

# 2020 Explorer Guides and Princesses Demolition Derby



**When:** Saturday, March 28 2020

**Time:** 11am -4pm

**Location:** JSC/Gilruth Center, Discovery Room (Rm 1008) (directions at the end)

**Schedule of Events:**

11:00 am: Set up & Car Check-In Begins. Practice runs

12:00 pm: The battles begin

4:00 pm (or when we are kicked out): Racing Ends

**Battle Format:** All-in double elimination battle royal tournament (everyone races everyone). Followed by an few rounds of in-your-face throw down (like Pokemon but with little wooden cars instead of magical creatures).

For those of you new to this, the demolition derby is as it sounds. We have a long track with both ends raised and the cars come barreling down to each other. Last one standing wins. There will be carnage – so prepare your child for their car to take damage.

**Snacks** - bring some cookies or a snack to share with all!

## Rules and General Information

The Demolition Derby is supposed to be about good-natured, fun, friendly competition; a chance for Dads and kids to work together to build a car and a memory. The majority of the fun should come from designing, building, and decorating your car together. There have been some incredibly imaginative cars in the past: Tanks, pencils, Space Ships, logs with squirrels, Butterfly's, Sponge Bobs, rainbows, campers, etc. yes even race cars! For best results:

- Have fun with it - let your kids use their imagination!
- Build the car as a team
- Test the car to ensure it runs straight and is freewheeling (See online suggestions)
- Resist the temptation to have the adult build the car.

### Build Rules.

*Please keep in mind that we are borrowing a track. We want to protect it the best we can so we can continue to use it in the future.*

- All kits must be the Boy Scouts of America (BSA) approved car kit. Kits be purchased many places including the Scout Shop on Bay Area (United Way Building Saturn and Bay Area), Michaels, Amazon and Hobby Lobby. Make sure it either has the BSA logo or states BSA approved. The below link is a kit Hobby Lobby sells for \$4 (\$2.40 with the Hobby Lobby 40% off coupon).
  - [https://pinecar.woodlandscenics.com/images/NewWSWeb/P370\\_f\\_pkg.jpg](https://pinecar.woodlandscenics.com/images/NewWSWeb/P370_f_pkg.jpg)
- No aftermarket wheels or axels are allowed.
  - Use what is supplied in the kit.
  - Some kits have a rod and nail axels - either type is acceptable.
- No recycled cars from previous years
- Overall **length** shall not exceed 7.25 inches (which is the usual length of the kit block).
  - We will make a small length allowance for things like bumpers and cosmetic accessories.
  - Anything added to the car must adhere to the clearance requirement.
  - Any amour used to help redirect an opponent the car (ex: angled leading edge) will have to be within the length requirement.
- Overall **width** of the car shall not exceed 2 ¾ inches.
  - We will make a small width allowance for thin amour and cosmetic accessories so that the car will not have to be "shaved" thin.
  - Anything added to the car must adhere to the clearance requirement.
- No restrictions on car height.
- Overall **weight** shall not exceed 8.0oz.
  - This is to avoid heavy cars damaging the track.

- The car must have 1 3/4" clearance between the wheels.
- The car must have minimum 3/8" clearance underneath the body so it does not rub on the track. This is measured from the lowest part of the car.
  - In practice, if you are using the premade axel groove you will have adequate spacing between the track and the underside of the car.
- No sharp edges or pointed protrusions (i.e. no nails, spikes, blades, glass).
- No items may be designed to "fly-off" the car.
- No items designed to contact the track like braces or wheelie bars.
- No explosives or flammables
- No motors
- No mechanisms or other design items intended to operate after collision that might touch the track or the other car (i.e. spring loaded ram, chopping arm).
- Only dry powdered lubricants, such as graphite, may be used.
  - Avoid excessive lubrication. It only makes a mess of the track.
  - Please clean wipe off excess lubrication from the body or wheel part(s).

### **Battle Rules**

The object of demolition is to smash into an opponent and launch them from the track. The battle starts with two cars on opposite raised ends of a single lane track. The cars are released at the same time and they hurl down the track toward each other and meet at the bottom. The collision can send the cars (and parts of cars) in a million different directions. Repairs are permitted between battle rounds – not all items need to be reattached – but the car must be able to roll down the track without scraping/dragging. Racers have to be ready to race at any time, no matter what the condition of your car.

A racer is eliminated if:

- At least 2 wheels are outside the parameter of the track
  - Inverted on the track is not cause for elimination of its own
- The racer cannot race.
  - A car is considered race capable as long as can roll down the track without the body or amour/accessories contacting the track.
- In the event that both cars leave the track, no winner will be declared and the cars will race again.
- If neither car can race immediately, a short repair opportunity will be allowed before a re-battle.
- If a battle goes 3 runs with no winner the cars will run backwards.
- After 5 runs (3 "normal" & 2 "backwards") and no winner then the rules will be tightened.
  - One wheel off the track is elimination.

## Directions to Gilruth (NASA/JSC)

GPS and Google Maps Link: 29.568881, -95.081432

The Gilruth facility is open to the community (NASA badge not required). The facility entrance is off of Space Center Blvd and there are 2 parking areas (A and B in the below). There are entrances off of the parking areas, however the easiest way to access the conference rooms is through the main entrance. There will be signs to find the room.

