CO_2 DRAGSTER REQUIREMENTS

Dragster body

DB1. One (1)-piece, all-wood construction. Two (2) or more like or unlike pieces of wood glued together are not considered one (1)-piece, all-wood construction. No add-ons such as body strengtheners, fenders, plastic canopy, exhausts, or air foils may be attached to or enclosed within the vehicle.

DB2. Body length.....200mm - 305mm

DB3. Body height with wheels.....75mm

DB4. Body mass (completed car without CO2) .....40g - 100g

DB5. Body width at axles, front and back.....35mm - 42mm

DB6. Minimum body width (other than at axles).....13mm

Axles/axle holes/wheelbase

A1. Dragsters must have two (2) axles per car, no more.

A2. Bottom of axle hole above bottom of car.....5mm - 10mm

A3. Rear axle hole from rear of car.....9mm - 100mm

A4. Wheelbase (axle distance apart at farthest points).....105mm - 270mm

A5. Bearings, bushings and lubricants may be used.

Power plant (CO_2 cartridge hole)

P1. The power plant hole must be at the farthest point at the rear of the car and must be drilled parallel to the racing surface to assure proper puncture of the CO_2 cartridge. A minimum of 3mm thickness around the entire power plant hole must be maintained on the dragster for safety. **Do not paint inside the CO_2 cartridge hole.**

P2. Hole depth.....50mm - 52mm

P3. Safety zone thickness.....3mm

P4. Chamber diameter.....19mm - 20mm

P5. Lowest point of chamber diameter to race surface (with wheels).....26mm - 40mm

Eye screws

ES1. Dragsters must have two (2) screw eyes per car that meet tolerances, no more. Screw eyes must not make contact with the racing surface. The track string must pass through both screw eyelets, which are located on the centerline of the bottom of the car.

ES2. Inside diameter.....3mm - 5mm

ES3. Distance apart (at farthest points).....150mm - 270mm

Wheels

W1. A dragster must have exactly four (4) wheels, each of which separately must meet the regulations. All four (4) wheels must touch the racing surface at the same time. All wheels must roll. Wheels must be made entirely from plastic. Dimensions must be consistent for the full circumference of the wheel.

Testing

T1. No repair or maintenance is allowed after the entries have been registered. Any entry damaged during the race is evaluated by the event coordinator to determine whether or not the vehicle is allowed to race again. In the event that the vehicle is damaged, the event coordinator rules as to whether the vehicle may be repaired by the student entering the vehicle. This is the only reason a student is allowed to touch his/her vehicle after registration. Undamaged wheels that come off during the event may be replaced as determined by the event coordinator. Damaged wheels may not be replaced.

T2. All CO_2 cartridges for the race are provided by your instructor.