



# 2019 Mini Stock Rules

***If the rules don't say you can't, don't assume you can. Tucson Tech has the final say.***

## 1. GENERAL BODY REQUIREMENTS

- a. All cars must be 1968 or newer, 4 cylinder two wheel drive front or rear wheel drive sedans, station wagons or mini trucks. No convertibles, sports cars or 4 wheel drive allowed.
- b. All vehicles must maintain a stock OEM body. The body sheet metal may be updated but must match original body lines and stock appearance. Approved aftermarket plastic nose may be used and all front ends shall retain general lines of body style.
- c. Hood and deck lid pins are required with a minimum of 2 pins on each and 4 pins on each when the hinges are removed.
- d. All glass, trim and chrome must be removed.
- e. Full stock floorboards and firewalls required and holes covered with a minimum of 22 gauge sheet metal.
- f. All doors must be welded, strapped or bolted shut.
- g. Front inner fender panels may be removed and fenders reasonably trimmed for tire clearance.
- h. Cars must be painted/presentable. Cars in primer are allowed a two (2) grace race maximum.

## 2. BODY REQUIREMENTS

- a. A rear spoiler up to 4" tall and a maximum width of 50" is acceptable but may only be as wide as the OEM deck lid.
- b. The windshield must be either a full clear lexan with a minimum thickness of 0.125" or the complete opening covered with a heavy gauge wire screen and each securely fastened with a minimum of two evenly spaced metal straps that are bolted to the roof panel or roll bar and dash panel with a minimum of 1/4" bolts. Straps may be 1/8" or more thick and not less than 1" wide.
- c. Optional rear window same as above.
- d. Quarter windows permitted made of clear lexan minimum thickness of 0.125".
- e. **One mirror allowed and it may not extend anywhere outside of the vehicle body. SUBJECT TO MANAGEMENT AND TECH APPROVAL.**
- f. A hood scoop up to 4" tall by 24" wide may be used but it must be rearward facing.
- g. Stock or Tech approved bumper ends must be fastened to the fenders with 1/8" thick plates as tall as the bumper.

## 3. CHASSIS

- a. Original frame and may tie front clip to the rear clip with a minimum of 2" by 2" square tubing.
- b. Frame extensions may be added for roll cage mounting.
- c. Cutting or moving the front cross member is not permitted.
- d. Must have either chains or hooks securely mounted in the front and the rear of the vehicle for lifting and towing.

## 4. ROLL CAGE

- a. Roll cage must be constructed of a minimum OD of 1.5" and minimum wall thickness of 0.095 ". Welds must be complete and where secured to the frame, must be acceptable to tech official.
- b. A minimum six (6) point roll cage with three (3) or more door bars on the driver side and two (2) on the passenger side.

- c. Driver's side door bars must be plated with a steel plate minimum 1/8" thickness with minimum dimensions 24" tall and 32" wide or plates may be welded between the three bars.
- d. A radiator protection hoop may replace the stock radiator support.
- e. Roll cage bars that may come in contact with the drive must be covered with racing roll bar padding.

## 5. WEIGHT, HEIGHT, WHEELBASE

- a. Minimum weight with driver before any event is 2400 lbs.
- b. Left Side Weight 55% maximum with driver in the vehicle.
- c. Tech reserves the right to make adjustments with car weight and left side percentage.
- d. Frame rails, body, oil pan, and exhaust must maintain at least 3" clearance with driver in the vehicle.
- e. Fuel cell must have at least 10" ground clearance with driver in the vehicle.
- f. Minimum wheelbase of 90" inches and maximum of 105". May not be altered from factory specifications, no tolerance.
- g. All added weight that is not contained in the frame rails or in steel tubing welded to the frame, must be painted white, must have the car number clearly visible on each piece, and must be securely attached with a minimum of two (2) 1/2" grade 5 minimum bolts with lock nuts.
- h. No pellets or tungsten allowed.
- i. In the interest of safety, a \$10.00 per pound fine **may** be assessed to the driver of any car that loses a ballast weight on the track surface. This fine will be paid to and verified by Tech, prior to further competition.

## 6. SUSPENSION

- a. Performance coil springs allowed.
- b. Adjustable upper spring buckets, struts and weight jacks allowed.
- c. Sway bars must be mounted in the stock location and must be stock appearing.
- d. May use a three link setup. One (90-10) shock may be mounted on the top of and in the center of the rear end housing.
- e. The lower trailing arms must be in the stock location on the rear end housing.
- f. Performance leaf springs allowed. Adjustable rear shackles, sliders and lowering blocks permitted.
- g. Only one shock per wheel but no rebuild able shocks are allowed. Coil over shocks allowed if stock on that model chassis.
- h. Stock OEM upper and lower control arms unless tech allows after market control arms because salvage yard parts are limited or just as expensive.
- i. Maximum tread width of 61". A 1" difference between front and rear allowed.

## 7. STEERING

- a. A quick release steering wheel is mandatory.
- b. Steering column must be collapsible and U-joints are acceptable.

## 8. BRAKES

- a. All four wheel brakes must operate at all times.
- b. OEM brake rotors, hubs and calipers must be steel and may not be lightened.
- c. Master cylinder must remain stock production and in stock location.
- d. Brake pedal assembly must remain stock and in stock location.
- e. Rear disc brakes allowed, must be OEM cast iron and no aftermarket parts permitted.

## 9. WHEELS

- a. Steel wheels mandatory, maximum 7" wide and 13" in diameter.
- b. After-market steel racing wheels are recommended.
- c. Heavy duty 9/16" wheel studs are required.
- d. No air bleeds allowed.
- e. Wheel spacers permitted, 1/2" maximum per wheel.

## 10. TIRES

- a. Tires must be purchased from the track.
- b. No altering of the tires. If caught fines and penalties will be levied.
- c. May purchase 6 tires for the first event and may purchase 2 tires per event.

## 11. DRIVE TRAIN

- a. Only standard domestic type transmissions are permitted. All gears, including reverse, must operate. No aftermarket production transmissions are permitted. Automatic transmissions are allowed, must have an oil cooler and must be vented to a minimum of a 1 quart catch can.
- b. Performance OEM style clutches and multiple disc clutches are permitted.
- c. Only steel or aluminum flywheels permitted.
- d. Must install an approved heavy duty bell housing or approved shield.
- e. Steele drive shafts only, painted white and must have two drive shaft loops.
- f. Rear end must remain stock, in stock location, with stock suspension mounting points.
- g. Independent rear suspension allowed if OEM on chassis year, make and model.
- h. Rear end may be locked, limited slip, posi-traction or open. Floater rear ends are permitted.
- i. Ford 9" rear permitted and must be mounted exactly per OEM specification for year, make and model of chassis.

## 12. EXHAUST

- a. Stock cast iron manifolds may be used and port matching or grinding is allowed.
- b. Aftermarket tubular headers with a 4" or less collector are allowed.
- c. Exhaust pipes must extend past driver and turn down or to the outside of the vehicle.
- d. Mufflers are recommended.

## 13. ENGINE COOLING SYSTEM

- a. Radiator must be mounted in original location. Aluminum radiators are permitted but with no modification to hood allowed for radiator clearance.
- b. Radiator over-flow catch canister mandatory.
- c. Absolutely no antifreeze allowed at any time.
- d. Solid plastic or electric fans are permitted but must be mounted on the back side of the radiator.
- e. A fan shroud must be installed if an electric fan is not used.

## 14. ENGINE AND CAR ELECTRICAL SYSTEM

- a. Aftermarket electronic ignition permitted. Must be stock type housing, gear driven and mounted in stock location. Performance electronic ignition components, performance ignition coils and dual point distributors are allowed. No crank trigger systems allowed unless OEM on that model engine.
- b. Starter must be mounted in stock location. High torque starters permitted. All cars must be able of starting under their own power or they will tag the field if a push is needed.
- c. Battery must be mounted in the driver's compartment and securely fastened in an approved 18 gauge steel container. No mounting in the fuel cell area.
- d. It is mandatory to have a master "On-Off" switch located in the cockpit of the car and easily reach by both the driver and safety crew.

## 15. GENERAL ENGINE REQUIREMENTS

- a. Engines will be GM to GM, Ford to Ford, etc. and must remain in stock location.
- b. Performance steel engine mounts are permitted but if stock rubber mounts are used, then two (2) engine tie down chains must be installed from each side of the motor to the frame.
- c. Maximum engine displacement is 2550cc.
- d. Engine blocks must be of standard factory production with standard external measurements in all respects. Four cylinder and two rotors only. Aluminum blocks permitted.
- e. Fuel injection is allowed if standard for year, make and model of chassis and engine. OEM stock throttle body must be used. No exceptions.
- f. All cylinder heads must be OEM. No aftermarket head permitted.
- g. Internal polishing, porting and/or any other modifications are permitted.
- h. Aftermarket rocker arm covers, oil pans, water pumps and pulley's are allowed.
- i. Any cast manifold allowed. The mounting holes for the carburetor or adapter may be modified.
- j. Alterations to allow air to be introduced into the engine below the venturi are not permitted.
- k. Any carburetor spacer or adapters are allowed but must not exceed two (2") inches in height.
- l. Carburetor must be a Holley 2300 Model # 7448, 350 CFM 2 barrel with casting and model numbers on the carburetor.
- m. Choke horn may be removed with a square mill cut.
- n. The butterflies may be drilled with one (1) idle hole each.
- o. The choke shaft and plate may be removed, but holes must be permanently filled.
- p. No polishing, grinding, coating or drilling of holes permitted in the body of the carburetor.
- q. Throttle shafts, butterflies, boosters and venturies must remain stock OEM.
- r. Screw in air bleeds are permitted.
- s. Butterfly screws may be replaced with pan head type screws.
- t. Venturi area must be as cast and not altered in any manner.
- u. Base plate cannot be altered in size, shape or finish.
- v. All vehicles must have a minimum of two (2) throttle return springs.
- w. Aftermarket air filter housing permitted. No tubes, funnels, or any device which may control the flow of air is permitted inside or outside of the air cleaner or between the air cleaner and carburetor. Must be used during all competition.

**Any carburetor modifications not specified in these rules will not be permitted.**

## 16. FUEL SYSTEM

- a. A 15 gallon maximum capacity fuel cell encased in a container of no less than 22 gauge steel with a fuel cell vent pipe check valve is mandatory..
- b. Must be mounted in the center of the trunk area and as far forward as possible. Tie down straps must be at least 1/8" by 1" and go over the fuel cell and attached to the stock trunk/bed with a minimum 3/8" grade 5 bolts with large body washers under the trunk/bed floor. A minimum of four straps – 2 north and south and 2 east and west. Fuel cell must be completely sealed off from the driver's compartment with a minimum of 22 gauge steel.
- c. Rear protection for the fuel cell permitted inside trunk area.
- d. Gas lines through driver's compartment must be encased in steel tubing welded to front and rear fire walls and securely attached to the floor pan.
- e. Fuel pump must be in stock location and OEM type. OEM electric fuel pump is permitted but must have an oil pressure cut off switch to automatically stop the pump if the engine stops.
- f. Tech will reject any fuel cell, check valves which appear to be damaged, defective or do not function properly.

## 17. FUEL

- a. Racing fuel must be purchased from TS directly. Competitors may be required to show a purchase receipt from TS for fuel on the race day. If no receipt is provided, winnings will be withheld until the fuel is tested and the costs of fuel testing will be deducted from the winnings.

- b. Racing fuel shall not be blended with any other additives, nitro compounds. No adding any other oxygen containing compounds. It is the competitor's responsibility to ensure that fuels are not mixed in previously used containers. You can mix pump gas and racing fuel.
- c. Pump gas may be bought from a gas station.
- d. Icing or cooling of fuel system will not be permitted in the pit or racing areas.
- e. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- f. Pressure systems will not be permitted.
- g. Any concealed pressure type containers, feed lines, or actuating mechanisms will not be allowed. Even if inoperable.
- h. Only 1 metal gasoline filter may be used between the fuel cell and the fuel pump. The location and size of the filter must be acceptable to TS officials.
- i. No nitrous oxide or additives of any kind allowed.

## 18. PERSONAL SAFETY EQUIPMENT

- a. All safety equipment is the sole responsibility of the driver, not TUCSON SPEEDWAY, 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 guide lines and adhere to them at all times.
- b. A professional racing seat is required. Approved seat must be made of .125 aluminum and manufactured specifically for auto racing. No fiberglass, plastic, or homemade seats.
- c. Seats must be securely bolted to a seat mount assembly that is an integral part of the roll Cage, FOUR BOLTS IN BOTTOM OF SEAT AND TWO IN SHOULDER AREA ATTACHED TO ROLL BAR. Seats must not be mounted to the floor.
- d. Seats must have a built-in padded headrest behind head.
- e. Padded rib protection and leg extensions are recommended.
- f. Each car must be equipped with an approved seat belt restraint system. The seat belt and shoulder harness should not be less than three (3") inches wide.
- g. The seat belt restraint system must be installed in accordance with the directions provided by the system supplier and/or manufacturer.
- h. The manufacturers label should not be located under the adjusting mechanism when the driver is buckled in the seat and has tightened the seat belts and shoulder harness. If the label is under the adjusting mechanism, the label should be removed or relocated in a manner that does not affect the integrity of the belt material. The date of manufacture should remain visible on the belts at all times.
- i. The driver must use the seat belt restraint system at all times on the race track, in accordance with the instructions and or recommendations of the system supplier and or manufacturer.
- j. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT TRACK OFFICIALS, OR THE PROMOTER, TO INSURE THAT HIS/HER SEAT BELT/ HEAD AND NECK RESTRAINT SYSTEMS AND ALL COMPONENTS ARE CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED. NOTE: Seat belts and shoulder harness must not be older than five (5) years.
- k. Driver's side window net is required and must be dated within five (5) years. Window net must have dated tag by manufacturer. Net material must be a minimum of  $\frac{3}{4}$ " inch wide and have openings of at least 1" inch. Net must be equipped with a quick release device on the top left front corner. Any visible damage, fraying or sun damaged, may require replacement.
- l. Driver's must wear a full-face helmet, carrying at least a valid SA 2000 or SA 2005 Standard Snell and or a valid SFI 31.1, SFI 31.2 or SFI 31.1/2005 label at all times on the race track.
- m. The driver should wear the helmet in accordance with the directions provided by the helmet supplier and or manufacturer. Any modification to the helmet for any purpose should not detract from its effectiveness.
- n. An approved Head and Neck restraint system is recommended. Neck collar is required.
- o. During race conditions, any crew member who steps into the car servicing area, if any, should wear a helmet.

- p. During race conditions, any crew member involved in fueling the car should wear a full face helmet and a fire resistant head sock.
- q. IT IS THE RESPONSIBILITY OF THE DRIVER/CREW MEMBER NOT THE TRACK OFFICIALS OR THE PROMOTER TO ENSURE THAT HIS/HER HELMET IS APPROVED, CORRECTLY WORN, MAINTAINED, AND PROPERLY USED.
- r. Each driver must wear a fire resistant uniform meeting the SFI 3.2A/5 specification.
- s. Each driver must also wear fire resistant accessories that effectively cover the remaining parts of the body. Shoes and gloves should meet the SFI 3.3 specification. It is recommended that underwear, head socks and socks meet the SFI 3.3 specification.
- t. During race conditions, any crew member who steps into the car servicing area should wear a fire resistant uniform meeting the SFI 3.2A/1 specification as a minimum. A uniform meeting the SFI 3.2A/5 specification is recommended.
- u. IT IS THE RESPONSIBILITY OF THE DRIVER AND CREW MEMBER, NOT TRACK OFFICIALS, OR THE PROMOTER TO ENSURE THAT HE/SHE MAINTAINS, WEARS AND PROPERLY USES PROTECTIVE CLOTHING.
- v. Car must have a fully charged fire extinguisher, Halon 1211, ABC or equivalent type at least 2 lb. UL rating, with an operating pressure gauge, securely mounted to the right of the driver's seat, and readily accessible for use.
- w. All entrants must have a 10 lb. Halon 1211, ABC or equivalent fully charged fire extinguisher in their pit area.

## 19. IDENTIFICATION AND MARKING

- a. Management reserves the right to assign or restrict the display of decals, identification and advertising deemed by the track officials to be in poor taste or otherwise detrimental to the betterment of the sport.
- b. Side numbers must be at least 18" inches high and neatly lettered on both sides of the car.
- c. Roof numbers must be at least 24" inches high and readable from the passenger side of the car.
- d. All numbers must be of a contrasting color to the area of the car on which they are displayed.
- e. Driver's full name must be a minimum of 3" inches high on the left and right edge of the roof.
- f. Car owners must register choice of car number with track management prior to the start of the season.
- g. Management reserves the right to require a competitor to use a different number at any time to avoid duplication.
- h. Contingency sponsor and or Class sponsor decals and or patches must be in place to receive awards and prize money.
- i. Top 4" inches of the windshield is reserved by Management for a division sponsor.

## 20. COMMUNICATION

- a. Two-way radios with a spotter or a RACeiver with one way communication from the tower is required.
- b. Spotters must also use a RACeiver to monitor communication from the tower.
- c. One car radio, one wiring harness and antenna only.
- d. During the event, start to finish, spotters must be in the designated location any time their car is on the race track.

## 21. ELECTRONICS

- a. Transponders for automatic lap scoring/timing is required and must be mounted on the right side of the vehicle no higher than 12" from the ground in the rear suspension area.
- b. On-board computers, traction control devices, automated electronics, telemetry devices, other than those issued or approved by track management, or digital readout gauges will not be permitted without written approval.
- c. Microprocessors or electronic memory chips will not be permitted.

## **22. COMPONENT VIOLATION**

- a. Speed enhancing alteration or modification of unsealed component(s) is not permitted. Components in violation will be confiscated and subject the driver and or owner to automatic disqualification from the event; loss of all driver/car points points; forfeiture of any or all event monies and/or contingency awards.

**TUCSON SPEEDWAY** reserves the right to make final decisions in the interpretation of any rules or race procedures at any time. No equipment will be considered as having been approved by reason of having passed through inspection unobserved.