

# Nashville Fairgrounds Speedway 2024 LIMITED LATE MODEL RULES March 2024

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 – WEIGHTS:**

- 1) Minimum weight 3100 lbs. .
- 2) Maximum left side wight is 55.0 percent
- 3) Weights and percentages are at all times even after the race with no burn off.
- 4) Box Stock Factory Sealed & Unaltered, deduct 50 lbs.
- 5) Cars using clutch option B (Sec 12, Rule 4), deduct 50 lbs. of total weight. Add 0.5 percent left side weight.
- 6) Weight box will be permitted and highly recommended. Weight boxes optional, constructed of minimum 3" x 3" x .120 square steel tubing and must be welded completely to frame.
- 7) Management reserves the right to alter, change or adjust weight limits at their option and all additional weight to non-conforming cars.
- 8) No weight may be mounted on, or added to, any moving suspension parts, including but not limited to rear end, trailing arms, a-frames, etc.
- 9) Weight cannot be mounted behind the rear end housing.
- 10) Any lost weight will result in a \$25.00 per lbs. fine to the car owner.

### **SECTION 2 – WHEELBASE:**

- 1) Wheelbase: Car must be minimum of  $105'' (+/- \frac{1}{2}'')$
- 2) Maximum tread width 65" measurement center to center of tires at spindle height (front and rear)
- 3) May run Camaro clip and cut down cars.

#### **SECTION 3 ENGINE:**

- 1) Engine must be centered between frame rails.
- 2) Maximum engine set back will be the #1 spark plug (front left plug) even with wedge bolt.
- 3) A minimum of twelve (12) inches from centerline of the crankshaft, in the front of the ground must be maintained.
- 4) Must be of standard factory production with standard external measurements in all respects.

#### **SECTION 3A - BUILT ENGINES:**

- 1) Ford and Chevy may not exceed 362 cid. Chrysler may not exceed 364.
- 2) Maximum compression of 10.5.1. If compression exceeds max, add 25 lbs. per 0.5 over 10.5.1.
- 3) Cast iron blocks only.
- 4) Flat top pistons only.
- 5) Piston may be flush with block (zero deck heights). Steel connecting rods permitted (must be magnetic). Rods must match engine size (example, 5.700 inches on 350 Chevrolet).
- 6) No remote oil systems or filters. No oil coolers, accu-sumps, dry sump or additional oil lines permitted other than line to oil pressure gauge.
- 7) Standard production type crankshaft only. No altering other than standard grind cleanup.
- 8) Stroke must be stock stroke within 0.010, may not be increased or decreased. (3.48).



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- 9) Stock type or any S.F.I. Approved balancers only.
- 10) Fifty-Pound minimum weight on all crankshafts, including timing chain gear.
- 11) The cylinder heads must be cast iron, the intake and exhaust ports must be in the original "as cast" configuration.
- 12) Minimum 62 cc combustion chamber Chevy, Ford 57 cc.
- 13) Mopar products: Maximum 1.624 in exhaust, minimum 1.920 in. intake valves.
- 14) Ford Cleveland: Maximum 1.655 in exhaust, maximum 2.041 in. intake valves.
- 15) Ford Windsor: Maximum 1.546 in exhaust, 1.940 in. intake valves.
- 16) Chevrolet Small Block: Maximum 1.500 in exhaust, 1.940 in. intake valves.
- 17) OEM Cast iron heads only. World Products SR 043610 Stock Replacement Heads allowed. (1.5 / 1.940) ALLOWED. No Dart, angle plug, 461, 461x, 462 or "bowtie" heads allowed.
- 18) 3/8 or 7/16 rocker studs permitted.
- 19) Stock steel valves and in stock location only.
- 20) Stock diameter valve spring with steel retainers only. Chevrolet maximum 1,280.
- 21) No titanium parts. Locks and retainers must be magnetic steel. Guide Plates Permitted
- 22) May run stock 2 bbl or 4 bbl intake, or intake # 14098242, GM marine intake on old type heads or Edelbrock performer # 2101, 2104, or 2116. All must be stock. No porting, polishing of the intake.
- 23) On all engines, only one standard flat gasket may be used between the head and the intake manifold. Maximum gasket thickness .177 inches.
- 24) Any attempt to pull outside air in is not permitted.
- 25) Only hydraulic flat tappet cams and stock hydraulic magnetic lifters allowed.
- 26) Maximum valve lift may not exceed .450 or .300 at lobe. < moved from rule below.
- 27) Camshaft lift checked with solid lifter with zero lash at retainer of valve or determined by cam doctor.
- 28) Lifters must be of stock diameter for engine application.
- 29) No roller rocker arms permitted. No stud girdles. 1.5 Ratio Rocker Arms Only "Cool Nuts permitted/ Polly Locks". Rocker arms must not exceed 1.55 ratio.

## SECTION 3B - CRATE ENGINE:

- 1) GM 602 Crate Motor Approved. By GM Yellow Book Guidelines.
- 2) Compression Limit 9.4.1 determined by NFS Whistler.
- 3) GM 602 Box Stock Factory Sealed & Unaltered crate engine may deduct 50 lbs. of total weight.

## **SECTION 4 – CARBURETORS:**

- 1) Built Engines: Holley "Box Stock" #4412 Carburetor required. May Change Jets, power valves and remove choke flap. No HP Carburetors or components permitted.
- Crate Engine: All 602 Crate Motors must run Holley 4150 #80541-1 650 CFM 4 Barrell Carb. Must Remain Box Stock, You may change jets, air bleeders and power valves. Holley 4150 #80541-2 carb is not permitted.
- 3) Crate Engine Carburetor Spacer: 602 Crates Motors CARBURETOR SPACER MAX. Height 1" aluminum with 1 paper gasket per side not to exceed 0.065 in thickness / open or 4 Hole Type



or tapered allowed.

Built Engine Carburetor Spacer: Maximum of 1" aluminum with 2 holes not to exceed over
1.690 at the top may be tapered with 1 paper gasket per side not to exceed 0.065 in thickness.

## **SECTION 5 – EXHAUST:**

- A muffler must be used and installed in a configuration that will suppress exhaust noise to a maximum of 99db's at 100 feet. The track 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) Economy 1 5/8" headers with no steps, allowed with a 3" collector that exits under car past driver.
- 3) Under the bottom headers ONLY. No 180 Degree Headers.
- 4) No alterations of any type, except external modifications for clearance purposes only.
- 5) Will be permitted a 5/16 header flange max with no spacer of any kind between the head of flange.
- 6) Mufflers are required. Muffler must be fully functional. Mufflers will be required at all race events, including Track Rental, Open Practice and Race Day. No Schoenfeld Shorties, NO EXCEPTIONS.
- 7) May raise or remove section of floor pan on right side of car for clearance to install large style mufflers (ex. Brzezinski/Howe). Must box or replace floor pan with 22-gauge steel sheet metal only.

## SECTION 6 – BODY:

- 1) Minimum of Four (4) hood pins required
- 2) No open hood scoops, hood must be sealed at windshield.
- 3) Rear spoiler must be mounted on the trailing edge of deck lid.
- 4) Spoiler may not exceed six (6) inches in total height. Must be single plane only. Max. width 60"
- 5) Spoiler must measure MAX 43" from ground to top of spoiler.
- 6) Front windshields mandatory. Recommended is 1/8" Lexan with a minimum of two (2) center braces required at a stock angle.
- 7) New AR Bodies / 5 STAR Bodies, new GEN 6 5 Star body allowed.
- 8) Any Body must be approved by NFS Tech Official. ABC and conventional bodies are legal. No wedge bodies, no down force bodies allowed.
- 9) Min. Roof Height will be 47"

#### **SECTION 7 – FUEL SYSTEM:**

- 1) Racing fuel cells are mandatory, bladder type cells are highly recommended.
- 2) Maximum 22-gallon cells.
- 3) Working fuel cell flapper valve is required. Fuel cap must be tethered.



- 4) Loop bar mandatory behind fuel cell.
- 5) Two (2) sections of box tubing may also tie the rear frame rails together and act as a fuel cell mount.
- 6) Fuel cells must be in trunk compartment, equal distance between frame rails and centerline of car.
- 7) Bottom of fuel cell container must have a minimum ground clearance of 8".
- 8) Stock type mechanical fuel pump only, in stock location. No electric fuel pumps allowed.
- 9) No additional fuel reservoir, pressure equalizing systems, or fuel cooling devices allowed.

#### **SECTION 8 – IGNITION:**

1) Stock HEI Ignition only. No MSD pickups or modules. No MSD distributors. Soft touch rev limiter allowed.

#### **SECTION 9 – BRAKES:**

- 1) Aftermarket hanging pedals allowed.
- 2) Must have functional brakes on all 4 wheels at all times.
- 3) Brake pad material optional.
- 4) Four wheel disc brakes allowed.
- 5) Brake bias devices allowed
- 6) GM Style Single piston calipers, Steel or Alum.

### **SECTION 10 – STEERING:**

- 1) Conventional steering systems only consisting of stock style steering box are the only type allowed.
- 2) Steering systems either manual or power.
- 3) Quick release hubs recommended.
- 4) Steering ratio may be changed only within steering gear box.
- 5) Tie rods & all steering components must be steel. Aluminum Idler arms okay.

#### SECTION 11 – SPINDLES & HUBS:

1) Large diameter wheel studs acceptable.

#### SECTION 12 – TRANSMISSION/CLUTCH:

Transmission/Clutch options:

1) Manual cast iron case OEM with all gears operable. (3 speeds only)



- 2) No 4 or 5-speed transmissions. NO AUTOMATICS
- 3) No internal modifications or gear reductions are allowed.
- 4) Only clutch options A or B may be used.
  - a. 7.25" triple disc clutch.
  - b. 14" stock steel 153 tooth flywheel, minimum weight 13.5 lbs. with bolts. Pressure plate and clutch must be 10.5", stock configuration, clutch disc consisting of solid disk or six ridged friction pads minimum. Cars using clutch option B may deduct 50 lbs. of total weight and gain 0.5 percent left side weight.
- 5) Cars must provide inspection holes for clutch.
- 6) Blow proof bell housing mandatory.

#### SECTION 13 – GROUND CLEARANCE:

- 1) Dragging exhaust systems will result in immediate black flag.
- All Cars will have a minimum of 4" frame height clearance, checked on the pad with the driver in the car. This will include all post-race tech.

#### **SECTION 14 – REAR END :**

- 1) Aftermarket racing axles are recommended.
- 2) Quick Change or 9" with wide 5 or Small 5 hubs.
- 3) Only Spool or Detroit Locker allowed. NO GLEASON OR TRACK STAR, OR SIMILAR ALLOWED. NO EXCEPTIONS.

### SECTION 15 – CHASSIS:

- 1) All cages must be style as set forth in the rulebook and approved for workmanship and design.
- 2) NO X Bar in Right Side Door Bars MIN. of 3 Door Bars (4 Recommended).
- 3) Car must have four-point roll cage with diagonal bar behind driver.
- 4) Top of roll cage may extend to rear frame behind fuel cell. All cars may be allowed front and rear hoop bars.
- 5) All roll bar tubing must be 1 <sup>3</sup>/<sub>4</sub> inch .90 diameter. Gussets required in left door bars.
- 6) Must be "0" Zero Offset.
- 7) No Under slung Frames

#### **SECTION 16 – SUSPENSION:**

- 1) Steel non-adjustable with no clickers, re-buildable shocks, not exceeding \$200.00 per shock. Non-adjustable.
- 2) Truck arms or 3rd Link Trailing Arms, 3<sup>rd</sup> Link Bars and Track Bars must be STEEL. No aluminum. Steel Heims only on anything.
- 3) Steel Driveshaft Only.



- 4) NO COIL OVERS, NO COIL BINDING, NO BUMP STOPS.
- 5) Weights may not be mounted on, or added to, any moving suspension parts, including but not limited to rear end, trailing arms, a-frames, etc.
- 6) Claim rule will be \$800 for set. If you claim someone's shocks you must run them at NFS next race. Shocks must remain with track promoter after shocks have been purchased.