

# **Central Arizona Speedway/Deuce of Clubs Thunder Raceway**

## **2025 Pure Stock Rules**

Revised 5/12/2025

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### **GENERAL RULES**

1. Driver is totally responsible for all of the conduct of his/her car owner and all pit personnel and other affiliated people. Conduct includes, but is not limited to: language, fighting, cheating, threatening or attempting to intimidate others, or any other actions that are determined to be unsportsman like conduct by a Central Arizona Raceway official.
2. If it does not say in these rules "you can", assume you cannot. If in doubt, ask your Director or an Official. Decisions by the Central Arizona Raceway technical inspection team on interpretation of these rules are binding. Let's all race in the spirit of the rules.
3. The word "stock" will mean: "Unaltered and as originally produced for that year, make, and model". Factory Stock rules do not permit the use of special performance cars or parts as OEM stock. If it didn't come off the show room floor on a regular base model, (in its purest form) it is NOT legal.

### **SECTION A: Chassis/Body/Roll Bars**

1. All cars must be 1955 or newer, full size, or intermediate, originally produced American made Passenger cars with a minimum wheelbase of 101" in stock condition. Bodies must be complete and stock, including a complete floor pan. (GM to GM, Ford to Ford, etc.).
2. No convertibles, pickups, jeeps, imports, or commercial vehicles allowed. Conventional passenger type station wagons are allowed. No commercial type Wagons, Blazers, Broncos, Suburban's, etc. will be allowed. All chrome, trim, glass, and mirrors must be removed.
3. No gutting of interior sheet metal except as follows: Door, dash and interior quarter panels may be cut as required to install roll bars and side bars. Inner roof sheet metal can be cut away. All firewall holes must be patched using 22 gauge. or better steel. Steel or Aluminum dash may be constructed in the original dash location. Dash may not be further back than the front edge of the steering wheel. No other aluminum or steel decking in the cockpit is allowed.
4. Hood and trunk lids may be gutted. No other chopping of bodies, except for 2" around fenders for tire clearance. Front inner fenders may be unbolted or cut out and removed but their mounting brackets cannot be cut off the fenders.

5. Added weight is not legal in this division. 5 gal. max water bottles can be placed inside roofline on floor. Items not allowed are: use of tubing larger or thicker than tubing in main roll cage, having more than one standard type automotive battery, fuel cells or their containers made of over 1/8" thick steel, fuel cells that hold over 16 gals of fuel (16 gal. as advertised), lead or added heavy materials, reinforcement, or construction using heavier materials than needed, or anything that can be considered excessive in weight as judged by a Central Arizona Raceway technical inspection team. If your car has anything like this, be sure to show it to a Central Arizona Raceway technical official before racing and get a written decision on it.
6. OEM bumpers or aftermarket approved front bumpers allowed. Front and rear bumper straps are MANDATORY. Front bumper must be strapped to the frame. Rear bumper must be strapped to the quarter panel. Minimum strap size required is 2" x 1/8" flat stock. Bumper straps must be welded and bolted with at least two 3/8" bolts. Front bumpers may have flat stock straps (2" x 1/8" maximum) or a chain running to the upper radiator support.
7. Rub rails (optional) must be mounted flush against the body with carriage bolts, between wheel well openings only, with the ends tapered, smooth and closed. Maximum material size is 1" x 1" .095 tubing. Maximum number allowed is one per side.
8. After market stock appearing nosepieces may be used. Nosepiece must appear stock.
9. All cars must have a four-point minimum roll cage. Cage must be minimum 1 1/2" tubing with a .095" wall thickness, minimum. 1 3/4" x .095" tubing is recommended. Three door bars left side. Two door bars right side minimum. Must have A pillar uprights 1 1/4" minimum. Front loops (Maximum 1 1/2" x .095" tubing) are mandatory (effective May 1st 2013). No cross braces or X's above the dash line. Both left side upright bars and all bars in trunk must have 3/16" inspection holes drilled in them in an easily visible location to inspect tubing thickness. All steel tubing must be bent in a manner that doesn't damage or kink the tubing. "NO" 90 degree cut and welded joints. Cage must be safe and secure with good welds. Cages with major damage must be repaired or replaced. (Subject to tech official's approval). Anything in question please ask an official. 2" space recommended for helmet to roll cage clearance (above head). If the roll cage is bolted to the floor pan, a 6" x 6" x 1/4" steel plate must be bolted to the top and bottom of the floor pan to weld to. Rear loops are allowed. No extra rear bracing allowed.
10. Core supports may be replaced with maximum 1 1/2" x .095" tubing. No cattle guards.
11. Approved racing seat, lap belt, and shoulder harness belts must be mounted to the roll cage. Drivers Mounting of these items to the floor pan is not allowed. They must be mounted in a safe secure manner. (Subject to tech official's approval)
12. All cars must have a minimum 1" x .095" center bar mounted in the windshield area. All cars must have full windscreen in windshield area.
13. Roll cage must be positioned so the driver's seat remains in the stock location.
14. Optional .049 steel plate is allowed to be welded to the outside the cage, inside the driver's door.
15. Cars must have secure bumpers and body panels to be allowed to race.

## **SECTION B: Engine/Transmission/Drive Shaft**

### **ENGINE:**

1. Engine must be in stock location. Engine setback will be determined using the following criteria: a) - Engine may be slightly moved back #1 spark plug must be in front of upper ball joint with no alteration to stock cross member or fire wall. Solid mounts are allowed. Engine cubic inch limits are as follows, GM 361, Ford 362, and Chrysler/AMC 371. Engine must be cast iron only factory produced blocks no bowtie blocks allowed. Oem or Oem appearing replacement steel crankshafts only no lightening. No arrowing, knife edge, bullnose or drilling of the 2<sup>nd</sup> or 3<sup>rd</sup> throws. Gm 5.7 inch rod only. Flat top or dished pistons only, No pop up or dome pistons. Oem firing order can not be changed. Racing oil pans are allowed, all oil pans must have 1" inspection plug. If no inspection plug is installed oil pan must be removed at tech inspectors request.
2. Factory produced cast iron unaltered heads only. No port or polish work allowed. No port matching of heads to intake or exhaust manifolds. No acid dipping or performance work of any kind. Valve size is optional and can be changed, provided that no machine work is done beyond 1/2" above the valve seat. Maximum valve size on GM cylinder head 2.02 intake 1.60 exhaust. Studs may be pinned or changed with screw in type. Poly Locks, Guide plates, and dual valve springs of stock diameter are allowed. No aftermarket heads, GM Performance or marine heads, or intake allowed. No grinding on intake or exhaust manifolds allowed.
3. Aluminum intake manifolds are allowed, but must be OEM standard production only, (exception Gm bowtie or Edelbrock 2701 or 2101 only). No special performance or special production manifolds allowed. Example: 1969 Z28 square flange aluminum intakes are not allowed. Drilling the intake manifold for water ports to be used with an external water bypass is allowed. No other modifications allowed. Do not drill the heads or the block.
4. Aluminum aftermarket water pumps and radiators are optional.
5. 1 5/8 headers allowed or Stock unaltered cast iron exhaust manifolds. No stepped headers will be allowed and exhaust must extend beyond firewall with turn downs. All cars MUST have approved track mufflers, IMCA930 or IMCA935 only. Mufflers must be welded SOLID. NO tac welds, sheet metal screws or rivets allowed.
6. Engine mounted factory type fuel pumps in stock location only. No electric or belt driven fuel pumps allowed.
7. No mushroom lifters, superchargers, turbo chargers, fuel injection of any design, nitrous oxide, pressurized fuel systems, magnetos, computers of any kind, aluminum flywheels, or alcohol allowed.
8. Carburetor: Option A: must be a stock, unaltered, production passenger car or light truck with OEM part numbers visible. Ford engines may run a Ford stamped Holley carburetor but MUST have come stock for the year, make and model of car. Carburetors must have factory OEM numbers stamped on them and cannot have any visible machine work done. Id air boxes or duct work. Mechanical OEM type push rod fuel pumps only. Fuel shut-off recommended. Option B: Must use unaltered 500 c.f.m. Holley - part no. 0-4412, 0-4412SA (aluminum casting no. L6R199B and metering block no. 707 only). Holley carburetor components only. All float bowls must face forward. Carburetor adapter/spacer allowed, MUST use Speedway part #1351936A.

9. Ignition system must remain stock. (No MSD or other type non- OEM). Parts can be replaced by heavy-duty OEM style and configuration. Exception: MUST use unaltered MSD #8727CT rev-control and maximum 6500 rpm chip.

#### **TRANSMISSION:**

10. Transmission must be stock, remain in stock location, and must be on stock unaltered cross member. A solid mount is allowed but must be stock configuration.
11. No direct drive, altered, lightened, or valve transmissions allowed. Torque converters must be working and of standard stock size 11" min.
12. No dog clutches, buttons, ram clutches, or ram couplers allowed. OEM clutch set up only. Scatter shield must be used on all manual transmission equipped cars. (Minimum 10 ½ clutch diameter). No aftermarket clutches. Hydraulic throw out bearings are allowed. **Transmission must move in all gears when presented in tech.**
13. Trans cooler MUST be mounted under hood of car. After market transmission coolers are allowed.

#### **DRIVE SHAFT:**

14. Drive shaft must be steel, be painted white, and have a 360 degrees loop around it, approximately 3" behind the front universal joint. Minimum loop material is 1" x 1/8" thick steel. Random inspections will be done, so keep it painted.

### **SECTION C: Rear End/Suspension/Wheels/Tires**

#### **REAR END:**

1. Rear end must remain stock, on stock unaltered mounts, in stock location, (year make & model) Wheel base must be equal on both sides (3/8" tolerance). Passenger car or light truck rear end can be used in any car and must be mounted on the stock chassis mount, in stock location for the make and model of car. No quick-change rear ends. Floater rear ends are allowed, but can't have gun drilled axles, aluminum pinion support, or scalloped gears. Aluminum drive flanges are allowed. Steel racing springs are allowed (coil for coil, leaf for leaf) and must be in stock location. No spacers or lowering blocks

Upper and lower trailing arms must be stock, stock length, unaltered, and in the stock mounting location for chassis being used. Shock and spring mounts must be in stock location. Ford 9" rear ends will be allowed. All non-stock rear ends must be +/- 1" of stock rear end width, i.e. if the stock rear end measures out at 58" the non-stock may be 57" to 59". There will be no exceptions to this. Pinion angle will be visually inspected throughout the year. Disc Brakes will be allowed. Rear end must be locked or welded. No gold tracs, ratchet, or lockers rear ends allowed. Maximum pinion angle is 3 degrees. Vented rotors only. Rear rotors may be aftermarket, 0.810 new thickness. No floated brakes.

### **SUSPENSION:**

2. No lowering blocks, weight jacks, chains, metal or rubber spring spacers allowed. No factory rubber bushing around spring allowed. Heat and re-arching of springs is allowed.
3. Suspension must remain stock for make and model being used, unaltered with OEM equivalent parts. No reinforcing of any suspension parts, except Chrysler product or 1965 or newer full-size Ford lower Aframes. Reinforcement of these parts is allowed, but must remain exact stock dimensions. Rubber/Urethane OEM suspension bushings only. No other types of bushings allowed.
4. Steel body rebuildable shocks, nonadjustable, in stock location, on stock mounts, no extra spacers/washers, extensions, or alterations will be allowed, one per wheel. Shocks may not be altered or extended in any way. Aftermarket "Stock replacement" steel racing shocks are allowed but cannot be extended or altered in any way. They must measure out at the advertised measurements. All shock ends must be the original ends as welded on or screwed on from the manufacture. Mono ball ends or homemade/fabricated/ non- factory welded ends or "bulb" style shocks are NOT allowed. No Internal bump stops, gas ports, Schrader or any other external adjusting devices. **\$75 shock claim rule in place for each shock can be claimed by any driver that starts the main event on any car that starts the main event and must be run by claiming driver at the following event.**
5. No rack and pinion. All components must be steel unaltered OEM, in OEM location and match frame, bolt on spindle savers allowed. **Aftermarket tubular style A arms allowed must be 8 inch or 8.5 inch only and must mount in factory control arm mount location.** OEM steering column may be replaced with steel knuckles and steel steering shafts (collapsible recommended), steering wheel and quick release (required) may be aluminum. Steering quickeners allowed. Brake pedal must be in stock location. Brake booster may be removed. Spindle savers are allowed.
6. Four-wheel brakes in working order are required. No line blocking allowed. If your car has a brake shut off valve you will be deemed illegal even if it's completely enclosed and away from drivers reach. Vented rotors only.

### **WHEELS:**

7. Both right side wheels must be plated or heavy-duty steel or aluminum. No stock steel including rally wheels or honeycomb aluminum factory wheels allowed on the right side.
8. Maximum wheel width is 8". Use of mud plugs made of rubber, foam, or plastic is allowed **on right side only**. No other material type allowed for mud plugs.
9. Wheel studs may be changed to a larger diameter size in the interest of safety. 1" OD lug nuts are mandatory. Broken, stripped, or missing wheel studs or lug nuts must be replaced, or car will not be allowed to race.
10. **Outer mud cover mounting tabs and rings must be integral to the wheel or be securely welded to wheel.**
11. Bead Lock Allowed on Right Rear ONLY

**TIRES:**

1. Tires must be street tires as manufactured for use on passenger cars. All factory names and numbers must remain on tires. Maximum tire size is 255/60/15. No light truck, mud, snow, off road, or recap tires allowed. Any time a car is found at the track with an illegal tire on it, that car will be fined and or disqualified from racing for the entire night. \*. No American Racer, Hoosier 500, or any other race tire will be allowed.

**SECTION D: Cooling/Fuel/Battery****COOLING:**

1. Radiator must be mounted in stock location and must appear stock. Factory core support may be changed.

**FUEL:**

2. Fuel and oil lines in the driver's compartment must be encased in steel tubing from front firewall with no breaks in the tubing. Steel braid line is accepted.
3. Racing fuel cells are Mandatory with Max 16 gallons (16 gal. as advertised) and must be securely mounted in the trunk area. No aluminum tanks. Two steel straps front to rear and one side to side are required. Ground strap on filler neck to chassis is required. Minimum strap size is 1" x 1/8" steel flat stock. Fuel cell must have a safety flapper valve. Fuel cells without safety flapper valves will NOT be allowed to compete.
4. Trunk floor area cannot be gutted and floor must have two 2" holes for fire extinguisher access.
5. Fuel cell area must be completely sealed off from the driver's compartment with min 22 ga. STEEL sheet metal. No filler necks protruding through rear fire wall or trunk lid.
6. Gasoline only. No additives of any kind allowed. Racing gasoline and AV gas is allowed.

**BATTERY:**

7. Battery must be mounted securely inside a container. Mounting inside the driver's compartment is optional. Plastic boat type battery boxes MAY be used if battery is mounted inside of car. Only (1) one 12-volt battery allowed, Positive terminal MUST be covered on battery.

**SECTION E: Safety**

1. No grace races on safety related violations.
2. Racing approved 5 Point harnesses are mandatory. Shoulder harness must be mounted below driver's shoulders and securely attached to roll cage. Seat belts must be attached to roll cage. recertified after 5 years of age. Subject to inspection at any time.
3. Seat must be securely mounted to the roll cage. Seat must be replaced with aftermarket Aluminum racing seat. Drivers utilizing a head and neck restraint system Must have left/right head supports

fastened to approved racing seat. Headrest or roll cage padding must be installed where seat back is not high enough to protect the driver's head.

4. All drivers must wear full safety equipment every time they go out on the track. Helmets must be worn anytime you operate the vehicle. **Neck braces or neck and head restraint systems are highly recommended.** Safety equipment consists of SFI approved fire suit, SFI approved gloves, and Snell approved with a rating of SA 2005 or better, full-face helmet with full chin protectors and flip-up shield for fire protection. M type helmets are not allowed.
5. No open face helmets or goggles allowed.
6. A working 2 ½ lb. ABC type fire extinguisher is required in every pit. A fire extinguisher or onboard fire out system is recommended in every car. This rule will be enforced all season.
7. Functional Raceceivers are mandatory anytime you're on the track.
8. Cars that lose front bumper, hoods or driver's door during a race may be black flagged from that race at the discretion of the track officials. Cars must have parts securely attached, prior to competing in the next scheduled event.
9. Pit crews leaving lug nuts off when a tire is changed will result in car being put to the end of the lineup, fined or disqualified.

#### **SECTION F: Miscellaneous Enforcement**

1. Working transponders are required. Transponder Must be mounted to passenger side firewall.
2. Legible numbers are required on both doors of the car and on the roof (facing right). These numbers must be a minimum of 20" tall x 3" wide and must be dark numbers on light cars or light numbers on dark cars. Numbers at least 5" tall are required on the front and rear of the car. Failure to field a car at least one time every 60 days could cause you to lose your car number. Be sure you are going to field a car before you buy a car number. Previous year's champion exempt.
3. The definition of "STOCK" means unaltered and as originally produced in its purest form for factory installation for year, make, and model at they pertain to these rules. Any part not covered by these rules must remain Stock in the purest form of year and make. The definition of "LEGAL" is any and all structures, parts, and equipment pertaining to the car that conforms to these rules and regulations as determined by track officials. OEM stands for Original Equipment Manufactured.
4. Three-digit numbers, numbers with letters, or letters only is not recommended.

5. Anyone not having the required decals in the proper place will be fined the amount of points and money earned that night.
6. These rules are meant to keep all cars stock. Anytime a car is found in violation of any of these rules during or after a race, it may be fined and or disqualified for the night, or worse. If you feel the need to ask if something is legal, ask. Don't assume.
7. No two-way in-car radios allowed. No radios allowed in the pits. Racecievers are mandatory. It is up to you to make sure you have a working raceciever, if not you may be docked positions or possibly not even scored.
8. Only self-starting cars may race.
9. Let's race in the spirit of the rules.
10. A driver must participate in at least 70% of Central Arizona Raceway events in order to receive Point Fund Monies and trophies.

#### **SECTION G: Protest / Tear Downs / Remedies-Decisions / Claim / Misc. Penalties**

**PROTEST:** All cars are eligible for an engine protest. To protest, you must follow the guidelines and submit your protest to the pit board within 15 minutes after the feature results are posted. Fee: \$250.00 in cash must be submitted with a written protest. Car number nature of protest and your signature must be included in the submittal. Cars Subject to Protest: Any car that has taken a green flag in the main event that night. What Can Be Protested: Anything on a car that could be in violation of given rules. Who May Protest: Any driver that starts the main event and is in good standing at Central Arizona Speedway.

**TEAR DOWNS:** Any tear down must be done within a reasonable amount of time as determined by an official. Where: In the tech area or designated area by officials. Which Parts: Any parts required to prove rule compliance to satisfaction of an official.

**REMEDIES-DECISIONS:** If Legal: Protested driver will receive \$200.00 of protested money. \$50.00 will go to the track. If Illegal: Protestor will receive \$250.00 refund. If a Car is found Illegal: 1st Offense: \$200 fine and or no points for the race. 2 nd Offense: \$400 fine and or no points for remainder of the season. 3rd Offense: Driver suspended for the year and forfeits all points and point fund money. Protested illegal car will be fully disqualified from all events for that day of racing, this includes all monies, awards and positions. In Addition: Failure of either party to cooperate with the officials and or rules may result in protest being denied or upheld on technical violations. Decisions made by officials are final. There will be no appeal of compliance once a decision has been rendered.

**CLAIM:** Shock claim will be \$75.00 per shock. Driver claiming shocks must **finish main event and report immediately to tech**. Driver needs to race 2 consecutive races prior to being eligible to claim shocks. ONLY 1 claim per year.

**MISC. PENALTIES:** In handling a protest, an official will use these procedures as a guideline, but are not limited to only the penalties contained herein. Further penalties or fines may be levied as deemed necessary. Driver of the car is totally responsible for all actions of his car owner and all pit



crew, including but not limited to: abusive language, fighting, cheating, threatening, or attempting to intimidate others, or any other actions determined by an official to be unsportsmanlike in conduct. Any of the above will result in disqualification. If any fighting occurs, track officials at their discretion may levy fines and/or suspensions. The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptance requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules.

**NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OR OF COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.** They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The Race Director shall be empowered to permit minor deviation from any of the specifications herein or impose further restrictions that in his/her opinion do not alter minimum acceptance requirements.

**NO EXPRESSED OR IMPLIED WARRANTY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS.** Any interpretation or deviation of these rules is left to the discretion of the officials