# 17.0 - Super DIRTcar Series / DIRTcar Big Block Modified

- Under the guideline of the 2020 DIRTcar rules any and/or rules and as stated in the 2020 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 2020 rules any and/or rules and as stated in the 2020 DIRTcar Rule Book, all DIRTcar rules apply to all <u>sanctioned</u> 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.

# 17.1 – Engines General and Location

- A. Conventional stock type V-8 engines (OEM American long block GM, Ford and Chrysler) with the cam in the block will be permitted. Aftermarket DART and Merlin cast iron engine blocks will be permitted.
- B. A maximum displacement of 470 cubic inches will be permitted with a minimum displacement of 396 cubic inches
- C. Aluminum engine blocks will not be permitted.
- D. No titanium anywhere in the engine unless specifically stated in the 2020 rulebook.
- E. Reverse rotation engines will not be permitted.
- F. The engine must be centered between the frame rails in the front of the chassis and placed in an upright position.
- G. Engine set back will be as follows; Minimum is 56"-inches and a Maximum of 66"-inches with a tolerance of ½"-inch (+/-). The setback will be measured from the centerline of the front axle to the rear-machined surface of the engine where the motor plate is attached to the motor.
- H. In the event that there are new engine components and/or a new engine configuration, they must be submitted to World Racing Group Officials and approved prior to being introduced into competition. Only World Racing Group Officials will be able to approve new engine and previously unapproved engine components.

#### 17.1.1 - Carburetor

- A. All engines must be normally aspirated with a single conventional-type four (4) barrel carburetor utilizing Holley float bowls, center section and components. The metering blocks and the base plate may be billet and altered.
- B. A maximum of four (4) venturis will be permitted.
- C. Fuel injection, nitrous oxide injection, turbo chargers and/or superchargers will not be permitted.
- Fuel and/or air must enter the carburetor through the standard air path / venturi as is typical in a stock OEM carburetor.
- E. In-line venturis will not be permitted.
- F. A minimum of two (2) throttle return springs and a metal toe loop mounted on the gas pedal will be required. The throttle return springs must be mounted in separate locations.
- G. A WRG approved carburetor roll over plate that prevents fuel spillage in case of a roll over is highly recommended.
  - a. Carburetors with plate(s) will be mandated at a future date to be announced.
  - b. Currently approved roll over plate approved as followed,
    - i. Willy's Carb & Dyno shop LLC. Part # WCD4000SB
    - ii. Willy's Carb & Dyno shop LLC. Part # WCD4002

# 17.1.2 - Intake Manifold

- A. Any single piece American production cast intake manifold that permits the mounting of only one four (4) barrel carburetor will be permitted.
- B. Only cast aluminum and/or cast-iron intake manifolds will be permitted.
- C. Porting of the intake manifold will be permitted.

### 17.1.3 - Cylinder Heads

- A. Any design cylinder head (must be approved by SDS Officials) manufactured from cast aluminum or cast iron will be permitted. The minimum angle valve angle for any Chevrolet and/or GM type cylinder head will be 18 degrees. Ford and/or Chrysler cylinder head(s) must be approved by DIRTcar and/or Super DIRTcar and/or World Racing Group Officials prior to being utilized in competition.
- B. Porting will be permitted.
- C. Valves must remain in a traditional type pattern but may be any size.
- D. Only two (2) valves per cylinder will be permitted.
- E. Only one (1) spark plug per cylinder will be permitted.
- F. Titanium valves and retainers will be permitted.
- G. Hollow stem valves and/or liquid cooled valves will not be permitted.
- H. The engine must have an operating self-starting mechanism. Vehicles that require a 'push start' will not be permitted.

### 17.1.4 - Camshaft

- A. Any design camshaft will be permitted, provided the camshaft remains in a stock location in the engine block.
- B. Chain or belt drives will be permitted.
- C. Overhead cams and/or similar type applications will not be permitted.

### 17.1.5 - Pistons, Connecting Rods and Crankshaft

- A. Only aluminum pistons will be permitted.
- B. Only steel or cast-iron crank shafts will be permitted.
- C. Any design, length and/or make of magnetic steel connecting rods will be permitted.
- D. Titanium crankshafts and/or connecting rods will not be permitted.

### 17.1.6 - Ignition

- A. Any type of mechanically driven ignition located in the stock position will be permitted.
- B. Crank trigger type ignition systems will not be permitted.
- C. Only one (1) ignition coil and one (1) ignition amplified box will be permitted in the system and on the car.
- D. Magnetos will be permitted.
- E. Ignition boxes must remain as manufactured. Internal or external alterations to the ignition amplifier box will not be permitted.
- F. From time-to-time ignition boxes may be impounded for inspection and/or exchanged and/or analyzed by the ignition amplifier box manufacturer.
- G. All ignition wiring must remain as designed by the manufacturer and in an exposed manner for ease of inspection.
- H. One American Passenger Car sized battery with a maximum of 16 volts will be permitted. The voltage must not measure more than 16.8 volts anywhere in the system. Step up transformer and/or any other device designed to increase voltage will not be permitted.
- I. The battery must be securely mounted inside the frame rails.
- J. All cars must have an ignition switch, which is easily accessible by the driver and/or safety crew and clearly labeled ON/OFF in the driver's compartment. Motor must not run when in the off position.
- K. A battery shut-off switch is mandatory. The switch must be clearly labeled ON/OFF. The switch must be mounted on the left side inner panel (above the steering post). The switch must be outside the panel and

easily accessed externally. The switch must be wired to shut off the hot (pos +) side and must not run when in the off position. See diagram in the back of this rule book.

### 17.1.7 - Lubrication/Oiling System/Oil Cooler

- A. Only a conventional type wet or dry-type oil pump will be permitted. Internal or external pumps will be permitted. Multi-stage dry sump oil pumps driven by a standard belt drive will be permitted.
- B. One oil tank and one oil cooler will be permitted within the oiling system.
- C. Only magnetic steel or aluminum oil pans will be permitted.
- D. Air-type and/or vacuum-type pumps for the purpose of removing air from the oil pan and/or system will not be permitted.
- E. The oil pan on conventional DIRTcar Big Block and the DIRTcar 500 engines must have a one (1") inch diameter inspection hole on the left side to permit inspection. If no inspection hole is present the oil pan must be removed for inspection.
- F. The oil tank and the oil cooler may be mounted outside the frame rails.
- G. The maximum capacity of the oil tank must be 14 US quarts.
- H. The oil tank and the oil cooler must be fully enclosed by the body and must be securely mounted and positively fastened to the frame. Reference the drawing in the back of this rule book for the minimum oil cooler specifications.
- I. Excessive bracing and/or mounting material will not be permitted.
- J. Oil coolers mounted outside the external body work will not be permitted.
- K. Oil coolers must be mounted under the hood or under the side wings/pods. Oil coolers mounted behind the driver exposed will not be permitted. Oil coolers that are not under the hood must have ducting covering them and remain below the bodywork. Unless mounted under the hood the oil cooler must be mounted horizontal and flush with the cut out in the side wing/pod area.

#### **DIRTcar 500**

A. All 500 engines allowed prior to 2016 must be inspected and approved for competition by DIRTcar technical department.

### <u>17.1.8 – Transmission/Driveline and Driveline Components</u>

- A. Only approved North American and/or Canadian manufactured manual shift transmissions will be permitted. Automatic and/or automatic-type transmissions will not be permitted.
- B. Overdrive and/or under-drive transmissions will not be permitted.
- C. Running through reduction gears will not be permitted. The transmission must be direct drive to the rear end.
- D. The transmission must have working gears. Forward, neutral and reverse must be working. From the neutral position and with the motor running, the car must be able to go forward and/or a backward in a smooth manner. The car must start and move under its own power.
- E. The transmission must bolt to the bell housing.
- F. Driveline components made of carbon fiber, titanium and/or other materials (considered exotic) will not be permitted.
- G. A maximum of two (2) universal joints per driveline will be permitted. No CV Joints allowed.

### 17.1.9 - Driveshaft

- A. Only one (1) drive shaft connected from the transmission to the center section of the rear end will be permitted.
- B. Two (2) driveshaft hoops / **closed** rings a minimum ¼"-inch thick x 2"-inch wide magnetic steel must be positively fastened by two (2) 3/8"-inch grade 5 bolts to the frame and/or torque arm side plates installed around each universal joint.
- C. The drive shaft must have some type of drive shaft cover/shield. Cars with open drive shafts must have a drive shaft tunnel a minimum of 1/8"-inch thick by 6" wide magnetic steel extending from 2"-inches under the front edge of the seat and up the back of the seat 4" covering the transmission, drive shaft and the universal joint(s) and output flange on top and both sides. The tunnel must extend down to the floorboards. The cover must be positively fastened with a minimum of four (4) 3/8"-inch diameter bolts at the bottom connected to a cross-member. The cover must be a solid unit with no cuts and/or holes and/or removed material for the purpose of weight reduction. The only hole may be for the gear shift control.

- D. Closed drive type cars, torque tubes and/or bells that already have a 360-degree cover from the universal joint back to the seat will be permitted.
- E. Carbon fiber, titanium, and/or other materials (considered exotic) will not be permitted anywhere in the

### 17.1.10 - Engine Cooling System/Radiator

- A. Only one (1) radiator will be permitted. The minimum width of the radiator will be 20"-inches when measured from the outside edge(s) of the radiator. The radiator must be mounted vertically in front of the engine. The minimum height of the radiator must be 22"-inches when measured from the bottom of the frame rail vertically and may incorporate the oil cooler to achieve the vertical height. Radiators mounted on an angle will not be permitted. Plastic and/or carbon fiber radiators will not be permitted.
- B. Plastic and/or carbon fiber radiators will not be permitted.
- C. Auxiliary cooling tanks and/or overflow cans and/or canisters will not be permitted in the cockpit.
- D. 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 fans and/or water pumps will not be permitted. No flex style fans allowed.

# 17.1.11 - Rear End

- A. Only Quick-Change type rear ends will be permitted.
- B. Hypoid-type and/or Nine (9") Ford-type and/or limited slip-type and/or lockers and/or two speed rear ends will not be permitted. Non Quick-Change Rear Ends not permitted
- C. Only aluminum and/or magnetic steel spools will be permitted.
- D. Only steel and/or aluminum rear spindles will be permitted. If the rear spindle is machined from aluminum it must be a one-piece tube and spindle with a minimum outside diameter 2-7/8" and a maximum 2-1/2" inside diameter.
- E. Live rear ends with aluminum tubes will not be permitted. All others must be approved.
- F. Carbon fiber, titanium and/or other materials (considered exotic) for any rear end component will not be permitted. Tungsten or any other exotic metal are not permitted, in any form.
- G. A maximum rear end offset of 4"-inches from the center of the inside tire width when measured from the inside of the left rear tire to the inside of the right rear tire at axle height. Refer to the drawing at the back of this rule book.
- H. Aluminum rear end tubes only, with a maximum wall thickness of .410". Outer diameter cannot exceed 3".
- Outer collars (other than to attach bridge cage) are not permitted. Droop chain bracket may be steel, excessively thick or enlarged brackets of any type are not permitted. <u>All other brackets must be</u> aluminum.
- J. Drive Axles must not exceed 1.600" diameter and must be made of steel only. No tungsten. Inserts to be slid inside of tubes, made of any material, are not permitted.
- K. Ballast inside, attached to, or machined into hubs are not permitted. Maximum hub 10 lbs

### 17.2- Fuel, Fuel Cells and Fuel System

- A. Either meets FT3 or SFI 28.3 requirements and/or Include: a metal container, bladder, foam, top bolted fuel valve plate with flop valve or roll over check valve **OEM** cap. The fuel cell must have a maximum capacity of 24 US gallons and must remain in a rectangle and/or square shape for measuring and calculating capacity. The fuel cell must be mounted securely in its container and centered between the frame rails. Pressure tanks on fuel systems will not be permitted. Auxiliary fuel tanks will not be permitted. No dry ice or any other cooling agents will be allowed on the motor during competition. Fuel coolers of any type will not be permitted. A clearly marked fuel shut off valve, labeled On and Off, must be mounted within reach of the driver. It must be labeled with the word(s) "Fuel Shut Off". Refer to the drawing in the drawing section of this rule book.
- B. Only 'D'-type VP Racing Gasoline, the official fuel of DIRTcar will be permitted for competition. <a href="VP D-113">VP D-113</a> or D-12 will be the only specified fuel permitted at any sanctioned DIRTcar and/or Super DIRTcar Series event. Blending of fuels, 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.

- C. The maximum capacity of the fuel when measured empty and/or dry will be measured in cubic inches utilizing the standard formula of length (minus ½"-inch) x width (minus ½"-inch) x depth (minus ½"-inch) will be 5.660 cubic inches.
- D. The foam in the fuel cell must remain unaltered. A minimal cut in the foam will be permitted in the shape of a square or a rectangle. The cut may be no more than 1,000 square inches. The foam must retain the factory cut.
- E. The fuel cell must be enclosed completely in a rectangle and/or square container that is a minimum thickness of 20-gauge magnetic steel. An aluminum container may be used as an option and must be a minimum of .060"-inch in thickness. On the bottom of the fuel cell, a piece of .090-guage material (aluminum and/or magnetic steel in addition to the existing container) must be used at the bottom of the fuel cell container to prevent bowing and/or deflection. The .090-guage material must have an inspection hole drilled near the center of the piece to measure the thickness of the material. A 1"-inch x 1"-inch x .0625"-inch thick magnetic steel square tubing rack must be fabricated on the top, front and rear sides of the fuel cell container. The square tubing must be a minimum of 5"-inches from the outside edge of the fuel cell on either side. The rack may be fastened to the bottom of the fuel cell can utilizing a piece of magnetic steel angle material that is a minimum of 1"-inch x 1"-inch with a minimum material thickness of .065"-inch magnetic angle steel that is on all four (4) sides of the container. Drilling multiple holes and/or any attempt to lighten any piece within the fuel cell container and/or rack will not be permitted. The measurements taken in regard to the fuel cell container will be measured on an inside-to-inside basis. A tolerance for material thickness will be calculated and permitted for dimensions; however, there will be no tolerance for expansion and/or containers that are larger than the minimum.
- F. Only one (1) fuel filter with a maximum capacity of one (1) US quart will be permitted with one (1) carburetor fuel log with a maximum outside diameter of 1-1/2"-inches. The fuel log must remain straight without bends and/or curves and must be a maximum of 16"-inches in length Plastic and/or glass fuel filters will not be permitted.
- G. Fuel coolers of any type will not be permitted. No dry ice or any other cooling agents will be allowed on the motor during competition.
- H. The fuel cell must be mounted behind the driver rear axle between the rear tires, a minimum of 4"-inches ahead of the rear bumper.
- I. The bottom of the fuel cell container must be a minimum of 12"-inches from the ground.
- J. The fuel pick up must be positioned on the top of the fuel cell and be constructed of metal. The vent line must have a check valve.
- K. For the purpose of inspection, the driver and/or crew must be prepared to drain fuel upon request for inspection and/or measurement.
- L. Only mechanical and/or belt driven fuel pumps will be permitted. Fuel injection system(s) and/or electrical fuel pumps and/or any type of pressurized fuel system will not be permitted.
- M. For the Official Fuel of DIRTcar; the fuel provider's decals must be displayed on both sides of all DIRTcar racecars and a patch is required on the driver's uniform. Logos and/or the presentation of any other fuel manufacturer and/or fuel refinery on the racecar and/or driver's uniform will not be permitted.

### 17.2.1 – Fuel, Fuel cells and Fuel System for live pit stop events.

- A. For all events that require a fuel stop the quick fill connect must be located in the upper corner of the left rear quarter panel. The maximum filler spout size is 4-1/4 inches outside diameter by eight (8) inches long, then tapering over the next 8-1/2 inches to 3 inches diameter extending to an overall length of 18 inches. The filler tube must take a straight and direct route to the fuel cell from the quick fill connect. Quick fill tubes constructed of aluminum a maximum 3 inches in diameter will be permitted. A minimum of six (6) inches of 3 inch maximum inside diameter flex hose must be used between the end of the filler spout and fuel cell neck. Only one fuel filler tube is permitted with a maximum outside diameter of 3"-inches. When a quick fill device is utilized there must be a vent line with a maximum inside diameter of 1-1/4"-inches. The fuel vent line must take a straight and direct route from the fuel cell to the quarter panel and must be able to accept a catch-can with a one-way check valve. The one way check valve must be a standard manufactured product available to everyone. If check valve is not listed in a catalog with a part number and price it is not legal. The fuel vent line must positively fasten to the left rear corner of the rear panel
- B. The catch can man may not stand behind the rear bumper of the car during pit stop refueling.
- C. Any fuel lines quick fill and/or fuel vent lines must not be visible from behind the car and must be contained within the rear panel which must be symmetrical in size and shape.

# 17.3 - Exhaust - Muffler and Sound Reduction Devices

- A. Each car must have one (1) unaltered spec muffler per exhaust. No other muffler or sound reduction will be permitted.
- B. The intermediate pipe between the collector and the muffler must have a maximum OD 3 ½ inches. The tail pipe must have a maximum OD of 4 inches.
- C. The exhaust must exit past the driver and the exhaust must flow toward the rear of the car in an upward manner away from the racing surface. Exhaust systems that face the outside of the car will not be permitted.
- D. Each muffler must have a tail pipe that is a minimum of 10"-inches long when measured off the rear edge of the muffler. Complete exhaust system must be welded or bolted, band clamps may be added over welded joints.
- E. Cross-over and/or the joining of exhaust systems from side-to-side will not be permitted.
- F. Any manufacturer of exhaust header is permitted, but the header material must be magnetic steel and/or stainless steel. No header wrap allowed anywhere in the exhaust system.
- G. The permitted mufflers include: Dynomax part number: 17224, 17539 and 17628; Extreme Muffler part number(s): 31530, 31535, 31230, 31235, 30830 or 30835; Beyea part number(s): MUF3DL and MUF3.5DL. Henry's DMMS3, DMMS3.5, DMMS4.
- H. Several tracks have a locally enforced decibel rule, which preempt any particular muffler rule. Some tracks may have a maximum sound level rule of 95 decibels at 100 feet. This rule will be enforced by local government agencies. Such decibel rules preempt utilizing the required mufflers in sub-section 17.3.

# 17.4 - Traction Control Devices

- A. All electronic and/or computerized wheel spin and/or ignition retardation and/or acceleration limiting and/or traction control devices of any type will not be permitted.
- B. Adjustable ping control devices, dial a chip controls, timing controls and/or automated throttle controls will not be permitted.
- C. Adjustable restrictor plates will not be permitted.
- D. Remote control components of any-type will not be permitted.
- E. Radios and/or devices for transmitting voice and/or data will not be permitted, unless otherwise authorized prior to any event.
- F. Data acquisition systems will not be permitted.

# 17.5 - Chassis/Frame

- A. All frames must be fabricated utilizing 2"x4" rectangular magnetic steel tubing with a .120" wall thickness. Only 2"x4" rectangular box frames between the front and rear axle centers will be permitted. The 4"-inch side of the rectangular tubing must remain in the vertical position. For the purpose of inspection one 3/16" diameter hole may be drilled in each frame rail. Other holes will not be permitted. Round tubing must be either 1-1/2" outside diameter (if used for main hoop must be .125") and/or 1-3/4" outside diameter with wall thickness of .095"-inches.
- B. Frame width will be as follows; At the front shock towers a minimum 24" and a maximum of 35"-inches. Rear of the car is a minimum of 26" with a maximum of 35"-inches. The minimum frame width at the rear roll bar must be 26"-inches. All measurements will be taken from the outside of the frame rails, at the top and bottom of the frame rails and its longest length. Clips, sub-frames, etc., will be considered a part of the frame.
- C. The minimum length of the 2"x4" frame rails begins 14"-inches in front of the centerline of the rear axle and extends to the front of the radiator. The left and right rails (both top and bottom) must be equal in distance from the driveline centerline along the total length of the frame. Offset frame rails will not be permitted. A maximum 4"-inch indent in the lower left rear frame rail for suspension clearance will be permitted. The two (2) upper frame rails in the engine compartment may be altered for engine clearance only.
- D. The kick-ups must meet the same specifications as the roll cage and/or frame material.
- E. Titanium and/or carbon fiber material(s) will not be permitted on the chassis and/or frame.

- F. There must be a minimum of 2-1/2"-inches ground clearance from the chassis at its lowest point.
- G. Ground effects will not be permitted.

### 17.5.1 – Seat Location and Mounting in Frame

- A. The seat and steering wheel must be centered in the frame. Offset mounting of the seat and/or steering wheel will not be permitted.
- B. The bottom rear of the seat must be a maximum of 16"-inches from the centerline of the rear axle. Refer to the drawing at the back of this rule book.

# 17.6 - Weight / Ballast

- A. All cars will be weighed with the driver seated in the car. The minimum weight permitted before and/or after an on track event will be measured by the track scales. The track scales will be the official scales. All cars found to be light prior to any event, time permitting will be allowed to make the necessary adjustments and represent themselves at the scales. The number of cars to be weighed after an event will be announced at the driver's meeting and/or on the one-way radio. If a car is signaled to go to the scales in any fashion and does not report to the scales at the appropriate time, that car may be disqualified from the event. Any car that is found to be light following time trials and/or a qualifying event will be disqualified from that particular race and may make the necessary adjustments and represent themselves for that car's assigned consolation event. If a car is found to be light after the feature event, that car will be disqualified from the event.
  - All Big Block Modifieds utilizing a Big Block engine per this rule book must maintain a minimum weight of 2,500 lbs following the completion of any event.
  - b. All Big Block Modifieds utilizing a DIRTcar 500 Big Block engine per this rule book must maintain a minimum weight of 2,500 lbs following the completion of any event.
  - c. All Modifieds utilizing a DIRTcar 358 Modified engine with the Brodix "Spec" heads, ported intake and "tri-y" exhaust must maintain a minimum weight of **2,500** lbs following the completion of any event unless otherwise posted
  - d. All Modifieds utilizing a Brodix "Spec." DIRTcar 358 Modified engine with the stock intake manifold (reference 17.1.2.A.; 17.1.3; 17.3.A.) and spec. Schoenfeld headers and a steel or aluminum oil pan must maintain a minimum weight of <u>2,400</u> lbs following the completion of any event unless otherwise posted.
  - The W16 must maintain a minimum weight of 2350 lbs after the completion of any event unless otherwise posted.
- B. During any Super DIRTcar Series Modified event all DIRTcar legal 358 modifieds will be permitted to race at weights posted before the event via the Competitors Notes. (Note, weights could vary depending on track).
  - a. For weekly racing events combining the DIRTcar 358 division and DIRTcar Big Block Modifieds the track may establish a weight rule to balance the DIRTcar 358 classes and DIRTcar Big Block Modifieds in competition. Super DIRTcar Series and/or DIRTcar Officials must be notified and grant permission for such a rule.
  - b. Any small block (short block in length) running with the Big Block Modifieds may only have a maximum engine displacement as specified by the DIRTcar 358 engine rules and the car must follow all DIRTcar 358 Modified rules.
  - c. All weights and/or ballast must be positively fastened and mounted within the vertical planes formed by the frame rails and must remain stationary during competition. All weight(s) must have a minimum of two (2) ½"-inch diameter grade 5 bolts and/or studs passing completely through the weight. Bolts and/or studs must be anchored with a minimum of two weight clamps to the frame. Bolts and/or studs welded to the frame will not be permitted.
  - d. All weights must be painted white and clearly labeled with the car number on it. For the period of one event, competitors may label their weight with white duct tape with the car number clearly labeled on the duct tape.
- C. Ballast and/or weight may not be mounted to the roll cage above the rear deck.
- D. All added weight(s) must be securely attached to the frame below the body decking.
- E. Frame is defined as the steel welded structure only.
- F. Any part that moves or is not a fixed component to the steel frame structure may not be used for any weight attachment.
- G. Weights attached to the rear bumper and/or outside the frame in any way will not be permitted.

# 17.7 - Body

# **BODY STYLE AND DIMENSIONS**

ALL MEASUREMENTS WILL BE TAKEN WITH DRIVER AND/ OR WITH OR WITH OUT FUEL. TOLERANCE PERMITTED ON ALL BODY DIMENSIONS IS MAXIMUM OF +/- (PLUS OR MINUS) ½"-INCH (ONE-HALF INCH). THIS IS A TOLERANCE, NOT A DIMENSION THAT IS INTENDED TO BE ADDED TO THE BODY DIMENSIONS.

# 17.7.1 - General Body

- A. Mirrors and/or reflective devices will not be permitted.
- B. Super DIRTcar and/or DIRTcar Series Officials reserve the right to request body and/or sheet metal to be replaced and/or painted if it has any sharp edges and/or does not appear presentable. Presentable is at the discretion of the Series Official.
- C. The maximum rear spoiler height, regardless of ride height, may not exceed 50"-inches. The rear spoiler must be able to provide the driver following a view of the track ahead.
- D. A full magnetic steel windscreen and/or rock guard is required. The windscreen and/or rock guard must have an individual hope opening of 2" x 1" with a minimum of 1/16" thickness. Chicken wire type and/or aluminum screens will not be permitted. The windscreen and/or rock guard must cover the entire windshield area across the front of the roll cage and from the top of the roll cage down to the base of the cowl and/or hood. In addition, clear lexan-type and/or safety glass windshields will be permitted. If the lexan and/or safety glass is utilized it must be shatterproof and mounted behind the windscreen and/or rock guard. Any additional windshield must not obstruct the driver's exit of the vehicle.
- E. The minimum size opening for the side windows will be 12"-inches in height by 18"-inches in width by 30"-inches in depth. A rectangular box, matching these dimensions may be used to pass through the car from one side window through to the other.

### 17.7.2 - Body Material

- A. Only magnetic steel and/or aluminum will be permitted for all inner and outer body panels.
- B. Vertical material (plastic and/or rubber-type), with a material thickness between .090"-to-.125"-inch and a minimum height of 8"-inches from the bottom of the quarter panel will be permitted, provided both doors and/or quarter panels maintain the same length and height with or without the plastic (symmetrical). An overlap of two (2") inches to secure the door(s) extensions will be permitted. The door(s) must maintain a minimum of six (6") inches of ground clearance including the additional material extending below the metal body. The overall dimensions of the door(s) and extensions must meet the specifications.
- C. Only a single piece fiberglass roof will be permitted.
- Only fiberglass and/or aluminum hood, hood scoop, windshield cowl, rear interior tire clearance cover will be permitted
- E. Only clear lexan will be permitted for the rear spoiler and rear wing windows. Decals and/or lettering will not be permitted on the rear spoiler and/or rear wing windows.

### 17.7.3 - Roof

- A. A one-piece fiberglass roof, single ply, one contour inside and out will be permitted. Carbon fiber and/or any other composite type materials will not be permitted. All roll bars must remain exposed. Vertical material of any type used to mount the roof that may cover the roll bar will not be permitted. The roof must weigh a minimum of 10 lbs.
- B. The roof must be centered from side-to-side on the roll cage and on the frame. Offset bodies will not be permitted. The leading edge of the roof must be positively fastened in a stationary position a minimum of 33"-inches and a maximum of 48"-inches in front of the rear axle centerline. The roof must be securely and positively fastened on all sides.
- C. The minimum length of the roof is 47"-inches with a maximum of 60"-inches. The minimum width of the roof is 48"-inches with a maximum of 52"-inches. The roof must be of the turtleback style and shape with a minimum of ¾"-inch belly from front-to-rear and ¾"-inch from side-to-side. The roof -contour must fit the DIRTcar roof template patterns. The maximum front lip must be ½"-inch. The maximum side edge(s) must be 1-1/8"-inch break. Refer to drawing on page 86 and 88.
- D. Changes to the shape and/or location of the roof at any time during competition will not be permitted.
- E. The maximum overall height of the car is 62"-inches with a minimum of 53"-inches measured from the ground.

- F. The maximum roof angle is 6 degrees when measured with the DIRTcar gauge. (See reference drawing).
- G. Any proposed roof design that deviates from the preceding rules must be submitted to DIRTcar for approval and approved before being presented for competition.

### 17.7.4 - Front Door Posts

- A. Only a one (1) piece magnetic steel and/or aluminum front door posts and/or 'A'-pillars a minimum of .050"-inches with a maximum of .090"-inches will be permitted. The front door posts must be securely mounted to the roof and to the door(s). The side of the front door post must measure a minimum and maximum of 2"-inches. The front door post may be bead rolled and/or have a lip and/or flange for reenforcement, but the re-enforcement must not exceed a maximum 3/8"-inch in width.
- B. The door post may be fastened with a minimum of two (2) 3/16"-inch bolts to the door bracket for ease of fabrication. The Door post must not extend past the vertical plane of the door.
- C. Additional material, air directional devices, lexan vent windows and/or excessive material will not be permitted in the corner of the front door post, where the post meets the door panel.
- D. There will be no tolerance on the front door post measurements.

# 17.7.5 - Rear Wing Windows / Side View / Rear View

- A. All rear wing panels and windows must resemble a current production OEM style body. Only manufacture approved rear wing panels and windows will be permitted for competition. Any non-manufacture rear wing panel must resemble and/or meet the criteria as the submitted rear wing panels and/or windows. Any rear wing panel that is submitted for competition must not exceed 815 square-inches in total area. All rear wing panels must be submitted for approval prior to introduction into competition.
- B. The upper profile must not extend above a straight line projected from the rear of the roof to a point 3"-inches higher than the rear deck. A minimum 2"-inch indent in the profile, so as not to make the panel a fast back is mandatory. (Please refer to the drawing and photographs)
- C. The maximum base length will be 61"-inches. The left and right must be of the same style and dimensions (symmetrical). (See example of Body Style Drawing)
- D. All rear wing(s) must have an opera-type window. The window must be lexan. Bends or breaks in the Lexan area of the window will not be permitted.
- E. Only one break as a change in body line/contour will be permitted in the rear window panel.
- F. Decals and/or lettering will not be permitted on the rear windows.
- G. The rear view of the wing window must go in a straight line from the top of the quarter panel (tangent) or bodyline to the roof with a maximum gradual bow of 2"-inches in the center of the wing window.
- H. Flanges and or additional material added to the rear window panel for the purpose of directing air flow will not be permitted.

### 17.7.6 - Body Width and Ground Clearance

- A. The body width, when measured at any point along the body line from front-to-back will be a maximum of 68"-inches and a minimum of 64"-inches.
- B. A minimum chassis ground clearance of 2 ½"-inches will be permitted.
- C. Fan and/or ground-effect cars will not be permitted.
- D. Rubber skirts, fins, air directional devices and/or spoilers of any type under the car will not be permitted. A 2" inch maximum air deflector in front of the radiator for engine cooling will be permitted.

### **17.7.7 – Door Panels**

A. The side door panel(s) will be a maximum of 86" inches and a minimum of 60"-inches in front of the centerline of the rear axle when measured along the top plane. The door(s), front door extensions and rear quarter panels must be flat and mounted in a vertical position. They must remain flat. Flanges at a 90 degree angle may be added to the front of the doors. The flange may only be added for the purpose of strengthening the door material The flange must not exceed ¾"-inch in length or width and must be mounted in a vertical position. Door flanges must face inward toward the centerline of the chassis. Louvers, bead rolls holes and/or protrusions from top-to-bottom will not be permitted. Holes will be permitted for rub rails/nerf bars. A maximum 1"-inch long lip/flange at a 45 degree outward angle ½"-inch away from the sheet metal for reinforcement will be permitted at the top and bottom of the door(s) panels. All outside sheet metal, door panels, door extensions, air dams, front nose and/or hood fins must be the same shape, size and angle on both sides of the car. The door(s) must match each other from side-to-side (symmetrical). Air directional devices and/or side mounted spoilers of any type, which extend past the outside edge of the flat plane of the body will not be permitted.

- B. Bead rolls around the outside perimeter of the door panels and the wing windows will be allowed. Bead rolled edges must face toward the center of the chassis.
- C. The top of the door when measured from the ground will be a maximum of 38" and a minimum of 30"-inches when measured 60"-inches from the rear axle centerline. The rear of the door when measured from the ground will be a maximum of 42"-inches to the top of the door when measured 16"-inches from the center of the rear axle centerline of the rear forward.
- D. The ground clearance on the bottom of the doors must maintain a maximum of 12"-inches and a minimum of 6"-inches from the ground.
- E. A maximum lip and/or flange of 1-1/2"-inches rounded at 90 degrees and facing inward only, on the top and bottom door(s) and rear quarter panel(s) will be permitted.
- F. A lip and/or flange angled out at a maximum angle of 45 degrees, extending away from the door at a maximum of ½"-inch and a maximum of 1"-inch in length before it bends inward for strength at the top of the door(s) and/or rear quarter panel(s) will be permitted.

### 17.7.8 – Rear Quarter Panels

- A. The rear quarter panels must be symmetrical in height, with or without plastic.
- B. The rear quarter panels must be a maximum of 47"-inches and a minimum of 40"-inches from the ground at the rear and continue in a straight line with the top of the door. (See drawing.).
- C. A maximum 2"-inch fender flare may be used, but the overall body width must maintain a maximum of 68"-inches.
- D. The rear quarter panels may extend rearward a maximum of 48"-inches when measured along the top plane of the rear quarter panel and a minimum of 44"-inches at the bottom when measured from the center of the rear axle to the rear of the car.
- E. A maximum of 16"-inches and a minimum of 8"-inches of ground clearance (when measured from the ground to the bottom of the rear quarter) will be permitted.
- F. The plastic / rubber material utilized on the rear of the car may extend a maximum of 16"-inches from the ground to a minimum of 8"-inches from the ground on either side of the car (symmetrical).
- G. The panels may have one side plastic on one (1) side only provided the panel remains completely symmetrical.
- H. Flanges at a 90 degree angle may be added to the Rear Quarter Panels. The flange may only be added for the purpose of strengthening the Rear Quarter Panel. The flange must not exceed ¾"-inch in length or width and must be mounted in a vertical position. Rear Quarter Panel flanges must face inward toward the centerline of the chassis. Air directional devices and/or side mounted spoilers of any type, which extend past the outside edge of the flat plane of the body will not be permitted.

### 17.7.9 – Rear Spoiler

- A. A one piece, clear Lexan spoiler with a maximum height of 5"-inches from the rear deck will be permitted. Lettering and/or decals will not be permitted.
- B. The rear spoiler must be non-adjustable from the cockpit and/or during racing conditions. Hinges, adjuster(s), slides and/or any other adjusting type device will not be permitted.
- C. Metal gurney and/or table and/or flanges and/or lips will not be permitted.
- D. A brake and/or bend on the top of the Lexan spoiler will be permitted for reinforcement. Maximum 1" lip.
- E. The maximum overall height of the spoiler when measured from the ground must not exceed 50"-inches.
- F. A maximum of four (4) of vertical supports (a maximum of 2"-inches in vertical height and 10"-inches in length) for the purpose of fastening the spoiler to the rear deck will be permitted.

### 17.7.10 - Rear Deck

- A. The maximum height of the rear deck when measured from the ground will be 47"-inches and a minimum of 40"-inches.
- B. The rear deck lid must be fully enclosed from side-to-side and have a maximum height of 14"-inches and a minimum 9"-inches, vertically behind the fuel tank.
- C. The left and right rear trunk lids must be symmetrical in size and shape and must remain flat to cover the fuel filler hose and apparatus. The panel must completely cover the fuel cell, the fuel filler hoses and the vent lines.
- D. The fuel tank must be completely enclosed from the bottom of this panel to the bottom of the fuel cell.
- E. Openings from the top of the fuel cell to the bottom of the trunk lid will not be permitted.

# 17.7.11 - Hood, Nose and Front Spoiler

- A. The maximum width for the hood, nose and front spoiler will be 36"-inches with a minimum width of 24"-inches. Louvers will be permitted on the sides of the hood.
- B. The hood, nose and front spoiler must remain the same contour where they meet.
- C. The nose-piece must not extend rearward of the front shock towers.
- D. The front spoiler must be a separate piece.
- E. Shock absorber covers and/or deflectors must not be a part of the nose or the spoiler and/or positively fastened to the nose in any fashion exceeding the 36"-inch maximum width.
- F. Fabric material shock absorber covers will be permitted. The covers must not be used to achieve any aerodynamic advantage and/or to deflect air in a positive manner.
- G. The maximum the spoiler may extend in front of the front axle centerline will be 20"-inches.
- H. The front spoiler must be non-adjustable (hinges and/or sliders will not be permitted).
- I. The hood shall be considered from the front roll cage to on top and in-line with the front of the radiator.
- J. The hood and nose may have a maximum lip and/or flange of 2"-inches on both sides following the contour of the body. They must remain symmetrical.
- K. The hood and nose be centered on the centerline of the frame.
- L. The hood, nose and/or spoiler must not overlap each other's location on the frame.
- M. Any part of the hood must not exceed 10 degrees and the sheet metal must not have an opening and/or extrusion between the hood and the nose.
- N. The hood must extend over the radiator and have complete sides.
- O. The front spoiler may have a lip and/or flange a maximum 2"-inches on both sides following the contour of the spoiler not exceeding the maximum width of 36"-inches. The front spoiler may be offset 1"-inch from the centerline of the frame to the right or the left. One 2" high wicker bill may be added horizontally to spoiler in front of shock towers.

### 17.7.12 - Hood Scoop

- A. The hood must be fully enclosed.
- B. There are two (2) types of hood scoops that can be mounted on top of the hood for the purpose of enclosing the carburetor and/or ram air. Ram Air will be permitted providing they meet the following specifications in this section.
  - a. The ram air scoop: A maximum 30"-inch length when measured from the rear motor plate to the front of the hood scoop will be permitted. A maximum width of 18"-inches will be permitted. The maximum 6"-inch front vertical opening at the beginning of the scoop will be permitted. A minimum of 8"-inches will be required from the highest point on the hood scoop to the lowest point on the front of the roll cage and/or the roof. The hood scoop must be positively fastened to the hood and completely enclose the carburetor and the air filter.
  - b. The conventional air scoop (non-ram air): A maximum of 25"-inches is permitted from the center of the carburetor forward to the end of the hood scoop. A maximum width of 22"-inches will be permitted. A minimum of 8"-inches will be required from the highest point on the hood scoop to the lowest point on the front of the front of the roll cage and/or the roof. The hood scoop must be positively fastened to the hood and completely enclose the carburetor and the air filter.

# 17.7.13 - Interior Sheet Metal

- A. All horizontal body support(s) other than the inner pods, whether in the front and/or rear must be a minimum of 1" x 1" .095"-inch thick tubing or 1"-inch flat stock a minimum of .125"-inch thick..
- B. Inside and/or outside wings, spoilers, air foils and/or wind deflectors will not be permitted.
- Double panels and/or sheet metal that is designed to create a wing effect will not be permitted.
- D. A maximum 1"-inch reinforced flange will be permitted on all lexan; however, all specified measurements must be retained.
- E. All interior sheet metal must completely cover all interior areas, door-to-door, quarter panel-to-quarter panel. Holes and/or openings will not be permitted in this area.
- F. Front and rear firewalls are required. The front firewall must isolate the cockpit from the engine compartment. The rear firewall must extend from the top of the fuel cell to the belly pan to isolate the

cockpit from the fuel cell. The firewall must be a minimum of .050"-inch thick aluminum and/or magnetic steel. The firewall may be altered and/or cut for drive shaft clearance.

- G. Vertical fins, air dams and/or fairings on either side, behind the roll cage will not be permitted.
- H. All sheet metal must be a flat single plane across the interior of the car. Two (2) bead rolls or breaks for the purpose of strengthening will be permitted. The maximum bead roll and/or break permitted will be 1/8"-inch in height and ½-"-inch in width.
- Covered roll bars will not be permitted. Sheet metal that is one-piece and/or part of a body panel formed around tubing that is not considered an aerodynamic advantage will be permitted, provided there is no excess sheet metal.
- J. Louvers will be permitted for cooling purposes only, including the radiator, engine and/or working oil cooler. Louvers and/or holes in the interior or exterior sheet metal will not be permitted.
- K. The floor and/or belly-pan may not be any wider than the frame at any point. Lips, fins and/or air directional devices on the floor and/or belly pan will not be permitted. Louvers for the purpose of cooling will be permitted on the belly pan from the radiator to the firewall. The under pan must not extend in length past the rear of the seat and exceed the width of the frame rails of the car and must be a maximum of .090"-inches in material thickness.
- L. Only aluminum belly pans will be permitted. Panels under the rear and and/or the fuel tank will not be permitted.

# 17.7.14 – Driver Compartment

A full metal firewall fabricated from magnetic steel and/or aluminum must encompass the driver's compartment from front-to-rear, on both sides and floor boards.

### **Containment Seats**

Seats must be "Full Containment" style constructed of aluminum to the general design specifications of current industry standards (SFI 39.2). Design shall include comprehensive head surround, shoulder and torso support system, energy impact foam, and removable head foam. Consult with your seat manufacturer for questions and recommendations regarding your seat safety system.

- A. Seats manufactured using carbon fiber or composite materials must meet SFI 39.2 specifications.
- B. The seat design should be one from a current manufacturer and/or recommended to include the full containment design. Installation of the full containment seat should follow the manufacturer's instructions.
- C. All cars must be equipped with a guick-release type steering wheel.
- D. The driver compartment must have a starting switch and/or button within reach of the driver.
- E. A clearly labeled electrical on/off 'kill' switch must be within reach of the driver and must shut off motor when in the off position.
- F. Mirrors of any-type will not be permitted.
- G. Radios and/or electronic and/or data communication devices will not be permitted.
- H. Any edge and/or sheet metal end in and around the driver compartment must be protected with trim and/or beading and rounded. Sharp and protruding edges will not be permitted.
- A substantial rock guard with a minimum of three (3) additional bars must be mounted in front of the driver. The rock guard must be made from wire screen. Windshield screens must be a minimum of .090inches and must be securely fastened.
- J. Fuel and/or power steering lines and/or fittings running through the driver's compartment must be made from an approved braided type of line. High pressure lines and/or fittings and/or hot fluid lines running through the driver's compartment must be encased and/or must have a shield.
- K. Shoulder guards will be allowed on right side of drivers compartment but must be hinged on front edge and attached with Velcro or have quick release button on back edge as to not be mounted solidly.

### 17.7.15 - Numbers and Identification

A. The track and/or series Scoring Director reserves the right to issue and/or change a car number to prevent duplication and/or maintain proper records.

- B. Team cars must be clearly identifiable from one another and use another number and/or letter.
- C. All number and letter combinations will be limited to three digits. If three digits are used two (2) shall be the primary numbers/letter.
- D. Number and/or letter combinations are required on the roof, nose, rear deck and both doors.
- E. All numbers and letters must be a minimum of 18"-inches high on the roof and/or doors and 8"-inches high for the rear deck and the nose. All numbers and/or letters must be equal in size and displayed legibly whether decaled and/or painted.
- F. The nerf bars must not block the visibility of the number and/or letter combinations.
- G. Light bars will be permitted however, they can only be a maximum of eight (8) inches in length and cannot be the colors of yellow, red or green.

# 17.7.16 - Bumpers and Side Bars/Nerf Bars

### **General**

- A. All bumpers, side bars/nerf bars and/or bracing must be made from minimum 1-1/2 diameter round .095-inch thick magnetic steel tubing only unless otherwise specified. All edges and/or corners on bumpers and side bars/nerf bars must be rounded. Sharp edges will not be permitted.
- B. The rear bumper and/or any side bars must not extend past the outside of the tire sidewalls on either the left and/or right side of the car.

### Front Bumper

- A. Only the front bumpers may be made from minimum 1-1/4 diameter round .095--inch thick magnetic steel tubing.
- B. The front bumper must consist of two (2) horizontal rails; an upper and a lower and a minimum of two (2) vertical braces, equally spaced, welded between the two (2) horizontal rails. The horizontal rails must be positively fastened **with bolts or pins** to the frame with four (4) sockets and/or supports. The front bumper must remain exposed without covering and/or any sheet metal fabrication surrounding it.
- C. The four (4) tubes that support the bumper from the four (4) frame sockets must be horizontal. These rails must be a minimum of 6"-inches and a maximum of 12"-inches apart when measured from the top to the bottom and maintain that measurement for a minimum width of 24"-inches and a maximum width of 30"-inches. The front bumper must also have an 18"-inch center when measured from the ground up to the middle of the bumper. The total width of the front bumper must not exceed 30".
- D. The maximum the front bumper may extend from the centerline of the front axle is 24"-inches and a minimum of 20"-inches.
- E. The front surface of the bumper must remain flat, parallel and perpendicular with the front of the nose piece for the full width of the bumper. V-shaped and/or any other type of shaped bumpers will not be permitted.
- F. The end bracing tube of the front bumper must be fabricated on an angle in such a way as to prevent the bumper of another car becoming interlocked. Please refer to the drawing at the back of this rule book.

### **Rear Bumper**

- A. The rear bumper must consist of two (2) rails, an upper and lower, which must have a minimum of four (4) sockets and horizontal support bars positively **fastened with bolts or pins** attaching it to the frame. The upper and lower rails must also be a minimum of 10"-inches apart and a maximum of 16"-inches apart from the top to the bottom and maintain that measurement for a minimum width of the 64"-inches and a maximum of 86"-inches.
- B. The rear bumper must have an 18"-inch center when measured from the ground to the middle of the bumper.
- C. The maximum the rear bumper may extend back when measured from the centerline of the rear axle is 52"-inches.
- D. The rear surface of the bumper must remain flat and parallel with the back of the rear quarter panel for the full width of the bumper. V-shaped and/or any other type of shaped bumpers will not be permitted.

### **Rub Rails**

- A. Solid rub rails and inner hoops with ballast added inside or outside will not be permitted.
- B. The rub rails must be exposed and outside the body panels. The left side rub rail may extend a maximum of 2"-inches outside the left rear tire sidewall.
- C. The rub rails must be bent with a gentle radius at a 90 degree angle and must protrude a minimum of 6"-inches back in past the body.

- D. The rub rails must be a minimum of 50"-inches long from socket-to-socket
- E. All three attaching points must be fastened with bolts or pins.

### **Bumpers and Rub Rails**

- A. Only a minimum of 5/16" bolts with nyloc nuts and/or DIRTcar approved quick release solid pins will be permitted for positively fastening bumpers and rub rails to the car. Cotter pins and/or other fastening devices will not be permitted. Double rub rails will be allowed on Modifieds, 358 and Sportsman on left side only. Single rub rails only allowed on right side.
- B. All bumpers and rub rail sockets must have fasteners, pins and/or bolts with a minimum diameter of 5/16"-inch.
- C. The front and rear rub rails must have a 360 degree sleeve a minimum of 3/8"-inch wide x .095" thick magnetic steel welded to the rub rail tube butted against the support socket to prevent pins from shearing. Refer to the drawing at the back of this rule book.

# 17.8 - 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.

# 17.8.1 - 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.
- G. The front wheels and tires must remain fully exposed. Fenders and/or air deflection devices of any type will not be permitted.

### 17.8.2 - Shock Absorbers

- A. Only one (1) shock per wheel will be permitted, total of four (4) shocks per car.
- B. Externally adjustable shock absorbers will not be permitted. Shock absorbers with Schrader valves will be permitted.
- C. External reservoir type shock absorbers will not be permitted.
- D. All shock absorbers must be an 'in-stock' item with manufacturers. Custom shock absorbers and/or shock absorber components will not be permitted.
- E. Prior to introduction into competition a new design shock absorber must be submitted to World Racing Group / World of Outlaws Officials for approval. Shock absorber manufacturers may be required to provide a board of components for inspection and display.
- F. All Shock absorbers must be constructed of magnetic steel and/or aluminum.
- G. Only conventional type closed shock absorbers and/or approved shock absorbers will be permitted for competition. Only single shaft shock absorbers will be permitted and all shock absorbers must remain closed on one (1) end via conventional design. No internal bump stops inside shocks for rebound or compression.
- H. Electronically controlled shock adjustments by any means or method are not permitted.
- I. "Through-rod" designs are not permitted.
- J. Communication; hydraulically, electronically, magnetically, or otherwise, between any two or more shocks on a vehicle is strictly prohibited. This includes "cross-over" shocks.
- K. Inerter style dampers, either mechanical or hydraulic, or other type of primarily acceleration sensitive damping device is not permitted.

L. AIR SHOCKS NOT ALLOWED.

### 17.8.3 - Suspension Components

- A. Independent front and/or rear suspensions will not be permitted. No Cantilever suspensions allowed.
- 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 and single **side**, **mechanical** rear panhard adjustment will be permitted in the cockpit. Any other type of adjustment will not be permitted in the cockpit.
- G. Only double-sided torque arms will be permitted and must be perpendicular to the rear end. Front slider rods for the torque arm attaching point must be centered in chassis (left to right).
- H. 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.
- Only conventional type aluminum birdcages. All Bird cages must be clamped or fixed to rear end tubes and can not move. Maximum bracket thickness 1.25" (1 1/4 "). Any new birdcage designs must be approved.
- J. The only materials used to fabricate axle housing mounts (birdcages) that will be permitted is aluminum. axle housing mounts fabricated of exotic, heavy materials will not be permitted.
- K. 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. Only one radius rod per side will be permitted to locate rear end to chassis. (No Four link style suspension will be permitted).
- B. Radius rod must be mounted in a fixed position front and rear.
- The only materials used to fabricate attaching (radius) rods that will be permitted are magnetic steel or aluminum
- D. Aluminum attaching (radius) rods must be tubular material only. Magnetic steel attaching (radius rods) must be tubular with a maximum wall thickness of 3/16 inch.

### 17.8.4 - Springs

- A. Any type and/or form of spring will be permitted (torsion bar or coil spring)
- B. Helper single spring allowed on right rear only with torsion bar rear suspension.
- C. Coil springs must be manufactured from magnetic steel.
- D. Spring preload adjustments for coil springs must be made using mechanical adjusting nuts on the shock body.
- 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 allowed, maximum two (2) coils per corner. **Lockout nuts allowed**. No external bump stops or bump springs of any kind on the shock shaft other than normal sized travel indicator O ring. A maximum of one 2 ¼ high foam type rubber (no neoprene) will be allowed to stop bottoming of shock. No internal bump springs inside shock for rebound or compression. No frame mounted neoprene or solid snubbers, bump springs or travel limiting devices other than a droop limiter as described in section 17.8.3-d of the DIRTcar modified section of the rule book.
- G. Conventional style spring insert(s)/(rubber(s) per corner that does not exceed the length of one full coil will be permitted.

### 17.8.5 - Brakes

- A. All cars must have four (4) wheel hydraulic brakes in good working condition. Random brake inspection may take place throughout the season.
- B. Carbon fiber, carbon, titanium, ceramic, aluminum pads and/or rotors will not be permitted.
- C. No floating mounted brake calipers.
- D. Brake bias may be adjustable through the cockpit.
- E. Manual brake shut offs will not be permitted, with the exception of the right front brake. An electronic brake shut off switch will also be allowed on the right front only.
- F. Rear brake calipers must be approved aluminum 4 piston designs and must be operational. Maximum rotor diameter 12.19" diameter by 1.25" thick and must be vented. No solid rotors with the exception of the 3/8" rotor.

### 17.8.6 - Wheelbase and Tread Width

- A. The minimum wheel base is 106"-inches and a maximum of 110"-inches with a maximum tolerance of ½", when measured from the centerline of the rear axle to the centerline of the front axle for both left and right sides.
- B. 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 80"-inches. These measurements will be taken from the outside edge of the sidewall of the tires on each side.

# 17.9 - Roll Cage

- A. Only round magnetic steel tubing 1-1/2" and/or 1-3/4" in outside diameter with a material thickness of 1-3/4"-.095"-inches and/or 1-1/2"-.120"-inches will be permitted.
- B. The roll cage must be an integral and structural part of the frame. All frames built in 2005 and after must have a manufacturer's unique serial number plate visible and positively fastened on the left front roll cage upright. The letters and/or numbers shall not exceed 8 digits and be ½"-inch in height. See drawing 4.7.2
- C. Front and rear roll bars must be positively fastened in a cage-type configuration. Two (2) round horizontal side bars on each side are required. The top side bar must be a maximum of 22"-inches below the top roll bar.
- D. Proper bracing and triangulation on the front and rear roll bars is required. All roll bar bracing material must be 1-1/2"-inches outside diameter with a material wall thickness of .095"-inches. A minimum of one (1) 1" diagonal bar across the top of the roll cage is required.
- E. The rear main roll bar hoop must be a minimum of 26"-inches when measured across the outside-to-outside of the hoop and maintain that measurement from the top to the bottom of the cage. The bottom of the rear main roll bar hoop must be positively fastened (welded) to the 2"x4" frame rails. Outriggers will not be permitted.
- F. The front roll bar hoop must be a minimum of 26"-inches when measured across the outside-to-outside of the hoop and maintain that measurement from the top to the bottom of the cage, with the exception of the allowable frame taper. Outriggers will not be permitted. Refer to the drawing in the back of this rule book.
- G. MANDATORY Frame/Roll Cage update: A piece of tubing, a minimum of 1-1/4" in outside diameter and .095"-inches in thickness, must be installed vertically and must extend through the car into the bottom frame rail or extend back to the union at the top of the door and rear main hoop joint. The tubing must be installed in a manner that does not impede the driver exiting the cockpit. The tubing must be mounted a minimum of 9" inches and a maximum of 12"-inches on the roof bar from the existing rear roll cage hoop. This must be installed symmetrically on both sides of the roll cage. Existing cars must be retrofitted with this piece of tubing.

### 17.10 - Wheels

- A. Only aluminum 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. Maximum wheel weight 28 lbs. Weights of any kind, added to wheels other than conventional balancing, are not permitted.
- G. Wheel covers: it is highly recommended that wheel covers have a minimum of 5 mounting points.

  However, both 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. No Adjustable expansion mounting rings allowed.
- H. 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.
- I. Approved fastening (nut assembly) systems:
  - 1. Keyser Manufacturing: Part #100 7-101.
  - 2. Wehrs Manufacturing: Part # WM377A-312 (Aluminum 5/16) / WM377S-312 (Steel 5/16)
  - 3. Triple X Chassis: Part # SC-WH-7810 (for a 1" spring) / SC-WH-7820 (for a 1 3/8" spring)
  - 4. Smith Precision Products: Part # MC-516-18

Optional fastening systems that are equal or superior to the above-approved system will be readily approved at the sole discretion of 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.

# 17.11 - 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

## Big Block, 358 Modifieds and Sportsman:

- 2.) D300
- 3.) D400
- 4.) D500

### Tire Size and Compound Designation:

Left Front - 11/82-15 Right Front - 13/82-15 Left Rear - 13/87-15 Left Rear - 13/89 - 15 Right Rear - 13/92-15

- 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.
  - 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.
  - 2. 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.
  - Reference Section 5.3.D. for Competitive Analysis, Section 11.1.S & T for Penalties and/or Section 11.2.I for Protest(s).
- C. Removable duct tape, provided it does not deface the tire, to cover the D-Number will be permitted.
- D. Heating of the tires by torch, blanket, heating device(s), exhaust system and/or any other method will not be permitted.
- E. Inner liners or **sidewall stiffeners** of any type will not be permitted.
- F. A tire durometer may be used during the tire inspection process, provided baseline tire(s) have been read at the event prior to inspection.

# 17.12 - Personal Safety Equipment - see section 3.0

# (See section 3.0 for requirements)

Note: Industry approved requirements in the Personal Protection Equipment will begin to be introduced into all divisions. When upgrading or purchasing new please consider the future requirements.

### 17.13 - Other

- A. Cars will not be permitted to make a qualifying attempt without passing technical inspection. All cars must be available for inspection prior to the time of the driver's meeting. Following the driver's meeting, covers of any-type on the racecar will not be permitted.
- B. All fuel lines, power steering lines and/or fittings running through the driver's compartment must be made from a braided or other approved type line. Plastic and/or glass fuel filters will not be permitted.
- C. All cars may be subject to technical inspection at any time.
- D. Full or partial car covers will be permitted only when there is inclement weather and/or the car is in its designated pit stall. All covers shall be removed prior to the car leaving its designated pit stall.
- E. Roll bar padding mandatory on all roll bars that helmet may come in contact with. Knee and steering pads and/or padding is recommended.
- F. All teams must have a fire extinguisher in the rear of their transporter with the car number clearly visible on the extinguisher. The fire extinguisher must be a minimum of 20lbs and is recommended to FFF type chemical and/or DuPont FE-36 and/or equivalent.
- G. Fire Suppression Systems Cylinders are mandatory and must be mounted forward of the fuel cell, behind the seat below the deck or just above the deck (Pro Stocks should be below deck or mounted inside the cockpit, right-side of driveshaft and must be easily visible). Cylinders must be securely mounted to the frame/roll cage assembly and centered in the chassis. SFI certification along with manufacturers date must be clearly visible.
- H. All drivers are required to have a one-way radio. The one-way radio must be working and active prior to any 'on-track' activity. Two-way radios, crew-member to driver and/or any other means of electronic communication, other than the one-way radio will not be permitted. ONEWAY RADIO MUST NOT BE ABLE TO SWITCH BETWEEN TWO OR MORE PROGRAMMABLE CHANNELS.
- I. Seven (7) days prior to any scheduled and/or sanctioned one (1) day DIRTcar Northeast Series event paying less than \$20,000-to-win race teams will not be permitted to rent, test and or attend any practice session(s) at the scheduled track, unless approved by DIRTcar. Any race team and/or driver in violation will be given one (1) lap of qualifying and the best their qualifying position that will be earned is 50% + 1 of the entered cars for that event.

# 17.14 - Series Decal and Patches

- A. All participants will be required to display decals as provided on the decal verification sheet prior to entering into competition. If any required decal is not displayed loss of any awarded money will be the penalty.
- B. A series decal is required on both sides of the car. Driver must display the series patch on their uniform to receive point fund awards.
- C. Contingency and sponsorship awards; any team participating must meet the requirements of the award(s) such as decals, patches, product use and verification. There will be a written deadline presented to the teams prior to the start of each season for each element to be in place for the award requirements. If it is an existing program it will roll over from the prior season and the program will begin at the first race of the season.

# 18.0 – DIRTcar 358 Modifieds

- Under the guideline of the 2020 DIRTcar rules any and/or rules and as stated in the 2020 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 2020 rules any and/or rules and as stated in the 2020 DIRTcar Rule Book, all DIRTcar rules apply to all <u>sanctioned</u> 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 18.0, the rules remain the same as presented in section 17.0

# 18.1 - Engines General and Location

- A. Conventional stock type V-8 engines (OEM American with cast iron blocks and Brodix Aluminum Cylinder Heads. Ported OEM and/or the DART Iron Eagle Cylinder Heads will be permitted. Aluminum engine blocks will not be permitted. The following are the approved cast iron engine blocks permitted for competition.
  - 1. OEM Chevrolet and Bow Tie Performance
  - 2. OEM Chrysler and R Performance
  - 3. OEM Ford and SVO Performance
  - 4. DART Performance (Little M)
  - 5. DART Rocket Block 31121111
  - 6. DART SHP Block 31161111 4"-inch bore
- B. ALL engines must maintain stock bore and stroke combinations.
  - 1. Engine Maximum Overbore Cubic Inches (C.I.):
  - 2. Chevrolet 350 C.I. 4,00" bore x 3.480" stroke + .075 maximum over bore = 363
  - 3. Chrysler 360 C.I. 4,00" bore x 3.578" stroke + .025 maximum over bore = 364
  - 4. Chrysler 340 C.I. 4,04" bore x 3.313" stroke + .065 maximum over bore = 350
  - 5. Ford 351 C.1. 4.00" bore x 3.500" stroke +.065 maximum over bore = 363
- C. Reverse rotation engines will not be permitted.
- D. The engine must be centered in the front of the chassis and placed in an upright position.
- E. Engine set back will be as follows; Minimum is 56"-inches and a Maximum of 66"-inches with a tolerance of ½"-inch (+/-). The setback will be measured from the centerline of the front axle to the rear machined surface where the motor plate attaches the motor.
- F. Engines must not pump more than the specified cubic inch.
- G. Only normally aspirated engines will be permitted.

### **ENGINE BLOCKS**

- A. Only stock OEM and cast iron performance blocks including the Chrysler (R) Block, Chevrolet Bow-Tie, Ford-SVO and/or DART Blocks will be permitted. Aluminum blocks will not be permitted.
- B. <u>Lightening and/or machining of engine blocks will not be permitted.</u> The engine block must remain as received from the manufacturer. Any alteration will not be permitted.

# 18.1.1 - Option A - Spec 358 Cylinder Heads and Intake Manifolds and exhaust Specifications

Chevy and Ford (2,400 lbs – Spec. Heads, Intake and Exhaust) Chrysler w/Stanton Intake # P4532966SR 2450 lbs.

The intake manifold must remain unaltered. Matching, welding, the additional of material and/or epoxy will not be permitted. Casting and/or part numbers must remain visible and must not be altered in any manner Brodix 'Spec' Aluminum Head. One (1) degree angle mill will be permitted. The cylinder head must remain as manufactured by the manufacturer. Only the specified intake manifold part number will be permitted. Oil lines and/or brackets must not be mounted in front of the cylinder heads for ease of inspection and measuring the dowel pin holes. Matching and/or porting of the cylinder heads will not be permitted. The cylinder heads and intake manifold must remain as manufactured by the manufacturer. A magnetic steel or aluminum oil pan will be permitted.

The following are the approved intake manifolds;

- Chevrolet 350 C.I. Brodix Part # HV1000
- Chrysler 360 C.I. and 340 C.I. Edelbrock Part # 2915
- Chrysler 360 C.I. and 340 C.I. Stanton part # P4532966SR
- Ford 351 C.I. Edelbrock Part # 2981 9.5"-inch deck height
- Ford 351 C.I. Edelbrock Part #2980 9.2"-inch deck height
- 1. 2.) The maximum compression ratio on any aluminum cylinder head package will be 10.5:1.
- 2. 3.) All Brodix 'Spec' Cylinder Heads will be supplied with CNC bowl blend and CNC combustion chamber and intake port matching.
- 3. 4.) Grinding and/or blending or CNC work will not be permitted.
- 4. 5.) Grinding and/or polishing anywhere on the cylinder head casting will not be permitted.
- 6.) The use of substances that may change and/or alter the shape, finish and/or size of the ports and/or combustion chamber will not be permitted.
- 6. 7.) The maximum intake valve size of 2.080"-inches and a maximum exhaust valve size of 1.600"-inches will be permitted for all Brodix 'Spec' Cylinder Heads.
- 8.) Titanium valves, titanium valve train components will not be permitted. Titanium retainers and/or keepers will be permitted.
- 8. 9.) Alterations to the valve seats and/or valve guides will not be permitted. The valve seats and/or valve guides must remain as manufactured in their cast positions.
- 9. 10.) Valve stem angles must remain as manufactured. The original valve seat center location(s) as provided by the cylinder head manufacturer (Brodix) must not be altered. Any valve repair job will only be permitted on steel seat concentric to the guide. Justifiable and reasonable enlargement of the valve seat concentric to the valve guide as the result of a valve repair job will be permitted, but the combustion chamber must retain the stock OEM dimensions as cast by the 'Spec' head manufacturer (Brodix).
- 10. 11.) Tapering and/or reshaping of the valve guide(s) will not be permitted.
- 11. 12.) Only 11/32"-inch diameter valve stems will be permitted. Neck down type valves will be permitted.
- 12. 13.) Brodix 'Spec' Cylinder Head serial/ part, ID, markings and/or numbers must remain unaltered. Defacing and/or altering of the part identification information will not be permitted.
- 13. 14.) Brodix, as the 'Spec' Cylinder Head manufacturer may repair cylinder heads with authorization from DIRTcar, Super DIRTcar Series and/or World Racing Group Officials.

Any deliberate 'Spec' Cylinder Head rules infraction may result in a suspension from all DIRTcar sanctioned tracks. In post-race inspection DIRTcar has the option of removing cylinder heads for inspection purposes. Failure to cooperate in removing cylinder heads for the purpose of inspection will result in an immediate disqualification from the event and may result in additional penalties as set forth by DIRTcar and/or Super DIRTcar Series Officials.

DIRTcar and/or Super DIRTcar Series officials reserve the right to exchange and/or 'swap' cylinder heads with a race team at any time. Failure to cooperate in exchanging and/or swapping cylinder heads for the purpose of inspection will result in an immediate disqualification from the event and may result in additional penalties as set forth by DIRTcar and/or Super DIRTcar Series Officials.

# 18.1.2 - Option B - 2500 Lbs. Brodix Cylinder Heads with Ported intake with Tri-Y Headers.

- A. The approved intake manifolds may be ported on Option B. If the intake manifold is ported and utilizes the Spec. Brodix cylinder heads as manufactured by the manufacturer and Tri-Y headers, the car must compete at the 2,500 lb overall weight.
- B. The following are the approved intake manifolds:
  - Chevrolet 350 C.I. Brodix Part # HV1000
  - Chrysler 360 C.I. and 340 C.I. Edelbrock Part # 2915
  - Chrysler 360 C.I. and 340 C.I. Stanton part # P4532966SR
  - Ford 351 C.I. Edelbrock Part # 2981 9.5"-inch deck height
  - Ford 351 C.I. Edelbrock Part #2980 9.2"-inch deck height

#### 18.1.3 - Exhaust - Muffler and Sound Reduction Devices

- A. The following are the approved Schoenfeld and Beyea headers allowed to compete at the 2,400 lbs. weight:
  - Chevrolet 1-3/4" to 1-7/8" Schoenfeld Part # 1124 BVU
  - Chevrolet 1-5/8" to 1-3/4" Schoenfeld Part # 1122 BV SH 3
  - Chevrolet 1-5/8" to 1-3/4" Schoenfeld Part # 1122BVUSH-3
  - Chrysler 1-3/4" to 1-7/8" Schoenfeld Part # 4124 BV SH
  - Chrysler 1-5/8" to 1-3/4" Schoenfeld Part # 4122 BV SH 3
  - Ford 1-3/4" to 1-7/8" Schoenfeld Part # 3124 BVN
  - Ford 1-5/8" to 1-3/4" Schoenfeld Part # 3122 BVN 3
  - Chevrolet 1-5/8" to 1-3/4" Beyea Part # NEDMSB-S1-3-DL
  - Chevrolet 1-5/8" to 1-3/4" Beyea Part # NEDMSBUS-S1-3-DL
  - Chevrolet 1-3/4" to 1-7/8 Beyea Part # NEDMSB-S2-3-DL
  - Chevrolet

    1-3/4" to 1-7/8" Beyea Part # NEDMSBUS-S2-3-DL
- B. Only magnetic steel exhaust headers will be permitted. The four (4) primary pipes going into one collector. Merge collectors will not be permitted. Ceramic coating and/or any other type coatings will not be permitted. Stainless Steel not allowed anywhere in the system.
- C. All 2,400 lbs. approved Headers must be able to be separated from the rest of the exhaust system for the purpose of inspection.
- D. The complete exhaust system must be sealed. Any type of add on, return system and/or exhaust evacuation system will not be permitted. Refer to Super DIRTcar Series Big Block Modified section 17.3F for approved mufflers.

# 18.1.4 - Carburetor

- 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. 4777 and 80777 Option:
  - 1.) The carburetor must maintain the stock venture and throttle bore dimensions; the primary venture 1-1/4" and the secondary venture will be 1-5/16".
  - The carburetor must maintain all stock dimensions, including mounting and stud location on intake manifold.
  - 3.) The booster height must remain stock OEM from Holley. Cutting, tumbling and/or polishing will not be permitted.
  - 4.) Visible modifications will not be permitted.
  - 5.) The maximum height of the carburetor when measured from the bottom of the carburetor and/or the throttle plate to the machined horizontal surface of block will be 7"-inches in both the front and rear of the block. Any carburetor spacer may be used to maintain the height with nothing going below the top of the machine surfaced of the intake manifold. Turtles, air dams and/or any type of similar device will not be permitted.
  - 6.) The following alterations will be permitted;
    - a. Holes drilled in the throttle plate for proper idle.
    - b. Drilling, tapping and plugging of unused vacuum ports.
    - c. Welding of throttle shaft to linkage arm.
    - d. Drilling of idle and/or high speed air correction jets.
    - e. Milling of center carburetor body metering block surface, maximum of .015" on each side.
    - f. Removal of choke plate and shaft.
    - g. The jets may be changed as needed.

- 7.) Gauge measurements (go/no-go) must be met at all times, regardless of carburetor temperature.
- C. 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.
  - 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.
- D. A shield may be used under the air filter base and must remain on top of the carburetor main body (venturi opening) in an attempt to seal off the air cleaner area only. Any type of shield that covers the engine compartment area and prevents visual inspection of heads and intake will not be permitted. A shield may be attached to the hood or air filter base plate for the purpose of preventing dust and/or exterior elements being introduced into the air breather. Any shields new in design must be submitted to DIRTcar for approval.
- E. A WRG approved carburetor roll over plate that prevents fuel spillage in case of a roll over is highly recommended.
  - a. Carburetors with plate(s) will be mandated at a future date to be announced.
  - b. Currently approved roll over plate approved as followed,
    - i. Willy's Carb & Dyno shop LLC. Part # WCD4000SB
    - ii. Willy's Carb & Dyno shop LLC. Part # WCD4002

### 18.1.5 - Camshaft

- A. The camshaft must maintain stock location and position in engine block. Design and/or manufacturer may vary.
- B. Gear and/or belt drives will not be permitted.
- C. Overhead cams will not be permitted.
- D. Roller and/or shaft rockers will be permitted.
- E. Stud girdles will be permitted.
- F. Lifters must retain stock diameters per OEM dimensions for make of engine, angles and positions. Rebushing for wear will be permitted.

# 18.1.6 - Pistons, Connecting Rods, Crankshaft and Vibration Dampeners

- A. Any steel and/or cast iron crank shaft maintaining stock stroke dimensions for the engine block that is used will be permitted.
- B. OEM stock production and/or aftermarket magnetic, solid steel rods with a maximum length of 6"-inches will be permitted.
- C. Titanium and/or aluminum rods will not be permitted.
- D. Only 3-ring, flat top aluminum pistons will be permitted.
- E. Engines with connecting rods longer than 6"-inches must maintain stock OEM specifications and measurements.
- F. Only one-piece constructed dampeners, fluid and/or friction dampeners meeting the SFI 18.1 specifications will be permitted for competition.
- G. Bolt and/or snap-ring assemblies will not be permitted.
- H. Safety snap rings will be permitted
- I. Rubber-lined dampeners will be permitted.

### 18.1.7 - Ignition

- A. Only DIRTcar approved MSD Box Part #64316-MSD/DIRT 6ALN fixed 7600 will be permitted. The ignition box must remain unaltered. Only one (1) approved MSD Box will be permitted per car. The ignition box must be in operating and working condition before, during and after the racing event.
- B. The ignition amplifier box ("rev box") and coil must be mounted under the hood (out of the driver's reach) and must be clearly visible for ease of inspection. Mounting under the hood includes behind the instrument gauge cover at the rear of the hood area. All wires from the ignition amplifier box must have

- a clear and direct path to their connections. The shortening of wires will be permitted to accomplish this. Bare wires and/or exposed wiring and/or tape(d) and/or wire looms of any type will not be permitted.
- C. Ignition boxes must remain as manufactured. Internal and/or external alterations and/or modifications will not be permitted. Crank trigger systems of any type will not be permitted.
- D. The ignition must be mechanically driven in the stock OEM location.
- E. Only one ignition coil will be permitted on the car.
- F. The wiring must remain as specified by the ignition amplifier box manufacturer.
- G. One American Passenger Car sized battery with terminals on top and a maximum of 12 volts will be permitted. The voltage must not measure more than 14.3 volts anywhere in the system. Step up transformer and/or any other device designed to increase voltage will not be permitted.
- H. OEM stock firing order must be maintained for all engines.
- I. Ignition amplifier boxes may be confiscated and/or exchanged at any time.

### 18.1.8 - 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. The oil pan may be magnetic steel or aluminum. The oil pan must have a 1"-inch diameter inspection hole for inspection of connecting rods. The hole must be in the left side of the oil pan. If the inspection hole is not present, removal of the oil pan will be required for inspection.
- C. External type oil pumps and/or vacuum pumps will not be permitted.
- D. Accu Sumps will be permitted.
- E. Oil coolers will be permitted. Please refer to section 17.1.7 (Big Block section) for mounting location and other rules specific to the oil cooler.
- F. Oiling evacuation (EVAC) systems from the valve covers to the exhaust system behind the spec header will be permitted. No air pumps allowed.

# 18.2 - Fuel, Fuel Cells and Fuel System

- A. See 17.2 of Modified rules for fuel cell specifications.
- B. Only 'D'-type VP Racing Gasoline, the official fuel of DIRTcar will be permitted for competition. VP D-113, D-12, and D-109 will be the only specified fuel permitted at any sanctioned DIRTcar and/or Super DIRTcar Series event. Blending of fuels, 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.

# 18.3 - Weight / Ballast

- A. All 358 DIRTcar Modifieds utilizing a Brodix "Spec." DIRTcar 358 Modified engine with the spec intake manifold (reference 17.1.2.A.; 17.1.3; 17.3 A.) and spec. Schoenfeld and Beyea headers and a steel or aluminum oil pan must maintain a minimum weight of 2,400 lbs following the completion of any event. Chrysler using spec Stanton intake # P4532966SR must weigh 2450.
- **B.** All 358 DIRTcar Modifieds utilizing a DIRTcar 358 Modified engine with the Brodix "Spec" heads, ported intake and "tri-y" exhaust must maintain a minimum weight of <a href="2.500">2,500</a> lbs following the completion of any event.
- C. During any Super DIRTcar Series event all DIRTcar legal 358 Modifieds will be permitted to race at weights posted before the event via the Competitors Notes. (Note – weights could vary depending on track.)

# 18.4 - W16 Engine Option

- A. The W16 will be permitted as an optional engine for use within the DIRTcar 358 Modified division. The W16 must maintain a minimum weight of 2350 lbs after the completion of any event.
- B. The engine and all components must remain in their original configuration and form as purchased and/or delivered from the Wegner Racing Motorsports. Any alterations to the engine will not be permitted. The Engine must remain as manufactured by Wegner Motorsports. Repairs must be performed by Wegner Motorsports only unless otherwise authorized by DIRTcar.
- C. All engines are to remain sealed. The seals must remain unaltered. Tampering, removal, modifications of any type and/or broken factory seals will not be permitted. The W16 must remain unaltered in any way. Tampering with and/or alteration of any seals will not be permitted and is subject to immediate penalty and/or suspension.

- D. Only DIRTcar approved MSD Box Part #64316-MSD/DIRT 6ALN fixed 7600 will be permitted. The ignition box must remain unaltered. Only one (1) approved MSD Box will be permitted per car. The ignition box must be in operating and working condition before, during and after the racing event
- E. Exhaust headers will be the Schoenfeld Schoenfeld Headers 1122BVLS1-3 NON TRI Y, OR Schoenfeld TRI Y 1124lvyls1, OR Beyea NEDMSBTY=LSS2-3.5. No inserts of any type in exhaust allowed.
- F. A single, unaltered original configuration Wegner Motorsports carburetor spacer plate must be installed. No extra thick gaskets or insulator plates to achieve any extra height.
- G. DIRTcar and/or World Racing Group Supervisory Officials reserve the right to technically inspect, dyno test, exchange and/or confiscate any Engine at any time. Failure to surrender the engine and/or submit the engine for inspection will result in disciplinary action as outlined in penalties section of the rule book.
- H. The intended direction of the W16 Engine program is to maintain a cost-effective, affordable racing program. Any 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.

Note \*\*\* - Fire Suppression Systems Cylinders are mandatory and must be mounted forward of the fuel cell, behind the seat below the deck or just above the deck (Pro Stocks should be below deck or mounted inside the cockpit, right-side of driveshaft and must be easily visible). Cylinders must be securely mounted to the frame/roll cage assembly and centered in the chassis. SFI certification along with manufacturers date must be clearly visible.

# 19.0 – DIRTcar Sportsman Modified

- Under the guideline of the 2020 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 2020 rules any and/or rules and as stated in the 2020 DIRTcar Rule Book, all DIRTcar rules apply to all <u>sanctioned</u> 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.

# **19.1 – Engines**

- A. The General Motors (GM) / Chevrolet Performance Engine part number #88958602/19370602 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.
- 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/bottle cap) must remain unaltered, 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 # 10212811/19154761.
- F. GM Crate Engine repairs must be authorized **through DIRTcar Authorized Repair Centers & Pace Performance.** GM Crate Engine repair procedure works 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 provide a list of DIRTcar Authorized Repair Center locations.
  - c. Based on the estimate and the detail of the repair, DIRTcar Authorized Repair Centers and Pace Performance will determine if the repairs may be made or if a new engine must be purchased.
  - d. If a repair is approved, the Authorized Repair Center will perform all repairs to the GM Specifications.
  - e. Upon completion of the repair(s) the engine will be 'resealed' before being released for competition.
  - f. Bead blasting and/or any polishing and/or any alteration to the intake manifold and/or cylinder heads will not be permitted.
  - g. All engine information regarding repairs and/or engine introduction will be retained by DIRTcar Officials and Pace Performance, 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. 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.

## 19.1.1 - Engine Verification.

- A. All motors repaired through the Authorized Repair Centers will have a Pace Performance a QR coded seal. The QR seal will retain information pertaining to the repaired motor.
- B. All current motors with GM Bolts/Bottle Cap seals or previously DIRTcar sealed may go through the verification program at an Authorized Repair Center and have a QR seal attached to the motor.
- C. A new motor may also be purchased from Pace Performance or Authorized Repair Centers and be updated to a verified motor with a QR seal.
- D. Seals from other sanctioning bodies are not accepted as verification seals.
- E. Verification pricing is locked in among all centers at \$550 (US) and \$750 (Can.)

# **Authorized Repair Centers:**

Petrucci Engines /Carlquist	Donath Motorworx	Enders Racing Engines	Hunts Machine
Competition Engines	4247 Abbey Rd.	55 County Rte. 59	102 Weaver St.
98 Falls Ave.	Syracuse, NY 13215	Phoenix, NY 13135	Schenectady, NY 12305
Oakville, CT 06779	(315) 481-2489.	(315) 695-4491	(518) 372-7177
(203) 297-2815			
LaFrance Performance	Lussier Chevrolet	New Generation Engines	DMO Engines
16397 County Rd. 2	3000 Rue Dessaulles	563 Hwy. 20	83 Bridge Street
Long Sault, ON K0C 1P0	Saint Hyacinthe, QC J2S 2V8	Fenwick, ON L0S 1C0	Plattsburgh, NY 12901
(613) 551-6212	(450) 778-1112	(905) 892-3255	(518) 563-2749

Crate Program Overseen by Pace Performance – Don Blackshear – (724) 977-7424

### 19.1.2 - 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 venture and throttle bore dimensions.
  - The carburetor must maintain all stock dimensions, including mounting and stud location on intake manifold.
  - 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;
    - 1. Holes drilled in the throttle plate for proper idle.
    - 2. Drilling, tapping and plugging of unused vacuum ports.
    - 3. Welding of throttle shaft to linkage arm.
    - 4. Drilling of idle and/or high-speed air correction jets.
    - 5. Milling of center carburetor body metering block surface, maximum of .015" on each side.
    - 6. Removal of choke plate and shaft.
    - 7. 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 WRG approved carburetor roll over plate that prevents fuel spillage in case of a roll over is highly recommended.
  - a. Carburetors with plate(s) will be mandated at a future date to be announced.
  - b. Currently approved roll over plate approved as followed,
    - i. Willy's Carb & Dyno shop LLC. Part # WCD4000SB
    - ii. Willy's Carb & Dyno shop LLC. Part # WCD4002
- F. 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.
- G. Only a single conventional round type air cleaner **housing with one 5" round hole in the center** 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.
- H. Air cleaners that provide ventilation through the top cover (such as the K & N brand) will be permitted.
- Air induction plastic carburetor insert and/or other air diffuser devices that direct air into the air intake will not be permitted.

### 19.1.3 - Ignition/Battery

- 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. Lock out plates may be added to the mechanical and vacuum distributor advance system. When both lock plates are added, mechanical weights and springs are to be removed along with the vacuum advanced canister.
- 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. distributor, ignition coil and module 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 voltage must not measure more than 14.3 volts anywhere in the system. 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.

### 19.1.4 – 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.

### 19.1.5 - 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.

### 19.1.6 - Engine Cooling System/Radiator

A. Only cast iron water pumps will be permitted.

# 19.1.7 - Rear End

See 17.1.11 in Modified Rules Section

# 19.1.8 - Engine Graphics

A. In 2021, the only lettering/graphics that will be permitted in a crate engine class on the hood or hood scoop will be GM Performance Crate or DIRTCar/GM Performance Crate.

# 19.2 - 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 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.

### 19.3 - Exhaust - Muffler and Sound Reduction Devices

- A. Schoenfeld headers, model number: 1122BCM, 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.
  - 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.

# 19.4 - Weight / Ballast

- A. Any car utilizing any aluminum wheel(s) must weigh a minimum of 2,400 lbs. following the completion of any event.
- B. Any car utilizing all steel wheels must weigh a minimum of 2,350 lbs. following the completion of any event.
- C. 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.

- D. Frame is defined as the steel welded structure only.
- E. Any part that moves or is not a fixed component to the steel frame structure may not be used for any weight attachment.
- F. Weights attached to the rear bumper and/or outside the frame will not be permitted.

# 19.5.- 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.
- B. Only a single brake bias adjustment will be permitted in the cockpit. Any other type of adjustment will not be permitted in the cockpit.

### 19.6 - 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.

### 19.6.1 - Shock Absorbers

- A. Only the DIRTcar approved –A-B-C type shock absorbers displaying the DIRTcar "Approved" decal will be permitted to compete.
  - a. Base valves can not be added or permitted to our approved shocks.
- B. <u>Approved Shock Absorbers</u>: 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 A	Absorbers:
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DIRTcar Sportsman Modified DIRTcar Pro Stock DIRTcar Pro Late Model DIRTcar UMP Sportsman DIRTcar UMP Stock Car

Approved 'B'-type Shock Absorbers:

DIRTcar Sportsman Modified DIRTcar Pro Late Model DIRTcar Pro Stock 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

Pro Shocks – TA Series Bilstein – SL/SZ 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

Bilstein – SL/SZ Series Bilstein – SNS Series AFCO – 1300 Series AFCO – 2100 Series

Genesis – GD Series (steel body) Integra – 310-45170 or 310-45190 Advance (ARS) – P/N ARS 2074 Advance (ARS) – P/N ARS 2092

FOX – 983-91-507 FOX – 983-91-509

DIG - 7507/7509 (Steel Body)

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

# 19.6.2 - Springs

- A. Any type and/or form of spring will be permitted (torsion bar or coil spring). One per corner, no helper springs will be permitted
- B. Stacked coils and spring rubbers of any type are not allowed in the sportsman division. No progressive springs allowed. A maximum of one 2 1/4 inch high foam type rubber (no neoprene) will be allowed to stop bottoming of shock.
- C. Only one take up spring allowed per corner. Maximum rate 5lbs.

# 19.7 - 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.

Note \*\*\* - Fire Suppression Systems Cylinders are mandatory and must be mounted forward of the fuel cell, behind the seat below the deck or just above the deck (Pro Stocks should be below deck or mounted inside the cockpit, right-side of driveshaft and must be easily visible). Cylinders must be securely mounted to the frame/roll cage assembly and centered in the chassis. SFI certification along with manufacturers date must be clearly visible.

# 20.0 - DIRTcar Pro Stocks

- Under the guideline of the 2020 DIRTcar rules any and/or rules and as stated in the 2020 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 2020 rules any and/or rules and as stated in the 2020 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 20.0, the rules remain the same as presented in section 17.0.

# 20.1 - Engines General and Location

The maximum engine setback permitted will be the center of the number of one (1) spark plug hole, **must** align with the center of the top of the **left side** ball joint. **There will be a** ½ **inch tolerance**.

- A. The General Motors (GM) / Chevrolet Performance Engine part number #88958602/19370602 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.
- 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/bottle cap) must remain unaltered, 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 # 10212811/19154761.
- F. GM Crate Engine repairs must be authorized **through DIRTcar Authorized Repair Centers & Pace Performance**. GM Crate Engine repair procedure works as follows:
  - a. Contact your track promoter and/or your local track and/or DIRTcar Technical Officials.
  - The Promoter and/or Technical Officials will provide a list of DIRTcar Authorized Repair Center locations.
  - c. Based on the estimate and the detail of the repair, DIRTcar Authorized Repair Centers and Pace Performance will determine if the repairs may be made or if a new engine must be purchased.
  - d. If a repair is approved, the Authorized Repair Center will perform all repairs to the GM Specifications.
  - e. Upon completion of the repair(s) the engine will be 'resealed' before being released for competition.
  - f. Bead blasting and/or any polishing and/or any alteration to the intake manifold and/or cylinder heads will not be permitted.

- g. All engine information regarding repairs and/or engine introduction will be retained by DIRTcar Officials and Pace Performance, 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. 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.

## 20.1.1. - Engine Verification.

- A. All motors repaired through the Authorized Repair Centers will have a Pace Performance a QR coded seal. The QR seal will retain information pertaining to the repaired motor.
- B. All current motors with GM Bolts/Bottle Cap seals or previously DIRTcar sealed may go through the verification program at an Authorized Repair Center and have a QR seal attached to the motor.
- C. A new motor may also be purchased from Pace Performance or Authorized Repair Centers and be updated to a verified motor with a QR seal.
- D. Seals from other sanctioning bodies are not accepted as verification seals.
- E. Verification pricing is locked in among all centers at \$550 (US) and \$750 (Can.)

# **Authorized Repair Centers:**

Petrucci Engines/Carlquist	Donath Motorworx	Enders Racing Engines	Hunts Machine
Competition Engines	4247 Abbey Rd.	55 County Rte. 59	102 Weaver St.
98 Falls Ave.	Syracuse, NY 13215	Phoenix, NY 13135	Schenectady, NY 12305
Oakville, CT 06779	(315) 481-2489.	(315) 695-4491	(518) 372-7177
(203) 297-2815			
LaFrance Performance	Lussier Chevrolet	New Generation Engines	DMO Engines
16397 County Rd. 2	3000 Rue Dessaulles	563 Hwy. 20	83 Bridge Street
Long Sault, ON K0C 1P0	Saint Hyacinthe, QC J2S 2V8	Fenwick, ON L0S 1C0	Plattsburgh, NY 12901
(613) 551-6212	(450) 778-1112	(905) 892-3255	(518) 563-2749

Crate program overseen by Pace Performance – Don Blackshear (724) 977-7424

### 20.1.2 - 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 venture and throttle bore dimensions.
  - The carburetor must maintain all stock dimensions, including mounting and stud location on intake manifold.
  - 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;
    - 1. Holes drilled in the throttle plate for proper idle.
    - 2. Drilling, tapping and plugging of unused vacuum ports.
    - 3. Welding of throttle shaft to linkage arm.
    - 4. Drilling of idle and/or high speed air correction jets.
    - 5. Milling of center carburetor body metering block surface, maximum of .015" on each side.
    - 6. Removal of choke plate and shaft.
    - 7. 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.
  - 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 WRG approved carburetor roll over plate that prevents fuel spillage in case of a roll over is highly recommended.
  - a. Carburetors with plate(s) will be mandated at a future date to be announced.
  - b. Currently approved roll over plate approved as followed,
    - Willy's Carb & Dyno shop LLC. Part # WCD4000SB
    - ii. Willy's Carb & Dyno shop LLC. Part # WCD4002
- F. 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.
- G. Only a single conventional round type air cleaner housing with one 5" round hole in the center will be permitted. Ram air, air box and/or heat shield type devices will not be permitted.
- H. Air cleaners that provide ventilation through the top cover (such as the K & N brand) will be permitted.
- Air induction plastic carburetor insert and/or other devices that direct air into the air intake will not be permitted.
- J. Air diffusers will not be permitted.

# 20.1.3 - Ignition/Battery

- A. Only the stock OEM H.E.I. distributor, ignition coil and module 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, lock plates may be added to the mechanical and vacuum distributor advance system. When both lock plates are added, mechanical weights and springs are to be removed along with the vacuum advance canister.
- B. Only the black wire must be grounded to the engine block.
- C. The rev box must be in clear view without removing the hood.
- D. One (1) unaltered DIRTcar approved, <u>MSD 8727CT will be the only MSD/DIRTcar RPM (rev) limiting box permitted for competition must remain operable and working condition, prior to, during and after all racing events. 6000 RPM maximum limit.</u>
- E. The OEM firing order must be retained. (Standard Chevrolet Firing Order: 18436572).
- F. Traction control devices will not be permitted. Braking devices that control traction will not be permitted.
- G. DIRTcar and/or World Racing Group officials reserve the rights to analyze and/or switch ignition boxes and/or rev chips at anytime.
- H. The ignition switch must be clearly labeled ON/OFF and easily accessible from outside of the car.
- I. All cars must be self-starting.
- J. The battery must be securely fastened in place.
- K. The battery must remain completely sealed off from the driver's compartment.
- L. One American Passenger Car sized battery with terminals on top and a maximum of 12 volts will be permitted. The voltage must not measure more than 14.3 volts anywhere in the system. Step up transformer and/or any other device designed to increase voltage will not be permitted.
- M. A battery shut-off switch, clearly labeled ON/OFF, is mandatory. The switch must be mounted on the left side inner panel (above the steering post). The knob must be outside the panel and clearly visible and easily accessed from outside of the car. It must be wired to take the power off on the positive and/or 'hot' side of the connection. Reference the diagram in the back of this rule book.

### 20.1.4 – Lubrication/Oiling System/Oil

A. Oil coolers that are mounted under the hood will be permitted.

### 20.1.5 - Transmission/Driveline and Driveline Components

- A. Only approved North American and/or Canadian manufactured manual shift transmissions will be permitted. Late Model Style Racing Transmissions will be permitted.
  - a. Three and/or four speed manual transmissions must have all gears working and must have a single clutch disc mounted in the stock OEM location. Clutch and pressure plate must be a minimum of 10.5" in diameter. No aluminum or lightweight material allowed. Steel only.
  - b. Late Model Transmission Part #'s are as follows. Bert #SG1400, Falcon #60100, Brinn 70001. No ball spline transmission. Transmission must have aluminum case. Must use full steel, unaltered OEM or OEM replacement flex plate. Starter must be mounted in OEM location. Must be steel crankshaft drive flange.
- B. Overdrive and/or under-drive transmissions and/or gears will not be permitted.
- Running through reduction gears will not be permitted. The transmission must be direct drive to the rear end.
- D. The transmission must have working gears. Forward, neutral and reverse must be working. From the neutral position and with the motor running, the car must be able to go forward and/or backward in a smooth manner. The car must start and move under it's own power.
- E. Only magnetic steel flywheels with a stock OEM diameter will be permitted.
- F. Driveline components made of carbon fiber will not be permitted.
- G. Drilling and/or machining and/or grinding of transmission components, gears and/or other components including the case for the purpose of lightening the weight of the transmission will not be permitted.

### 20.1.6 - Scattershield

- A. Magnetic steel scattershield and/or magnetic steel scatter proof bell housing for standard and Late Model style transmission are required.
- B. Automatic transmission explosion blankets are recommended.
- C. All bell housing must have a 1"-inch diameter inspection hole drilled near the top to permit visual inspection of the flywheel and the converter.

### 20.1.7 - Driveshaft

- A. Only magnetic steel driveshaft will be permitted. All drive shafts must be painted white and be clearly labeled with the car number on it.
- B. Only one (1) drive shaft connected from the transmission to the center section of the rear end will be permitted.
- C. Two (2) driveshaft hoops a minimum ¼"-inch thick x 2"-inch wide magnetic steel must be mounted to the frame wrapping around the driveshaft. One must be mounted in the front of the driveshaft and the other on the rear that prevents the driveshaft from digging into the track and/or bouncing out or up into the car
- D. Only magnetic steel drive yokes on the rear end and on the transmission will be permitted.

### 20.1.8 - Engine Cooling System/Radiator

- A. Only one (1) radiator will be permitted. The radiator must be mounted vertically in front of the engine. The radiator must remain in its stock OEM location between the frame rails.
- B. Fans mounted to the crankshaft will not be permitted. Electric fans and/or water pumps will not be permitted. No flex style fans allowed.
- C. Plastic radiators will be permitted.
- D. A 25 lb. pressure radiator cap is recommended.
- E. An overflow catch can is required. The overflow cans and/or canisters will not be permitted in the cockpit.
- F. All hose connections require double clamp(s).
- G. 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 fans and/or water pumps will not be permitted. No flex style fans allowed

- H. Only magnetic steel radiator fans will be permitted.
- I. Electric fans and/or water pumps will not be permitted.

## 20.1.9 - Rear End

- A. Stock passenger car rear ends will be permitted. The differential housing must be/remain the stock/OEM location. Truck and limited slip rear ends will not be permitted. Floater hubs allowed.
- B. Welded spiders or magnetic steel spools will be permitted. Aluminum spool will be permitted.
- C. A Ford 9"-inch rear may be installed in any chassis providing it utilizes all of the stock OEM and/or same parts needed to hold in the rear that it replaced.
- D. For rear ends that utilize horseshoe clips and/or retainers to hold the axles in place, it is recommended that they be tack welded to hold them in place and prevent failure and/or the axle falling out.
- E. Torque arms will not be permitted.
- F. All rear end components, ring and pinion gear sets and/or any other component, must be specific for the rear end in the car in size. Only full-size type rear ends will be permitted. Miniature rear ends and/or rear ends manufactured for the sole purpose of reducing rotating weight by decreasing the actual size of the rear end with the internal components of the rear end will not be permitted.
- G. Only magnetic steel axles will be permitted. Titanium axles, gun drilled, lightened and/or any other titanium rear end components and/or axles will not be permitted.
- H. The rear end must be in the same location, front-to-back and centered in the chassis. Offset of the rear end will not be permitted.

### **QUICK CHANGE REAR END OPTIONS**

- Quick-change rear end optional. Must have magnetic steel tubes, aluminum or steel spool allowed. Mini quick changes are not permitted.
- 2. Drive Axles must not exceed 1.600" diameter and must be made of steel only. No tungsten. .
- 3. 3" maximum o.d. tubes. No heavy steel tubes allowed. .410' thick maximum. Inserts to be slid inside of tubes, made of any material, are not permitted
- Ballast inside, attached to, or machined into hubs are not permitted. Maximum hub weights 10 lbs. Tungsten or any other exotic metal are not permitted, in any form.
  - Maximum wheel weight 25 lbs.
- 5. Effective 2019 no 8" ring gears allowed. V-8 Midget type rear ends will not be permitted.

### 20.2 - Fuel, Fuel Cells and Fuel System

- A. Either meet FT3 or SFI 28.3 requirements and/or Include: a metal container, bladder, foam, top Bolted fuel valve plate with flop valve or roll over check valve, threaded cap, steel rack or minimum two straps each way. The fuel cell must have a maximum capacity of 24 US gallons and must remain in a rectangle and/or square shape for measuring and calculating capacity. The fuel cell must be mounted securely in its container and centered between the frame rails and located in the trunk area in a fixed location. Pressure tanks on fuel systems will not be permitted. Auxiliary fuel tanks will not be permitted. A clearly marked fuel shut off valve, labeled On and Off, must be mounted within reach of the driver. It must be labeled with the word(s) "Fuel Shut Off". Refer to the drawing in the drawing section of this rule book.
- **B.** The maximum capacity of the fuel when measured empty and/or dry will be measured in cubic inches utilizing the standard formula of length (minus ½"-inch) x width (minus ½"-inch) x depth (minus ½"-inch) will be 5,660 cubic inches.
- **C.** The foam in the fuel cell must remain unaltered. A minimal cut in the foam will be permitted in the shape of a square or a rectangle. The cut may be no more than 1,000 square inches. The foam must retain the factory cut.
- **D.** The fuel cell must be enclosed completely in a rectangle and/or square container that is a minimum thickness of 20-gauge magnetic steel. An aluminum container may be used as an option and must be a minimum of .060"-inch in thickness.
- E. The fuel cell and/or the container material around the fuel cell must not be able to expand in any way. Tank panels that are bowed and/or bellied and/or positioned to create additional capacity of the fuel cell will not be permitted. Oversized filter housings, fuel coolers, oversized lines, fuel logs and/or any other device that increases the capacity of the fuel system will not be permitted.

- F. The entire container must be visible for ease of inspection.
- **G.** Fuel coolers of any type will not be permitted.
- H. The fuel cell must be mounted with a minimum of two (2) .125"-inch thick steel straps a minimum of 1"-inch wide. The straps must cover the entire cell. Fuel cells that are mounted in a square tubing frame will be permitted. A minimum of 5/6"-inch ASTM Grade 8 bolts must be used to mount the fuel cell to the frame.
- I. Fuel Cell Protection Plate The plate must be made of magnetic steel, minimum of 1/8" (.125) and must be equal size or more of the fuel cell. Plate is to be secured to the framing. Plate will also have a 3/8" hole drilled in one of the corners for inspection of thickness.
- J. 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.
- K. The bottom of the fuel cell container must be a minimum of 12"-inches from the ground.
- L. A horizontal bar a minimum of 1.5"-inch in diameter and .095" in wall thickness must be mounted behind and on each side of the fuel cell unless cell is centered in the 2x3 frame rails. Both sides and the rear of the cell must be protected.
- **M.** The fuel pick up must be positioned on the top of the fuel cell and be constructed of steel. The fuel pick up must have a check valve. The vent line must have a check valve.
- N. 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 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.
- **O.** For the purpose of inspection, the driver and/or crew must be prepared to drain fuel upon request for inspection and/or measurement.
- **P.** Only mechanical type fuel pumps will be permitted. Fuel injection system(s) and/or electrical fuel pumps and/or any type of pressurized fuel system will not be permitted.
- **Q.** External filler connections including 'dry-break'-type applications will not be permitted. The rear deck/trunk lid must be removed in order for fuel to be added to the fuel cell. The filler neck must remain enclosed in the trunk area of the car.
- R. Onboard fire suppression systems are mandatory.
- **S.** For the Official Fuel of DIRTcar; the fuel provider's decals must be displayed on both sides of all DIRTcar racecars and a patch is required on the drivers uniform. Logos and/or the presentation of any other fuel manufacturer and/or fuel refinery on the racecar and/or drivers uniform will not be permitted.

### 20.3 – Exhaust - Muffler and Sound Reduction Devices

- A. Only the Beyea part # MUF2.5DL, Dynomax part #17218, Extreme Mufflers part # 20025, Henry's part # DMMS2.5 mufflers will be permitted. All cars required to have mufflers.
  - Exhaust headers and systems must extend past the driver's seat. Exhaust may exit out the side but must be flush with body panel.
- B. Mufflers must remain unaltered and/or modified internally and/or externally in any way. The collector extension pipe and tail pipe may not be installed past the inlet and/or outlet flange of the muffler.
- C. The maximum exhaust pipe diameter will be 3 inches.
- D. The complete exhaust system must remain under the car and exit to the rear of the car behind the driver, parallel or away from the racing surface.
- E. For GM Crate motors Schoenfeld headers part numbers #135cm-2, #145cm-2.
- F. Crossover connecting pipes from each bank/side of exhaust system will not be permitted.
- G. Several tracks have a locally enforced decibel rule, which preempt any particular muffler rule. Some tracks may have a maximum sound level rule of 95 decibels at 100 feet. This rule will be enforced by local government agencies. Such decibel rules preempt utilizing the required mufflers in sub-section 15.3.

# <u>20.4 – Traction Control Devices</u>

A. All electronic and/or computerized wheel spin and/or ignition retardation and/or acceleration limiting and/or traction control devices of any type will not be permitted.

- B. Adjustable ping control devices, dial a chip controls, timing controls and/or automated throttle controls will not be permitted.
- C. Adjustable restrictor plates will not be permitted.
- D. Remote control components of any-type will not be permitted.
- E. Radios and/or devices for transmitting voice and/or data will not be permitted, unless otherwise authorized prior to any event.
- **F.** Data acquisition systems will not be permitted.

## 20.5 - Chassis/Frame

- A. Frames may be repaired where needed but the stock frame rail must remain in the stock location. Front clips must remain unaltered. No cutting or modifying other than clearance for fuel pump. Front cross member may be trimmed for open motor oil pan clearance. Excessive removal in this area may prompt a weight penalty up to the discretion of the technical inspector.
- B. Front and/or four wheel drive cars and/or frames will not be permitted.
- C. Approved DIRTcar manufactured front clips (frame sections) from Stone Racing & JACR Chassis will be allowed in 2020.

## 20.5.1 - Steering

- A. The steering column must remain in stock OEM location as manufactured for the make, model and year.
- B. Steering quickening devices that are commercially manufactured will be permitted. Homemade steering quickening devices of any type will not be permitted.
- C. The steering quickening device must be fully enclosed.
- D. The steering wheel center must be padded.
- E. A flexible, racing type steering wheel with a guick release mounting device is recommended.
- F. Steering box must be steel OEM style box.

## 20.5.2 – Uni-bodied Cars/Frames

- A. A homemade frame may be constructed using a minimum of 2"x3"x.120"-inch thick rectangular magnetic steel tubing. The 3"-inch dimension must be in the vertical position. The tubing must start at the rear of the front stock OEM sub-frame and continue all the way back up over (not under) the rear axle and end where the stock OEM rear sub-frame ended.
- B. The new frame must be as wide as the original sub-frame.
- C. All springs and suspension mounts must be located in the same exact position and manner as they were in the stock OEM frame.
- D. Stock OEM suspension parts must be used unless approved by DIRTcar.
- E. The suitability of the construction of this frame option regarding welds, cross-members, bracing, roll cage and the stock mounting links will be up to the discretion of the Officials.

#### 20.5.3 - Front Suspension

- A. Only stock magnetic steel or tubular magnetic steel aftermarket upper A-Frames will be permitted.
- B. Only stock-type components in stock OEM locations will be permitted unless otherwise approved.
- C. Approved Stone Racing or JACR chassis fabricated front clip will be permitted.
- D. Aftermarket tubular upper A-Frames must be one (1) piece magnetic steel with a minimum wall thickness of .095" and remain non-adjustable in any manner.
- E. Lower Control A Arms Parts #'s 32-1230-L and 32-1230-R from UB Machine may be used.
- F. Only magnetic steel cross shafts will be permitted.
- G. The following approved multiple piece aftermarket spindles may be used for competition in addition to stock OEM Impala, Camaro or Metric spindles; Speedway Motors 91034501/2, 91034511.
- H. Aftermarket ball joints allowed.
- I. Aftermarket heavy-duty tie rod sleeves will be permitted.
- J. Chassis cross-shaft mounts for upper A-Frames may be fabricated and relocated but must remain on top of factory frame rail.

- K. Excessive cutting of frames for shock clearance will be at the discretion of the Officials.
- L. Any form and/or type of chassis adjustment and/or adjusters in the cockpit will not be permitted.

### 20.5.4 - Rear Suspension

- **A.** The rear suspension must be double triangulated 4 link. Upper links must run from rear end (pumpkin part housing) inward to outward and lower links must run outward to inward. The top, trailing arm lengths must be between 10" to 12.5" and the lowers are 17.5" to 23" (measured center to center). Links may be fabricated box tubing or steel radius rod tubing with steel bushings heim ends. Upper and Lower brackets on rear must be equal distance from centerline of rear and symmetrical right to left.
- B. Vertical mounting points can be adjusted up and down.
- C. Front leaf spring mount may have a maximum of four (4) mounting holes or one (1) slotted mounting location for chassis height adjustment. Threaded jack screw allowed either front or rear of leaf.
- D. The rear shackles may have multiple holes for chassis height adjustment Threaded jack screw allowed either on front or rear of leaf.
- E. No rubber biscuits allowed in rear suspension. The spring mounting pads on leaf and/or coil cars must be stock and be welded in one position on the rear end housing.
- F. No Travel Limiters allowed. Chains only allowed to limit rear droop. No rubber, springs or aftermarket droop limiters.
- G. No rear sway bar may be used. No coil over eliminators allowed.
- H. On leaf spring configurations a rear slider mount will be permitted.
- I. Adjustable leaf spring lowering block will be permitted.

### 20.5.5 - Wheelbase and Tread Width

- A. All cars must have a minimum wheel base of 107"-inches & maximum of 110"-inches on either side of the race car.
- B. The maximum front and rear tread width will be 81"-inches for all cars when measured from the outside of the sidewall to the outside of the sidewall.
- C. Rear end offsets will not be permitted.
- D. A Maximum of one-inch wheel spacers will be permitted on all four corners.

## 20.5.6 - Seat Location and Mounting in Frame

## **Containment Seats**

Seats must be "Full Containment" style constructed of aluminum to the general design specifications of current industry standards (SFI 39.2). Design shall include comprehensive head surround, shoulder and torso support system, energy impact foam, and removable head foam. Consult with your seat manufacturer for questions and recommendations regarding your seat safety system.

Seats manufactured using carbon fiber or composite materials must meet SFI 39.2 specifications.

## 20.6 - Weight / Ballast

- A. All cars will be weighed with the driver seated in the car. The minimum weight permitted before and/or after an on track event will be measured by the track scales. The track scales will be the official scales. All cars found to be light prior to any event, time permitting will be allowed to make the necessary adjustments and represent themselves at the scales. The number of cars to be weighed after an event will be announced at the driver's meeting and/or on the one-way radio. If a car is signaled to go to the scales in any fashion and does not report to the scales at the appropriate time, that car may be disqualified from the event. Any car that is found to be light following time trials and/or a qualifying event will be disqualified from that particular race and may make the necessary adjustments and represent themselves for that car's assigned consolation event. If a car is found to be light after the feature event, that car will be disqualified from the event.
- B. The minimum weight following the completion of any Pro Stock race will be 2950 lbs.
- C. All weights are subject to analysis in any DIRTcar division, to maintain a level competition through each DIRTcar sanctioned division.

- D. If time permits, weight added prior to qualifying and/or the event will be permitted,
- E. All weight and ballast must be positively fastened to the frame rails **and below the** deck and must remain stationary during competition. All weight(s) must have a minimum of two (2) 1/2"- inch grade 5 bolts and/or studs passing completely through the weight. Bolts and/or studs must be anchored to a suitable clamp to fasten it to the frame. Bolts and/or studs welded to the frame will not be permitted.
- F. All weights must be painted white and clearly labeled with the car number on it. For the period of one event, competitors may label their weight with white duct tape with the car number clearly labeled on the duct tape.

## 20.7 - Body

#### **BODY STYLE AND DIMENSIONS**

ALL MEASUREMENTS WILL BE TAKEN WITH DRIVER AND/ OR WITH OR WITH OUT FUEL. TOLERANCE PERMITTED ON ALL BODY DIMENSIONS IS MAXIMUM OF +/- (PLUS OR MINUS) ½"-INCH (ONE-HALF INCH). THIS IS A TOLERANCE, NOT A DIMENSION THAT IS INTENDED TO BE ADDED TO THE BODY DIMENSIONS.

Unless otherwise noted and/or in most instances the exterior body dimensions, measurements, materials and rules are based on the ABC (Approved Body Configuration) rules. The ABC Body Specifications may be found at www.ABCbodies.com.

### 20.7.1 - General Body

- A. Any American and/or Canadian made passenger car from 1968-to-present will be permitted. The 2005 and newer Ford Mustang and the 2010 Chevrolet Camaro bodies as manufactured by ARP Bodies and/or Five Star Race Car Bodies will be permitted for competition, provided they meet the manufacturers dimensions. Compacts, foreign cars, trucks, sports cars and/or convertibles will not be permitted. Aftermarket bodies, provided they meet the ABC Body Configuration dimensions, appear stock and match the wheel of the frame being used will be permitted.
- B. The body must be stock appearing and mounted in the stock location on the frame. Ford or Mopar bodies may be used on a GM chassis only utilizing the GM 602 Crate Engine. The stock sheet metal or aftermarket body must maintain the OEM fit and appearance. Air dams, skirting, any type of air deflection device and/or aerodynamic enhancing equipment will not be permitted anywhere on the car. Wedge shaped and/or flat body panels and/or sides will not be permitted. All windows must be cut out and remain open. The covering and/or filling in of any window area will not be permitted. Body styles and/or body parts may be rejected by Super DIRTcar Series, DIRTcar and/or World Racing Group Officials.
- C. The maximum body width when measured anywhere along the contour of the car will be 82"-inches. The minimum ground clearance will be 5"-inches.
- D. The roof must be of and maintain stock contour and appearance.
- E. Hood scoops and/or raised hood boxes will not be permitted with the exception of aftermarket fiberglass hoods. The aftermarket fiberglass hood may have a maximum raised surface of 4"-inches in height provided it is pre-manufactured into the design of the hood. Holes cut in the hood for any reason will not be permitted. **Aluminum** hoods and stock sheet metal trunk decks will be permitted provided they are positively fastened to properly seal off the engine and/or trunk area.
- F. The front nose must be stock appearing. 'DIRT style' noses including part number(s) Performance Bodies; 331040, 281040, 251040, etc., will not be permitted. Front and rear bumper covers must be widened from the stock width. The front nose must not extend further than 47"-inches from the centerline of the front wheels. The tail piece/rear fascia must be stock appearing with a bumper cover. Flat sheet metal will not be permitted.
- G. Full fenders are mandatory. A reasonable radius cut for tire clearance will be permitted. Front fender must be one-piece magnetic steel and/or aluminum and/or composite type as manufactured by ARP Bodies or Five Star Race Car Bodies will be permitted. The fenders must remain stock in appearance. The inner fender panels may be removed provided the fender remains positively fastened and secured to the car.
- H. The removal of the dash is permitted, providing that the steering column is adequately secured and remains in its stock location.
- I. All cars must have a full magnetic steel rock guard with a minimum material thickness of 1/16"-inch. Chicken wire and aluminum screens will not be permitted. The rock guard must cover the entire windshield area from left-to-right across the cage and from the top of the roll cage to the hood and/or cowl. Any shields, visors and/or cardboard that blocks visibility through the rock guard will not be permitted. Any shield, visor and/or cardboard for visibility must not be a part of and/or fastened to the roof.
- Mirrors and/or reflecting devices will not be permitted.

- K. Under pans, rear tubbing in the rear wheel area, speedway-type bodies and/or air dams/additional air directional devices will not be permitted.
- L. Officials reserve the right to request body panels and/or bumpers to be replaced and/or painted if they do not look presentable and/or have any sharp edges.

#### 20.7.2 - Rear Spoiler

- A. A single rear spoiler mounted on the top, at the rear of the deck lid/trunk will be permitted.
- B. The rear spoiler must be a one-piece aluminum or two-piece (split in the center vertically) lexan spoiler with a maximum height of 5"-inches. The spoiler must not exceed 5" in total length (of material) no matter what the angle of the spoiler.
- C. The spoiler must follow the contour of the body and may not extend out past the maximum body width and must not extend past the trunk lid. Spoiler must be straight with no bends (**GUERNEY LIP**).
- D. Two (2) vertical support(s) fin-type mounted in front of the spoiler will be permitted. These supports may not exceed the maximum height of the spoiler and are limited to 16"-inches in length and must be symmetrical left to right

## 20.7.3 - Interior

- **A.** A full magnetic steel engine fire wall with a minimum of 20 gauge material thickness is required. All holes in the firewall must be covered to isolate the driver's compartment from the engine compartment.
- **B.** A full rear steel fire wall must seal off the driver's compartment from the trunk/fuel cell area. Front and rear fire walls must extend from fender to fender in as straight of a line as possible and spot welded for strength. There must be no openings in the firewall to protect the driver from engine compartment fire.
- C. Excessive firewall cutouts and/or tunneling for header/exhaust clearance will not be permitted.
- **D.** Full floor boards must be steel retained from the engine firewall to the rear fire wall and from the body, side-to-side (interior door skin to interior door skin). The passenger side floor board may be level from the top of the transmission and drive shaft tunnel, but must not exceed this height, to permit clearance for both exhaust pipes and mufflers. All interior sheet metal must be spot welded for strength.
- E. Angular installations and/or cock pit type applications and/or fabrications will not be permitted.
- **F.** Any holes in the floor board for the shifter, etc., must not be any larger than required to facilitate shift pattern.
- **G.** Shifter boots are **mandatory** as a sealing device for the driver's compartment.

### 20.7.4 - Car Numbers/Driver Name

- A. The track and/or series Scoring Director reserves the right to issue and/or change a car number to prevent duplication and/or maintain proper records.
- B. Team cars must be clearly identifiable from one another and use another number and/or letter.
- C. All number and letter combinations will be limited to three digits. If three digits are used two (2) shall be the primary numbers/letter.
- D. Number and/or letter combinations are required on the roof, nose, rear deck and both doors.
- E. The nerf bars must not block the visibility of the number and/or letter combinations.

### 20.7.5 - Bumpers and Rub Rails

### **Rub Rails**

- A. One (1) horizontal rub rail on each side of the car between the wheels will be permitted.
- B. The rub rails must be magnetic steel square/rectangular tubing with a maximum dimension of 1"-inch x 2"-inches high.
- C. The rub rails must mount flush against the body panels with each end cut at a 45 degree angle and capped. Sharp edges of any type will not be permitted. Lexan-type rub rails that are securely mounted to the body will be permitted.

#### **Bumpers**

- A. Stock front and rear bumpers will be permitted.
- B. The bumpers may be securely reinforced under ends of the splash guard to maintain stock OEM appearance.

- C. The bumpers must be stock appearing for the year, make and model of the car.
- D. Additional upper and/or lower bumper reinforcements that are visible will not be permitted. Any-type of reinforcement must be in line with the bumper and not visible. Outside reinforcements of any type will not be permitted.
- E. All tubing must have rounded corner supports to prevent cars from hooking and/or losing bumpers.
- F. Fabricated front and/or rear bumper that entirely cover the stock-type rubber bumper cover will be permitted.
- G. All cars must have tow hooks. The tow hooks must be easily accessible on both the front and rear of the car.
- H. Front and rear bumpers that are fabricated behind the bumper cover must have two (2) rails, an upper and a lower across the frame for support fabricated from a magnetic steel tubing a minimum of 1-1/2" diameter with a minimum wall thickness of .095"-inches. There must be a minimum of four (4) horizontal uprights positively securing the rails together to support the bumper. Approved mounting and design for bumpers of the this type will be at the discretion of the Super DIRTcar Series and/or DIRTcar official

# 20.8 - Shock Absorbers

- A. Only one (1) shock per wheel will be permitted.
- B. The shock absorber mounting location is optional. Cantilever mounted shocks will not be permitted.
- C. Coil over shock absorbers will not be permitted.
- D. Only the DIRTcar approved A and -B type shock absorbers displaying the DIRTcar "Approved" decal will be permitted to compete.
  - a. Base valves cannot be added or permitted to our approved shocks.
- E. <u>Approved Shock Absorbers:</u> 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:	Pro Shocks – WB and SS Series
DIRTcar Sportsman Modified	Bilstein - AK and SG/SM Series
DIRTcar Pro Stock	AFCO – 1020-1034 Series
DIRTcar Pro Late Model	AFCO – 1273-1295 Series
DIRTcar UMP Sportsman	AFCO – 1473-1497 Series
DIRTcar UMP Stock Car	Integra 421 Series

## Approved 'B'-type Shock Absorbers:

DIRTcar Sportsman Modified

DIRTcar Pro Late Model

DIRTcar Pro Stock

AFCO – 1000 Series

AFCO – 19 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

Bilstein – SL/SZ Series
Bilstein – SNS Series

Bilstein – SNS Series AFCO – 1300 Series AFCO – 2100 Series Genesis – GD Series (steel body) Integra – 310-45170 or 310-45190 Advance (ARS) – P/N ARS 2074 Advance (ARS) – P/N ARS 2092

FOX - 983-91-507 FOX - 983-91-509

DIG 7507/7509 Steel Body

Pro Shocks - TA Series

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

## 20.8.1 - Springs

- A. The springs must be of the OEM stock-type and the OEM location. No progressive springs. Springs must be mounted vertical on top of rear.
- B. Coils must be 5" diameter and mounted in stock location on top of the rear tube. Springs must be equal distance from center of rear left and right. Spring rubbers will be permitted, bump stops of any kind will be allowed in the springs, shocks or on the frame.
- C. Only magnetic steel springs will be permitted. Carbon fiber and/or other material will not be permitted.
- D. Ford, Chevrolet and/or Chrysler cars may interchange **leaf** springs providing springs maintain the individual specifications and stock OEM application, format and stock mounting positions.

# 20.9 - Brakes

- A. All cars must have four (4) wheel hydraulic brakes in good working condition. Cast steel OEM type single piston calipers will be allowed.
- B. Rear disc brakes may be installed must be steel single piston OEM style design and be operational. Maximum rotor diameter 12.19" x 1.25" wide and must be vented. No solid rotors.
- C. Carbon fiber, carbon, titanium, ceramic, and aluminum rotors will not be permitted.
- D. Brake bias may be adjustable through the cockpit.
- E. Right Front brake shut offs: either mechanical or electric, are permitted
- F. Dual master cylinders with proportioning valve and adjustment will be permitted.
- G. Drilling of brake rotors, any, front or rear will not be permitted.

# 20.10 - Roll Cage

- A. Only round magnetic steel seamless tubing 1-1/2" with a minimum material thickness of 1/8"-inch or 1-3/4" in outside diameter with a minimum material thickness of .095"-inches will be permitted.
- B. The basic configuration of the roll cage must be one of 'standard-type' racing application. There are multiple variations common to motorsports applications. Approved roll cage design is at the discretion of the Track, Super DIRTcar Series, DIRTcar and/or World Racing Group Official(s).
- C. A six (6)-point cage surrounding the driver with uprights mounted on the right and left side of the frame is mandatory. One upright in front and upright behind the driver on each side of the frame. The uprights must be welded to the flat horizontal part of the frame. Welding the uprights to the kick-ups will not be permitted. The four (4) bars joining the four (4) uprights in a horizontal plane above the driver's head must be a minimum of 2"-inches above the helmet of the driver when seated with seat belts fastened in the car.
- D. There must be a minimum of three (3) bars on both sides of the car connecting the main uprights. A minimum of one bar on each side must extend to the outer door skin. The horizontal bars must have at least one set of vertical support bars positioned between the main uprights which connect the horizontal bars together.
- E. An additional diagonal bar is recommended from the top left rear of the cage moving downward toward the right side frame rail.
- F. The above mentioned (A-through-E) roll bars are the minimum requirements. More bars are recommended but must be approved by an inspector/official.
- G. All junctions of two (2) or more tubes in the cage must be joined with at least 1/8" magnetic steel gussets. Threaded pipe, pipe fittings, and lap weld, soft metals like aluminum, angle iron and/or channel iron will not be permitted. Flush grinding of welds will not be permitted.
- H. All roll cage bars within 18"-inches of the driver, extended arms, legs, head, etc., must be adequately padded for protection. It is recommended that SFI-Rated roll bar padding is utilized in all roll bar padding applications. In addition the steering wheel center must also be padded. It is recommended that this padding be SFI Rated and fire retardant.
- Front and rear firewalls constructed from magnetic steel with a minimum thickness of 20-guage steel are mandatory.
- J. The rear firewall must extend from the top of the window shelf downward and attach to the floorboards. Holes in the firewall will not be permitted.
- K. The front firewall must extend from the dash downward and attach to the floorboards with all holes securely covered with magnetic steel to isolate the driver from the engine compartment.

## 20.11 - Wheels

- A. Only one piece magnetic steel wheels will be permitted with a maximum width of 10"-inches and a 15"-inch diameter for competition. Magnesium, carbon fiber and/or any other exotic type material will not be permitted.
- B. All four (4) wheels must have a minimum of five (5) studs and lug nuts. The stud threads must go past the full thickness of the wheel nut on all four corners of the car.
- C. Beadlocks will be allowed.
- D. Wheel offset, front and/or rear, will be a minimum of 3"-inches and a maximum of 4"-inches on either side. The tolerance will be a maximum of 1/4"-inch.
- E. Wheel centers may not be altered.
- F. Wheel covers:
  - a. Wheel covers must have a minimum of 5 mounting points. However, both 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.

Approved fastening (nut assembly) systems:

- Keyser Manufacturing: Part #100 7-101.
- Wehrs Manufacturing: Part # WM377A-312 (Aluminum 5/16) / WM377S-312 (Steel 5/16)
- Triple X Chassis: Part # SC-WH-7810 (for a 1" spring) / SC-WH-7820 (for a 1 3/8" spring)
- Smith Precision Products: Part # MC-516-18

Optional fastening systems that are equal or superior to the above-approved system will be readily approved at the sole discretion of Technical Officials.

## 20.12 - Tires

- A. Individual race tracks, events and/or series may designate a particular tire and/or compound at any time. The compound may be announced prior to the event in a bulletin and/or at the driver's meeting.
- B. 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;
- C. D60 will be the only compound allowed at series and weekly tracks.

## **Tire Size and Compound Designation:**

Front or Rear Tires;

11/87-15 D60

11/90-15 D60

- D. 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.
- E. 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.
- F. 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.

Reference Section 5.3.D. for Competitive Analysis, Section 11.1.I for Penalties and/or Section 11.2.I for Protest(s).

- G. Removable duct tape, provided it does not deface the tire, to cover the D-Number will be permitted.
- H. Heating of the tires by torch, blanket, heating device(s), exhaust system and/or any other method will not be permitted.
- I. Inner liners of any type will not be permitted.

J. A tire durometer may be used during the tire inspection process, provided baseline tire(s) have been read at the event.

## 20.13 - Personal Safety Equipment - see section 3.0

## 20.14 - Other

- A. Cars will not be permitted to make a qualifying attempt without passing technical inspection. All cars must be available for inspection prior to the time of the driver's meeting. Following the driver's meeting, covers of any-type on the racecar will not be permitted.
- B. All fuel lines, power steering lines and/or fittings running through the driver's compartment must be made from an approved braided type line. Plastic and/or glass fuel filters will not be permitted. A clearly marked fuel shut off valve, labeled On and Off, must be mounted within reach of the driver. It must be labeled with the word(s) "Fuel Shut Off". Refer to the drawing in the drawing section of this rule book.
- C. All cars may be subject to technical inspection at any time.
- D. Full or partial car covers will be permitted only when there is inclement weather and/or the car is in its designated pit stall. All covers shall be removed prior to the car leaving its designated pit stall.
- E. SFI-approved and labeled seat, roll bar, knee and steering pads and/or padding is recommended.
- F. All teams must have a fire extinguisher in the rear of their transporter with the car number clearly visible on the extinguisher. The fire extinguisher must be a minimum of 20lbs and is recommended to FFF type chemical and/or DuPont FE-36 and/or equivalent.
- G. Fire Suppression Cylinders are mandatory. Fire Bottles can be mounted behind the seat area, centered in chassis and should be below deck. Fire Bottles can also be mounted inside the cockpit area, on passenger side of the driveshaft. Cylinders must be securely mounted with SFI certification along with manufacturers date must be clearly visible.
- H. All drivers are required to have a one-way radio. The one-way radio must be working and active prior to any 'on-track' activity. Two-way radios, crew-member to driver and/or any other means of electronic communication, other than the one-way radio provided by the Super DIRTcar and/or DIRTcar Northeast, will not be permitted. ONEWAY RADIO MUST NOT BE ABLE TO SWITCH BETWEEN TWO OR MORE PROGRAMMABLE CHANNELS

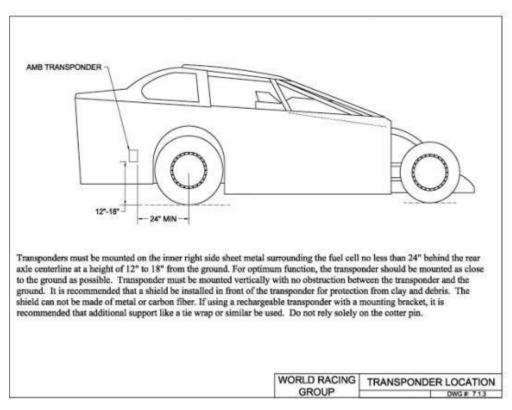
## 20.15 - Series Decal and Patches

- A. All participants will be required to display decals as provided on the decal verification sheet prior to entering into competition. If any required decal is not displayed loss of any awarded money will be the penalty.
- B. A series decal is required on both sides of the car. Driver must display the series patch on their uniform to receive point fund awards.
- C. Contingency and sponsorship awards; any team participating must meet the requirements of the award(s) such as decals, patches, product use and verification. There will be a written deadline presented to the teams prior to the start of each season for each element to be in place for the award requirements. If it is an existing program it will roll over from the prior season and the program will begin at the first race of the season.

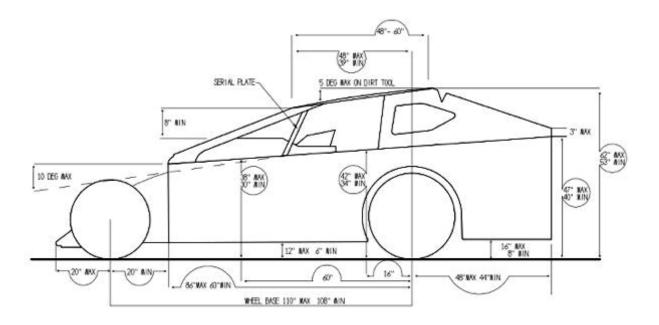
# 20.16 - Drawings/Photo Descriptions

# Mandatory Decal Placement all Series:

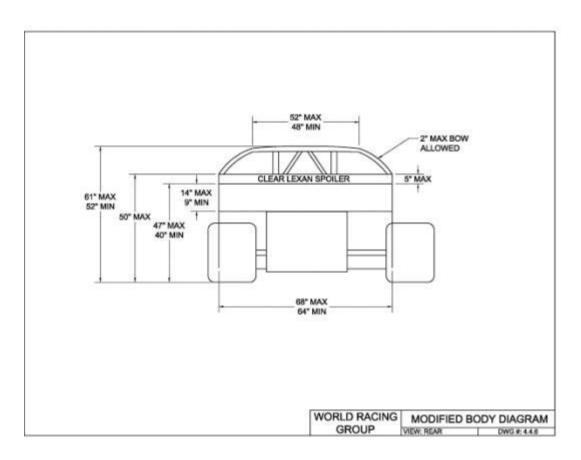




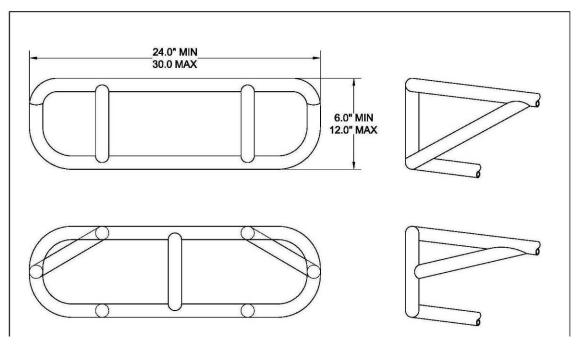
# **Body Dimensions**



# **Rear Body Dimensions**

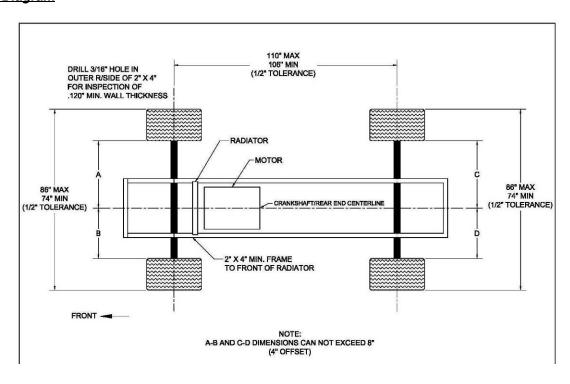


# Front Bumper

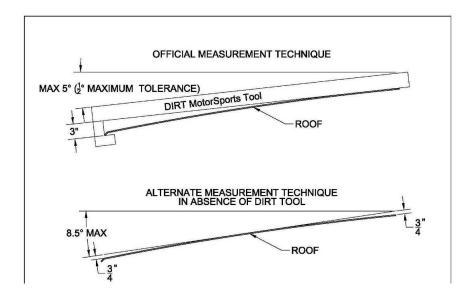


NOTE:
BUMPERS MUST BE CONSTRUCTED
OF 1 1/4" X 0.095 TUBING AND
MAINTAIN A HEIGHT OF 18"
MEASURED FROM THE GROUND TO
THE MIDDLE OF THE BUMPER

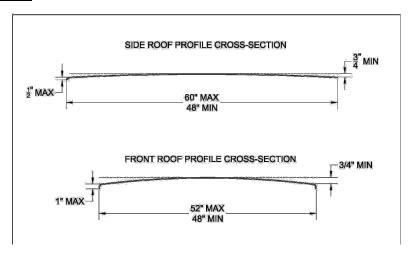
# Chassis Diagram

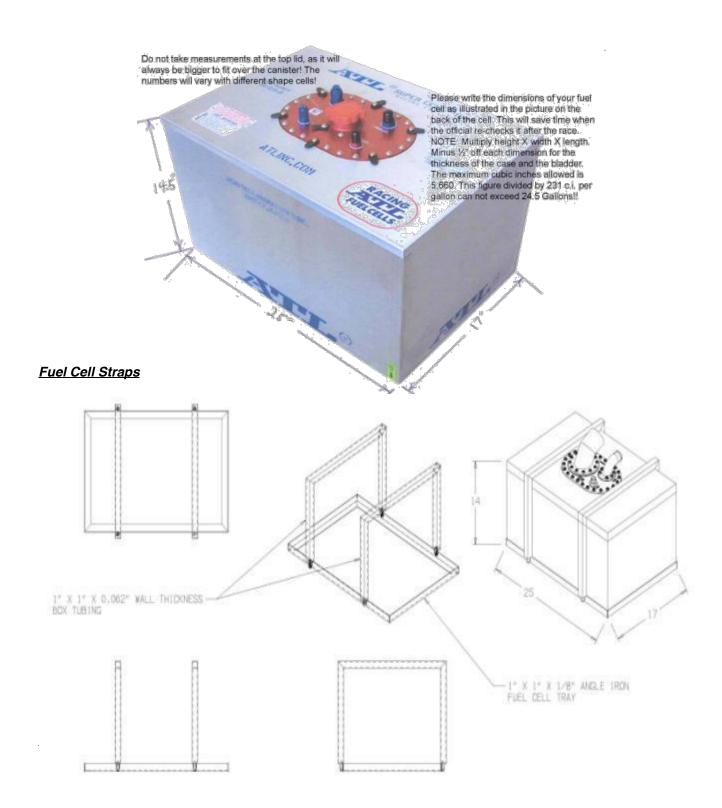


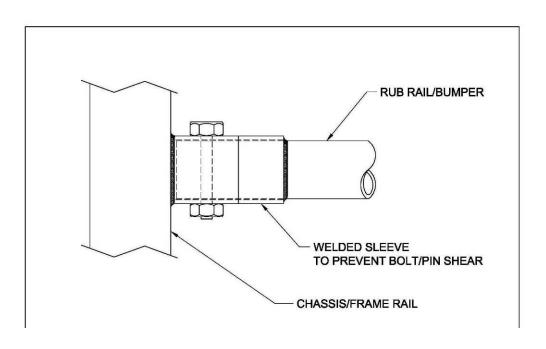
# Roof Angle

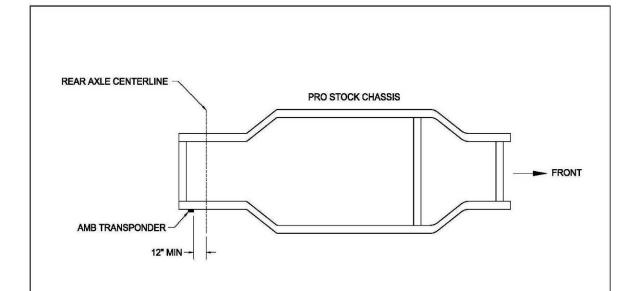


# Roof Profile









Transponders must be mounted on the right rear frame rail a minimum of 12" from the rear axle centerline. The transponder must be mounted vertically with no obstruction between the transponder and the ground. The transponder may not protrude below the lowest chassis rail. It is recommended that a shield be installed in front of the transponder for protection from clay and debris. The shield can not be made of metal or carbon fiber. If using a rechargeable transponder with a mounting bracket, it is recommended that additional support like a tie wrap or similar be used. Do not rely solely on the cotter pin.