

## Valve Cover Cars

### What are Valve Cover 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 inclined track.

Most tracks are designed to allow two cars to participate at a time. The winning car can be determined by electronic beams or by human judges.

There may be 20 to 30 cars at a race but the track can only run two cars at a time. The registrant will race at least three times during the elimination process. The fastest cars will probably race up to 7 or 8 times.

### What is the criteria for the cars?

Length	up to 36 inches
Width	up to 10 inches
Height	up to 9 inches - including an optional "driver"
Weight	up to 10 pounds
Wheel Diameter	up to 4 inches

### 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. The car can have three or four wheels. 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. The cars are held in the start position by vertical pins about 1.5 inches high. No part of the car may extend past this pin

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

Many of the cars owned by members of the Okanagan Chapter have unique design and may carry humorous names. Eg: Gord Angus painted his car black and white, attached ears and a tail and calls it the "Black Angus". There is a car called the "Green Machine" and another called the "Pink Ladies". These cars provide a great opportunity for imaginative design.

At some race sessions, they may have a "Junior" event to encourage younger people to become involved. Building a car is a great project for a grandchild and grandparent or a parent and child to work co-operatively

Some Chapters will even announce a variety of categories and prizes may be awarded for such things as best engineering and most unique design