



# **2016 4 CYLINDER RULES**

## **TERMS:**

**Stock OEM replacement** means that the item/part must have been a standard item/part on the MAKE and MODEL of the vehicle being driven as a race car. Just because a part is manufactured by the company that manufactured the vehicle does NOT mean the part is legal. The part must have been available on the specific vehicle being used as a racecar. Stock OEM replacement direct fit, direct replacement parts must meet size/weight/material requirements as if factory produced. No Modifications.

**Factory Stock/Production or Factory Produced** means manufactured by the company who produced the vehicle being used as race car; manufactured for the year/make/model/of the race car. No Aftermarket parts allowed.

## **PREFACE:**

Any participant who refuses to allow tech officials to inspect their car will be subject to the following – disqualification from the event, loss of all points, and prize money from that event. For handicap purposes you will be credited with a feature win.

Any participant found to be illegal and disqualified from an event will not receive points or prize money for that event. If found illegal on a double feature night, the car will be declared illegal for both events and will not receive any points or prize money for either event. For handicap purposes you will be credited with a win for both events.

**Engine violations or technical issues that are deemed illegal** - You will be disqualified from the event, loss of all points and prize money from that event and a possible total loss of all accumulated points to date.

Merrittville Speedway reserves the right to confiscate any illegal components at any time. Merrittville Speedway reserves the right to alter or amend these rules at any time in the interests of safety, cost or fair competition. The safety of each race car and all equipment is the complete responsibility of the driver/owner, and the driver/owner acknowledges this responsibility by participating in any racing activity at Merrittville Speedway.

## **REMEMBER - BUILD IT LEGAL, KEEP IT LEGAL AND HAVE FUN!**

### **1. COMPETING MODELS**

- a. Open to all cars naturally aspirated only, no turbo or supercharged automobiles. No Porsche
- b. No convertibles, station wagons, jeeps, trucks.
- c. Front or rear wheel drives allowed, no all wheel drives or four wheel drive automobiles allowed.
- d. No rear or mid engine cars.

### **2. APPEARANCE**

- a. All cars must be neatly and brightly painted.
- b. Numbers should be as large as possible on doors, roof, and all four corners of the body.
- c. Number on roof to be read from right side.
- d. Sponsor decals must be placed in a visible location to be eligible for awards.
- e. Year, make and model along with weight classification and engine displacement clearly and neatly displayed on hood is mandatory for proper tech inspection.

### **3. BODIES**

- a. Complete stock original design, make, model and year. No alterations.
- b. Floorboard coverings such as carpeting, door panels, headliner and insulation must be removed.
- c. All holes in floor and firewall must be patched with minimum 18 gauge sheet metal.
- d. Rear seat must be removed.
- e. Hood, roof, doors and truck lid may be gutted. No other panels.
- f. All doors must be welded or bolted shut.
- g. Side scrub rails allowed and must be rectangular tube (1"x 2" ends beveled tight to body)

### **4. BUMPERS**

- a. Bumpers must be securely mounted. Fabricated bumpers are allowed but must have stock appearing cover and must be approved by an official.
- b. Tow hooks must be installed with one on the front and one on the rear for towing purposes.

## 5. CARBURETOR

- a. **Carburetor must be an OEM type. Holley Part # 7448 – 350 CFM 2 bbl allowed. Maximum stock 2 barrel with no alterations.**
- b. **Carburetor must bolt to the intake** manifold (No Carburetor adapters)
- c. OEM 1-1/8" maximum carburetor spacer plate allowed (including gaskets).
- d. Choke plate may be removed.
- e. Maximum 1 and a half inch throttle bore opening (butterfly).

## 6. ELECTRICAL SYSTEM

- a. It is recommended that the battery be mounted under the hood or mounted securely in a spill proof container and must be securely fastened.

## 7. ENGINES

- a. Three (3) or Four (4) cylinder engines only, must be stock for make, model and year.
- b. No 8 plug heads.
- c. No rotary engines.
- d. No rear or mid-engine cars.
- e. Engines no larger than 2.5 Litre (2500 c.c.).
- f. Cranking compression must not exceed 190 psi. penalty of 100lbs to minimum weight for engines above 190 psi, max cranking pressure must never exceed 205psi, no exception.
- g. Camshaft must be stock or stock replacement (stock lift & duration) for engine being used.
- h. No performance camshafts. 2.3 Ford OHC maximum .2437 lobe lift .400 valve lift or .2620 lobe lift .430 valve lift solid lifter cam with 50 lbs. added to minimum weight. .030 over stock valve lift allowed with 50 lbs. added to minimum weight. Camshaft lift must be Canadian or US specs.
- i. No 4 Valve per cylinder
- j. No Dual Overhead Cam
- k. Adjustable cam gears allowed (mustangs only).
- l. Oil coolers will be allowed (mounted in engine compartment only).
- m. Aftermarket radiators or Racing radiators are allowed (mounted in stock location)

## 8. EXHAUST

- a. Stock cast iron exhaust manifold or street type aftermarket header or stock header allowed with 50 lbs. added to minimum weight.
- b. Exhaust must exit behind driver's door securely fastened.
- c. No part of the exhaust allowed in the driver compartment.
- d. Maximum 2 1/2" OD. exhaust pipe. 2" OD maximum exhaust pipe on cars with engine over 125 hp. By manufacturer's specs.
- e. Stock or stock replacement mufflers are allowed.
- f. Exhaust must be securely fastened.

## 9. FIREWALL

- a. Front and rear must remain stock and all holes patched (18 gauge minimum metal)

## 10. FUEL INJECTION

- a. Fuel injection and electric fuel pumps are allowed if equipped as stock.
- b. VW's originally equipped with EFI may convert to an older version of CIS providing the CIS is unaltered and from the same make and model of car.
- c. A matched intake and carburetor set up may replace fuel injection set up with no modifications.
- d. Electric fuel pumps allowed with inertia or oil pressure switch to shut off fuel pressure.
- e. Any air filter allowed. K&N type filter allowed.
- f. Air breather top or bottom can be trimmed. Air must be pulled through stock size filter.
- g. Computer must be stock with no modifications. No removing of rev limiter.

## 11. FUEL SYSTEM

- a. Fuel cells are mandatory and must be securely fastened in the trunk. No sloppy installations.
- b. Fuel cell must have a one way roll over valve and must be vented outside away from driver.
- c. Fuel cell filler neck must be grounded to the car.
- d. Fuel cell must be in a steel container of minimum 20 gauge if exposed to outside elements.

- e. No aluminum tanks.
- f. Full firewall required between drivers compartment and truck area.
- g. Pump Gas Only. No additives allowed. No aviation fuel. No CAM2 racing fuel.

## **12. FRAMES**

- a. Stock frames only. No modifications allowed except for reinforcement.

## **13. GLASS**

- a. All glass must be removed.
- b. Windshields must be replaced with lexan or full wire screen of 1" square maximum.
- c. All external lights must be removed.
- d. No mirrors.

## **14. INSPECTION**

- a. All new cars must arrive at the track one hour prior to start time and report to the tech inspector.
- b. If the car does not meet our rules it will not be able to compete.
- c. All cars are subject to inspection by Merrittville Speedway officials at any time and in any manner determined by track officials. All decisions regarding the timing and manner of the inspections as well as which cars will be inspected are final.

## **15. POINTS**

- a. Points are awarded to the driver, driver must qualify car to be run in a feature
- b. You must let a track official know at pit entry gate and at the pit registration trailer if you are driving a different car than your regular one in any given event.

## **16. RADIOS**

- a. A one-way RACeceiver or scanner is mandatory. Frequency is 454.000.

## **17. REAR END, TRANSMISSION, CLUTCH, FLYWHEEL**

- a. Only stock transmission. No modifications allowed.
- b. All gears must be in working order.
- c. Must have two (2) safety hoops 2" X 1/4" within 6" of either end of the drive shaft. Option of a minimum 1/4" link chain mounted securely on the bottom of a stock floor board will also be accepted.
- d. Driveshaft must be painted white.
- e. Locking of rear ends or differentials allowed.
- f. Stock unaltered driveline for the year, make & model. Tracking must remain square in the rear to a max. of 1 inch.
- g. Clutch pedal must remain stock for make, model and year.

## **18. SEATS AND SAFETY EQUIPMENT**

For all safety equipment: It will be the sole responsibility of the driver, not Merrittville, their agents/officials, or corporate officers to ensure that his/her safety equipment is correctly installed, maintained, and properly used. Please refer to manufacturer installation and usage guidelines and adhere to them.

- a. Aluminum professional built racing seat required. No fiberglass seat allowed.
- b. Seat must be securely fastened in six spots, Four (4) on the bottom and Two (2) on seat back.
- c. Seat must be securely fastened to frame and cage.
- d. No floorboard installations allowed.
- e. A SFI rated -five (5) point safety harness with a 3" wide lap belt, Two – 3" shoulder belt and a 2" submarine belt.
- f. All belts shall be securely fastened to the frame or roll cage with high quality bolts not less than 7/16" in diameter. 1/2" recommended.
- g. It is recommended that seatbelts are no more than 3 years old.
- h. No frayed or torn belts.
- i. Full faced Snell rated SA 2005 or newer helmet.
- j. No open face helmets allowed.
- k. Window net mandatory. Minimum 1" mesh with release at top only. Drivers must wear an SFI 3.2A-1 or better fire retardant racing suit.
- l. Fire proof gloves, footwear, underwear, head sock and neck brace recommended.
- m. All bars and sharp contact areas around driver must be padded with roll bar padding.

- n. All cars will be required to have in their pit area – a fire extinguisher capable of extinguishing gas and oil fires. This is to be visible to tech officials and all crewmembers. All crewmembers must be made aware of its location and must be knowledgeable in the use of the fire extinguisher.
- o. The use of an SFI-certified head and neck restraint system is recommended.

## **19. STEERING**

- a. Stock steering for the make and model must be used. No modifications allowed.
- b. No steering wheel quickener allowed.
- c. Steering wheel quick release allowed.
- d. Center of steering wheel must be padded.
- e. Must have stock style collapsible steering column.

## **20. SUSPENSION**

- a. Stock replacement parts only allowed. No modifications allowed.
- b. Springs can be any size or spring rate. Do not have to be the same rate side to side. Springs can be cut. Must be in stock location.
- a. Original OEM style shock.
- b. The use of aftermarket bushings allowed.

## **21. ROLL BARS**

- a. A minimum six point roll cage is required. Minimum 1-1/2" diameter OD X .120" wall or 1-3/4" x .095" wall.
- b. Galvanized, aluminum or black pipe and/or exhaust tubing are not permitted.
- c. Must have bars on the drivers side and passenger side is recommended.
- d. Approved padding must be used at any point where driver contact might occur.

## **22. WHEELS, TIRES, BRAKES**

- a. All four STEEL rims must remain stock offset. There will be a maximum 1/2" tolerance. Example: If the right front rim is a 5" backset, the other wheels must be within 1/2" of this offset. This does not mean you can use a 5" on the right front, a 5 1/2" on the left rear and a 4 1/2" on the right rear.
- b. Aftermarket Steel rims are allowed with the factory offset.
- a. All wheels must have the same offset.
- b. Maximum width of six inches - measured inside of bead to inside of bead,
- c. 1" lug nuts must be used. 1/2" stud recommended.
- d. Wheel spacers are not permitted.
- e. Any DOT street legal tire permitted. No mud, snow, ice or off road tires allowed. No racing tires.
- f. Stock brake system for make, model and year. All cars must have 4 wheel brakes and must function at all times.
- g. No adjustable brake bias, no aftermarket proportioning valves.
- h. Brake pedal must remain stock for make, model, and year.

## **23. WEIGHTS**

- a. Added weight must be securely mounted with minimum 2-1/2" diameter bolts.
- b. All weight must be painted white with car number visible.
- c. A weight rule has been established – cars must weigh 1 pound per cc, but never less than 1900 pounds, plus handicap with driver at anytime.
  - i) Mustang, Capri, Sentra 2500 pounds minimum
  - ii) Rabbit, Golf and Jetta 2550 pounds minimum
  - iii) BMW – 2200 pounds minimum
  - iv) Chevette 1900 pounds minimum
  - v) Nissan Stanza 2.4 litre and Nissan 240 – 2800 pounds minimum
- d. All weights indicated are car and driver after event.
- e. Any car deemed to be over competitive will be required to add weight as directed by tech inspector.
- f. In the event that a driver is assigned a weight penalty for competitive equality, the weight will be added to the car that the driver is driving. Therefore, in the event that the driver must switch cars, the car the driver is driving on the given night will be required to carry that additional weight.

**PARTICIPANT MUST BE A CURRENT MERRITTVILLE SPEEDWAY LUCAS OIL WEEKLY RACING SERIES MEMBER DRIVER AND HAVE ATTENDANCE OF 75% OR GREATER DURING THE SEASON TO BE ELIGIBLE FOR ANY AWARDS OR POINT MONEY THAT MAY BE AVAILABLE.**