

TECH 9  
CO<sub>2</sub> DRAGSTERS  
2019-2020

RACER \_\_\_\_\_ CAR # \_\_\_\_\_

STUDENT INSPECTION: \_\_\_\_\_ TEACHER INSPECTION: \_\_\_\_\_

**CO<sub>2</sub> Dragster Requirements**

**Dragster Body**

- DB1. One (1)-piece, all-wood construction. No add-ons such as body strengtheners, fenders, plastic canopy, exhausts, or airfoils may be attached to or enclosed within the vehicle.
- DB2. Body length.....200 mm-305 mm
- DB3. Body height with wheels..... $\leq 75$  mm
- DB4. Body mass (completed car without CO<sub>2</sub>) ..... $\geq 45$  grams
- DB5. Body width at axles .....35 mm - 45 mm
- DB6. Vehicle total width (including wheels)..... $\leq 90$  mm
- DB7. Paint.....Fully painted by student

**Axles/axle Holes/wheelbase**

- A1. Dragsters must have two (2) axles per car, no more.
- A2. Bottom of axle hole above bottom of car.....5 mm - 10 mm
- A3. Rear axle hole from rear of car.....10 mm - 100 mm
- A4. Wheelbase (axle distance apart at farthest points).....150 mm - 285 mm
- A5. Bearings, bushings and lubricants may be used.

**Spacer Washers/Clips**

- S1. Spacer washers..... $\leq 10$
- S2. Axle clips..... $\leq 4$
- S3. Silicone or any other type of glue/adhesive may not be used in place of wheel clips to hold wheels or axles in place.

**Power Plant (CO<sub>2</sub> cartridge hole)**

- P1. Safety zone thickness..... $\geq 3$  mm
- P2. Lowest point of chamber diameter to race surface (with wheels).....26 mm - 40 mm
- P3. Hole depth..... $\geq 50$  mm

**Eye Screw**

- 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)..... $\geq 150$  mm

**Wheels**

- W1.0 A dragster must have exactly four (4) wheels, each of which separately must meet the regulations.
- W1.1 All four (4) wheels must touch the racing surface at the same time.
- W1.2 All wheels must roll.
- W1.3 All Wheels must be made entirely from plastic.
- W1.4 Dimensions must be consistent for the full circumference of the wheel.
- W2. Front/Rear Wheel diameter.....30 mm- 40 mm
- W3. Front/Rear Wheel width at surface contact point.....2 mm-18 mm

***Approved by West, South, North, Les Bois, East, Riverglen.***