

2021 DIRT CAR FACTORY STOCK RULES

As approved by The Charleston Speedway

25.1 - Engine

- A. All engine components must remain stock, unaltered and OEM for the year, make and model of the car being used in competition. All engine components must remain Chevy for Chevy, Ford for Ford, etc.
- B. Engine must be in stock location.
- C. No Siamese blocks.
- D. All engines must be stock bore(.060 max over bore) and stroke, 360 maximum cubic inch, No 400 blocks.
- E. No dome pistons. Flat top or dished pistons ONLY.
- F. No aftermarket cylinder heads EXCEPT: Engine Quest (EQ) head CH350I for GM & CH318B for Chrysler
- G. Combustion chambers must remain within 3CCs of stock.
- H. No porting or polishing of any kind permitted.
- I. All heads must retain stock valve size.
- J. Single valve spring only.
- K. Guide plates and screw in studs are allowed. NO girdles allowed.
- L. Valve springs must be of stock diameter and height.
- M. Stamped steel rocker arms only. No roller rockers or roller tip rockers.
- N. Poly locks allowed.
- O. Stock steel retainers only.
- P. Pin studs are allowed.
- Q. No milling or cutting of valve spring seats to allow the use of larger valve springs. Must use stock OEM valve springs.
- R. No extensive milling or angle milling will be allowed.
- S. No gear or belt driven camshafts.
- T. Cams must be hydraulic/non-roller only.
- U. Must have cast iron OEM intake. (NO ALUMINUM INTAKE ALLOWED).
- V. 7-quart oil pans permitted.
- W. Fan shroud required.
- X. No electric fuel pumps.

25.1.1 - Electronics and Ignition Systems

- A. All ignition components must be unaltered, OEM and match the year, make and model of the car in competition. Only 12-volt ignition systems will be permitted.
- B. Ignition boxes and/or performance chips and/or any ignition enhancing devices will not be permitted.
- C. Traction control of any type will not be permitted.
- D. Only (1) one (12) twelve-volt battery, securely mounted with both terminals covered will be permitted. Battery is required to be mounted in the trunk between frame rails with minimum 3/8"-inch hold down bolts.
- E. Engine starter must be mounted in the OEM location.
- F. Only one aftermarket tachometer, oil pressure and water temperature gauge(s) will be permitted.
- G. Data transmitting devices of any type will not be permitted.

25.1.2 - 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 carburetor tool.
- 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

25.1.3 - Exhaust System

- A. Headers or cast iron exhaust manifolds will be allowed.

25.2 - Transmission & Driveline

- A. OEM replacement clutch, pedals, and master cylinders allowed.
- B. Driveshaft loops no more than 12"-inches past the front yolk.
- C. Driveshaft must be painted white.
- D. Driveshaft must be steel.
- E. Manual transmissions must run explosion proof bell housing.
- F. Automatic transmissions must run explosion proof blanket or 1/4"-inch steel scatter shield over converter.
- G. All forward and reverse gears must be operational.
- H. No aftermarket or altered transmission will be allowed.
- I. The flywheel, flex plate, clutch and/or torque converter and/or assembly must remain unaltered and OEM of the year, make and model of the car in competition. Only 12" torque converters will be allowed.
- J. Mini type clutches and/or couplers will not be permitted.
- K. Transmission coolers in the driver compartment will not be permitted.
- L. Locked rear ends will be allowed. Floater rear ends will be allowed. No limited slip differentials (No traction control). Any pinion angle allowed.
- M. Trailing arms must remain stock length with stock bushings. Lower trailing arm mounting location can be no lower than 3.5" below the bottom of the rear axle tube.
- N. OEM, 10bolt, 12bolt, 9"(floater) rear axle housings are allowed.
- 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 not allowed.

25.3 Chassis / Frame / Roll Cage

- A. All cars must be stock; cars must be of sedan type only. No small, unsafe cars. No hearses, station wagons, convertibles, or commercial vehicles are allowed. No foreign cars.
- B. Rear frame rails may be replaced with 2"-inch x 3"-inch square tubing after kick up only. UNI-BODY cars MUST tie frame together.
- C. Roll cage: full six-point roll cage from center to rear axle must be used, rear loop from frame to frame allowed.
- D. Minimum of four door bars on the left and three door bars on the right are mandatory. Bars must be made of 1.50" O.D. x .095" wall thickness tubing.
- F. Bars on quarter panel & door to protect car are required. The bars, which should be 1 1/2"-inch or 1 3/4"-inch tubing.
- G. Front safety loop not to exceed 1 3/4"-inch O.D. round tubing with maximum loop not to exceed 5"-inches as measured from the front side of tubing in front of the radiator. Loop to be a single bar. A brace for the radiator may be used with an upright on each side and brace to the frame. In front of "A" frame, a maximum of 1 1/2"-inch O.C. x minimum 1" I.D. pipe of tubing.
- H. No offset or set back cages allowed.
- I. Minimum wheel base is 108".

25.4 - Weight

- A. Minimum weight is 3,200 pounds with driver.
- B. Removable weight will be allowed. Must be painted white and securely mounted with a minimum of 2 (two) 1/2"-inch bolts.

25.5 - 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. Stock fuel tank MUST be removed.
- D. Must use a racing type fuel cell in a steel can. Rollover valve mandatory.
- E. Fuel cell must be firmly secured by two(2) over the tank straps, minimum 1/8" thick x 2" wide steel.
- F. Fuel lines in the drivers compartment MUST be inside of steel tubing.
- G. Pump gas or racing gas only. No alcohol, nitrous oxide, nitrous methane, propylene oxide or E85.
- H. Performance additives will not be permitted.

25.6 - Body

- A. Cars must have stock appearing steel bodies.
- B. Floor pans are required. Firewall and floor pan in stock position. Floor pan is to go from front firewall to front of 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.
- C. Four vertical bars evenly spaced apart on the driver's side in the windshield location are required. No glass or plastic. You may cover headlight openings only.
- 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 or pop riveted shut.
- F. All flammable materials must be removed (backseat, headliners, etc.).
- G. Must have stock front bumper or noise piece. All bumpers must be rounded and securely attached.
- H. Only one(1) radiator hoop bar is allowed.
- I. Tow chains or cables are mandatory for front and rear.
- J. Cars will be allowed 5"-inch spoiler. Spoilers cannot exceed the width of the deck lid.
- K. OEM stock steel and/or OEM stock appearing steel and/or fiberglass hoods are required. A hole for air cleaner clearance is allowed. Four(4) hood pins are mandatory.
- L. The rear of the car must be enclosed, no holes will be allowed.

25.7 - Wheels and Tires

- A. A maximum of 8"-inch wide steel racing wheel will be permitted. Aluminum and/or magnesium and/or mag-type and/or homemade wheels will not be permitted.
- B. 1 (one) 1"-inch magnetic steel lug nuts will be permitted on all four corners of the vehicle. Any five-lug pattern OEM spindle will be permitted. Spindle saver(s) will be permitted. Must run 9/16"-inch minimum studs with 1"-inch lug nuts.
- C. Radial, DOT, street tires with an 8" maximum tread width will be allowed. AT(All Terrain), mud, snow, or recap tires are not allowed.
- D. Siping and grooving of tires will NOT be permitted.
- E. Any type of alteration, chemical and/or mechanical, to the face and/or sidewall of the tire will not be permitted.
- H. A bead lock will be permitted on the right side only.
- I. Approved wheel discs will be permitted. 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 will not be permitted.
- J. Approved fastening (nut assembly) systems:
 - a. Keyser Manufacturing – Part # 100 7-101
 - b. Wehr's Machine – Part # WM377A-312 Aluminum 5/16
 - c. Wehr's Machine – Part # WM377S-312 Steel 5/16
 - d. Triple X Chassis – Part # SC-WH-7810 (1"-inch spring)
 - e. Triple X Chassis – Part # SC-WH-7820 (1 3/8"-inch spring)
 - f. Pit Stop USA – Part # 2020 DIRTcar Factory Stock Rules & Specifications
 - g. Smith Precision Products – Part # MC-516-18

25.8 - Suspension

- A. Shocks and springs must be stock mounted in stock location.
- B. No aluminum shocks allowed.
- C. A stock replacement, tubular upper control arm that has a steel cross shaft that have OEM dimensions for year and make of chassis will be allowed. Must bolt directly to stock mounting brackets. You will not be allowed to move the brackets on the frame. A-arms must use stock ball joint as well.
- D. No titanium or other exotic metals allowed (body, engine and/or suspension).
- E. Lower control arms must be OEM for the year and make of chassis.
- F. Spindles must be stock OEM for the year and make of chassis.
- G. No adjustments, weight jacks or spacers will be permitted at the front coil spring pockets.
- H. Tie rods and rod ends must be OEM for the year and make of the chassis.

25.9 - Steering

- A. Quick steers allowed. Aftermarket power steering pumps and reservoirs allowed.
- B. Steering shaft may be collapsible. (recommended)
- C. Aftermarket steering wheel with quick release are permitted.

25.10 - Brakes

- A. Four wheel brakes. No shutoff valve. Dual aftermarket brake master cylinder with NO in car adjustment will be allowed. Balance bar MUST be in neutral position.
- B. Only stock appearing steel calipers and steel non-scalloped rotors will be allowed.
- C. Random brake checks will be enforced. If your car fails the mandatory brake check, you will not be allowed to start the night's feature event.

25.11 - Safety

25.11.1 - General

- A. Each competitor is solely responsible for the effectiveness and proper installation, per the manufacturer's specifications, of personal safety equipment and determining it to be adequate for competition at every event. Each competitor is expected to investigate and educate themselves for continuing improvement regarding their own personal safety equipment.
- B. Different safety regulations may be in place depending on the local and/or state government rules and/or laws and/or regulations in the specific location of the racetrack. Helmet and seatbelt dates and/or specified equipment requirements, worn, utilized and/or otherwise may be different than specified in the rulebook. Contact your local track officials for more information regarding this.
- C. Each division section (15 to 24) will cover the General and Specific Safety and Personal Protection minimum requirements. All participants are solely responsible to meet the requirements in the specific division.

25.11.2 - 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.

25.11.3 - Protective Clothing

- A. All drivers will be 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 shoes that meet minimum of the SFI 3.3 specifications and display a valid SFI 3.3 label.

25.11.4 - Seats

- A. Aluminum and/or carbon fiber-type composite seats only will be permitted. 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. All seats must be mounted to the frame as required by the seat and chassis manufacturer. Full containment seat(s) and/or aftermarket bolt on head restraints are recommended.
- B. SFI 39.2 seat compliance for the World of Outlaws Late Models, Super DIRTcar Series, 358 Modifieds and DIRTcar Late Models will become mandatory beginning in 2021.
- C. SFI 39.2 seat compliance for the DIRTcar Pro Late Models, UMP Modifieds, UMP Pro Modifieds, NE Sportsman will become mandatory beginning in 2022.
- D. Up fitting a current seat with bolt on kits will be 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. Combining components may not meet SFI 39.2 Certification.
- 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.

25.11.5 - 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.

25.11.6 - Head and Neck Restraints

- A. Drivers, at all times they are on the track, must 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.

25.11.7 - Fire Suppression

Required for DIRTcar Late Models, Super DIRTcar Series, DIRTcar Big Block Modifieds, DIRTcar 358 Modified, DIRTcar NE Sportsman and DIRTcar NE Pro Stocks.

It is recommended for all other divisions.

- A. All racecars shall 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 ten (10) lbs. of 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 mounted forward of the fuel cell. Cylinders must be securely mounted to the frame/roll cage assembly. 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.
- G. An optional manual override cable is recommended for two (2) thermal automatic nozzle systems but is mandatory for systems with one (1) activation point.

25.11.8 - 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 should have an easily accessible fire extinguisher or its equivalent in the team's pit area.

25.12 - Appearance

- A. Cars must have 18"-inch number on each door and the roof.
- B. There must be a 6"-inch number on the rear of the car, easily read from the rear of the car while on the track.
- C. All numbers and letters must be easily visible and readable 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.