

2023 Charleston Speedway

DIRTcar HORNET Rules

(Sport Compact)

TO ALL COMPETITORS/PARTICIPANTS

- ❖ Under the guidelines of the 2023 Charleston Speedway/DIRTcar HORNET(sport compact) rules, any/all rules as stated in the 2023 DIRTcar Rule Book, shall apply to all divisions.
- ❖ Local track rules pertaining to the racing procedures and/or overall rules that are administered by the local track officials and management, may apply at local tracks in DIRTcar sanctioned events.
- ❖ The following are the 2023 Charleston Speedway/DIRTcar HORNET(sports compact) rules. All amendments supersede any previous rules regarding any technical article and/or aspect.
- ❖ The specifications published shall be considered a section of the *“General Rules and Specifications”* for all events, series and sanctions by World Racing Group. All sections should be considered when determining specifications and governance.
- ❖ **Local track rules supersede where a conflict exists.**

6.1 – Engine

- A. Only three (3) or four (4) cylinder in-line engines are permitted.
- B. All engine components must remain unaltered, stock, OEM for the year/make/model of the vehicle being used in competition.
- C. All internal engine components must remain unaltered, stock, OEM for the year/make/model of the vehicle being used, including but not limited to: crankshaft, connecting rods, valves, valve sizes, bore and stroke.
- D. Aftermarket and/or racing-type cylinder heads are not permitted.
- E. High performance, sports car type, turbo charged, super charged and/or rotary engines are not permitted.

6.2 – Electronics and Ignition System

- A. All ignition components must be unaltered, stock, OEM and match the year/make/model of the vehicle in competition.
- B. Only 12-volt ignition systems will be permitted.
- C. Only one twelve (12) volt battery, securely mounted with both terminals covered will be permitted. If battery is moved from OEM location, the battery must be securely mounted in a marine-type case.

6.2 – Electronics and Ignition System (continued)

- D. Ignition boxes and/or performance chips and/or any ignition enhancing devices are NOT permitted.
- E. Traction controlling devices or traction enhancers of any type are NOT permitted.
- F. Only stock, OEM starters mounted in the stock, OEM location are permitted.
- G. Only one aftermarket tachometer, oil pressure and water temperature gauge(s) are permitted.
- H. The vehicle computer (ECU) must be unaltered, stock, OEM and mounted in such a way as to allow for ease of inspection.
- I. Data transmitting or recording devices of any-type are not permitted. In car cameras such as a Go-Pro type, are permitted.
- J. A functional radio with functional speakers, playing music at a high volume level while racing is HIGHLY RECOMMENDED.
- K. An electrical engine shut off switch is required. The switch must be clearly labeled and within the reach of the driver.

6.3 – Exhaust System

- A. The exhaust manifold must remain unaltered, stock, OEM for the year/make/model of the vehicle in competition; except that Headers are allowed regardless of year/make/model of vehicle being used.
- B. Removal of the catalytic converter, air conditioning compressor and smog pump is permitted.
- C. Exhaust may not come through the hood in any fashion.

6.4 - Engine Compartment

- A. The engine and radiator must be mounted in the stock, OEM location for the year/make/model of the vehicle in competition.
- B. Solid engine mounts and/or safety chains are permitted.
- C. Accumulators and/or Accusumps are NOT permitted.
- D. Reinforcing is NOT permitted WITH THE EXCEPTION of the front strut cross bar.

6.5 - Transmission & Driveline

- A. The transmission and/or transaxle must remain unaltered, stock, OEM for the year/make/model of the vehicle in competition; Except that locked transmissions are allowed.
- B. All forward and reverse gears must be operational.

6.5 - Transmission & Driveline (continued)

- C. The flywheel, flexplate, clutch and/or torque converter and/or assembly must remain unaltered, stock, OEM for the year/make/model of the vehicle in competition.
- D. Mini-type clutches and/or couplers are NOT permitted.
- E. Transmission coolers in the driver compartment are NOT permitted.
- F. Torque dividing final drive systems are NOT permitted.
- G. A minimum one (1) inch inspection hole must be located in the bell housing and accessible for inspection at ANY time!

6.6 – Chassis/Frame

- A. All chassis and frames must remain unaltered, stock, OEM. Any front wheel drive, compact car frame is permitted.
- B. A maximum wheelbase of 107-inches is permitted.
- C. The magnetic steel floor pan must remain unaltered and OEM. Any work that is done in the form of patches must be completed with magnetic steel.

6.7 – Weight

- A. Additional weight of any type is NOT permitted. Any item(s) that are deemed to provide additional weight must be removed.

6.8 – Fuel Cells and Fuel

- A. The fuel system must be complete, unaltered, stock, OEM for the year/make/model of the vehicle in competition.
- B. Only standard pump gasoline purchased from a local gas station is permitted for competition. A maximum of 93 octane. Performance additives are NOT permitted.
- C. The gas tank/fuel cell may be mounted ahead of the rear axle with a minimum 1/8-inch shield mounted under it.
- D. If the gas tank/fuel cell is mounted behind the rear axle the gas tank/fuel cell must be replaced with a maximum eight (8) gallon fuel cell relocated to the trunk area of the car. The cell must be mounted with two (2) solid magnetic steel straps around the entire cell, two (2) inches wide and 0.125-inch thick. A magnetic steel or fuel cell cover must be between the driver and the fuel cell.
- E. A fuel cell vent, including cap that vent, must have a check valve. If the fuel cell does not have an aircraft-type positive seal filler neck, then a flapper, spring and/or ball type filler roll-over valve is mandatory.
- F. External electric fuel pump wired to the ignition switch with aftermarket fuel cell are permitted.

6.8 – Fuel Cells and Fuel (continued)

- G. Cool cans are NOT permitted.
- H. Fuel lines that pass through the driver compartment must be inside a magnetic steel tube to protect fuel line from being cut or ruptured.
- I. A fuel shut off valve is required. The valve must clearly labeled and within reach of the driver.

6.9 – Body

- A. Any front wheel drive, compact car is permitted for competition. Convertibles and/or two seat sports cars are NOT permitted.
- B. The body must remain unaltered, stock, OEM in appearance.
- C. The inner fenders must remain unaltered, stock, OEM. Removing the plastic inner fenders is permitted. Modifying any portion of the metal structure of the inner fender is strictly forbidden and NOT permitted.
- D. The hood and trunk lid/hatchback must be positively and securely fastened.
- E. All doors must be positively and securely fastened in the closed position.
- F. All glass, exterior lights, chrome, plastic trim and hood insulation must be removed.
- G. The dashboard may be removed.
- H. Front and rear bumpers and/or covers must be positively and securely fastened to the chassis whether welded, chained and/or cabled to the frame. Aftermarket front nose cones are allowed but must remain within stock, OEM specifications for the year/make/model of the vehicle in competition.
- I. Tow chains or cables are **MANDATORY** on the front and rear. Must be EASILY accessible by track officials for towing of your car.
- J. A maximum seven (7) inch sun visor is permitted.
- J. The opera windows may be closed and/or covered.
- K. It is highly recommended that the interior/cockpit remain OPEN. If it is enclosed, there must be adequate room for the driver to safely operate the vehicle. Easily removable access panels for inspection purposes are required. Inspection panels must be adequate in size and quantity to fully inspect the interior of the vehicle.
- L. The Vehicle Identification Number (VIN) must remain clearly visible and unaltered in a minimum of one (1) of the stock, OEM location. Any car missing the VIN will not be permitted to enter competition.
- M. No sharp or protruding edges in or around the cockpit, which would impede the driver's rapid exit from the car are allowed.
- N. Windshield screens with a minimum of .090-inch screens must be securely fastened in the area directly in front of the driver.

6.9 – Body (continued)

- O. The driver compartment must be sealed completely from the track, the engine and the fuel cell. The front and rear firewalls must remain and any holes must be patched with magnetic steel.
- P. Mirrors are NOT permitted.
- Q. All material considered flammable, such as vinyl seats, foam, airbags, etc., must be removed.

6.10 – Suspension

- A. All components and mounts must remain unaltered, stock, OEM and must match the year/make/model of vehicle in competition.
- B. Weight jacks, modifications, racing components, aftermarket or homemade traction devices are NOT permitted.
- C. The vehicle must remain in alignment from front-to-rear and must track straight.
- D. A maximum of 5 degrees of camber is permitted on any wheel.
- E. Center mounted steering wheel/steering column is NOT permitted. The steering column must remain unaltered, stock, OEM in the stock, OEM location.
- F. A quick release, aftermarket steering wheel is HIGHLY recommended.
- G. Aftermarket remote reservoir power steering is NOT permitted.
- H. All shocks and struts must remain unaltered, stock, OEM in the OEM location.
- I. Spring rubbers are permitted.
- J. “Safety Hub” on RR is permitted.

6.11 – Brakes

- A. All brake components must be unaltered, stock, OEM, magnetic steel and operative on all four wheels.
- B. Disc and/or drum brakes are permitted but must match the year/make/model of the vehicle in competition.
- C. Only unaltered, stock, OEM Master Cylinders in OEM location are permitted.
- D. Brake shut off and/or valve bias adjuster(s) are NOT permitted.
- E. Only magnetic steel brake lines will be permitted.
- F. If a “Safety Hub” is used on the RR, it is HIGHLY recommended that the brake on the RR be FULLY functional, however, the RR brake is not required to be FULLY functional, ONLY when a “Safety Hub” is used.

6.12 – Wheels and Tires

- A. Only OEM, DOT passenger tires are permitted. Racing-type, Mud-type, All-Terrain-type, and/or Snow-type tires are NOT permitted.
- B. Alterations of any type including re-caps, softening, chemical alterations, conditioning, mechanical alterations, siping and/or grooving is NOT permitted.
- C. All wheels must be OEM steel or aluminum type wheels with a maximum width of seven (7) inches and a standard bead. Racing-type wheels are NOT permitted.
- D. Wheels and tires must be of the same series, size and offset on the LF as the RF. Wheels and tires must be of the same series, size and offset on the LR as the RR. Front tires MUST match the Front tires, and Rear tires MUST match the Rear tires!
- E. All tires MUST remain inside of the body.
- G. Wheel reinforcement is strongly recommended.
- H. One, 1”(inch) Outside Diameter magnetic steel lug nuts on steel wheels are required. All lug nuts being 1”(inch) outside diameter on all wheels is highly recommended.

6.13 - Trucks

- A. Any rear wheel drive, small, sport compact trucks are permitted. (S-10, Ranger, Toyota, Mazda, etc.)
- B. All Trucks will be required to meet ALL rules of the Charleston Speedway DIRTcar Hornet Division.
- C. Trucks may not have a modified wheelbase, but wheelbase may exceed 107”, wheelbase must be unaltered, stock, OEM for the year/make/model of the vehicle being used in competition.

6.14 – Roll Cage

- A. Unless otherwise noted all tubing utilized in the construction of the roll cage must be 1.50-inch Outside Diameter, .095-inch thick magnetic steel tubing.
- B. A six-point, full perimeter roll cage, using 1.50-inch Outside Diameter, .095-inch thick magnetic steel tubing is required.
- C. The rear hoop must have bracing that crosses in an ‘X’ configuration. Rear kicks up supports are required.
- D. A minimum 1.25-inch outside diameter cross bar is required across the top of the halo bar.

6.14 – Roll Cage (continued)

- E. The roll cage must be securely fastened (WELDING IS REQUIRED) utilizing a minimum of .250-inch plating to mount cage to the frame. Only magnetic steel will be permitted. Iron, galvanized pipe, fittings, square tubing, brazing and/or soldering is NOT permitted.
- F. A minimum of three (3) door bars on the driver side and two (2) door bars on the passenger side, mounted in a horizontal manner will be required. Vertical bracing from the top-to-the-bottom of the door bars on both sides is required.
- G. A minimum of three (3) windshield bars and protective windshield screen with a minimum of .090-inch thick screens are required in front of the driver.

6.15 – Claim/Tech Request

- A. A competitor may request an entire or partial vehicle tech of a fellow competitor.
- B. Such requests must be accompanied by a cash deposit of \$300 from the one making the request to the tech officials.
- C. The competitor making the request MUST have finished on the lead lap of the race as well as the same lap as the vehicle he/she is requesting to be teched.
- D. Requests can ONLY be made by the actual driver of the vehicle, no later than 15min after the completion of his/her Feature event.
- D. Both vehicles of the two competitors (the vehicle of the one making the request, as well as the vehicle being requested to be teched) will be sat side by side in a secure area and undergo the exact same tech inspection.
- E. The only individuals allowed in the secure tech area will be the 2 drivers of the 2 vehicles, and authorized staff of The Charleston Speedway. NO other people will be allowed in this area.
- F. If both vehicles are deemed legal, \$200 will be paid to the competitor who was “claimed”. The remaining \$100 will be given to tech officials.
- G. If the claimed vehicle is found illegal and the requester is legal, \$200 will be given back to the one making the request and \$100 will be given to tech officials.
- H. If either vehicle is found illegal, ALL points and earning for that event will be forfeit as well as being docked and additional 25 Championship points.
- I. If both vehicles are illegal, \$100 will be given to the tech officials and the other \$200 will be evenly distributed between the other Hornet division competitors competing in that night’s Feature event.

6.15 – Claim/Tech Request (continued)

- J. Officials of The Charleston Speedway reserve the right to fully or partially tech any vehicle or competitor at anytime deemed necessary.
- K. Any competitor refusing any portion of any tech procedure will forfeit all points and earning for that nights event, be docked 25 Championship points and serve 8 hour of community service at the Speedway.
- L. Vehicles found illegal in ANY pre-race tech will not be permitted to compete until those infractions are remedied.
- M. Vehicles found illegal in ANY post-race tech, will be disqualified from that event, and loose all points and earnings from that event only.

6.17 - Personal Protection Equipment

(See section A. in the Charleston Speedway General Rules)

It is the sole responsibility of each competitor to verify the effectiveness, ensure proper installation, per the manufacturer's specifications, and properly use, every component of the competitors safety equipment. Each competitor is expected to investigate and educate themselves for continuing improvement regarding their own personal safety equipment.

6.18 - Seat Belt and Restraint System

- A. Each car must be equipped with minimum of an SFI 16.1 or SFI 16.5 approved restraint system. Restraint system will be eligible for use in competition until the expiration date or for 2 years from the date of manufacture. Seat belt restraint systems shall be installed and used in accordance with manufacturer's instructions.
- B. In any type of manufacturer's installation, the fasteners must be as supplied by the manufacturer.
- C. Seat belt material should not be permitted to come in contact with any sharp or metal edge, including when the material passes through the seat.

6.19 - Protective Clothing

- A. All drivers are required to wear a fire-resistant driving uniform meeting minimum of the SFI 3.2A/5 specifications and display a valid SFI 3.2A/5 label on the outside of the uniform.
- B. Drivers must wear gloves at all times they are on track. Driver's gloves must meet or exceed the SFI 3.3 specification and have a legible and valid SFI 3.3 label.

6.19 - Protective Clothing (continued)

- C. Drivers must wear racing shoes at all times they are on track. Racing shoes must meet a minimum of the SFI 3.3 specifications and display a valid SFI 3.3 label.

6.20 - Seats

- A. Aluminum and/or carbon fiber-type composite racing seats are required. If a carbon fiber-type composite seat is used, it must meet the SFI 39.2 ratings. Aluminum seats with an FIA and/or SFI 39.2 ratings are recommended.
- B. All seats must be mounted to the frame as required by the seat and chassis manufacturer.
- C. Full containment seat(s) and/or aftermarket bolt on head restraints are recommended.
- D. Up fitting a current seat with bolt on kits is permitted with a seat manufacturer produced kit and an acceptable base seat approved by the seat manufacturer. Components must include comprehensive head surround, shoulder and torso support system, energy impact foam. Must be installed in accordance to seat manufacturer's instructions.
- E. Seats must be used as supplied and installed following instructions provided by the seat manufacturer.
- F. If the left side head surround is 7"-inches or less when measured from the back of the headrest, then a left side head net meeting the SFI 37.1 must be installed with a quick release latch. A minimum left side head surround of 4"-inches is required.

6.21 - Helmets

- A. All drivers must wear a full-face helmet while on the track. Helmet must have a minimum safety rating of FIA 8860-2010, FIA 8860-2018, Snell SA 2015, Snell SA 2010, Snell SAH 2010 and/or a valid SFI 31.1/2005 label.

6.22 - Head and Neck Restraints

- A. Drivers, at all times they are on the track, should have their helmets correctly (following manufacturers installation and use instructions) connected to an approved head and neck restraint.
- B. The head and neck restraint must be SFI 38.1 approved and display a legible and valid SFI 38.1 label.
- C. Neck braces should be used when a head & neck restraint device is not used.

6.23 - Fire Suppression is *HIGHLY* recommended.

- A. All race cars should be equipped with a thermally deployed automatic fire suppression system. The fire suppression system will consist of a DOT approved cylinder manufactured from aluminum or steel with a capacity of ten (10) lbs. of fire extinguishing agent, steel or steel reinforced lines, and has a minimum of two (2) thermally activated discharge nozzles.
- B. All systems must meet or exceed SFI 17.1 specifications.
- C. Systems must be fully charged with DuPont FE-36, 3M NOVEC 1230, or FireAde and display a legible and valid SFI and manufacturer label depicting fire extinguishing agent, capacity, and certification date. Cylinders that are beyond useful certification date must be inspected, serviced and re-labeled by the manufacturer.
- D. Cylinders must be securely mounted to the frame/roll cage assembly, forward of the fuel cell. The certification label must be unobstructed and easily accessible for inspection when the mounting is complete. For systems with one activation point, the activation point may be mounted in the cockpit or rear of the car close to the fuel cell.
- E. The cylinder must be connected to the nozzles with steel or steel reinforced lines.
- F. Two (2) thermally activated nozzles must be used. One (1) nozzle must be located directly above the fuel cell in the fuel cell area and the second nozzle located in the driver cockpit area.
- G. An optional manual override cable is recommended.

6.24 - Other

- B. All teams must have an easily accessible fire extinguisher or its equivalent in the team's pit area.

6.25 - Appearance

- A. Cars must have 18"-inch number on each door and the roof. The roof number shall be oriented in such a way as to be easily read from the grandstands while passing by in the normal, racing direction.
- B. There must be a 6"-inch number on the front and rear of the car, easily read by competitors and safety crew while the car is on the track.
- C. All numbers and letters must be very visible and EASILY read by the track officials and fellow competitors. In the situation of duplicate numbers, the track officials may assign a letter to you. It is your responsibility to add this letter to your car on the roof and doors. Failure to do so will cause you to be scored last for your event.