



# 2018 Hobby Stock Rules

***If the rules don't say you can't, don't assume you can. Tucson Tech has the final say. Note: Strictly an economy-based class. No performance modifications of any type will be allowed.***

## 1. RACE PROCEDURES

- 1.1 All cars must go through tech before main event and top 5 finishers will go to tech. All car engines must start and run after the main event, when in tech.

## 2. SPECIFIC CAR RULES / COMPETING MODELS - ELIGIBILITY

- 2.1 If it didn't come off the show room floor on a regular base model (in its purest form), it is NOT legal.
- 2.2 Any 1960 or newer sedan or station wagon. No convertibles, pick-ups, or Jeeps.
- 2.3 No Camaros, Firebirds, Mustangs, or similar type cars. No Novas or smaller-type cars.
- 2.4 Strictly an economy based class, no performance modifications of any type will be allowed.
- 2.5 All installations must be tech approved. Track Management reserves the right to refuse any car not constructed within the spirit of the rules.
- 2.6 All casting numbers and part numbers must remain intact and unaltered.

## 3. WHEEL BASE 110" MINIMUM

- 3.1 110 inch wheel base and longer must weigh at least 3400 lbs and 52.5% maximum left side weight with driver. 108" metric full frame cars will be allowed, but must weigh a minimum of 3500 lbs.
- 3.2 All added weight must be added to the vehicle in equal amounts to the front and rear and be securely bolted to factory frame, with a minimum of 2 ½" diameter bolts. Weight must be painted white, have amount of weight of said weight on it, and must have the car number on each piece. Weights must be mounted on the frame between the front firewall and front bumper, and rear firewall and rear bumper. Added weight will not be permitted to be mounted on the bumper. Weight may not be mounted anywhere between the front firewall and the rear firewall (driver's compartment). TS Tech officials will determine if added weight is in the proper location and mounted in equal amount the front and rear. Example: if your car currently weighs 3350 pounds, you will have to add 25 pounds to the front frame rail and 25 pounds to the rear frame rail for a total of 50 pounds to meet the 3400 pounds.
- 3.3 All added weight must have two ½ inch grade 5 minimum bolts with lock nuts and large washers top and bottom approved by tech.
- 3.4 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.
- 3.5 Cars that are overweight may remove inner panels, and non-necessary parts.
- 3.6 All non-necessary parts removed must be approved by tech.

## 4. BODIES

- 4.1 Complete bumper-to-bumper steel body must be retained.
- 4.2 The stock floor pan, fire walls, trunk, trunk floor, and rear wheel wells must remain intact. (front wheel wells may be removed). Must maintain stock radiator core support.

- 4.3 Car must be strictly stock. No cutting, chopping, channeling or shortening allowed.
- 4.4 No holes in the hood. Hood must be kept in place at all times (minimum 2 hood pins or fasteners are mandatory).
- 4.5 Body sheet metal must be kept in place at all times.
- 4.6 All lights, trim and upholstery must be removed. All stainless, plastic, glass, and die cast trim parts, lights, and moldings must be removed from the outside of the car. Stock front seat is allowed.
- 4.7 All doors must be welded, chained or bolted shut.
- 4.8 Inner panel of driver door may be removed to allow proper installation of roll bars. This rule applies only when adding more than one door bar.
- 4.9 No gutting of body parts including door lid, etc. Dash may be removed for dash roll bar or crossbar only.
- 4.10 No gaps allowed at bottom of doors and at doors and firewalls.
- 4.11 Rear seat must be removed and resulting holes must be replaced by sheet metal (22 gauge maximum thickness).
- 4.12 Numbers (16" minimum) clearly painted on both sides and on the roof facing the right-hand side of the car.
- 4.13 Drive shaft must be painted white. A 1 inch x 1/8 inch thick driveshaft loop mounted towards the front of the driveshaft is mandatory.
- 4.14 Battery's must be securely mounted. Ratchet straps are not allowed to secure battery.
- 4.15 Cars must be painted/presentable. Cars in primer are allowed a two (2) grace race maximum.

## 5. FRAMES

- 5.1 Stock frames only. No modifications. No alterations of any type allowed.
- 5.2 No part of the frame or body shall be lower than 6", with the exception of the cross member at all times, with the driver in the car and in the driving position. The cross member must be no lower than 5" with the frame rails at 6" of ground clearance. Ground clearance measurements will be taken prior to any race and/or after the vehicles complete their races.
- 5.3 No alterations, customizing, or reinforcing of the chassis, other than the roll cage.
- 5.4 Roll cage must attach securely and safely to frame. Rear kicker may be attached to frame for safety purposes only, and must be covered. May NOT extend out of driver's compartment.

## 6. SUSPENSION

- 6.1 No modifying of suspension is allowed.
- 6.2 Suspension parts must remain absolutely stock for that make and model of car – absolutely no cutting for clearance.
- 6.3 Ride height of 6" rule will be strictly enforced. Measured from lowest point of frame rail, with driver.
- 6.4 Over-exaggerated camber is not permitted. Maximum of 3" in or out permitted on either side of the car. Camber will be measured on the wheel/rim with a carpenter square; with one end of the square flat on the ground, with the other end of the square up against the outer edge of the tire, and then measured to the bulge of the tire.
- 6.5 Magnetic, steel-bodied, sealed, non-adjustable or unaltered shocks only. Shocks may not have the ability to be re-valved, re-built or modified from its standard design. No coil-over, air or remote reservoir shocks will be permitted. No Schrader or bladder type valve allowed. All shocks must use OEM mounting, only one shock per wheel.
- 6.6 Shock claim rule: Any competitor running in the day's event may claim all 4 shocks of another competitor following the completion of the event for \$100.00. Claim must be made before the main event starts by giving the tech inspector a sealed envelope with \$100.00 cash. Claimed shocks must be used on car the following race. Failure to sell the shocks will result in

disqualification from that event and a suspension of the next 3 Tucson Speedway Hobby Stock events. The claimed driver will receive the \$100.00 upon removal and delivery of the shocks. Claims will not be accepted the final night of points racing.

- 6.7 Stock coil or leaf springs only. **11" racing springs are allowed.**
- 6.8 Front sway bars permitted and must be OEM, as produced, per make & model and must use stock mounting. Sway bars must be of stock diameter. Right side must be solid OEM mount on lower control arm. The use of all-thread on left side permitted. No rear sway bars permitted. Adjustable sway bars are not allowed. Rear sway bars in Crown Victoria taxis must come out.

## 7. STEERING COMPONENTS

- 7.1 Stock steering only. No aftermarket parts designed to lower, widen, correct bump steer, or geometry.
- 7.2 No steering quickeners allowed.

## 8. ENGINES

- 8.1 Engines must remain stock for make, model, and year of car being used. All engines are subject to tech approval.
- 8.2 Engine blocks must be a V-8 type or V-6 type and be stock factory production.
- 8.3 No aluminum intake manifolds allowed, including factory performance manifolds.
- 8.4 All internal engine parts must remain OEM specifications as to size, shape, weight and finish. **NO EXCEPTIONS!!!**
- 8.5 Any procedure associated with a common rebuild will be allowed. (Must be approved by Race Director).
- 8.6 Engine and transmission mounts must remain stock.
- 8.7 Engine **Must** be **STOCK** with stock engine mounts and in stock location. GM to GM, Ford to Ford, etc. No solid motor mounts.
- 8.8 The largest Chevrolet motor allowed is a 360ci.
- 8.9 A single Holley 4412-**S** 2-bbl carburetor must be used. Carburetor may not be altered in any way, except for the changing of jets or metering valve. Choke horn must be 100% intact and unaltered in any way; choke plate, shaft and all linkage must be removed for inspection purposed. Identification numbers must be legible and unaltered. No controlled vacuum leaks. Only Mr. Gasket part # 1929, #1933 or #1937 carburetor adaptors are allowed. Carburetor adaptor must have the part number intact and may not be modified in any matter. Maximum thickness of gaskets and Mr. Gasket adaptor #1929, #1933 or #1937 is 1.375". No carburetor spaces allowed. All cars must have 2 throttle return springs.
- 8.10 Motors under 400ci may run a single Holly 4412-**S** 2-bbl carburetor, intake manifold and air cleaner/filter assembly. All carburetors must have the stock choke flap and run a stock unaltered air cleaner/filter assembly. No bigger than a 2 ½ inch air cleaner.
- 8.11 Aftermarket valve covers are ok.
- 8.12 Distributor must be stock with stock components.
- 8.13 Stock steel engine pulleys are required.
- 8.14 No roller rockers or roller camshafts allowed.
- 8.15 No pop up / dome pistons allowed.
- 8.16 All engines must have at least 14" of steady vacuum, as checked with a gauge, with engine idling at 800 RPM's at all times.
- 8.17 Drivers are responsible for having a 3/16" port in the intake manifold to hook up a vacuum gauge.
- 8.18 Stock Stroke crankshafts only.
- 8.19 No strokers of any kind.
- 8.20 GM Vortec or center bolt heads are NOT allowed.
- 8.21 All motors must use OEM internal parts, no light weight or knife edge crankshafts.

- 8.22 Connecting rods must be OEM I-Beam style only.
- 8.23 It is recommended that a ¾" plug be installed in the oil pan for inspections, that access hole must be inline with a connecting rod journal. *If an inspection hole does not exist and an inspection is required, oil pan must be removed or disqualification will result.*
- 8.24 Every engine will be pumped/whistled and sealed at the beginning of the season. Tucson Speedway reserves the right to pump/whistle any engine at any time, regardless if the engine is sealed. Two (2) right center intake bolts and two (2) carburetor bolts must be drilled for sealing. If the seal is broken or missing, at any time after a race, it may result in disqualification.

## 9. HEADS

- 9.1 Cylinder heads must be "stock factory production".
- 9.2 Valve must be stock factory production specifications. No dual valve springs.
- 9.3 All rockers maximum 1.50 stamped steel only. No long slot rockers, no roller rockers or roller tip rockers, no stud girdles allowed.
- 9.4 No machining grinding or blue printing of valve head and must have stock valve springs. No altering/ drilling of heads of any kind.

## 10. ENGINE COOLING SYSTEM

- 10.1 Stock fans only.
- 10.2 No electric fans allowed. OEM factory electric fans allowed.
- 10.3 Water overflow catch can unit required.
- 10.4 No anti-freeze or other coolant in radiators. Water only.
- 10.5 After market aluminum radiators allowed.

## 11. ENGINE EXHAUST SYSTEM

- 11.1 No headers allowed.
- 11.2 No performance or racing mufflers of any type.
- 11.3 Exhaust must extend behind driver.
- 11.4 Maximum exhaust size 2-1/2".
- 11.5 Stock cast iron exhaust manifolds only.
- 11.6 95 DBA at 100 ft.
- 11.7 Exhaust must be a stock "y" pipe or 2 single "dual" pipes. No "x" or "H" pipes or aftermarket 2 into 1 exhaust allowed.

## 12. DRIVE TRAIN

- 12.1 TRANSMISSION AND REAR END: Transmission must be automatic and be stock with no modifications and mounted with stock cross member.
- 12.2 Rear end must be stock and mounted in stock location with the wheel base matching from side to side, ½" tolerance, must have stock trailing arms for make and model being used. An open, locked, or posi-traction rear end will be allowed.
- 12.3 Rear disc brakes are allowed but had to come stock on make, model, and year of car being used.
- 12.4 Automatic transmissions must have functional torque converter.
- 12.5 **Only Steel Drive-shafts allowed.**

## 13. BRAKES

- 13.1 Stock four wheel brakes required in good working order.
- 13.2 All brakes must function.
- 13.3 No inline adjustors allowed.

## 14. TIRES AND WHEELS

- 14.1 Approved tire only; stock street type tire. (If you have a tire that's in question ask a tech official for clarification). All four (4) rims must be the same diameter and offset. No offset or reversed rims. 3" or 4" backspacing wheels are allowed but all wheels on car must match as far as offset. Aftermarket steel wheels are permitted (8" maximum width). Aluminum wheels are not allowed. Recommend 1" lug nuts. **¼" wheel spacers are allowed on REAR Only for clearance.** All competition tires must be purchased from TS Tire Barn. The track specified tire for the 2018 season is the 8" Towel City. No shaving, grinding, cutting, softening, conditioning, siping, or grooving of tires allowed. Tire limitation rules apply.
- 14.2 TS has a "Tire limitation rule" in an effort to lower the costs associated with racing by limiting the amount of tires any competitor may purchase. The tire limitation rule is only in affect for the tires that are eligible to race on, not practice on. Below are the requirements, rules and guidelines for the Tire Limitation Policy.
- 14.3 On opening day, each competitor who has a car in the pits that attempts to qualify and compete in that evenings evens may record a maximum of Six (6) new tires.
- 14.4 Cars must attempt to qualify and compete. What constitutes a qualifying attempt shall be left to the discretion of TS officials. If the car does not attempt to qualify and compete, the tires will be considered NEW for the next event and the competitor will not be allowed to purchase new tires.
- 14.5 Each tire will be branded, logged and recorded by TS Tech Officials.
- 14.6 In the event a competitor is unable to attend or compete on Opening Day, they may record four (4) new tires their first race day at TS.
- 14.7 If you flatten or damage tires in an accident, only ONE (1) new tire may be recorded for replacement. The Competition Director may approve additional tires for competitors damaging more than one tire in an event. Competitors must present all damaged tires to Track Officials before the end of the night to be eligible for replacement. The replacing tire must be of similar age and quality of the tire it is replacing; i.e. a new tire replaces a new tire or a used tire replaces a used tire.
- 14.8 There will be no banking of tires at TS tire barn facilities.
- 14.9 The tires you qualify on must be ran for the heat and main events that evening.
- 14.10 No swapping of tires with other teams.
- 14.11 Wheels may be reinforced.
- 14.12 Maximum 8" steel wheel only. Outside to outside of wheel lip.
- 14.13 No mag wheels, special wheels or rally wheels.
- 14.14 Steel stock type wheels only. No aluminum, magnesium or similar type wheels allowed. Racing wheels are allowed.
- 14.15 No bleeder valves permitted.
- 14.16 5/8" studs and large lug nuts. Ford ½" left side only okay. (not mandatory)
- 14.17 If flat tire or wheel loss occurs, it shall be mandatory to immediately, and in a safe manner, leave the race surface. We will not allow track damage.
- 14.18 Crown Vic's can change from 17" wheels to 15" wheels, to run on Towel City tires.
- 14.19 All cars will be allowed 4 tires to run the season. All tires will be branded. If a tire is bad, it will be replaced, with Tucson Tech permission.

## 15. ELECTRICAL SYSTEM

- 15.1 For safety, battery may be located behind the driver and securely fastened and sealed in minimum 18 gauge leak proof steel box. **Plastic boxes not permitted.** Lid must be removable without tools.
- 15.2 All cars must have a battery.
- 15.3 No two way radio communication allowed.
- 15.4 All cars will have starters in good working order with switches clearly marked, and accessible to the driver while strapped in, as well as from outside the car. All cars must be able to start

on their own power to maintain their starting position. All cars must be turned off during introduction. If the car does not start on its own power, it will be pushed to start and given the opportunity to take one lap and return to the starting line. If car fails to start on its own power a second time, it will be push-started and will then lose its starting position and will start at the rear of the starting field. Exception, alternate car will be allowed to run Trophy Dash if car cannot start under its own power.

- 15.5 Stock ignition only. No MSD type aftermarket performance parts allowed, including but not limited to, coil, module, cap, rotor, etc.

## 16. FUEL SYSTEM

- 16.1 Gas tank (fuel cell) must be located over the rear end or inside the trunk area. It can NOT be under the trunk floor by the back bumper.
- 16.2 **Pump gas only**, with an octane rating of no more than 92 octane with no additives of any kind. **RACING FUELS ARE NOT ALLOWED.**
- 16.3 Racing fuel cells are allowed and must be "COMPLETELY" sealed off from driver's compartment with 22 gauge sheet metal. The cell must be centered on trunk floor and must be strapped with 1 inch wide x 1/8 inch thick flat stock. Must have two straps going up and down and one side to side. Flat fender washers are to be used to mount fuel cell to the bottom of trunk floor. 16 gallon fuel cell maximum. LxWxH divided by 231 = gallon capacity. Must have a ground strap from filler neck to a chassis ground.
- 16.4 Boat tanks are NOT allowed.
- 16.5 Trunk floor must have 2 holes for fire extinguisher access. The holes must be at least 5 inches wide.
- 16.6 Use of a fuel cell is highly recommended.

## 17. CARBURETOR

- 17.1 No dual line double pumpers.
- 17.2 A single Holley 4412-S 2-bbl carburetor must be used. Stock fuel injection permitted, for make and year. Must have cut off switch on fuel injected cars.
- 17.3 Two throttle return springs MANDATORY on all carburetors, mounted to the engine.
- 17.4 No modifications allowed to any carburetor or fuel injection systems allowed.
- 17.5 No controlled vacuum leaks allowed.

## 18. CHASSIS AND ROLL BARS

- 18.1 All cars MUST have a 4 point roll cage, must be minimum 1 1/2" tubing with a .095" minimum wall thickness. 1-3/4" x .095" tubing is recommended.
- 18.2 Roll cage must be welded to frame or bolted to the floor with a minimum of a 6" x 6" plate 1/4" thick with four 1/2" bolts in each plate.
- 18.3 All steel tubing must be bent in a manner that doesn't damage or kink the tubing. Any bend in the tubing must be done with a tubing bender and be a continuous length of tubing.
- 18.4 No butt welding, brazing, soldering, iron pipe, or square tubing allowed.
- 18.5 Cage must be securely supported and braced with good welds. Cages with major damage must be repaired or replaced. (Subject to tech officials approval). Anything in question, please ask a tech official.
- 18.6 The cage must have three (3) driver's side door bars minimum. 2 rear down bars are allowed and must mount behind the driver and cannot be past the center of the rear end. The rear down bars must be mounted front to back (no angling from one side to the other). The rear down bars must be welded to the frame or bolted to the floor with 6" x 6" plates.
- 18.7 The cage and welds must meet Tucson Speedway tech official safety standards or will not be allowed to compete.

- 18.8 Gutting of driver's door is allowed for multiple door bars (3 MINIMUM). NO other gutting allowed. Removal of the passenger side door inner sheet metal or any other metal is not allowed unless specified in these rules.
- 18.9 Bars must be mild steel or chrome molly. No gutting, reinforcing or modifying except to mount roll cage to frame.
- 18.10 Anything that is flammable or could possibly melt, smolder, etc., on the interior of the car may be removed, dashes are optional. Metal is not one of those items.
- 18.11 A minimum of 2 convex door roll bars on driver's side.
- 18.12 Roll bars must be padded at any point a driver may come in contact. Driver door must be padded.

## 19. SEATS AND SAFETY EQUIPMENT (Subject to tech approval)

- 19.1 For all safety equipment it will be the sole responsibility of the driver, not the track management, 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 on usage guidelines and adhere to them.
- 19.2 An aluminum racing seat is recommended. No plastic, or fiberglass, etc.
- 19.3 Seat must be securely bolted.
- 19.4 A five (5) point safety harness, with quick release is mandatory. 3" wide lap belt, 2" or 3" shoulder belts. All belts shall be attached to roll cage using minimum 1/2" grade 8 hardware and safety cables.
- 19.5 Cotton harness components prohibited.
- 19.6 Safety harnesses/seat belts may be no more than five (5) years old. If necessary, proof of purchase may be required.
- 19.7 Safety helmet must meet Snell 2000 testing standards, bear proper identification, and have no signs of previous damage. No off road or motorcycle type allowed.
- 19.8 Window net mandatory! Minimum 1" mesh with release at top only and may be no more than 5 years old.
- 19.9 All drivers must wear fire suit. Fire suit is mandatory at all times and approved racing shoes recommended.
- 19.10 Eye protection is mandatory and must be in proper place at all times.
- 19.11 All cars will be required to have in their pits a minimum of one 5 pound, Halon or dry chemical fire extinguisher. This is to be visible to tech officials and all crewmembers. All crew members must be made aware of its location, and knowledgeable in the use of the fire extinguisher.
- 19.12 Car must have a fully charged fire extinguisher, Halon 1211, ABC or equivalent type at least 2 lb. UL rated, with an operating pressure gauge, securely mounted to the right of the driver's seat, and readily accessible for use.

## 20. BUMPERS

- 20.1 Stock only.
- 20.2 No hidden reinforcement or nerf bars allowed.
- 20.3 Bumper straps 2" flat stock x 1/8 thick, (no thicker than 1/8 strap may be used) and must be fastened from the ends of the front and rear bumpers to the frame or rear quarter panels. (All Sharp edges must be removed.)

## 21. WEIGHTS

- 21.1 No movable weight permitted.
- 21.2 All added weight must be in the back seat center of car.
- 21.3 108" wheel base – 3,500 lbs, 52.5% max. left with driver.
- 21.4 110" wheel base – 3,400 lbs, 52.5% max. left with driver.

## **22. WINDOWS**

- 22.1 Stock windshields permitted or a minimum of 1/8" thick lexan windshield covering all windshield opening or mesh screens are permitted.
- 22.2 Back window and all other glass must be removed.
- 22.3 All mirrors must be inside car and subject to tech approval.

## **23. IDENTIFICATION AND MARKING**

- 23.1 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.
- 23.2 Side numbers must be at least 18" inches high and neatly lettered on both sides of the car.
- 23.3 Roof numbers must be at least 24" high and readable from the passenger side of the car.
- 23.4 Cars must have 6" tall numbers on front and rear.
- 23.5 All numbers must be of a contrasting color to the area of the car on which they are displayed.
- 23.6 Drivers full name must be a minimum of 3" inches high on the left and right edge of the roof.
- 23.7 Car owners must register choice of car number with track management prior to the start of the season.
- 23.8 Management reserves the right to require a competitor to use a different number at any time to avoid duplication.
- 23.9 Contingency sponsor and or Class sponsor decals and or patches must be in place to receive awards and prize money.
- 23.10 Top 4" inches of the windshield area is reserved by Management for a division sponsor.

## **24. COMMUNICATION**

- 24.1 Race receiver with one way communication from tower is required.
- 24.2 Transponders for automatic lap scoring/timing is required and must be mounted on the right side frame rail 13"6" from the furthest point of the nose and no higher than 12" off the ground.
- 24.3 No other communication devices are allowed.

## **25. ELECTRONICS**

- 25.1 No transmitting or listening devices.
- 25.2 No electronic monitoring computer devices capable of storing or transmitting information except tachometers.
- 25.3 No digital gauges, timing retard controls or oxygen sensors allowed.
- 25.4 No electronic traction control devices allowed.

## **26. RACE PROGRAM**

- 26.1 Points will go to drivers. Championship for the season will be determined by points.
- 26.2 Driver must attend the driver's meeting.