# Valve Cover Race Rules, regulations and information

### What are Valve Cover Race Cars?

They are small cars that are constructed using a car engine valve cover. Most cars are constructed from overhead valve covers, but it is also permissible to use the plate that covers the valves on a flathead style engine.

#### How are the cars used?

The cars are raced down an incline track, track is designed to allow two cars to participate at a time. The winning car is determined by electronic beams timing.

The cars are held in the start position by a vertical pin about 2 inches height. No part of the car may extend past this pin.

## **Racing participants:**

Racers will register as either "junior" or "adult". Junior are all racers 14 years old and younger. 15 years old and older will register as "adult". One valve cover per category, no valve cover can be entered in multiple categories.

## General rules (applies to all categories)

- Cars shall be based on an actual valve/rocker cover from an automobile engine.
- Cars must have four wheels, each no more than six inches in diameter.
- Maximum width 15", maximum length 32", maximum height 9"
- No propulsion system of any kind, no moving or movable weights, no fluid weight
- 1 valve cover per chassis
- No steering of the valve cover racer is permitted
- Nothing can extend beyond the front of the valve cover (or beyond the starting pin)

### **Categories:**

#### Standard

- Wheels must be inside the gasket surface
- 10 pounds max weight
- Stock gasket surface must be retained
- No modifications to external surface, but custom paint, stickers etc. are encouraged

## Outlaw

- must maintain factory gasket surface and be recognizable as a valve cover
- 10 pounds maximum weight, car must fit on the track
- wheels may be inside or outside of the valve cover. If wheels are outside the valve cover, this is immediately placed in the OUTLAW class

#### Prizes / awards:

- Best appearance in each category (both Junior and adult)
- Fastest race time (both junior and adult)
- Participant medals for junior racers

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## **Construction Tips**

Most successful cars employ ball bearing wheels. The type of wheels used on inline skates work very well. Some people machine wheels from steel or aluminum and insert small ball bearings into the center of each wheel. It is vital that the car track straight or it will run into the side of the track and friction will slow the car. Cars should be built with some way to adjust the axle so that straight tracking can be achieved.

No form of propulsion is allowed. Gravity draws the cars down the track.

Some cars even contain a battery so lights can be turned on for the race.

#### **Procedure**

All cars may have practice runs during the designated times (to be posted at the track on the days of the event) but must be weighed and inspected PRIOR to official race times. Registration may continue during racing.

Each car will race 4 times with results recorded accordingly. Fastest time of the 4 runs will represent the cars "official time". Cars will switch lanes after each run. One fastest car will be identified for each:

Junior StandardJunior OutlawAdult StandardAdult Outlaw

In the event of a tie, the cars will compete against one another "head to head" in one race (elimination format). The best looking valve cover racer will be chosen by the judges in each of the above categories.