

American Iron Series

Official Rules Rules Subject To Change

2004 Rules and Classifications

1. Introduction

The American Iron Series was created to meet the needs of domestic sedan racers looking for a series specifically tailored to accommodate modified vehicles that are currently relegated to racing in Unlimited or Spec-limited classes. This class is designed to field a large high-profile group of American Musclecars and will unify fields of cars that currently race in other sanctioning organizations. This large field/open modification concept will provide racers and vendors access to a promotional and racing vehicle containing similarly prepared and appearing cars that can run nearly unlimited configurations.

2. Intent

The American Iron Series Rules will encourage each competitor to create an aftermarket-sourced configuration that will make their car perform at an optimum level. The intent of the rules is to allow competitors to use a combination of parts that will increase the performance and competitiveness of the vehicle and create promotional exposure for that vendor. It is the intent of the series to serve as a “showcase” for aftermarket tuners and manufacturers and to create tremendous exposure for their products and services while providing a friendly, accommodating, and challenging environment for the series drivers. This approach is intended to create a reciprocal relationship that will encourage the aftermarket tuners to give their full support and attention to the competitors in the series.

3. Sanctioning Body

The American Iron Series will be supported and sanctioned by the National Auto Sport Association (NASA). All race events will be governed by the rules set forth by the American Iron Series Directors and NASA officials. All competitors agree to also abide by the rules set forth in the NASA’s current Club Codes and Regulations (NASA CCR) and any supplemental rules issued by the American Iron Series Directors. Any decision made by the American Iron Series Directors regarding the status of American Iron competitors or their vehicles is final.

4. Eligible Manufacturers/Models/Configurations

- a) All 1960 through present, American-made vehicles certified by the United States Department of Transportation for street use at their date of manufacture.
 - b) 100-inch wheel base minimum.
 - c) Front engine.
 - d) Rear wheel drive
 - e) Solid rear axle.*
- * 1999-current Mustang Cobra with factory IRS is allowed and updating of 1979-current live axle Fox Body or SN95 cars to factory IRS is allowed. “Factory IRS” is defined as the OEM installed carrier assembly and center differential. Other IRS cars allowed are MN12 chassis Ford Thunderbirds/Mercury Cougars and 2004-up Pontiac GTO’s.
- f) No tube frame chassis conversions will be allowed.
 - g) Vehicle must retain its stock front clip, floorpan, and subframe

5. Safety

5.1 Safety Requirements

All safety requirements will follow NASA standards as detailed in the 2003 NASA CCR. Where the American Iron Series Rules and the NASA CCR’s differ, the American Iron Series Rules will supercede the NASA CCR. All vehicles and competitors must be outfitted with proper NASA CCR-compliant safety

gear including, but not limited to: legal roll cages, fire suppression systems, harnesses, window nets, safety switches, and proper driver attire. Regardless of vehicle weight, the use of 1&3/4" x .120 DOM roll cage material is highly recommended.

5.2 Class Safety

The NASA Chief Scrutineer or American Iron Series Directors may exclude any car from competition for any items that the Directors or Scrutineer deems to be unsafe. The Event Director may also exclude any car for modifications the Event Director deems to be illegal or unsafe.

5.3 Steering Wheel Lock

Steering wheel locks may remain intact, but it is highly recommended that the steering wheel lock be removed.

5.4 Air Bags

All cars equipped with air bags must either have the systems disabled or removed. Only an American Iron Series Director can make an exception to this rule.

5.5 Sunroofs/Moonroofs

Sunroofs or Moonroofs made of glass must be either:

- a) removed from the vehicle during competition; or
- b) replaced by an acceptable covering such as sheetmetal that is securely attached to the vehicle covering the opening.

Metal sunroofs may be retained if additional fasteners are used to secure them to the vehicle.

5.6 Drive Shaft/Torque Arm Safety Loops

A drive shaft safety loop is recommended to retain the front end of the drive shaft in the event of a universal joint failure. A suitable torque arm safety loop is also recommended to retain the torque arm in the event of a torque arm mount failure.

5.7 Scattershield

The installation of a scattershield or explosion-proof bell housing is not required but is highly recommended.

5.8 Masterswitch

The installation of an electrical cutoff (Master Switch) is required and the switch must conform to the specifications set forth in the NASA CCR.

5.9 Fuel Safety Cell

The installation of a fuel safety cell is not required but is highly recommended. If a fuel cell is installed, it must be installed in accordance with the rules set forth in the NASA CCR.

5.10 Fire Extinguisher/Fire System

All cars must have a NASA CCR-compliant fire extinguisher installed in a manner that meets the requirements of the NASA CCR. The installation of an onboard fire system meeting the NASA CCR is not required but is strongly recommended. When a dry sump oil container is placed in the driver's compartment, the competitor must install an onboard fire system that covers the driver's compartment in fire retardant chemicals in the event of a fire and have ready access to the release actuator while seated in the driver's position.

5.11 Convertible/T-top Cars

Convertible/T-top cars are allowed to compete in the series, but they must have an additional support bar added to the roof halo of the roll cage running from front to back following the centerline of the car. Convertible/T-top cars must also employ arm restraints as required by the NASA CCR. Convertible cars

must run with the top down during competition and provide suitable means to prevent the top from deploying in the event of a rollover. T-top cars must remove the T-tops during competition.

5.12 Roll Cage

The roll cage must comply with the roll cage standards of the NASA CCR. However, a roll cage may also provide additional chassis stiffening through the use of alternative mounting points. As such, the roll cage mounting points are unrestricted. The roll cage may also pass through the firewall and attach to the front shock towers. Additional bracing may also be welded to the front of the shock tower and extend forward and down to the forward most part of the original frame rail. This bracing may not pass through the shock tower and must not form the upper mounting point for an aftermarket SLA system as the SLA must still remain within the original shock tower. The mounting plate material must conform to the specification in the NASA CCR but the plate size and design is unrestricted. Interior body panels and sheetmetal may be bent or altered to accommodate the roll bar design.

5.13 Door Safety Bars

In addition to meeting all the NASA CCR specifications for the rollcage, American Iron Series cars must also meet the following additional specifications. At least one door bar must be used on both the driver and passenger sides. The door window glass, window operating mechanism, door panel, and door latch assemblies may be removed, but the OEM side impact beam on the drivers side may not be removed or modified unless NASCAR-style bars which extend to the outer door skin are added to the roll cage. It is highly recommend using a NASCAR style door bar for adequate side impact protection.

6. Car Classifications

In order to maintain a fair and competitive racing field, all cars must conform to specific power to weight ratios. As such, there will be two classes in the American Iron Series. Vehicle weight measurements will be taken post-race with driver. No addition of any fluids, removal of equipment, or other activity that could modify the vehicle weight is allowed prior to weighing the vehicle. Also, no other adjustments that could adjust weight or power figures may be made to the vehicle from the time it enters the track for competition or qualifying until the time it is released from impound by an official.

6.1 American Iron

The lower division class will be called "American Iron" [AI] and will have a strict 9.5:1 (9.5 pounds of vehicle weight per each horsepower) power to weight ratio **maximum** and 9:1 (9 pounds of vehicle weight per each foot-pound) torque to weight ratio **maximum** as measured at the rear wheels. All vehicles that compete in this class may have less than the specified amount but may not exceed the 9.5:1 and 9:1 ratios. ~~Vehicles that exceed this ratio must race in the American Iron Extreme class.~~ The minimum weight for a V8 powered AI car is 2800 pounds with driver. No minimum weight for 4 or 6 cylinder powered AI cars. Fox and SN95 chassis vehicles are allowed a maximum wheelbase of 102.2 inches and the wheelbase for all other AI vehicles shall remain within two and one-half (2.5) of the original factory configuration. Fox and SN95 chassis vehicles are allowed a maximum allowable wheel width of 72.25 inches with a +/- .25 inch to tolerance (measured at the outside edge of the tires). A Fox or SN95 vehicle must be able to drive through a fixture laid on the ground measuring 72.25 inches wide and 3 inches in height.

Deleted: with the amount of torque not to exceed 380 foot-pounds

Deleted: or the 380 foot-pound torque limit

6.2 American Iron Extreme

The upper division class will be called "American Iron Extreme" [AIX] and will include all cars that have a power to weight ratio (measured at rear wheels) greater than 9.5:1 (9.5 pounds of vehicle weight per each horsepower). The minimum weight for an AIX car is 2700 pounds with driver in full race dress. AIX cars will have a maximum allowable wheel width of 76 inches with a +/- .25 inch tolerance (measured at the outside edge of the tires). The vehicle must be able to drive through a space measuring 76 inches wide and 3 inches in height laid on the ground. The wheelbase for any AIX vehicle shall remain within three (3) inches of the original factory configuration.

7. Modifications

7.1 Performance

Any performance modification is allowed provided the car meets the class power to weight ratio rule and complies with the class configuration specifications defined in Section 4. American Iron Extreme cars are unrestricted in all performance modifications with the exception of using Nitrous Oxide power adder systems. Use of Nitrous Oxide power adder systems is specifically outlawed in either AI or AIX.

7.2 Tires/Wheels

American Iron- The Toyo Tire RA-1 will be the Spec tire for 2004. Any Toyo RA-1 meeting a maximum width of 275mm (according to manufacturer specifications) and maximum diameter of 17 inches will be allowed in the American Iron class. Any wheel with a maximum wheel diameter/width of 17" X 9 1/2" is allowed.

American Iron Extreme- Any size readily available commercially sold DOT certified tire is allowed. However, AIX competitors may only use a maximum 18-inch diameter wheel with a maximum width of 11 inches.

NOTE: Toyo will be contributing to a prize fund for every tire sold to AI series competitors only. AIX competitors are not eligible for this contingency. All competitors need to photocopy the invoice showing the purchase of shaved RA-1 tires and turn into the American Iron Series Director. Any competitor that does not turn in receipts will not be eligible for this contingency.

Toyo RA-1 Dealers

AIM, CA- (Ron) 707-938-9193

Vilven Tire, IL (Bob) 800-251-0017

Bob Woodman Tires, SC 843-571-2277

A to Z Tire, TX (Kerry) 800-725-3151

7.3 Frame

The entire tub, floor pan, firewall, and frame assemblies including the cowl and windshield frame must remain in the stock position and cannot be relocated. "Cowl" is defined as the metal structure installed by the factory between the firewall and base of the windshield. Cars may not be "channeled" to raise the floor within the body or lower the body below the frame rails. The only modifications to these structures allowed will be in the following instances:

- a) To facilitate the addition of safety equipment such as subframe connectors and roll cage bracing (i.e. roll cage may extend through the firewall to strut towers);
- b) To facilitate plumbing or electrical access.
- c) To facilitate transmission fitment or access.
- d) For installation of a fuel cell or fuel tank access.
- e) For exhaust clearance. This does not allow exhaust components to be run through the firewall, which is not allowed.
- f) To facilitate installation of and access to ignition and induction components in 4th generation F-body GM vehicles. Allowed modification is restricted to removal or clearancing of the cowl/wiper bucket area. The cowl and firewall must remain otherwise intact.
- g) The floorplan may be modified for the purpose of facilitating the installation of suspension components such as a three-link type suspension. All components that intrude into the cockpit must be covered.

Deleted: in AIX vehicles

7.3.1 Radiator core supports may be removed or modified but frame rails must remain intact.

7.3.2 All cars must have OEM front and rear shock towers in the same location as stock. AI cars must utilize the OEM rear shock towers for rear shock attachment. Attachment of camber or caster adjusting devices is unrestricted. AIX cars must have OEM shock towers in place and resemble the factory build. The shock towers may be modified to facilitate suspension component fitment (i.e. SLA, etc) but must retain the general shape, structure and location as stock.

7.4 Body/Interior

- 7.4.1 Cars must have neat and clean appearances. All panels must fit properly and be free of sharp edges. All panels must be painted. No vehicle will be able to compete in more than one event with obvious body damage or unpainted body panels.
- 7.4.2 American Iron Extreme cars are unrestricted in all body panel material and modification. AIX cars are allowed to remove rear inner fender metal structures to facilitate tire fitment ("mini-tub"), but an alternative structure must be put in place to cover the tire and seal the tub assembly.
- 7.4.3 Only OEM (or the equivalent replacement of same type and material) body panels may be used in the American Iron Class.
- 7.4.4 Composite hoods, and bumper covers (fiberglass/carbon fiber, etc.) are allowed within the power to weight ratio constraints of the American Iron Class.
- 7.4.5 Acid dipping or body panel lightening is not allowed in the American Iron Class.
- 7.4.6 Wheel openings may be modified in American Iron for the purpose of tire clearance only. AIX vehicles may modify fenders for any purpose, but when viewed from above the top half of the tire must not be visible.
- 7.4.7 All interior modifications (including removal of the dashboard and wiring) are allowed provided that the modifications do not conflict with any other rules contained herein or the NASA CCR. Dashboards may only be removed if acceptable replacements are installed (i.e. fabricated aluminum panels).
- 7.4.8 Lexan or polycarbonate material may replace windshield (3/16" min thickness for windshield), rear glass and side windows provided it is installed in accordance with the NASA CCR. Center bracing must be installed in the inside to support the windshield if Lexan is installed.
- 7.4.10 Spoilers and airdams are unrestricted but must be fixed for competition. Rear wings or rear spoilers installed on AI cars must not extend more than 1.5 inches beyond the outline of the rear bumper and not more than .75 inches on either side of the body when viewed from above.
- 7.4.11 All holes in floors and firewalls must be sealed according to NASA CCR.
- 7.4.12 All vehicles must start a race with a minimum of two functioning brake lights.

7.5 Ballast

Ballast can be added in order to meet the power to weight ratio of the American Iron class. Ballast may be placed in any location provided it is securely fastened and approved by NASA tech and safety officials. Any ballast mounted inside the vehicle may not be taller than three inches or stacked higher than three inches. No more than **150 lbs.** of ballast may be added to the vehicle. Ballast shall be defined as material that serves no other purpose than adding weight. The weight of the ballast shall be clearly marked on the ballast itself.

7.6 Catch Tanks

All engine breathers and coolant overflow lines must vent to a catch tank of adequate capacity to hold any potential overflow. Catch tanks may not be mounted in the driver's compartment with the exception of rear differential catch tanks.

7.7 Engine Coolant

Adding antifreeze to cooling systems is not allowed. The only engine coolant used in the radiator shall be water. Water additives such as Redline Water Wetter may also be used. The intent of this rule is to avoid slick track conditions produced by spilled antifreeze.

7.8 Brakes

- 7.8.1 Water cooling or other liquid cooling of brakes is not allowed in either AI or AIX. Air cooling is both allowed and recommended.
- 7.8.2 Brake rotor friction surfaces must be iron with a maximum diameter of 14 inches.
- 7.8.3 Anti-lock brake systems are prohibited except for an unmodified OEM system, which includes ABS valve body and electronics as delivered from the factory. Calipers are unrestricted.

7.9 Drivetrain

- 7.9.1 Rear axle assemblies may be modified in any manner, however for AI only the center section of axle housing and gear carrier on solid axle cars must be of ferrous material. AIX axle housing materials are unrestricted.
- 7.9.2 AI cars must use synchromesh-type transmissions. Non-synchro transmissions such as Jericos are not allowed in AI.
- 7.9.3 AIX cars may use any transmission that is available to the public for under \$6000.00 suggested racer net excluding the shifter mechanism. Transmission gears cannot be changed during the weekend of an event, except in the case of gear failure, which must be proven.

7.10 Electronics

- 7.10.1 Traction control devices other than factory-installed units are expressly prohibited.
- 7.10.2 Data acquisition devices, except those that are allowed per the NASA CCR are prohibited in AI and are allowed only for fuel and engine control mapping purposes in AIX.
- 7.10.3 Two-way radio communication in the cars is encouraged and recommended in both AI and AIX.
- 7.10.4 Any device installed in AI vehicles which is capable of modifying engine ignition timing, fuel delivery, air flow, boost, or other parameters that can modify engine performance must be non-adjustable during competition.

7.11 Engine

- 7.11.1 AI cars may not use non-OEM aluminum engine blocks. Examples of excluded engine blocks would be the World Products or Ford Motorsports aluminum blocks. This does not preclude the use of factory equipped aluminum blocks such as the 4.6 Ford or GM LS1.
- 7.11.2 AIX engine blocks are unrestricted.
- 7.11.3 AI vehicles may not use dry-sump oiling systems.

7.12 Suspension

- 7.12.1 Control arm mounting points are unrestricted on all cars but may not violate any rules herein (i.e. frame modification).
- 7.12.2 AI cars must utilize upper rear OEM shock/strut attachment points.
- 7.12.3 AIX cars are unrestricted in shock/strut attachment points but may not violate section 7.3.2.

8. Rules/Procedures

8.1 Dynamometer Certification

All American Iron (AI class only) participants who wish to compile season points must submit a certified dynamometer report prior to the start of the race or make arrangements to have a dyno test performed immediately after the race (Note that one certification can be valid for an entire season provided that no performance modifications are performed to the car). Dyno test must be performed 60 days or less prior to first race entered. Any AI competitor wishing to race without a Dyno Certification will be required to compete in American Iron Extreme (AIX). All power to weight ratio certifications must be performed by obtaining a certified rear wheel horsepower figure at an American Iron approved Dyno center. All competitors will be required to include the latest Dyno certification in their vehicle logbook at all times. Any Dynamometer tests that are performed by series officials will be considered "official". It is the responsibility of the competitor to be within power levels on any Dyno. AI cars may not use any system that allows adjustment of horsepower levels that would serve to alter Dyno readings. Examples of such systems are driver-adjustable electronic tuning and engine timing advance devices, fuel pump output modification devices, and any other system that could alter the Dyno readings when measured for compliance purposes. Any restriction device placed in the air intake system must be clearly identified as such and marked to indicate its dimensions.

American Iron Series vehicles (both AI and AIX) are subject to visual inspection by any NASA Technical Inspector or American Iron Series competitors at any time when the car is at the track or at prearranged mutually agreed upon times when the car is not at the track. American Iron Series Directors retain the right to request any disassembly or other procedure required to verify vehicle compliance. The spirit of this rule is to allow competitors to share information regarding modifications proven to enhance performance, which will drive business to the manufacturers of products that increase performance and increase manufacturer support of the series.

At random times or at the discretion of the American Iron Series Directors, any American Iron (AI class) car may be ordered to report for rules compliance on a chassis dynamometer. All official American Iron dynamometer tests will be open. All American Iron Series competitors have the option to be present for official chassis dynamometer testing.

Prior to the chassis dynamometer inspection the competitor may top off any fluids needed to ensure the engine and drivetrain are not damaged during testing. The fluids must be added with a NASA Technical Inspector present and no other modifications or adjustments may be made to the car.

The chassis dynamometer operator and the American Iron Chief Scrutineer will determine the chassis dynamometer testing procedures and how many test runs will be performed for any given car being tested in order to obtain accurate test data. To ensure fairness, an American Iron Series appointed official will operate any cars being inspected on the chassis dynamometer.

Any car exceeding the maximum power to weight ratio for their declared class shall be penalized in accordance with the NASA CCR and these rules.

Dynamometer tests must be conducted on a DynoJet Model 248 in a commercial facility that offers Dynamometer testing as part of their business and is open to the public. Each American Iron Series Director may retain the option to specify which Dyno locations will be the Approved Centers for that particular region. Please check with the Series Director in your area for instructions.

8.2 Weight Certification

All weight measurements must be done with American Iron approved weight scales or with specific approval from series director.

8.3 Appearance

- 8.3.1 All cars are required to display at least four official NASA racing stickers. One shall be placed on the front, rear, and each side of the vehicle.
- 8.3.2 Series sponsor or individual race sponsor decals or stickers may be required.
- 8.3.3 All cars must display "American Iron" at least 2.5 inches in height across top of windshield in contrasting color unless otherwise directed by series officials. Contact series officials for supplies.
- 8.3.4 The driver's last name, or first initial and last name, must be displayed on the bottom right section of the windshield in white block letters between three and five inches in height.
- 8.3.5 All cars are must display its assigned car number on both sides and must be at least 10 inches tall with a contrasting color. Class identification must be at least 3 inches tall and be located in close proximity to the number.
- 8.3.6 Car numbers must be obtained by contacting the American Iron Series Directors

8.4 Impound

All finishing drivers in both classes must proceed to impound immediately after any race or qualifying session unless released by a NASA official. Failure to do so may result in penalties being imposed on the driver. It is purely the driver's responsibility to report to impound with the vehicle and vehicle's logbook at the proper time. If the vehicle is unable to report to impound, the driver must report to impound and remain until released by a NASA official.

8.5 Non-compliance/Cheating

Cheating and non-compliance are not welcome and offenders will receive harsh penalties. A first offense will result in a minimum one-race disqualification applied to the most current completed points race. For a second offense, there will be a two-race disqualification applied to the most current completed points race and the race result which has earned the most points in the season. For a third offense, there will be a loss of all season points and a four-race suspension. Any driver found guilty of non-compliance/cheating is required to return all prizes, prize money, and trophies that were awarded for that race.

After the second offense, the driver will be placed on probation for one year. While on probation, the driver's prizes will be withheld until the end of each season. If a driver completes a one-year probation period successfully, he/she will be reinstated.

8.6 Appeals

Any decision by NASA officials during an event may be appealed to the Event Director. Appeals must be made immediately following the official's decision in writing by filing an "Appeal Form" with the Event Director. The Event Director's decision shall be final.

8.7 Non-conforming Equipment

The American Iron Series Directors must approve any equipment that does not conform to the American Iron Series Rules in advance. For consideration, approval must be made in writing thirty (30) days prior to the date of competition.

9 On Course Conduct

Per the NASA CCR, any driver displaying rough, negligent, or unsportsmanlike conduct will receive harsh penalties, which may include loss of points, suspension and/or fines. Drivers found to be "at fault" for an on course incident will lose all points for that race, be suspended for one race and be put on probation for one race.

10 Points Structure

It is the intent of the American Iron Directors to have two qualifying points races per weekend. Because of scheduling and other uncontrollable events, this quantity is subject to change. Please check with your region as to the number of eligible races, which will count for season points.

Points will be awarded as listed in the NASA CCR. However, an additional 4 points will be added for each pole position earned.