## MAHONING VALLEY SPEEDWAY

### Mahoning Valley Speedway 4-cylinder FWD Hobby Stock Division & Futures Class Rules – 2024

These rules are intended to be a "guideline" in constructing a car. If the rules <u>DO NOT</u> state that you <u>ARE ALLOWED</u> to do something - then <u>assume that you MAY NOT do that!</u>

# Interpretation of rules will be at the discretion of the Technical Inspector and any other Official's the Owner's or General Manager may assign.

The intent of this class is to supply a Low budget Entry Racing Division.

#### <u>Body</u>

- 1. Any domestic or foreign four-cylinder passenger 2 or 4 door car with a maximum of 107 inches. (No convertibles, mini vans, supercharged or turbo charged vehicles allowed).
- 2. No 2-seaters, No CRXs.
- 3. All non-metal interior trim must be removed. Dashboard may remain and can be covered with sheet metal.
- 4. Bodies must be strictly stock with no gutting of interior sheet metal except for left and right-side door for roll-bar installation. Side body panels may be repaired by 16-gauge sheet metal but must be welded or riveted, however, original body must remain under sheet metal. No gutting of body. You must follow the contour of bodyline no longer than rocker panel or above center of bodyline.
- 5. Doors must be welded or bolted shut. No Dzus buttons.
- 6. Hood and trunk hinges can be removed. Secured with easy open fasteners or pins.
- 7. Full stock floor, trunk floor, firewalls, and rear wheel wells "must remain intact." The holes must be covered with sheet metal. If the fuel cell is mounted in trunk, it must have rear Firewall made of minimum 22-gauge sheet metal to separate from driver's compartment. Must be riveted or welded.
  - a. Maximum four (4) one-inch holes may be drilled into spare tire well.
- All glass must be removed except for the front windshield which may be replaced with Lexan or 1-inch maximum square wire screen. Must have (3) vertical support bars, minimum 1 inch by 1/8 inch, in center of windshield area and not less than 4 inches apart.
  - a. No back windows. Side windows are permitted and must be in a factory location.
    Must be a flat surface.
  - b. Mirror covers are permitted and must be in a stock location and a flat surface.
  - c. All covers must be clear Lexan.
- 9. Stock bumpers and bumper covers only. No sharp edges on bumper ends. No reinforcing of bumpers period! (No pipes or 2x3 square tubing).
- 10. All plastic trim, moldings and marker lenses must be removed.
- 11. No inside or outside rear-view mirrors.

- 12. No gutting of stock body components. (Hood, hatch, doors, roof, etc.)
- 13. Vehicle identification number (VIN) tag MUST remain intact and will be checked with all other tags to insure proper motor and transmission.
- 14. Vehicles with T-tops or sunroofs must have roof openings sealed off with 16-gauge sheet metal.

#### NOTE: STOCK means the way it was originally equipped from the factory!

#### ROLL BARS

- Minimum 1 1/2" x .120" or 1 ¾" x .095" round steel seamless (or DOM) tubing mandatory. Roll cage must be attached to the unibody with no less than 1/8" steel plate. Plates must be minimum of 8" X 8". Or 2" x 3" square tubing may be used along driver and passenger door sill to reinforce the rocker and mount. Roll-cage must be on top of the floor and welded to floor and door sill. Cannot be cut into the floor and may not be attached to other side.
- 2. All cars are required to have a rear vertical hoop behind and above the driver's head, connected to the left and right front roll bar legs by a roof hoop. Must have full cage and petty bar.
- 3. The front roll bar legs must follow the contour of the windshield post and cowl.
- 4. The maximum distance from the windshield to the rear of the roll bar should be no more than 4.
- 5. A diagonal bar from the top left to the bottom right must support the vertical rear hoop.
- 6. A roll bar must connect the left and right of the rear vertical hoop at seat height and across the floor pan at the bottom.
- 7. An additional bar must be installed at dashboard level, extended from the left front roll bar leg to the right front roll bar leg.
- 8. Roll cage must be full perimeter, no offsetting of cages.
- 9. A minimum of (3) door bars on the left side and (2) door bars on the right side must be used.
- 10. Door bars must be convex in shape and extend into the door panels.
- 11. Door bars must be attached to each other and the frame with vertical bars. A minimum of 1/8" X 1" gussets must be welded into all main cage joints and driver and passenger door bars.
- 12. Minimum 1" diameter steel tubing welded directly to the cage must support the drivers' seat.
- 13. 5-point harnesses (racing belts) are mandatory.
  - a. May not be older than two (2) years from Manufacturers Date on Belt
  - b. Harnesses must be securely fastened to the cage (harness must be attached shoulder level)
- 14. Roll bars in the drivers' area must be padded.
- 15. A Professionally Manufactured Aluminum racing seat is "MANDATORY."
- 16. Headrests and drop-down style window nets are "MANDATORY."
- 15. Front hoop allowed and may go around front radiator with 2 down pipes on each side of the hoop attaching bumper to front hoop.
- 16. Rear cage supports <u>MUST extend into the rear of the frame</u>.
- 17. Plating of driver side door bars "HIGHLY RECOMMENDED."
- 18. Rear hoop is required to protect fuel cells in trunk area. <u>No lowering of fuel cell</u>, <u>NO cutting</u> <u>trunk</u>.
- 19. Rear down-bar can be welded to the strut mounts.

#### <u>Rub Rails</u>

- 1. Rub rails allowed between wheelbase only.
- 2. 1 3/4" round tube maximum, no lower than center of hub and no higher than tire.
  - a. Left side six (6) inch maximum allowed from top to bottom on overall width.
- 3. Rub rails may not extend out more than tires.
- 4. Nerf bars must be securely attached to roll cages.

#### <u>Suspension</u>

- 1. NO Racing Shocks Allowed. (Just heavy OEM parts for make of car you are racing)
- 2. No adjustable ball joints.
- 3. (4) racing springs allowed on all four corners.
  - a. Heavy duty stock mount shocks or struts permitted that are OEM for that make of car.
  - b. Springs may be cut to lower car.
  - c. Springs must mount in factory mounts.
  - d. NO cutting, heating, altering, or modifying <u>of any other suspension parts allowed</u>.
- 4. All cars must maintain a 4" frame and body parts height.
- 5. <u>No rear-end lead</u>.
- 6. Rear suspension is Straight Up! (No rear toe, no tie-downs, no rear suspension enhancing). Parts MUST BE OEM.
  - a. Rear end may be toed in or out, however both sides of the wheelbase must be equal in length (NO LEAD)
- 7. Car must fit on scale pads at end of race.
- 8. A bump-stop or spring rubber may be used on all four wheels (but not at the same time).
- 9. K-Frame reinforcement is allowed. K-Frame must remain in stock mounting location. Reinforcement is subject to modifications per tech inspectors.

#### Tires and Wheels

1. Racing steel wheels allowed, maximum 7" width. Any wheel offset to get 8" over stock track width.

- 2. No aluminum wheels allowed.
- 3. No wheel spacers permitted.
- 4. 1" lug nuts mandatory. Thread "must" be exposed on the outside of lug nut.
- 5. Hoosier track tire only.

#### <u>Brakes</u>

All four wheels must have working brake parts and brake fluid administered to each wheel.

#### <u>Engine</u>

- 1. Engine size and specifications must be stock for year, make and model and utilize stock OEM engine mounts.
- 2. Absolutely <u>NO aftermarket or high-performance parts allowed except for cold air intakes</u>, which may be used if they remain in the engine compartment.
- 3. Absolutely <u>No machining, grinding, posting, gasket matching, etc.</u> of any engine component.
- 4. Engine and engine components <u>must be stock and match VIN tag</u>.
- 5. OEM fuel injection or carburetor for year, make and model.
- 6. Engine computers must be stock for year, make and model.
  - a. Officials will be watching Electrical Ignition Components and are looking into ways to monitor the flashing of ignition modules or any tampering with this aspect"!
- 7. No carburetor spacers or adapter plates permitted.
- 8. Maximum compression of 175 PSI on any cylinder.
- 9. One inch inspection hole required in bell housing.

#### <u>Fuel System</u>

- 1. Fuel cells are mandatory.
- 2. You can use the stock tank if in front of rear axle.
- 3. Fuel cell must be mounted <u>on top of</u> trunk floor, and <u>as far forward as possible</u>, <u>centered in</u> <u>car</u>.
- 4. Cell shall be secured with "minimum" (4) one inch X 1/8" steel straps (2 front to rear, and 2 left to right) with (Large Washers minimum 1/8" thick or 1/8" thick plates) on underside and minimum 3/8" bolts.
- 5. Fuel pump shut off switch is mandatory.
  - a. Must be accessible from both sides of car and be painted a bright color.
  - b. Must be clearly marked Fuel On (in one direction) and Fuel Off in the other.
  - c. Fuel pump shut off switch must kill power to Fuel Pump & Ignition. Switches will be tested periodically during the season.
  - d. Carbureted engines must have a fuel shut off valve and be clearly marked.
- 6. Electric fuel pumps must match OEM specs for fuel pressure.
- 7. An oil pressure cut-off regulated switch for fuel pump is mandatory.
- 8. A momentary push button switch is allowed for starting of the car

#### Drive Train

- 1. Stock automatic or standard transmission for year, make and model.
- 2. Stock torque converter for automatic with stock steel flexes plate.
- 3. Stock steel flywheel and clutch assembly for standard transmission.
- 4. No machining of any drivetrain parts.
- 5. Transmission coolers are allowed.
- 6. Must put 1" hole in bellhousing for tech inspection.

#### Exhaust System

- 1. Stock exhaust manifold only for the year, make and model.
- 2. Any type of muffler or glass pack only.
- 3. Single exhaust only. Must exit behind driver.
- 4. Maximum pipe diameter- 2.5 inches.

#### **Battery**

1. Battery "must be located in drivers' compartment" in an enclosed spill proof container and be secure. Containers must have spill or splash cover.

#### <u>Weight</u>

- 1. Weight for any car must be 2400lbs minimum.
- 2. Any lead must be securely mounted within the wheelbase and painted white.

#### **Additional**

- 1. **Aerodynamics** of any kind or any rear wings or spoilers ARE NOT Permitted Only those that are OEM will be allowed.
- 2. **Transponder** must be 48-inches from center of right hub and must be mounted on passenger side floor.

**NOTICE:** These rules, combined with our 2024 Mahoning Valley Speedway General Rules as well as our Social Media Policy, and Tire Policy (if any) may be found on the Mahoning Valley Website (www.mahoningvalley-speedway.com), and will form the basis for your Divisions total rules.

#### ANY AND ALL RULES SUBJECT TO CHANGE BY TRACK MANAGEMENT - 2024