

# ***Lorain County Speedway***

## **2018 GRAND NATIONAL COMPETITION RULES**

THE RULES AND/OR SPECIFICATIONS SET FORTH HEREIN ARE DESIGNED TO PROVIDE FOR THE ORDERLY CONDUCT OF RACING EVENTS AND TO ESTABLISH MINIMUM ACCEPTABLE REQUIREMENTS FOR SUCH EVENTS. THESE RULES SHALL GOVERN THE CONDITION OF ALL SPEEDWAY EVENTS, AND BY PARTICIPATING IN THESE EVENTS, ALL SPEEDWAY ENTRANTS ARE DEEMED TO HAVE COMPLIED WITH THESE RULES. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF, OR COMPLIANCE WITH THESE RULES AND/OR SPECIFICATIONS. THEY ARE INTENDED AS A GUIDE FOR THE SPORT AND ARE IN NO WAY A GUARANTEE AGAINST INJURY OR DEATH TO PARTICIPANTS, SPECTATORS, OR OTHERS.

**NOTICE:** Creative interpretation and/or anything that may not be covered by the following rules or racing procedures are the sole responsibility of the Driver. If a question should arise a Driver should inquire with a LCS Competition Inspector and/or Race Director before proceeding. Any decision on questionable items about rules and racing procedures is up to LCS Competition Inspector and/or Race Director and their decision is FINAL! Remember: It is the responsibility of the Driver to keep his/her car legal and follow all rules and racing procedures at all times. Infractions of technical rules of any kind may result in an additional weight penalty, forfeit qualifying, or not being able to compete until infraction is corrected. Penalty will be determined by a LCS Competition Inspector and/or Race Director.

### **1.0 ELIGIBILITY:**

- 1.1 This division is limited to American manufactured chassis.
- 1.2 Jeeps, suburban's, convertibles, front wheel drives or two passenger sports model chassis are not permitted.
- 1.3 The minimum allowed wheelbase is (108") with a maximum (1") tolerance. The wheelbase on all cars will be measured from the center of the front axle to the center of the rear axle.

### **2.0 BODIES:**

- 2.1 All cars must have a steel or aluminum body for make/model of car being used, homemade bodies or skirts are permitted and must be factory stock appearing as if it were being shown on the dealer showroom floor. Fiberglass roofs are permitted.
- 2.2 No flat sides.
- 2.3 No lowering, sectioning, or moving on frame.
- 2.4 All cars must have complete factory stock appearing hood/rear deck lid (with hood pins), bumpers, grills and roof in top quality condition.
- 2.5 Tires may not extend out body sides.
- 2.6 All doors must be welded or bolted shut.
- 2.7 After-market nose/tail pieces and 5 Star body panels will be permitted. AR bodies 2016 street stock Asphalt Camaro pn#1-15015, Mustang pn#2 – 15015 and Challenger pn#3 – 15015, bodies permitted.
- 2.8 Roof height must be a minimum of (48") and will be checked (10") back from where windshield and roof meet.
- 2.9 Body side panels cannot be lower than frame and have a (6") ground clearance all the way around the car. Body quality and appearance will be rigidly inspected at all times!

### **3.0 FRAMES:**

- 3.1 Frames must be stock as from the factory for make/model of chassis being used, from front bumper to (4") behind rear tires with optional tubing replacing remainder of frame to rear bumper.
- 3.2 Main frame rails may be (X) for support, and rusted portions may be plated. Frame cannot be altered for fuel pump clearance. NO OTHER MODIFICATIONS WHATSOEVER!
- 3.3 Frame height minimum (6") to be measured from the ground to the bottom of the entire main frame rail. NO TOLERANCE!
- 3.4 Unibody frame cars must be factory for make/model car being used in front and back with one exception, front and rear frame sections may be tied together with tubing.

### **4.0 INTERIOR:**

- 4.1 All upholstery fabric must be removed including back seat.
- 4.2 Doors may be gutted.
- 4.3 An aftermarket floor pan and front firewall may be used, but must be stock appearing and in stock location.
- 4.4 Interior behind driver can be parallel to ground and up to the rear side window. Passenger side interior may angle from the bottom of passenger window opening down to the lower half of the driver's seat, suitable for easy extraction of driver.
- 4.5 All sheet metal to be a minimum of .020-gauge material.
- 4.6 Original dashboard may be retained, or fabricated dashboard can be installed.
- 4.7 Aftermarket throttle/brake/clutch pedals are highly recommended.

#### 5.0 INNER FENDER WELLS:

- 5.1 May be removed, provided outer fenders are solidly braced.

#### 6.0 HOOD/REAR DECK LID:

- 6.1 Cannot be altered in any way, but inner panels may be removed, and must hinge on hinges.
- 6.2 Hood pins must be installed.

#### 7.0 BUMPERS:

- 7.1 Bumpers must be of the same year/make/model car and may be reinforced behind original bumper.
- 7.2 Bumper ends must be covered with sheet metal that attaches to the fender/quarter panel to cover bumper ends.
- 7.3 An external tow hook capable of supporting the weight of the car is mandatory for front & rear. Mounted in a way that allows the car to be raised evenly off the ground.

#### 8.0 RUB RAILS:

- 8.1 Must be in centerline of car between front and rear tires. Must be secured to roll cage and be up against body and must not be larger than (2") wide and (1") thick. No sharp edges. No other bars outside of car allowed.

#### 9.0 WINDSHIELD/MIRRORS/RADIO/SCANNER:

- 9.1 Must have factory stock windshield made of clear glass or Lexan in good condition at all times. Lexan windshield must have a center support bar.
- 9.2 Back seat left & right-side windows and rear window made of clear Lexan will be permitted and recommended.
- 9.3 The use of rearview mirrors is prohibited.
- 9.4 The use of two-way communication is prohibited at all times. Any communications between pit crew and driver will result in complete disqualification.
- 9.5 A one-way receiving radio scanner locked to Frequency (TBD) is mandatory and must be operational at all times.

#### 10.0 SEAT:

- 10.1 Single front racing seat mandatory, and must be securely fastened to floor or roll bar members. Seat back must be solidly fastened to roll bar member.
- 10.2 Headrest required in all cars.
- 10.3 Seat mounted head, shoulder, and leg supports are strongly recommended.

#### 11.0 ROLL BARS:

- 11.1 Four-point perimeter type roll bars required in all cars. No offset roll cages.
- 11.2 Minimum outside diameter (OD) is (1.75") and must have a wall thickness of (.095").
- 11.3 The top of cage should form a box and follow the contour of the windshield in front and rear.
- 11.4 Minimum (3) door bars are required on both sides.
- 11.5 Driver side door bars must be filled in with a (16) gauge steel door plate, with a minimum thickness of (.065"). Must be securely welded to outside of the driver side door bar and cover the area from top door bar to bottom door bar and from rear hoop down post to front cage down post. The metal plate is to stop anything from entering driver's area.
- 11.6 Bars around driver must be padded.
- 11.7 Front/Rear hoops are permitted, but suspension parts cannot be attached to hoops.
- 11.8 Gussets should be used where possible. **ROLL CAGE INSTALLATION WILL BE RIGIDLY INSPECTED!**

#### 12.0 SPOILERS:

- 12.1 Rear spoiler maximum (6") high of material and no wider than the rear deck lid.

12.2 Must be one solid piece with all support braces mounted to the backside of spoiler.

### 13.0 ENGINES:

13.1 All engine blocks and heads must be stock UNMODIFIED production cast iron units.

13.2 NO ALUMINUM BLOCKS OR HEADS.

13.3 Engine size as follows: GM 350/Ford 351 (.060) overbore for cleanup, Mopar 360 maximum. NO (400cu.in.) blocks or strokers.

13.4 Unmodified World Product heads part numbers, (#042660-1, #0426270-1, #043600-1 and #043610-1), HRS heads part number (#12317-01), and Dart Iron Eagle heads bare casting part number (SKU – 10121112) are permitted.

No porting, sanding, polishing, gasket matching, roller cams, gear drives, oil coolers, dry sump systems.

13.5 Engine must line up with (#3) spark plug with the center of the left (driver) side upper ball joint.

13.6 Roller tip rockers and roller rockers are permitted.

13.7 No shaft mounted rockers.

13.8 All part numbers must be legible and unaltered.

13.9 Sealed 602 crate engine with approved four-barrel carburetor is optional with a 100-pound weight break as well as a 1% left side weight break. Race-1 sealed engines will be the only crate engine approved.

13.10 Crate motor can be swapped out at any time based on track's discretion.

### 14.0 EXHAUST:

14.1 Use of under the car headers of a (1 5/8") max. diameter in size, with a (3") collector, or stock cast iron unmodified exhaust manifolds per make/model of engine being used are permitted.

14.2 No porting or polishing.

14.3 Exhaust pipes may be maximum (3" O. D.) and must exit behind the driver.

14.4 Cars may be required to install mufflers and pass a (.98) decibel test.

14.5 No "H", "X" or two into one pipe.

14.6 Center dump manifolds, 180 degrees or over the top headers are not permitted.

### 15.0 CARBURETION/INTAKE:

15.1 Carburetor will be limited to (1) 500cfm Holley (#4412) unmodified (air horn must be intact) (2bbl carburetor) with stock size venturi diameter and throttle bore, and must pass a gauge test for top and bottom of carburetor.

15.2 Stock Boosters Only! If carburetor adapter is to be used it cannot exceed (1") thick.

15.3 Carburetor must have (2) throttle return springs hooked to (2) different points.

15.4 A throttle rod is required. No factory throttle cable assemblies allowed.

15.5 Toe-type return gas pedal mandatory.

15.6 Manufactured factory stock unmodified (2bbl) cast iron intake manifold only. Optional Edelbrock part (#350-2101) intake manifold may be used for GM engines. Ford engine as follows: (289/302 engine Edelbrock #2121) and (Windsor 351 engine Edelbrock 2181). NO Brzezinski, Bowtie, Marine, High-rise or racing after-market intakes.

15.7 All part numbers must be legible and unaltered.

### 16.0 AIR CLEANER:

16.1 A metal air cleaner must be used on all carburetors to act as a flame arrestor.

### 17.0 FUEL PUMP/ FUEL LINES/FUEL CELL/ FUEL:

17.1 Pump shall be standard type unit installed on engine only.

17.2 No electric fuel pumps or glass/plastic fuel filters.

17.3 Fuel line must run under car, and must be fastened to underbody or frame of car at no more than (24") intervals.

17.4 It is recommended that rubber or plastic hose be used over metal fuel lines, and be fastened down.

17.5 Fuel cell to be a Maximum (22) gallon commercial type cell bladder with foam insert, required. Must be mounted in trunk area, between frame rails, with bottom of fuel cell no lower than the bottom or rear-end center section.

17.6 Must use at least (2) two (1") wide straps to mount fuel cell.

17.7 Rear protection bars mandatory.

17.8 Only straight gasoline or racing fuel is permitted. NO NITRO, ALCOHOL OR NITROUS.

### 18.0 BATTERY/STARTER/IGNITION:

18.1 Battery may remain under the hood, or may be moved into driver's compartment but must be mounted in a PLASTIC MARINE TYPE BOX in case of rollover.

18.2 Battery must be securely mounted down. NO RUBBER OR WIRE -TIE DOWNS!

- 18.3 Starter must be operable at all times and able to start and move car at all times.
- 18.4 No magnetos or MSD boxes.
- 19.0 RADIATOR/CATCH CAN:**
- 19.1 Any radiator allowed which will fit under stock hood without cutting, dimpling or altering stock fit hood.
- 19.2 All cars must be equipped with a radiator overflow catch can of minimum (1) gallon capacity.
- 19.3 The use of antifreeze is prohibited and can result in a (\$100) fine.
- 20.0 FAN SHIELD:**
- 20.1 A metal fan shield or shroud must be securely fastened and shall cover the upper (180°) of fan area.
- 21.0 OIL PAN:**
- 21.1 Must have a minimum ground clearance of (4").
- 21.2 Oil pan may be replaced from stock but may not be modified so as to allow lowering of crankshaft centerline.
- 21.3 Optional (8) quart capacity oil pan permitted.
- 21.4 No Dry Sump System.
- 22.0 TRANSMISSION/CLUTCH:**
- 22.1 Standard or automatic transmissions only.
- 22.2 A (360°) steel blow proof bell housing is mandatory for manual transmission and a Metal Blanket for an automatic transmission.
- 22.3 Clutch must be standard (10") factory production type with pressure plate. NO SMALL CLUTCH, NO ALUMINUM PRESSURE PLATE OR FLYWHEELS, NO DOUBLE/TRIPLE DISC CLUTCHES OR 10,000-RPM CLUTCH.
- 22.4 NO aluminum bell housing.
- 22.5 No machining of any kind on flywheel.
- 22.6 Automatic transmission must have a functional O.E.M. Torque Converter, with O.E.M. stall speed.
- 22.7 Steel flywheel only, with a minimum weight of (16) lbs.
- 22.8 Transmissions must have at least two forwards and one reverse gear.
- 23.0 REAR END/DRIVESHAFT:**
- 23.1 Must be U.S. factory production type for year/make/model car being used and in stock location.
- 23.2 Rear end upper and lower control arms must be steel and stock appearing. Trailing arm's length must be from center bolt hole to center bolt hole. Must be within (1") of total length of each other. Lower trailing arms must be no longer than (22") and upper arms must be no longer than (11.5").
- 23.3 No aftermarket trailing arms (Single, non-adjustable chassis mounting point only).
- 23.4 No 3 link or panard bar set up.
- 23.5 Ford (9") rear end and /or floater permitted.
- 23.6 No quick change rear ends.
- 23.7 NO Aluminum driveshaft.
- 23.8 Driveshaft must have at least (1) (360°) safety driveshaft loop required and must be constructed of at least (.25") by (2") steel or equivalent, mounted (6") back from u-joint.
- 23.9 Driveshaft must be painted white and have car number for identification.
- 24.0 FRONT/REAR SUSPENSION:**
- 24.1 Must remain factory manufactured for year/make chassis being used, and in factory stock location on frame.
- 24.2 An aftermarket A-frame with part number UBM14-0809-5r or UBM14-0829-6L will be permitted.
- 24.3 Lower A-frame must be stock for frame being used (O.E.M. mounting towers only). A-frame bushings must be stock or polyurethane.
- 24.4 No modifications will be permitted.
- 24.5 Coil springs MUST be in stock mounts.
- 24.6 Front and rear load bolts or twist blocks permitted.
- 24.7 No coil binding.
- 24.8 Racing springs and spring rubbers permitted. Leaf springs must have the same number of leaves on both sides.  
**SUSPENSIONS WILL BE RIGIDLY INSPECTED! ALL PART NUMBERS MUST BE LEGIBLE AND UNALTERED.**
- 25.0 SHOCKS/SPRINGS:**

- 25.1 One steel shock per wheel.
  - 25.2 Shock absorbers must be non-adjustable, and non-rebuildable with no external canisters.
  - 25.3 Schrader valve, coil over, and coil over eliminators are NOT PERMITTED.
  - 25.4 Total racer cost of less than (\$100) per shock new (Speedway Motors Catalog).
  - 25.5 Bump stop technology is NOT PERMITTED.
  - 25.6 Minimum (4") spring diameter.
- 26.0 HUBS/SPINDLES:**
- 26.1 Must be factory production for make/model chassis being used. Spindles must be O.E.M.
  - 26.2 Studs for wheels must be (9/16") diameter minimum.
  - 26.3 No wide five's.
- 27.0 STEERING:**
- 27.1 Must use stock steering box in stock location and have a minimum of (2) universal joints.
  - 27.2 NO RACK AND PINION or CENTER STEERING!
  - 27.3 Collapsible steering column highly recommended.
  - 27.4 Stock type sway bars only with a maximum 1.25" diameter. Adjustable sway bar (optional) but must remain in stock location.
- 28.0 BRAKES:**
- 28.1 Shall be factory stock hydraulic type, operating all four wheels at all times.
  - 28.2 Absolutely NO racing type brakes. Brake inspection and/or test may be required at any times.
  - 28.3 ALL NON-MECHANICAL TRACTION CONTROL DEVICES INTENDED FOR LIMITED WHEEL SLIP IS PROHIBITED. NO WIRING OF ANY TYPE PERMITTED TO FRONT/REAR WHEELS OR SUSPENSION.
  - 28.4 Rear disc brakes are permitted.
  - 28.5 Optional two-piece stock appearing aftermarket brake rotors are permitted on the front only.
  - 28.6 O.E.M. calipers only (NO RACING OR AFTERMARKET BRAKE CALIPERS).
  - 28.7 Brake bias adjuster allowed.
- 29.0 TIRES/WHEELS:**
- 29.1 American Racer AR-970 series racing tire will be the only approved tire.
  - 29.2 Chemically soaking of tire will NOT BE PERMITTED AND/OR TOLERATED. If tires are found to be chemically soaked they will be confiscated and driver will be disqualified and/or fined.
  - 29.3 Tires are to be mounted on a steel racing wheel with a maximum width of (8") measured from bead to bead, with a (15") diameter.
  - 29.4 Wheel width of (77") will be measured from outside tire to outside tire front and rear.
- 30.0 WEIGHT:**
- 30.1 All cars to weigh a minimum of (3300 lbs.) a maximum (54%) left side weight and (49%) rear. Exception for Crate cars which are to weigh 3200 lbs. with a maximum (55%) left side weight and (49%) rear weight. All cars can be measured after the feature or at an official's discretion, wet or dry with the driver in the driver's seat with helmet as if race ready.
  - 30.2 All attached on weight MUST be securely fastened to car and must be painted white with car number for identification.
- 31.0 PAINT/LETTERING:**
- 31.1 All cars must be professionally painted, neat in appearance and professionally lettered at all times.
  - 31.2 Numbers must be approved by the Speedway office and must be professionally painted on both sides and on the ROOF of car, readable from the right side, in minimum twenty-four (24") heights, with a four (4") stripe width in a color offering contrast to the color of car.
  - 31.3 A four (4") number with the letter (GN) lettered in white or yellow located on the upper right side (Passenger Side) of the windshield.
  - 31.4 DUPLICATE CAR NUMBERS WILL NOT BE PERMITTED!!
  - 31.5 All car numbers must be registered with Lorain County Speedway office regardless if number competed in previous years.
- 32.0 TRANSPONDER:**

- 32.1 LCS utilizes the MyLaps system of Timing and Scoring. All teams are required to have a MyLaps transponder on their car operational at all times.
- 32.2 Transponder is to be mounted behind the left rear tire.
- 32.3 All teams are encouraged to buy their own transponder for themselves.
- 32.4 LCS will offer MyLaps transponders at cost; or can be rented for (\$20) with a valid driver license per event on the second level of the pit tower.

**33.0 SAFETY EQUIPMENT:**

- 33.1 All drivers must be protected at all times with a clean SFI or equivalent full fire driving suit, fire retardant gloves, shoes, quick-release lap belt, shoulder harness and headrest.
- 33.2 Hans, Hutchens or equivalent head and neck restraint is highly recommended.
- 33.3 A Snell-Rated helmet SA2010 or newer is required. Sticker must be visible and verifiable.
- 33.4 Harness and seat belts and are required to be five-point system with lower crotch belt (six-point systems are recommended). Mounting attachment bar for shoulder harness must be at shoulder height of the driver and harness should not bend or change direction. Belt systems must be minimum of (3") SFI approved units, dated within three years to date.
- 33.5 All cars must have a driver's side web style window net with a latch mechanism on the top front corner, and must fall down alongside driver's door when released.
- 33.6 All cars must have a (2 ½) pound minimum B and C dry chemical fire extinguisher with gauge mounted within easy reach of driver and in working order at all times.
- 33.7 An engine ignition kill switch must be mounted within the driver's reach and must be marked 'OFF' / 'ON'.

**NOTICE/WARNING: All part numbers must be visible and unaltered. If part number is not legible or has been altered in any way it will be determined to be illegal and not permitted for use. If any items are found to be illegal, LCS and/or its Track Officials reserve the right to confiscate any illegal parts.**

**REMEMBER: Lorain County Speedway and its officials reserve the right to change specifications/procedures/competition rules, and add/or subtract cars to the field at anytime. Those who sign-in and/or start in an event agree to be governed by these rules and by all decisions of the Speedway and its officials.**

**GRAND NATIONAL DIVISION PURSE**

Purse to be announced at a later date.

**AMERICAN RACER RACING TIRES WILL BE AVAILABLE AT THE TRACK.**

Any technical questions contact the Tech. Inspector

Any procedural questions contact the Race Director