

LAKESIDE SPEEDWAY 2020 GRAND NATIONAL RULES



These rules may be adjusted to ensure competitive fairness.

1. Body Rules:

- a. All bodies are subject to Tech Official approval.
- b. Bodies are expected to resemble late model type racecars.
- c. Bodies must be similar to the Dirt Body or Short Track Body style produced by Performance Bodies.
- d. Bodies - steel or aluminum. Aftermarket polypropylene nosepieces allowed.
- e. All sheet metal seams shall have the lip on the underside leaving a smooth top finish. Body products supplied by Performance Bodies will be used as an example.
- f. A minimum 16-gauge firewall is required between the driver's compartment and the fuel cell.
- g. Rub rails (optional) must be 1" x 2" maximum rectangular tubing attached flush to body between fender wells.
- h. Floor pan thickness must be 1/8" metal minimum thickness from front of driver's seat all the way to 6 inches up firewall.
- i. 8 Inch rear spoiler must be manufactured of a Lexan or aluminum, top of spoiler not to exceed 47 inches from the ground, and rear spoiler cannot be suspended above the deck to create a wing effect.

2. ELIGIBLE ENGINE. All engine options can be rebuilt and/or tore down for inspection. Crate motors must meet the specifications of the CT400 Tech Specs as published in the Chevrolet Performance catalog. **With the Exception that the Crate Motors cannot be rebuilt.** The Standard Two Barrel motors must meet the rules as described below:

WHEN MOTOR IS TORN DOWN BY LAKESIDE SPEEDWAY TRACK OFFICIALS, LAKESIDE SPEEDWAY/TRACK OFFICIALS ARE NOT RESPONSIBLE FOR GASKETS or MATERIALS.

a. CRATE Motor Option:

- a. May use unaltered sealed GM #88958604 crate engine or GM #88958602 or #19258602 crate engine.
- b. Upon inspection, any different, altered or missing GM seal bolts will result in disqualification, loss of all points for the season and a \$1,000 fine.
- 3) \$250 fine and two week suspension for any crate engine not using required
 - a. spacer, (may use 1" thick carburetor spacer, must use Moroso part #64940).
 - b. distributor,
 - c. rev limiter,
 - d. pushrods,
 - e. valve springs or
 - f. rocker arms.

b) Standard Two Barrel Motor:

- a. Steel blocks only, No GM Rocket blocks.
- b. No titanium engine parts permitted other than titanium valve spring retainers are allowed.
- c. Maximum cubic inch is 363 for GM, 364 for Ford, and 370 for Chrysler.

- d. Maximum compression 11.0 to 1. Atmospheric conditions and equipment limitations suggest a .3 tolerance. Therefore compression measurements greater than 11.3 means disqualification.
- e. Steel Rods - only.
- f. Aftermarket harmonic balancers allowed.
- g. Steel heads only, all heads must be stock valve angle for make (example: Chevrolet = 23 degrees.). One half (1/2) degree valve angle tolerance, angle milling not allowed.
- h. No offset rocker arms or Jessel rocker arms – (exception of Ford M-6049-N351 cylinder heads – intake valve only).
- i. Approved is any steel head with a maximum intake port runner not to exceed 205cc.
- j. Any size valve may be used. No air directional devices permitted. No hollow valve stems.
- k. No roller cams.
- l. No rev kits.
- m. Rocker arms for all GM and Ford engines must be an independent single stud type.
- n. Dual shaft rockers not permitted.
- o. Intake manifold must be cast aluminum, commercial intake manifold. No box or fabricated manifolds.
- p. Radiators to be mounted in front of engine only.
- q. Maximum engine set back of 4" to be measured from the center of the forward most spark plug hole to the center of upper ball joint. No dry sump systems.
- r. Any water pump, other than no electric water pumps.
- s. Gear drives approved.
- t. Motor designation must be defined on left front A post.

3. CARBURETORS AND AIR CLEANERS.

- a. CRATE Motor Holley Model 4150, 650-cfm Holley four barrel carburetor p/n 80541-1
- b. Standard Two Barrel motor: Unaltered two barrel Holley #4412, 500 c.f.m. model. Aftermarket fuel metering blocks are not allowed. Any adapter plate, and/or spacer, may not exceed 1.015".
- c. Choke plate may be removed.
- d. No vacuum leaks between air cleaner and intake valve.
- e. A maximum .065 gasket may be used on each side of spacer.
- f. No "carb" hats or other air flow enhancing devices.
- g. No spacer will be allowed between bottom of air cleaner and carburetor.
- h. Fuel pump must be in original mounting position. Mechanical only. Belt drive pumps approved. No electric pumps.
- i. Only one round air cleaner may be used. Maximum size will be: 14" diameter by 4" thick.
- j. Air cleaner top and bottom must be made of solid metal.

4. CAR WEIGHT/BALLAST:

- a. **602/604 crate motor option:** 2600 lbs. with driver at end of race. Adjustment on weight up/down as need.
- b. **Standard Two Barrel motor:** A minimum weight of 2800 lbs. with driver at end of race.

5. ELECTRICAL/ELECTRONIC SYSTEM:

- a. **Crate Motor Option:** RPM chip must not exceed 6800.
- b. **Standard Two Barrel motor:** RPM chip must not exceed 7600.
- c. One MSD ignition box and/or MSD rev limiter allowed on car mounted in engine compartment or over the steering column accessible via an inspection cover. If used, the only approved ignition box is the MSD 6A, 6T, or any version of the MSD 6 box will be

allowed. No other ignition boxes or remote rev limiters will be considered.

d. The following MSD remote rev limiters are allowed:

- P/N 8728, MSD Soft Touch Rev Control, is designed to be used on standard point's ignition or inductive ignition systems. This means that the PN8728 can be installed on engines with a GM HEI Ignition, Ford or Chrysler electronic ignition and any standard breaker points system without an MSD box.
- P/N 8738 MSD Soft Touch Rev Control is approved for use with MSD 6T and 6TN Ignition Boxes.
- P/N 6420 MSD 6AL Ignition Control Box with Rev Limiter Built-In. • P/N 6430, MSD 6 ALN Ignition Control Box with Rev Limiter Built-In.

e. The only changes that can be made with ignition box is rev-limiter settings, and only one high-end setting is allowed.

f. Any ignition component may be replaced with track components or confiscated and sent to the manufacturer for review.

g. No electronic monitoring computer devices capable of storing or transmitting information except tachometers allowed on cars.

h. Tachometers must be mounted so that they can be removed before the A feature.

i. No digital gauges allowed on car.

j. No electronic traction control devices allowed.

k. No adjustable ignition control boxes allowed.

l. No timing retard controls allowed.

m. No bundling of wires, all wires must be open and visible.

n. One 12-volt battery only, must be securely mounted and shielded. Positive post/terminals must be shielded.

o. All vehicles must be self-starting without being pushed or pulled in staging area or on the track. All cars must join lineup on demand or go to rear of that race.

p. NOTE: Any car suspected of running a traction control device due to a missing engine or unusual handling characteristics can be pulled out of competition and not allowed to race

6. EXHAUST:

a. Exhaust system must be mounted in such a way as to direct spent gasses away from cockpit of vehicle and away from areas of possible fuel spillage.

b. No 180 degree headers.

7. DIFFERENTIALS:

a. 9" Ford, with floaters.

b. No quick changes.

c. Differentials must be locked at all times with a spool.

d. Rear coolers may be used, but cannot be mounted inside of the driver's compartment.

e. No open tube rear ends allowed.

f. No scalloped ring gears.

8. WHEELS & TIRES:

a. The track tire is the BTC (Boubin Tire Company) stamped McCreary American Racer G60 or the Hoosier G60 with IMCA stamp. NO HOOSIER G60 ALLOWED AFTER 06/01/2015

b. Tire sipping, grooving, and grinding allowed. No conditioning of tires allowed. Tire durometer cannot be less than 50.

c. No wide-five wheels or adapters allowed.

d. External, steel bead lock only and it cannot make the wheel any narrower than 8 inches and no wider than 8.75 inches.

- e. Mud plug and/or inner wheel mud plugs allowed.
- f. Must use only steel bolts and nuts.
- g. Foam rubber and/or plastic mud plugs do not require fasteners. All other mud plugs require metal, mechanical fasteners such as DZUS fasteners. Tape to hold a metal mud plug in/on the Wheel will not be allowed.
- h. Bleeder valves are allowed.
- i. Steel wheels only.

9. FRAMES:

- a. Factory production, 1964 or newer, complete full parallel American passenger car frames only.
- b. Frame may be cut no closer than 36 inches from the center hole of the front cross member.
- c. No front clips or tube type allowed.
- d. Maximum two-inch wide by four-inch tall frame stiffener may be welded directly to outside of frame rail.
- e. Frames may not be widened or narrowed and must be able to support roll cage on both sides.
- f. Must be full and complete both sides.
- g. Frames may be notched for swedge tube clearance.
- h. Front cross member must remain full and intact where joined at the frame rails, center of cross member may be notched for radiator and/or steering clearance only.
- i. No Jeep, Bronco, etc. or four-wheel drive frames allowed.
- j. No sports car frames allowed.
- k. No front wheel drive allowed.
- l. Frame Horns may be removed in front of steering box.
- m. No part of frame can be lower than four inches from ground except front cross member.
- n. Wheelbase minimum is 103 inches and maximum 112 inches.
- o. The cross member center hole must remain and the bottom of the cross member cannot be cut except for steering clearance.

10. SUSPENSION AND STEERING:

- a. Stock lower OEM A-arm in stock location. Tube upper arms OK. Steel coil springs only 4.5" minimum on all vehicles, front torsion bars approved on Dodge. OEM replacement lower A frames approved; lower A-frames must be the same, right and left, and of same design.
- b. Steering must be unaltered or approved OEM with the exception of outer tie rod ends may be replaced with heims joints and steel tie rod sleeve.
- c. Weight jack must be in original centerline of spring.
- d. Steering box must be steel approved OEM and must remain in stock location.
- e. No rack & pinion allowed.
- f. Steel steering shafts and knuckles or collapsible steering shafts, required.
- g. Rear of frame may be altered to accept leaf or coil springs, one type only not both; any coil spring must be at least 4.5 inches outside diameter.
- h. One steel coil spring per wheel.
- i. One steel shock per wheel. No external adjustable shocks allowed.
- j. Steel or aluminum rear coil over kits allowed, minimum 4½-inch spring, no threaded shock bodies.
- k. No other aluminum or fiberglass suspension or rear end parts allowed.

- l. Gas or oil filled shocks only except a zero shock (no compression/no rebound) may be used in lieu of slider.
- m. Suspension parts may be covered to protect them from damage but must be uncovered for inspection purposes.
- n. No offset lower control arm bushings.
- o. No aluminum shocks.
- p. Rear suspension optional but no torsion bars.
- q. Steering quickeners allowed.
- r. No devices or methods permitted that would allow a driver to alter the vehicle geometry while the car is in competition.

11. TRANSMISSION & DRIVESHAFT:

- a. Must be made of steel and painted white.
- b. Minimum drive shaft diameter is 2 inches.
- c. At least one 360 degree drive shaft loop constructed of 1/8" x 2 steel and securely mounted to frame, cross member, or floor pan.
- d. Drive shaft tunnel must be reinforced next to driver.
- e. With motor running and car in a still position, driver must be able to engage car in gear and move forward, then backward, and put it in neutral.
- f. Must have at least two gear forward, one reverse, and neutral gear position required.
- g. Scatter proof bell housing mandatory.
- h. The Starter motor must mount in stock location and must turn flywheel located on the back of the engine crankshaft.
- i. Brinn, Bert, Falcon internal clutch transmissions approved. All transmissions without bolt on items (linkage, bell housing, etc.) must weigh 43 lbs.
- j. Power glides without converters approved.

12. BRAKES:

- a. Brakes must be operated on all four wheels and must lock up all four wheels during inspection.
- b. No brake shut-off or pressure sensitive devices allowed.
- c. Proportioning valve allowed, front to rear only.
- d. Vented rotors only.
- e. Must be steel, OEM single piston calipers on front and any single piston on back.

13. FUEL:

- a. Gasoline, racing fuel, and E85 allowed. No performance enhancing additives or scented additives.
- b. Fuel must pass dielectric, chemical, and specific gravity tests.

14. BUMPERS:

- a. Steel bumpers must be used both front and rear
- b. Front bumper must be mounted to the front frame horns with all support tubing under the body nosepiece.
- c. Must be made of minimum 1.25-inch tubing and must be able to support car if lifted by wrecker.
- d. Rear bumper, steel nerf bars and bodies must not extend beyond width of rear tires, and must not contain any sharp edges.
- e. Rear bumper must be one of the following designs:
 - 1. Solid bumper of square or round tubing not wider than five inches outside each rear

frame rail.

2. If rear bumper is wider than five inches outside rear frame rail it must be capped with no sharp edges and bent forward on the end at a 90-degree angle inside the rear quarter panels

3. a bumper constructed in a loop design that loops back inside the rear quarter panels.
f. All tubing must be capped.

15. REAR VIEW MIRROR and RACEIVER.

- a. Mirrors or reflective material not allowed.
- b. Raceiver required.

16. IDENTIFICATION AND MARKING.

- a. All car numerals must be applied in bold, contrasting, non-reflective, non-mirror colors.
- b. Side numbers must be at least 18 inches high, letters if used must be 12 inch high and all neatly attached.
- c. A number 24 inches high (letters if used must be 18 inch high), must be attached to the roof, reading from the passenger side.
- d. Numbers must be at least 4" wide.
- e. Sponsors' names must not interfere with car numbers and must be neatly lettered.
- f. If numbers cannot be read then driver loses all rights to question finish.

17. SAFETY:

- a. A toggle type ignition kill switch boldly marked ON and OFF must be connected and located directly behind the driver's seat.
- b. Helmets are required and must be a minimum of **SA2010** with certification label inside helmet.
- c. Helmet must be worn at all times car is on the track and must be provided for inspection.
- d. Roll bar padding (Fire retardant recommended) required in driver compartment and all roll bars within the reach of the driver's head must be covered with roll bar padding. Roll bar padding in conjunction with a containment seat will be determined on an individual basis by Lakeside Officials.
- e. An approved head and neck restraint system (i.e. Hutchens, G-Force, Hans, etc.) is required. An approved head and neck restraint system means a system tested and subsequently approved for sale by vendors.
- f. SFI approved full fire suits of a flame-retardant nature must be worn by all competitors.
- g. Nomex Underwear highly recommended.
- h. Fire retardant gloves, and fire-retardant shoes are required.
 - i. Minimum 6-point safety belts, sub belt, and shoulder harness required and securely mounted as prescribed by manufacturer. Excess belt must be secured.
- j. Seat belts and shoulder harness cannot be more than three years old.
- k. Aluminum high-back seat only, must be bolted in using minimum 0.375 inch bolts with oversize washers to keep bolt from pulling through seat (fender washers). Head and shoulder supports are highly recommended.
- l. Seat must be mounted inside the frame rail and ahead of the "B" Post of the roll cage.
- m. Bottom of seat can be no lower than the bottom of the frame rail.
- n. All cars must have an approved rib type, made from minimum 3/4 inch, maximum one-inch wide nylon material with a minimum one-inch square opening between the ribs, window net in the driver's side window at all times the car is on the track. No mesh nets.

- o. Window nets, minimum 22" wide and 16" high, must latch at top of car so that window net hangs down on door or inside door when unlatched. Triangle window nets in addition to regular window net recommended on each side of seat.
- p. The bottom of the window net must be securely connected to door bars (pop rivets, hose clamps, and/or wire tied is not acceptable).
- q. It is recommended that cars be equipped with a fully charged Halon On Board Fire Suppression System.
- r. Minimum requirement is a 2.5 lb. fire extinguisher securely mounted in vehicle and within driver's reach for activation.
- s. Each team must have a minimum 10 lb. Dry chemical and/or 10 lb. CO2 and/or 2.5 gallon water fire extinguisher in their pit area. Fire extinguishers must be visible.
- t. Steel drive shafts and yokes only.
- u. Drive shaft must be painted white.
- v. Rear Springs must be cable or rope tethered so that they do not come out of a car. Cable must be 1/8" minimum diameter or rope must be 3/8" minimum diameter.
- w. Roof Escape hatch approved provided it is closed and locked during racing.

18. ROLL CAGES.

- a. Car builders and drivers/owners are responsible for roll bar installation. Officials will examine all workmanship to check that roll cage welds are completed and may test to ensure the proper metal diameter and wall thickness was used.
 - b. Round steel tubing, seamless roll-over bars are required for the basic roll cage. Acceptable minimum size tubing is as follows: one and three-quarters (1-3/4) inches by .090 of an inch or one and one-half (1-1/2) inches by .095 of an inch for mild steel and DOM tubing (one and three quarters (1-3/4) inches by .083 of an inch for chrome-moly tubing). Aluminum and/or other soft metals are not allowed. Roll bar connections must be properly welded.
 - c. Lakeside Speedway is not responsible for roll cage construction or for the size/quality of materials used. Roll bar installation and workmanship must be acceptable to track officials.
 - d. Low carbon, mild steel tubing is recommended.
 - e. Must be frame-mounted in at least six places.
 - f. No brazing or soldering allowed.
 - g. Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops.
 - h. Driver's head must not protrude outside cage with helmet on and strapped in driver's seat.
 - i. Must have minimum of one cross bar in top halo of roll cage.
 - j. Roll cage must be securely supported and braced.
 - k. Protection of feet is mandatory.
 - l. Bar across back of engine with vertical bars and rub rails, or similar protection.
 - m. No brace bars forward of cage may be higher than stock hood height.
 - n. Main cage no further forward than engine plate.
 - o. Modifications shall be made to ensure trailing arm will not penetrate the driver's compartment.
- Any modifications are subject to the Competition Director's or Technical Director's approval.

19. DOOR BARS.

- a. A minimum of three driver side door bars, at least 1.5-inch O.D., must be as parallel

with the ground as possible and located perpendicular to the driver so as to provide maximum protection for driver, but without causing undue difficulty in getting into or out of vehicle.

b. The side bars must be welded to the front and rear of the roll cage members.

c. Must have at least one cross door bar, minimum 1.25-inch O.D., on passenger side of car, either horizontal or angled.

d. A minimum of 18 gauge steel doorplates welded from 'A' post to 'B' post top to bottom of the door bars will be required.

20. FUEL CELLS:

a. Racing fuel cells required and must be securely mounted by at least two solid steel straps, two inches wide, or 1" square tubing around cell.

b. Fuel cells must be enclosed in steel container and must be mounted securely behind rear axle and between the rear tires, no lower than 10 inches off the ground, protected by roll-cage tubing.

c. Protective tubing must cover the rear and extend past both sides of fuel cell.

d. Fuel cell shall be a minimum of four inches ahead of rear bumper.

e. Fuel cells shall have check valves, and bladders are highly recommended.

f. Fuel cells are limited to 22-gallon maximum capacity.

g. Pick-up must not be underneath (bottom side) fuel cell.

h. No plastic or urethane fuel lines allowed.

i. Fuel cell must have in internal flapper valve.

21. WEIGHT:

a. If weight/ballast needs to be added it must be securely fastened, but cannot be in drivers compartment.

b. Weight/ballast must be painted white with car number on it. The driver is subject to a \$100 fine if the car number is not on the weight or the incorrect car number is on the weight.

c. All weight/ballast must be lead.

d. All weight/ballast must be securely mounted and not exposed at any point to outside interference.

e. Race vehicles losing weight/ballast on racetrack will be disqualified and weight/ballast retained by Lakeside Speedway.

Lakeside Speedway Officials will have the final word on all matters of rules. Speedway officials will be empowered to restrict any car from competing. Any other alterations or modifications not specifically allowed for in these rules will be considered illegal.

IMPORTANT NOTE: COMPETITIVE RACING CAN RESULT IN INJURY AND/OR DEATH TO THE PARTICIPANT. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. The rules and regulations are intended as guides for the conduct of the sport. They are in no way a guarantee against injury or death to a participant, spectator, officials, or other.

Outlaw Street Stocks are allowed to run but must follow their rules package.

Questions regarding these rules may be forwarded to:

Lakeside Speedway Tech Official: Bob Kerbs: 417-684-1488