

2021 SUNSET SPEEDWAY

PRO LATE MODELS

CARS TO APC SERIES RULES WILL BE ALLOWED, MUST CONFORM TO SUNSET SPEEDWAY POST RACE WEIGHT RULES

Driver Protection: Drivers are required to wear full coverage; one or two piece Nomex multi-layered fire suits which are S.F.I. rated. Fire retardant undergarments are mandatory with a single-layered suit. Fire retardant gloves and shoes are mandatory. Driver helmets must be full face and conform to Snell SA-2010 or higher SA standards and have a certification sticker visible inside the helmet.

Head and Neck Restraint. Approved head and neck restraint system which meets SFI specification is mandatory

Belts and Harness: A quick-release 5-point belt (shoulder and lap) of no less than 2" in width, and 2" width anti-submarine harness in good condition are mandatory. Shoulder harnesses must be mounted and secured at the driver's shoulder height. Belts must be securely fastened to the frame, cross-member or roll cage by means of a suitable reinforced mounting, in such a manner that all fittings are in direct line with the direction of pull. No inertia reels allowed and under no circumstances are bolts inserted through belt webbing accepted for mounting. Belts may not be any older than 3 years (manufacturer's date). All belts and mounting will be subject to inspection.

Fire control: Cars are recommended to have an on board fire system. On-board fire systems should be a 5 LB system and spray into driver's compartment. All entries must at least have a CSA approved fire extinguisher "ABC" rating, dated for the current year, which accompanies the car at all times. Fire Extinguishers, whether a suppression system or a stand-alone extinguisher, must be mounted in such a manner so the gauge is visible when looking in from outside the car.

Window Net: An approved nylon ribbon type net must be installed in driver's side window opening. Net sizing must be at least 16" x 18" . Net must be installed so it is tight. Window net anchors must be attached to roll bars, not body. Window net

must be quick-release type. Net must be permanently anchored at the bottom and release at the top. Lever-latch releases are highly recommended.

Dash: Car must have a fabricated full dash from left to right. All gauges must be installed directly in front of driver and on a vertical plane of dash. No part of dash shall continue to floor panel.

Steering Wheel: All cars must be equipped with a quick release steering wheel. Center of the wheel must be padded. Collapsible column highly recommended.

Roll Bar Padding: All roll bars within driver's area must be covered with approved roll bar padding. No sharp edges, intrusions or bare metal near driver.

Seat: Approved aluminum racing seat mandatory. Aluminum seats must be bolted or secured solid, so that seat will not shift or loosen on impact. A minimum 6 seat bolts, min. 3/8 inch or larger will anchor the seat. Seat must be completely to the left of the center line of the car and inside frame. Sheet metal surrounding driver must be 22-gauge magnetic steel, including front firewall. Interior must be complete with no visible holes.

RADIOS:

Two way radios allowed

Track one way frequency 454 UHF.

AIR CLEANER:

Filter element diameter 14" maximum, height maximum 4-1/2" .

All air shall be filtered through element. Top of air cleaner must be solid, no holes.

Element may not be sprayed or soaked with any type of chemicals or liquids.

Cowl induction will be acceptable, the front of the cowl must seal to the back of the hood when the hood closes. A rectangular opening maximum 20 inches long by 3 inches wide may be removed from the sheet metal at the center of the cowl.

No forward mounted air ducting allowed.

Air cleaner base must mount directly to carb, a thin gasket will be allowed.

NO high velocity or stack type air cleaner assembly.

Air cleaner must fit under hood without raising or distorting hood contour.

No high performance air flow enhancing air cleaners allowed.

BATTERY/ELECTRICAL SYSTEM:

Must be anchored securely and separated from driver by a firewall. Minimum two 5/16" mounting bolts.

12 VOLT electrical system only

BODY:

ABC Body 102" minimum wheelbase. All vehicles will conform to the ABC body rules and templates. Minimum tolerances will be enforced. All measurements will be taken with tire pressure set at 20lbs maximum.

ABC website <http://www.abcodies.com/>

Cars must conform to the following minimum and maximum heights.

Minimum nose and skirt height is 4". Maximum nose height is 8" while being presented for tech

A-pillar vent windows may only have 1" of straight line deflection. The surface must be smooth and not have bead rolls or breaks

No carbon fiber components.

All body panels and windows must be mounted and properly braced on the chassis to prevent deflection under racing conditions.

No types of under body air deflectors allowed. no "panning" of any type except under engine only

Air blowers must draw air from nose and may only be directed at brake rotors

Duct work between radiator and nose may be no wider than 29"

Roof must be mounted to conform to template and exhibit no side-to-side rake.

The placement of the roof will be compared to the location of the spoiler using an "X" measurement from the top corners of the windshield to the outside edges of the spoiler.

Rear deck must not be dished or raked side to side.

REAR SPOILER:

A 6.5" high X 60" wide rear spoiler, (measured across rear) with no side boxing is allowed. All rear spoilers will be centered side to side on the rear deck. Rear spoiler must be clear Lexan.

WINDSHIELD:

Lexan windshield with a minimum thickness of 1/8" must be full and complete.

No holes or ducting allowed. One brace from top to bottom must be on inside center of windshield. The car must run a rear window (minimum thickness of .093") and it too must be braced on the inside only. The passenger side window must remain completely open except for front 10.5" , which may have an air vent or clear Lexan installed (must match shape and dimensions of Five Star part # 000 – 6202). No additional material may be added in pillar area. The quarter windows should be Lexan. However, should the original fiberglass remain, the intended opening should be made to look like a window. Top 4 inches of windshield is reserved for series sponsor decals.

3" X 14" mirror mounted in the stock location is permitted. In addition to the larger mirror, an optional left side mirror that is no larger than 4" may be installed. The left side mirror may not extend or protrude outside the vehicle.

Numbers must be on the roof, readable from the right side of the car and both doors, at least 18" high and 3" wide. All numbers must be dark on a light background, or light on a dark background. No gold, silver, metal flake or trick numbers. A number must be placed on the front of the car, below the left headlight cover.

Race cars must be presentable in appearance at all times. Cars that are considered improperly prepared may be rejected by Sunset Speedway officials.

BRAKES:

Functional four-wheel brakes with a working caliper on each wheel are mandatory. Calipers may be made of steel, cast iron, or aluminum only.

Maximum four pistons per caliper. Maximum one caliper per wheel.

Magnetic steel brake rotors only. No cast iron faced aluminum. No carbon fiber material is allowed.

Front brake rotors must be a minimum of 1 ¼-inch thick and made of magnetic steel.

Rear brake rotors must be a minimum of ¾-inch thick and made of magnetic steel.

Floating rotors allowed.

All cooling ducts must be routed from the front nose of vehicle. Two hoses per brake, with a maximum 3" flexible hose to the brake.

Electronic wheel speed sensors or brake activators will not be permitted. An on-board pressure adjuster is allowed.

No brake recirculation systems

All brake lines must be visible for inspection

No titanium parts allowed

CHASSIS

Perimeter chassis, straight rail and OEM front clips permitted

Underslung-style chassis, Perimeter chassis, Straight rail, Coil-over permitted.

Front clip and main frame 2" x 3" x .095" minimum.

Chassis width 48" Min outside rail to outside rail.

Rear clip 2" x 3" x .083" minimum.

Four-point roll cage 1-3/4" x .090" DOM minimum.

Minimum cage height 39" from the bottom of the rail to the top of the cage.

Minimum four left-side horizontal door bars. Minimum height 22" to bottom of frame.

Minimum length for door bars 39" center to center. Door bars to be plated with minimum 16 gauge metal.

Width of halo to be no less than 28" outside to outside. Length of halo to be 28" minimum.

Leg protection bar mandatory. Roll cage structure shall be braced to front frame stub with a hoop section surrounding the engine compartment, and rearward

with diagonal members connecting to rear frame section.

Driver to be protected from left-rear trailing arm intrusion by 1/8" plate, 12" x 12"

Towing Loops: Each rear frame rail must have a 3" inside diameter tow loop (strong enough to lift the car) securely fastened as far rearward as possible extending above the trunk floor.

SUSPENSION/STEERING:

Front Upper Control Arms: Any tubular Upper Control Arms. Magnetic steel only.

Lower Front Control Arms: O.E.M. type or approved tubular steel aftermarket control arms accepted. All control arms and mounting hardware must be magnetic steel.

Rear Control Arms:

Must be maximum of 30" from mounting hole center to mounting hole center. Steel solid rod ends, rubber bushing style or magnetic steel Heim ends allowed. No hydraulic or spring devices allowed.

Upper Rear End Link:

>Maximum length 30" mounting hole center to mounting hole center. No coil, spring or hydraulic device allowed. Magnetic steel Heim ends allowed.

>No "BIRD CAGE" Assembly permitted in the rear suspension. Trailing arms must mount to rear end in a solid fashion (magnetic steel heim allowed) and no part of the trailing arm mounting may freely rotate around the rear end housing.

> No torque arm 3 link systems

Springs:

Aftermarket coils permitted front & rear. Non-metallic spring spacers are allowed between coil windings. Magnetic steel springs only.

Sway Bars/Panhard Bar:

> Max Sway bar size 2 inch

>Panhard bars must use magnetic steel Heim-ends at the connecting points and may not be adjustable from drivers seat

Shocks:

The following shocks will be permitted for competition.

Any steel bodied gas race shock with a retail price no greater than \$200.00 CDN.

The QA1 62 series, and aluminum threaded body, NON- adjustable shock will also be permitted for competition.

Pro Shocks rebound only adjustable smooth and threaded body shocks. PART # "PROAC" or "PROA" permitted.

>**Bilstein AS2 series:** Non-adjustable & rebound adjustable AS2 shock approved 7&9 inch shaft length only.

Unaltered stock Bilstein AS2 -46mm linear or digressive pistons only.

-Part #E4-B46-20SNDT -linear - 12mm shaft.

-Part #E4-AK1-Z024A01- digressive - 12mm shaft.

-Part #E4-B46-20SNCT- linear 8mm shaft.

-Part #E4-AK1-Z033A00 - digressive shaft.

>Must use unaltered stock Bilstein AS2 valving shims.

>All Bilstein AS2 shock components must be unaltered stock Bilstein AS2 components.

>1 shock per corner and no high pressure gas shocks.

Bump stops: External bump stops will be allowed

Steering and Hubs:

> Steering components, steering box and spindles must be magnetic steel (NO ALUMINUM SPINDLES ALLOWED). Magnetic steel Steering arms only. Hubs with a 5 x 5 bolt pattern. Wide five hub optional. Stock or aftermarket. Rack and pinion steering allowed. MAGNETIC Steel Heim ends must be used for tie rods (5/8-inch minimum).

>ALL Steering/Suspension mounting hardware must be magnetic steel. NO TITANIUM.

WHEELS/TIRES:

Wheel stud threads must protrude through nuts.

Bleeder or pop-off valve devices are not permitted.

No Blowers or hoses will be allowed to blow air on the tire/wheel

Wheel rim: Rim size 15" x 10" . Wheel rims must be magnetic steel only.

Wheel rims must be identified with team # on ALL wheel rims.

No soaking or altering of tire in any manor allowed. Drivers/teams soaking or altering tires will receive major penalties.

*All tires MUST be purchased at approved tire vendor. American Racer EC21-10 Tires

Tire limit rule- 6 tires to start year, all tire numbers must be submitted before any race.

One tire per week limit.

WHEELBASE-TRACK WIDTH:

102" inch wheelbase minimum.

Wheelbase must not exceed 1/2" from side to side.

Track width: 80.5" in maximum measured from outside to outside of tire sidewall measured at spindle height. (zero tolerance)

COOLING SYSTEM:

Radiator must remain stock in appearance and remain in standard position.

Radiator dust screens permitted.

Stock type water pump only

Radiator must include liquid overflow can (minimum capacity 1 liter) mounted ahead of engine firewall. Overflow vent must exit the vehicle at the base of the windshield.

Fan shroud cannot extend more than 1 inch behind blades.

No anti-freeze allowed in the cooling system.

CLUTCH ASSEMBLY:

Triple or Twin disc of a 5.5 inch minimum diameter and flex plate

All cars must have magnetic steel or aluminum bell housing. Starter motor must be in stock location.

If using stock-type flywheel & clutch assembly, a shatter-proof bell housing must be used

No carbon fiber or extensively modified units.

TRANSMISSIONS:

Transmission must remain stock appearing O.E.M. 3 OR 4 speed with all forward gears working **as originally produced**. No less than 123:1 third gear ratio

Must have reverse gear.

Must retain brass synchronizer ring.

Two-speed oval track Richmond transmissions allowed (T-10 case) or Winters 60200 "Raptor" transmission must weigh a minimum of 39 lbs

Shifter: Conventional-type shifter or rods. Shifter must have boot or cover at all times. Shifter boot must have a wire wrap sealing the top of the boot to the shifter.

REAR AXLE ASSEMBLY:

Rear axle ring and pinion may be of any gear ratio. Full floating quick-change or 9 inch permitted.

Rear differential housing must be centered in car. Aftermarket spools are permitted. No cambered rear axle assemblies allowed. No limited slip or posi-traction devices permitted.

Magnetic steel axle shaft assemblies only. Aluminum axle tubes are allowed.

Matching white lines are to be painted on each hub to indicate the relationship of one axle to the other. These lines are to be positioned so that they are lined up exactly the same on each side – i.e. both lines would run from the 3 to the 9 o'clock position.

DRIVE LINE:

Drive shaft and universal must be similar to stock type.

Steel, 360-degree retainer loops, minimum 1/4" thick by 2" wide, must be positioned at front and rear of shaft, within 12" of each U-joint.

No aluminum or carbon fiber drive shafts.

Magnetic steel drive shaft must be painted white.

TRACTION CONTROL:

Cars will not be permitted to carry on board computers, micro-controllers, processors, recording devices, electronic memory chips, traction control devices or digital read out gauges.

Violators will be suspended.

IGNITION SYSTEM:

Any tampering, alterations, or violations with respect to the ignition box and related components will result in the immediate suspension of the driver, car owner, and chief mechanic for a minimum of 1 year (365 days) from the date of the infraction. Further monetary fines and reduction of points will be assessed by series official.

Car must be self-starting & must have a master disconnect switch mounted in center of the car.

All cars must have any of the following ignition boxes: MSD 6AL, 6ALN, 6CT-6427, MSD 6425 – Digital 6AL Ignition Control or Crane Cams Ignition part # 6000-6701, FAST #FST6000-6700 or FST#6000-6701

All ignition boxes must be mounted on the right side of the dash within 6" (six inches) of the 'A' post.

The operational rev chip must be accessible through the passenger window all ignition wiring to remain open and clearly visible for inspection. Crate engines must have an operational 6400 RPM rev chip or ignition module must be set to 6400.

Stock-type distributor & module for make and model or GM HEI-type distributor from DUI optional or stock type MSD distributor.

Only one (1) ignition box, one coil, and one wiring harness per vehicle.

No other electrical devices are allowed anywhere on the vehicle.

All ignition wiring to remain open for inspection. All wiring must use weather pack connector 6 and 2 pin at ignition box, and 2 pin at the distributor. Male connectors are required on the box and distributor. 4 pin connector required and must be accessible on the rear of the tachometer See notes below:

All 6 AL wiring to be standard:

Red wire/ ignition switch

Use a brown wire/ tach output

Black wire/ coil negative

Orange wire/ coil positive

Green wire/ dist. Negative

Purple wire/ dist. Positive

Connectors to be within 12 inches of the ignition box.

Battery pos. and neg. may be hard wired to master disconnect and chassis ground.

Distributor pick up positive and negative **MUST** be routed separately from all other wiring and must remain open for inspection

FUEL CELL:

Fuel cell mandatory.

22 U.S. gallons maximum size allowed.

Fuel cell must be mounted in trunk area behind area behind firewall, between the frame rails.

The fuel cell and or cell guard will be no lower than **8"** from the ground when presented for technical inspection

Intrusion plate on both front and rear of fuel cell mandatory. 1/4" aluminum or 1/8" magnetic steel. Must be same dimension as fuel cell

Fuel cell containment are must have a safety bars designed to protect the rear of the fuel cell

Fuel cell must be complete with safety flap foam and check vent assembly vented to outside if the car.

A minimum of 22 gauge steel or aluminum fuel cell case.

Dry break system allowed. If used, filler system to be located on the left rear quarter panel behind rear wheel FIRMLY supported from within. Filler cap assemblies must be grounded to the chassis for the prevention of static build up.

FUEL LINE:

Must be single AN-8 Max Armored/Kevlar hose.

If fuel line is routed through cab it must run through a steel tube and painted either yellow or red in contrast to car color. The conduit must extend minimum 2" beyond each firewall.

The conduit in the car in addition to being painted in the contrasting color will also be labeled" Fuel line, Do Not Cut".

In line fuel safety check valve recommended

Fuel shut off valve mounted in fuel line, must be accessible to be shut off by driver or safety personnel.

No icing, Freon type chemicals or refrigerants may be used in or near the fuel system or engine compartment. No cooling of fuel cell or fuel system.

FUEL:

The gasoline 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. Fuel Pump: Mechanical pump only
Fuel samples may be taken at any point during racing event.

CARBURETOR:

Crate engines: Must use Holley #80541-1. Carb must be unaltered & pass "go-no-go" test. Maximum gasket thickness is .065" . 602 crate engine allowed carb spacer (See 602 Engine Package).

*D347SR/SR7 or 425LM engines must be equipped with a one piece, 4 hole, 1" thick, adjustable base plate produced by Allstar Performance PN# ALL26060 equipped with four 1.250" base plate inserts PN# ALL26066 and must remain as produced and unaltered by Allstar performance.

No screens allowed in and or under the carburetor.

No altering of the intake manifold with respect to the fuel atomization is allowed.

Any attempt to pull outside air other than down through venturi's is not permitted.

Mandatory two throttle return springs.

EXHAUST SYSTEM:

Headers:

Maximum primary tube size of 1 3/4" and maximum 3" collector allowed. Tri- Y headers allowed. Magnetic steel only (No Stainless).

Only 1 maximum 3" balance tube between the right and left header system is allowed.

Exhaust must exit right side of car. Pipes to be cut flush to the body and above the frame rail.

MUFFLERS: mufflers must be removable for inspection, and must remain unaltered in appearance. A decibel reading of 95db or less at 100 feet will be enforced.

WEIGHTS:

602 CRATE minimum weight **2725 lbs.**

604 "RED SEAL" CRATE minimum weight **2775 lbs.**

604 crate minimum weight **2800 lbs.**

Ford 347 Sealed Crate Engine weight **2800 lbs.**

Part # M-6007-D347SR minimum weight **2800 lbs.**

Maximum 58% left side.

Maximum 52.5% rear.

All weights will be checked after any race or qualifying, with driver in seat with helmet and belts on.

Engine setback: 1/2" - 4" 15 lbs. added to minimum weight.

Straight rail chassis 15 lbs. added to minimum weight.

Perimeter chassis 30 lbs. deducted from minimum weight

WEIGHT:

Weight must be no lower than frame rails and in block form, no less than 10 lb. pieces.

No weight to be added rearward of fuel cell.

All ballast weight must be either fastened to or encased within the frame rail. All added weight must be double bolted and painted white, with car number clearly marked on each piece.

If stacked or bolted weight exceeds 30 lbs it must be bolted into an approved weight tray.

Engine minimum height 11" measured at crankshaft center line.

No tungsten, lead shot, ball bearing type, or liquid type ballast permitted.

Loss of weights will result in severe penalty

RIDE HEIGHT:

No ride height rule. Chassis can not bottom out on the track causing sparks. Body roof height must be 46" or more measured 10" back from windshield.

Any tampering, alterations, or violations with respect to the crate engine program will result in the immediate suspension of the driver, car owner, and chief mechanic for a minimum of 1 year (365 days) from the date of the infraction. Further monetary fines and reduction of points will be assessed by the technical committee. The tampered engine which must be removed at the team's expense will be impounded at both the team's expense and risk until the ruling is finalized.

SUNSET SPEEDWAY RESERVES THE RIGHT TO IMPOUND ENGINES FOR FURTHER INSPECTION AT APPROVED ENGINE SHOP.

APPROVED ENGINES:

>GM 604 Crate Engine: Part # 88958604 May use any aftermarket crankshaft damper. 30 lb weight break for 604 stock damper.

>Ford 347 Sealed Crate Engine Part # M-6007-D347SR

>Ford 425LM Spec Engine

>GM 602 Crate Engine: Part # 889586602/19258602 with following changes.
Double Roller Timing Chain.

6-3/4" magnetic steel, non-fluid balancer.

7" or 6 1/2" deep oil pan, kick-out allowed.

MUST be completed by Sunset Speedway approved engine repair facility.

1" carburetor spacer with maximum .065" gaskets on either side.

GM 604 Crate Engine Part # 88958604 / Ford 347 Part # M-6007-D347SR, FORD

425LM

Must be unaltered SEALED engines.

Crate engine must use damper supplied by manufacturer.

ALL engine repairs MUST be approved by Sunset Speedway Tech Director.

Any approved repairs MUST be completed by Sunset Speedway approved engine repair facility.

Must have an operational 6400 RPM rev chip installed.

GM 602 Crate Engine Part # 889586602/19258602 :

Must be unaltered SEALED engine. ALL engines Repairs MUST be approved by Sunset Speedway Tech Director.

Any approved repairs MUST be completed by Sunset Speedway approved engine repair facility.

Approved 602 changes: Double Roller Timing Chain & 7 or 6 1/2 deep oil pan, kick-out & 6-3/4 magnetic steel, non-fluid balancer must be completed by Sunset Speedway approved engine repair facility.

Must have an operational 6400 RPM rev chip installed.

NOTE:

ALL WEIGHTS WILL BE TAKEN WITH DRIVER IN CAR WITH SEATBELTS FASTENED AND HELMET ON OR IN DRIVERS LAP

ALL MEASUREMENTS WILL BE TAKEN WITH DRIVER OUT OF CAR AND NO ONE NEAR THE CAR AFTER IT HAS BEEN PRESENTED FOR TECHNICAL INSPECTION

Interpretation of these rules will be solely up to the judgment of the officials in charge of the area in question. Sunset Speedway reserves the right to impound non-complying components with no compensation to the owner(s).

Noncompliance with the specifications outlined herein may subject violating teams to disqualification, loss of points and moneys and/or fine.

SUNSET SPEEDWAY RESERVES THE RIGHT TO IMPOUND ANY CAR OR COMPONENT FOR FURTHER INSPECTION. REFUSAL TO COMPLY WITH REQUEST MAY END IN EXPULSION OF DRIVER AND/OR OWNER, FINE OR PENALTY AND/OR SUSPENSION. ALL DECISIONS BY PIT STEWARDS, CHIEF TECHNICAL INSPECTOR WILL BE FINAL.

ALL RULES SUBJECT TO INTERPRETATION BY SUNSET SPEEDWAY OFFICIALS. RULE BOOKS WILL BE ISSUED TO MEMBERS. ALL EQUIPMENT NOT GOVERNED BY THE AFOREMENTIONED

