

2022 Charleston Speedway

Charleston/DIRTcar Factory Stock Rules

TO ALL COMPETITORS/PARTICIPANTS

- ❖ Under the guidelines of the 2022 Charleston Speedway/DIRTcar Factory Stock rules, any/all rules as stated in the 2022 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 2022 Charleston Speedway/DIRTcar Factory Stock 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.**

5.1 - Engine

- A. All engines must be stock bore and stroke. Maximum overbore of .060” for cylinder “clean-up” is allowed. 360 cubic inch MAXIMUM, No 400 blocks.
- B. No Siamese blocks.
- C. All engine components must remain stock, unaltered and OEM for the year/make/model of the car being used in competition. All engine components must remain Chevy for Chevy, Ford for Ford, etc.
- D. Flattop or dished pistons ONLY. Dome pistons are not allowed.
- E. No aftermarket cylinder heads EXCEPT: Engine Quest (EQ) head CH350I for GM & CH318B for Chrysler.
- F. Combustion chambers must remain within 3CCs of stock.
- G. Porting or polishing of any kind is not permitted.
- H. All heads must retain stock valve size.
- I. Single valve spring only.
- J. Guide plates, screw in studs and pin studs are allowed. NO girdles allowed.
- K. Stamped steel rocker arms only. No roller rockers or roller tip rockers.
- L. Poly locks are allowed.
- M. Stock steel retainers only.

5.1 - Engine (continued)

- N. Must use stock, unaltered, OEM valve springs. No milling or cutting of valve spring seats to allow the use of larger valve springs.
- O. Extensive milling or angle milling is not allowed.
- P. Gear or belt driven camshafts are not allowed.
- Q. Cams must be hydraulic/non-roller only.
- R. Must have cast iron, stock, unaltered, OEM intake. (ALUMINUM INTAKES ARE NOT ALLOWED, even if you use metallic/magnetic paint, it's still ILLEGAL).
- S. 7-quart oil pans are permitted.
- T. Fan shroud is required.
- U. Fuel pump must be mechanical, engine mounted in the stock, OEM location. No electric fuel pumps are allowed.
- V. Engine must be mounted in the stock, OEM location. GM Metric frame, center of fuel pump must be located a minimum of 1.75" in front of cross member, measured where the cross member meets the frame.

5.2 - Electronics and Ignition Systems

- A. All ignition components must be stock, unaltered, OEM and match the year/make/model of the car/engine in competition.
- B. Only 12-volt ignition systems are permitted.
- C. Ignition boxes and/or performance chips and/or any ignition enhancing devices are not allowed.
- D. Traction controlling devices or traction enhancers of any type are not allowed.
- E. Only 1 (one), 12 (twelve) volt battery securely mounted with both terminals covered is allowed. Battery is required to be mounted in the trunk between frame rails with minimum 3/8"(inch) hold down bolts.
- F. Starter must be mounted in the stock, OEM location on the engine.
- G. Only one aftermarket tachometer, oil pressure and water temperature gauge(s) will be allowed.
- H. Data transmitting or recording devices of any type are not allowed. In car cameras such as a Go-Pro type, and others, are allowed.

5.3 - Carburetor

- A. Only 1 (one) unaltered two-barrel Rochester or a Holley 4412 will be allowed. Choke blade and linkage may be removed.
- B. Carburetor adapter plates or spacers are allowed.
- C. Carburetor will be checked with GO/NO GO carburetor tool.

5.3 - Carburetor(continued)

D. An approved carburetor rollover plate that prevents fuel spillage in case of a rollover is **HIGHLY** recommended. Currently approved rollover plates are as follows:

1. Willy's Carb & Dyno Shop, LLC – Part # WCD4000SB
2. Willy's Carb & Dyno Shop, LLC – Part # WCD4002

5.4 - Exhaust System

A. Headers or cast iron exhaust manifolds are allowed. Exhaust may not come through the hood in any fashion.

5.5 - Transmission & Driveline

- A. Stock, OEM replacement clutch, pedals, and master cylinders are allowed.
- B. Driveshaft loops are to be no more than 12"-inches past the front yolk.
- C. Driveshaft **MUST** be painted white and made of magnetic steel. Your car number **MUST** be prominently displayed on the drive shaft.
- D. Manual transmissions must run explosion proof bell housing.
- E. Automatic transmissions must run explosion proof blanket or 1/4"-inch steel scatter shield over converter.
- F. All forward and reverse gears must be operational.
- G. No aftermarket or altered transmissions are allowed.
- H. The flywheel, flex plate, clutch and/or torque converter and/or assembly must remain unaltered, stock, OEM for the year/make/model of the car in competition. Only 12" torque converters are allowed.
- I. Mini type clutches and/or coupler's are not permitted.
- J. Transmission coolers in the driver compartment are not permitted.
- K. Stock, OEM 10bolt, 12bolt, and 9"(floater) rear axle housings are allowed.
- L. Locked rear ends are required. No limited slip differentials.
- M. Any pinion angle is allowed.
- N. Trailing arms must remain stock, OEM length with stock, OEM bushings. Lower trailing arm mounting location can be no lower than **3.5"** below the bottom of the rear axle tube.
- O. Weight jacks are permitted **ONLY** on the rear axle. Shackles and lowering blocks will be allowed for leaf spring cars **ONLY**. Mono leaf spring is not allowed.
- P. Traction controlling devices or traction enhancers of **ANY** type are **NOT** permitted.

5.6 Chassis / Frame / Roll Cage

- A. All cars must be stock, as OEM. Cars must be of sedan type only.
Small, unsafe cars, Hearses, Station Wagons, Convertibles, Foreign Cars or Commercial Vehicles are NOT allowed.
- B. UNI-BODY cars are allowed but MUST tie the frame together.
- C. Rear frame rails may ONLY be replaced with 2”(inch) x 3”(inch) square tubing after kick up.
- D. Roll cage: full six-point roll cage from center to rear axle must be used, rear loop from frame to frame allowed.
- E. Minimum of four door bars on the left and three door bars on the right are mandatory. Bars must be made of 1.50”(inch) O.D. x .095”(inch) wall thickness tubing.
- F. Bars on quarter panel & door to protect car are required and should be 1 1/2”(inch) or 1 3/4”(inch) tubing.
- G. Offset or set back cages are not allowed.
- H. Minimum wheel base is 108”.

5.7 - Weight

- A. Minimum weight is 3,200 pounds with driver at the completion of the on track activity (Qualifying, Heat, B-Feature, A-Feature, Etc.).
- B. Removable weight is allowed. Weight **MUST** be painted white, securely mounted with a **MINIMUM** of 2 (two) 1/2”(inch) bolts, and be clearly marked with your car number.

5.8 - Fuel Cells and Fuel

- A. Cars must have a full firewall between fuel cell and driver.
- B. Fuel cell can hang no lower than 4” below rear frame rails.
- C. Must use a racing type fuel cell in a steel can. Rollover check valve is mandatory on/in the fuel cell. Stock, OEM fuel tank MUST be removed.
- D. Fuel cell must be firmly secured by 2(two) over the tank straps, minimum 1/8”(inch) thick x 2”(inch) wide steel.
- E. Fuel lines in the drivers compartment MUST be inside of steel tubing.
- F. Pump gas, racing gas or E85 only.
- G. Alcohol, nitrous oxide, nitrous methane, propylene oxide, performance additives or any other type of fuels is NOT permitted.

5.9 - Body Rules Enforced in 2022

- A. Cars must have **STOCK, OEM APPEARING, STEEL** bodies.
Station Wagons, Hearses, Convertibles, Foreign Cars or Commercial Vehicles are NOT allowed.

5.9 - Body Rules Enforced in 2022 (continued)

- B. Floor pans are required. Firewall and floor pan must be in stock, OEM position. Floor pan is to go from the front firewall to front of the rear tires and from door to door. All holes and notches in the firewall, floor pan, and rear seat panel area must be plated or filled in with steel.
- C. Four vertical bars evenly spaced apart on the driver's side in the windshield location are required. No glass or plastic.
- D. All chrome must be removed from the car. Including door handles, moldings and mirrors. No interior metal removed except door panel.
- E. All doors must be welded shut.
- F. All flammable materials must be removed (backseat, headliners, etc.).
- G. Must have stock, OEM and/or stock, OEM appearing front bumper or plastic nose piece on the front. All bumpers, nose and tail pieces must be rounded and securely attached. The rear of the car must be enclosed, with a stock, OEM and/or stock, OEM appearing cover. No holes in rear will be allowed.
- H. Only one(1) radiator hoop bar is allowed.
- I. Cars will be allowed 5"(inch) rear spoiler. Spoilers cannot exceed the width of the rear deck.
- J. Stock, OEM, and/or stock, OEM appearing, steel and/or fiberglass hoods are required. A hole for air cleaner clearance is allowed. Four(4) hood pins are mandatory.
- K. Tow chains or cables are **MANDATORY** for front AND rear. Must be EASILY accessible by tow truck operator.
- L. Mirrors of any type are not allowed.
- M. Maximum car width at any point is 79".
- N. Absolutely no flat sided bodies.

BODY RULES THAT WILL BE ENFORCED IN 2023

- O. Maximum car width at any point is 70".
- P. Body must be mounted in the stock, OEM location and over all appearance must resemble the type of car being claimed. Example: If you claim it is a Monte Carlo, then ALL of the body MUST look like a Monte Carlo.
- Q. Stock, OEM appearing roof is required. "Late Model/Modified Style" roofs and flat roofs are not allowed.
- R. Roof support/pillars, A and C pillars must be made of steel, stock/OEM in appearance, and mounted in the stock, OEM location.
- S. Front nose must have a minimum ground clearance of 7".
- T. Minimum ground clearance on the sides is 5".

BODY RULES THAT WILL BE ENFORCED IN 2023 (continued)

- U. Hood must be separate from the front fenders, have stock, OEM, “factory” feature lines, and mounted in the stock, OEM location.
- V. Aftermarket nose piece MUST be stock, OEM in appearance. LATE MODEL, or wedge type aerodynamic noses are not allowed.
- W. Nose/hood rake may be no more than 3”. Measurement will be taken from where the hood meets the “windshield”, out to where the hood meets the nose, using a “straight edge” device, laid length way on the hood.
- X. Fenders and nose piece must remain tight with the body lines on the car.
- Y. Bodies that appear to be wedge shaped, and/or do not have stock contours/shape in appearance are not allowed.
- Z. Body panels must follow the configuration, bend, and shape of the stock, OEM body.
- AA. Trunk lids must be removable.

5.10 - Wheels and Tires

- A. Steel racing wheels with a maximum width of 8”(inches) are allowed. Aluminum, magnesium, mag-type and/or homemade wheels are not allowed.
- B. Any five-lug, OEM pattern is permitted. Must run 9/16”(inch) minimum studs with 1”(inch) lug nuts.
- C. Radial, DOT, Street Type tires are required. An 8”(inch) maximum tread width is allowed. Hoosier, American Racing, McCreary, Racing Type, Mud, Snow, AT(All Terrain), or Recap tires are not allowed.
- D. Siping and grooving of tires is NOT permitted.
- E. Any type of alteration, chemical and/or mechanical, to the face and/or sidewall of the tire is not permitted.
- F. Bead lock wheels are permitted on the right side only.
- G. ONLY Approved wheel discs are allowed. Approved wheel discs are wheel discs that are fastened to the wheel using a minimum of 3 (three) 1/4”(inch) or 5/16”(inch) diameter magnetic steel hex head bolts. The use of wheel discs with any other type of fastener are not permitted.
- H. Approved fastening (nut assembly) systems:
 - a) Keyser Manufacturing – Part # 1007-101
 - b) Wehr’s Machine – Part # WM377A-312 Aluminum 5/16 or WM377S-312 Steel 5/16.
 - c) Triple X Chassis – Part # SC-WH-7810 (1” spring) or SC-WH-7820 (1 3/8” spring).
 - d) Smith Precision Products – Part # MC-516-18.

5.11 - Suspension

- A. Shocks must be stock type, OEM mounted, in the stock, OEM location. Both shock ends must be mounted with rubber bushings as original type stock, OEM equipment. Spherical balls or Heim joints/ball mountings of any type, are NOT allowed. Shocks may be “take-apart” type, gas or oil type. Steel body shocks ONLY.
- B. Springs must be mounted in the stock, OEM location. Rear springs must be directly over center of the axle. Moving the spring mounts to the left, right, forward or aft of the stock, OEM location of center line of the axle is NOT allowed.
- C. A tubular upper control arm that has a steel cross shaft, and has stock, OEM dimensions for year/make/model of the chassis being used, is allowed. It must bolt directly to stock, OEM mounting bracket.
- D. Upper and lower control arm brackets/mounts may NOT be moved on the frame and must remain in the stock, OEM location for the year/make/model of the chassis being used.
- E. Upper and lower control arms must use stock, OEM type ball joints.
- F. Lower control arms must be stock, OEM for the year/make/model of the chassis being used. Aftermarket type lowers are not allowed.
- G. Spindles must be stock, OEM for the year/make/model of chassis being used. Spindle savers are permitted.
- H. No spring adjustments, weight jacks or spacers will be permitted at the front coil spring pockets.
- I. Tie rods and rod ends must be stock, OEM for the year/make/model of the chassis being used.
- J. Titanium, gun-drilled, hollow bolts, or studs of any kind, are not allowed anywhere on the car.
- K. No suspension limiters of any kind are allowed. This includes, but is not limited to, chains, ropes, bump stops, etc. Shock shaft must be able to fully compress all the way into the shock body and fully extend for the proper length of the shock. No internal travel limiters in the shock are allowed.

5.12 - Steering

- A. Steering quickening devices, aftermarket power steering pumps and reservoirs are allowed.
- B. Steering shaft may be collapsible. (recommended)
- C. Aftermarket steering wheel with quick release are required.

5.13 - Brakes

- A. Four wheel brakes are REQUIRED.
- B. Shutoff valves are not allowed.
- C. Dual aftermarket brake master cylinder is allowed. Balance bar MUST be in the neutral position. NO in car brake adjustments are allowed.
- D. Only stock, OEM appearing steel calipers and steel non-scalloped rotors are allowed.

5.14 - Personal Protective 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.

5.15 - 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 shall not be permitted to come in contact with any sharp or metal edges, including when the material passes through the seat.

5.16 - 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.
- 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.

5.17 - 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"(inch) 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"(inch) is required.
- G. Seats must be securely fastened to the frame and/or cage in 6(six) positions with a minimum of 6(six) 3/8" bolts. There should be a minimum of 4(four) bolts on the bottom of the seat, and 2(two) in the back of the seat. Only single piece high back type seats will be allowed.
- H. All seats must have a minimum of 1/8" steel plate under the seat, up the back 4" and be as wide as the seat.

5.18 - Helmets

- A. All drivers must wear a full-face helmet with 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.

5.19 - 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.

5.20 - 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. 2 (two) 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.

5.21 - Other

- A. Only SFI 45.1 roll bar padding may be used. Knee, steering pads and/or additional padding may be utilized.
- B. All teams **MUST** have an easily accessible fire extinguisher or its equivalent in the team's pit area.

5.22 - Appearance

- A. Cars must have an 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 as the car travels past the grandstands.
- B. There must be a 6"(inch) number on the front and rear of the car, easily read by other drivers and officials 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.