

Champ-Sprint Rules for 2022

IMCA Racesaver 305 Sprints are allowed to race with the Champ Sprints at Tulsa Speedway. Absolutely no mixing of rules.

GENERAL SAFETY REQUIREMENTS:

1. All cars 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 standards required and must be worn at all times the car is moving. Helmet must be with car during inspection.
3. A single racing fabricated seat is mandatory and must be factory manufactured. Only approved seat installation and seat structure that passes inspection will be approved for this series. Seat backrest cannot be moved further back than the roll cage rear main hoop.
4. Fire retardant uniform, fire resistant gloves, fire resistant shoes, socks and head hood or helmet skirt, and arm restraints are MANDATORY. Head and neck restraints HIGHLY recommended.
5. A 3" wide safety belt and shoulder harness with 2 (two) belts over shoulders, and a quick release type are required. Must have minimum of one submarine strap. All belts must be securely fastened to frame or roll cage. Belts must be replaced every 4 (four) years beginning with belts dated 2007. Date tag or stamp is required.
6. Shock-resistant roll cage padding on all bars that drivers head, legs and arms may contact with while strapped in seat is recommended.
7. Two throttle return springs recommended as well as a toe strap on the throttle pedal.
8. Front rock screen from top of hood to top front halo and from roll bar to roll bar is required. Must be fastened with hose clamps or bolts. No plastic ties allowed. There must be a minimum clearance between drivers head with helmet on and top of roll cage of 2". Loops may be used and must be constructed of same tubing requirements as roll cage. These must be added in a safe manner.
9. No rear view mirror allowed of any kind, inside or outside of car.
10. There must be a right side head net or seat brace for head support.
11. All participating drivers must have a Receiver Radio. The radio must be on at all times while your car is moving. This is a form of communication for the track officials to the driver. This radio is available for per event leasing, or for purchase. It is the driver's responsibility to have this form of communication.
12. Scoring can be relevant to communication. You MUST HAVE THIS RADIO TO RACE IN A CHAMP SPRINT EVENT. This radio is also used in other series you may participate in, please call to find out if yours is compatible.

SECTION I. CHASSIS:

1. Chassis pass any test prescribed by the safety inspectors. The roll cage must be of a four-post design. No dirt champ cars. No elliptical (oval shaped) tubing used on or as part of the main frame structure.
2. Minimum wheel-base of 83 inches, maximum wheel-base of 90 inches. No pieces may be added to the frame so as to resemble, imitate or be specifically designed to deflect, trap or form a wind break of any nature, except those used to cool/protect the motor and braking system. No roadster type chassis allowed, only sprint appearing type bodies, tails and hood will be allowed. Titanium front axles nerf bars and/or rear bumpers will not be permitted. Nerf bars and rear bumpers must be made from magnetic steel and/or stainless steel. Left and Right Nerf bars must attach to the chassis at three points. The bumpers must be a minimum of one (1) inch in diameter and have a minimum material thickness of .065 inches. The nerf bars must not extend past the outside edge of the tires.
3. No aluminum frames or draglinks. Tie Rods and Left Front Radius Rods may be aluminum, but highly recommended they be 4130 steel with magnetic steel rod ends. Swaging of the tubing will not be permitted. The drag links must be tethered to the frame with a minimum of one (1) inch nylon webbing.
4. Carbon Fiber connecting rods having to do with suspension or steering are not permitted. All drive lines must be broken in the coupler or rear slider, fully enclosed and contains no more than one U-joint or C-V joint. No torque arm drive lines allowed. A safety strap or hoop that is securely attached to the chassis is required. Driveline components may not be Carbon Fiber. Headers: Must be a minimum of .045. Steel, Aluminum or Titanium brake rotors only. The maximum distance from the leading edge of the front bumper to the leading edge of the front torsion tube is a maximum of 8". The maximum distance from the leading edge of the front bumper to the leading edge of the front axle is 23 1/2 inches.
5. No hollow, tubular or drilled out bolts allowed.
6. The right side opening must be a minimum of 10 inches vertical at any point and 21 inches horizontal.
8. The right side panel (armguard) will be permitted to extend a maximum of 7 inches as measured from the outside edge of the middle frame rail and must remain above the middle frame rail.

SECTION II. WINGS:

Top Wing:

1. Center Foil maximum size of 25 square feet with a maximum width of 60 inches with a one degree plus or minus tolerance.
2. Center Foil shall be fully sheathed in aluminum. Vent holes are strictly prohibited.
3. No wicker bills or Gurney lips permitted on Center Foil, unless center foil is totally flat then a two-inch wickerbill is allowed.

4. No moving parts allowed on or in foil structure. No hydraulic sliders or cockpit adjustments of any kind.

5. The 12-inch section located at the rear of the Center Foil must not have the belly/curl arc out of proportion with the rest of the Center Foil. The belly/curl arc must span the entire length of the Center Foil and appear to be a gradual arc with the deepest point no further back than 48 inches from the leading edge. As measured on a 12-inch straight edge, the belly at 6 inches from the rear of the Foil may not be deeper than $\frac{1}{2}$ inch. There is zero tolerance on this $\frac{1}{2}$ inch depth. It is suggested that the wing blue print specify $\frac{15}{32}$ -inch depth, so that if any deflection or movement of the wing occurs, the depth will not exceed the $\frac{1}{2}$ inch specification. (This $\frac{1}{2}$ inch measurement ensures that the belly/curl arc is gradual.)

6. The belly/curl arc must start at the radius of the Center Foil's leading edge and shall not exceed a depth of $2\frac{1}{2}$ inches. Center Foil thickness cannot exceed 9 inches. Center Foil top surface from side to side must remain flat. Center Foil must be one-piece construction. No split or bi-wings will be permitted.

7. Wings must be fabricated of metal alloys only. No fiberglass, carbon fiber or other similar material may be used in the basic framework of the wings. Top wing must not extend beyond outside of rear tires.

8. Two stationary foils or rudders will be allowed to run the entire length of the underneath portion of the top wing. Maximum height proportions are 1 inch at the front and 3 inches at the rear. Nowhere shall the foil exceed 3 inches in height. The top wing can be cockpit/driver adjustable.

9. Wing T-Post will be built from 1" X .083" minimum ASTM4130 normalized steel or equivalent material.

10. Wing attachment designs will be subject to approval. The only cast pieces approved will be HRP Part #HRP8811-A75-HD. If new T-Post designs are developed they must be submitted for approval. Some approved T-Post designs are in the drawings section (See illustration below).

Front Wing:

1. Center Foil maximum size of 6 square feet with a maximum width of 36 inches with a one degree plus or minus tolerance.

2. Center Foil shall be fully sheathed in aluminum. No vent holes allowed.

3. Wicker bills up to 1-inch are allowed on nose wing, flat or dished.

4. Maximum distance from the Center Foil front edge to the front edge of the front axle may not exceed 20 inches.

5. The Center Foil front edge must remain at least 1 inch behind the front edge of the front bumper.

6. Center Foil top surface from side to side must remain flat.

7. Center Foil must be one piece. No split or bi-wings will be allowed.
8. Wings must be fabricated of metal alloys only. No fiberglass, carbon fiber or other similar material may be used in the basic framework of the wings.
9. The Front Wing must not extend beyond outside of front tires. The Front Wing may not be cockpit or driver adjustable while the car is stationary or in motion.
10. No moving parts allowed on or in foil structure.
11. The 5" section located at the rear of the front foil must not have a belly/curl arc that is out of proportion with the rest of the front foil. As measured on a 5-inch straight edge, the belly at 2 ½ inches from the rear of the foil may not be deeper than 3/8 inch. There is zero tolerance on this 3/8-inch depth. It is suggested that the wing blue print specify 11/32-inch depth, so that if any deflection or movement of the wing occurs, the depth will not exceed the 3/8-inch specification (This 3/8 inch measurement ensures that the belly/curl arc is gradual).
12. The belly/curl arc must span the entire length of the front foil and appear to be a gradual arc with the deepest point, no further back than 12 inches from the leading edge. The belly/curl arc must start at the front foil's leading edge and shall not exceed a depth of 2 inches. Top foil thickness cannot exceed 3.6 inches.
13. No rudders or fins on Front Wings.

Side Board Panels:

1. All side board panels must be within an eight-degree plus or minus tolerance and be square to center foil.
2. Side panels may not be supported by braces whose section is not horizontal. All braces or supports shall be oriented thin edge to face the air stream. Only rectangular, round or oval metal braces not exceeding 1 inch in width may be used.
3. No aero section side panel brace material allowed.
4. No brace or support shall resemble a wicker bill or a split wing.
5. Top Wing, sideboards maximum size, 72 inches long and 30 inches tall. Panels must be of onepiece construction. Panels must be fabricated flat so as to have no turnouts or flaps made of more than 2 inches of material on the front or rear of panel and no more than 1 1/4 inches on the top or bottom.
6. Panels must be mounted parallel and square to the center foil with no more than 1 1/2" of turnout as measured from the Center Foil. Only two (2) corners on the 2/3 of each top wing side board will be permitted. Each corner shall be set at a 90° angle with no tolerance. The leading edge of the side board may not be behind the leading edge of the Center Foil. Front Wing side boards maximum size, 12 inches

tall and 26 inches long with no more than one inch overhang from the center foil front edge to the side board front edge. Sideboards may have front, back, top and bottom turnouts of no more than 1/2 inch.

SECTION III. TIRES

1. Right Rear must be ASCS Hoosier Racing Tire, 105x16.0-15 Medium OR 105x18.0-15 HARD.

SECTION IV. BRAKES:

1. All participating cars must have minimum of one brake on the front and one brake on the rear.
2. No carbon fiber brake components. Brakes must be in working order. Open to inspection at any time. If your brakes are not working before a race you will not race. Brakes must be hydraulic type only.

SECTION V. FUEL:

1. Methanol fuel only. No additives OF ANY KIND allowed. Fuel will be tested frequently and randomly. No oxidizers of any kind. Fuel infractions are subject to DISQUALIFICATION, FINES, and the possibility of complete REMOVAL from any further competition. This includes the OWNER AND DRIVER. THIS IS A NOT NEGOTIABLE OR TOLERABLE.

SECTION VI. WEIGHT RULES:

1. Weight rule is 1475 lbs., including the driver, at the conclusion of the race. Any bolt-on weight must be painted white and the car number must be on the weight. Loss of any bolt-on weight during competition will disqualify the individual from that event. The weight must be securely attached and must remain in place during a race. It must not be moved or removed during a red flag situation. We reserve the right to disqualify any individual whose weight mounting procedure does not meet our specifications. (see illustration below)

SECTION VII. ENGINES:

OPTION 1: Champ Sprint Engine Rules:

1. 368 Cubic inch maximum displacement. Steel blocks only. Flat top pistons only, (no protrusions above piston face), No internal reciprocating parts made of aluminum or titanium or anything other than steel.
2. Water pumps to remain in the stock location and must be belt driven. Wet sump oil systems only, no external oil pumps or tanks of any kind. All competitors' engines are subject to inspection at any time.
3. No crank trigger ignition systems allowed. Any steel rod or crankshaft may be used. No titanium engine part will be allowed except valves and valve spring retainers. Camshaft is optional. No overhead cams.
4. Gear drive ok. All oil pans must have a one inch inspection plug. Pans without plug will be subject to pan removal at any time.

OPTION 2: IMCA Racesaver 305 Engine Rules:

1. Must be 100% IMCA Racesaver legal to the 2020 IMCA Rulebook. Absolutely no mixing of rules.

SECTION VIII. CYLINDER HEADS:

1. BRODIX SPECIFIED CYLINDER HEADS PART # CHEVEROLET SP-CH

2. FORD SP-FO MOPAR SP- MO

3. All spec heads will be supplied with CNC bowl blend and intake matching from Brodix.

4. No grinding or blending of CNC work is allowed.

5. No grinding or polishing of any kind is allowed anywhere on the castings.

6. No use of any substance that may change or alter the shape or size of the ports or combustion chambers is allowed.

7. Valve seats and guides are to remain as manufactured and in the cast position, valve must stay on the valve seat and cannot touch aluminum.

8. Valve angles are to remain as manufactured. The original seat center locations as provided by the manufacturer may not be altered.

9. No tapering or reshaping or the valve guides is allowed.

10. No minimum combustion volume.

11. Serial #'s must remain on the head and must not be altered or defaced.

12. No welding modifications are allowed to the original castings. Brodix will provide repairs and recertification.

13. Valve stem may be no smaller than 11/32.

14. IMCA spec heads ok! Straight plug only!

15. The ONLY steel cylinder heads allowed for competition are original production for Chevrolet only. No aftermarket steel or aluminum cylinder heads are allowed other than the specified head. Porting and Polishing of the steel stock production head is legal. Ford and Mopar cylinder heads must be the specified Brodix head. Shaft mounted roller rockers are ok.

SECTION IX. CARBURETORS:

1. One 500 cfm holly 0-4412 5 point check legal carburetor. Venturi Bore Primary 1.373-1.377

2. Booster O.D. .620 (+or-) .010

3. Booster I.D. .380 (+or-) .003
4. Booster Height or Length .434 (+or-) .010 Throttle Bore 1.685-1.687
5. Throttle shaft & Plate thickness Pri .1868-.2008
6. These dimensions will be checked with a go-no-go gauge. Carburetors with injectors inside are illegal.
7. No air leak device of any kind.

INTAKE MANIFOLD

1. OEM or stock type cast aluminum allowed. May be ported only to match heads. No welding, grinding, cutting, porting, polishing anywhere on intake EXCEPT for one inch maximum inside intake runners to match heads. No plastic manifolds.

SECTION X. MUFFLERS:

1. Mufflers are not required for 2021. Schoenfeld 112535 or 14272735-78 is required. No inserts.

SECTION XI. TRACTION CONTROL:

1. Traction Control devices of any kind is not allowed. Electrical boxes or spark boxes and all wiring must be out of cockpit area. Anyone found with Traction control devices are subject to permanent removal from any competition indefinitely. All violators will be noted to all other sanction bodies.

SECTION XII IN-CAR ADJUSTMENTS:

1. In-car adjustments are not allowed under race conditions. This includes but not limited to, Torsion Bar, Shocks, Wings, Fuel, etc.

SECTION XIII. RULES AND PROTEST:

1. All protest will be handled by the race director. All decisions are final. Any competitor wanting to protest must bring the protest fee of \$300.00 in cash within 15 minutes of checkered flag for the event protesting. At this time the race director will determine if this protest item can be evaluated at the race track or if outside facilities are necessary. All competitors must comply or a guilty plea will be applied.
2. Fines and penalties will be determined the track within 48 hrs. All moneys will be held until the outcome.
3. If the protest finds legal then the protesters money will be awarded to the complying contestant minus \$25.00 for fees. If the part or parts are found to be illegal then the protester will be awarded their protest fees back minus \$25.00 fees. The only people that can protest are the registered owners of a competing car in that event. The owner must bring the protest with fees in person. Drivers, crew members, wives, children, etc. are not eligible protesters unless they are owners of a car in that event.

4. WE STRONGLY SUGGEST IF YOU ARE IN A GRAY AREA THAT YOU FIND OUT. QUESTIONS ARE VALUED AND APPRECIATED. DON'T ASSUME