



# 2020 DIRTcar Factory Stock Rules

(Pure Stock, American Stock, Hobby Stock, Novice)

## **TO ALL COMPETITORS AND PARTICIPANTS**

- ❖ Under the guideline of the 2020 DIRTcar Factory Stock rules and as stated in the 2020 DIRTcar rulebook, All DIRTcar rules 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/or management may apply at local tracks in DIRTcar sanctioned events. Instances, where applicable, local track rules may be applied.
- ❖ The 2020 DIRTcar Factory Stock rules have been established to include the rules in several different regions of North America, refer to the rules that are in effect in your region.
- ❖ The following are the 2020 DIRTcar Factory Stock rules. All amendments supersede any previous rules regarding any technical article and/or aspect.
- ❖ Under the guideline of the 2020 DIRTcar Factory Stock rules and as stated in the 2020 DIRTcar rulebook, all DIRTcar rules apply to all sanctioned divisions.
- ❖ 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.

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## 25.0 DIRTcar Factory Stock

### 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 of stock bore and stroke (.060 max. over bore).
- E. No dome pistons. Flattop or dished pistons only.
- F. The following heads are permitted:
  - a. GM-350 CID, castings 487-882-997-624-126-493-185-339-441-993
  - b. GM-305 CID, castings 434-450-416-896-520-601
  - c. Engine Quest head CH350I for GM & CH318B for Chrysler - Intake: TBD
  - d. Ford 351 W CID - Intake: TBD
  - e. Chrysler 360 CID - Intake: TBD
- 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.
- 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 2-barrel intakes.
- V. 7-quart oil pans permitted.
- W. Fan shroud required.

#### 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.

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- 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. If the battery is moved from the OEM location, the battery must be mounted in a marine type case. Battery is required to be mounted in the trunk between frame rails with minimum 3/8"-inch hold down bolts.
- E. Only stock OEM starters in the OEM location will be permitted.
- F. Only one aftermarket tachometer, oil pressure and water temperature gauge(s) will be permitted.
- G. In-car cameras, recording devices and/or data transmitting devices of any type will not be permitted.

### 25.1.2 Carburetor

- A. Must run stock 2-barrel carburetor, no Holly's. Carburetors must mount directly on the intake without the use of an adapter plate.
- B. Carburetor will be checked with carburetor tool. (May remove the choke plate only.)
- C. An approved carburetor rollover plate that prevents fuel spillage in case of a rollover is highly recommended.
  - a. Carburetors with plate(s) will be mandated at a future date to be announced.
  - b. Currently approved rollover plates are as follows:
    - i. Willy's Carb & Dyno Shop, LLC - Part # WCD4000SB
    - ii. Willy's Carb & Dyno Shop, LLC - Part # WCD4002

### 25.1.3 Exhaust System

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

### 25.1.4 Engine Setback

- A. Engine setback will be measured from rear trailing holes in the frame to the back of the block. Measurement is 76.5"-inches.

## 25.2 Transmission & Driveline

- A. OEM replacement aftermarket clutch, pedals, and master cylinders allowed. No mid mounts. Must have transmission cross member.
- 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. 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.

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- I. Mini type clutches and/or couplers will not be permitted.
- J. Transmission coolers in the driver compartment will not be permitted.
- K. Locked rear ends will be allowed. Floater rear ends will be allowed. No limited slip differentials (No traction control). Any pinion angle allowed.
- L. Trailing arms must remain stock length. Trailing arm brackets must be within 1/2 of each other.

### 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. Full frames only. Rear frame rails may be replaced with 2"-inch x 3"-inch square tubing after kick up only.
- C. Roll cage: full six-point roll cage from center to rear axle must be used, rear loop from frame to frame allowed.
- D. No intentional reinforcement of bumpers allowed. Bumpers must be curved inward.
- E. Three door bars on both sides is mandatory.
- 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 pipe, must be cut on an angle so they are able to slide off, close to the body, and must be capped off.
- 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. 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.

### 25.4 Weight

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

### 25.5 Fuel Cells and Fuel

- A. Cars must have a full firewall between fuel cell and driver.
- B. Pump gas or racing gas only. No alcohol, nitrous oxide, nitrous methane, propylene oxide or E85.
- C. Performance additives will not be permitted.

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### 25.6 Body

- A. Cars must have stock appearing steel bodies
- B. Floor pans are required. Stock 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.
- C. Windshield must be full screen (wire mesh) with three vertical bars spaced 6"-inches apart on the driver's side. 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, headlines, etc.).
- G. Roll bar can be used behind nose.
- H. All bumpers must be rounded. Must be changed on each side to the frame. Must have loop to extend from inner edge back to frame. All bumpers must be welded on and have a good tow hookup. If stock bumper is used, it may not be reinforced.
- I. Cars will be allowed 5"-inch spoilers, trucks will be allowed 8"-inch spoilers. Spoilers cannot exceed the width of the deck lid.

### 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 on the right side.
- C. Street tires, Hoosier M-30 and Hoosier M-60 tires will be permitted.
- D. Siping of tires will be permitted.
- E. Grooving of tires will not be permitted.
- F. Recapping of an approved tire is not permitted.
- G. 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 rear tire only.
- I. Only 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 #

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- g. Smith Precision Products - Part # MC-516-18

### 25.8 Suspension

- A. Racing shocks and springs must be stock mounted in stock location.
- B. A stock replacement upper control arm made by U-B Machine - Part # 14-0809-5R 8"-inch (right) or Part # 14-0829-6L 8.5"-inch (left) that have a steel cross shaft will be allowed. These bolt directly to stock mounting brackets. You will not be allowed to move the brackets on the frame. These a-arms use the stock K-5208 ball joint as well. These are optional, not mandatory.
- C. No titanium or other exotic metals allowed (body, engine and/or suspension).

### 25.9 Steering

- A. Quick steers allowed. Aftermarket power steering pumps and reservoirs allowed.

### 25.10 Brakes

- A. Minimum three-wheel brakes, stock appearing steel calipers, steel non-scalloped rotors.
- B. Brakes are mandatory
- 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

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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. All current seats must be full containment type constructed of aluminum or approved carbon fiber and must adhere to the general design specifications of SFI 39.2 seat construction standards. Design shall include comprehensive head surround, shoulder and torso support system, energy impact foam, and removable head foam.
- B. Carbon fiber seats must have a current valid SFI 39.2 certification.
- C. 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.
- D. SFI 39.2 seat compliance for the DIRTcar Pro Late Models, UMP Modifieds, UMP Pro Modifieds, NE Sportsman will become mandatory beginning in 2022.
- E. 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.
- F. Seats must be used as supplied and installed following instructions provided by the seat manufacturer.
- G. 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.



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### 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.

### **Super DIRTcar Series, Big Block Modifieds, 358 Modified, DIRTcar NE Sportsman and Pro Stock only:**

- A. Cylinders must be mounted forward of the fuel cell below the deck or just above the deck. Pro Stocks should be mounted below the deck.
- B. Cylinders must be securely mounted to the frame/roll cage assembly and centered in the chassis.

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### 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 5"-inch number on the right-side headlight or on the upper right hand windshield.
- C. All numbers and letters must be easily visible and readable by the track officials. 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.