

**LIMITED LATE MODEL**  
**2012 RULES & REGULATIONS**

**(Red Denotes Changes In Rules)**

**IMPORTANT NOTE:** Applications for NASCAR License may be obtained from the Pit Steward at the sign -in-window or at the speedway office during regular business hours. This division requires a NASCAR Whelen All American Series **Charger Or Learner's Permit** License Membership. Anyone entering the pit area must be properly registered. Track Official in charge has the right to refuse any entry.

**1. ELIGIBLE MODELS APPROVED FOR COMPETITION:**

Steel bodied 1975 through 2011 models of American made passenger car production sedans.

**GROUP 1:** Intermediate Size Cars Any American manufactured intermediate size sedan with a factory wheelbase of more than 105 inches, except cars listed in Group 2. However, these cars must maintain a minimum of 108-inch wheelbase.

**GROUP 2:** Limited to cars with AMA wheelbase of less than 105 inches. However, these approved cars must maintain a wheelbase of 105 inches at all times. In order to obtain the 105-inch wheelbase, the rear axle assembly must be moved toward the rear of the frame.

Buick: 1980-1993 Regal

Chevrolet: 1982-1992 Camaro, 1987-1993 Beretta, 1990-1994 Lumina,

1995-2005 Monte Carlo, 2006 Monte Carlo SS, **2011 & 2012 Camaro**

Chrysler: 1987-1993 Lebaron

Dodge: 1983-1993 Daytona, 1995-1997 Avenger, 2001-2004 Intrepid, 2005-2006 Charger

Ford: 1983-1997 T-Bird, 1998-2005 Taurus, 2006 Ford Fusion, **2011 & 2012 Mustang**

Oldsmobile: 1980-1992 Calais, 1982-1999 Cutlass

Pontiac: 1982-1992 Firebird, 1987-2003 Grand Prix

The following are the only approved composite body models eligible for competition:

Chevrolet: 2007-2008 Monte Carlo SS, 2008-2012 Impala SS

Dodge: 2007-2012 Charger

Ford: 2007-2012 Fusion

Toyota: 2012 Camry

**2. WHEELBASE:**

A. Group 1 cars - 108 Inches

B. Group 2 cars - 105 Inches

C. Group 2 cars must obtain the minimum allowable wheelbase by moving the front and rear wheels an equal distance. When measuring the wheelbase, one side measurement must be the allowable wheelbase. Maximum allowable tolerance cannot exceed 1/2 inch plus or minus on the other side.

**3. TREADWIDTH:**

A. Group 1 cars - Maximum 66.5 inches

B. Group 2 cars - Maximum 64.5 inches

**4. STEERING:** No rack and pinion steering permitted. All cars must have a removable steel steering wheel.

## **5. CHASSIS:**

Tubular racing type may be used. Note that a Chevy frame section could be used in a Ford. The use of tubular A arms, jacking bolts, special sway bar, racing shocks and special hubs are allowed. No quick disconnect shock mounts permitted. Stock type trailing arms must be used on the rear or they may be constructed of no less than two (2) inch square tubing with a minimum thickness of .120 inches. No helm joints permitted. **NO OFFSET FRAMES ALLOWED.**

**SHOCK ABSORBERS** must provide a resultant force dependent upon piston velocity and must be acceptable to Track Officials. Shock absorbers and components must be acceptable to Track Officials and must be available to all Competitors from the shock absorber manufacturer.

- A. All non-revalvable shock absorbers must be used as supplied from the manufacturer.
- B. Nitrogen-gas pressurized shock absorbers must be mono-tube, deflective disc valve type with an integral gas reservoir. Only a single piston is permitted in the main body with one (1) shim stack on the compression side, and one (1) shim stack on the rebound side, and only a single floating piston is permitted in the integral gas reservoir. Steel deflective disc valve shims must seal the primary metering faces of the single piston in the main shock body.
- C. External adjustments will not be permitted on any shock absorbers.
- D. Shock absorber shaft diameter must not exceed 0.630 inch and the shaft must not have any sleeves or spacers that could limit the travel of the shaft into or out of the main body.
- E. Shock absorbers and internal components are subject to inspections.
- F. Shock absorbers must be used as manufactured by the shock absorber company.
- G. Track Officials may use a shock absorber provided by the respective manufacturer as a guide in determining whether a Competitor's shock absorber conforms to the specifications in the Rule Book.
- H. A maximum of one (1) shock absorber per wheel will be permitted.
- I. Coil over shock absorbers will be permitted.
- J. External shock absorber reservoirs will not be permitted.
- K. Remote or electronically controlled shock absorbers will not be permitted.
- L. An external Schrader valve to pressurize the shock absorber with gas will be permitted.
- M. Quick disconnect shock mounts will not be permitted. The shocks must be attached with nuts and bolts.
- N. Heating pads and/or blankets will not be permitted for warming the shock absorbers.

## **6.ENGINE IDENTIFICATION:**

In the engine rules the types of engines referred to as engine A, B, C and D will be as follows:

Engine A: 6 Cylinder Engines

Engine B: 8 Cylinder Engines (Late Model Stock Rules)

Engine C: 8 Cylinder Engines (Optional Stock Engine)

**Engine D: GM Crate Motor ZZ4/24502609 GM Circle Track/88958603**

## **7. WEIGHT:**

**A. (Engine A, B & C): must maintain a minimum weight 2900 pounds with 1300 pounds minimum right side weight.**

**B. (Engine D):** must maintain a minimum weight of **3000** pounds with **1350** pounds minimum right side weight.

C. All cars are weighted with gas, oil, water and DRIVER INCLUDED. All added weight must be painted white with car number on it.

D. No mechanical device for shifting weight will be permitted inside of driver compartment. No hydraulic weight shifting devices permitted at any time. No weight adjustment permitted on left front wheel during a race without prior approval of Track Official. Positively no electrical, air, hydraulic or remote control device allowed in order to change the handling characteristics of the car at any time.

Any other devices to control the handling characteristics of the car must be approved by Track Official. No onboard computers or record keeping devices or wiring are permitted.

## **8. ENGINES:**

**A.(Engine A)** Only standard production in line six cylinder engines allowed. The maximum engine size allowed will be 250 cubic inches. All engines must be used in make of car manufactured for. 240 cubic inch Ford engine in Ford cars, 230 or 250 cubic inch Chevrolet engines in a Chevrolet car. Stock stroke and crankshaft only. All engines are allowed an overbore of .070 inches including wear. Dome pistons allowed. Any type camshaft allowed, except that roller tappets may not be used.

**B.(Engine B & C)** Must be standard factory production with standard external measurements in all respect. Removal of material from the engine block, with the intent of weight reduction, will not be permitted. No aluminum blocks permitted. Internal polishing, porting, altering and/or relieving of engine parts are not permitted.

### **Displacement as follows:**

1. General Motors: 350 cubic inches plus .060 inches overbore per cylinder including wear.
2. Ford: 351 cubic inches plus .045 inches overbore per cylinder including wear.
3. Chrysler Corp: 360 cubic inches plus .045 inches overbore per cylinder including wear. Hydraulic or solid lifters are permitted. Lifters must be the same size as original equipment. No mushroom type lifters permitted. Roller rocker arms permitted

**C. (Engine D)** Engines must remain stock as delivered from the manufacturer, no changes. Rocker arms must be original. Harmonic balancer must be original. Timing cover must be original.

## **9.CAMSHAFT:**

(Engine B) Only steel camshafts are permitted. No belt drive systems permitted. Only standard production sleeve type cam bearings permitted. No needle or roller bearings permitted. Camshafts must be driven in the same direction of rotation as the NASCAR approved standard production engine. Valve covers must be made of metal. ENGINE C will have a maximum lift at valve tip .475. Flat tappet camshaft only.

(All Engines) The camshaft bearing journal size must be the same as the standard production design for the NASCAR-Approved production engine being used. Only standard production sleeve type cam bearings will be permitted and must be the standard inside diameter for the NASCAR-approved production engine being use. The cam bearing bores in the block may be machined a maximum of 0.030 inch oversize from standard bore.

## **10.CRANKSHAFT:**

**A. (Engine B):** Only standard steel or cast iron production design crankshaft permitted. If aftermarket crankshafts are used, they must be identical in appearance and constructed as an OEM crankshaft. Stroke may not be increased or decreased. Balancing is permitted. Counterweights must be the same shape, may be polished, but they cannot be knife-edged, undercut or drilled to lighten the crankshaft. The rod bearing journals may be drilled. The main bearing journals may not be drilled. When weighting crankshafts, the minimum weights listed below shall include the timing chain sprocket. The following dimensions are the minimum specifications for crankshafts:

	<b><u>Rod Journal</u></b>	<b><u>Weight</u></b>
General Motors	2.100 minus .030	50 Pounds
Ford	2.100 minus .030	50 Pounds
Chrysler	2.100 minus .030	50 Pounds

**B. (Engine C):** Only OEM crankshafts allowed. Stock stroke only. No lighting or knife- edge. No de-burring on crankshaft. Balancing only permitted. Only standard OEM steel elastomer-type

harmonic balancers permitted. Electronic switching devices or sensors are not permitted on the harmonic balancer, crankshaft or flywheel.

**11.PISTONS AND CONNECTING RODS:**

**A. ENGINE A & B:** Any flat top three (3) ring piston may be used. Valve reliefs may be cut into pistons. **ENGINE C:** Only a 600-gram (piston and pin) piston will be allowed. **Engine A, B & C the use of coatings of pistons will be permitted.**

B. Only steel piston pins maintaining a minimum of .927 inch may be used.

C. No portion of the piston may protrude above the top of the block surface.

D. Only solid steel connecting rods permitted. No hollow beam rods are permitted. All rods must maintain the minimum/maximum rod lengths listed below:

	<b>Minimum</b>	<b>Maximum</b>
General Motors	5.700	6.250
Ford "Windsor"	5.954	6.250
Ford "Cleveland"	5.778	6.250
Chrysler	6.000	6.250

**NOTE:** Engine C will only allow a stock length rod.

**12.FAN:**

**A.** Removal of a belt is not permitted. The engine-cooling fan must meet the following requirements: Only **STANDARD STEEL** fan with a minimum of four blades shall be used. Electric fans permitted.

(2) The pitch of the fan blades may not be changed; however, the blades must retain standard size, width and length for make and model.

(3) Minimum diameter of fan shall be no less than 14 inches.

(4) Fan blades shall be a minimum of 3.5 inches wide.

(5) No flat fan blades permitted.

**13. FAN SHROUD AND DUCTS:** When an electric fan is used, shrouds or panels rearward of the radiator will not be permitted. When a standard steel fan is used, the shroud must follow the entire circumference of the fan and must not extend more than one (1) inch rearward of the trailing edge of the fan blade. Flat panels or air dividers will not be permitted. Fan shrouds and ducts must not be used for downforce purposes and must be acceptable to Track Officials.

**14.STARTER:** The self-starter must be in working order and in stock location. Only standard factory OEM production starters permitted. All cars must start under their own power.

**15.ENGINE OIL PANS AND OIL COOLERS:**

**A.** Oil pans and oil coolers must meet the following requirements:

(1) Oil pans must be made of steel and must be approved by Track Official.

(2) Oil pans must be wet sump type and manufactured using a stock production type pan with a sump reservoir added to the bottom. All bolt holes and bolthole flanges must be visible. No kickouts are permitted between the bolt on flange and the top of the added sump.

(3) Engine oil coolers may be either an oil to air or an oil to water heat exchanger mounted forward of the engine firewall. All oil coolers and their installation must be approved by Track Official.

**16.CLUTCH ASSEMBLY:**

**A.** Only mechanical foot pedal, cable or hydraulic operated clutches will be permitted. Pneumatic assisted clutches will not be permitted.

- B. The clutch assembly must be bolted to the flywheel located inside the bell housing.
- C. Multiple disc clutches will be permitted up to a maximum of 3 discs. The disc clutch housing assembly and cover must be made from aluminum or steel. The clutch cover must be the push type design.
- D. Only magnetic steel discs and magnetic steel pressure plates will be permitted.
- E. The minimum clutch disc diameter permitted is 5-1/2 inches.
- F. Clutches must be a positive engagement design. Slider or slipper clutches designs will not be permitted.

**17.HEADS:**

**A. (Engine A)** Must be stock and from make of car manufactured. **NO** altering such as polishing, porting, relieving and lightening of valves. Valves must not be altered; three angle valve jobs are allowed. Roller rocker arms allowed. Polylocks, screw-in or pinned rocker studs are permitted. Stud girder and O-ringing are permitted.

**B. (Engine B)** Cylinder heads must be NASCAR approved. Cylinder heads must be stock cast iron production only. Limited of two valves per cylinder. No titanium valves or valve springs permitted. No port matching or flow work is permitted. The head stud or boltholes cannot be offset or drilled off-center for the purpose of moving the head in any direction. A maximum of three (3) angle valve jobs are permitted. When cutting the valve seat angles, no stone or grinding marks are permitted above the bottom of the valve guide. All cutting in reference to the valve job and bowl area must be centered off the centerline of the valve guide. No radius cuts permitted. Upon completion of the valve job, the bowl area under the valve seat down to the bottom of the valve guide must still be the same configuration as far as shape and finish as it was from the manufacturer. Surfaces and/or edges where the cutter or stone has touched must not be polished. No hand grinding or polishing is permitted on any part of the head. Only Chevrolet part number 14011058 and 10134392, casting number 14011034, heads are permitted in GM models. The Chevrolet head, part number 10051108 is not eligible. Chrysler W-2 cast iron head are permitted. Any stock production cast iron is permitted on Ford models. Ford part number M-6049-N351 cast head is permitted. The maximum valve sizes as measured across the face of the valve are as follows:

	<b>Intake</b>	<b>Exhaust</b>
General Motors:	2.020	1.625
Ford "Cleveland":	2.046	1.656
Ford "Windsor":	1.8437	1.5469
Ford M-6049-N351:	2.020	1.600
Chrysler Corp:	2.020	1.625

External modifications will not be permitted. Heads are limited to a minimum 62 cc combustion chamber. The combustion chamber may be machine cut, beside the valves only, to equalize the chamber cc. No other machining or grinding will be permitted.

**C. (Engine C)** The optional 8 cylinder engine will only be allowed to run a World Products aftermarket head (Dart) #4351 & 4361. No titanium valves permitted. All heads are limited to a minimum of 62 cc combustion chamber. Three (3) angle valve jobs permitted - no cutting in pocket lower than OEM cuts. The maximum valve sizes measured across the face of the valve are as follows:

General Motors: Intake - 1.940 Exhaust - 1.500

Ford & Chrysler: Same as engine B

**18. CARBURETOR:**

**A. (Engine A)** Stock fuel pump and carburetors only for make and model engine used. Maximum carburetor throttle bore allowed is 1 5/8 inches. NASCAR has approved the Holley 2300 two-barrel carburetor model number 7448 and the Holley 500 two-barrel carburetor model number 4412 for all 6-cylinder engines (OPTIONAL). The rework guidelines for the Holley 2300 and the

Holley 500 carburetors are listed in paragraph 2. The venturi size of the Holley 500 is 1 11/16 inch. (1) All 6-cylinder engines running an aluminum intake must run a spacer, maximum 3/4 inch in thickness, installed between the intake manifold and carburetor. With the 2300 series carburetor the spacer must have two holes with 1 Y2 inch openings that match the base of the carburetor. With the Holly 500 series carburetor the spacer must have holes with 1 11/16 inch openings that match the base of the carburetor. No taper or bevels.

**B. (Engines B & C)** Any NASCAR approved two barrel carburetor properly installed will be permitted. NASCAR has approved the Holley 2300 two-barrel carburetor model number 7448 with a venturi size of 1 3/16 inches and maintaining a throttle bore maximum size of 1 Y2 inches.

The rework guidelines for the Holley 2300 and the Holley 500 series carburetor are as follows:

**(1). BODY OF CARBS:** No polishing, grinding or drilling of additional holes permitted. The maximum size for the air bleed holes in the top of the carburetor body will be .080 inch for all four holes.

**(2). CHOKE HORN:** Choke horn may not be removed.

**(3). BOOSTERS:** Boosters may not be changed. Size or shape must not be altered. Height must remain standard.

**(4). VENTURI:** Venturi area must not be altered or reshaped in any manner. Casting ring must not be removed.

**(5). BASE PLATE:** Alterations to allow additional air to be picked up below the opening of the venturi such as altered gaskets, base plates and drilling holes into the carburetor will not be permitted.

**(6). BUTTERFLIES:** Stock butterflies must not be thinned or tapered. Idle holes may be drilled in butterflies. Screw ends may be cut even with shafts, but screw heads must remain standard.

**(7). THROTTLE SHAFTS:** Shafts must remain standard and must not be thinned or cut in any manner

**(8). CARBURETOR SPACER:**

Carburetor spacers must be NASCAR approved. Only a one-piece aluminum carburetor spacer, a minimum .700-inch, maximum .750-inch in thickness, must be installed between intake manifold and carburetor. The spacer must be centered on the intake manifold and have two holes with 1 Y2 inch openings that match the base of the carburetor. Holes must be cut perpendicular with base of carburetor. No taper or bevels, or any modification permitted. A one-piece gasket maximum .065 inch thick must be installed between the carburetor and spacer. A one-piece gasket maximum .065 inch thick must be installed between the spacer and intake manifold. Only one (1) gasoline cartridge type filter may be used between the fuel cell and fuel pump. A fuel filter on the pressure side of the fuel pump may only be used at the carburetor fuel bowl inlet. The location and size of the filter must be acceptable to Track Official.

**(Engine D)** The Holley 4150 Four-barrel 390 CFM carburetors with a venturi size of 1 1/16 inches and a throttle bore size of 1 7/16 inches is approved for use on **CHEVROLET** Crate Engines **ONLY** A one (1) inch spacer will be allowed between the carburetor and intake. All other spacer rules apply.

**19. AIR CLEANER AND AIR INTAKE:** Air cleaners cannot be removed during practice or competition.

**A. AIR CLEANER AND AIR FILTER:** Only NASCAR approved round air cleaner element minimum 12 inches and maximum 17 inches diameter will be permitted. A NASCAR approved complete dry element - minimum 1 Y2 inches - maximum 4 inches high, must be used in the air cleaner at all times. All air shall be filtered through element. The air filter element may not be sprayed or soaked with any type of chemicals or liquids. Only a round metal air cleaner housing is permitted. The top and bottom of the air cleaner must be solid and must be the same diameter. No lips or expanded edges are permitted. The air filter housing must be the same diameter as the air filter element. The air cleaner housing must be centered and sit level on the carburetor. The bottom of the air cleaner housing must be lower than the top of the carburetor choke horn. No tubes, funnels or any

device, which may control the flow of air, is permitted inside of the air cleaner or between the air cleaner and the carburetor.

**B. AIR INTAKE:** Cowl air induction is not permitted. Absolutely no ducts or baffles permitted on or leading to the air cleaner or element. No fresh air openings of any type are permitted in the hood or cowl area.

## **20. ELECTRICAL SYSTEM:**

**A.** Electronic distributors will be permitted. All electronic distributors must be stock type housings, equipped with a magnetic pickup, gear driven, and mounted in the stock location. Single or dual point camshaft driven distributors will be permitted. Only one (1) ignition coil will be permitted and it must be mounted on the engine side of the firewall. Only one (1) electronic firing module amplifier box will be permitted (if used), and it must be mounted on the right hand side on the front of the dash panel. Ignition amplifier boxes and RPM limiters that are analog only which DO NOT contain programmable, computerized, or memory circuits will be permitted in standard ignition systems. Computerized, multi-coil, dual electronic firing module amplifier box, or crank trigger systems will not be permitted. Magnetos will not be permitted. Adjustable timing controls will not be permitted. Retard or ignition delay devices will not be permitted. External RPM limiters will not be permitted. Accessories to regulate the power supply will not be permitted. The ignition amplifier must have a six (6) pin female connector attached to its output leads of the Packard Electric type (MSD part #8170) to facilitate manual operation and testing of the ignition components during inspection. The wiring sequence must be the same as the General Motors or Ford ignition amplifier. A heavy red wire (positive to the battery) and a heavy black wire (negative to the ground) will be permitted. Any other wires will not be permitted. Only one battery permitted and must be located in an approved position. A labeled on-off switch must be located on the front of the dash paneling centered left to right. The switch must be wired to the battery cable in a manner that would cut off all electrical power to the car. The alternator system (when used) must be mounted on the front of the engine in the standard location. Racecars will not be permitted to carry onboard computers, micro-controllers, processors, recording devices, electronic memory chips, traction control devices or digital readout gauges. Radios must be of two-way voice communication type only, independent of the car's electrical system.

**21. LUBRICATION SYSTEM:** No Dry-Sump Systems permitted. No external oil pumps or tanks permitted. Oil cooler are permitted. No oil drain lines permitted. No inside valve cover oiling systems permitted. No quick disconnect fitting swill be permitted.

## **22. EXHAUST SYSTEMS:**

### **(Engine A)**

A. Exhaust headers are permitted.

B. Exhaust pipes must be outside the driver's compartment beneath the floor of the car. The exhaust pipes must extend to the outer edge of the body of the car in front of the rear wheels, but must not exit the body any further forward than vertical centerline of the door. The exhaust pipes may exit the body either beneath the frame rails or immediately above the frame rails.

C. Heat shields to cover exhaust manifold can be no more than four (4) inches wide and no longer than the cylinder head.

### **(Engines B, C & D)**

A. Stock cast iron manifolds permitted with no modifications.

B. Exhaust headers are permitted. The exhaust headers must be manufactured using a steel primary tube size of 1 5/8 inches outside diameter, maximum 30 inches in length cut off square, no cones or pyramids permitted, with a collector tube size of three (3) inches outside diameter. The header collector pipe cannot be reduced at any point between the primary tubes and exhaust pipe. Those tubes that do not must be mounted parallel, or angle down, in reference to the cylinder head, then turn down

and turn to the rear into the collector pipe. The maximum thickness permitted on the header mounting flange will be 3/8 inch.

- C. No stainless steel, stepped, 180-degree or crossover equalizer tube systems allowed.
- D. No spacers allowed between the cylinder head and the exhaust manifold. Only one (1) gasket, maximum .075-inch thickness, may be used between the cylinder head and exhaust manifold.
- E. No thermal wrap permitted on headers.
- F. No scavenge lines and/or holes permitted between the engine and exhaust system.
- G. Exhaust pipes from the exhaust header collector must not be larger than four (4) inches or smaller than three (3) inches outside diameter but must be the same diameter for the entire length. Only round exhaust pipes will be permitted, but may be flattened to an oval shape a minimum of 1 Y2 inches high. The circumference must be the same as the round exhaust pipe of the same diameter. Any device to reduce the interior diameter of the exhaust pipe will not be permitted. The exhaust pipe must exit the collector pipe and turn either right or left and may join into one (1) pipe that must exit the car either beneath or on top of the frame rail. When the two (2) exhaust pipes into one (1) system is used, all exhaust pipes must be routed beneath the transmission and exit to the outside of the car, with a single pipe only, behind the driver and in front of the rear wheels. Any exhaust pipe exiting through the inside of the car must be completely sealed and not extend more than Y2 inch outside the door. Frames, rocker and quarter panels must not be notched to accommodate exhaust pipes.
- H. Exhaust pipes must be made of magnetic steel, fastened to the header collector and to the frame in a secure manner acceptable to Track Official.
- I. Thermal wrap will not be permitted on the exhaust collector or exhaust pipes.
- J. Crossover pipes or merge systems will not be permitted.
- K. Heat shield to cover exhaust manifold can be no more than four (4) inches wide and no longer than the cylinder head.

### **23. INTAKE MANIFOLDS:**

- A. (Engine A)** All cars will be allowed to run an aluminum intake. **NO HI-RISE INTAKES ALLOWED. NO MODIFICATIONS** are permitted.
- B. (ENGINES B & C)** Listed below are the only approved intake manifolds approved by NASCAR. These manifolds must remain as manufactured. No port matching or flow work permitted. Manifolds must not be painted. All part numbers are current design Edelbrock Performer series intake manifolds. Older design manifolds with the same number are not permitted.
  - 1. Chevrolet: Edelbrock – Part Number 2101
  - 2. Dodge: Mopar – Part Number P5249572AB (this number appears on the intake manifold and is to be used to order this part). This intake manifold must be used with a 9.200 inch deck height engine block.
  - 3. Ford: Ford Performer Intake Manifold – Part Number M-9424-C358
- B.** The intake manifold material must be aluminum. Magnesium or other exotic materials will not be permitted.
- C.** For all manufacturers approved intake manifolds, the front to rear center divider of the intake manifold may be machined to a minimum width of 1/8 inch at the top of the divider for clearance with the throttle bore holes in the adapter plate. The machining must be an angle cut from the minimum width on each side at the top of the divider to the manufactured width on each side at a maximum depth of Y2 inch down into the plenum area. This is the only machining that will be permitted to the intake manifold. The remainder of the intake manifold must remain as manufactured.

### **24. ENGINE LOCATION:**

- A.(Engine A):** Engines may be located so the center of the #2 plug lines up with the upper ball joint. Lateral location, the engine, transmission, driveshaft and rear end housing must be centered on the

centerline of the chassis. A minimum engine height of twelve (12) inches and a maximum of thirteen (13) inches from center of crankshaft to ground must be maintained at all times on all cars.

**B.(Engines B, C, & D):**

(1) All General Motors engines must be located so center #1 spark plug hole on right side of engine block is in line with the centerline of the front upper ball joint.

(2) Ford and Chrysler engines may be located so that the front of the cylinder head on the right side is in line with the center of the upper ball joint.

(3) Center of crankshaft must be centerline of the frame and tread width, front and rear.

**25. TRANSMISSIONS:**

A. Only standard production OEM type Muncie or T-10 manual four (4) speed transmissions will be permitted. Three (3) speed transmissions will be permitted. Special production transmissions will not be permitted. Top loader type transmissions will not be permitted.

B. Only cast iron, aluminum, or magnesium transmission housings will be permitted.

C. Only OEM type, steel, angle cut forward gears will be permitted. Square cut forward gears will not be permitted.

D. Holes and/or other modifications to transmission gears, including but not limited to, narrowing of gears, that in the judgment of Track Official, have been made with the intent of weight reduction will not be permitted.

E. All forward gears and reverse gear must be in working order, and they must be operational from inside the driver's compartment.

F. All transmissions must have the input shaft and its main drive gear constantly engaged. This assembly must be constantly engaged with the countershaft and its cluster and reverse gears.

G. Transmissions with gears removed will not be permitted.

H. Quick change transmissions will not be permitted.

I. Automatic or semi-automatic transmissions will not be permitted.

**J.** Only fire resistant type shifter boots, secured with fasteners, acceptable to Track Official will be permitted

**K.** External oil pumps and oil coolers will not be permitted.

**L.** Heating pads and/or blankets will not be permitted for warming the transmission.

**26. DRIVE SHAFT:**

A. The drive shaft, universal joints, and yokes must be steel and be similar in design to the standard production type. The drive shaft must be made of one-piece magnetic steel and must be either 2-3/4 inches or 3 inches in diameter.

B. Two (2) 360 degree solid magnetic steel brackets, with no holes or slots, not less than two (2) inches wide and 1/4 inch thick, must be placed around the drive shaft and fastened to the cross members of the car.

C. All drive shafts must be painted white.

**27. REAR END ASSEMBLY:**

A. The center of the rear end housing must be within 1/2 inch of the centerline of the tread width, front and rear.

B. Only the following differentials will be permitted:

(1). Only Detroit locker ratchet type limited slip differentials will be permitted. When this type differential is used, one (1) wheel, when jacked up with the transmission engaged, must turn freely by hand for one (1) full turn - 360 degrees.

(2). Locked rear drive axle assemblies (solid spool) will be permitted. When jacked up, both rear wheels must rotate in the same direction and the same rotational distance at all times. One (1) wheel, when jacked up, must not rotate in any direction.

C. Only quick-change rear end center sections with a minimum cross section height of 12 inches at the center of the rear axle with a side bell minimum diameter of 12 inches and magnetic steel spur gears on the backside will be permitted. Only a magnetic steel lower jackshaft and driveshaft yoke will be permitted in the quick-change rear end center section.

D. Full floating rear axle is mandatory, but must not alter the tread width of general appearance.

E. Only solid, one-piece magnetic steel axle housings will be permitted. Only one-piece, magnetic steel axles will be permitted. Crown type axles will not be permitted.

F. Cambered rear axle housings will not be permitted. The method used to check camber will be the Track Officials' option.

G. Only metal drive plates, the same thickness on the left and right side, will be permitted and the drive plates must be one-piece with a single internal spline. Grease fittings will not be permitted on the drive plates or axle caps.

H. If rear axle housing support bars are used; they must not have any method of adjustment.

I. External oil pumps and oil coolers will not be permitted.

J. Heating pads and/or blanket will not be permitted for warming the rear end assembly.

**28. BRAKES:** Only single puck disc brakes with stock type calipers and steel rotors will be allowed front and rear. Brakes must be installed on all four wheels. Floating brake calipers are not permitted. Only magnetic cast iron or steel brake rotors are permitted. Rotors must maintain a minimum of 3/4 inch thickness and cannot be drilled, slotted or grooved. The brake rotors must be bolted solid to the hubs. Floating brake rotors are not permitted. Brake proportioning system adjustments inside driver's compartment will be permitted. No electronic wheel speed sensors or brake actuators will be permitted. Power assisted braking systems will not be permitted. Brake fluid recirculating systems will not be permitted

**29. BODIES:** The front fenders, quarter panels, and rocker panels must be acceptable to Track Officials and meet the following minimum requirements:

A. The front fenders and quarter panels of not less than 24 gage (0.025 inch thick) magnetic sheet steel must be installed in their standard location as referenced by a stock production car. As an option the front fender may be made from flexible, rubberized plastic material maintaining stock factory dimensions and must be approved and acceptable to Track Officials. When measured anywhere across the rear of the car, a maximum of three (3) inches difference (plus or minus) from a stock production car will be permitted. When cutting the front fenders or quarter panels for clearance, the only modifications permitted will be cutting for tire clearance with a maximum of 10 inches measured from the edge of the wheel to the edge of the front fender or quarter panel.

B. All front fenders and quarter panels must be roll-formed to cover the tires—left and right side must match. The front fenders and quarter panels must not extend out past the tire sidewall and must be permanently mounted with one-piece, solid, magnetic steel, non-adjustable supports and brackets. Interior wheel wells must be constructed of magnetic sheet steel and must either be radiused the same as the tire or they may extend from the front of the rear wheel upward, turn and continue horizontally to the rear bumper cover. If crush panels are used, they must be a maximum of eight (8) inches wide and constructed with aluminum.

C. Excessive modifications to the rocker panels will not be permitted. The rocker panels must be magnetic sheet steel and remain straight and parallel with the frame rails. If rocker panel trim moldings are used, they must be attached to both sides and be magnetic sheet steel. All bodies must be mounted on the centerline of the tread width and frame.

D. Body Height -Measures at the center of the roof.

(1) Group 1 Cars - 46 inches

(2) Group 2 Cars - 48 inches

**E. Ground Clearance** - all cars must maintain a minimum ground clearance of four (4) inches at all times, measured anywhere along the frame rails or body panels. NO skirts of any kind can extend below any body panel.

**F. Floors** - must be complete and in standard position, no tunnels or air ducts. Floors may be raised eight (8) inches from drive shaft tunnel to door on passenger side.

**G. Hood & Roof**—The hood and roof must be acceptable to Track Officials and meet the following requirements:

(1) Only flat hoods will be permitted on all models. The front edge of the hood must not be exposed and must fit into a slot a minimum of 2 inches across the entire width of the front of the hood and be painted the same color as the car. The hood must seal tight to the front fenders and the windshield at all times.

(2) The hood must close in the original position and maintain the original configuration. The hood must be made of reinforced fiberglass or metal.

(3) The hood must have positive magnetic solid steel pin fasteners, a minimum of three (3) across the front—one (1) at each corner, one (1) in the center – and one (10) at each rear corner and one (1) in the center, if necessary—to seal the hood to the windshield. A minimum of two (2) magnetic solid steel pin fasteners or quick release fasteners, if necessary, must be installed on each front fender, evenly spaced between the front and rear pin fasteners.

(4) Holes will not be permitted in the hood for cooling. Hood bubbles or scoops will not be permitted.

(5) Hood openings that permit air to the carburetor air filter will not be permitted.

(6) All roofs must be the same size and shape as a stock production roof. Roof panels must be permanently mounted with one-piece, solid, magnetic steel, non-adjustable supports and brackets in the stock position the same as a stock production roof for the make and model car being used. Roof panels may be of a one-pieced design including the windshield, the rear and side windows with a mounted solid, magnetic steel roof. All roofs must be acceptable to Track Officials.

**H. Dash Panel** – All cars must have a removable inspection panel, a minimum size of 10 inches by 10 inches or eight (8) inches by 18 inches, on the top of the dash panel on the driver's side. The right side of the dash panel from the center windshield bar (#4A) to the right side front roll bar leg (#2B) may be replaced with a flat ignition system mounting panel. The flat ignition system mounting panel must be securely fastened on the top of the dash bar (#8) and mounted parallel to the frame rails. The right side ignition system mounting panel must be constructed of metal.

**I. Cars** must be neat appearing. Interior must be painted. All nose and rear bumper covers must be painted the same color as the car including the bolts and rivets.

### **30. SPOILERS:**

**A. FRONT AIR DAM:** The front air dam must be mounted perpendicular to the ground at the trailing edge of the front bumper or nose area. The front air dam must maintain a minimum ground clearance of four (4) inches. All support brackets must be mounted to the rear of the air dam.

**B. REAR SPOILER: Refer To 2012 Nascar Late Model Stock Rule Book**

### **31. BUMPERS:**

A. All cars must have a complete set of stock bumpers in top quality condition. No holes may be drilled in the bumpers in order to lighten. No homemade type bumpers allowed.

B. Bumper ends should be fastened to fenders.

C. Tubing, with a maximum size of 1 3/4 inches in diameter may be used to reinforce the bumpers. The reinforcement tubing must not be exposed and may only be mounted inside the bumpers

D. All cars must have a hook, front and rear, to enable a wrecker to hook up without delay.

### **32. GLASS:**

- A. All glass must be removed except windshield and rear view mirror.
- B. Each car must have full windshield made of lexan.
- C. Rear Window Glass: NASCAR has approved the use of lexan in lieu of standard rear window glass.
- D. Side Window Glass: Lexan may be installed in the rear quarter windows on cars, which come from the factory with standard window post.
- E. All window glass must be secured with “pop out straps”.

**33. SAFETY:** All drivers must attend the driver’s race meeting each week held in the inspection building. At all times, before going onto the race track, drivers must wear an approved helmet, driver’s uniform and seat belts. The window net must be secured in the proper position.

**34. HELMET:** Drivers should wear a helmet carrying at least a valid SA 1995 or SA 2000 Standard Snell Sticker at all times on the racetrack. The driver should wear the helmet in accordance with the directions provided by the helmet supplier and/or manufacturer. Any modification to the helmet for any purpose should not detract from its effectiveness.

**35. DRIVER’S UNIFORM:** It is mandatory that at all times driver wear driving suit of fire resistance material that effectively covers the body. It is recommended that driver wears gloves, socks and underwear made of fire resistance material.

**36. WINDOW SCREEN:**

- A. A nylon window screen must be installed in the left side door opening.
- B. The window screen must be a rib type, made from 3/4 inch wide nylon material with a minimum one (1) inch opening between the ribs.
- C. The minimum window screen size shall be 22 inches wide by 16 inches high.
- D. All window screen mounts must be welded to the roll cage.
- E. The window screen, when in the closed position, must fit tight and be secured with a quick release type latch at the top on front only.

**37. SEAT BELTS:**

- A. Each car should be equipped with a NASCAR approved seat belt restraint system. The seat belt and shoulder harness should not be less than three (3) inches wide.
- B. The seat belt restraint system should be installed in accordance with the directions provided by the system supplier and/or manufacturer.
- C. The manufacturer’s label should not be located under the adjusting mechanism when the driver is buckled in the seat and has tightened the seat belts and shoulder harness. If the label is under the adjusting mechanism, the label should be removed or relocated in a manner that does not affect the integrity of the belt material. The date of manufacture should remain visible on the belts at all times.
- D. The driver should use the seat belt restraint system at all times on the race track, in accordance with the instructions and/or recommendations of the system supplier and/or manufacturer.
- E. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT NASCAR, TRACK OFFICIALS, OR THE PROMOTER, TO INSURE THAT HIS/HER SEAT BELT RESTRAINT SYSTEM AND ALL COMPONENTS ARE NASCAR APPROVED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.**

**38. SEATS:**

- A. Only custom-manufactured aluminum seats acceptable to Track Official should be used.
- B. All seats should have padded side protectors and padded aluminum seat leg extensions on the left and the right side.

C. A padded headrest acceptable to Track Official should be used. All roll bars and other hard surfaces around the driver's seat should be padded with impact absorbent material acceptable to Track Official.

### **39. FIRE CONTROL:**

A. Race cars must have an approved fire extinguisher securely mounted within reach of driver. This extinguisher must be mounted on an approved mounting bracket (no extinguisher may be taped to roll bars) or mounted in door area.

B. It is recommended that each car have built in fire extinguishing equipment, but it cannot be a dry powder type (must be 1301 halon or equivalent). All entrants should have in their pits, at all times, a fully charged ten (10) pound capacity dry powder fire extinguisher or it's equivalent showing a current inspection certificate.

C. It is mandatory that at all times driver wear driving suits of fire resistance material that effectively covers the body. It is recommended that driver wears gloves, socks and underwear made of fire resistance material.

### **40. ROLL BARS:**

A. Steel roll over bars are compulsory. No aluminum or other soft metals permitted. They must be approved by officials. Front and rear bars must be connected at top (cage type) and bottom on both sides at seat height. Side roll bars are compulsory and must extend into door panels (minimum of four (4) on left side and four (4) on right side) with additional support on back of the roll bar. Left door bars must be convex in shape, with some arch. An additional roll bar must be installed across bottom of dashboard, from left bar leg to right roll bar leg.

B. Roll bars must be welded and must be no less than 1 3/4 inches thick. All welds must have gusset plates and no less than .090 steel, NO pipe fittings allowed. Only round seamless tubing permitted. Roll bars in driver area must be padded and taped with foam rubber from bottom of left window to center of top.

### **41. FUEL CELLS:**

A. All cars must have fuel cells.

B. The maximum fuel cell capacity 22 gallons, including filler spout and overflow. No materials other than standard foam supplied by the fuel cell manufacturer are permitted to make the fuel cell meet the 22-gallon capacity.

C. Fuel cell check valve is required and acceptable to Track Official.

D. Fuel cell container must maintain a minimum ground clearance of eight (8) inches.

**E. A rear firewall of magnetic sheet steel not less than 24 gauge (0.025 inch thick) must be located between the trunk compartment and the driver's compartment and must be welded in place.**

F. Fuel cell shut off valve recommended and should be installed near fuel cell.

**TRACK FUEL ONLY! FUEL MUST BE PURCHASED AT THE TRACK**

### **42. WHEELS:**

A. All wheels must be fifteen (15) inches in diameter. All wheels must be the same width and offset.

B. Rim width cannot exceed ten (10) inches.

C. Wheel spacers, if used, must be the same on all four (4) wheels.

D. Heavy duty lug nuts and bolts must be used.

E. Tape will not be permitted on the wheel.

**43. TIRES: Hoosier F45 Scuff tires are to be purchased by Track Tire Supplier. The only air in tires will be supplied by tire trailer only. Scuffs will be mounted on racers wheels.**

**44.IDENTIFICATION:**

Numbers must be at least 18 inches high and neatly painted on both sides of the car on the center of door. A number 24 inches high must be painted on the roof, reading from the driver's side. The use of number decals is acceptable if the number is legible. Foil number decals are not permitted. If numbers are not legible, the Track Reserves the right to make you change your markings. Block type numbers six (6) inches high, white in color, must be attached to the uppermost corner of the windshield on the right side, and also on the rear taillight cover. The speedway will maintain a registry of car numbers. **ALL DRIVER'S WILL BE ASSIGNED A NUMBER BY CONTACTING THE SPEEDWAY OFFICE.** If you register for a number, and do not compete within four events of registering, the track reserves the right to re-assign the number. Only single or double digit numbers permitted, 00–99. No alphabet number allowed. Track officials have the right to temporarily change racecar numbers to avoid duplication.

**NOTE:** Equipment or specifications not considered herein does not necessarily mean approval.

For additional information contact Darren Hackett at the speedway office (336) 629-5803