

# **Gopher formula 1**

## **Purpose.**

This formula is intended to create a builder's framework for the construction of racing vehicles based on mobility scooters, hereafter referred to as gophers.

The intent is to remove unequal competition and advantage by the use of specially built frames and suspensions while encouraging the development of better propulsion systems and driving skills.

The formula is deliberately left as open as possible to allow sensible innovation and creative design.

## **General requirements.**

A formula 1 racing car shall be built on an unmodified, commercially available gopher chassis. No changes to the frame suspension or basic steering system are permitted beyond raking of the steering column and removal of slackness.

## **Dimensions.**

The dimensions of the wheelbase will be dictated by the original manufacture, however the overall width shall not exceed 750mm, and the length 1700mm.

Mass shall not exceed 160kg without the rider.

## **Bodywork.**

The type and shape of the bodywork is completely open, provided that it remains within the dimensional limits, and is sufficiently robust to remain intact for the duration of the race.

Builders should avoid exposed, sharp, hard edges (see Safety).

## **Motors.**

The motor shall be of the type used in a commercially available gopher. That is, it shall be either the original motor from a gopher, or an identical replacement.

Large, high-power motors are not permitted in this formula.

**Battery voltage.**

Battery voltage may not exceed 80volts.

**Control systems.**

Control systems for the motors may be anything that the builder chooses. Controllers, switches, wiring and related equipment are at the discretion of the builder.

**Brakes.**

The gophers shall be equipped with brakes, which operate on at least two wheels.

The brakes shall be able to stop the gopher reasonably quickly, so as not to pose a danger to others.

**Safety.**

Drivers are responsible for the safety of their vehicle, their own safety and that of others. They must ensure that their vehicle is safe to compete.

Gophers shall not have any sharp or dangerous protrusions that might endanger other vehicles, drivers or spectators.

Safety helmets must be worn while racing. These must be either an Australian Standard bicycle helmet, or motorcycle helmet, and must be correctly worn.

Seat belts and roll bars are desirable, but not mandatory.