



Nashville Fairgrounds Speedway  
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Nashville, Tennessee  
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## Nashville Fairgrounds Speedway 2021 PURE STOCKS RULES MARCH 2021

The guidelines and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These guidelines shall govern the condition of events and participation therein. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE GUIDELINES AND/OR REGULATIONS. They are intended as a guide for the conduct of events and are no way a guarantee against injury or death to a participant, spectator, or official. The director of competition, or his authorized designate, shall be empowered to permit minor deviation from any of the guidelines and/or regulations herein, or impose any further restriction which, in his/her opinion, does not alter the purpose of the organization. Deviation of these guidelines and/or regulations will be the responsibility of the speedway officials whose decisions are final.

### NOTICE:

All equipment is subject to the approval of Nashville Fairgrounds Speedway officials. No equipment will be considered as having been approved by reason of having passed through the inspection process unobserved. Any equipment which does not conform to specifications or tolerances contained in this rulebook or in the appropriate manuals, will not be eligible for approval. All cars must comply with the rules set forth by the Nashville Fairgrounds Speedway rule book and reference manuals used in the inspection process. All cars and car parts are subject to Nashville Fairgrounds Speedway technical inspection processes. Nashville Fairgrounds Speedway is not required to follow any other sanctioning bodies or manufacturers guidelines in its inspection process. Nashville Fairgrounds Speedway reserves the right to add to and or adjust left side and/or car weight when deemed necessary for equal competition purposes. Driver Eligibility is subject to approval by racetrack officials.

### REQUIRED DECALS:

When supplied, teams are required to use uniform patches and car stickers in their designated and mandated position. Failure to do so may result in a minimum penalty of \$100 or up to 10% of their purse for that event. Teams must also leave the top of windshield for use by Nashville Fairgrounds Speedway sponsors decal stickers (subject to penalty above if not the color/dimensions supplied by Speedway). Select windshield sticker may be absolutely required to participate in an event.

All cars must be numbered on both sides and roof with registered car number assigned to the driver. Number must be on race car day of race and be legible. A 6" tall number must be placed in the upper corner of the windshield on the passenger side.



## **SECTION 1 – SAFETY:**

Rules apply at all times car is on track.

All cars must complete and 'pass' the safety inspection process before on-track access is permitted.

1.1.1 Snell rated SA2010, or NEWER HELMET REQUIRED.

Neck brace (or head and neck restraint) required.

SFI-approved full fire suit required. Fire Retardant gloves, and. Recommended: Fire Retardant head sock and underwear. Recommended: Fire retardant shoes.

Roll bar padding required in driver compartment. Recommended: Fire Retardant padding.

On board fire extinguishing systems are highly recommended.

Driver's side window net required, minimum 16 inch x 20 inch ribbon or mesh style, and must be mounted to roll cage so latch is at top front of window.

Minimum three inch (two inch with head restraint system) wide SFI-approved FIVE POINT SYSTEM REQUIRED must be mounted securely to main roll cage. SEAT BELTS CAN NOT BE OLDER THAN 3 YEARS.

Recommended: Safety belts be no more than two years old.

Kill switch required within easy reach of driver and must be clearly marked 'OFF and ON'. All power switches must be clearly marked 'OFF and ON'

1.2 Racing Seat. Aluminum High Back seats only, must be bolted in with .0375 inch bolts. MUST HAVE HEAD SUPPORT. EITHER WITH SEAT OR BOLT ON.

1.3 Mirrors. One (1) inside mirror only; must be mounted in traditional rearview mirror location (center of car) Wink mirrors and wide angle mirrors are permitted.

1.4 Fuel Cell. Fuel Cells are required. Maximum 22 gallon. If fuel cell does not have aircraft style positive seal filler neck/cap system – a flapper, spring or ball type filler rollover valve is required. Fuel Cap MUST BE Tethered. Recommended: Bladder Type fuel cell highly recommended. Fuel shut-off recommended.

1.5 Fuel Cell Container. Must be made from 20 gage steel and mounted in a minimum 1"x1" square tubing or two solid steel straps around entire cell, two inches wide and 0.125 inches.

1.6 Fuel Cell Bar. 1 3/4" .083 fuel cell bar must be installed behind fuel cell and must be 1" lower than fuel cell container.

1.7 Fuel Cell height We highly recommend all Fuel cells be flexible bladder type. Recommended: Fuel cell be no more than 3 years old. mounted in a steel container (20 gage min. thickness). Highly recommend the fuel container be mounted in a 1"x1" x .065 wall steel tubing frame welded in place a minimum of 10" from the ground height. MUST HAVE a 1/8" plate the width and height of the fuel cell be mounted between the fuel cell and rear end housing.

1.8 Fuel Line. Fuel line can run under car but must be higher than the lowest part of the frame and securely attached. Fuel line can be run through the car from fuel cell but must be in a 1 pc. steel pipe and the pipe must extend a minimum of 1" out from front and rear firewall.

1.9 Drive Shaft Loops. 2 drive shaft safety loops made of flat steel minimum 0.25 inch by two inch steel strap, or one inch tubing. Drive shaft loops should be mounted 6 -12" in from each end of the drive shaft u joint. All drive shafts must be painted white.



## SECTION 2 – BODY & INTERIOR:

- 1) Stock Equipment - All stock equipment only for that year model car.
- 2) Replacement Body Panels - Body sides may be replaced with sheet metal. Quarter Panels, Doors & Fenders may be steel or aluminum aftermarket replacement panels but must follow factory curve and sizes. No flat sides allowed. The entire door may be steel fabricated sheet metal however the doors must have the stock type upper and lower body lines formed into it. The top edge of the door must be hemmed the length of the door to eliminate sharp edges. All replacement body panels may be welded or riveted on using 3/16" rivets. NO sheet metal screws. Panels must follow basic stock contour & shape. NO flat sided body panels.
- 3) No sharp or jagged edges on body panels including exhaust.
- 4) Fiberglass Hoods and Deck Lids are allowed with no weight penalty. NO homemade hoods.
- 5) Fender edges cannot be rolled out. Highly recommended that all fender edges are hemmed 180 degrees.
- 6) Inner Body Supports may be removed.
- 7) Doors - All stock doors must be welded or bolted shut.
- 8) Bumpers - Stock bumpers must remain in stock location, with NO reinforcing. All stock bumpers must have a chain to connect from the bumper bolt to the frame bumper bolt or welded bumper shocks to keep the bumpers from coming out of the bumper shock. If Plastic Nose and Rear Bumper covers are used, you may remove the stock bumpers and replace with a single 1.75" preformed bumper car and bumper support tubes. The top edge of the nose or rear bumper cover may be braced with tubing.
- 9) Glass & Interior - Must remove all side and rear glass and flammable interior. Must leave windshield or replace with 1/8" Lexan / Polycarbonate. No Plexiglas.
- 10) Mirror - One (1) inside mirror ONLY. Mirror must be mounted in traditional rearview mirror location (center of car). Wink mirrors and wide-angle mirrors are permitted.
- 11) Lights & Hub Caps - Must remove headlights & taillights. Must remove all hub caps.
- 12) Interior - Must remove all cloth/plastic type interior panels. Dash may be removed.
- 13) Steering Column - Stock steering column may be removed and replaced with 2 pcs of .125 wall DOM tubing mounted with two (2) swivel steering knuckles and at least two supports with no weight penalty. MUST HAVE REMOVABLE QUICK RELEASE STEERING WHEEL.
- 14) Hood & Deck lid latch - Must remove hood and deck latches on stock hoods and deck lids and replace with minimum of two hood pins. Must remove deck latch assembly and replace with two hood pins. Hoods and decks must be held shut with quick release hairpin or lynch pin type fasteners to secure panel.
- 15) Heater & AC Core - May remove heater core and air conditioner core, but all holes in firewall must be covered with steel sheet metal minimum 24 gauge.
- 16) Trunk sheet metal and behind the driver may be cut out.
- 17) Spoiler - 6" maximum spoiler height x 60" max width. Cannot extend past stock quarter panel top edge.
- 18) Firewalls & Rocker Areas - To protect our drivers the front and rear firewalls and rocker panel areas must be sealed with metal out to the body panels in all divisions. No open holes allowed in the fire walls. Holes must be covered with metal.
- 19) Cars must have stock front firewall and stock floor pan. Stock floor pan must run at least to behind the driver's seat. Interior may be boxed in or aftermarket interior with wheel tubs can be used behind the driver.



- 20) Body Panel Inner Liners may be removed.
- 21) Center B-post / Door post on 4 door cars. This post may be removed on 4 door cars for roll cage and door bar installation.
- 22) Stock OEM or aftermarket type power steering pumps and alternators may be used.

### **SECTION 3 – ROLL CAGE:**

- 1) 1-3/4" DOM .090 min wall tubing for roll cage highly recommended.
- 2) Roll Cage - All cars must have a minimum 4-point roll cage with minimum 3 left side door bars and 2 right side door bars. 4 driver's side door bars and 3 right side door bars. Minimum of 2 vertical 1 3/4" OD spacer bars in between each door bar. Must use gussets on all driver side door bars.
- 3) Main Hoop - Main hoop should have a bar from side to side with a diagonal bar behind driver head.
- 4) No limit on down bars or support roll cage bars.
- 5) Excessive bars cannot be used behind the nose.

### **SECTION 4 – BATTERY:**

- 1) Battery may be moved to driver compartment behind driver seat. Must be securely mounted in place and in an approved sealed and vented container, vented to the outside of the car with a hose.
- 2) Must have working emergency cut-off master switch within reach of driver and officials. **MUST BE CLEARLY MARKED WITH – OFF and ON LABELS.**
- 3) 12-volt system only.

### **SECTION 5 – COMMUNICATION:**

- 1) Radios are permitted in this division. [Driver and/or spotter must be able to monitor Race Control with a scanner or RaceCeiver device.](#)

### **SECTION 6 – COOLING SYSTEM:**

- 1) No anti-freeze in radiator. \$100 FINE if caught using anti-freeze.
- 2) Stock radiators ok, may replace plastic with stock metal or aluminum radiators.

### **SECTION 7 – SUSPENSION & STEERING:**

- 1) No Coil spring preloaders.
- 2) No suspension travel limiting devices allowed including trick mounting of shocks. No coil binding or bumping. No aftermarket suspension and steering components.
- 3) Bushings - All bushings must be stock or stock replacement polyurethane type, No mono balls.
- 4) Stock 4 link Suspension - Suspension parts must remain stock for that year, make and model of car. Stock OEM spindles ONLY. Spindles must match chassis type, make and model. May be



- reamed for larger ball joints. No Relocating of suspension mounting points. Mounting points and brackets must be in stock position.
- 5) Racing/Performance Parts - No racing or performance parts permitted unless stated so in the rules.
  - 6) Front Springs - May run pig tail or flat end racing springs. FRONT SPRINGS Minimum 700 pound spring rate.
  - 7) Rear Springs - Minimum 125 pounds spring rate. REAR Springs no more than 50 pounds in rate difference from Left to Right REAR Springs.
  - 8) Frame Height - Minimum frame height 7" measured at step up in frame on left front corner.
  - 9) Over size ball joints and sleeves for the ball joint to mount in may be used.
  - 10) Weight Shifting Devices - Absolutely no weight shifting devices of any type.
  - 11) Buckets - Adjustable buckets will be allowed.
  - 12) Rear Wedge bolts - Wedge bolts will be allowed in the rear ONLY, however if you choose to use rear wedge bolts they cannot be adjusted during a race.
  - 13) Spring Rubbers are allowed.
  - 14) Solid or adjustable shims may be used in front and rear springs. May extend spring seat centers to hold shims and springs in place.
  - 15) No mono balls.
  - 16) Must use Over the Counter (Local Auto Parts Store (Autozone, O'Rielly etc.) NOT a performance Speed Shop) stock shocks or stock replacement shocks. NO BILSTEIN shocks of any types. Adding Grease to a shock is not permitted. Must be stock UNALTERED local auto parts type shocks. Any shock may be claimed by track or competitor for \$25.00 each. (\$100 for all 4) Factory brand name & part numbers must be on the shocks so they can be compared to over the counter shocks of the same type.
  - 17) Front Lower shock mounts may be moved or spaced for clearance and Travel.
  - 18) Maximum 1 .125 " OD (1 1/ 8" ) Diameter Sway bar. Must be factory stock type sway bar with stock OEM wall thickness.
  - 19) Sway bars must be bolted or welded in mounts under frame. Sway bar can be hooked as you wish on the lower control arms but sway bar must be located and mounted above the lower control arms.
  - 20) GM Style steering box with drag link and idler. Any ratio. No Rack and Pinion
  - 21) Minimum Wheelbase for BIG GM type Chassis, 112". 112" Minimum Wheelbase. No Cut Down Chassis
  - 22) Chassis cannot be X'd out. No X b racing allowed on chassis.

#### **SECTION 8 – BREAKS:**

- 1) Working brakes required. All brakes must work. Must have stock brake pedal & stock type Master Cylinders.
- 2) Calipers, Rotors, Brake Drums - Must have stock calipers, rotors and brake drums. No four wheel disc unless the factory car had it.
- 3) Four Wheel Brakes - All brakes must be hooked up and working together. No pinching of brake lines. No shut off valves.



## SECTION 9 – WEIGHT:

- 1) Minimum base weight 3,450 lbs.
- 2) Maximum left side weight is 53.0 percent.
- 3) Maximum rear weight is 48.5 percent.

## WEIGHT BREAKS

- a) Gage legal Holley carburetors. No HP carburetors or components. #4412 500 CFM carburetors can run with a 50 lb weight break. Holley 2 barrel part# 7448- 350 cfm carburetors can run with a 75 lb weight break. These weights may be adjusted as needed.
- b) 305 Engines - If you are running a 305 block with (.060 max. bore or smaller engine your weight will be a minimum of 3350 lbs with 53% Left side). 305 with HO small chamber heads must weigh 3450 lbs with 53% Left Side weight. No 305 Vortec head.
- 4) Adjusting Weights - Track reserves the right to change or adjust weight and add weight to any car at any time to level the competition. Weight may be changed on any car in the interest of a level playing field for the division.
- 5) Lead - No Tungsten or liquid weight. All ballast must be mounted securely with 1/2" Bolts, Fender Washers & Lock nuts. Ballast can be attached to the frame rail / chassis at any point even behind the rear axle however the weight cannot be located outside of the frame rail / chassis it is attached to. Ballast cannot be mounted lower than the frame rail / chassis it is mounted to. We highly recommend all ballast be put in weight boxes welded or securely attached to the frame rail by welding or securely bolted with multiple 1/2" Bolts, Fender Washers & Lock Nuts. ALL LEAD MUST BE INSPECTED BY TECH OFFICIALS BEFORE CAR CAN GO OUT ON TRACK. (Initial Safety Inspection) ALL LEAD WILL BE PAINTED WHITE WITH CAR NUMBER ON ALL SIDES. CAR NUMBER SHOULD BE IN LARGE PRINT STYLE AND IN PERMANENT MARKER OR PAINT. THIS IS MANDATORY. Any driver that loses any lead from his car will be fined \$10.00 PER POUND payable prior to any further competition. This rule is in effect during race day and practice days.
- 6) Absolutely no weight shifting devices of any type.
- 7) Weight cannot be mounted lower than the bottom of the frame rails.
- 8) No weight may be mounted on, or added to, any moving parts.

## SECTION 10 – BUILT ENGINE:

- 1) Hydraulic lifters only. Hydraulic Flat Tappet cams ONLY. No roller cams in carbureted engines. No roller rocker arms allowed.
- 2) Engine Location & Mounts - The engine & sub systems must be in its original position. After Market solid motor mounts may be used but engine must be in stock position.
- 3) Engine block - 2 or 4 bolt main GM blocks are approved for competition. No aluminum engine blocks or heads on carbureted engines.
- 4) Engine Size - Max CID, GM 350, Ford 351W, Chrysler 360
- 5) Rebuilt Engines - Engine may be rebuilt, Max over bore .060.
- 6) Pistons - Stock replacement 2 or 4 valve relief cast or forged flat top or dished pistons. No dome pistons. No short or narrow skirt Pistons. Full skirt pistons only. 9.6.1 MAX compression.
- 7) Rods - Rods must match engine size (example: Must be 5.700 inch rods on 350 Chevrolet) Must use Stock 5.7" Rods, Scat or Eagle I beam type 5.7" Rods are approved for competition.





- 8) Cranks - 3.48" stroke cranks ONLY. Stock GM Crank. No cutting, grinding or machining of ANY crank. Scat or Eagle Cast Cranks are approved for competition. Minimum crank weight is 49 pounds with timing gear. No excessive removal of material to balance. NO cutting of counterweights and added heavy metal. No Heavy metal can be added to the crank.
- 9) Valve Springs - May be Stock, Z-28 or Comp Spring #981-16 with a maximum of 105 pounds seat pressure.
- 10) Cylinder Heads - Cylinder heads must be stock cast type. Minimum chamber of 72cc. Stock valves, stock springs. High performance heads are not allowed. The following heads are NOT Allowed #041, #186, #291 #461, #461x, #462, #491, #492, #370. No aftermarket heads. No three hundred hp heads of any kind. GM #441, #487, #993 heads are good performing heads for a 350 engine. No grinding, porting, polishing or acid dipping of heads. All Unapproved heads and components may be Confiscated.
- 11) Rocker Arm Studs - Rocker arm studs may be pinned, Screw in studs are allowed.
- 12) **Must be a hydraulic flat tappet camshaft. Max lift .450 cam measured at the valve. .003 manufacturers variance tolerance. The manufacturers part number must be stamped in the camshaft. No custom grinds, the cam must be out of a catalog and be bought off the shelf of one of the following places: JEGS, Summit or Lane Automotive. Cam card needs to be available to read if cam is being checked with the cam doctor.**
- 13) A Must use factory firing order for all engines including 5.3 engines. Built Engine firing order is 18436572. B Stock GM HEI Distributors or Stock Street type Replacement type HEI distributors. Approved Distributors include Stock GM, MSD Pt #8362 Street Fire distributor or Mallory Pt#7548201. No externally / remote type mounted coils. Weights may be welded.
- 14) DIGITAL Soft Touch Rev limiters are the ONLY standalone rev limiters that are approved for competition on built engines and may be REQUIRED on any built engine race car after 3 feature wins. RPM limits will be set by tech and cannot be changed.
- 15) Double roller timing chains are permitted.
- 16) Any valve cover is permitted.
- 17) Must have air cleaner (with solid top). Minimum 14" OD. Maximum 16" OD. No flow through tops, no holes in the top or bottom of the air cleaner. Effective 8/06/19 on a trial basis you may use a cold air box with your air cleaner with a 2" x 20" maximum size hole at the back of the hood where the windshield meets the hood to draw cool air. NO Hoses or ducts going to the air box.
- 18) Intakes - Stock cast iron intakes are approved for competition. No marine steel / factory stock. Absolutely no altering can be done on the intake. No grinding, porting, polishing. No acid dipping etc. Absolutely no altering or internal coatings of any type on this intake
- 19) Aluminum Intakes - Aluminum Edelbrock #2101 Quadrajet carburetor. Absolutely no altering can be done on this intake. No grinding, porting, polishing, welding etc. No acid dipping etc. Runner cc's cannot be altered and are subject to be checked against new intake specs. Absolutely no altering or internal coatings of any type on this intake.
- 20) Engine/Carburetor/Fuel Injection - Engine & carburetor or fuel injection must be stock for that model car. **Quadrajet** carburetors or 2 barrel Rochester carburetors on GM, Motor craft 2 or 4 barrel on Ford. Must be stock, No grinding or polishing permitted. Gage Legal Holley carburetors - the Holley #477 8 or Holley #4412 two barrel. No Oxygen enhancing fuel additives.



- 21) Exhaust - Exhaust manifold must be factory stock type. Exhaust pipes must extend past the driver and exit out either side of the car. No headers of any type permitted. Exhaust exiting sides of car must not create an obvious cutting hazard. Maximum of 2.5" exhaust pipe. No X, Y or H pipes. Must be two individual exhaust and exhaust must bolt & unbolt to the stock unaltered manifold flange.
- 22) Exhaust Manifolds - Must remain as produced from the factory. No Ram Horn center dump Corvette exhaust manifolds. No LT1 Manifolds. No factory steel tube type manifolds. CAST IRON ONLY.
- 23) Carb Adapter - One Carburetor adaptor plate may be used but must be aluminum with a maximum height of one inch. (1").
- 24) Engine Setback - The left upper ball joint must be located between the #1 and #3 Spark Plug holes on the Left (drivers side) cylinder head. This includes BOTH the Built Engines and the 5.3 Engines.

#### **SECTION 11 – TRANSMISSION:**

- 1) Automatic Transmissions Mandatory. NO METRIC OR POWER GLIDE TRANSMISSIONS OR PARTS.
- 2) 350 Turbo Transmission - Stock 350 Turbo transmissions are approved for competition.
- 3) Torque Converter - Stock 12 inch working torque converter required in all transmissions. (1/2" tolerance allowed on converter diameter). No direct drive / lock up transmissions.
- 4) Driveshafts - No aluminum or composite drive shafts (Steel Minimum 3" diameter).
- 5) DRIVESHAFT MUST BE PAINTED WHITE WITH TWO LOOPS.

#### **SECTION 12 – REAR AXEL & DIFFERENTIAL:**

- 1) Stock Rear End - Rear end must be stock for that car. Changing gear ratio is allowed.
- 2) ONLY Stock Open type or welded, spool locked type center sections allowed. NO aftermarket Auburn type rear end units.
- 3) **NOTE** - 2.73 and 4.56 are the typical rear gears ran at Nashville Fairgrounds Speedway.
- 4) Maximum 4:56 (no larger number, example no 4.88 gears) Rear Gear ratio. This rule is for all engine packages.

#### **SECTION 13 – WHEELS & TIRES:**

- 1) Wheel Size - All four wheels must be the same size.
- 2) Wheels - No aluminum or alloy wheels.
- 3) Wheel Width - 7" or 8" wheels are allowed. Maximum eight (8) inch steel wheel width.
- 4) Aftermarket Wheels - May run aftermarket 8" wide steel racing wheels.
- 5) Maximum Tread width measurement at the face of the wheel to face of the opposite wheel is 73.25" including the toe. Metric Chassis Maximum is 71.25".
- 6) All wheel studs may be replaced with larger racing studs.
- 7) Oversized Lugs. 1" OD Oversized steel lugs are recommended on all wheels and required on Right Front wheel. Required on all aftermarket racing wheels.





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#### **SECTION 14 – MUFFLERS:**

- 1) A muffler must be used and installed in a configuration that will suppress exhaust noise to a maximum of 99db's at 100 feet. Track officials will conduct random testing of exhaust noise, a penalty of 10lb's for every point above 99db's will be enforced. Any car that is consistently tested above 99db's will receive additional penalties up to and including disqualification.
- 2) No straight exhaust manifolds.
- 3) All exhaust must exit behind the driver. Any exhaust exiting the sides of the car must do so in a way to not cause an obvious cutting hazard.