MAHONING VALLEY SPEEDWAY

4-Cylinder Rules 2014 Revised 12-02-13

ALL CARS MEETING THESE RULES AND SPECIFICATIONS WILL BE ELIGIBLE TO RACE

GENERAL RULES:

- 1. Interpretation of these rules will be at the discretion of the Technical Inspector.
- 2. All decisions by track officials will be final.
- 3. These rules are intended to be a guideline in constructing a car. If the rules do not state that you MAY do something, then assume that you MAY NOT.
- 4. Any time the word "stock" or the term "OEM" is used to describe cars, parts or components, it is defined to mean a part of component as it is available over the counter, from General Motors, the Ford Motor Company, Chrysler Corporation, of AMC authorized dealers.

BODIES:

- 1. American made rear wheel drive passengers cars with one hundred four inch (104") Wheel base maximum.
- 2. Car body and overall appearance must retain stock dimensions. May use aluminum doors and quarters but must use steel OEM roof for make or model. No wing spoiler or air dams permitted no noses on front of car unless they came stock OEM on that car.
- 3. Altered body lines will be significant reason for disqualification.
- 4. Minimum ground clearance is four inches (4") frame rail at the lowest part.with driver in car 15" crankshaft center line.
- 5. The body must be mounted in components. Must maintain mounting to the frame.
- 6. All glass, except windshield, must be removed.
- 7. Windshield must have four (4) three inch (3") tabs two (2) on the top and two (2) on the bottom, plus two (2) inner center braces. Windshield may be replaced with Plexiglas, Lexan,or approved screening.
- 8. Doors must be Dzused or Bolted securely, front and back.

- 9. Body molding, including door handles, must be removed.
- 10. Air cleaner may be out of hood, hood scoops no higher than 4"
- 11. Hood scoops no higher than 4"
- 12. Driver must sit in stock position.
- 13. Pedals must be in stock position.
- 14. Floors must be stock, front to rear, not including trunk.
- 15. All cars must be neatly painted and professionally lettered. Numbers may be three (3) digits only, from 00 to 999.
- 16. Numbers must be a minimum of eighteen inches (18") high and three inches (3") wide.
- 17. A 6"x6" square plate must be mounted on the right top corner of the windshield, with the car number clearly painted on.
- 18. Battery must be anchored and mounted inside a spill proof container.
- 19. Front firewall must be original with all holes covered with no less than twenty (20) gauge steel and must remain in original position and location.
- 20. Rear firewall must be completely closed off from trunk compartment with eighteen (18) gauge steel that must be riveted or welded. No metal screws.
- 21. Front frame must be completely stock (steel). (no tube frames, allowed to use 2X3 to replace bent horns in front of shock tower)
- 22. Front inner fender panels may be removed. Stock front and rear bumpers must be in original location. You may use front and rear nerfs can not stick out past the wheels After market bumper allowed. You can also use Troyer aluminum bumpers.
- 23. No Rear spoilers.
- 24. No aluminum drive shafts.

CAGE SPECIFICATIONS:

- 1. Minimum of one and a half inch $(1 \frac{1}{2})$ tubing, .095 wall minimum thickness, must be used on the complete main cast structure.
- 2. Cage must have two (2) loops connected by a minimum of three (3) sidebars on each door area. One inch (1") bar must be in center of windshield, petty bar must be in car.
- 3. A circle track racing seat only will be allowed. Seat must be fastened to the roll cage. No center steering allowed.
- 4. Stock petals only.
- 5. Fuel cells must be mounted in the trunk and be completely enclosed by steel. Tank should be mounted as far front as possible and centered on the trunk floor. Tank may not be lower than the original frame rails Steel strapping only.
- 6. Fuel cell must have a roll over valve installed.

ENGINE SPECIFICATIONS-4 CYLINDER ONLY/REAR-WHEEL DRIVE, 2300CC:

- 1. 2.3L with maximum overbore of .060 Stroke must remain stock for engine used.
- 2. Any stock replacement rod must be heavier then OEM rods and you must run a stock OEM crank untouched.
- 3. Stock OEM engine parts only. No cross breeding between manufacturers.
- 4. The head and block may be shaved.
- 5. Engine must remain in stock location on original motor mounts. No off-setting.
- 6. Stock unaltered electronic ignition or stock type distributor only.
- 7. Stock clutch, and transmission assembly. Clutch assembly must have 360 degree facing. Transmission must have all gears and (steel drive shafts only).
- 8. An inspection hole must be on the bell housing.
- 9. Roller cams are legal. Roller cam bearings Are Not.
- 10. No porting, polishing. No grinding of any engine part. Any cam shaft with maximum lift of .520 (Roller, Hydraulic or Mechanical Flat Tappet Cam) No more than .520 lift on Roller Cams.
- 11. Forged or cast stock replacement stock ring pack pistons

- 12. No fuel injection
- 13. Stock intake manifolds only, must be stock OEM must have original part numbers.
- 14. 0-4412 Holly 500 cfm two-(2) barrel carburetor may be used with one inch (1") removable adapter plate.
- 15. Maximum two (2) gaskets .065" each.
- 16. No external modification to carburetor allowed.
- 17. Only modification jets, accelerator pump, power valve, and discharge nozzle. Choke air horn must remain. No tuning carb. Sideways on the intake.
- 18. Mufflers are mandatory.
- 19. Flywheel minimum of 14 lbs. Clutch and Flywheel must be visible. Minimum thickness of flywheel .800 any steel flywheel may be used.

Fuel

No alcohol – No fuel additives of any type.

Any type pump gas.

SUSPENSION SPECIFICATIONS:

- 1. External adjustable shocks are NOT allowed. Stock shock location. Any OEM shock or AFCO (pn# 1040 or 1041 or pro 55300 or 55401) you can mix match these shocks.
- 2. Stock OEM upper and lower A-frames. Stock ball joints. Also No Mono Balls.
- 3. Heavy duty OEM stock 1" max style sway bar may be used in front of car in stock mount adjustable .any style front strut rods may be used. Stock OEM spindles only may be drilled for heim ends and bolt.
- 4. Weight jacking devices, one per wheel is permitted on the rear only. No other modification allowed to suspension. Adjustable spring spacers allowed in left front spring.
- 5. No reinforcing of frame or anything else under car. All bracing must be done above the floor of the car.

- 6. Wheel base must remain stock for manufacturer's body used.
- 7. Stock differential and transmission for body used. With all gears in trans. rears 6.75 or 8" only No offsetting of the differential assembly.
- 8. Rear differential must be no wider than stock rear end. Differential must be mounted exactly the same way as the stock rear in the stock position.
- 9. Extra spring leaves may be added or after-market coils may be used but must be in stock location.
- 10. No brake bias and stock OEM brakes, drums and rotors.
- 11. All four wheel brakes must work.

BUMPERS AND RUB RAILS:

- 1. Stock appearing front and rear bumper may be used and also can use a Troyer bumpers with the caps on the ends bumper May be reinforced with one and one half inch $(1 \frac{1}{2})$ pipe only, behind bumper. No sharp edges. Nerf bars can be used front and back but cannot stick out past wheels.
- 2. One rub rail bar per side, three inches (3") above hub center.
- 3. Rub rails must be rounded at both ends with no sharp edges. Can be no larger than one and one half inch $(1 \frac{1}{2})$ steel tubing .1250 thickness.
- 4. Center of front bumper must be 19" + or -1". Center of rear bumper must be 17" + or -1" in stock location.

TIRES AND WHEELS:

- 1. Track tire rule applies.
- 2. Fourteen Inch (14") diameter wheels. Eight Inch (8") wide maximum.
- 3. Right side wheels must be double centered or racing wheels no less than two inches (2") offset.
- 4. Left side wheels may be no more than five inches (5") offset.
- 5. Maximum track width (72) outside of tire to outside of tire.

6. Stock wheel base for body style used.

WEIGHT:

Minimum weight – 2400 pounds with car and driver.

HEIGHT

4 inches is the lowest of any part of the car allowed with driver in car.

SAFETY:

- 1. A dry chemical fire extinguisher with quick release is mandatory. The extinguisher must have the gauge within easy reach of the driver. It is mandatory that the fire extinguisher be securely mounted to the right of the driver on the drive shaft hump, and must be clearly visible by track officials at all times.
- 2. Engine shut-off kill switch must be mounted in the driver's compartment on the right side of the steering column or on the right side of the dashboard, if so equipped, within easy reach of the driver, and must be clearly visible and of easy access to track officials. The switch must be marked "ON" and "OFF" and be painted in bright colors.
- 3. Fuel shut-off valve must be in plain view and mounted to the right of the driver near the petty bar within easy reach of the driver, and must be clearly visible and accessible to track officials. The shut-off must be clearly marked "ON" and "OFF" and be painted bright orange.
- 4. Fuel lines in the driver's compartment must be encased.
- 5. Driver's side net with a quick release mechanism is mandatory.
- 6. All roll bars, sidebars, or other protrusions that a driver may come in contact with must be properly padded.
- 7. Nomex hoods and driving shoes are strongly recommended.

- 8. Full-face helmet with shield strongly recommended. All helmets must be a minimum Snell SA2005, racing type only.
- 9. Two layer racing uniform strongly recommended. If a single layer suit is worn, full Nomex underwear MUST be worn.
- 10. Racing gloves are mandatory.
- 11. No interior shields to the right of the driver will be allowed and interior metal in this area must be on a angle and below the driver's shoulder height. This is to protect the driver from serious injury.

SEAT SPECIFICATIONS:

- 1. Circle track racing seat must be supported by, minimum one inch (1") diameter steel tubing welded directly to the cage.
- 2. Roll bars and headrest in the driver's area must be padded.
- 3.Drop down window nets are mandatory.
- 4. All seats must be of racing design and must have a headrest or high back seat.
- 5. Seat must be attached to the roll cage and the frame, mounted on steel or aluminum.
- 6. Back of seat must be mounted to the roll cage.
- 7. Aluminum seats are strongly recommended.
- 8. A minimum three inch (3") quick release lap belt and a three inch (3") shoulder harness that is no older than three (5) years or thirty six (60) months is mandatory.
- 9. A crotch strap is mandatory.
- 10. Shoulder harness must be connected to the roll cage.
- 11. All lap belts must be mounted behind the seat and attached to the roll cage. Harness must be attached below shoulder level.
- 12. Absolutely NO original equipment belts permitted.