parent/guardian if Participant is a minor) acknowledges and accepts the risks of injury associated with participation in the Activity.

The Participant (or parent/guardian) accepts personal financial responsibility for any injury or other loss sustained during the Activity, as well as for any medical treatment rendered to the Participant that is authorized by the Sponsor or its agents, employees, volunteers, or any other representatives (collectively referred to hereinafter as the "Activity Sponsor"). Further, the Participant (or parent/guardian) releases and promises to indemnify, defend, and hold harmless the Activity Sponsor for any injury arising directly or indirectly out of the described Activity, other than for the willful, wanton or reckless misconduct of the Activity Sponsor.

The Participant (or parent/guardian if Participant is a minor) also gives permission to the Activity Sponsor to photograph the Participant during these activities and to use those photographs in Sponsor publications or media presentations.

If a dispute over this agreement or any claim for damages arises, the Participant (or parent/guardian) agrees to resolve the matter through a mutually acceptable alternative dispute resolution process. If the Participant (or parent/guardian) and the Activity Sponsor cannot agree upon such a process, the dispute will be submitted to a three-member arbitration panel for resolution pursuant to the rules of the American Arbitration Association.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(Participant)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(Parent or guardian)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
(Parent or guardian)



## RACE DAY SCHEDULE AND INFORMATION

**Saturday, June 4, 2016**

**Rain Day will be Saturday, June 18, 2016**

Parking for the race will be in the Immanuel Reformed Church UPPER parking lot only. Access will be from our **Lake Drive Entrance only** which will be clearly marked for those unfamiliar with the driveway location.

**11am-12:30pm:** Registration for **every** driver is in the church lobby. You will receive a scorecard and lanyard at this time that every driver will wear during the race.

Each car will be displayed in the upper parking lot with a sign indicating a name and/or number that is unique to your car only. During this time, people can cast votes for their favorite car design.

**11am-1:00pm:** Grilled Hot Dog lunch with side dishes and beverages will be served for a free will donation.

**11:30am-1:00pm:** Everyone can cast a vote for your favorite designed car. Voting slips will be available by the car display area in the upper lot. Just place your vote in the marked container. The top 3 will be winners of the People's Choice awards.

**12:30pm:** Drivers meeting and opening prayer at the Finish Line

**1:00pm-4:00ish pm:** Races Begin! The *Colt Class* races first, followed in order by the *Mustang, Stallion, and Super Stallion Classes*.

Cotton Candy, sno-cones and popcorn will be available in the lower lot.

### Race procedures


For every class, each car is guaranteed 2 heats (one in each lane) with heats consisting of 2 cars each. The fastest time will be recorded for each car out of both heats, and the 4 fastest cars of all the heats will advance to the Finals, which will be done in a head-to-head elimination format. Three places will be awarded in each class.



Award ceremony will take place immediately following each race class.

\*The format of the race may change as conditions and participation warrant.

### Safety

-  All drivers must wear a helmet!
- Knee Pads, Elbow Pads, and Long Pants are encouraged for younger riders.
- No Flip Flops or open toe shoes allowed.
- Anything inside the cockpit that could injure the driver in the event of a crash should be fastened securely and/or padded.
- Driver must be in a seated position. **No head-first configurations are allowed.** Reclining to any degree is an acceptable configuration as long as driver is not visibility impaired.
- *Colt class racers will be started on a lower ramp incline to reduce their top speed*

\*In order to maintain the safety of the event the race committee may impose additional requirements as conditions warrant.

### ***More Information for Spectators and Drivers...***

Be sure to bring lawn chairs, blankets, sun umbrellas, sunscreen, cameras, etc.

There will also be games and activities available for children.

# **Immanuel Down Hill Derby**

## **Car Construction and Specifications**

The following specifications are designed to provide safety for the drivers and uniformity in the basic structure of the car. They are intended to create a safe and fair competition.

- Cars are to be completely gravity powered.
- All design attachments must be securely attached.
- 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.
- The center of gravity of the vehicle should be as low as possible. Road clearance must be no less than 2".
- The most forward point of the car must be no higher than 12" so the starting gate will make contact.

<b>Vehicle Specifications</b>	<b>Minimum</b>	<b>Maximum</b>
Vehicle height	-none-	60 inches
Seating surface height	-none-	12" above road surface
Total vehicle length	48 inches	84 inches
Wheelbase	48 inches	72 inches
Vehicle Width	24 inches	36 inches

*\*Width of car body cannot project beyond maximum width*

### **WHEELS**

All racers must use the specified wheels.

- The wheels are to be 7" steel or plastic with a 1.5" wide solid rubber tire.
- Car must have at least 4 wheels and a maximum of 6 (tandem allowed on rear axle). This allows for a greater load capacity for the total weight of the car and driver.
- The wheels shall have a hub which will rotate on a 1/2" steel bolt or rod (axle). A typical example is the Arnold 7" Wheel.
- Wheels must have some type of locking attachment to the axle such as a locknut or cotter pin.
- Wheels may be lubricated and modifications to the bearings are allowed.

**NOTE: Wheels and axles may be purchased from Immanuel Reformed Church. Contact Bob Hager (616)949-0719 or (616)890-5122 for price.**

### **BRAKES**

Each car must have a braking system attached that will completely stop the vehicle. Absolutely! NO braking with feet. This could result in very serious injury.

**The driver must be able to steer while braking.**

### **STEERING**

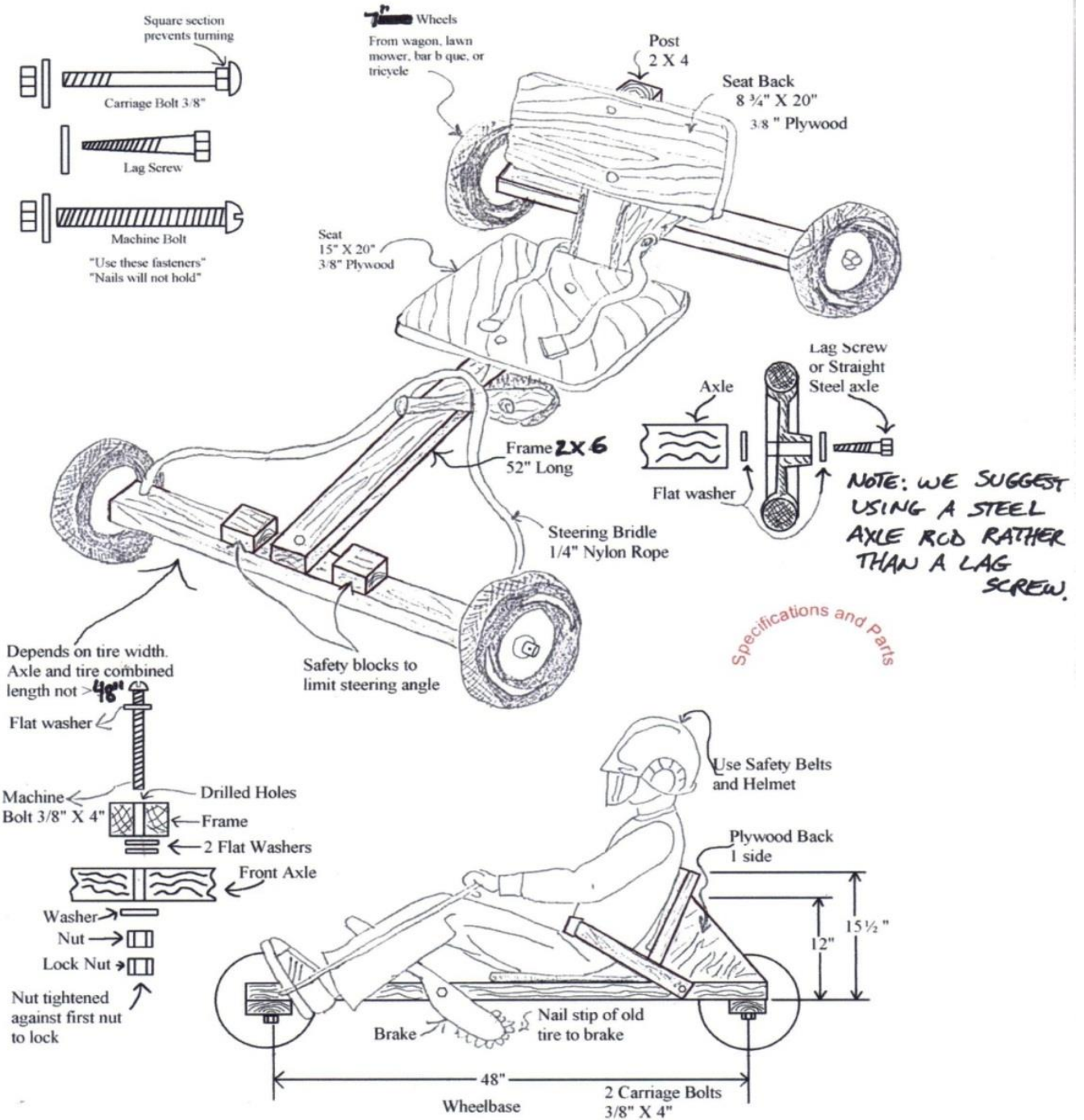
The driver **MUST** have complete control of steering at all times.

- The most popular method of steering is with feet and/or rope pull.
- To prevent jackknifing, **steering limiters** must be attached to the front axle. The limiters should keep the front axle from turning no more than 4-6 inches.

### **DESIGN**

Any personalized design or theme of car is allowed as long as the basic construction follows the specifications listed above

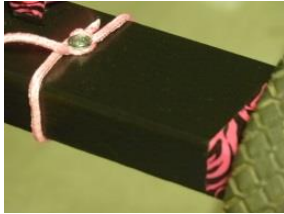
# BASIC EXAMPLE OF WHAT COULD BE BUILT <sup>(5)</sup>



**Suggestions:**

Rope steering hint: You may find more control in your steering if your rope is tied around the front axle and screwed in rather than attaching it through eyelets. (See examples below).

*Tied and screwed*



*Rope tied through metal eyelet*



For younger drivers, a seat that actually encloses them would be helpful to reduce the chance of them sliding off the seat during the race and when braking. (See example below).

*Seat could be made of wood with sides*



Front axle attachment with limiters



Axle attachment



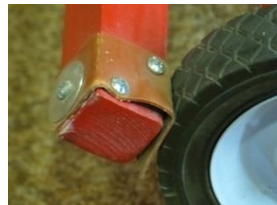
Cotter pin wheel attachment



Brake assembly



Brake on wheel



Brake hand control



**Here is a basic example of what you might see on Race Day...**

