

Bear Ridge Speedway 2020 DIRTcar Sanctioned Sportsman Modifieds

REFER TO TRACK GENERAL RULES FOR NON-DIVISION SPECIFIC RULES

THESE ARE THE 2019 DIRTcar RULES WHEN THE 2020 RULE BOOK IS ISSUED WE WILL UPDATE ACCORDINGLY

Please refer to the DIRTcar rule book for more information if needed

19.0 - DIRTcar Sportsman Modified

- ❖ Under the guideline of the 2019 DIRTcar rules any and/or rules and as stated in the 2019 DIRTcar Rule Book, 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 management may apply at local tracks in DIRTcar sanctioned events. Instances, where applicable, local track may be applied.
- ❖ All amendments supersede any previous rules regarding any technical article and/or aspect.
- ❖ Under the guideline of the 2019 rules any and/or rules and as stated in the 2019 DIRTcar Rule Book, all DIRTcar rules apply to all sanctioned divisions.
- ❖ The specifications published shall be considered a section of the " Official Rules and Specifications" for all events, series and sanctions by World Racing Group. All sections should be considered when determining specifications and governance.
- ❖ ANY CAR, TEAM AND/OR DRIVER THAT DOES NOT MEET THESE SPECIFICATIONS AND/OR EQUIPMENT REQUIREMENTS WILL BE SUBJECT TO PENALTIES AS DETERMINED BY THE Super
- ❖ DIRTcar and/or DIRTcar and/or World Racing Group OFFICIALS.
- ❖ Any new components. including engine components. body designs. frame designs and/or components of any type utilized in competition must be approved by World Racing Group, Super DIRTcar and DIRTcar Officials prior to being introduced into competition.

Note: unless otherwise noted within section 19.0 the rules remain the same as presented in section 17.0

Engines

- A. The General Motors (GM) / Chevrolet Performance Engine part number #88958602/19258602 is the only engine permitted in all DIRTcar Sportsman Modified events.
- B. The engine and all components must remain in their original configuration and form as purchased and/or delivered from the factory. Any alterations to the engine will not be permitted, including treating or coating of any parts. The Engine must remain as manufactured by General Motors with a stock 4"-inch bore. Overbore(s) will not be permitted. Sleeve repair may be permitted with written permission from DIRTcar and/or World Racing Group Officials.
- C. All engines are to remain sealed from the factory or have DIRTcar cable seals. The original factory seals or DIRTcar cable seals must remain unaltered, tampering, removal, modifications of any type and/or broken factory seals will not be permitted. The GM Engine must remain unaltered in any way.
- D. The GM Crate Engine seals (bolt-type) must remain unaltered. DIRTcar and/or World Racing Group Officials may require specific sealing and verification of all seals on any GM Crate Engine. Tampering with and/or alteration of any seals will not be permitted and is subject to immediate penalty and/or suspension.
- E. Only GM replacement parts of any type will be permitted for any type of replacement and/or repair work. Only GM Crate Engine specific valve springs may be used for replacement and/or repair, Part Number# 10212811.
- F. GM Crate Engine repairs must be authorized by DIRTcar. GM Crate Engine repair procedure Wkimii9inorks as follows:
 - a. Contact your track promoter and/or your local track and/or DIRTcar Technical Officials.
 - b. The Promoter and/or Technical Officials will specify a repair location and instruct the driver/owner where to take the engine to get an estimate.
 - c. Based on the estimate and the detail of the repair, DIRTcar and/or World Racing Group officials will determine if the repairs may be made or if a new engine must be purchased.
 - d. If a repair is approved, a specified inspector will inspect the engine and work with the engine repair facility throughout the duration of the repair to ensure that the engine maintains the GM Specifications.

- e. Upon completion of the repair(s) the engine will be 'resealed' before being released for competition.
 - f. All parts including the gasket repair kit(s) must be stock OEM Chevrolet Performance replacement parts. The receipt(s) generated from the Chevrolet Performance Dealer and/or parts department must be retained and a copy presented to DIRTcar for verification.
 - g. Overbores will not be permitted. If a cylinder has scoring and/or needs repair it must be communicated to DIRTcar officials before being sleeved to maintain the original bore size.
 - h. Valve jobs will not be permitted. Valves may be lapped.
 - i. If the cylinder head requires resurfacing and/or valve seats, a new cylinder head must be purchased. Machine work of any type will not be permitted to the cylinder heads.
 - j. Bead blasting and/or any polishing and/or any alteration to the intake manifold and/or cylinder heads will not be permitted.
 - k. All engine information regarding repairs and/or engine introduction must be retained and turned into DIRTcar Officials, to track and manage engine database, including the driver, serial number, repair, type of repair and/or what type of service was performed to any engine.
- G. If any repair estimates come back to the DIRTcar Officials that meet and/or exceed 80% of the actual price of a new engine, a new engine must be purchased. The engine that was damaged will no longer be eligible for competition.
- H. DIRTcar and/or World Racing Group Supervisory Officials reserve the right to technically inspect, exchange and/or confiscate any GM Crate Engine at any time. Failure to surrender the engine and/or submit the engine for inspection equals disqualification from the event and/or suspension, same as W16.
- I. The intended direction of the GM Crate Engine program is to maintain a cost-effective, affordable racing program. Rebuilding, balancing, blue printing and/or any other alteration made in an attempt to influence the integrity 'of this program will not be permitted. The judgment and determination of any such decision will be at the sole discretion of DIRTcar and/or World Racing Group Officials.

Carburetor/ Air Cleaner

- A. Only one (1) 650 cfm Holley carburetor, Part Number 4777 or 80777 or Holley HP Carburetor Part Number 80541-2 will be permitted.
- B. All engines and all components must remain in their original configuration and form as purchased and/or delivered from the factory. Any changes will result in disqualification from the event. Any alterations to the engine will not be permitted.
- C. 4777 and 80777 Option:
- a. The carburetor must maintain the stock venturi and throttle bore dimensions.
 - b. The carburetor must maintain all stock dimensions, including mounting and stud location on intake manifold.
 - c. The booster height must remain stock OEM from Holley. Cutting, tumbling and/or polishing will not be permitted.
 - d. Visible modifications will not be permitted.
 - e. The following alterations will be permitted;
 - i. Holes drilled in the throttle plate for proper idle.
 - ii. Drilling, tapping and plugging of unused vacuum ports.
 - iii. Welding of throttle shaft to linkage arm.
 - iv. Drilling of idle and/or high speed air correction jets.
 - v. Milling of center carburetor body metering block surface, maximum of .015" on each side.
 - vi. Removal of choke plate and shaft.
 - vii. The jets may be changed as needed.
 - f. Gauge measurements (go/no-go) must be met at all times, regardless of carburetor temperature.
- D. HP 80541-2 Option:

- a. The carburetor must remain stock retaining all Holley measurements and dimensions. The carburetor may be adjusted utilizing only specified Holley replacement parts.
 - b. Jets, bleeds, needle and seat, emulsion bleeds, power valves, accelerator pumps nozzles and accelerator pump cam adjustments will be permitted.
 - c. Physical alteration of carburetor components and/or parts and/or any alterations, machining and/or reshaping will not be permitted. The use of epoxy and/or coatings of any kind will not be permitted.
- E. A single unaltered carburetor spacer plate with an unaltered square hole/opening including gasket with a maximum thickness of 1-1/8"-inch will be permitted. Tapering, machining and/or any other alteration to the spacer plate will not be permitted.
 - F. Only a single conventional round type air cleaner housing with a bottom 5" center hole will be permitted. Ram air, air box and/or heat shield type devices will not be permitted. The air cleaner must remain in place when the hood is removed. A flat piece of metal may be added and securely fastened to AND LEVEL WITH the hood following the contour of the hood scoop to act as a dust shield. The metal attachment can follow the contour of the air cleaner and is not to go past the centerline of the carburetor. The rear 180 degrees of the bottom of the hood scoop must remain open and not enclosed. The opening behind the air cleaner must extend parallel to the air cleaner, to the rear of the hood , enclosure/firewall. There cannot be any metal attached to the air cleaner. Air cleaner must be centered on carburetor.
 - G. Air cleaners that provide ventilation through the top cover (such as the K & N brand) will be permitted.
 - H. Air induction plastic carburetor insert and/or other air diffuser devices that direct air into the air intake will not be permitted.

Ignition

- A. Only stock OEM distributors will be permitted. The distributor must maintain the factory mechanical advance curve to stock OEM specifications. Alterations and/or adjustments will not be permitted with the exception of the distributor advance lock plate may be added.
- B. The ignition amplifier box ("rev box") and coil must be mounted under the hood and on a panel behind the air filter shielded from heat (out of the driver's reach) for ease of inspection. The black wire must be grounded to the motor. When the hood is removed the "rev box" must be clearly visible and not covered.
- C. The car must be fitted with one (1) unaltered approved MSD/DIRTcar RPM (rev) limiting box, maximum 6000 RPM. The box and the chip must remain operable and in working condition, prior to, during and after all racing events. The MSD 8727CT will be the only MSD/DIRTcar RPM (rev) limiting box permitted for competition.
- D. Trigger-type and/or crank trigger-type ignitions will not be permitted.
- E. The ignition must be mechanically driven in the stock OEM location.
- F. Only the stock OEM H.E.I. ignition coil will be permitted.
- G. The wiring must remain as specified by the ignition amplifier box manufacturer.
- H. One American Passenger Car sized battery with terminals on top and a maximum of 12 volts will be permitted. The battery voltage must not measure more than 14.3 volts. Step up transformer and/or any other device designed to increase voltage will not be permitted.
- I. OEM stock firing order must be maintained for all engines. Standard GM Firing Order 18436572.
- J. Ignition amplifier boxes, "rev boxes", RPM limiting chips, may be inspected, confiscated and/or exchanged at any time.
- K. Traction control devices will not be permitted. Braking devices that control traction will not be permitted.
- L. DIRTcar and/or World Racing Group officials reserve the rights to analyze and/or switch ignition boxes and/or rev chips at anytime.

Lubrication/Oiling System/Oil Cooler

- A. Only a single wet sump oil pump will be permitted. Dry sump oil systems will not be permitted.
- B. Only magnetic steel oil pans will be permitted.
- C. External type oil pumps and/or vacuum pumps will not be permitted.

- D. Accu Sumps will not be permitted.
- E. Engine evacuation systems by internal and/or external driven pumps or by connection between exhaust system and/or valve covers, intake manifold and/or oil pan will not be permitted.
- F. Oil coolers will be permitted. Please refer to section 15.1.7-A (Big Block section) for mounting location and other rules specific to the oil cooler.

Driveshaft

- A. Only magnetic steel drive shafts will be permitted. Titanium and/or aluminum drive shafts and/or drive shaft yokes and/or driveline components will not be permitted.

Engine Cooling System/Radiator

- A. Only cast iron water pumps will be permitted.
- B. The cooling fan for the radiator must be mounted in the stock OEM location on the front of the water pump. Fans mounted to the crankshaft will not be permitted. Electric cooling fans and/or pumps will not be permitted.

Rear End

See 15.1.12 in Modified Rules Section

Fuel, Fuel Cells and Fuel System

- A. See Pg. 50 17.2 of Modified rules for fuel cell specifications.
- B. Fuel coolers of any type will not be permitted.
- C. Only 'D'-type VP Racing Gasoline, the official fuel of DIRTcar will be permitted for competition. D-98 will be the only specified fuel permitted at any sanctioned DIRTcar and/or Super DIRTcar Series event. In addition a maximum "94 octane, R+M/2" standard pump gasoline will be permitted at DIRTcar sanctioned weekly tracks. Blending of fuels or gasoline, including VP spec (including 'D') fuels of different octane will not be permitted. Alcohol, methanol, nitrous oxide, nitro-methane and/or propylene oxide will not be permitted. Fuel may be subject to inspection and testing at any time. Proof of purchase for the official fuel of DIRTcar may be required.
- D. Only one mechanical fuel pump in the stock location will be permitted. Fuel must be delivered through the fuel system from the fuel cell to the mechanical fuel pump. Fuel systems that require a return line, a pressure regulator of any type and/or other volume and/or pressure altering device will not be permitted.

Exhaust Muffler and Sound Reduction Devices

- A. Schoenfeld headers, model number: 11228CM, 1122BUCM2 and 1122BCM2 will be permitted. Beyea headers Part # NEDM602, NEDM602US will also be allowed. The exhaust headers must be 1-5/8" outside diameter. Tri-Y, step headers, stainless steel, coated, ceramic and/or otherwise, and/or merge collectors will not be permitted. The permitted mufflers include: Dynomax part number: 17223 and 17296; Extreme Muffler part number(s): 31530 and 31230; Beyea part number(s): MUF3DM. Henry's DMMS3
- B. The header collector extension pipe and tail pipe must not be inserted past the muffler inlet or outlet flange and must exit behind the driver. Maximum of 3" exhaust pipe allowed throughout the exhaust system. No Stainless allowed anywhere in exhaust system.
 - a. All Spec headers must be able to be separated from the rest of the exhaust system for the purpose of inspection.
- C. The complete exhaust system must be sealed. Any type of add on, return system and/or exhaust evacuation system will not be permitted.

Weight/ Ballast

- a. All DIRTcar Sportsman Modified utilizing the Chevrolet Performance Crate Engines must not exceed a minimum weight:

- b. Any car utilizing any aluminum wheel(s) must weigh a minimum of 2,450 lbs following the completion of the event.
- c. Any car utilizing any aluminum wheel(s) and a fire suppression system must weigh a minimum of 2,400 lbs following the completion of the event
- d. Any car utilizing all steel wheels must weigh a minimum of 2400 lbs following the completion of any event
- e. Any car utilizing all steel wheels and a fire suppression system must weigh a minimum of 2350 lbs following the completion of any event.
- f. Ballast and/or weight may not be mounted to the roll cage above the rear deck. All added weight must be securely attached to the frame below the body decking.
- g. Frame is defined as the steel welded structure only.
- h. Any part that moves or is not a fixed component to the steel frame structure may not be used for any weight attachment.
- i. Weights attached to the rear bumper and/or outside the frame will not be permitted.

ALL DIRTCAR SPORTSMAN MODIFIEDS WILL WEIGH 2400 MINIMUM.
FOR CABLE, AFTERMARKET, CHANGED, OR TAMPED SEALS WILL WEIGH 2450.
ON DIRTCAR SACTIONED EVENT NIGHT WILL WEIGH 2450 MINIMUM.

Body

- A. The letters of the driver's last name must be a minimum of six 6"-inches in height and be positioned under, through and/or above the number on both sides of the car.

Driver Compartment

- A. Rear panhard bar adjustment devices will not be permitted in the driver compartment. Any rear panhard adjustments that have a knob and/or an adjustment device outside of the cockpit must be wired in a fixed position for competition.

Suspension

- A. Suspension designs and applications are constantly evolving. Although the intent of the suspension rules are an attempt to accommodate the majority of suspension and suspension component designs and applications currently being used in competition, the rules cannot be absolute. Any and all new designs or modifications to an existing suspension and/or suspension component must be communicated to and approved by the DIRTcar Racing before being used in competition.

Front End

- A. The front axle must be a straight, one-piece axle manufactured from magnetic steel tubing. Only approved camber adjustments and/or camber adjustment devices will be permitted. Any other camber adjustments and/or will not be permitted.
- B. Split axles and/or dropped axles and/or independent front suspension(s) will not be permitted.
- C. All brackets on the front axle must be welded and/or bolted. Bird cages and/or sliders will not be permitted.
- D. Only approved Modified front spindles will be permitted.
- E. Bearing shafts that are made of steel are recommended.
- F. The chassis may be offset a maximum of 4"-inches from the center of the inside tire width measured from the inside of the left front tire to the inside of the right front tire at axle height. Refer to the drawing in the back of this rule book regarding front and rear end offset details.

Shock Absorbers

- A. *Only the DIRTcar approved -A-B-C type shock absorbers displaying the DIRTcar "Approved" decal will be permitted to compete.*
- B. **Approved Shock Absorbers:** All shock absorbers for the DIRTcar Sportsman Modifieds, DIRTcar Pro Stock, DIRTcar Pro Late Model, DIRTcar UMP Sportsman and DIRTcar UMP Stock Car division must be approved and display an approved designation decal. There will be three types of approved designations, 'A', 'B' and 'C'.

Approved 'A' -type Shock Absorbers:

DIRTcar Sportsman Modified
DIRTcar Pro Stock
DIRTcar Pro Late Model
DIRTcar UMP Sportsman
DIRTcar UMP Stock Car

Pro Shocks - WB and SS Series
Bilstein - AK and SG/SM Series
AFCO-1020-1034 Series
AFCO - 1273-1295 Series
AFCO - 1473-1497 Series
Integra 421 Series

Approved 'B'-type Shock Absorbers:

DIRTcar Sportsman Modified
DIRTcar Pro Late Model
DIRTcar Pro Stock

Pro ShocksTA Series
Bilstein - SLISZ Series
Bilstein - SLS Series
AFCO - 1000 Series
AFCO - 19 Series
AFCO - 24 Series
AFCO - 74 Series
FOX- 983-97-507
FOX- 983-97-509

Approved 'C'-type Shock Absorbers:

DIRTcar Sportsman Modified
DIRTcar Pro Late Model

Pro Shocks - PG Series
Bilstein - SLISZ Series
Bilstein - SNS Series
AFCO - 1300 Series
AFCO - 2100 Series
Genesis - GD Series (steel body)
Integra - 310-45170 or 310-45190
Advance (ARS) - PIN ARS 2074
Advance (ARS)- P/N ARS 2092
FOX – 983-91-507
FOX – 983-91-509

Shock Absorbers must be submitted to World Racing Group for competition approval prior to the application of the shock absorber designation decal.

Suspension Components

- A. Independent front and/or rear suspensions will not be permitted.
- B. A-Frames and/or ball joints will not be permitted for steering axis (kingpin only).
- C. Four-wheel steering actuated by the steering wheel and/or of any type will not be permitted.
- D. All suspension systems (including travel limiters) and designs must be mechanical. Hydraulic, pneumatic (air), electronic, radio and/or computer assisted for adjustments, and/or in-or-out of cockpit type suspensions, and/or suspension adjustment systems will not be permitted.
- E. Traction control of any type, including within the braking system is not permitted.

- F. Only a single brake bias adjustment will be permitted in the cockpit. Any other type of adjustment will not be permitted in the cockpit.
- G. Spring rods allowed on right rear radius rod only. Must be a conventional approved spring rod. No externally mounted shocks attached to radius rod. No Rubber biscuits allowed on the left rear radius rod.
- H. Only conventional type aluminum birdcages currently being used are allowed. Maximum bracket thickness 1". Any new birdcage designs must be approved.
- I. The only materials used to fabricate axle housing mounts (birdcages) that will be permitted is aluminum or magnetic mild steel. Axle housing mounts fabricated of exotic, heavy materials will not be permitted.
- J. When fabricating axle housing mounts detail must be paid to functionality. The completed axle housing mounts, when comparing the right and the left side, must be as similar in design as possible.

Rear Suspension Attaching (Radius) Rods

- A. The only materials used to fabricate attaching (radius) rods that will be permitted are magnetic steel or aluminum
- B. Aluminum attaching (radius) rods must be tubular material. Magnetic steel attaching (radius rods) must be tubular with a maximum wall thickness of 3/16 inch.

Springs

- A. Any type and/or form of spring will be permitted (torsion bar, coil and/or leaf spring).
- B. Coil springs must be manufactured from magnetic steel. Leaf springs must be manufactured from either magnetic steel or approved composite material.
- C. Spring preload adjustments for coil springs must be made using mechanical adjusting nuts on the shock body.
- D. Spring preload adjustments for leaf springs must be made using a mechanical adjusting device such as an adjustable shackle or threaded rod type mount.
- E. Other than spring dampening by the shock absorber, hydraulic, pneumatic, or electrically controlled adjusting devices, (static or dynamic) that affect spring preload or race car heights will not be permitted.
- F. Stacked coils and spring rubbers of any type are not allowed in the sportsman division. No progressive springs allowed.
- G. Only one take up spring allowed per corner. Maximum rate 5lbs.

Wheelbase and Tread Width

- A. The maximum front tread width will be 86"-inches with a minimum of 74"-inches. The maximum rear tread width will be 86"-inches with a minimum of 74"-inches. These measurements will be taken from the outside edge of the sidewall of the tires on each side.

Wheels

- A. Aluminum or steel wheels will be permitted for competition. Magnesium, steel, carbon fiber and/or any other exotic type material will not be permitted.
- B. 'Bleed-off and/or 'Bleeder' valves will be not be permitted.
- C. The maximum rim width will be 14"-inches when measured from the inside of left bead to the inside of the right bead of the wheel. Only wheels 15"-inches in diameter will be permitted.
- D. Beadlocks will be permitted. Any wheel utilizing a beadlock must maintain a minimum diameter hole of 11" or 5" inches inside the beadlock and the wheel. Beadlocks may only be used on the outside of the wheel.
- E. Wheel spacers must be aluminum.
- F. Aluminum or steel wheels allowed. Maximum wheel weight 28 lbs. Weights of any kind, added to wheels other than conventional balancing, are not permitted.
- G. Wheel covers: 5 and 3 mounting point wheel covers will be allowed for competition under the following conditions: Wheel covers having a minimum of 5 attachment points may continue to use steel dzus fasteners. Said dzus fasteners must be made of steel only. Wheel covers having only 3 attachment points must be bolted-

on at all 3 points utilizing a minimum 5/16", flanged steel bolt and an approved fastening (nut assembly) system. No adjustable mounting rings allowed.

- H. Approved fastening (nut assembly) systems:
 - a. Keyser Manufacturing, part #100 7-101.
 - b. Wehrs Manufacturing Part# WM377A-312 Aluminum 5/16 / WM377S-312 Steel 5/16
 - c. Triple X Chassis Part# SC-WH-7810(for a 1" spring) / SC-WH-7820(for a 1 3/8" spring)
 - d. Smith Precision Products Part# MC-516-18
- I. Optional fastening systems that are equal or superior to the above-approved system will be readily approved at the sole discretion of WoO Technical Officials.
- J. Foam inserts may be permitted
- K. A minimum of five (5) lug nuts on the rear wheels will be required. A minimum of three (3) lug nuts will be required on the front wheels. Knock off hubs of any type on any wheel will not be permitted.

Tires

- A. Only Hoosier Racing Tires will be permitted in any DIRTcar sanctioned events. Hoosier (the tire manufacturer) will mark/stamp/brand all legal tires with specified compound and/or other specific DIRTcar designations as listed below:
 - DIRTcar Sportsman Modified:
 - Big Block, 358 Modifieds and Sportsman Modified:
 - 1.) D300
 - 2.) D400
 - 3.) D500
 - Tire Size and Compound Designation:
 - 1.) Front - 11/82-15. D300, D400, Allowed
 - 2.) Front- 13/82-15. D300, D400, D500 Allowed
 - 3.) Rear - 13/87-15. D300, D400 Allowed
 - 4.) Rear - 13/89 - 15. D300, D400 Allowed
 - 5.) Rear - 13/92-15. D300, D400, D500 Allowed
- B. The altering of any tire compound, by any means will not be permitted. Chemical alteration of the tread carcass and/or tread compound, such as tire 'soaking' and or the introduction of tread 'softener' and/or the physical defacement (removal, altering and/or covering) of tire sidewall markings in any manner will not be permitted. If any competitor is found to have altered their tires any penalty deemed appropriate by Super DIRTcar Series and/or DIRTcar Officials may be issued. Tires may be protested by another competitor following the protest rules as stated in section 11.2.
 - a. Any tire may be inspected and/or analyzed for alteration at any time. This will consist of a process as determined by the independent laboratory that performs the analysis. A "Chain of Custody" process will be outlined with the competitor upon inspection of the tires.
 - b. The analysis process will require shipment of the tire to the selected laboratory. Additional race event(s) may be completed before a determination is made. If a penalty is issued, the event(s) that fell into the analysis time period while the tire(s) were being analyzed may be considered as part of the penalty time period.
 - c. Reference Section 5.3.D. for Competitive Analysis, Section 11.1.1 for Penalties and/or Section 11.2.1 for Protest(s).
- C. Heating of the tires by torch, blanket or heating device(s) will not be permitted.
- D. Inner liners of any type will not be permitted.
- E. A tire durometer may be used during the tire inspection process, provided baseline tire(s) have been read at the event prior to inspection.