# **2022** Wingless Limited Sprint Rules

### **CHASSIS**

1. Any type of sprint car chassis is allowed that has a minimum of 84 inches and a maximum 90 inches, measured from center of the front hub to the center of the rear hub.

2. Minimum weight, including driver is **1,525** pounds. Cars may be weighed at any time. Fluids used or parts lost during a race may not be added to make weight. No tolerance. Add-on weights must be bolted with a minimum of two 3/8" bolts and double nut and/or weight clamps. They must also be painted white with car number present.

# **BODY COMPONENTS: (Effective 2016)**

- The definition of an upright car is a conventional front-mount engine in which the vertical position is to be maintained as closely as possible, with a maximum ½" offset. The driver shall be seated directly behind the engine, the fuel cell must be behind the driver and the radiator must be positioned in front of the engine. The driver cannot be located beside the drive shaft. Side lips on hood cannot exceed 2 ½".
- Nerf bars cannot be attached in more than 3 places. May not exceed .120 wall thickness and no larger than 1" O.D. Maximum width 36" left side and 42" right side, measured from center of driveline.

# TIRES:

- 1. Tires, front tires and left rear tires are open; compounds and size are optional.
- 2. Tires, Right Rear must be one of the following:
  - a. Hoosier right rear medium ASCS 105"-16"-15"
  - b. Hoosier right rear RaceSaver 104"-16"-15"
  - c. American Racer right rear medium 102"-16"-15"
  - d. Goodyear right rear 400 compound 103"-16"-15"
  - e. Goodyear right rear, 105"-17"-15"

### Wheels:

1. Wheel type is optional. Bead lock wheels are optional.

### **SAFETY RECOMMENDATIONS:**

1. *It is the driver's responsibility to follow all safety recommendations*. All cars are subject to inspection at any time and must be free of mechanical defects and be in safe racing condition.

2. Full face racing helmets meeting Snell 2000 standard are required and must be worn at all times the car is on the track and must accompany vehicle during tech inspection.

3. Aluminum Racing seats are mandatory and must be factory manufactured. Only approved seat installation and seat structure will be accepted. No car will be permitted in competition unless seat is

4. Fire suits, shoes, gloves, arm restraints and neck collars or Head / Neck restraint systems are mandatory and must be worn at all times during racing.

5. All seatbelts must have a 2" minimum wide safety belt and shoulder harness with 2 belts over shoulders, and are required to have a quick-release type latch. A 2" Shoulder belt system is allowed in combination with the use of a head / neck restraint system. Example: Hans device.

6. Shock-resistant roll cage padding on all bars that driver's head, legs and arms may contact with while strapped in seat are required. A padded, functional headrest in line with the center of the driver's head is mandatory. Right side head restraint is mandatory.

7. Two throttle return springs and a steel toe strap on throttle is mandatory.

8. Front rock screen must be securely mounted to the frame rails; it must extend from the top of the hood to the top of front halo with a maximum of  $2^{"}x 4^{"}$  openings.

9. There must be a 2" minimum clearance between driver's head (with helmet) and top of roll cage (without padding). Loops may be used and must be constructed of the same tubing requirements as frame. These must be added in a safe manner.

# RADIOS:

1. All drivers must have a working receiver type radio when car and driver is on the track. It is the driver's responsibility to make sure the radio is working.

# FUEL:

- 1. Methanol ONLY. No performance additives.
- 2. FUEL CELL WITH BLADDER is mandatory. A fuel shutoff valve within easy reach of the driver is required. No vinyl or plastic fuel lines allowed. Fuel cell must be securely mounted. No car can start a race with more than 40 gallons of fuel.

# FUEL PUMP:

Fuel pump type is optional. No pressurized fuel system.

### NUMBERS:

Nose / Tail Tank Numbers must be a minimum of **16**" tall. Make numbers BIG, not fancy and kept clean for scorers. All cars must provide a **16**" tall right side number on the right arm guard, right rear panel or hood.

# CARBURETOR:

One (1) two (2) barrel Holley type carburetor not to exceed 500 cfm. No solenoids. Carburetor will be checked using a GO-NO-GO gauge. Carburetor venturibore, throttle plate bore, throttle shaft diameter, and booster size will be checked using GO-NO-GO gauges. Measurements are as follows: Venturibore max 1.390", throttle plate bore max. 1.700", throttle shaft diameter minimum .180", booster height size minimum .435", booster size interior max of .385", exterior booster max. .6600". The use of fuel injection, supercharger, turbo charger, nitrous oxide or water injection will not be allowed.

#### **DRIVELINES:**

All drivelines must be broken in the coupler or rear slider. Torque arm drivelines may not be used. All drivelines must be enclosed and contain no more than one U-joint or CV-joint and that one must be at the front of the driveline.

#### **IGNITION:**

Any ignition mechanically driven in stock location. No crank triggers.

#### MUFFLER:

Mufflers are mandatory, type is optional.

#### SHOCKS:

Steel or aluminum shocks allowed. Adjustable shocks allowed but CAN NOT be cockpit adjustable.

#### NO TRACTION DEVICES!!

#### **INTAKE MANIFOLD:**

1. Any dual plane intake. Cast iron or aluminum, no single plane intake manifolds.

2. No porting or polishing of any kind on aluminum intake manifolds.

3. Cast Iron intakes may be ported.

4. May run up to a 4" spacer.

#### ENGINE:

1. 283, 302, 305, 327 and 350 blocks can be used for Chevrolet, with a maximum of 368 C.I. No big blocks. OEM or Dart after-market blocks allowed. No 400 blocks allowed.

2. Only 260, 289, 302, and 351 blocks can be used for Ford, with a maximum of 368 C.I. No big blocks. OEM blocks or Dart after-market blocks allowed. No 400 Blocks allowed.

3. Only 273, 318, 340 and 360 blocks can be used for Mopar, with a maximum of 370 C.I. No big blocks. OEM blocks or Dart after-market blocks. No 400 blocks allowed. No hemis.

4. All casting numbers must remain on blocks. No side bolt main blocks allowed.

5. No 400 small block or big block crankshafts allowed. This goes for Ford, Chevy or Mopar.

6. No 4-cylinders allowed. No V-6's allowed. No in-lines. V-8's only.

7. Again: only Ford, Chevy or Mopar engines are allowed.

8. No tolerance on cubic inch.

9. Oil Pan may be a stock or circle track pan that has a <u>1</u>" inspection hole above the oil level, suitable for tech inspection. Wet sump systems only.

10. Any flat top pistons are legal. No gas ported pistons.

11. OEM blocks or Dart after-market blocks allowed. No 400 Blocks allowed. No aluminum. Cylinder sleeves okay. Polishing lifter galley, okay. No splayed main caps.

12. OEM cranks only. Steel or cast. Balancing okay. After market cranks allowed if they have a stock replacement/stock weight with a maximum of 3.48 stroke.

13. After market rod, main and head bolts or studs allowed. Any **5.7** steel rod. Push rods may be any length.

14. Fluid dampener harmonic balancer is allowed. No roller bearings can be used in the rod, main, or camshaft bearings.

15. Chevy, Ford and Mopar water pumps may be aluminum. OEM type only. Mechanically belt driven only.

16. Any brand of air cleaner allowed.

17. Engine displacement can be checked by pump even on protest.

18. Oil filters must attach at factory specs.

### CAMSHAFT:

1. Hydraulic lift cams only. Must have a \*MINIMUM\* of 12" of vacuum at 1200 rpms. Timing or carburetor may not be altered at time of tech, if vacuum used. It is the tracks discretion as to which way they want to check cam, even on the protest. Must have a vacuum fitting in intake. If WOW opts to use vacuum for tech, tech by vacuum will be final.

2. No hydraulic roller cam or lifters. No bronze bushings in the lifter bore or similar pieces. Up to four bronze bushings will be allowed in lifter bore for repair. Hydraulic lifters only. No solid cams or solid lifters allowed.

3. Anti-pump up lifters okay. No gear drives.

4. No reverse rotation cams or motors. OEM rotation only.

5. No vacuum canisters of any type allowed.

6. No vacuum pumps allowed.

### **HEADS:**

1. Engine Quest (EQ) head #350I shall be the only head to be used, except for the grandfathered stock production heads mentioned below. Valve sizes cannot be changed. 1.94" intake and 1.50" exhaust. No porting, polishing, or acid dipping.

### **CHEVROLET: HEADS - GM**

A. Chevrolet production heads (#s 997, 445, 882, 624, 441, 487, 993, 185) raced in the 2014 WOW season may be used, must have been inspected by WOW and stamped by WOW for approval. These conforming heads can be used for the life of the heads, NO SUBSTITUTIONS.

#### FORD: HEADS

- A. Any cast iron head. OEM Ford heads only.
- B. No Boss or after-market heads of any kind.
- C. No valves larger than 204 intake or 1.70 exhaust.

#### **MOPAR: HEADS - PLYMOUTH, DODGE, CHRYSLER**

- A. Any cast iron head. OEM Mopar only.
- B. No after-market heads of any kind.
- C. Mopar can use the rocker arm bars. OEM only.
- D. No valves larger than 2.04 intake or 1.70 exhaust.
- 2. Screw-in studs and guide plates are legal.
- 3. Milling of heads is allowed.
- 4. Any type rocker arm will be allowed. Stud girdles are allowed.
- 5. No titanium components allowed. No carbon fiber parts anywhere.
- 6. Poly-locks are allowed. Heads may be cut 360 degrees under valves in bowl area only.
- 7. Any angle valve job is legal.
- 8. No O-ringed block or heads.
- 9. Any breather, valve cover configuration, composition is allowed.
- 10. Due to Fords and Mopars having no cc rule, neither will Chevys.
- 11. If EQ heads are used you must run stock diameter springs, 1.250" O.D. (+/-.060" tolerance)
- 12. Stock production Mopar, Chevy, and Ford heads can run springs up to 1.440"

# ALL DECISIONS MADE BY TECH OFFICIAL AND/OR DIRECTOR OF COMPETITION OFFICIAL ARE FINAL