

# 2024 Super Late Model Rules

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

This set of Super Late Model Rules is intended to allow a variety of typical Super Late Models/ Late Models to compete on an equal playing field. Track management reserves the right to make changes to the rules on a when and as needed basis.

#### 1. CAR BODY REQUIREMENTS:

- 1.1 Please refer to the ABC official rulebook version 9.0 for all body specifications.

  <a href="https://www.fivestarbodies.com/Files/Resources/Rules--Dimensions/ABCrulebook-web.pdf">https://www.fivestarbodies.com/Files/Resources/Rules--Dimensions/ABCrulebook-web.pdf</a> NOTE: Gen 6 Body is allowed.
- 1.2 Bodies must be constructed of steel, aluminum, fiberglass, Kevlar or carbon-fiber. Flat or slab-sided bodies are not permitted. All bodies must maintain original dimensions. Must be installed in a professional manner and meet manufactures guidelines. Must fit referee. No wedge, down force, or aero type bodies allowed. Belly pans/ Under pans will not be allowed. 29" maximum radiator box mandatory by 2025.
- 1.3 If the car excessively contacts the track, driver will be black-flagged. The maximum front overhang from the front centerline of the spindle to the leading edge of the lower air dam at the centerline is 46". At all times, the ABC "A" measurement must maintain a minimum of 11-½". A minimum length of 20" is permitted for the nose, measured from the bottom leading edge at center, up to the hood seam. Minimum 47" roof height required, measured 10" back from top edge of the front windshield. Top of front fenders, doors, and rear quarter panels must maintain the same plane front to rear. The maximum of 34-½" plus or minus ½" measured at quarter panel/deck lid/rear bumper cover intersection on both sides. The nose/fender may flare out in front of the tire on the front and rear of the vehicle; it may be a maximum of 1" past the outside of the tire measured at spindle height. The fender in back of the tire on the front and rear of the vehicle may roll in a maximum of 2", measured on the outside of the tire and measured at spindle height. Adjustments will be permitted during an event and must be done in a manner that results in the car maintaining body height requirements.
- 1.4 Roof rails are permitted with a maximum of 1" lip only. No other vertical rails allowed on window or deck lid. No quarter panel extensions allowed. NO "shaping" or contour modifications of panels or nose permitted in any way. The tech director reserves the right to add weight accordingly to non-conforming body measurements. Weights will be determined by the officials and are non-negotiable.

#### 2. ENGINE REQUIREMENTS – GENERAL

Please Note: Track Officials have the option to tear down any vehicle at anytime.

- 2.1 Minimum 311 C.I. to 366 C.I Max.
- 2.2 No titanium, carbon fiber, aluminum, or stainless steel connecting rods allowed.
- 2.3 A ¾ inch plug must be installed in the oil pan for inspection, that access hole must be in line with a connecting rod journal.
- 2.4 All engines must be located so the center of the forward-most spark plug hole of the engine is 2 inches rearward of the center line of the upper ball joint.
- 2.5 Ford & Chrysler engines are allowed a 3 inch setback.
- 2.6 All engines must be centered in the frame, within a maximum of 1 inch offset for header clearance.
- 2.7 Crankshaft height is 10 inches minimum, with frame sitting on 4" blocks.
- 2.8 Dry sump system is allowed.
- 2.9 Roller cam and lifters are allowed. Lifters and push-rods must be magnetic steel. Belt drive, chain or gear drives timing chain allowed.

- 2.10 Shaft type rockers are allowed.
- 2.11 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 side center intake bolts and two right side (2) carburetor bolts must be drilled for sealing. When using 2 BBL option (1) carburetor stud and (1) adapter stud on the right side must be drilled. If the seal is broken or missing, at any time after a race, it may result in disgualification.
- 2.12 Engine Seal Details: Engines shipped from engine manufacturers (Ford Racing or GM Performance) or sealed by an approved sanctioning body (Ex: IMCA or the S.E.A.L. program) come as a sealed unit. Any alteration and/or tampering with engine seals deems that engine in-eligible for competition and may result in the entire engine being confiscated; subjecting the driver to any or all of the following penalties; loss of points and winnings; fines; or suspensions. Penalties for those violations are not subject to appeal and decisions are final.
  - 1. Alteration or modification of any sealed component will cause that component(s) to be ineligible for competition and will subject the driver and or owner to disqualification from the event, confiscation of the component(s); forfeiture of any or all event monies and indefinite suspension; additional fines and penalties as deemed appropriate by Officials.
  - 2. Seals deemed tampered with or altered cause the engine to be ineligible for competition and will be immediately impounded. Impounded engines will be sent to a track approved Certified Engine Inspector/Rebuilder, at the expense of the driver and/or car owner for engine re-certification. At the conclusion of testing, the engine has been deemed altered or modified, the offending driver and or owner will be subject to automatic disqualification from the event; loss of one-hundred (100) Driver Championship points; forfeiture of any or all event monies and/or contingency awards; confiscation of the engine; indefinite suspension, additional fines, fees and penalties as deemed appropriate.
  - 3. For Chevrolet 604, CT525 and Ford Racing D347 crate engines, the only allowed seals are the factory bottle cap type seal. The exception is when the engine has been sealed by an approved sanctioning body (Ex: IMCA) OR sealed by Tucson Tech after being examined and found to be compliant (Tech personnel examination/time charges will apply).
  - 4. For engines that are not sealed by a sanctioning body, OEM and Engine Program Builder outlined above, and found not to have non-compliant components, only those components deemed to be illegal will be confiscated. All other fines, fees and penalties will still apply.

# 3. Engine Options: A

- A ASA / 604 GM crate motor with 650 CFM Holley Carb = 2725 lbs.
- A1 The 604 GM Crate motor must be left as "Factory" or "IMCA" sealed. At this time factory is the "bottle cap" seal. Crate engines that have been rebuilt or modified in any manner are considered under Engine Option B rules.
- A2 Ignition systems will be limited to 6600 rpm. Rev limiter must be out of reach of driver. All other requirements for ignition systems apply.
- A3 Approved aftermarket harmonic balancers and pulleys will be allowed.
- A4 1.5 Or 1.6 aluminum roller rocker arms are allowed.
- A5 GM 12499224 Beehive valve springs are allowed.
- A6 The 6.5" aftermarket oil pans allowed.
- A7 ASA Legal Engines are allowed provided that they meet ASA rules.
- A8 <u>Crate engine protest</u> if you feel the engine builder build sheet is not true, pay \$2,000.00 protest fee to have the engine checked. If the engine is legal or illegal part of the money will go to the shop that checks it and the rest will go to the win or lose party and a \$100 to the tech official.

# **Engine Options: B**

- B1 Ford 347 Crate Motor with 650 CFM Holley Carb = 2750 lbs
  - a. 1.5 Or 1.6 aluminum roller rocker arms are allowed.
- B2 McGuneaill Ford LM425 motor with 650 CFM Holley Carb = 2800 lbs
- B3 Ignition systems will be limited to 6600 rpm. Rev limiter must be out of reach of driver. All other requirements for ignition systems apply.
- B4 Approved aftermarket harmonic balancers and pulleys will be allowed.

- B5 The 6.5" aftermarket oil pans allowed.
- <u>Crate engine protest</u> if you feel the engine builder build sheet is not true, pay \$2,000.00 protest fee to have the engine checked. If the engine is legal or illegal part of the money will go to the shop that checks it and the rest will go to the win or lose party and a \$100 to the tech official.
- **B7** Engine Seal Details:

Crate Engines may be rebuilt and will be considered resealed. As an option GM or Ford Crate's may be rebuilt with full rockers and stud girdles. If you have a crate engine rebuilt you can use aftermarket parts as long as they are equivalent to GM and FORD spec sheet in weight and size. Engine builder will produce a build sheet showing parts and part numbers used in the engine. Contact the tech director for track approved Certified Engine Re-builder before having any work done.

Rebuilt 604 and Ford crate engines must present the build sheet at time of pump and whistle. If you do not present the build sheet you will be considered an Open Motor and must weigh 2900 pounds. If you cannot meet these requirements, you will tag and receive last place points and money.

Engines shipped from engine manufacturers and/or track approved Certified Engine Re-builders come as a sealed unit. Alteration and/or tampering with engine seals deems that engine in-eligible for competition and will be confiscated; subjecting the driver to any or all of the following penalties; fines; or suspensions.

# **Engine Options: C**

- C1 CT 525 Engine = 2,825 lbs (15 lbs of weight mounted forward of bellhousing on right side frame rail and 15 lbs must be mounted forward of bellhousing on left side frame rail, up high as possible.)
- a Engine must meet all specifications of the CT 525 P/N 88958759 technical manual second edition.
- b Ignition system P/N 19171130 is mandatory and will be limited to 6800 rpm.
- c The ignition box may not use a chip.
- d Timing limited to 28 degrees.
- e All other requirements for ignition systems currently in rule book will be enforced.
- Be prepared to remove your ignition box. Boxes may be swapped with a competitor's box or a box provided by the track at any time.
- Laptops are not allowed to be connected to boxes while in TS tech area without an official present.

  Laptops or laptop wiring may not be in any portion of the drivers compartment while in TS tech area unless an official is present.
- h TUCSON TECH will install the curve and maximum rpm. Tucson Speedway can make changes to these rules at any time to make competition fair.
- C2 Tucson Speedway Engine (approved by officials) = 2800 lbs (750cfm = 2850 lbs)
- a Engines may be interchanged with any approved body. Only cast iron engine blocks permitted and must retain all stock external dimensions.
- b Maximum engine displacement is 366 cubic inches including wear.
- c Maximum engine compression ratio is 12.1:1.
- d Any aluminum piston may be used with a minimum of three (3) rings per piston is required.
- e Titanium valves and valve spring retainers permitted but no other titanium is permitted in the engine.
- f Cylinder heads may be cast iron or aluminum. GM type engines must have no less than 23 degree of valve angle as measured from the crankshaft centerline. There are no restrictions on valve size. The valve stem centerlines must remain in the OEM location and dimension of the heads being used.
- g Any magnetic steel roller or flat tappet camshaft is permitted.
- h Independent stud, roller-tip rocker arms, stud girdles and split shaft rocker arm assemblies are permitted.
- Only standard magnetic steel or cast iron production design crankshafts will be permitted. If aftermarket crankshafts are used, they must be designed and manufactured the same as an OEM crankshaft for the approved standard production engine. Stroke may be increased or decreased and balancing is permitted.
- j Connecting rods must be solid, magnetic steel. Aluminum, titanium, stainless steel or hollow rods are not permitted.

- **k** Engines may use a wet sump or dry sump oiling system. An accusump type auxiliary type oil reserve is permitted.
- The oil pan must have an inspection plug with a minimum diameter of one (1") on the driver's side allowing visibility of the crankshaft and connecting rods. (Moroso part # 23970 is recommended).
- m Any cast, one piece intake manifold may be used.

# **Engine Options: D**

- **D1 S.E.A.L. Engine Program McGunegill, Hamner, Progressive = 2875 lbs** Any tampering of seals or established construction of these engines is grounds for immediate disqualification.
- a Holley 750 CFM P/N 4779 or 80528 is permitted.
- b The carburetor and any carburetor components including boosters, throttle plates, throttle shafts, throttle bodies, metering blocks, etc. must remain stock in appearance and match all factory dimensions.
- only Holley replacement and/or service parts will be permitted in carburetor rework. Must pass all Box Stock Gauges. Any Hamner engine will run the 1.350 restrictor.
- d IGNITION SYSTEM SPECIFICATIONS 7600 Maximum Rev Limit. May use any standard oval track racing ignition box. Racers responsibility to have chip that tests 7600 rpm or below and covered at all times.
- e Absolutely no crank trigger pickups permitted.
- f Engines may be inspected during post race tech to monitor adherence to spec rules.
- g Tucson Speedway can make changes to these rules at any time to make competition fair.
- **D2 TOUR 9.5:1** (this includes **SRL legal** with 750 Carb) = 2825 lbs 8200 Max RPM
- a Touring Division legal motors are allowed must comply with rulebook including amendments. (750 SRL legal)
- **Southern Super Parts Engine (SSPE)** = 2875 lbs Per SRL 2023 Rules the maximum racer cost of this engine package is capped at \$24,000 and as a result may be claimed for \$24,000.
- A Maximum Engine Displacement is 362 c.i.
- B Maximum compression ratio is 11.5:1 with +.5 tolerance
- C Maximum 7800 RPM Rev Limiter must be fully functional.
- D Any flat top piston with 927 wrist pin (no titanium) and minimum ring thickness 1mm x 1mmx 2mm only. Pistons must not extend out of the top of engine block.
- E Cast iron engine blocks only. No lightened blocks.
- F Intake must remain stock. Absolutely no match porting or blasting of any kind permitter. Slotting of bolt holes, water lines and matching of sides allowed. Ford Part #: Edelbrock 2928, 2929 or 2934 only. Chevy Part #: Edelbrock 2814 and 2892 only.
- G Crankshaft must have a minimum weight of 40 lbs (with front timing pulley or sprocket). Minimum main size Chevy 2.300/ Ford 2.250.
- H Connecting rods: Minimum rod journal size 1.850". Absolutely no piston-guided rods permitted. No titanium rods permitted. Minimum rod weight 540 grams.
- Listed Brodix Cylinder Heads only. Heads may be surfaced to achieve proper compression ratio. Absolutely no other work of any kind will be permitted to the intake ports, exhaust ports or combustion chambers. Ford Part #: SP STS T-1 F STD 225-SSPE. Must retain minimum valve angle of 20 degrees. Chevy Part #: SP STS T-1 STD 227-SSPE. Must retain minimum valve angle of 21 degrees. Multi-angle valve job permitted. Absolutely no blending of valve job below valve seat permitted. Chamber must retain shape 3/8" above valve seat. Minimal blending due to multi-valve jobs permitted.
- J Maximum valve size: Intake 2.08", Exhaust 1.60", Stem size 11/32". Intake valve may be titanium or stainless steel. Exhaust must be stainless steel.
- K No titanium valve springs permitted. Titanium retainers permitted. Lock angles not specified. Starting in 2024 no valve springs less than a minimum OD of 1.500.
- L SSPE spec Camshaft must be Competition Cam Part #21151712. Camshaft must be installed on 104 degree intake centerline +/- 1 degree. Roller lifters. Maximum lift of .715" while using 1.6 rockers checked at valve with zero lash. Maximum 1.6 rocker arm. Magnetic-type push rods only. No keyway guided lifters permitted.
- M Maximum 5 stage dry sump oil pump permitted. All stages must be straight tooth or straight rotor with a maximum rotor of three lobes. Starting June 1, 2023, no high helix pumps permitted.

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- N Oil pan must have 1" inspection hole. Absolutely no sectional pans permitted. Open box pans only (No windage tray/scrapers, etc.)
- O Ignition system must mount on the right side of the car out of reach of the driver.
- P Absolutely no crank trigger pickups permitted.
- Q Carburetor must be an unaltered 750 CFM 4779, 80528 Holley permitted. Carburetor must pass inspection at any time.

#### 4. CARBURETOR:

You may use either a 4 barrel (4150HP) carburetor or 2 barrel (Holley 4412). The only approved modifications apply to both carburetors as follows:

- 4.1 A Holley 4150HP Series Model # 80507 (4) barrel carburetor may be used with the minimum posted engine weight. Holley 4412, 2 barrel carburetor may be used with 50 lb weight break from the posted engine weights.
- 4.2 750 Carburetor (max) will be allowed only on Engine Options: C2 (2850 lbs) D (2875 lbs) D2 (2825 lbs)
- 4.3 The choke air horn may be removed with a square mill cut.
- 4.4 The butterflies may be drilled with one (1) 3/16 idle hole each.
- 4.5 The choke and linkage may be removed, but holes must be permanently filled.
- 4.6 No polishing, grinding, coating or drilling of holes permitted in the carburetor body.
- 4.7 Screw in air bleeds is permitted.
- 4.8 Keith Dorton Carburetor Part # 0-80583-1 not permitted.
- 4.9 Butterfly screws may be replaced with pan head type screw.
- 4.10 Venturi area may not be altered in any manner. Casting ring must not be removed.
- 4.11 Base plate cannot be altered in size, shape or finish.
- 4.12 Throttle shafts must remain standard and cannot be thinned cut or altered in any manner.
- 4.13 Boosters may not be changed. Size or shape must not be altered. Height must remain standard.
- 4.14 Accelerator pump system is open.
- 4.15 Power valves, metering blocks and floats may be modified.
- 4.16 Performance air filter and housing permitted but must not protrude through the hood. No tubes, funnels or any device which may control the air flow are permitted inside or outside of the air cleaner or between the air cleaner and the carburetor. Cold air boxes are permitted.
- 4.17 A minimum of 2 throttle return springs are required and must be mounted from separate locations.
- 4.18 Maximum gasket thickness is .065".
- 4.19 No tubes, funnels or anything which may control the flow of air is allowed inside of the air cleaner or between the air cleaner and the carburetor. No forced air devices are allowed.
- 4.20 A fresh air deflector will be permitted (if not utilizing a cold air system) from the center of the leading edge of the windshield directly under the cowl air opening in the hood. The deflector will not exceed 20" in width and will be centrally located on cowling. The top and bottom of the air filter housing must be solid and must be the same diameter. A maximum of a one inch lip will be permitted from the air filter element to the edge of the air filter housing top and bottom. Only one round dry paper type air filter element is permitted. No treating or soaking air filters.
- 4.21 No electric fuel pumps will be allowed.
- 4.22Two (2) right side 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.
- 4B In addition to the above modifications, below are rework guidelines for the 4150 HP: (under advisement)
- B1 Boosters: 0.620 OD minimum 0.450 maximum
- B2 Tube: 0.218 minimum
- B3 Venturi: 1.0625 maximum
- B4 Baseplate: 1.4375 maximum
- B5 Baseplate Thickness: 0.715 minimum
- B6 Throttleshaft: 0.200 minimum
- B7 Any carburetor modifications not specifically covered in these rules will not be permitted.
- B8 All carburetors must pass the Go/NoGo gauges.

#### 5. CARBURETOR ADAPTER / SPACER & FILTER:

- 5.1 An approved one piece carburetor adapter/spacer with a maximum of 1.000" inch thickness may be installed between the intake manifold and the carburetor. One (1) carburetor bolt with one (1) adapter bolt on the right side must be drilled adjacent to each other for sealing. If the seal is broken or missing, at any time after a race, it may result in disqualification.
- 5.2 A one piece, paper gasket, maximum thickness 0.065" inch that matches the exterior dimensions of the carburetor throttle plate and must be installed between the adapter and the carburetor and a second gasket of the same size and dimensions must be installed between the adapter and the intake manifold.
- 5.3 Any alterations to allow air to be introduced into the engine below the opening of the carburetor venturi is not permitted.
- 5.4 Performance air filter and housing permitted but must not protrude through the hood. No tubes, funnels or any device which may control the air flow are permitted inside or outside of the air cleaner or between the air cleaner and the carburetor. Cold air boxes are permitted.

## 6. WEIGHT/PERCENTAGES/RPM RULES WITH DRIVER BEFORE RACE:

- 6.1 Engine Options: A 2725 lbs. / 58% maximum left side weight / 6600 Rev Limiter
- 6.2 Engine Options: B1 2750 lbs. / 58% maximum left side weight / 6600 Rev Limiter
- 6.3 Engine Options: B2 2800 lbs. / 58% maximum left side weight / 6600 Rev Limiter
- 6.4 Engine Options: C1 2825 lbs. / 58% maximum left side weight / 6800 Rev Limiter
- 6.5 Engine Options: C2 2800 lbs. / 58% maximum left side weight / NO Rev Limiter
- 6.6 Engine Options: D 2875 lbs. / 58% maximum left side weight / D1 = 7600 Rev Limiter / D2 8200 Rev Limiter
- 6.7 Engine Options: D3 2875 lbs. / 58% maximum left side weight = 7800 Rev Limiter
- 6.8 Your declared weight must be posted on the top right side of the windshield pillar.
- 6.9 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 car number clearly visible on each piece, and must be securely attached with a minimum of two (2) ½ grade 5 minimum bolts with lock nuts.
- 6.10 No pellets or tungsten allowed.
- 6.11 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.
- 6.12 Holley 4412 2 barrel carburetor may be used with a 50 lb weight break from the posted engine weights.
- 6.13 Spooled rear-ends will receive a 25 lb weight break from the above posted weights.

#### 7. SPOILER:

- 7.1 A spoiler, non-adjustable by driver, must be attached to the rear deck-lid, with a maximum surface area of 6 ½ inches in height and maximum 60 inches in length.
- 7.2 Must be 1/8 inch metal or 1/4 inch Lexan, the top 3 ½ inches of rear spoiler must be ¼ inch clear Lexan, and control the flow of air over top surface only.
- 7.3 No rudders or forward mounted brackets are allowed.
- 7.4 Rear spoiler braces may be used.
- 7.5 Front nose width no wider than 81 inches, with no other directional air devices allowed.

#### 8. FRAME/ ROLL BARS AND GROUND CLEARANCE:

- 8.1 If a car excessively contacts the racing surface the driver may be black flagged.
- 8.2 Full tube or stock sub frames are permitted. Perimeter or straight rail chassis permitted. Mainframe rails or clip sections may not be pierced, drilled, or otherwise altered for reducing weight. Absolutely no holes will be tolerated in the mainframe rails or sub frames except to facilitate component attachment and /or brackets.
- 8.3 Mainframe rail structure of the chassis, defined as the primary structure to which the roll cage center section mounts to must be constructed of steel having a minimum perimeter of 10"(2"x3"ect) and be a minimum .095 wall thickness in that portion of the frame contained within the wheelbase. Front and read sub frame sections extending from the center section must also be 10" perimeter members but may have a minimum wall thickness of .083. If the frame rails are 12" perimeter (3"x3") minimum wall thickness may be .090. All frames are subject to approval. Any frame rejected by the Tucson Speedway officials for poor workmanship or welding will not be approved until necessary changes have been made.

- 8.4 A roll cage is required. Roll cage minimum 1x3/4" x.095 round ERW or DOM tubing. Roll cage must have main hoop. Roof hoop 2 A-post bars, dash and main hoop spreader bars and main hoop diagonal bar. Minimum of 3 door bars on left side and a minimum of 2 door bars on the right side. Left side door bars must radius out to within 1" of the door skin. Door bars must be tied to the frame at center. An upright brace between each door bar shall be welded into place. Right side door bars may straight between hoops instead of curving out to bodyline. Bars must be of the same materials as roll cage and similarly gusseted. A windshield bar (Earnhardt Bar) from roof halo to dash bar is required.
- 8.5 Roll bars must be padded anywhere driver may come in to contact with the bars. A driver's side door bar pad is permitted.
- 8.6 Tucson Speedway requires the installation of steel plates, 10" gauge or 1/8" thickness metal, must be securely welded to the door bars on driver side. Plate must cover the area from the top door bar to the bottom door bar and from the A post to the B post. The plates must be visible for inspection.

# 9. TREAD WIDTH:

9.1 All cars allowed a maximum tread width of 68-1/2 inches front and rear. 67" tread width mandatory by 2025. Must fit the TS gauge as presented for inspection. Measured from the inside of the right tire to the outside of the left tire at spindle height. No tolerance.

#### 10. WHEEL BASE:

- 10.1 101 inches minimum. No tolerance.
- 10.2 The wheelbase difference from left to right may not exceed ½".

#### 11. BRAKES:

- 11.1 All four corners must have operational brakes. Brake rotors must maintain a minimum of 85% of the original specification for the rotor being used. Rotors must be magnetic steel vane style. No solid type rotors are allowed. No carbon or carbon fiber components are allowed in the braking system.
- 11.2 Brake blowers are allowed. Tire blowers are not allowed.

## 12. SUSPENSION:

- 12.1 No spring or dampening devices are allowed to be-incorporated in the trailing arms. Independent rear suspension is not permitted. Rear suspension of either a three (3) link type suspension or a four (4) link with two (2) upper arms allowed. Rear springs must be mounted in the same manner/location on each end of the rear end housing.
- 12.2 Rear torsion bar suspension allowed. If needed will make left side weight adjustments for fair competition. Must have one torsion bar per side. No one piece torsion bars allowed.
- 12.3 Truck Arms allowed. If needed will make left side weight adjustments for fair competition.
- 12.4 No rear sway bars allowed.
- 12.5 One Shock per wheel. Shocks must be only mechanical in nature and no part of suspension or shocks may utilize electricity. No Inerter-style dampners, a.k.a. "J dampners" shocks allowed.
- 12.6 Maximum of one coil spring and one bump spring associated with each wheel.
- 12.7 No driver's adjustments allowed.

#### 13. IGNITION/COOLING SYSTEMS:

- 13.1 Only a point type, single or dual, or electronic system is permitted. All ignition systems are subject to approval by track management and tech officials. Ignition amplifier boxes and RPM limiters that are analog only which do not contain programmable, computerized, or memory circuits will be permitted. (Subject to change at official's discretion).
- 13.2 No magnetos or computerized systems are allowed.
- 13.3 The distributor must mount in the stock location for the make and model engine being used. No crank trigger ignition systems allowed. Each car may have optional backup ignition system components. The backup ignition system components must be disconnected from the primary system components using primary / backup switch(s). The ignition systems must consist of an ignition amplifier box, coil, distributor pickup and optional rev limiter (internal / external). RPM limiting devices must be approved

- by management and tech officials and be attached and wired to the ignition amplifier boxes in a visible manner.
- 13.4 The radiator must be located in front of the engine and must have a minimum 1 quart catch can securely mounted. No ethylene glycol or similar coolants allowed. Water Wetter and Motor max are permitted.
- 13.5 A labeled on/off master switch is required and must be located in the driver's compartment so that it is accessible from both sides of the car. On/off must be clearly marked.
- 13.6 The on/off switch must be connected to the battery cable in such a manner that would cut off all electrical power the car. Engines must stop running when master switch is off.

#### 14. EXHAUST:

14.1 Mufflers recommended.

#### 15. MIRRORS:

15.1 Rear view mirror with a maximum width of 26 inches will be permitted.

## **16. COMMUNICATIONS:**

- **16.1** Two way radios with a spotter is required.
- 16.2 During the race event, each competitor must have a spotter in the designated location. It is recommended the spotter monitor TUCSON SPEEDWAY race control.
- 16.3 Only one radio, one wiring harness and one antenna will be allowed.
- 16.4 During the event, start to finish, spotters must be in the designated location any time their car is on the race track.
- 16.5 Spotters must display car # affiliation for spotter official to see.
- 16.6 During the event, start to finish, spotters must be in the designated location any time their car is on the race track. If the spotter leaves the designated location during the event the car may be black flagged.
- 16.7 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.

# 17. DRIVE TRAIN REQUIREMENTS:

- 17.1 All clutch assemblies must meet the following requirements and are subject to track approval.
- 17.2 High-speed multiple disc clutches are permitted. Clutch must be a minimum of 5-1/2 inches in diameter.
- 17.3 Clutch must be mounted inside of the bell housing.
- 17.4 Clutch & Steel Flywheel must attach to crankshaft in a conventional manner and rotate with crankshaft at all times.
- 17.5 No carbon or carbon fiber clutches.
- 17.6 Standard production transmissions which are cataloged and available through regular dealer channels may be interchanged.
- 17.7 One forward and reverse gear must be in working order. Two-speed, three- speed, and four-speed transmissions are permitted. No direct drive assemblies or internal clutch type transmissions allowed.

#### 18. DRIVE SHAFTS:

- 18.1 Steel or aluminum drive shafts only.
- 18.2 No carbon fiber drive shafts, yokes or slip yokes allowed.
- 18.3 Driveshaft must be painted white and have a minimum of one, 2 inch wide X ¼ inch thick 360 degree brackets placed around the drive shaft and fastened to the floor or cross member preventing the shaft from being dislodged and dropping onto the racing surface or entering the drivers compartment. Recommended 2 driveshaft hoops.

#### 19. REAR-ENDS:

- 19.1 No open tube or independent suspension rear-ends are allowed.
- 19.2 Cambered rear-ends are allowed.
- 19.3 No titanium axles or lower input shafts are allowed.
- 19.4 No rear sway-bars are allowed.
- 19.5 Quick-change rear ends allowed.
- 19.6 Spooled rear- ends will receive a 25 lb weight break.

#### 20. WHEELS:

- 20.1 10 inch steel, approved racing wheels are mandatory.
- 20.2 No wheel weights are allowed.

# 21. FUEL SYSTEM REQUIREMENTS:

21.1 FUEL CELL: Fuel shall not be blended with any other gasoline or any additives, nitro compounds, or other oxygen containing compounds. It is the competitor's responsibility to ensure that fuels are not mixed in previously used containers. Icing or cooling of fuel systems will not be permitted in the pit or racing areas. Pressure systems will not be permitted. Any concealed pressure type containers, feed lines, or actuating mechanisms will not be permitted, even if inoperable. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system. Only 1 gasoline metal alloy filter may be used between the fuel cell and the fuel pump. The location and size of the filter must be acceptable to track Officials. The use of a fuel cell with bladder is required and must be isolated from the driver by a firewall. The fuel cell shall have a positive locking cap or approved dry break and must be vented with a flapper or check valve in the vent tube. Fuel cell must be enclosed in an approved metal container. Fuel cell must be fitted within the container so that the maximum capacity, including filler spout and overflow does not exceed 22 gallons. It is suggested that fuel cell dimensions be 33 X 17 X 9 inches. Fuel cell and container must be installed as far forward as possible in trunk compartment with an equal distance between frame rails. Fuel cell and container must be installed in recessed well, and must be secured with steel straps not less than two lengthwise and two crosswise. Straps must be made of 1" X 1" square tubing bolted to frame rails. Fuel cell container must be supported by 3 straps minimum, of 1 inch square tubing, secured to frame an equal distance from each end. All fuel lines must be steel braided line or enclosed in suitably marked (painted red) pipe or conduit. Fuel cell height is 8 inches minimum measured from cell to ground at a 4" ride height. No glass or plastic fuel filters are allowed. A reinforcement plate of not less than 1/8 inch magnetic steel must be installed behind the fuel cell. The plate must be welded to cage and must extend the entire width and height of the fuel cell.

#### 21.2 FUEL SPECIFICATIONS

- 21.2.1 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.
- 21.2.2 The fuel shall not be blended with alcohols, ethers or other oxygenates and it shall not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds. You can mix pump gas and racing fuel with a minimum 25% TS race fuel. It is the competitor's responsibility to ensure that fuels are not mixed in previously used containers.
- 21.2.3 Pump gas may be bought from a gas station.
- 21.2.4 Icing or cooling of fuel system will not be permitted in the pit or racing areas.
- 21.2.5 Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
- 21.2.6 Fuel is subject to testing at any time.

# 22. TIRES: (Hoosier 3035/F50)

22.1 All cars will run Tucson Speedway (TS) tires purchased from TS Tire Barn. The track specified tire for the 2024 season is the Hoosier 3035/F50. No shaving, grinding, cutting, softening, conditioning, siping, or grooving of tires allowed. A minimum durometer reading may be enforced at all time. Tire limitation rules apply.

- 22.2 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.
- 22.3 On Opening Day, each competitor who has a car in the pits that attempts to qualify and compete in that evening's events will be able to follow the tire allotment schedule, to be determined at a later date.
- 22.4 There will be no banking of tires at TS tire barn facilities.
- 22.5 No bleeder valves will be allowed.
- 22.6 Swapping tires between teams will not be allowed.
- 22.7 Tires that are qualified on must be used for all heat and main event races.
- 22.8 On each race day, after the first race event, that TS holds a NASCAR Super Late Model event, each competitor who has a car eligible and ready for competition will be allowed to record a pre-determined allotment of tires based on the tire allotment schedule.
- 22.9 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 tire/ tires will be considered NEW for the next event and the competitor will not be allowed to purchase new tires, unless, the race that the competitor did not qualify or compete was a two (2) tire race, and the next race is a four (4) tire race, then the competitor will be allowed to purchase a maximum of two (2) tires.
- 22.10Each tire will be branded, logged, and recorded by TS Tire/Tech Officials.
- 22.11In the event that a competitor is unable to attend or compete on Opening Day, at their first race to TS they may record four (4) new tires.
- 22.12In the event that a competitor flattens or damages more than one tire in an accident, only one (1) new tire may be recorded for replacement. The Tech Director may approve additional tires to 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.
- 22.13Tires will be available for purchase when the TS Tire Barn is open, generally Fridays prior to race weekend (if practice is scheduled), and Race day.

#### 23. PERSONAL SAFETY EQUIPMENT:

- 23.1 For all safety equipment. It will be the sole responsibility of the driver, not track management, their agents/officials or corporate officers to ensure that his/her safety equipment is correctly installed, maintained, and properly used. Any modification to safety equipment for any purpose must not detract from its effectiveness. Please refer to manufacturer installation and usage guide lines and adhere to them
- 23.2 Aluminum professionally built high back racing seat required. No plastic, etc.
- 23.3 Padded headrest required.
- 23.4 Seat must be securely bolted to and mounted on an assembly that is an integral part of the roll cage.

  Minimum 4 bolts on bottom of seat and two bolts to the roll bar near shoulder area.
- 23.5 Seat will not be attached to the floorboard. OK only if floor is minimum .125 steel welded between frame rails.
- 23.6 A five- (5) point safety harness, with quick release is mandatory! 3" wide lap belt, 2" or 3" shoulder belts, and a 2" submarine belt. All belts shall be attached to roll cage using minimum ½" grade 8 hardware and safety cables.
- 23.7 Cotton harness components prohibited.
- 23.8 SFI or FIA approved Safety harnesses/seat belts valid for two (2) years from date of manufacture per SFI standards. If necessary, proof of purchase may be required. Any visible damage, fraying or sun damage, may require replacement.
- 23.9 Full-face helmets are required and must be worn at all times while racing. Helmet must be 2015 Snell standard or better and have a sticker visible for inspection.
- 23.10 Window net mandatory SFI or FIA approved and may be no more than five (5) years old! Minimum 1" ribbon with release at top only. It is required that all window net releases be updated to the quick release seat belt type with releases located and facing the outside of the car. No close mesh off-road type allowed. Any visible damage, fraying or sun damage, may require replacement.

- 23.11 SFI or FIA approved fire suit, gloves and racing shoes mandatory at all times. Head and neck restraint highly recommended. Neck collar mandatory.
- 23.12 Eye protection is mandatory and must be in proper place at all times.
- 23.13 All cars must have a fully charged fire extinguisher, Halon 1211, ABC or equivalent type with at least a 2 lb. UL rating. Must have an operating pressure gauge which must be visible to tech inspection. If hand held type extinguisher must be securely mounted to the right of the driver's seat, and readily accessible for use. Steel mounts only, no plastic.
- 23.14 Two (2) drive line straps, 1" x 1/8" required. Mounting to be within 6" of the U-Joints.
- 23.15 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 crew members. All crew members must be made aware of its location, and knowledgeable in the use of the fire extinguisher.
- 23.16 Car and driver will be required to make safety rule violations comply PRIOR to any on track activity.

## 24. IDENTIFICATION AND MARKING:

- 24.1 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.
- 24.2 Side numbers must be at least 18" inches high and neatly lettered on both sides of the car.
- 24.3 Roof numbers must be at least 24" inches high and readable from the passenger side of the car.
- 24.4 Cars must have 6" tall numbers on front and rear.
- 24.5 All numbers must be legible and of a contrasting color to the area of the car on which they are displayed. No reflective/mirrored doors, quarter panels or numbers.
- 24.6 Driver's full name must be a minimum of 3" inches high on the left and right edge of the roof.
- 24.7 Car owners must register choice of car number with track management prior to the start of the season.
- 24.8 Management reserves the right to require a competitor to use a different number at any time to avoid duplication.
- 24.9 Contingency sponsor and or Class sponsor decals and or patches must be in place.
- 24.10 Top 4" inches of the windshield is reserved by Management for a division sponsor.
- 24.11 Cars must be painted/presentable. Cars in primer are allowed a two (2) grace race minimum.

#### 25. ELECTRONICS:

- 25.1 NO Traction Control Devices of any kind If any 'traction control' device is found, the driver and owner will be disqualified from the event, the car will be confiscated until a \$15,000 fine is paid. Additionally, the driver and owner will receive a lifetime ban from all Tucson Speedway events.
- 25.2 No Data Acquisition equipment/wiring is allowed in the car on officially recognized race or practice days.
- 25.3 No digital dashes will be allowed.
- 25.4 Cellphones, smart watches or bluetooth devices will not allowed in racecar at any time during qualifying or race, this is an automatic disqualification.

#### **26. COMPONENT VIOLATION:**

26.1 Speed enhancing alternation 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; forfeiture of any or all event monies and/or contingency awards.

**COMPETITIVE RULE:** If there is a rule violation that does not result in a competitive advantage, the Track Officials may issue a correction notice to the car/cars for inspection at the next class race, to be presented for inspection prior to any qualifying or heat races. If the car is not presented and/or the correction not made, the car is subject to disqualification at that race.

**OUT-OF-TOWN CARS:** TS invites all Out-of-Town competitors. Due to differing levels of competition, TS reserve the right to adjust gear, total weight or bias on an individual basis.

**Officials** reserve 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.