



*" THE WORLD'S TOUGHEST MOTORSPORTS BATTLEGROUND "*

## *Figure Eight Ironmen Rule*

*2023 - 2024*

THE RULES AND/OR SPECIFICATIONS SET FORTH HEREIN ARE DESIGNED TO PROVIDE FOR THE ORDERLY CONDUCT OF RACING EVENTS AND TO ESTABLISH MINIMUM ACCEPTABLE REQUIREMENTS FOR SUCH EVENTS. THESE RULES SHALL GOVERN THE CONDITION OF ALL SPEEDWAY EVENTS, AND BY PARTICIPATING IN THESE EVENTS, ALL SPEEDWAY ENTRANTS ARE DEEMED TO HAVE COMPLIED WITH THESE RULES. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF, OR COMPLIANCE WITH THESE RULES AND/OR SPECIFICATIONS. THEY ARE INTENDED AS A GUIDE FOR THE SPORT AND ARE IN NO WAY A GUARANTEE AGAINST INJURY OR DEATH TO PARTICIPANTS, SPECTATORS, OR OTHERS.

NOTICE: Creative interpretation and/or anything that may not be covered by the following rules or racing procedures are the sole responsibility of the Driver. If a question should arise a Driver should inquire with a Painesville speedway Competition Inspector and/or Race Director before proceeding. Any decision on questionable items about rules and racing procedures is up to the Competition Inspector and/or Race Director and their decision is FINAL! Remember: It is the responsibility of the Driver to keep his/her car legal and follow all rules and racing procedures at all times. Infractions of technical rules of any kind may result in an additional weight penalty, forfeit qualifying, or not being able to compete until infraction is corrected. Penalty will be determined by a Competition Inspector and/or Race Director.

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## **1.0 ELIGIBILITY:**

- 1.1** Any cars from 1969 to present. REAR WHEEL DRIVE ONLY!
- 1.2** S-10 Trucks are permitted as long as they conform to all rules.
- 1.3** No cars will be permitted to race if they need a computer to run.
- 1.4** No fuel injection cars permitted. Minimum 107" wheelbase.
- 1.5** All drivers must be at least 17 years old to compete in this class. You must have one year experience in any other division before you can race Figure Eight. You do not need the one year of experience if you are over 18.

## **2.0 BODY:**

- 2.1** Body must be factory
- 2.2** Hood and trunk lid may be gutted. Hood pins must be used to secure down.
- 2.3** Cross Breeding of chassis and bodies permitted. (Ex 1981 Monte Carlo frame and engine with a 1998 Ford Ranger Body).
- 2.4** All doors must be welded shut. Inner door panels can be removed.
- 2.5** Bumpers may be gutted and one 1 3/4" x .065 tubing will be allowed behind bumper cover.
- 2.6** Hood and window moldings may remain.
- 2.7** No reinforcing of Bumpers or body panels.
- 2.8** Trunk floor maybe removed.
- 2.9** Grill and headlight buckets must be metal. Lights and exterior chrome must be removed.
- 2.10** External tow hooks or chains on front and rear in the center of the car to support the weight of the car.

## **3.0 FRAMES:**

- 3.1** Frame must remain factory stock OEM dimensions front to center of rear hump.
- 3.2** Rear frame rail can be replaced from the center of rear hump to back bumper. Using 2" x 3" box tubing.
- 3.3** Tube horns are permitted as replacements, and must be from front of cradle only
- 3.4** Frame cannot be altered for fuel pump. Frame may be X'ed using 1 1/2 inch round or square tubing with a .095 wall thickness.
- 3.5** Frame height with driver must have a ground clearance of 5 inches all around the car.
- 3.6** Bumpers must be chained up or sliders must be installed. No mounted solid bumpers.

## **4.0 INTERIOR:**

- 4.1** All flammable material must be removed including door panels, seats, carpet, etc.
- 4.2** Dash removal is optional.
- 4.3** All holes in floor and firewalls must be covered with sheet metal.
- 4.4** Factory stock floor may remain or could be removed.
- 4.5** If factory floor is removed, the driver's floor and surrounding areas must be replaced with sheet metal. The rest of the interior floor can be aluminum.
- 4.6** All sheet metal must be welded or pop riveted. No screws allowed.

## **5.0 HOOD / REAR DECK LID:**

**5.1** Cannot be altered in any way, but inner panels may be removed.

**5.2** Hood pins must be installed.

## **6.0 RUB RAILS:**

**6.1** Must be in centerline of car between front and rear tires. Must be secured to roll cage and be up against body and must not be larger than (2") wide and (1") thick. No sharp edges. No other bars outside of car allowed.

## **7.0 WINDSHIELD / MIRRORS:**

**7.1** Must have stock windshield made of clear glass, Lexan, or screen.

**7.2** If Lexan or screen is used for windshield, a minimum of three 1" safety bars connected to roll cage inside of car behind windshield must be installed for support.

**7.3** No back seat left & right side windows or rear window permitted.

**7.4** The use of any type of mirrors is prohibited.

## **8.0 SEAT:**

**8.1** Single front Aluminum racing seat mandatory, and must be securely fastened to cage. Seat back must be solidly fastened to cage member. Minimum of 3/8 inch bolts to be used in seat mounting.

**8.2** Containment Racing Seat Highly Recommended. If not, seat mounted head, shoulder, and leg supports are strongly recommended.

## **9.0 ROLL CAGE:**

**9.1** Four point perimeter type roll bars required in all cars.

**9.2** Minimum outside diameter (OD) is (1.75") and must have a wall thickness of (.095")

**9.3** The top of cage should form a box and follow the contour of the windshield in front and rear.

**9.4** Minimum (4) door bars are required on driver side.

**9.5** Driver side door bars must be filled in with a (10) gauge steel door plate, with a minimum thickness of (.125"). Must be securely welded to the outside of the driver side door bar and cover the area from top door bar to bottom door bar and from rear hoop down post to front cage down post. The metal plate is to stop anything from entering driver's area.

**9.6** Front/Rear hoops are permitted.

**9.7** No bars may be connected to the bumpers or kick downs (forward) to any point from radiator protection bars.

**9.8** No mounting of any suspensions parts to cage allowed.

**9.9** ROLL CAGE INSTALLATION WILL BE RIGIDLY INSPECTED!

## **10.0 SPOILERS:**

- 10.1** Rear spoiler maximum (5") high of material and no wider than the rear deck lid. All spoilers must be constructed of clear Lexan or you will be instructed to remove the spoiler.
- 10.2** No spill boards.

## **11.0 ENGINE:**

- 11.1** Engine size as follows: GM 350/Ford 351 (.060) overbore for cleanup, Mopar 360 maximum. NO (400cu.in.) blocks or strokers. No crossbreeding. GM to GM, Ford to Ford, Chrysler to Chrysler.
- 11.2** Any cast iron, straight plug cylinder head is permitted. Guide plate and stud girdles are allowed. THE FOLLOWING ARE NOT PERMITTED: No Vortex heads, porting, sanding, polishing, gasket matching, acid dipping, internal painted/epoxy. No removal or addition of material of heads or intakes permitted. No roller cams, gear drives, oil coolers or dry sump systems permitted.
- 11.3** Compression not to exceed 10.5 to 1.
- 11.4** Only original OEM 23 degree or World Product #043600-1, 042660-1, 042670-1 limited to maximum 2.02 intake and 1.60 exhaust valve size.
- 11.5** Valve springs, retainers, and push rods must be magnetic steel only.
- 11.6** No shaft mounted rockers or Jesel set-up allowed. Roller rockers permitted.
- 11.7** Hydraulic lifters and crankshaft with a maximum of .450 total lift at valve permitted.

## **CRATE MOTOR OPTION:**

- 11.8** 602 sealed crate engines will be allowed a 100 lb weight break and a 1% left side weight break. Absolutely NO modifications can be done to the engine. 4 barrels are allowed for crate engines only. Four barrel must be a Holley 650cfm 4150 4bbl. Part #6-80541-1 only. No exceptions. Track officials reserve the right to tear down a crate motor exactly the same way they would a built motor. We will not be responsible for the costs incurred to "reseat" any crate engine. TPS and LRP also reserve the right to pull and dyno engine at track expense. If the engine comes back illegal, driver, car owner and car will face possible fines, suspensions and potential bans.

## **12.0 EXHAUST:**

- 12.1** Stock unmodified center dumps or log style cast iron exhaust manifolds or (1 5/8") header with a (2 1/2") collector.
- 12.2** Header over the top part #135H from Schoenfeld ONLY!
- 12.3** No porting or polishing.
- 12.4** Exhaust pipes may be maximum (2 1/2" O. D.) and must exit out either side, behind the driver.
- 12.5** Cars may be required to install mufflers and pass a (.98) decibel test.
- 12.6** No "H", "X" or two into one pipe.
- 12.7** No exhausting holes may be drilled or cut into pipes.

### **13.0 CARBURETOR / INTAKE:**

- 13.1** Carburetor will be limited to (1) 500cfm Holley (#4412) unmodified (air horn must be intact) 2bbl carburetor with stock size venturi diameter and throttle bore, and must pass a gauge test. **NO HOLLEY 4412 HP CARBURETOR IS PERMITTED.**
- 13.2** Must run a phenolic carb spacer #85-060.
- 13.3** Stock Boosters Only! If carburetor adapter is to be used it cannot exceed (1") thick.
- 13.4** Carburetor must have (2) throttle return springs hooked at (2) different point locations.
- 13.5** A throttle rod is required. No factory throttle cable assemblies allowed.
- 13.6** Toe-type return gas pedal mandatory.
- 13.7** Edelbrock part (#350-2101) intake manifold will be used for GM engines. Ford engines as Follows: (289/302 engines Edelbrock #2121) and (Windsor 351 engine Edelbrock #2181 **ONLY. NO Brzezinski, Bowtie, Marine, High-rise or Racing after-market intakes.**
- 13.8** All part numbers must be legible and unaltered.
- 13.9 \*CRATE MOTOR\*** Holley 650cfm 4150 4bbl carburetor Part # 0-80541-1 will be the only permitted carburetor for the crate engine. Unmodified air horn must be intact with stock size venturi diameter and throttle bore and must pass a gauge test for top and bottom of carburetor.

### **14.0 FUEL PUMP / FUEL LINE / FUEL CELL / FUEL:**

- 14.1** Pump shall be standard type unit installed on engine only.
- 14.2** No electric fuel pumps or glass/plastic fuel filters.
- 14.3** Fuel line must run under car, and must be fastened to underbody or frame of car at no more than (24") intervals. It is recommended that rubber or plastic garden hose be used over metal Fuel lines, and be fastened down with pipe straps.
- 14.4** Fuel cell to be a Maximum (22) gallon commercial type cell bladder with foam insert, required. Must be mounted in trunk area, in between frame rails, with bottom of fuel cell no lower than the bottom or rear-end center section. **14.5** Must use at least (2) two (1") wide straps to mount fuel cell.
- 14.5** Rear protection bars mandatory.
- 14.6** Only straight gasoline or racing fuel is permitted. **NO NITRO, ALCOHOL OR NITROUS.**

### **15.0 BATTERY / STARTER / IGNITION:**

- 15.1** Battery may remain under the hood, or may be moved into the driver's compartment but must be mounted in a **PLASTIC MARINE TYPE BOX** in case of rollover.
- 15.2** Battery must be securely mounted down. **NO RUBBER OR WIRE -TIE DOWNS!**
- 15.3** Starter must be operable at all times and able to start and move car at all times.
- 15.4** HEI stock appearing ignition allowed. No external coils or MSD boxes. All parts must be under the cap.

### **16.0 RADIATOR / CATCH CAN:**

- 16.1** Any radiator allowed which will fit under stock hood without cutting, dimpling or altering stock fit hood. Must have an upper 180 digress fan shroud.
- 16.2** All cars must be equipped with a radiator overflow catch can.
- 16.3** **NO ANTIFREEZE WILL BE PERMITTED.** The use of antifreeze is prohibited and will result in a \$250 fine, immediate removal from the racing event. Car must be re-inspected before allowed back on the track. (Same day or next participating race event).

## **17.0 OIL PAN:**

- 17.1 Must have a minimum ground clearance of (4").
- 17.2 Oil pan may be replaced from stock but may not be modified so as to allow lowering of crankshaft centerline.
- 17.3 Optional (8) qt capacity oil pan permitted.
- 17.4 No Dry Sump System.

## **18.0 TRANSMISSION / CLUTCH:**

- 18.1 Standard or automatic transmissions only.
- 18.2 A steel blow proof bell housing, 360 degree for standard transmission and a metal blanket for an automatic transmission is mandatory.
- 18.3 Clutch must be standard single disc (10 1/2") factory production type with clutch and pressure plate. Total weight must be a minimum of 35 lbs. all together. NO SMALL CLUTCH, NO ALUMINUM PRESSURE PLATE OR FLYWHEELS, NO DOUBLE OR TRIPLE DISC CLUTCHES OR 10,000 RPM CLUTCH.
- 18.4 Standard transmission must be OEM without internal or external modifications.
- 18.5 Steel flywheel only, with a minimum weight of (15) lbs.
- 18.6 No machining of any kind on flywheel.
- 18.7 Transmissions must have at least two forwards and one reverse gear.
- 18.8 Automatic transmission must have a functional OEM torque converter, with OEM stall speed.
- 18.9 Sock type torque convertor no less than 10 inches and completely functional.
- 18.10 All transmission lines must be metal.
- 18.11 After market coolers are permitted.

## **19.0 REAR END / DRIVESHAFT:**

- 19.1 Must be steel driveshaft, painted white. No exotic materials allowed.
- 19.2 Rear end upper and lower control arms must be steel, stock length, stock appearing and equal length on both sides. Mounted into a single, non-adjustable holes. No heim joints. Polyurethane or steel bushings permitted.
- 19.3 Four link suspension only. No 3 link or panhard bar set up.
- 19.4 Ford (9") rear end and /or floater permitted.
- 19.5 No quick change rear ends.
- 19.6 No Aluminum driveshaft.
- 19.7 Driveshaft must have at least (1) driveshaft loop.

## **20.0 SUSPENSION FRONT / REAR:**

- 20.1 All suspension must remain factory manufactured for year/make of chassis being used.
- 20.2 All suspension mounting points must remain factory stock and meet OEM dimensions.
- 20.3 No interchanging of parts. No cross breeding. (Ex. '74 Chevelle spindles on a '78 Malibu)
- 20.4 Load bolts are permitted in rear only. No front load bolts allowed.
- 20.5 Spring spacers and twist block are permitted.
- 20.6 Racing springs and spring rubbers allowed. One per wheel and must remain in stock location. Leaf springs must have the same number leaves on both sides.
- 20.7 After market replacement tubular upper A-frames are permitted.

- 20.8 If replacing upper A-frames, Metric cars must be 8 inches for right side and 8.5 inches for left side. Camaro's and full size cars upper A-arm must be 9 inch for right side and 9.5 inches for left side.
- 20.9 Lower A-frames must remain stock OEM in stock location for frame being used.
- 20.10 No after market or adjustable ball joints. After market spindles (drivers side part # ALL55988, passenger side part # ALL55989 are permitted.
- 20.11 Control arm bushings front and rear. Must be stock replacement or polyurethane. No offset or moon ball bushing allowed. Solid steel bushings are permitted.
- 20.12 Control arms may not be moved from original stock location.
- 20.13 No modifications to lower A-frame or A-frame mounts will be permitted.
- 20.14 Ford Nine inch rear ends and limited slip are permitted.
- 20.15 Sway bar must be stock style, one piece, no spline.

**\*SUSPENSIONS WILL BE RIGIDLY INSPECTED! ALL PART NUMBERS MUST BE LEGIBLE AND UNALTERED\***

### **21.0 SHOCKS / SPRINGS:**

- 21.1 One steel shock per wheel. Shocks must be steel, economy type. Stock replacement for make and model.
- 21.2 Rear shocks must be in stock location with springs inside of the frame rails.
- 21.3 No gas rechargeable, rebuildable, adjustable, inverted or coil binding allowed. Schrader Valve, Coil over, and Coil over Eliminators are NOT PERMITTED.
- 21.4 Total racer cost of less than (\$125) per shock new per (Speedway Motors Catalog). Shock Rule to be strictly enforced. Bump stop technology is NOT PERMITTED Minimum (5") diameter front and rear spring.

### **22.0 HUBS / SPINDLES:**

- 22.1 Must be OEM spindle. No cross breeding of spindles permitted. (E.g: GM to GM; Ford to Ford) or an aftermarket 3- piece spindle part #91034501 allowed.
- 22.2 Studs for wheels must be (5/8") diameter minimum.
- 22.3 No wide 5's.

### **23.0 STEERING:**

- 23.1 Must use stock steering box in stock location and have a minimum of (2) universal joints.
- 23.2 NO RACK AND PINION or CENTER STEERING!
- 23.3 Collapsible steering column highly recommended.
- 23.4 Must be stock center link for chassis being used.
- 23.5 Aftermarket tie rods will be permitted.
- 23.6 Idler Arm must be stock appearing and non-adjustable.

### **24.0 BRAKES:**

- 24.1 Shall be factory stock hydraulic type brake, operating all four wheels at all times.
- 24.2 Brake inspection and/or test may be required at any time.
- 24.3 ALL NON-MECHANICAL TRACTION CONTROL DEVICES INTENDED FOR LIMITED WHEEL SLIP IS PROHIBITED. NO WIRING OF ANY TYPE PERMITTED TO FRONT/REAR WHEELS OR SUSPENSION.
- 24.4 NO Rear disc brakes, anti lock brakes, or trick brake system are permitted.
- 24.5 Stock appearing steel calipers only.
- 24.6 Brake bias adjuster allowed.



## **25.0 TIRES / WHEELS:**

- 25.1** Tires are to be mounted on a steel racing wheel with a maximum width of (8") measured from bead to bead, with a (15") diameter. Same specification on right side of car in oval race.
- 25.2** Factory stock rims permitted for Figure Eight Race.
- 25.3** One inch lug nuts are mandatory.
- 25.4** One set of tires per half of the season. Same four feature tires must be used for first half of season. New set of tires can be purchased for the second half of the season.
- 25.5** A tire durometer reading of a minimum of 55. No tolerance
- 25.6** Wheel width of (77") will be measured from outside tire to outside tire front and rear.
- 25.7** HOOSIER Comanche tires will be run in the oval races. Hoosier G-60s will be run in the Figure Eight races.  
**\*Tires Must Be Purchased Through The Painesville Speedway\***

## **26.0 WEIGHT:**

- 26.1** All cars to weigh a minimum of 3300 lbs. and maximum of 3600 lbs. with a (55.0%) left side weight with driver at all times.
- 26.2** All cars will be weighed with driver at any time to verify weights.
- 26.3** All attached on weight MUST be securely fastened to the car and must be painted white with car number for identification. Added weight bolted down with two ½ inch bolts.
- 26.4** Any added weight cannot be lower than fuel cell in rear and frame rails on the sides.

**\*If any weight is lost during the race, it cannot be returned to the car for post race inspection\***

## **27.0 PAINT / NUMBER:**

- 27.1** Numbers must be neatly in appearance and painted on both sides and on the ROOF of car, readable from the right side, in minimum twenty-four (24") heights, with a four (4") stripe width in a color offering contrast to the color of car.
- 27.2** A four (4") number with the letter (D) lettered in white or yellow located on the upper right side corner, (Passenger Side) of the windshield.
- 27.3** A car with two drivers. Each driver must have its own number and on the car when he/she is driving.

**\*\*All cars must be neatly painted in appearance and lettered at all times\*\***

## **28.0 TRANSPONDER / RADIO:**

- 28.1** Transponder is to be mounted behind the left rear tire.
- 28.2** The use of two-way communication is prohibited. Any communications between crew member and driver will result in complete disqualification.
- 28.3** A one-way receiving radio scanner locked to Frequency (469.5000) is MANDATORY and must be operational and used at all times, including all feature races

## **29.0 SAFETY EQUIPMENT:**

- 29.1** All drivers must be protected at all times with a clean SFI or equivalent full fire driving suit, fire retardant gloves and shoes.
- 29.2** Hans, Hutchens or equivalent head and neck restraint is highly recommended.
- 29.3** A Snell-Rated helmet SA2015 or newer is required. Sticker must be visible and verifiable.
- 29.4** Harness and seat belts and are required to be five-point system with lower crotch belt (six point systems are recommended). Mounting attachment bar for shoulder harness must be at shoulder height of the driver and harness should not bend or change direction. Belt systems must be a minimum of (2'') SFI approved units, dated within three years to date.
- 29.5** All cars must have a driver's side web style window net with a latch mechanism on the top front corner and must fall down alongside of the driver's door when released.
- 29.6** All cars must have a (2 ½) pound minimum B and C dry chemical fire extinguisher with gauge mounted within easy reach of the driver and in working order at all times.
- 29.7** An engine ignition kill switch must be mounted within the driver's reach and must be marked ON / OFF.

**NOTICE / WARNING:** All part numbers must be visible and unaltered. If part number is not legible or has been altered in any way it will be determined to be illegal and not permitted for use. If any items are found to be illegal, TPS and/or its Track Officials reserve the right to confiscate any illegal parts.

**REMEMBER:** TPS and its officials reserve the right to change specifications/procedures/competition rules, and add/or subtract cars to the field at any time. Those who sign-in and/or start in an event agree to be governed by these rules and by all decisions of the Speedway and its officials.