



## 2021 Late Model Technical Rules

Regarding any questions please contact:

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All American Speedway reserves the right to alter or amend these rules and regulations in the interest of safety, cost control and / or fair competition. Any changes will be posted as an "addendum" to the rules.

It is the responsibility of each competitor to read and understand the contents of this rule book. In the event of a disagreement or dispute regarding the interpretation or application of the rules written herein, the decision of the speedway manager shall prevail.

Illegal components may be confiscated by All American Speedway and become property of the speedway.

All deficient safety issues must be corrected before the car is allowed to compete. All non - safety rules infractions will be addressed by the All American Speedway technical staff and, if deemed to have a performance advantage, may require the competitor to repair before being allowed to compete, or, if deemed acceptable, may require a weight penalty be added for that nights event and the repair to be made before the next event can be participated in.

**0.0 Driver Eligibility** Drivers in this division must be at least 14 years old. A NASCAR premier license is required for this division. All drivers, owners and crew members must hold a current NASCAR member license in good standing.

**0.1** Any driver competing for rookie of the year points or who has competed in fewer than 5 races must display an obvious yellow stripe on the rear bumper of his or her vehicle while competing.

### **1.0 Competing models**

**1.1** Open to any made for asphalt racing, late model perimeter or straight rail tube frame chassis that meets the specifications spelled out in this rule book.

### **2.0 General body rules**

**2.1** Must use a **5 STAR** or **AR BODIES** asphalt late model traditional ABC **or new** style body, **5-STAR new style asphalt late model body** or **AR BODIES** asphalt late model muscle car body. Bodies must be mounted in compliance with standard mounting procedures as spelled out in the **manufacturer's catalogs**. No additional or add-on panels, extensions or modifications to the factory panels will be allowed. No modifications of front or rear bumper covers will be allowed. No additional holes or cut outs other than for front brake ducts and radiator cooling. Maximum **3/4"** tall roof rails will be allowed. Rails may not extend past the roof. (No rails allowed on the rear windows or rear deck etc.) Right and left front vent windows extending no further than **12"** back will be allowed.

**2.2** No carbon fiber body panels will be allowed. Only std. fiberglass or lightweight fiberglass body kits will be allowed

**2.3** The following body measurement dimensions are required **(all cars will be measured on 4" blocks)**

1. Roof height will be **46"** minimum as measured **10"** back from the top of the windshield in the center.
2. Front nose overhang will be a maximum of **47"** as measured from the centerline of the front hubs to the farthest forward point of the car.
3. Rear tail overhang will be a maximum of **47"** as measured from the centerline of the rear axle to the top rear of the bumper cover at the base of the spoiler.
4. Maximum rear quarter panel height **35"** measured at the top of the R & L quarter panel at the base of the spoiler.



5. Right and left door height is **32"** minimum measured to the top of the door at the front and rear of the side window opening.

6. Maximum rear spoiler width is **60"**. Maximum height allowed is **6 1/2"** measured from the base of the spoiler at the rear deck to the tallest point. Spoilers must be mounted no further back than the rear-most top of the tail. Spoiler must be centered on the rear body. No offset mounting of spoilers allowed. There are no forward braces or end plates or wicker lip edges allowed. Spoilers must be constructed of clear poly carbonate to allow visibility through for competing drivers.

**2.4** All interior panels shall be aluminum or steel and completely seal the driver's compartment from the engine compartment and fuel cell area.

**3.0 Weight** All vehicles shall be weighed prior to qualifying and the main events or as requested by track tech staff.

**3.1** All added weight shall be painted white with the car number written on all pieces. Must be at least 5lb. blocks securely bolted to a main frame rail with 1/2" bolts or secured inside weight boxes. No weight blocks inside the drivers compartment.

**3.2** Vehicle weights and left side percentage requirements are as follows.

- |   |                  |                 |                 |
|---|------------------|-----------------|-----------------|
| 1. All cars running the GM sealed approved 602 crate motor/any 4bbl | <b>2875 lbs.</b> | <b>60% left</b> | <b>6200 rpm</b> |
| 2. All other iron block wet sump engine combinations/any 4bbl       | <b>3075 lbs.</b> | <b>58% left</b> | <b>6800 rpm</b> |
| 3. Dry sump iron block engines 76" maximum track width              | <b>3075 lbs.</b> | <b>58% left</b> | <b>6800 rpm</b> |
| 4. CT 525 GM approved sealed crate engine/any 4bbl                  | <b>3075 lbs.</b> | <b>58% left</b> | <b>6800 rpm</b> |

The CT525 is the only aluminum block allowed. Cars running the Ct525 will be required to bolt 20lbs. to each R & L front frame rail (40lbs. total) at the kick up just behind the front cross member.

**3.3** Perimeter frame cars ~~true big spring~~ Camaro front clip cars will receive a **50lb.** weight break.

**4.0 Chassis** Any, made for asphalt racing, late model perimeter or straight rail chassis.

**4.1** Roll cage shall be a minimum of an 8 point cage. Must have at least 4 horizontal door bars on the driver's side with a minimum of 2 vertical spreaders between each door bar. Right side shall have a minimum of 3 bars. If an "X" pattern is used a horizontal top bar must be installed as the third bar. Must have at least 1 horizontal spreader bar running right to left between the front uprights at dashboard level. Main drivers compartment roll cage shall be constructed of at least 1 3/4" .095 steel tubing.

**4.2** All front clip and main frame rails must be constructed out of at least 2x3 .095 box tubing. Rear clip main frame rails must be constructed of at least 2x2 .083 box tubing. All center section main frame rails must be constructed out of at least 2x3 .095 box tubing. Stock Camaro style front clips are allowed.

**4.3** All roll cage bars are required to be padded at any point of possible contact with the driver.

**4.4** Driver's side door bars must be plated with minimum 1/8 inch steel or 1/4 inch aluminum plate covering at least 2/3's of the door bar area for driver protection.

**4.5** Ride height. There is no minimum ride height rule for the late model division at AAS.

**4.6** Wheelbase on all cars shall be a minimum of 101" on the right and left side.

**4.7** Maximum front track width is 79" outside sidewall to outside sidewall measured in the front of the tires at spindle height. Dry sump motor cars will be maximum 76" track width. Crew will be allowed to "set" the car before track width is measured but no one will be allowed to touch the car while measuring.

### **5.0 Suspension and Steering**

**5.1** All steering components, steering box, idler arm, pitman arm, center link, upper and lower cont. arms and spindles must be steel. Rack and pinion unit and upper control arm cross shafts may be aluminum. Steering heims and tie rod sleeves may be aluminum.

**5.2** A made for racing collapsible type steering column is mandatory. A quick disconnect and a made for racing steering wheel and steering wheel center pad is required.

**5.3** Coil springs (1 per wheel) of magnetic steel only may be used.

**5.4** Shocks must be steel body single or double adjustable. One per wheel. Aluminum heim ends and aluminum end caps on the shaft side are ok. May be rebuildable. No remote canister or reservoir type shocks allowed. No remotely adjustable shocks allowed. A weight penalty may be assessed for non-conforming shocks at the AAS technical staff discretion.

**5.5** Bump stops are allowed. Bump spring type bump stops are allowed.



**5.6** Rear suspension must be all solid links with heims. No additional springs, bushings, dampeners or biscuits on rear trailing arms, top links or panhard bars.

## **6.0 Brakes & Hubs**

**6.1** Must have working brakes on all 4 wheels. Only steel rotors are allowed. No titanium, aluminum, composite or ceramic rotors.

**6.2** 5x5 or wide 5 hubs are allowed. Must use floater style hubs. Must have 5/8 wheel studs. Wheel studs must be of sufficient length that stud thread is visible when lug nut is tightened. A maximum of a 1" thick wheel spacer of either aluminum or steel is allowed as long as there is sufficient wheel stud length to accommodate and maximum track width is not exceeded.

**7.0 Engines.** Any American cam in block iron block motor will be allowed. (CT525 Aluminum allowed)

### **See 3.2 for different weight classifications**

**7.1** Maximum engine set back.

1. Maximum setback for open motors and CT525 will be no further back than 2" from the forward most spark plug to the center of the upper ball joint on the same side.

2. Maximum setback for the GM602 will be no further back than 6" from the forward most sparkplug to the center of the upper ball joint on the same side

**7.2** Any iron block, wet sump motor (see 3.2-3 for dry sump) will be allowed. Aluminum heads ok. Must run a distributor ignition (no crank fire ignitions) Max **6800 RPM**

**7.3** GM CT525 Approved sealed crate engine. **MAX 6800 RPM** (See 3.2-4) for weight requirement for aluminum block)

**7.4** GM 602 approved sealed crate engine must be ran as delivered from Chevrolet. **As of 2020 only the new encrypted cup seal engines will be allowed. Domed head break off seal bolt engines will no longer be allowed in this division.** No altering rebuilding or repairing of these engines will be allowed. Must have GM factory seals verified to the satisfaction of AAS tech staff. The engine must retain the factory harmonic balancer as delivered.

You may run and aftermarket type distributor (Crane / MSD etc.) Coil and box. You may change to an aftermarket valve spring (factory retainers only) that has the same seat pressure and rating as the factory stock valve spring. **Max 6200 RPM**

**Altering this motor in any way under the GM seals (oil pan, timing cover, heads, intake) may result in a permanent suspension from racing at AAS and other AAS partner tracks**

**8.0 Ignition** HEI or aftermarket distributor may be used. MSD or Crane style ignition boxes and coils may be used. Must be mounted out of reach of driver in the upper right hand side of the dash area and in such a way that AAS tech staff can easily access and visually inspect as well as verify rpm limiting chip or settings. No crank fire or optical ignition systems No programmable ignitions allowed.

**No electronic traction control devices or systems allowed. Penalty for this infraction may result in a permanent suspension from racing at AAS or other AAS partner tracks.**

## **9.0 Fuel and Fuel system**

**9.1** Any 4 bbl. carb may be used

**9.2** All engines except the CT525 must run a mechanical fuel pump mounted in the stock location.

**9.3** CT525 may run an electric fuel pump system as required with an oil pressure cut off switch.

**9.4** No fuel lines, shut off valves or return lines may run through the driver's compartment

**9.5** A made for racing SFI rated fuel cell and can must be used and mounted in accordance with typical industry standards. Must be mounted a minimum of 8" off the ground.

**9.6** All competitors must run Sunoco 110 leaded, Sunoco E-85 race, E- 85 pump gas or Chevron premium 91 octane pump gas. No blending, altering or fuel additives will be allowed.

## **10.0 Cooling and Electrical**

**10.1** A single battery shall be allowed. Must be securely located outside of the driver's compartment.



**10.1** A master kill switch clearly marked for location and "on" and "off" that is accessible to the driver and the safety crew is mandatory.

### **11.0 Exhaust system and noise requirements**

**11.1** Mufflers, single or dual, are mandatory and shall be sufficient enough to meet all sound requirements of All American Speedway at all times. **No side exit exhaust!** All exhaust shall exit under the car. All mufflers must have a turn down that aims the exhaust exit at the ground. Due to our strict sound restrictions and the effect that weather condition variables have on sound generation, it is highly recommended that additional sound adjustability be built in to your exhaust system in the event your vehicle does not meet the sound levels required.

**11.2** All vehicles in this division competing, practicing or testing at All American Speedway are required to comply with the mandated maximum sound output restriction. All individual vehicles are required meet a maximum decibel output of **90 DBA**. No exceptions. Any vehicles found to be exceeding the allowable levels will be black flagged from the race track and required to make necessary repairs before being allowed back on the race track.

### **12.0 Drive Train**

**12.1** May use a Ford 9 inch or Quick change rear end. Gun drilled axels are allowed. Must be magnetic steel axles only, no titanium axels allowed.

**12.2** Front loaded quick change rear ends will carry a **25lb.** weight penalty.

**12.3** Magnetic steel or aluminum drive shaft may be used. (No carbon fiber) Must be painted white.

**12.4** Front and rear drive line safety loops are required.

**12.5** Any external clutch manual transmission is allowed. Must have at least (2) working forward gears and (1) working reverse gear. A full containment style bell housing is required.

### **13.0 Wheels and Tires**

**13.1** AAS approved racing tires are the only tires allowed to be run. You must run your main event on the tires you qualify on. All American Speedway Officials will mark tires prior to qualifying. Damaged tires may only be replaced upon inspection and approval by AAS officials.

**13.2** Only 8" steel racing wheels are allowed. 5x5 or W-5. May run offset wheels as long as track width requirements are met.

### **14.0 Safety Requirements**

**14.1** A professional grade aluminum made for racing seat is required. Shoulder, head, and leg supports are strongly recommended on all seats. **Absolutely no plastic or fiberglass seats of any kind will be allowed.** The seat must be securely mounted to a steel frame and brackets welded to the main roll cage. Seat shall be bolted to the mounts with minimum 3/8" grade 8 bolts and large washers to prevent pull through.

**14.2** SFI certified racing seat belts and harness are required. A minimum 3" wide strap (narrowed for Hans device ok) 5 or 6 point harness with individual double shoulder belts shall be required (no "Y" type). Seat belts should include an anti-sub belt to prevent the racer from sliding forward under the lap belts. **Seat belt sets may not be more than 5 years old per the SFI tag.** Belts with missing or unreadable SFI tags will be required to be replaced. Seat belts will be securely fastened to the main roll cage with welded tabs and minimum 1/2" bolts. Seat belts bolted directly to the floor pan will not be allowed. Shoulder belts should be anchored 6" below the shoulder line by either bolting or securing around the spreader bar with the proper hardware.

**14.3** Snell approved SA2010 or newer full face racing helmet with polycarbonate shield or goggles is required. A missing or unreadable Snell or SFI label will require recertification or replacement of helmet. SFI head sock is strongly recommended.

**14.4** A Hahns, Hutchins, Zamp or other similar SFI approved head and neck restraint is required to be worn at all times while on the track.

**14.5** SFI certified racing suit is required for all drivers at all times on the track. Damaged drivers suits with holes or tears will be required to be replaced. SFI rated gloves and shoes are required. Fire retardant long underwear is highly recommended.



**14.6** An on board fire suppression system is mandatory. System shall have a minimum of a 5 lb. halon extinguisher in an approved secure mounting bracket. Must be mounted inside the driver's compartment either under or behind the driver's seat. System must have a minimum of 3 operational nozzles, 1 at the rear of the engine, 1 over the fuel cell and one in the driver's compartment facing the driver from just under the dash area.

**14.7** An SFI certified ribbon style window net is required on the driver's side window. Mesh window nets are not allowed. Must be securely fastened to the top door bar at the bottom and have a quick release latch at the top that is easily accessible to both the driver and track safety crew.

**14.8** Two-way radios are mandatory. Spotter and crew must be able to communicate with driver by radio at all times while on the track. A designated spotter is mandatory and will be required to be present in the spotters stand at all times during the event. Any car without a spotter in the designated spotters stand may be black flagged from the event.

**14.9** Transponders are required and must be mounted 12" behind the centerline of the rear end and no higher than 24" off the ground.