



## **2019 LATE MODEL RULES:** updated 1.23

### Competition Rules and Specifications:

This rulebook is written to attempt to accommodate Late Model style cars that compete in our region, if your car does not meet the written specifications of this rulebook, please call Kern County Raceway to discuss the specification of your car.

#### **1) Engines**

- A) Engine must be centered in the front clip.
- B) Any round metal air filter housing may be used. No cold air box to cowl allowed. Cowl Air Deflector may have no material forward of the front edge of the cowl panel.
- C) Any 1" metal carburetor spacer may be used with 4 squared cut holes, or mandated governor.
- D) Any muffler allowed that meets the 90-decibel at 100 foot.
- E) Engine setback 1.5" furthest forward spark plug on driver's side behind upper ball joint.
- F) Maximum 12-volt electrical systems.
- G) Base weight: 2,900 lbs.

**Option (1) 25lbs. weight break:** GM 604 Crate Engine (Sealed from factory) w/ gauge legal Holley 650 cfm (80541-1)

- A) GM "604" crate engine must be run as delivered from GM with all applicable GM factory seal bolts intact. No altering or rebuilding allowed. Must have correct GM harmonic balancer.
- B) Rocker arms, valve springs, retainers and keepers must all be as delivered from factory.
- C) Stock OEM type HEI distributor only.
- D) Any 1.625" Header allowed. No Tri Y. No merge collectors. Catalog Part Number required.
- E) 6.5-inch pan permitted.

**Option (2) Yellow book specifications, w/ gauge legal Holley 650 cfm (80541-1).**

- A) Any 1.625" Header allowed. No Tri Y. No merge collectors. Catalog Part Number required.
- B) Must have correct GM harmonic balancer.
- C) Stock OEM type HEI distributor only.
- D) 6.5-inch pan permitted.

*Builder must be approved.*

**Option (3) no weight penalty:** Any rebuilt GM 604 Crate Engine 360ci, 10.0:1 compression, w/ gauge legal Holley 650 cfm (80541-1) **with the All Star Performance Adjustable Base Plate with the 1.050" size inserts. See link.**

<http://www.allstarperformance.com/specSheets/pdf/285.pdf>

- A) Must use the correct 604 block, casting # 10105123, May be bored .030 over (4.030 max) and deck surfaced.
- B) Must use correct 604 powdered metal 595 gram 5.7 rods, part # 10108688. May be resized and balanced for rebuild but may not be lightened in any way.
- C) May use replacement flat top 4 valve relief pistons and magnetic steel pins of similar weight

and design as stock.

- D) Maximum compression ratio not to exceed 10.0:1.
- E) Any rings, bearings and gaskets may be used.
- F) Any after-market stock replacement type timing chain and sprockets may be used. Timing gears with adjustable cam timing keyways or slugs are allowed.
- G) Any aftermarket harmonic balancer may be used.
- H) Any aftermarket stock replacement wet sump, high volume type oil pump is allowed. Any aftermarket steel wet sump oil pan is allowed.
- I) Only GM 604 aluminum Vortec cylinder heads, part #'s 12464298 or 19300955 may be used. May be resurfaced but no other port work, smoothing or enlarging of intake and exhaust ports or valve pockets.
- J) May use aftermarket replacement valves. Must be max 2.00/1.55 steel or stainless steel valves with 11/32 stems. No performance enhancing valves such as back cut, swirl polished or titanium valves. May use any valve springs, retainers and keepers.
- K) May use ANY hydraulic roller lifters and camshaft. No solid roller cam or lifters.
- L) May use 1.5 or 1.6 (max) ratio roller rockers. No shaft mounted rockers.
- M) Must use GM 604 part # 12496822 aluminum intake. Must be as cast. No modifications, porting, grinding or smoothing of runners or reworking of plenum floor allowed.
- N) Any HEI or aftermarket distributor may be used. No magnetos or crank fired or optical ignitions allowed.
- O) Any 1.625" Header allowed. No Tri Y. No merge collectors. Catalog Part Number required.
- P) Data sheet from builder must be provided if requested.

**Option (4)** - steel block, wet sump, 11.5:1 max. compression, max. 361 ci, 2 bbl Holley 4412, with Irwindale Brodix head or Vegas spec Vortec head, or CT 525 engine with 20lbs. on both sides of block 2 bbl carb Holley 4412, 6600 chip.

These packages require a KCRP approved restrictor plate. Mandatory 4:11 gear.

NOTE: **Option (4) engine** may only be used in the **Package (B) chassis**.

Headers: If a header is used that do not comply – add 25lbs.

## **2) Chassis and Weights**

Main roll cage must be 1.75" x .090 to NASCAR Late Model, Tour and Super Late Model standards.

Base weight: 2,900 lbs.

### **Package (A) - NASCAR Late Model (2018 Irwindale Rule Book legal):**

#### **DRIVE TRAIN**

- A) Heavy duty racing style clutch and pressure plate recommended.
- B) 7.25" clutch with minimum of 2 discs. 5.5" clutch add 15#
- C) No direct coupling type units.
- D) Steel bell housing only. Aluminum bellhousing add TBA#
- E) Transmission must have two forward gears and working reverse.
- F) Any aftermarket transmission allowed.
- G) Minimum weight of transmission is 50# without shifter.
- H) OEM 3 or 4 speed transmission – Saginaw, Muncie or T-10 with heli cut gears allowed.
- I) Third gear ratio minimum 1.18 to 1. High gear 1 to 1. Must not circumvent gear rule at any time.
- J) One-piece magnetic steel drive shaft with a minimum 2.75" a minimum thickness of 0.060".
- J) It is mandatory that two 1/8-inch x 1-1/2 inch steel drive shaft hoops front and rear.
- K) All drive shafts must be painted white with car number on it.
- L) 9-inch floater or quick change allowed.
- M) Third member including bearing retainer and yoke must be magnetic steel.
- N) Mandatory rear gear 4.11 for all cars.
- O) Solid magnetic steel axles only.
- P) No cambered snouts or bolt on snouts.
- Q) Gun drilled axles add 25lbs.

R) Any 15" x 8" steel wheel.

S) Wide 5 wheels must have a minimum weight of 14lbs, and 5 on 5 wheels must have a min. weight of 17lbs.

T) The use of bleeder valves is not permitted.

### **CHASSIS**

A) Any perimeter chassis may be used similar to the All-American Series Rule Book Frame Requirements

B) Roll cage must be constructed in a manner similar to the diagram in the back of the current NASCAR All-American Series Rule Book. A full roll cage is required.

C) Must have four (4) bent door bars on the both sides of car. Top right door bar can be straight.

D) Main roll cage, see NASCAR All-American Series Rule Book diagrams – must be 1.75" x .090" minimum, two (#13) rear down bars and two (#16) front sub frame bars must be 1-3/4 inches x .090 inch minimum round magnetic steel tubing.

E) The driver's side door bars must be plated with a steel 1/8-inch material from a to b-pillar.

F) Rear frame rails may be 2-inch x 2-inch x .095-inch square tubing **behind** the rear end.

G) Interior panels except crush panels must be fabricated of 24-gauge magnetic steel minimum. Any car competing under Package (A), that does not meet this rule must carry an additional 20lbs. and must work to be in compliance with this rule by August 25<sup>th</sup>.

H) Interior panels must be trimmed neatly around roll cage and sealed for safety.

I) Interior panels must be painted and must fit properly and free of sharp edges.

J) Interior right side door shelves not permitted.

K) Added weight must be in block form of no less than 10 pounds.

L) All added weight must be securely bolted in place with a minimum 1/2-inch diameter, grade 5 bolts.

M) All added weight **MUST** be painted white and the car number must be clearly visible on each piece.

N) Weight may not be added ahead of the front spindles, or behind the rear axle.

O) Lead enclosed in a frame rail must have two 3/8-inch grade 8 bolts as a secure stop at each end.

P) **No tungsten or molybdenum may be used for ballast.**

Approved tubular front replacement clips:

1) Port City Racing, P/N 100-2-205.

2) Race Car Factory, P/N 5506.

3) Victory Circle, P/N VCC-02-8055.

4) Jackson Race Car, P/N 75.

P) Approved front clip with steering rack – add 15# to left clip rail where steering box would be.

### **SUSPENSION**

A) Front coil springs must maintain a 5-1/2" minimum outside diameter plus/minus 1/4"

B) All A-arms must be made of magnetic steel. **Upper a-arm cross shaft may be aluminum.**

C) **OEM type stamped steel** lower A-arms must be same length. (+/- 1/4")

D) One-piece, non-adjustable, heavy-duty magnetic steel spindles must be used.

E) Wheel bearings must be magnetic steel, tapered roller bearings only.

F) Wide five pattern hubs – add 25#.

G) Tread width must not exceed a maximum of 67" center to center at spindle height.

H) A minimum 105" wheelbase, must be within +/- 1/2-inch on opposite side.

I) All steering components must be magnetic steel. Tie rod adjuster sleeves may be aluminum.

J) Sway bar must be one-piece magnetic steel only.

K) Sway bar must not be adjustable from inside.

L) Sway bar for rear axle not permitted.

M) Trailing arms and top link must be one piece tube. Trailing arms must be equal length +/- 1/2"

N) Rubber bumpers, springs or spring loaded bars will not be permitted.

O) **Track bar/Panhard bar** adjuster can't be within driver's reach.

P) Rear coil springs must maintain a 5" minimum outside diameter plus/minus 1/4".

Q) **Coil spring rubbers allowed in rear springs only.**

R) **No titanium fasteners or parts allowed.**

## **BRAKES**

- A) Single piston magnetic steel brake calipers only.
- B) OD Scalloped or drilled brake rotors are not permitted.
- C) Brake cooling air must come through the nose of racecar.
- D) Aluminum or multi piston brake calipers add TBA#

Also, including but not limited to; Perimeter chassis similar to drawing in NASCAR Whelen rule book, single piston magnetic steel brake calipers, magnetic steel steering box, center link, pitman arm and idler arm and OEM type stamped equal length lower a-arms, equal length trailing arms, minimum 5.25" diameter conventional front springs, minimum 5" diameter rear springs, steel interior, fuel cell at (10) inch height, with approved Camaro reproduction tubular front clip allowed; Port City P/N 100-2-205, Racecar Factory P/N 5506 or Victory Circle P/N VCC-02-8055, Jackson Race Car, P/N 75. 57% left side and 67" tread width.

**Package (B)** – Tour Style/SLM Perimeter chassis with rack and pinion, coil overs, tour sway bar and after market lower a-arms, multi piston brakes – **25lbs. penalty** at 57% left side and 67" tread width. Current Tour Car /Super Late Model rules apply to chassis.

Package (B) with 604 engine – maximum weight with penalties: 2935lbs. *Subject to change.*

**Package (C)** – Straight Frame Rail chassis with rack and pinion, coil overs, tour sway bar and after market lower a-arms, multi piston brakes – **35 lbs. penalty** at 57% left side and 67" tread width. Current Tour Car / Super Late Model rules apply to chassis.

Package (C) with 604 engine – maximum weight with penalties: 2940lbs. *Subject to change.*

**Package (D)** – Factory Stock front clip or leaf spring rear suspension, perimeter chassis – 58% left side and 67" tread width. **40 lbs. weight break.**

## **THE FOLLOWING APPLIES TO ALL CARS:**

### **3) Body**

- A) The ABC Body Rulebook version 9.0 will be used.  
<http://www.fivestarbodies.com/store/downloads/ABCrulebook-web.pdf>
- B) Holes for ducting are permitted in the front air dam for air inlet only.
- C) Lower radiator panel must be no wider than 29" going forward from radiator to nose.
- D) At all times, the ABC "A" measurement must maintain a min. length of 11.5 inches.
- E) At all times, 20" is the minimum length from the bottom of the nose up to the hood seam.
- F) Spoiler must be 6 ½" x 60" with four (4) inches of the top of the spoiler must be clear.
- G) The spoiler must be slotted ½ inch in the center to fit the NASCAR overall body template.
- H) No roof rails.
- I) ABC manufacturer standard mesh grill screen only.
- J) No under car panning – undercar weight mounting must be approved.
- K) Pre-race Minimum 4" ride height without driver. Post race minimum 3" ride height without driver.
- L) No tire blowers allowed.
- I) Pre race minimum 4" ride height without driver. Postrace minimum ride height 3.0" without driver

Lightweight hoods will carry a penalty starting TBA date.

#### **4) Shock Absorbers**

- A) Steel non-adjustable, non-nitrogen charged shocks.
- B) Gas charged and/or adjustable shocks add 40lbs.
- C) No external reservoir type shocks allowed.
- D) No shock covers.
- E) Shocks must be an emulsion type shock only.
- F) Shock has to be raced the way manufacturer built it (if it was manufactured as a gas shock it has to stay a gas shock).

***NOTE: A spec shock or shocks may be approved in 2019.***

#### **5) 25 lbs. Weight Break with NO BUMP STOPS (If you choose not to bump, you must meet the following to receive weight break)**

- A) No bump stops of any kind internally or externally of the shock.
- B) NO SUSPENSION TRAVEL LIMITING DEVICES ALLOWED (Examples include, but are not limited to: bump stops, bump springs, coil binding, chains, straps, bolts, shock mounting locations, suspension binding, short shock shafts, spring pre-loaders, etc).
- C) Cars may be inspected using one and one half inch (1 1/2") ramps and nose of body or cross member travel sufficiently pushed down by three crewmembers or may be considered illegal. *Bumper must be mounted SOLID. No hinges or slides – must comply with nose height rule at all times.*
- D) No adjustable shock mounts permitted.
- E) When the rear of the car is jacked up the rear suspension must drop 1.5".

***NOTE: Bumps are being evaluated and a change may be made in the future.***

#### **6) Rear End and Suspension**

- A) Mandatory Rear gear 4:11.
- B) Three link suspension must use one piece trailing arms, top link tubes and panhard bar. No dampening on trailing arms, top link and panhard bar.
- C) Magnetic steel rod ends only.
- D) Ford 9" floater or quick change allowed. No truck arm chassis.
- E) No birdcage or pivoting trailing arm mounts on rear end housing. No fifth (5th) coil, torque arm or lift bar suspensions will be permitted.
- F) Magnetic steel third member, bearing retainer and yoke.
- E.) No cambered rear ends

#### **7) Other Suspension**

- A) Any magnetic steel spindle with aftermarket hubs may be used.
- B) Tapered roller wheel bearings only.
- C) Wide five hubs add 25 lbs.
- D) One shock/spring per wheel. One (1) conventional (single coil) spring rubber per spring allowed.
- E) Hydraulic Spring Perches are not permitted.
- F) No spring or shock covers allowed.
- G) No progressive springs allowed.
- H) Only the springs may hold the car up during ride height tech inspection. Nothing may be positioned on the shock shaft which holds the car up during tech inspection. A portion of the shock shaft must be visible during pre-qualifying and pre-race tech inspection.
- J) Pre-race Minimum 4" ride height without driver. Post race minimum 3" ride height without driver.

#### **8) Brakes**

- A) Round Vented brake magnetic rotors must be a minimum of 11.75" x .750".

B) Must have four working brakes. No brake recirculators.

### **9) Transmission**

A) Transmission must have two forward gears and working reverse.

B) Any aftermarket 2 speed transmission allowed.

C) Minimum weight of transmission is 50lbs. without shifter.

D) OEM 3 or 4 speed Transmission - Saginaw, Muncie or T-10 with helicut gears allowed.

E) Magnetic steel driveshaft minimum 2.5" diameter with steel yokes.

F) High gear must be 1.00:1. Third gear minimum ratio 1.18:1. Must run in high gear and must not circumvent gear rule at anytime.

G) No direct coupling type units.

### **10) Clutch**

A) 7.25" Clutch minimum 2 disc. 5.5" Clutch add **15lbs.**

B) All clutch parts must be metal - No carbon fiber.

### **11) Fuel**

A) SUNOCO Purple Standard 110 is the Spec Fuel.

B) Fuel cell must be in a minimum of 22 gauge steel can.

C) Fuel cell cage must be 1"x1"x.065 square tube- two lengthwise and two widthwise.

D) No fuel additives or mixing of fuel.

### **12) Tires**

A) Tires must be purchased from Kern County Raceway .

B) Approved tire is Hoosier 970 - 8". No Star tires.

C) Tires will be scanned and logged to each car.

D) Tires that have been altered by any means will not be permitted. No tire shaving.

Tire Rule:

A) At a competitors first event of the season he/she may purchase five (5) new tires.

B) At each race after the competitors first race he/she will be allowed one (1) recorded tire.

C) You must qualify and race the tire the night you log/scan it in for competition.

D) You must qualify and start the race on logged/scanned tires. (Same tires for both Twins)

E) Flats or damaged tire in an accident must be presented to Track Officials before the end of the night to be evaluated.

F) Kern County Raceway reserves the right to impound tires for storage between events. No chemicals or cleaners of any kind may be applied to the tire.

G) You may practice on any 970 tire.

H) No tire blowers allowed.

I) It is the team's responsibility that an Official scans their race tires at the time of purchase.

J) No inner tubes or anything else may be put inside the tire.

K) Flat or damaged tire must be replaced by a used logged and scanned tire.

L) If you have a flat or damaged tire between twin races and put an approved tire on you start at the rear of field in the second twin race.

### **MORE**

A) Wheelbase, must be within ½-inch left to right.

B) 15" x 8" steel wheels. No bleeders.

C) Two-way radio and a spotter must be used anytime your car is on-track. It is required the spotter scans race control during the event.

D) All competitors must have timing transponders on their car for the entire program.

Transponder must be mounted a minimum of 14' 2" back from the leading edge of the nose of the car on the outside of right side frame rail. Transponders are mandatory for practice sessions.

- E) Refer to NASCAR Whelen All-American current rulebook, section 6, in its entirety covering protective clothing, fire control, helmets, head and restraints, seat belts, and seats.
- F) Added weight must be block form and painted white with car number on it.
- G) Added weight must be secured with minimum 1/2" grade 8 bolt and lock nut. Weight may not be added behind the rear axle.
- H) All wiring must be approved, if any 'traction control' device is found, the driver and owner will be disqualified for that event, all points for the year will be taken away and the car will be confiscated until a fine is paid.

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**NOTE: Madera Style Cars are welcome to compete but must call ahead to discuss what package is being used.**

**Kern County Raceway: 661-835-1264**

**1.28.19**