

Lancaster Motorplex

2024 4 cylinder rules

To all Competitors/Participants

All rules within are at the discretion of the Race Director and Technical Officials. Any stock or aftermarket part must stock and unaltered for that part unless stated within these rules. Removal of ID or part numbers makes the part illegal. If something is not clear within the rules, DO NOT ASSUME IT'S LEGAL.

A. ENGINE AND TRANSMISSION

- 1.) OEM factory ignition and (1)12-volt battery only.
- 2.) 4-cylinder engines only. No super or turbo chargers allowed. No chemical power adders of any kind (nitrous oxide, benzene, nitromethane, etc...) allowed. Four-cylinder engines may be pushrod, SOHC, or DOHC. OEM stock variable cam timing is allowed on all four cylinders displacing 2.5 liters or less only. Maximum displacement is 2.5 on all four-cylinder engines.
- 3.) **Cars must use an OEM engine type and brand matching the make of car** (Example: any Honda Civic engine in a Honda Accord is allowed).
- 4.) No aftermarket blocks allowed. Cylinder heads must be a stock type casting for the engine brand used (Example: Honda to Honda) No aftermarket heads.
- 5.) No engine swaps of non-stock engine types from other makes or models of vehicles are allowed.
- 6.) Throttle body must be attached to intake manifold at stock location. Single overhead cam cars will Be allowed aftermarket intakes. Dual overhead cam cars must run OEM stock intakes for the engine make.
- 7.) Throttle body EFI or multi-point EFI allowed.
- 8.) No carburetors permitted. A maximum of one fuel injector per cylinder is permitted.
- 9.) OEM style starter must be used and operational at the start of each night's event.
- 10.) INTERNAL ENGINE MODIFICATIONS, such as, but not limited to, porting, polishing, decking, and camshafts, ARE ALLOWED.
- 11.) Automatic or manual transmissions.
- 12.) NO driver-controlled engine or transmission tuning devices allowed.
- 13.) FUEL: Fuel is restricted to pump gasoline. Maximum 93 octane NO alcohol (methanol or ethanol) or E85 fuel is allowed. Fuel will be checked, **must have a way to pump or get gas from car to be checked.**
- 14.) Cold air intakes are allowed, must be mounted in engine area.
- 15.) Computers must be stock and mounted in a place where they are easily accessible.

B. BODY AND CHASSIS

- 1.) A Maximum wheelbase of 108" excluding midsize vehicles (such as Camaros, Firebirds, Thunderbirds, Van, SUV, Trucks, etc.). Please call for clarifications on approved vehicle makes and models.
- 3.) Remove all glass (except windshield, if desired may be replaced with Lexan polycarbonate, NOT plexi-glass). No rear windows). Side 'B' & 'C' Pillar widows allowed to be filled in with polycarbonate or sheet metal.
- 4.) Remove all burnable and sharp objects within interior. Use 20-gauge minimum sheet steel for all holes in firewalls, covering dash or council. No sheet metal screws allowed.
- 5.) Factory OEM brake pedal and components remain Factory location.
- 6.) All doors must be welded shut. Factory Interior floor must be complete.
- 7.) Control arm mounting locations must remain factory stock, Control arms may be modified, or aftermarket production. Strut towers may be modified to accommodate camber adjustments.
- 8.) Aftermarket Springs allowed. One spring and shock per wheel. No coil overs allowed.
- 9.) Shocks; Stock struts, non-rebuildable and or adjustable.
- 10.) Rear spoiler allowed at the rear top edge of the trunk lid or hatch. Not to exceed 4 "in overall height or extend over the edge of the rear body panels in overall length. Front spoiler or splitter may be used but cannot extend forward of the leading edge of the bumper cover, ground effects may not be lower than 4" above ground. No additional air enhancement devices will be permitted.
- 11.) Lift chains must be available on front and rear. Please label lift chain area if hidden under covers. Bumper covers/body panels must be on the car during competition.
- 12.) **Maximum of 4 degrees of camber on the wheel and tires.**

C. BRACING

- 1.) Full roll cage is required. Driver's compartment must be complete with a min. of 3 door bars on driver's side and 3 bars on pass side. 'X' may be used with additional cross bar on passenger side.
- 2.) Each roll bar must have two braces running rearward from top of roll cage at approx. 45-degree angle welded to frame or foot plate bolted through floor to another plate. Additional bracing is recommended to the front and rear compartments.
- 3.) Drivers' door plating **is mandatory.**
- 4.) All roll bars must be min. 1 1/2" O.D. ERW or DOM, .095 min. wall thickness. All roll bars must be welded to the frame unless unibody construction. If unibody, must have 6" sq. foot plate welded and/or bolted to the floor.
- 5.) Roll Cage Suggestion - Stitch weld heavy wall tubing along the top of the rocker panel extending from the foot box back behind the driver's seat. This will provide a strong brace for roll cage support bars.
- 6.) All weld joints recommended to have gusset min. 1/8" thick steel. Driver's side door plates are highly recommended.

D. EXHAUST

- 1.) A complete exhaust system, consisting of a single tube extending from manifold or header exit to an exit point behind the driver's seat. Exhaust may exit right or center of the car. If the exhaust exits in the center of the car, it must be turned down towards the track. If the tip is within 6" of the fuel cell, there must be a heat shield between the fuel cell and exhaust tip. Maximum exhaust tubing diameter is 2 1/2" and it must be the same diameter from header/manifold collector or flange/reducer to the system exit.
- 2.) Headers are allowed. Exhaust may be welded or bolted, but NO exhaust leaks are permitted the entire length of the exhaust. Exhaust must be routed under the floor pan, and no part of the exhaust system may enter the driver's compartment. No dual exhaust systems are allowed.
- 3.) Exhaust must not extend past edge of car.

E. WEIGHT (AFTER RACE WITH DRIVER AND NO ADDED FLUIDS)

- 1.) 56% Left side maximum. **All weight ballast must be painted white with car # boldly labeled. Car minimum weight must be permanently labeled on upper windshield.**
 - a. SOHC 1900 lb. minimum weight
 - b. DOHC (1.9L or less) 2000 lb. minimum weight
 - c. DOHC (2.0 or higher) 2300 lbs. minimum weight
 - d. All Variable Timing Engines 2400 lbs. minimum weight

F. TIRES AND WHEELS

- 1.) *Hoosier 850 and any 200-thread wear or higher tires are allowed.*
- 2.) May not stick out past the body in excess of 1" inches. A 1" rub rail may be bolted tight to the body to protect tires and paint. Maximum track width is 71 1/2" measured at the tire bead @ spindle height.
- 3.) All wheel offsets must be the same side to side. Racing wheels may be used. Wheel spacers only allowed if all wheels are the same spacing.

G. FUEL TANK

- 1.) Factory fuel tanks secured in front of the rear axle may remain stock location or be replaced with small fuel cell.
- 2.) Factory fuel tanks located behind rear axle must be replaced with approved fuel cell and safety secured within the trunk area. Trunk floor may be removed for clearance. Bottom of cell may not be lower than the center line of the rear wheels and be supported by parallel or 'X' bar bracing. If the fuel cell is exposed, it needs to be protected by rear hoop.

H. DRIVER AND SAFETY

- 1.) Each driver must wear a fire-resistant uniform meeting the SFI 3.2A/5 specification and display a valid SFI 3.2A/5 label.
- 2.) Each driver should also wear fire resistant accessories that effectively cover the remaining parts of the body. Shoes and gloves should meet the SFI 3.3 specification and display a valid SFI.3.3 label.
- 3.) **Full containment seats will be mandatory in 2024. Must be attached to roll cage or frame with minimum (4) ½” grade 8 bolts.**
- 4.) Must have SFI type head rest with padding.
- 5.) Drivers must wear a full-face helmet with valid SA2015 or SA2020 rating. **M rated helmets are not allowed and will be confiscated and returned after the races are over.** Helmets must be worn in accordance with the helmet manufacture and or supplier.
- 6.) Head and neck restraints are mandatory and must meet current SFI 38.1 specifications. NO foam collars are allowed.
- 7.) All roll bars within reach of driver must have roll bar padding.
- 8.) All cars must have a driver’s window net meeting current SFI.27.1 specifications and be installed according to the manufacture specifications.
- 9.) All cars must have SFI 16.5 or 16.6 rated Seat belt restraint system and be installed according to the manufacture specifications. NO seat belt webbing may come in contact with anything sharp or unradiused edge.

I. General

- 1) **Spot mirrors and regular stock mirrors will be allowed. No Mirror driving or they will come out!!**
- 2) **No cell phones, Bluetooth devices and or smart watches are allowed in the car, if found it will be immediate disqualification.**
- 3) Electrical fuel pump shut off switch is required and must be clearly labeled and located on the rear speaker deck. It must work and will be checked.
- 4) NO brake bias allowed anywhere in the car.
- 5) All Brakes on the car (front and rear) must work.

2/5/22

5/3/2022 All cars must run a Mylaps transponder and be mounted in the RR area of the car no farther forward the front edge of the RR tire, be mounted vertically and no higher than 18” from the track surface. **This will be subject to change.**

6/8/2022 ~~Spot mirrors allowed. You may run one or the other, rear view or spot.~~

7/15/22 Added all brakes must be working.

11/6/23 Must wear a minimum 2-layer suit meeting SFI3.2a/5 rating.

11/6/23 Added camber rule for tires and wheels.