

## SUPER LATE MODEL RULES

\*\*\* Please refer to General Section for rules and regulations applicable to all divisions\*\*\*

### 1. THE CAR, BODY & SPOILER:

- 1.1 For all body rules please refer to the ABC rulebook.
- 1.2 Spoiler size: 6 ½ inches tall by 60 inches wide.
- 1.3 Only approved spoilers manufactured by ABC approved manufacturers will be allowed for competition
- 1.4 Additionally cowl induction cold air system is allowed provided it mates to the cowl panel and air deflector.
- 1.5 The valance must be two piece and (1.2) spoiler has a ½ gap in the center (no taping ½ gap).
- 1.6 No type of under body air deflectors allowed. No fans, ducts, or hoses to the rear brakes. No hoses or holes through the interior sheet metal or body panels allowed. Air may be pulled through the nose for engine / brake cooling.
- ~~1.6 — Weight penalties will not be assessed for 1998-2002 bodies.~~
- ~~1.7 — Perimeter chassis — Body must meet 2006 and earlier tour rules or ABC rules.~~
- ~~1.8 — There will be no minimum nose height. There will be no minimum quarter panel height.~~

### 2. WINDSHIELD, GLASS, & MIRRORS:

- 2.1 A clear, molded polycarbonate windshield with a minimum thickness of 1/8 inch must be used in all cars. The same shape windshield will be used for all body styles. Flat, unmolded windshields are not allowed.
- 2.2 All windshields must be supported by a minimum of three internal windshield braces to prevent deflection under racing conditions.
- 2.3 The windshield braces shall be made of a minimum 1/8 inch thick and 1 inch wide aluminum.
- 2.4 The windshield braces should be spaced on a minimum of 5 inch centers and should be approximately in the center of the windshield.
- 2.5 A clear, molded polycarbonate rear window with a minimum thickness of .090 inch must be used in all cars. The same shape rear window will be used for all body styles. Flat, unmolded rear windows are not allowed.
- 2.6 All rear windows must be supported by a minimum of two internal window braces to prevent deflection under racing conditions.
- 2.7 The window braces shall be made of a minimum 1/8 inch thick and 1 inch wide aluminum.
- 2.8 A maximum of three holes will be allowed in the rear window and the holes must lead directly to an adjuster (screw jacks and or panhard / track bar). The maximum diameter of the holes allowed will be 1 inch.
- 2.9 Clear polycarbonate quarter panel windows with a minimum thickness of .090 inch must be used in all cars.
- 2.10 The quarter panel window shape will vary for brand identification.
- 2.11 Flat or molded quarter panel windows are allowed for competition.
- 2.12 The maximum dimension for the vent window along the top of the door will be 12 inches and must go 90 degrees from the top of the door up to the A-post.
- 2.13 Rear view mirror will be permitted.

### 3. FRAMES:

- 3.1 ~~No minimum frame height is required~~ Minimum ride height is 4" as presented without Driver before the race (pre-race). If a car is deemed to excessively contact the racing surface it will be immediately black flagged with the corresponding finish.

#### **4. ROLL BARS**

- 4.1 A steel roll cage consisting of continuous hoop not less than 1-3/4 inch outside diameter and must have a wall thickness of at least .095.
- 4.2 Cage must be mounted to frame in at least six places with proper bracing to protect the driver.
- 4.3 Deleted.
- 4.4 Four or more side bars are mandatory and must be as parallel with the ground as possible and located perpendicular to the driver, so as to provide maximum protection.
- 4.5 Steel door plate must be securely welded to outside of driver's side door bars and cover the area from the top door bar to bottom door bar from behind the driver including the footbox area with a minimum of 0.125 (1/8") magnetic steel plate.
- 4.6 Must utilize a full roll cage and be approved by CNS officials.
- 4.7 Earnhardt bar recommended - a vertical support down tube from upper halo to cage to add support to upper halo.

**NOTE: ENGINE OPTIONS & SPECIFICATIONS ARE LISTED AT THE END OF THE RULES**

**CNS OFFICIALS HAVE THE OPTION TO TEAR DOWN ANY VEHICLE AT ANY TIME**

#### **5. ENGINE REQUIREMENTS – GENERAL:**

- 5.1 Minimum 311 C.I. to 365 C.I Max – Except “S.E.A.L. Engines.”
- 5.2 No titanium, carbon fiber, aluminum, or stainless steel connecting rods allowed.
- 5.3 A 3/4 inch plug must be installed in the oil pan for inspection, that access hole must be in line with a connecting rod journal.
- 5.4 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. Ford & Chrysler engines are allowed a 3 inch setback.
- 5.5 All engines must be centered in the frame, within a maximum of 1 inch offset for header clearance.

#### **6. CARBURETOR REQUIREMENTS – GENERAL:**

- 6.1 A minimum of 2 throttle return springs are required and must be mounted from separate locations.
- 6.2 Maximum gasket thickness is .065”
- 6.3 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.
- 6.4 No forced air devices are allowed.
- 6.5 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 measure a maximum of 2 inches down and 2 inches forward by 20 inches wide and have square bends with no radius.
- 6.6 Air deflector must be attached to the body only.
- 6.7 The top and bottom of the air filter housing must be solid and must be the same diameter.
- 6.8 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.
- 6.9 No electric fuel pumps will be allowed.
- 6.10 One carburetor stud and one intake manifold bolt on the right side of the engine must be drilled so that the engine can be sealed.

#### **7. EXHAUST**

- 7.1 Mufflers are mandatory. 95 DBA OR LESS WILL BE STRICTLY ENFORCED!

- 7.2 Collector type headers must extend behind the driver and be securely mounted.
- 7.3 Heat shields to cover exhaust system can be no more than 4 inches wide and no longer than the valve covers.
- 7.4 The minimum penalty for any car found to be too loud at any time by Track Officials will automatically start at the back of a "A" Main, regardless of qualifying position!

## **8. IGNITION**

**NOTE: by 2020, the Nelson Specialties SRL Wiring Harness will be mandatory**

- 8.1 Only a point type, single or dual, or electronic system is permitted.
- 8.2 All ignition systems are subject to approval by CNS officials.
- 8.3 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 CNS official's discretion.
- 8.4 No magnetos or computerized systems are allowed.
- 8.5 The distributor must mount in the stock location and maintain the same firing order as a factory produced engine for the make and model engine being used.
- 8.6 No crank trigger ignition systems allowed.
- 8.7 No adjustable timing controls allowed.
- 8.8 No ignition system equipment or wiring may be located in the driver's side door area.
- 8.9 All ignition system equipment must be securely mounted, with an unobstructed view, and to the driver's right.
- 8.10 All wires from ignition amplifier box to distributor must be visible with no open connections.
- 8.11 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).
- 8.12 The ignition systems must consist of an ignition amplifier box, coil, distributor pickup and optional rev limiter (internal / external).
- 8.13 RPM limiting devices must be approved by CNS officials and be attached and wired to the ignition amplifier boxes in a visible manner.

## **9. COOLING SYSTEM**

- 9.1 The radiator must be located in front of the engine and must have a minimum 1 quart catch can securely mounted.
- 9.2 **Radiator Pan not to exceed 29" in width. Any air that enters the air box must go through the radiator.**

## **10. RADIOS**

- 10.1 Two way voice communication radios, independent of car's electrical system will be required in the Super Late Model division.
- 10.2 Only one radio will be allowed in the car.
- 10.3 An area will be reserved in the Pit grandstand for one Super Late Model crew chief or crew member with radio communications to his/her driver during all practice and racing events.
- 10.4 If no spotter is checked in with the CNS official in the spotter's area, that car will be black flagged until such time as a spotter is available.

## **11. TRANSMISSION**

- 11.1 Standard production transmissions which are cataloged and available through regular dealer channels may be interchanged.

- 11.2 One forward and reverse gear must be in working order.
- 11.3 Two-speed, three- speed, and four-speed transmissions are permitted.
- 11.4 No automatic or quick-change transmissions are allowed, unless pre-approved by CNS track officials due to extenuating circumstances.
- 11.5 No direct drive assemblies of any kind are allowed.
- 11.6 Two bolts on the side or top cover must be drilled so that the transmission can be sealed.
- 11.7 ~~No transmission gear may be closer than 1.23:1 of the mandatory final drive ratio of 1:1.~~

## 12. CLUTCHES

- 12.1 All clutch assemblies must meet the following requirements and are subject to CNS approval.
- 12.2 High-speed multiple disc clutches are permitted.
- 12.3 No light alloy assemblies are allowed.
- 12.4 Clutch must be mounted inside of the bell housing.
- 12.5 Clutch & Flywheel must attach to crankshaft in a conventional manner and rotate with crankshaft at all times.
- 12.6 No carbon or carbon fiber clutches.
- 12.7 Clutch must be a minimum of 5-1/2 inches in diameter.

## 13. DRIVE SHAFTS

- 13.1 No carbon fiber drive shafts, yolks or slip yolks allowed.
- 13.2 Driveshaft must be painted white and have a minimum of two, 2 inch wide X ¼inch 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.

## 14. REAR END

- 14.1 Deleted.
- 14.2 No open tube or independent suspension rear-ends are allowed.
- 14.3 ~~No cambered rear ends are allowed~~ Cambered rear-ends are allowed. ~~Maximum deviation ½ degrees.~~
- 14.4 No titanium axles or lower input shafts are allowed.
- 14.5 No rear sway-bars are allowed.
- 14.6 ~~To compete in any CNS sanctioned event, the lowest allowed final drive ratio for the 604 crate engine is 5:30, the 525 crate engine is 5:30—5:50 and all other engines 5:67—5:92. No deviations are allowed.~~
- 14.7 ~~Two bolts on the differential cover must be drilled so that it can be sealed.~~

## 15. BRAKES

- 15.1 All four corners must have operational brakes.
- 15.2 Floating type brake rotors allowed, not floating calipers.
- 15.3 Solid type rotors are allowed.
- 15.4 No carbon or carbon fiber components are allowed in the braking system.

## 16. TREAD WIDTH

- 16.1 All cars must maintain a maximum allowable tread width, front and rear, of 66 inches, measured from the inside of the right tire to the outside of the left tire, at zero toe-in at spindle height. Must fit the CNS gauge and/or referee *as* presented for inspection with roof at 47” without driver. No tolerance.

16.2 **\*Perimeter Chassis (2006 Tour Chassis) 66 inches.**

Tour Chassis means Legal under the NASCAR 2006 Rule Book. Applies only to the chassis. Body may be an offset body on a Perimeter Chassis. Body must meet CNS or ABC Rules.

17. **WHEEL BASE**

17.1 101 inches minimum.

18. **SUSPENSION**

18.1 Rear suspension may not use bird cages or any type of floating bracket on the rear end.

18.2 The rear suspension three (3) link lower arms must be steel or aluminum, round or hexagonal tubing with heim joint adjustments. Must be approved material by CNS Officials. Springs, shock absorbers, or any dampening devices will not be allowed on the lower trailing arms or upper third link.

18.3 Trailing arm mount must be rigid and not rotate or move.

18.4 Rear coil overs must be mounted either inside or outside of the rear frame rails. Both springs must be mounted on the rear trailing arms or to the brackets on the rear axle housing.

18.5 Panhard Bar adjustments must not be made in the driver's compartment.

18.6 Solid Panhard Bars only.

18.7 No fifth (5<sup>th</sup>) coil, torque arm or lift bar suspensions will be permitted. No birdcage set-ups of any kind (3 or 4 link).

18.8 Truck arm rear suspension is not permitted.

18.9 No data acquisition or cockpit adjustable devices, wiring, or components allowed on race day or during race day practice.

19. **WHEELS & TIRES**

**NOTE:** for 2020 – Tire Pressure Bleeders no longer allowed

19.1 10 inch steel, approved racing wheels are mandatory.

19.2 Mandatory tire will be 10” Hoosier 3035 on the left and 3045 on the right.

19.3 Tires will be limited to 4 tires per event (2 rights and 2 lefts).

19.4 All tires must be purchased at CNS and will be marked. If a driver is found to be using tires that have not been marked, they will automatically be disqualified for the evening with a minimum loss of points and prize money.

20. **WEIGHT** (*Note: Weight MUST be posted on Passenger A-Pillar!*)

20.1 Option 1. NASCAR Elite Division Engine ~~2900~~ 2850 lbs. 58% maximum left side weight.

20.2 Option 2. C.N.S. Spec Engine ~~2900~~ 2850 lbs. 58% maximum left side weight.

20.3 Option 3. C.N.S. Injected Engine, Complete Pkg ~~2850~~ 2800 lbs. 58% maximum left side weight

20.4 Option 4. USLMA engine (as detailed) ~~3000~~ 2950 lbs. 58% maximum left side weight

20.5 Option 5. ASA legal crate motor (CNS approved) ~~2850~~ 2800 lbs. 58% maximum left side weight

20.6 Option 6. 525 Crate Engine ~~2875~~ 2800 lbs. 58% maximum left side weight

25 lbs. must be mounted forward of bellhousing on right and left side frame rails; total of 50lbs.

20.7 Option 7. “S.E.A.L.” Engine ~~2,900~~ 2850 lbs. 58% maximum left side weight

20.8 Option 8. Southern Super Series Engine ~~2,900~~ 2850 lbs. 58% maximum left side weight

20.9 Running a Spool gives an additional 50lb. weight break.

**21. FUEL**

- 21.1 Only racing fuel will be permitted and must be purchased from CNS directly.
- 21.2 Fuel shall not be blended with any other gasoline or any additives, nitro compounds, or other oxygen containing compounds.
- 21.3 It is the competitor's responsibility to ensure that fuels are not mixed in previously used containers.
- 21.4 Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.

**22. FUEL TANK**

- 22.1 The use of a fuel cell is *required* and must be isolated from the driver by a fire-wall.
- 22.2 The fuel cell shall have a positive locking cap or approved dry break and must be vented out at the upper left rear corner of the left rear quarter panel with a flapper or check valve in the vent tube.
- 22.3 Fuel cell must be enclosed in an approved metal container.
- 22.4 Fuel cell must be fitted within the container so that the maximum capacity, including filler spout and overflow does not exceed 22 gallons.
- 22.5 It is suggested that fuel cell dimensions be 33 X 17 X 9 inches.
- 22.6 Fuel cell and container must be installed as far forward as possible in trunk compartment with an equal distance between frame rails.
- 22.7 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
- 22.8 Fuel cell container must be supported by 3 straps minimum, of 1 inch square tubing, secured to frame an equal distance from each end.
- 22.9 Fuel cell height is 9 8 inches minimum measured from cell to ground.
- 22.10 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.
- 22.11 Only 1 gasoline filter may be used between the fuel cell and the fuel pump.
- 22.12 No glass or plastic fuel filters are allowed.
- 22.13 The location and size of the filter must be acceptable to CNS Officials

**Notes:**

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

**REQUIREMENTS SPECIFIC TO ENGINE OPTION:**

**OPTION 1 (NASCAR ELITE DIVISION RULES) –ENGINE REQUIREMENTS**

NASCAR Elite Division legal motors are allowed –must comply with NASCAR rulebook including amendments.  
CNS will allow up to 362 c.i. maximum

**With RPM Chip: 8,100 Max RPM**

**OPTION 2 (C.N.S. SPEC RULES) –ENGINE REQUIREMENTS**

365 Cubic inch maximum - Maximum bore is 4.075

**CRANK:** CHEV 3.48 STROKE 2.1 ROD JOURNAL 2.449 MAINS  
FORD 3.50 STROKE 2.1 ROD JOURNAL 2.749 OR 3 MAINS  
CHRY 3.58 STROKE 2.1 ROD JOURNAL 2.50 MAINS  
Crank must weigh a minimum of 48 pounds with no inertia balancing. Grinding tolerance is .0350 maximum undercut.

**BLOCK:** Cast Iron blocks only. Light de-burring is allowed. No grinding or milling for weight reduction is allowed. No roller cam bearings are allowed.

**PISTONS:** Any three ring flat top piston allowed. 9.5-1 Compression Ratio Max. Any size steel piston pin.

**RODS:** Must be solid magnetic steel connecting rods. 6.250 max length, 5.7 min.

**OILING SYSTEM:** Dry sump system is allowed. 4 stage pump maximum (Pump Body 8.5" max length X 3.5" cross section.)

**OIL PAN:** Magnetic steel only. Pan must have a 3/4 inch inspection hole that is in line with a connecting rod journal.

**CAMSHAFT:** Roller cam and lifters are allowed. Lifters and push-rods must be magnetic steel. Stock size lifters must be in stock position for engine being used. Belt drive, chain or gear drive timing chain allowed.

**ROCKERS:** Shaft type rockers are allowed with a maximum ratio of 1.6. .650 max lift at valve with .030 maximum lash.

**INTAKE MANIFOLD:**

CHEV	BRODIX	HV1000
FORD	EDLEBROCK	FORD 2981 (9.5" deck height block)
FORD	EDLEBROCK	FORD 2980 (9.2" deck height block)
CHRY	EDLEBROCK	CHRY 2915

All part and casting numbers must remain on Intake, Heads, and Block. No machining, grinding, drilling, or polishing allowed. No painting, acid porting, port matching or flow work on any manifold is allowed. No spacers are allowed between the engine block and intake manifold or between the intake manifold and the cylinder heads. NO added air directional devices will be allowed inside the plenum of the intake manifold. Pop off valve on the intake valley floor is permitted. No other modifications of any kind are allowed.

**HEADS:** CHEV CNS BRODIX SPEC HEAD 46221 / SP-CH-CO-NATL  
FORD CNS BRODIX SPEC HEAD 46223 / SP-FO-CO-NATL  
CHRY CNS BRODIX SPEC HEAD 46222 / SP-MO-CO-NATL

No painting or coating of heads allowed. All spec heads will be supplied with CNC bowl blend and intake port matching. No acid porting, grinding, or polishing of any kind is allowed anywhere on the casting. Use of any substance that may change or alter the shape or size of the ports or combustion chamber is not allowed. A maximum valve size of 2.083 for the intake and 1.603 for the exhaust will be allowed for all spec heads. Titanium intake

valves are optional. Valve angles are to remain as manufactured. The original seat center locations as provided by the head manufacturer may not be altered. Seat rings must be stock for the head being used. No tapering or reshaping of valve guides will be allowed. No grinding in the port or on the seat. Valve job must be concentric with valve guide. No grinding or machining of aluminum below the seat. A .125 cut is permissible above the outer edge of valve seat. Valve spring seat may be machined to a 1.590 diameter maximum. Cylinder heads may not be angle milled. Minimum valve stem diameter is 11/32 inch. Undercut valve stems are allowed. Spec head serial numbers must remain on the head and may not be defaced or altered. No welding modifications are allowed to the original head castings. Brodix will provide head service which enables CNS to keep track of repairs. Machining or grinding for push rod clearance only is permitted.

**CARBURETORS:** § DEMON 650 CFM. P/N –2282010-OT STOCK  
§ HOLLY 750 H.P. NON-BILLET CARB. 1-11/16 BUTTERFLY, 1-3/8  
VENTURI, NO AEROSOL CARB, NO CUT-DOWN THROTTLE SHAFTS

No modifications are allowed, except for jets, air bleeds, emulsion bleeds, and power valves, which may be changed for tune-ability. No spacer plates between the carburetor and intake are allowed. Only 1 gasket is allowed with a maximum thickness of .065.

**With RPM Chip: 7.900 Max RPM**

### **OPTION 3 (C.N.S. INJECTED ENGINE) –ENGINE REQUIREMENTS**

365 C.I. MAX. All repairs (Warranty and Non-Warranty), must be approved by CNS Management, prior to work being done. Schwanke Specifications as posted 01/01/2015 with no modifications.

A copy of this specification is available from CNS.

**With RPM Chip: 7.500 Max RPM**

### **OPTION 4 (USLMA ENGINE) - ENGINE REQUIREMENTS**

USLMA Legal Engines are allowed provided they meet all other CNS rules contained in this rule book pertinent to the SLM division. **With RPM Chip: 7.800 Max RPM**

### **OPTION 5 (ASA LEGAL CRATE MOTOR)**

The following are allowed on the crate 604:

- Carburetor: 650 CFM gauge legal maximum. 1" spacer between carburetor will be allowed.
- Ignition systems will be limited to 6600 rpm. All other requirements for ignition systems currently in the rule book will be enforced.
- Approved aftermarket harmonic balancers and pulleys will be allowed.
- 1.5 Or 1.6 aluminum roller rocker arms are allowed.
- Factory installed valve springs as well as GM 12499224 Beehive valve springs are allowed.
- Factory installed oil pans as well as the 6.5" aftermarket oil pans allowed.
- **With RPM Chip: 6.600 Max RPM**



### **OPTION 6 (525 CRATE MOTOR)**

The following are allowed on the crate 525:

- Engine must meet all specifications of the CT 525 P/N 88958759 technical manual second edition.
- Part is no longer available. CNS Official to approve replacement
- Carburetor: 650 or 750 CFM gauge legal maximum. Stock with no modifications.
- Ignition system P/N 19171130 is mandatory and will be limited to 7100 rpm. All other requirements for ignition systems currently in the rule book will be enforced.
- The ignition box may not use a chip. Be prepared to remove your ignition box! Boxes may be swapped with a competitors box or a box provided by the track at any time! Timing limited to 29 degrees! Teams must provide laptop capable of accessing ignition box programming when requested in tech. Laptops are not allowed to be connected to boxes while in CNS tech area without an official present. Laptops or laptop wiring may not be in any portion of the drivers compartment while in CNS tech area unless an official is present.
- **With RPM Chip: 7.100 Max RPM**

### **OPTION 7 (S.E.A.L. Approved Engine)**

Approved McGunegill, Hamner, Progressive “S.E.A.L.” Engines: All approved S.E.A.L. engines must use the gauge legal, 750 Holley carburetor, with the All Star Performance Base Plate with the 1.150<sup>th</sup> inserts.

- Any tampering of seals or established construction of these engines is grounds for immediate disqualification and confiscation.
- 7600 maximum RPM limits. Rev limiting device must be operational at all times with RPM dials set correctly. RPM dials must be securely sealed by CNS Officials for competition.
- All cars using the approved S.E.A.L. - McGunegill, Hamner, or Progressive engine must only use the following ignition system: Crane Cams Ignition Part # 6000 – 6700 (HI-6RC) and a Coil part # 730-0192 (PS92N), mounted on a tray as from Crane Cams, as far to the right and forward as possible inside the car. RPM dial positioned facing right side of car.
- May be torn down for inspection at team’s expense.
- Must be sealed by original engine builder.
- No modifications allowed.
- ~~1.150 restrictor required~~ **HAMNER engines will be required to run 1.100 restrictors; all other engines will still use the 1.150 restrictor**
- **With RPM Chip: 7.600 Max RPM**

### **OPTION 7 (Southern Super Series Engine)**

Southern Super Series Engine allowed but must run a 1.150 restrictor required with CNS official present to determine restrictor size, or other options to equalize competition. **With RPM Chip: 7.800 Max RPM**