General Rulebook disclaimer…the rules written or based on "Industry Standards" and those set forth by other sanctioning bodies that operate touring series. These rules are a guideline and may be changed or updated at anytime. All competitors, crew members and pit area participants are expected to review these rules and comply in all areas. Race of Champions officials are not responsible for the actions of anyone within the pit area or the actions of car builders, manufacturers or distributors. It is the sole responsibility of the competitors to meet the rules herein;

Approved Competition Manufacturers

2009 Racing Season

The following are the only approved manufacturers for competition in the 2009 Race of Champions Tour.

APPROVED MANUFACTURERS CHEVROLET, DODGE, FORD, PONTIAC, TOYOTA

GENERAL CAR BODY REQUIREMENTS

Car Bodies

The car body must be acceptable to race officials and meet the following minimum requirements:

A. Cars must be neat appearing. The interior and exterior of all floors, firewalls and the interior of all body panels should be painted using only light/bright colors.

B. All bodies must be installed on the frame in a manner acceptable to race officials. Window openings should remain stock appearing and should maintain the original manufacturer's window opening configuration. Bodies must not be wider than the standard width from the front of the door panel to the rear of the quarter panels when measured beneath the car at the rocker panels. A minimum distance of 43 inches and a maximum distance of 45 inches will be permitted across the body at the bottom of the front windshield opening. Bodies must not extend below the frame at the side rails. Skirts or additional metal must not extend below the body.

C. The floor area directly beneath the seat forward to the front engine firewall must be made using a minimum 1/8 inch thick magnetic steel. The remainder of the floor area to the right and rear of the seat must be made from a minimum 22 gage (0.031 inch thick) magnetic sheet steel. All floor area panels must be welded together.

D. Streamlining of the contours of the car, beyond that approved by the race officials will not be permitted. Installation of air directional devices, underpans, baffles, shields or the like beneath the car or the car's hood and front firewall, floor, rear firewall area, rear deck and quarter panel area will not be permitted. When fabricating the door and quarter panels, any accent lines or offsets whether they are tapered or flat will be limited to one (1) inch maximum in width. Should conditions require a larger window opening than 13-1/2 inches, a hinged door may be installed on the driver's side door. The door must be installed using a magnetic steel full length hinge and be equipped with a magnetic steel spring loaded latch. The maximum size shall be 22 inches in length by a maximum 5 inches in height. The door must be fabricated neatly without any protruding sides or edges and must be acceptable to race officials. If, in the judgment of Race Officials, any part or component of the car not previously approved that has been installed or modified to enhance aerodynamic performance, will not be permitted. Bodies must have a standard appearing windshield opening and the windshield "A" post must follow standard configuration.

E. Cars will not be permitted to compete with excessive body damage (excessive body damage to be determined by race officials.)

F. Belly pans will not be permitted. A belly pan will be defined as any object or material that alters the flow of air under the car. Determination of whether any material or object is or is not a belly pan shall be in the discretion of the race Officials. The bottom panel of the front nose panel must not extend rearward past the rear edge of the harmonic balancer.

G. The driver's compartment may be enclosed with additional sheet metal. All interior sheet metal must be a minimum 22 gage (0.031 inch thick) welded magnetic sheet steel. Interior sheet metal must not be higher than or enclose a standard window opening. Sheet metal in the driver's compartment must be horizontal from the top of the drive shaft tunnel to the right side door bars or angle from the top of the drive shaft tunnel upwards to the top of the right side door. Angled or horizontal sheet metal must extend from the rear firewall or the back of the seat a minimum of 26 inches forward. The interior sheet metal behind the main roll bar (#1) may be roll formed upward to the top of the shoulder bar (#7). The sheet metal must extend rearward and at the center of the rear axle housing, the sheet metal may angle upward and seal to the bottom of the rear window opening. Interior spoilers, wings, or wind deflectors will not be permitted. Double panels will not be permitted. All interior sheet metal must be acceptable to race officials.

Overall Car Weight

A. All specified minimum weight requirements will be with fuel, oil, and water (with driver) and the car race ready. Throughout the event, the minimum weight requirement of 2,575 pounds and a maximum weight requirement of 3,000 pounds will be required in this Series regardless of the cubic inch displacement. Cars will not be permitted to have more than 55% of the total weight as left side weight.

B. For all engines with a cubic inch displacement greater than 368.000 cubic inch displacement 50lbs. must be added in addition to the minimum weight requirements listed below.

C. The minimum required weight for an approved Dart Cast Iron Steel Headed motor is 2,575 lbs.

D. The minimum required weight for an approved aluminum head motor is 2,600 lbs.

E. Unless otherwise authorized by race officials, at all times all weights will be measured by tour officials using the scales available at the host speedway.. It is the responsibility of each race team to insure that its car meets the specified minimum weight requirements for the event on these scales.

Added Car Weight

Added weight must be in block form of not less than five (5) pound blocks (no pellets). Added weight must be securely bolted to the frame rail with a minimum of two (2), 3/8 inch diameter high quality bolts and painted white with the car number or team identification permanently legible on it. Dislodged weight will not be permitted to be returned to the car for weighing after the race. Any added weight containers should be welded directly to the main frame rails, rear sub-frame rails and/or the cross members attached to the main frame rails. Added weight will not be permitted inside the driver's compartment. Material and mounting must be acceptable to race officials.

Car Weights After Competition

A. After a car has qualified, only fluids consumed, as determined by race officials, may be replaced.

B. At the end of the Race, the minimum weight of the car must be over the above posted weights. No tolerances are provided. When cars are weighed after a feature, only fuel in the fuel cell may be added. No fuel may be added to meet minimum requirements after any qualifying event. Wheels and tires may not be changed, unless otherwise authorized by race officials.

DETAILED CAR BODY REQUIREMENTS

In addition to the General Car Body Requirements specified in the previous section, the following Detailed Car Body Requirements must be maintained.

Front Air Dam

An approved air dam may be mounted to the front underside of the cars. The optional metal or vinyl front air dam must be mounted perpendicular to the ground and not more than three (3) inches behind the front edge of the nose panel. The front nose panel and air dam must not extend past the rear edge of the front bumper. The nose panel and air dam must not extend past the outside edge of the front frame rails. The nose panel and air dam must have a minimum ground clearance of two (2) inches. All support brackets must be mounted to the rear of the air dam. Horizontal or flat air deflectors must not extend past the outer edges of the front nose panel side walls.

Rear Spoilers

A. All spoilers must be approved by race officials. An approved spoiler must be a flat non-adjustable part of the body which controls the flow of air over one (1) surface only. Spoiler sizes will be reviewed as testing and/or Race competition dictate, and adjustments may be made during testing, official practice, or prior to Events such as time trials and/or qualifying Races, etc.

B. All rear spoilers and spoiler mounting points must be acceptable to race officials. A solid rear spoiler of a minimum 1/4 inch thick clear polycarbonate only must be installed at the rear deck lid and meet the requirements that follow:

C. The only rear spoiler size permitted will be eight (8) inches high by 48 inches wide, measured at the mounting point on top of the rear panel. The rear spoiler must be installed in the center at the rear of the quarter panels where the rear panel meets the interior sheet metal. During the Race, the rear spoiler must not extend past the rear edge of the rear bumper. Decals or logos will not be permitted on the rear spoiler.

D. A maximum of two (2) one (1) inch wide adjustable supports will be permitted on the front of the spoiler.

E. A maximum of three (3) supports may be attached to the rear of the spoiler. The supports, front or rear, may be attached to the spoiler using a piece of one
(1) by one (1) inch aluminum angle one (1) inch long mounted one (1) inch down from the top of spoiler.

F. All cars must maintain a minimum height of 32 inches and a maximum height of 35 inches, measured from the ground to the spoiler mounting point.

Windows / Lights / Mirrors

Windshield

A. A single one-piece flat or radiused type polycarbonate windshield must be used on the driver's side.

B. The windshield must be mounted flush with the cowl or dash panel and extend up to the top of the windshield opening in front of the driver. Regardless of the type of windshield being used, it must not be wider than the center of the windshield opening.

C. A complete steel windshield screen (with maximum openings of one (1) inch by two (2) inches) must be installed in the right side of the windshield opening. The windshield screen must cover the right side windshield opening from the center windshield bar (#4A) to the right side front roll bar leg (#2B) and from the front of roof bar (#3), at the top, down to the cowl or dash panel.

D. Decals will not be permitted on the windshield.

E. All windshields, windshield screens and their installation must be acceptable to race officials.

Rear Window

The rear window glass must be removed.

Side Window Glass / Window Screen

A. All side window glass must be removed. A window screen must be installed in the left side door window opening. The window screen must be a rib type made from minimum 3/4 inch, maximum one (1) inch wide, material with a minimum one

(1) inch square opening between the ribs. Window screens are recommended to meet the SFI 27.1 specification and should display a valid SFI 27.1 label. Window screens should not be used beyond two (2) years from the date of manufacture. The minimum window screen size must be 22 inches wide by 16 inches high. The forward edge of the window screen, when in the closed position, must be in line with or forward of the steering wheel. All window screen mounts must be welded to the roll cage. The window screen, when in the closed position, must fit tightly and be secured with a lever-type quick release latch acceptable to race officials. The lever must be secured by a detent ball in the lever and may be supplemented by a Velcro® fastener only, pins or clips will not be permitted. The latch must be mounted at the top in the front to the roof bar (#3) or at the top of front roll bar leg (#2A) near roof bar (#3).

B. The minimum side window opening on all models must be 13-1/2 inches when measured from the top of the door panel to the bottom of the roof bar (#3) or the roof drip rail (whichever is closest). Door panels must not be cut or notched to meet this specification.

Headlights / Parking Lights

All cars must be equipped with a solid taillight panel. The taillight panel must extend down to the top of the frame and have a maximum 1-1/2 inch lip on the bottom edge.

Rear View Mirror

A. Multi-view, three dimensional type mirrors will be permitted and must be mounted in the upper center of the windshield opening. The rear view mirror must not extend outside of the car at any time or any position.

B. The maximum mirror size permitted will be 2-1/8 inches by 21-1/2 inches.

C. An additional rear view mirror may be fitted, however, it must be acceptable to race officials and must not extend outside of the car at any time.

D. Composite material(s) will not be permitted on the rear view mirror or its mounting hardware.

Dash Panel

All dash panels must be acceptable to race officials.

Firewalls

For driver protection, all firewalls, floors, tunnels, and access panels must be installed and completely secured in place when the car is in competition.

A. A front and rear firewall of not less than 22 gage (0.031 inch thick) magnetic sheet steel must separate the driver from the engine compartment and fuel cell.

B. The front firewall must be positioned below the leading edge of the windshield.

C. The front firewalls must be sealed and welded in place.

D. The rear firewalls must be sealed and securely mounted in place and be acceptable to race officials.

Doors

A. All door panels must be magnetic sheet steel or aluminum (if aluminum is used it must be a minimum 0.040 inch thick) and mounted in a manner acceptable to the race officials. Any seams, creases or accent lines fabricated in the doors must be made parallel with the top of the door.

B. A minimum distance of 72 inches up to a maximum distance of 78 inches will be permitted when measured from the center of the rear axle housing forward to the front of the door. A minimum distance of 43 inches and a maximum distance of 45 inches will be permitted when measured across the car at the front outside edge of the door panel.

Quarter Panels

Quarter panels must be acceptable to race officials and made of magnetic sheet steel or aluminum (if aluminum is used it must be a minimum of 0.040 inch thick) and meet the following minimum requirements:

A. The top of the quarter panels and door panels must maintain the same degree of rake from the front of the rear window "C" post to the rear of the front windshield "A" post.

B. All cars must have rear wheel openings on the right side a minimum of 11 inches and a maximum of 14 inches radius measured from the center of the rear axle housing.

C. The minimum size for any quarter window opening will be nine (9) inches high by 14 inches wide. All quarter window openings and their location must be acceptable to race officials.

D. A minimum distance of 34 inches (measured any place at the rear of the quarter panels) and a maximum distance of 42 inches measured from the center of the rear axle to the rear of the body will be permitted. Both the right and left side rear quarter panels must be equal in length. The length of the rear panels when measured from the top at the centerline of the rear axle housing rearward to the edge of the body must have a minimum distance of 49 inches and a maximum distance of 60 inches. A minimum distance of 58 inches and a maximum distance of 60 inches will be permitted between the outer edges of the quarter panels measured at the rear bumper height.

E. The height of the rear quarter panels when measured from the ground to the top of the rear quarter panel at the spoiler mounting location must be a minimum of 32 inches and a maximum of 35 inches.

F. The rear quarter panels must maintain a minimum of eight (8) inches ground clearance behind the rear wheels. A maximum distance of 60 inches will be permitted when measured across the car at the rear of the quarter panels.

G. The rear body panel located between the quarter panels must maintain a minimum of 32 inches and a maximum of 35 inches when measured from the ground to the top of the panel at the rear spoiler mounting point. The panel must be solid with no open holes and be mounted flush at the rear of the quarter panels. The center panel must not be higher than the top of the rear quarter panels.

Grilles

A. The grille air intake housing at the radiator must maintain a rectangular shape across the front of the nose with the opening being at least as wide as it is high and covering a minimum of 130 square inches. Only screen wire will be permitted in the opening to allow for proper cooling. Tape will not be permitted.

B. Only metal grille air intake housings will be permitted.

C. Horizontal or flat air deflectors must not extend past the outer edge of the grille air intake housing.

D. The top and bottom panel of the grille air intake housing must mount flush with the side panels.

Hood / Roof

A. All cars must be equipped with a hood manufactured from a single piece of metal or fiberglass and be acceptable to race officials.

B. The hood must be manufactured so that it will completely cover the engine compartment from the left side to the right side, turn down a minimum of four (4) inches on each side, and cover (if used) the engine side panels. No part of the hood at the side panels except for the "A" post, shock absorber, and master cylinder covers may be higher than the lowest part of the hood. Only openings for the carburetor air filter housing, air filter, valve cover breathers and the distributor will be permitted. Holes for cooling the carburetor or engine will not be permitted. No portion of the hood may be higher than the bottom of the carburetor air filter housing and air filter. Hoods must be fastened with positive pin fasteners evenly spaced across the front and rear.

C. The roof panel must be from an approved manufacturer and be made of magnetic steel. All roof panels and their installation must be acceptable to race officials. Unless otherwise authorized, the following are the only roof panels approved for competition:

MANUFACTURER	PART NUMBER
General Motors	22699260
Ford	F8RZ6350202AA

D. Roof support posts must remain stock appearing and maintain the original manufacturer’s configuration. All “A” posts must maintain a maximum width of 3-3/4 inches from the top mounting point to the bottom mounting point. The panel at the bottom of the "A" post must maintain a maximum length of 18 inches (including any portion of the panel that is recessed into the hood). The rear "C" post must be mounted to the rear quarter panels and maintain a minimum width of 48 inches. All roof panels must be installed in a manner and a position that is acceptable to race officials. The front of the roof must be secured in three

(3) places–one (1) in the center and one (1) on each side. The roof must be installed using non-winged type dzus fasteners.

E. The rear roof quarter panel must be made from a single piece of metal without any creases, breaks or extra rolled designs. The quarter window panel must be neatly attached at the roof and the top of the quarter panels. The top of the rear quarter window panel must not be higher than a straight line when measured from the most rearward point of the roof down to the rear top of the quarter panel at the spoiler mounting point. The front edge of the "B" post must be located a maximum of 24 inches forward of the center of the rear axle housing. The installation of all rear quarter window panels and "B" posts must be acceptable to race officials.

F. Radio Antennas will not be permitted to be mounted on the roof panel.

Rear Deck Lids

The rear deck lid must be magnetic sheet steel.

Bumpers / Side Rails

Any bumper or side rail that has been damaged or flattened beyond repair during an Event will not be permitted. The bumper and side rails must be acceptable to race officials and meet the following minimum requirements:

A. Front bumpers must be made of two (2) pieces of 1-1/2 inches minimum to 1-3/4 inches maximum round magnetic steel tubing four (4) inches to six (6) inches apart, center to center, mounted to the front frame rails, spindle height, with a minimum of four (4) vertical connectors will be permitted. Two (2) vertical connectors must be welded in the center of the radiused corners with the remaining two (2) spaced between the corner uprights. The front bumper must be convex in shape with rounded corners, and mounted at the front frame rails. The maximum width of the front bumper must not exceed more than two (2) inches per side of the front frame rails. The maximum distance from the center of the front spindle to the front of the front bumper must not be less than 30 inches and not more than 30-1/2 inches.

B. Rear bumpers must be made from an I-beam extruded from aluminum. The width, when measured across the rear of the car, must be a minimum of 48 inches and a maximum of 50 inches and be mounted on centerline of the rear sub-frame rails plus or minus (+/-) one (1) inch. Each end of the rear bumper (from the mounting side) must be cut square and capped with a minimum 0.125 inch thick aluminum. All bumper caps must be welded and sharp edges must be filed smooth. The minimum I-beam size permitted will be 2-3/4 inches by four (4) inches by 3/16 inch thick. The bumper must be mounted at rear axle height. A maximum distance of 46 inches measured at the center of the rear axle to the rear edge of the bumper will be permitted. Bumper extensions must be a minimum of 1-1/2 inch by 1-1/2 inch square magnetic steel tubing with a minimum wall thickness of 0.125 inches. Bumper extensions may be welded or bolted directly to the rear sub-frame crossmember. If bumper extensions are bolted to the rear sub-frame crossmember, four (4) bolts per bumper extension must be used and be a high quality minimum 3/8 inch diameter solid magnetic steel. Bumper extensions must have a rear bumper mounting flange a minimum of 1/4 inch thick flat magnetic steel welded completely to the bumper extension. Four (4) rear bumper mounting bolts per side must be used and be a high quality minimum 3/8 inch diameter solid magnetic steel. All mounting bolts must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the mounting flange (see Diagram #10, in the rear pages of the Rule Book). Holes and/or modifications that, in the judgment of race officials, have been made with the intent of weight reduction, will not be permitted. Cars will not be permitted to compete without the front and rear bumper.

C. All cars must be equipped with rear corner rails and side rails. All rails must be constructed using a minimum 0.083 inch thick magnetic steel seamless tubing with an outside diameter of a minimum 1-1/4 inches and a maximum of 1-3/4 inches. Side rail bars must be constructed using the following guidelines.

(1) Right side bars must be constructed by using two (2) pieces of magnetic steel seamless tubing. The bottom bar must attach to the rear of the frame rail and extend upward and outward even with the outside of the tires, or up to a maximum of 1/2 inch outside of the tires. The bottom side bar must extend forward parallel with the frame rail and angle in to the front sub-frame rail with minimal tire clearance. The bottom bar must be mounted centerline with the rear axle and front spindle. The top side bar must be attached centerline with the main roll bar (#1) at the intersection with the horizontal shoulder bar (#7) extending outward and forward to the forward most point of the bottom bar. The top bar must turn down, be centered on, and attach to the bottom bar. The top bar must have an additional support bar attached to the front roll bar leg (#2B) centered on the dash panel bar (#8). An additional support bar must be added in the center. The bar must be attached to the frame rail and side bar. Two (2) additional vertical support bars must be added, one (1) at the rear and one (1) in the center of the side rail bar. The distance measured at the front, center to center, of the top and bottom bars at the turn down area must be a minimum of six (6) inches. The distance measured at the rear center to center must be a maximum nine (9) inches and minimum six (6) inches. Right side rail bars must be attached using high quality minimum 5/16 inch diameter solid magnetic steel bolts. Pins or clips will not be permitted.

(2) Left side rail bars must be constructed using the same guidelines described above except that the rear support bar may be a radius bar that attaches to the main roll bar (#1) at the intersection with the horizontal shoulder bar (#7) extending down and attached to the frame rail. Left side rail bars must be mounted by centering the two (2) parallel side rail bars with the center of the rear axle and the front spindle or left side bars may be raised a maximum of two (2) inches from center. Left side rail bars must be attached using high quality minimum 5/16 inch diameter solid magnetic steel bolts. Pins or clips will not be permitted.

(3) Rear corner rails must be constructed using two (2) pieces of magnetic steel seamless tubing a minimum of 1-1/4 inches and maximum 1-3/4 inches in diameter. Both pieces of tubing must be identically formed and welded to a steel bumper bracket at the rear. The left and right rear corner rail mounting brackets must be a minimum of two (2) inches by two (2) inches, minimum 1/8 inch thick magnetic extruded steel angle and must attach to the rear surface of the rear bumper with two (2) high quality minimum 3/8 inch diameter solid magnetic steel bolts per side. All mounting bolts must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the rear corner rail mounting flange and must be a minimum of one (1) inch from the end of the rear bumper. When the rear corner rail mounting bolts are fully tightened, mounting bolts must be completely flush with the mating surface, angled or beveled washers will be permitted. Grinding or machining of the rear bumper at the rear corner rail mounting points will not be permitted (see Diagram #10, in the rear pages of the Rule Book). The tubing must angle out and upward even with the outside of the tires, or up to a maximum of 1/2 inch outside of the tires and maintain a six (6) inch dimension measured center to center. The corner bumpers must then turn in with a minimal tire clearance to the rear quarter panels. Additional support bars must be installed behind the body panels to the rear frame rails and/or roll cage. The front mounting flanges of the rear corner rails must be attached using high quality minimum 5/16 inch diameter solid magnetic steel bolts. Pins or clips will not be permitted.

(4) Cars will not be permitted to compete without side rails and rear corner rails.

Identification / Marking

A. Numbers / Graphics

(1) All car number configuration and design is subject to approval by the Series Director. Only single or double-digit numbers will be permitted.

The size, color, and style of numbers must be adequate to permit prompt identification by race officials at all times. Numbers must be solid color, at least 18 inches high, measured vertically, excluding borders and silhouettes, must be neatly attached to or painted on both sides of the car on the center of the door. Door numbers must be a minimum of four (4) inches in width, and slant no more than 30 degrees from vertical. The tops and bottoms of all numbers must be even (not staggered). Two (2) digit numbers must not overlap and must have a minimum of 3/4 inch separation. A solid number 18 inches high, excluding borders and silhouettes, must be neatly attached to or painted on the roof, reading from the passenger side. Solid numbers, as large as possible, must be attached to or painted on the right outer nose and taillight covers. The use of number decals is acceptable if race officials determine that the number is legible. Mirror foil numbers, and decals will not be permitted. Paint schemes using a mirrored or holographic appearance will not be permitted.

(3) Race officials may require a Competitor to use a different number in order to avoid duplication or confusion at an Event.

B. Decals / Advertising

(1) Race officials may, in its sole discretion, refuse to permit, or it may restrict or assign the size or placement of decals, identification, and advertising of any kind on a car for any reason. All tour members agree to accept decisions in this regard. No offensive or otherwise inappropriate lettering is permitted.

(2) Race officials may refuse to permit a Competitor to participate in an event even if they determine that any advertising, sponsorship or similar agreement to which the Competitor (or a car owner, driver or crew member associated with the Competitor) is or will be a party, is detrimental to the sport, Series Sponsor or to the Promoter for any reason, including without limitation, the public image of the sport.

(3) Decals, advertising slogans, paint schemes and other graphic designs and text on the car that have not been previously approved by race officials must not be used unless and until they have been submitted to race officials previously.

(8) **The Series sponsors decals must be displayed at each event and will be a requirement as a part of each race team's eligibility. Competing and/or non-conforming decals may be required to be removed per race officials discretion.**

(9) A yellow stripe must be displayed on the vertical portion of the rear bumper of any car driven by a rookie driver as determined by the race officials.

GENERAL ENGINE REQUIREMENTS

General Engine Eligibility

A. The eligible engines must be production engines as determined, selected, and approved by tour

officials. All major components (engine blocks, heads, etc.) must be produced by the manufacturer for sale in a regular product offering.

B. As an option, Teams may compete using the Dart Steel Headed motor program that has been established.

General Engine Characteristics

The following characteristics of the production engine must be maintained in any engine used in competition in a manner acceptable to race officials. All parts listed below must originate from approved production castings and forgings. All parts, except spark plugs, should utilize fractional English measurement system fasteners and dimensions (non-metric).

A. ENGINE BLOCK:
- Material
- Number of Cylinders
- Angle of Cylinders
- Cylinder Bore Centerline Spacing
- Number of Main Bearings and Type
- Integral or Separate Cylinder Sleeves
- Location of Camshaft
- Overall Configuration

B. CYLINDER HEAD:
- Material
- Number of Valves per Cylinder
- Type of Combustion Chamber
- Location of Spark Plug
- Orientation of Spark Plug
- Arrangement of Valves
- Valve Location in Relation to the Cylinder Bore
- Angle of Valves
- Type of Valve Actuation
- Number of Intake Ports
- Number of Exhaust Ports
- Center Distances of Intake Ports Referenced to the Cylinder Bore
- Center Distances of Exhaust Ports Referenced to the Cylinder Bore
- Angle of Port Face Relative to Mating Face of Head to Block
- Firing Order

DETAILED ENGINE REQUIREMENTS

For purposes of construction, some elements of other sections are listed below. Changes from the approved standard production automobiles or component parts will not be permitted except as specified in the following for engine preparation. In addition to the General Engine Requirements specified the engines must also conform to the following Detailed Engine Requirements.

Engine Location

The engine location must be approved by race officials. The engine must be mounted between the frame rails in front of the driver. The centerline of the crankshaft when measured to the center of the lower ball joint, left and right, must be within two (2) inches in distance. The engine must not be tilted.

Engine Ground Clearance

The engine ground clearance will be measured (with the driver in the car) at the oil pan. A minimum height of two (2) inches from the bottom of the oil pan to the ground must be maintained at all times during the inspection process.

Engine Mounts

All engine mounts must be acceptable to race officials and meet the following minimum requirements:

A. Engine mounts must be reinforced steel or aluminum.

B. All engine mounts must be securely bolted.

Engine Displacement / Compression Ratio

A. Engine Displacement

(1) Only "small block" V8 engines with a minimum of 350.000 cubic inch displacement will be permitted.

(2) To clarify the identification of a "small block" engine, listed below are the basic engines designated

and approved as "small block" engines. Any engine not listed will be designated as a large block engine and will not be permitted, regardless of the engine size.

DODGE	GENERAL MOTORS	FORD
360 CID	350 CID	351C CID

(3) The engine displacement may be increased or decreased by boring or stroking. The formula for determining cubic inch displacement is as follows: Bore x Bore x Stroke x .7854 equals cubic inch displacement of each cylinder. The cubic inch displacement of each cylinder added together will determine the total cubic inch displacement of the engine. Unless otherwise permitted by race officials, a maximum cooling down time of two (2) hours from the official completion time of the Race will be permitted prior to measuring the total cubic inch displacement.

B. Compression Ratio:

(1) For all Events, the maximum compression ratio permitted on any cylinder will be 12.0 to 1 on all engines. (2) The procedure for calculating the compression ratio is as follows: Bore x Bore x Stroke x .7854 x 16.387 equals the Cylinder Volume of a cylinder at Bottom Dead Center (BAD) in cubic centimeters. The Cylinder Head Pour Volume minus (-) the known volume of the cylinder head plate plus (+) Head Gasket Volume plus (+) 1.00 cc for sealing the piston ring plus (+) the Cylinder Block Volume minus (-) the known volume of the block plate equals (=) Chamber Volume.

Compression Ratio = Cylinder Volume plus (+) Chamber Volume Chamber Volume

Engine Blocks

All engine blocks must be acceptable to race officials and meet the following requirements. Race officials may use an engine block provided by the respective manufacturer as a guide in determining whether a Competitor's engine block conforms to the specifications of the Rule Book.

Eligibility

A. All engine blocks must be a product of the manufacturer for the approved engine being used in competition. Approved manufacturers' identification and part numbers and/or casting numbers in the form of cast-in numbers must remain unaltered on the engine block being used in competition.

B. Only the Dodge 360 engine blocks, the Ford 351 Cleveland-type engine blocks and General Motors 350 engine blocks will be permitted. Aftermarket engine blocks will not be permitted.

C. The engine block must retain all standard external dimensions with the exception of the surfacing of the engine block deck. Angle cutting of the engine block deck will not be permitted.

D. All engine blocks must use individual magnetic steel crankshaft main bearing caps.

E. Aluminum engine blocks will not be permitted.

F. The General Motors cast iron engine blocks, part numbers 22551657, 22551659, 22551788 and 22551790, will not be permitted.

Internal Changes

A. Boring and honing of the cylinders will be permitted. Cylinder bores must remain round.

B. Internal polishing of the engine block will be permitted.

C. Relocation of the camshaft will not be permitted.

Pistons / Rods

A. Only round aluminum pistons will be permitted.

B. Only solid magnetic steel connecting rods will be permitted.

C. Only round piston pin holes with a fixed location in the piston and the connecting rods will be permitted.

D. Titanium and stainless steel connecting rods will not be permitted.

E. Only two-piece insert style connecting rod bearings will be permitted. Roller bearings will not be permitted.

Oil Pans / Oil Coolers

The oil pans and oil coolers must be acceptable to race officials and meet the following minimum requirements:

A. Oil pans must be made of magnetic steel. Spacers, other than sealing gaskets, will not be permitted between the oil pan side rails and the engine block surface.

B. Segmented oil pans and/or crankcases will not be permitted. The oil pan and crankcase area must remain open. Additions of materials to the engine block, engine block components, and/or the oil pan to separate the crankcase area from front to rear will not be permitted.

C. A maximum of four (4) oil pump scavenging pick-ups will be permitted into the oil pan. The scavenging pick-ups must draw oil from the inside bottom of the oil pan.

D. Sealed windage trays will not be permitted.

E. A single baffle (windage screen) may be used inside the oil pan providing it is constructed of wire mesh or louvered metal. The baffle (windage screen) must be installed in a straight line from the front to the rear of the oil pan. The baffle (windage screen) must attach to the upper sidewall and to the bottom of the oil pan on the same side. Clearance between the baffle (windage screen) and the engine main bearing caps must not be less than 1-1/2 inches when viewed horizontally. Directional baffles in the bottom of the oil pan must not be higher than one (1) inch.

F. Engine oil coolers must be either an oil to air or an oil to water heat exchanger mounted adjacent to the engine. The oil cooler must be mounted inside the body panels. The oil cooler may be mounted in front of the engine firewall or to the right of the driver beneath the angled interior sheet metal. The oil cooler air intakes mounted in the front body panels must not be larger than five

(5) inches in width and 10 inches in length. A maximum of two (2) cooling ducts with a maximum three (3) inch diameter flexible hose in the front body panels will be permitted. Any outward facing lips on the cooling ducts must only be bent once and the lip must not exceed one (1) inch. The oil cooler air intake mounted above the interior sheet metal must not be larger than five (5) inches in width and 10 inches in length. The outside edges of the oil cooler must be completely sealed with sheet metal. All oil coolers and their installation must be acceptable to race Officials.

Cylinder Head

All modifications must be submitted to race officials before any proposed modification will be eligible for approval. Approved manufacturers' identification in the form of cast-in part numbers must remain unaltered on the cylinder heads being used in competition.

A. OEM Cylinder Heads:

The following cylinder heads are the only OEM cylinder heads that have been approved for use in competition:

MANUFACTURER	PART NUMBER	CASTING NUMBER
Dodge W8	P4876281	P4532933
	P4876697 (CNC)	P4532933
	P4876281	P4510019
Ford (dated 9/9/91 or later)	E3ZM6049C3	E3ZM6049C3
	E3ZM6049C3L	E3ZM6049C3
General Motors 18 Degree	10134364	10134363
	24502580	10134363

B. Previously approved 22 and 23 degree valve angle aluminum V-8 cylinder heads are eligible for General Motors engines. Previously approved Ford and Dodge aluminum V-8 cylinder heads are eligible for Ford and Dodge engines.

Previously approved cylinder heads with manufacturers' identification and part numbers are as listed:

MANUFACTURER PART NUMBER
Air Flow Research
All Pro
Brodix
Chevrolet
Dodge W 7 P5249958 (Unported)

P5249850 (CNC ported) Ford

Pontiac CASTING NUMBER AFR215 AP227 3941075 10051101 P4532442B P453244B M 6049 C302
With 4 Degree Valve Cant 10033867

Race officials may use a cylinder head provided by the respective manufacturer as a guide in determining whether a Competitor's cylinder head conforms to the specifications of the Rule Book.

Eligibility

To be eligible, the approved cylinder heads must be acceptable to race officials and meet the following requirements:

A. The following requirements are for the approved OEM cylinder heads described in sub-section 20D-5.6

A above:

(1) The valve angle and valve location must remain as approved.. Spacing between the valves measured center to center is:

MANUFACTURER VALVE ANGLE SPACING Dodge W8 15 Degrees 1.936 inches Ford Intake 7-1/2 Degrees 1.900 inches
Exhaust 8 Degrees General Motors 18 Degrees 1.935 inches

Valves must remain in the approved location in relation to the cylinder bore centerline.

(2) The top of the intake ports must remain in the approved location measured on the inside top of the port.

(3) The vertical centerline of the intake port entrance must be straight and perpendicular to the cylinder head gasket surface. The vertical centerline of the intake port must remain in the approved location. The horizontal centerline of the intake port must be straight and parallel to the cylinder head gasket surface.

(4) The vertical and horizontal centerlines of the exhaust port exit must remain in the approved location. The vertical and horizontal centerlines must be straight lines. The horizontal centerline must be parallel to, and the vertical centerline must be perpendicular to, the cylinder head gasket surface. If material is removed from the top or side of the exhaust port, the same amount must be removed from the bottom or opposite side of the port.

(5) The rocker arm fastener bolt holes must remain in the approved location.

(6) Only stainless steel or titanium valves are permitted. Exotic materials will not be permitted

(7) Only magnetic steel valve springs are permitted.

(8) Only two (2) valves per cylinder will be permitted.

(9) There are no restrictions on the valve size.

(10) Internal polishing and porting will be permitted.

(11) Spark plug holes must remain in the approved location.

(12) Angle cutting of the cylinder head to the engine block mating surface will not be permitted.

(13) Milling of the heads will be permitted, but not to exceed 0.175 inch.

(14) "O" rings will not be permitted for sealing the cylinder head to the engine block.

B. The following are allowed when the previously approved cylinder heads are used, the cylinder heads must meet the following requirements:

(1) Only steel or titanium valves will be permitted.

(2) Only magnetic steel valve springs will be permitted.

(3) Only two (2) valves per cylinder will be permitted.

(4) There are no restrictions on the valve size.

(5) Internal polishing and porting will be permitted.

(6) Spark plug holes must remain in the approved location.

(7) Valve angle must remain as manufactured within two (2) degrees from the approved valve angle on the previously approved cylinder heads in the race officials possession.

(8) Valves must remain in the approved location in relation to the cylinder bore centerline.

(9) "O" rings will not be permitted for sealing the cylinder head to the engine block.

External Changes

A. External modifications for the approved OEM cylinder heads will be permitted providing the external dimensions of the cylinder head have not been changed in respect to original height (0.000 inch for Dodge, plus 0.100 inch for Ford and 0.080 inch for General Motors or minus 0.175 inch for all engines), original length, and original width as compared to the cylinder heads described in sub-section 20D-5.6B.

B. External modifications for the OEM Ford cylinder head, part number E3ZM6049C3L and the OEM 18 degree General Motors cylinder head, part number 24502580 will be limited to milling of the head not to exceed 0.175 inch.

C. External modifications for the previously approved 22 and 23 degree General Motors cylinder heads will be permitted providing the external dimensions of the cylinder head have not been changed in respect to original height (plus or minus 0.100 inch) original length and original width. A maximum of 3.000 inches height must be maintained on intake flange side of head from the head to block surface to the valve cover rail. On cylinder heads manufactured with a raised valve cover rail for oil retention purposes a maximum of 3.200 inches will be permitted.

D. Painting or coating of the cylinder heads will not be permitted.

Internal Changes

Internal changes for the OEM cylinder heads are as follows:

A. Air flow improvements by internally polishing and porting will be permitted.

B. Improvements or modifications to the cylinder head may be done by removing material from the

production casting.

C. The addition of foreign material (i.e., epoxy, plastics, etc.) to the production casting will not be permitted.

D. Internal porting and/or polishing will be permitted. The original internal shape and configuration of the port must not be notched, grooved, channeled, or ridged in any way. After porting and/or polishing the intake port walls, port roof and port floor from the intake manifold mating surface to the centerline of the intake valve, air can flow over one (1) surface each, except where the manufacturer has cast a valve guide support into the roof of the intake port. The maximum port roof height, port centerline, and spark plug locations must conform to the approved template available to tour officials.

Crankshaft / Harmonic Balancer

A. Only one-piece magnetic steel crankshafts will be permitted.

B. Aftermarket crankshafts must have the same design as an OEM type crankshaft for the approved engine and must be acceptable to race officials.

C. Only two-piece insert style crankshaft main bearings will be permitted. Roller bearings will not be permitted.

D. Crankshafts may be lightened and balanced. Materials used to balance crankshafts must be permanently attached to the crankshaft.

E. Harmonic balancers must be used and must be used as manufactured. Only SFI 18.1-approved magnetic steel harmonic balancers and balancer hubs will be permitted. Harmonic balancers must be acceptable to race officials.

Camshaft / Valve Lifters / Rocker Arms

Camshaft

A. Any magnetic steel roller or flat tappet camshaft will be permitted. The maximum camshaft journal size must not be more than 2.362 inches (60mm).

B. Only standard production design timing chains, gear drives, and belt drives will be permitted for operating the camshaft on all engines. All camshaft timing drive systems must be acceptable to race officials.

C. Camshafts must be driven in the same direction of rotation as the approved standard production engine crankshaft. The camshaft must maintain the same firing order as the approved production engine.

The approved firing orders using approved cylinder identification are as follows:

Dodge	1-8-4-3-6-5-7-2
Ford	1-3-7-2-6-5-4-8
General Motors	1-8-4-3-6-5-7-2

D. The manufacturer's cylinder identification sequence is as follows:

Dodge and General Motors (Front)		Ford (Front)	
1	2	5	1
3	4	6	2
5	6	7	3
7	8	8	4

Valve Lifters

A. Valve actuation must be limited to one (1) lifter, one (1) push rod and one (1) rocker arm per valve. All valve actuation systems must be acceptable to race officials.

B. Solid magnetic steel flat tappet straight barrel valve lifters will be permitted. Roller tappets, mushroom valve lifters and any type of mechanical assistance exerting a force to assist in closing the valve, commonly known as rev-kits will be permitted.

C. Only magnetic steel one-piece, push rod assemblies without any moving parts, will be permitted.

Rocker Arms / Valve Covers

A. Only steel or aluminum roller bearings rocker arms, one (1) per valve, that are acceptable to race officials may be used. Split shaft rocker arm assemblies will be permitted.

B. The rocker arm fastener bolt holes may not be relocated more than 0.100 inch in any direction measured from the centerline of the approved rocker arm fastener hole.

C. Valve covers must be made of steel or aluminum. Magnesium and other exotic materials will not be permitted.

Intake Manifold

A. The intake manifold must be approved. The approved manufacturers' identification in the form of cast-in part numbers must remain unaltered on the intake manifold.

B. The intake manifolds must conform to the approved templates, gauges, scales and other measuring devices.

C. Race officials may use an intake manifold provided by the respective manufacturer as a guide in determining whether a Competitor's intake manifold conforms to the specifications of the Rule Book.

D. Only open plenum intake manifolds will be permitted. The plenum opening must not be smaller than a minimum size of 3-5/8 inches in width by 3-9/16 inches in length. The maximum plenum opening size must not be larger than 3-3/4 inches in width by 3-11/16 inches in length. The plenum opening must have radiused corners that maintain the shape and configuration of an open four (4) barrel carburetor gasket.

E. The inside floor of the plenum and the carburetor mounting flange must remain in the approved location.

F. The plenum will be defined as the area inside the opening of the intake manifold from the plenum opening at the carburetor mounting flange down to the floor of the plenum. Included in the plenum area will be where the runner walls attach at the top and bottom in the plenum. The intake manifold runners will be defined as starting at the point of attachment both at the top and the bottom in the plenum area of the intake manifold.

G. The intake runners must maintain the same length as compared to the approved intake manifold with the same part number.

H. The centerline of the intake ports, as seen from above, must remain in the approved location.

I. Each engine will be permitted a maximum of two (2) approved intake manifolds. New approvals must be preceded by deleting a currently approved manifold. The following intake manifolds are approved for use in competition:

MANUFACTURER PART NUMBER DODGE Dodge P4532598 Dodge/Arrington – P4532590

FORD Ford Edelbrock 2991-Victor 351Y Ford M9424-W351

GENERAL MOTORS 18 DEGREE Edelbrock 2995 GM 24502653 Spider

Modifications Permitted:

(1) Polishing in the plenum area will be permitted only to "clean up" imperfections in the castings in a manner acceptable to race officials.

(2) Polishing of ports in the intake manifold will be permitted.

Modifications Not Permitted: 1) Added air directional devices will not be permitted inside the intake manifold.

(2) The length of the intake manifold runners must not be changed and remain as manufactured.

(3) Epoxy or fillers will not be permitted on the plenum floor or on the walls of the plenum.

(4) Air holes will not be permitted to be opened in the intake manifold.

(5) External modifications to the intake manifold will not be permitted unless approved by the Series Director.

(6) Painting and/or coating of the intake manifold will not be permitted.

(7) Drilling or tapping of the intake manifold plenum or intake runners will not be permitted unless approved by the Series Director.

J. Previously approved intake manifolds may be used. If you have questions on this you must inquire with race officials. These intake manifolds must meet the following requirements:

(1) Only open plenum intake manifolds will be permitted. The plenum opening must not be smaller than a minimum size of 3-5/8 inches in width by 3-9/16 inches in length. The plenum opening must have radiused corners that maintain the shape and configuration of an open four (4) barrel carburetor gasket.

(2) The plenum will be defined as the area inside the opening of the intake manifold from the plenum opening at the carburetor mounting flange down to the floor of the plenum. Included in the plenum area will be where the runner walls attach at the top and bottom in the plenum. The intake manifold runners will be defined as starting at the point of attachment both at the top and the bottom in the plenum area of the intake manifold.

(3) In the center of the plenum, from the base of the carburetor to the floor of the intake manifold between the intake runners, there must be an open area of 1-3/4 inches minimum diameter. This will be checked with a gauge.

(4) The inside floor of the plenum must remain in the approved location and be the same shape as compared to the approved manifold with the same part number.
(5) The floor of the intake manifold between the intake runners must have a single plane, smooth, unaltered surface.
(6) The carburetor mounting flange must remain in the approved location and maintain the same configuration as compared to the approved intake manifold with the same part number.
(7) The centerline of the intake ports, as seen from above, must remain in the approved location.

The following intake manifolds have also been approved for competition:

MANUFACTURER	PART NUMBER		DESCRIPTION
Brodix	HV-1005	HV-1-H	0.625 inch Flange
	HV-1013	HV-SP-1	0.590 inch Flange
Chevrolet	GM 10051103		
Dodge	Dodge W-7 P4532598		
	Dodge/Arrington P4532590		

Edelbrock 2926 General Motors, High Port 2990 Ford Victor 351-AH-11 2981 Ford Victor Jr 351-W Ford M-9424 - A351 M-9424 - E351 Holley 30041 300-105 Pontiac GM 10093374

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Modifications Permitted:
(1) Polishing in the plenum area will be permitted.
(2) Polishing of ports in the intake manifold will be permitted.
Modifications Not Permitted:
(1) Added air directional devices will not be permitted inside the intake manifold.
(2) Air holes will not be permitted to be opened in the intake manifold.
(3) External modifications to the intake manifold will not be permitted.
(4) Painting and/or coating of the intake manifold will not be permitted.
(5) Drilling or tapping of the intake manifold plenum or intake runners will not be permitted unless approved by the Series Director.

K. Spacers between the engine block and the intake manifold will not be permitted.
L. Spacers between the intake manifold and the cylinder head will not be permitted.
M. The intake manifold must have a minimum of 1/4 inch of surface on all sides to seal the intake manifold to the cylinder head.
N. The carburetor mounting studs must be solid and remain in the approved location and maintain a stud size of 5/16 inch diameter.
O. Any spacer added between the carburetor (per sub-section 20D-5.10.2) and the intake manifold must be mounted using the approved 5/16 inch diameter, solid carburetor mounting studs and must not be welded to the intake manifold.
P. The intake manifold ports must be completely sealed to the cylinder head ports at all times. Intake manifold sealing must be done by using one (1) approved paper-type intake manifold gasket per side. Metal shim type or metal impregnated intake manifold gaskets will not be permitted. The maximum thickness of the intake manifold gaskets must not exceed 0.117 inch per side. Intake manifold gaskets must be secured to either sealing surface (intake manifold or cylinder head) with an approved adhesive.
At the race officials discretion the intake manifold and cylinder heads may be leak tested to ensure proper sealing at any time during the event.
Q. The intake manifold and the valley tray material must be aluminum. Magnesium or other exotic materials will not be permitted.

Carburetor
Race officials may use a carburetor provided by the respective manufacturer as a guide in determining whether a Competitor's carburetor conforms to the specifications of the Rule Book.

Eligibility
The following Series carburetors are eligible for use:
A. The Holley 4150HP Series, list number 80507, four (4) barrel carburetors with a maximum venturi size

of 1-1/16 inches and a maximum throttle bore size of 1-7/16 inches are approved for use on all engines. The venturis must maintain a circular (round) cross section. Only Holley replacement or service parts can be used in any carburetor rework. All carburetor modifications must be acceptable to race officials. Carburetors and/or carburetor components machined from billet materials will not be permitted.

B. Holley 4150HP Series, list number 80507 rework guidelines are as follows:

(1) Carburetor Main Body The only carburetor main body that will be permitted for the Holley 4150HP Series will be the Holley main body with casting number 6R7879B. The Holley casting numbers must remain legible on the top of the main body. Main bodies must remain as manufactured. Machining, reshaping, grinding, polishing, or drilling holes will not be permitted. The addition of material(s) such as but not limited to, epoxies, sleeves, inserts, or tubes will not be permitted to the carburetor main body.

(2) Carburetor Boosters One (1), one-piece singular discharge booster per venturi must be used. The type of booster must not be changed. The Holley booster part number 45R-107-1, with the casting number 45R-107 and part number 45R-312R, with the casting number 45R-312 are the only boosters that will be permitted. The Holley casting numbers must remain legible on the top of all booster stems. Size and shape must not be altered. Height and location of the boosters must remain as manufactured. All boosters must maintain a minimum outside diameter of 0.616 inch. The maximum inside diameter of the booster stem passage must not to exceed 0.144 inch. The addition of material will not be permitted to the boosters. A bonding agent may be used to assist in adhering the carburetor booster to the carburetor main body, but it must not extend past the carburetor main body booster mounting hole into the carburetor venturis. Each carburetor booster must be secured by a steel wire not less than 0.025 inch in diameter. The wire must be installed in such a manner that in the case of a carburetor booster failure, the carburetor booster should remain suspended in the carburetor without any interference to the operation of the throttle shaft and the throttle plates (butterflies). A minimal size hole, acceptable to race officials, must be drilled through the top of the booster barrel, inboard of the booster attaching stem. The 0.025 inch steel wire must loop through the hole in the booster barrel and then be tied to the respective float bowl vent tube. As an alternative to drilling a hole in the booster, the 0.025 inch steel wire must pass through the booster barrel from top to bottom and then be tied to the respective float bowl vent tube.

(3) Carburetor Venturis The venturi is defined as a constricted throat in the main body air passage. The location of the venturi must remain as produced by the manufacturer. The venturis must not be raised or lowered in the body of the carburetor. The venturis must maintain a circular (round) cross section. The maximum diameter of the venturis must not exceed 1.064 inches. Altering or reshaping of the venturi in any manner will not be permitted.

(4) Carburetor Throttle Body (base plate) The only carburetor throttle bodies permitted will be the Holley throttle bodies with casting numbers 12R-6236B or 12R11524B. The Holley casting number must remain legible on the left secondary "ear" of the carburetor throttle body with casting number 12R-6236B, and on the right secondary "ear" of the carburetor throttle body with casting number 12R-11524B. The carburetor throttle body must be used as provided by the manufacturer. The positioning of the throttle bores in the carburetor throttle body must be the same as provided by the manufacturer. The throttle bores must be completely round. The throttle bores must not be larger than 1.438 inches. The throttle bores must be straight without taper from top to bottom. The throttle bores must remain perpendicular to the top and bottom of the carburetor throttle body. The carburetor throttle body must not be altered in shape or size.

(5) Throttle Plates (butterflies) The throttle plates (butterflies) must be magnetic steel and must not be thinned or tapered. The type of screw used to retain the throttle plates (butterflies) to the throttle shafts must be pan head type either straight slotted, phillips head or allen type head. Idle holes may be drilled in the throttle plates (butterflies). The throttle plates (butterflies) must be mounted to the throttle shaft in the approved location.

(6) Throttle Shafts Holley magnetic steel throttle shafts must be used. Shafts must remain standard production size and must not be thinned or cut in any manner. Throttle shaft rotation must be in the same direction as produced by the manufacturer. The combined thickness of the throttle shaft and the throttle plate (butterflies) must not be less than 0.197 inch. Throttle shaft seals that prevent air leakage must be used on all throttle shafts where the shafts exit the carburetor throttle body. The primary and secondary throttle shafts must each have an independent travel stop to prevent the throttle plates (butterflies) from opening beyond vertical.

(7) Carburetor Metering Blocks Only Holley metering blocks will be permitted. Surfacing of the metering blocks for improved gasket seal will be permitted.

(8) Carburetor Floats Carburetor floats must be a Holley replacement or service part acceptable to race officials.

(9) Alterations that, in the judgment of race officials, were made to allow additional air to be picked up below the opening of the venturi, such as but not limited to, altered gaskets, throttle bodies, drilling or machining holes into the carburetor will not be permitted.

(10) External modifications and/or alterations to the carburetor will not be permitted.

Carburetor Spacer / Gaskets

A. A one-piece, solid, four (4) hole, aluminum carburetor spacer, one (1) inch in thickness, must be installed between the intake manifold and carburetor on all engines. The spacer openings must be perpendicular to the base of the carburetor with no taper or bevel. The outside configuration of the spacer must conform to the shape of the base of the carburetor.

B. Only two (2) non-metallic gaskets (one (1) per side) a maximum thickness 0.065 inch will be permitted on the spacer plate used with the carburetor. Gaskets can only be altered to match the carburetor base opening.

Carburetor Jets

Carburetor jets must be the same type as supplied by the carburetor manufacturer.

Carburetor Restrictor

A carburetor restrictor must be used only when required prior to race event.

Carburetor Fuel Filter

Fuel filter(s) on the pressure side of the fuel pump must only be used at the carburetor fuel bowl inlets. The location and size of the filter(s) must be acceptable to race officials.

Fuel Injection / Supercharger

Fuel injection, superchargers or turbochargers will not be permitted.

Carburetor Air Filter / Air Intake

The air filter housing, including the filter, must not be removed during practice or competition. Performance enhancing additives or chemicals will not be permitted in the air filter housing, air filter or the air intake area.

Carburetor Air Filter / Air Filter Housing

A. Only a round dry type, unaltered, paper or dry type gauze air filter element maintaining a maximum 14 inches diameter will be permitted. The air filter element must maintain a minimum of 1-1/2 inches, maximum five (5) inches in height. The air filter element must maintain a consistent height when measured anywhere around the circumference of the air filter element. All air filter elements must remain as manufactured. All air must be filtered through element.

B. Only a round metal air filter housing acceptable to race officials will be permitted. The top and bottom of the air filter housing must be solid. A maximum of a 1-1/2 inch lip will be permitted from the air filter element to the outside edge of the air filter housing on the bottom. The air filter housing must be centered on the carburetor and seated on the air filter housing gasket ring. The air filter housing carburetor mounting ring must have one (1) round hole. It is permissible to attach a shield to the front area of the air filter housing up to a maximum of one half of the air filter circumference. It must not be higher than the height of the air filter element. Tubes, funnels, spacers, or any other device that may control the flow of air will not be permitted inside of the air filter or between the air filter housing and the carburetor.

Air Intake

Air ducts or baffles will not be permitted on or leading to the air filter housing or air filter.

ENGINE / CAR ELECTRICAL SYSTEM

All engine/car electrical system components must be approved by race officials.

Ignition System

A. Either a crank trigger or distributor type ignition system may be used. If the crank trigger ignition system is being used, triggering devices or pick ups will not be permitted inside the distributor housing.

B. Computerized systems will not be permitted.

C. Adjustable timing controls will not be permitted.

D. Retard or ignition delay devices will not be permitted.

E. The ignition system wiring must not contain any open wires or terminals. Unused ignition amplifier box wires must be cut flush to the box.

F. Each car must have primary ignition system components and 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). The ignition systems must consist of an ignition amplifier box, coil, distributor pickup and optional rev limiter (internal/external).

G. Multiple primary/backup individual component switches will not be permitted. (See sub-section 20D-6.1F)

H. Ignition system components, including but not limited to, ignition amplifier boxes, coils and external rev

limiters must be mounted to a removable ignition system mounting plate.

I. A removable ignition system mounting plate, acceptable to race officials, must be attached to the right side floor panel and must be within four (4) inches of the right side door bars (#9B). The removable ignition system mounting plate must be made of solid (no holes) metal measuring a maximum size of 12 inches by 16 inches and installed using a minimum of four (4), minimum 1/4 inch diameter mounting bolts. The right side floor pan must be reinforced at the mounting bolt holes. The installation must be acceptable to race officials. Ignition system components must be located on the removable ignition system mounting plate with the ignition amplifier box wires and connectors directed toward the front of the car. The ignition system mounting plate, ignition system components, wiring and connectors must be covered with a flat clear polycarbonate cover. The flat clear polycarbonate cover must be the same size as the ignition system mounting plate. The flat clear polycarbonate cover installation and size must be acceptable to race officials. The ignition system components, including wiring and connectors must be visible from above and be wired such that the ignition system mounting plate can be easily removed for inspection purposes.

J. Race officials may, at their discretion, inspect, test and/or destructively test ignition system components including ignition amplifier boxes, tachometers, distributors, etc.

K. Race officials may use approved ignition system components provided by the respective manufacturer as a guide in determining whether a Competitor's ignition system components conform to the approved components.

Ignition System Wiring

A. All ignition system wiring, including wiring to the ignition amplifier box, distributor and/or any gauges must be acceptable to race officials.

B. Ignition system wires must be continuous from the start connector to the end connector. Splices, bare and punctured wires will not be permitted in the ignition system.

C. The distributor pickup signal must be carried by a shielded wire pair with one (1) shielded ground wire. The wire pair may be twisted within the shield. The shielded ground wire must be located at the end nearest the ignition amplifier box.

D. Only the distributor pickup wire pairs can be contained within a shielding wrap with one (1) wire pair per shielding wrap. Ignition system wiring must remain visible and accessible. Taping wires together, heat shrink wrap and/or banded wire looms will not be permitted in the ignition system wiring.

E. All connectors must allow for the application of a seal if deemed necessary.

F. Additional connectors may be permitted at the race officials discretion to facilitate removal for inspection purposes.

G. A dedicated single ground stud must be used. All ignition system components must be grounded at this stud. Accessory components must not be connected to this stud. A ground wire may be run from this stud to the battery ground or main ground stud.

H. The use of tracer wire color schemes is acceptable to specify backup components.

I. Accessory component wiring, including power and ground wires, must remain completely separate from the ignition system wiring and away from ignition system components. Ignition system components must draw power from the battery side of the starter solenoid. Accessory components and switches will not be permitted to draw power from the ignition system wiring at any point.

Ignition Amplifier Box

A. Ignition amplifier boxes and rev limiters that are analog only, which **do not** contain programmable, computerized or memory circuits, will be permitted.

B. Rev limiting devices acceptable to race officials may be required and must be attached and wired to the ignition amplifier box(s) in a visible manner. Terminals and pin connections designed for the rev limiter connection must have the ability to apply a seal if deemed necessary. Rev limiter chips must have the ability to apply a seal if deemed necessary

C. The ignition amplifier box(s) may have either an internal rev limiter or be connected to an external rev limiter.

D. Each ignition amplifier box is allowed six (6) ignition wires, two (2) power leads and either a rev limiter pin connection or approved rev limiter connection terminal. If originally equipped with a single white points trigger wire and the white points trigger wire is not used with an interrupt switch/system, the white points trigger wire must be cut and sealed so that it does not protrude from the ignition box.

E. The ignition amplifier must have a six (6) pin female connector attached to its output leads of the Packard Electric type (MSD part #8170) or the Deutsch Connector type (MSD part #8180) to facilitate testing of the ignition components during inspection. The wiring sequence must be the same as the General Motors or Ford ignition amplifier boxes. The wire color, gage, and pin assignment must follow the table below:

MSD	Pin Deutsch	Description	Color	Gage
A	5	Power	Red	16-18
B	2	Tachometer Signal	Green or Brown	16-18
C	6	Coil (-)	Black	16-18
D	1	Coil (+)	Orange	16-18
E	3	Pickup (-)	Green	16-18
F	4	Pickup (+)	Violet	16-18

F. The ground negative (-) lead wire must be a continuous single black minimum 12 gage wire and the positive (+) power lead must be a continuous single red minimum 12 gage wire.

G. Modifications to ignition amplifier boxes will not be permitted.

Distributor

A. The distributor must mount in the approved location and maintain the same firing order as the approved factory produced engine for the make and model engine as described in sub-section 20D-5.8.1C.

B. Only two (2) ignition pick ups of the magnetic, optical or Hall effect type will be permitted in the distributor.

C. The distributor must have a single connection to the coil selector, two (2) shielded distributor pickup wire pairs connecting the distributor pickup to the ignition amplifier box, eight (8) spark plug wire connections, and may have two

(2) power wires for distributor pickups that require a power source.

D. Distributors which use a remote interface control box will not be permitted.

Coils

A. The positive (+) coil wire must be a single continuous 16-18 gage orange wire and the negative (-) coil wire must be a single continuous 16-18 gage black wire. The coil wire pair may be twisted.

B. The coil wires may use a connector of the Packard Electric type (MSD part #8173) or approved equivalent. If used, Pin "A" must be the negative (-) pickup wire and Pin "B" must be the positive (+) wire.

C. A coil secondary spark wire selector will be permitted.

D. A firewall feed through connector may be used between the coil and distributor.

Tachometers

A. Tachometers should be mounted to the steering column or the dash panel and must be accessible and removable for inspection purposes.

B. Tachometers should have a maximum of three (3) wires connected to the ignition system allowing for a ground, power and a tachometer signal.

C. The tachometer must have a connector of the Packard Electric type (MSD part #8172), or approved equivalent, to facilitate testing during inspection. The tachometer connector must be located on or at the removable ignition system mounting plate. The wire color, gage, and pin assignment must follow the table below.

Pin	Description
A	Ground
B	Power
C	Tachometer Signal

Color	Black	Red	Green or Brown
Gage	16-18	16-18	16-18

D. The tachometer signal wire must be run from the tachometer as a single continuous green or brown 16-18 gage wire to connect the primary and backup ignition amplifier boxes to the tachometer through blocking diode(s).

E. The tachometer power wire must be connected to the battery side of the starter solenoid.

F. If an illuminated tachometer is used, the light power and ground wires must connect into the tachometer power and ground between the tachometer and the tachometer connector.

G. Tachometers with integral shift lights, or pit road speed lights will not be permitted.

H. External, remote shift lights and pit road speed lights will not be permitted.

Interrupt Switch

A. An auxiliary on/off button that will shut off the ignition system must be mounted on the steering wheel within reach of the driver's thumb when the hands are in the normal driving position. The auxiliary switch must shut off the engine immediately when depressed and the engine must not restart until the button is

depressed again.

B. An approved ignition interrupt system which contains a manifold vacuum switch and a brake line pressure switch (and may include a brake pedal position switch) may be used at the crew chief's option, in conjunction with or to replace the auxiliary on/off button on the steering wheel.

C. The button/interrupter should be mounted inline of the red 16-18 gage power wire between the main ignition switch and the primary/backup switch. When the button/interrupter is engaged the ignition amplifier box must automatically shut off. If the ignition amplifier box is originally equipped with a single, white points trigger wire, this wire may be used with an interrupt switch/system.

D. The button/interrupter must use a connector of the Packard Electric type (MSD part # 8173), or approved equivalent, to facilitate testing of the ignition system during inspection.

Main Ignition Switch

The main ignition switch must be an on/off toggle type and be located next to the starter switch in the main switch panel. The switch must connect power to the input of the interrupter device.

Primary / Backup Switch

A single switch may be used to select the primary or backup ignition system and it must be mounted on the dash panel.

Spark Plugs

Any make or brand of spark plugs may be used. All spark plugs must thread into the cylinder heads using only M14 x 1.25 threads.

Alternator

The alternator system, if used, must be an internal regulator-type with only one

(1) wire. External voltage regulators will not be permitted. The alternator must be mounted on the front of the engine with the center higher than the center of the water pump. Only standard production V-type or flat type V-ribbed alternator drive belts will be permitted.

Starter

The self-starter must be in working order and in the approved location. Gear reduction starters acceptable to race officials will be permitted.

Battery

Only a single 12-18 volt OEM automotive type or an automotive type gel-battery will be permitted. The battery must be located between the frame rails. The battery must be located under the hood or floor of the car. If located under the floor, the battery must be completely encased. If located under the hood, the battery must have a suitable cover. The battery must not be forward of the radiator or rear of the rear end housing of the car. The battery location must be acceptable to race officials.

Electrical Switch Location

A. A labeled on/off rotary-type master switch, with "on" being in the clockwise direction, must be located on the cowl or panel behind the windshield opening on the right side of the driver. The switch must be wired to the battery cable in a manner that will cut off all electrical power in the car. The switch must be easily accessible and in plain view.

B. All ignition, starter and accessory electrical switches must be located on the front of the dash panel or to the right of the driver in a manner acceptable to race officials.

C. Accessory wiring must remain separated from the ignition system wiring.

Accessories

A. Except as provided below, cars and drivers will not be permitted to carry onboard computers, automated electronic recording devices, electronically actuated devices, micro-processors, recording devices, electronic digital memory chips, traction control devices, digital readout gauges and the like, even if inoperable or incomplete. Competitors will not be permitted to have or have had on his/her person or in his/her possession or in his/her car a device(s) at an Event designed specifically to enhance the traction capabilities of the car, even if inoperable or incomplete.

B. Radios must be of two-way voice communication type only, independent of the car's electrical system. Only one (1) radio and one (1) radio push to talk button will be permitted in each car. Teams must be able to monitor race officials on a frequency of 454.000.

D. Race officials may require cars to carry approved on-board impact accelerometers mounted in a standard location and manner approved by race officials. It is recommended that the mounting bracket be installed in the car. The mounting bracket must be welded to the floor near the left side frame rail at the forward edge of the front of the seat and must be parallel with the bottom of the seat with the arrow on the bracket pointing forward.

G. Remote lap timing or speed sensing devices will not be permitted.

H. All electrical wiring harnesses, switches, and connectors must be acceptable to race officials. All wiring must be point-to-point and each wiring connection must be easily traceable and removable from the car for inspection purposes.

I. Competitors will be permitted to use filming and recording devices for internal, competition-related use only and not for promotion, resale or other commercial exploitation without prior written approval.

J. Electronic oil, water and fuel pressure gauges and oil and water temperature gauges must be approved by race officials and they must be completely independent of the ignition system.

K. All electrical outlets used to connect the remote generator to the car must be in a location acceptable to race officials.

ENGINE COOLING SYSTEM

All engine cooling system components must be approved. A. Icing, freon type chemicals or refrigerants must not be used in or near the engine compartment.

B. Portable cooling machines or devices will not be permitted.

Water Pump

A. Only aluminum mechanical water pumps, turning in the same direction of crankshaft rotation and in the approved location, will be permitted.

B. Water pump impellers may be altered.

C. Coolant flow must be in the same direction as the approved production engine.

Fan

A. Engine-driven fans if used, must be operational and belt driven from the crankshaft. Free spin or clutch fans will not be permitted.

(1) The pitch of the fan blades may be changed.
(2) The minimum diameter of the fan must not be less than 14 inches.
(3) Engine-driven fans must have a minimum of four (4) blades.
(4) Flat fan blades will not be permitted.

B. Electric cooling fans will be permitted in place of a standard steel fan on the back side of the radiator only.

C. The installation, type, and location of the fan(s) must be acceptable to race officials.

Fan Shroud / Ducts

When ducting air from the nose housing to the radiator, air directional shields or dividers will be permitted within the duct.

Radiator

The engine cooling radiator must be acceptable to race officials and meet the following minimum requirements:

A. The radiator must remain stock appearing. Radiator cores and tanks must be constructed from aluminum material. The radiator core must be a standard automotive fin and tube design acceptable to race officials. Bar and plate radiator cores will not be permitted. The radiator core must not be wider than the inside width of the front sub-frame rails. Radiator tanks must be installed on the sides of the radiator core. The radiator must remain in the standard position in front of the engine.

B. Radiator dust or shaker screens will be permitted.

C. Radiator installation must be acceptable to race officials.

D. The radiator overflow tube may be relocated to the rear of the car.

E. All radiator cooling tubes must be operational. All cooling fins and tubes must be evenly spaced top to bottom and side to side and must remain at a 90 degree angle to the side tanks. The spacing and width must be acceptable to race officials.

ENGINE LUBRICATION

All engine lubrication system components must be approved.

Oil

Any oil is permissible. Combustion enhancing additives will not be permitted.

Oil Pressure

Oil pressure may be regulated at the discretion of each team.

Oil Filters

Oil filters and breather caps acceptable to race officials will be permitted. Oil filter breather caps must not be mounted in the rear firewall.

Oiling System

A. A dry sump oiling system must be used consisting of a single engine-mounted, engine-driven, oil pump with a maximum of five (5) stages. The body of the oil pump must not exceed 9-1/2 inches in length and 3-1/2 inches in cross-section. The maximum overall length of the oil pump including seals, bearings, adjusters, bolt on end plates and covers, not including the front end of the shaft, will be 10 inches maximum. The oil pump must be acceptable to race officials.

B. All oil must be pumped by the engine-driven engine oil pump. Additional oil pumps or re-circulating pumps will not be permitted.

C. The lubrication oil reservoir tank must be located to the rear of the leading edge of the engine firewall or mounted behind the driver's compartment to the inside edge of the left frame rail or beneath the right side sheet metal and inside the edge of the right side frame rail. The lowest component of the lubrication oil reservoir tank, including all connectors, oil lines, and fittings must not be located lower than the bottom surface of the main frame rails. Oil lines must not pass through or against the exhaust pipes and must be located inside roll cage. Location, installation, venting and air ducting of the lubrication oil reservoir tank encasement must be acceptable to race officials. Unless otherwise authorized by the Series Director, the same lubrication oil reservoir tank must be used for the entire Event (practice, qualifying, and the Race).

D. The engine oil system must have a functional, vented, overflow, expansion tank (a minimum of 1/2 gallon capacity should be used). The vent hose from the lubrication oil reservoir tank to the overflow tank must be protected by a covering acceptable to race officials. Location and installation of the tank must be acceptable to race officials.

E. The oil pressure line to the oil pressure gauge and/or the oil pressure sending unit must be stainless steel, full coverage, outer braid protected synthetic rubber hose attached with threaded, nipple design hose end fittings and should be covered with flame resistant covering acceptable to race officials.

ENGINE EXHAUST SYSTEM

The exhaust systems and components must be acceptable to race officials and meet the following minimum requirements.

Exhaust Manifold

A. All cars must use tube header-type exhaust manifolds.

B. The exhaust header flange must mount directly to the cylinder head without any spacers between the flange and the cylinder head. A maximum header flange width of 1/2 inch will be permitted.

Exhaust Pipes

A. 180 degree exhaust systems will not be permitted.

B. Exhaust pipes must come out aft of the engine at the cowl and must extend a minimum of six (6) inches past the cowl.

C. Exhaust pipes may run beneath the car, but must turn down and out toward the bottom of the frame rails or exit out through the door panel.

D. Exhaust connectors will not be permitted between the left side exhaust pipe and the right side exhaust pipe.

E. Mufflers may be mandated prior to each event.

Heat Shields

Heat shields, when used to cover the exhaust manifold, must be a flat piece of metal not more than six (6) inches wide and not longer than the length of the valve cover.

DRIVE TRAIN

All drive train systems and drive train system components must be approved.

Clutch

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 three (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 solid magnetic steel pressure plates, and magnetic steel floater plates, without any holes will be

permitted.

E. Only full circle, fully faced magnetic steel clutch discs with a minimum diameter of 5-1/2 inches will be permitted. Minimal cooling slots will be permitted in the clutch discs.

F. The clutch must be mounted inside the bell housing.

G. Clutches must be a positive engagement design. Slider or slipper clutch designs will not be permitted.

H. Dog clutch or direct drives will not be permitted.

Flywheel

Any steel or aluminum flywheel, bolted to the crankshaft, will be permitted but must be acceptable to race officials. Holes and/or other modifications to the flywheel, that in the judgment of race officials, are for weight reduction, will not be permitted.

Bell Housing

A. Special production all steel bell housings will be permitted.

B. Special production aluminum bell housings will be permitted.

C. The maximum distance from the machined surface at the back of the engine block to the machined surface at the front of the transmission case must not exceed 6-3/8 inches including any spacers.

D. It is mandatory that a 3/4 inch hole be drilled in the top of the bell housing directly over the starter ring gear to manually turn the engine for checking the compression ratio limit. This will be the only modification permitted on the approved aluminum bell housings.

E. Holes and/or other modifications that, in the judgment of race officials, have been made with the intent of weight reduction will not be permitted.

Transmission

A. Transmissions must be standard production design. The transmission must be from an approved manufacturer. Race officials may use a transmission provided by the respective manufacturer as a guide in determining whether a Competitor's transmission conforms to the specifications of the Rule Book.

B. Unless otherwise specified the same transmission must be used for practice, qualifying, practice after qualifying and the start of the race. A transmission must not be removed from a car without the approval of the Series Director. The race officials may require any team that removes a transmission to start at the rear of the field, providing the car earns a starting position in the Race. The transmission may be removed from a backup car, without penalty, at the discretion of the Series Director, as follows:

(1) If a car is wrecked beyond repair during qualifying and a backup car is used, a transmission change may be permitted, however, the transmission must be installed before the beginning of practice(s), if practice(s) is scheduled, that follow qualifying.

(2) If a car is wrecked beyond repair during or after qualifying and a backup car is used, then a transmission change may be permitted without an additional penalty.

If a competitor violates this Rule, in addition to imposition of a penalty pursuant to Section 12, the Series Director may take such action during the Event as he deems appropriate, including but not limited to, loss of practice time and/or loss of the opportunity to qualify, and/or confiscation of the transmission or transmission components. Such action shall be deemed an inspection decision not subject to Section 12.

C. Race officials may require that all cars compete with a final drive gear ratio specified by race officials for each event.

D. High gear must be 1.00:1 (direct) and be the primary gear engaged on all tracks.

E. Race officials reserve the right to have all cars use a final drive gear ratio within the limits set.

F. The transmission must be acceptable to race officials and meet the following requirements:

(1) Standard production OEM type Muncie or T-10 manual four (4) speed transmissions with OEM type angle cut forward gears will be permitted. Square cut forward gears will not be permitted in OEM type Muncie or T-10 manual four (4) speed transmissions.

(2) The Jerico #2-SP two (2) speed transmission and the Jerico #3-SP three (3) speed transmission will be permitted. Straight-cut forward gears will be permitted.

(3) The four (4) speed Jerico transmission with gears removed will not be permitted.

G. Only aluminum or magnesium transmission housings will be permitted.

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

I. Any method or transmission gear higher than 1.18:1 will not be permitted. The only high gear transmission ratio permitted will be 1.00:1.

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

K. A forward gear and reverse gear must be in working order.

L. Only manual shift linkage will be permitted on the transmission.

M. Only fire resistant type shifter boots will be permitted. The shifter boots must meet the SFI 48.1 specification and should display a valid SFI 48.1 label visible on the outside of the shifter boot. Shifter boots must not be used beyond two (2) years from the date of manufacture. Quick release fasteners will not be permitted to secure the shifter boot to the transmission tunnel. The shifter boot, when installed, must be completely sealed to the floor of the car. Installation of the shifter boot must be acceptable.

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

Drive Shaft

The drive shaft must be acceptable to race officials and meet the following requirements:

A. The drive shaft, universal joints, and yokes must be magnetic steel and be similar in design to the standard production type. Only a one-piece magnetic steel drive shaft will be permitted.

B. Two (2) 360 degree solid magnetic steel brackets, without holes or slots, not less than two (2) inches wide and 1/4 inch thick, must be placed around the drive shaft and torque arm and be welded or fastened to the crossmember of the car. As an option the rear drive shaft bracket may be bolted directly to the torque arm using a minimum of two (2) high quality 3/8 inch minimum diameter bolts.

C. All drive shafts must be painted white.

Rear Axle

The rear axle must be acceptable to race officials and meet the following requirements:

A. Only aluminum or magnesium quick change and non-quick change center sections equipped with aluminum or magnesium side bells will be permitted. If quick-change rear ends are used, quick change rear end center sections must have 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 back side. Only a magnetic steel lower jackshaft and driveshaft yoke will be permitted in the quick change rear end center section.

B. Full floating magnetic steel double splined rear axles must be used.

C. Only locked rear drive axle assemblies will be permitted at all times during an event.

D. Limited slip differentials will be permitted.

NOTE: Effective January 1, 2010 – Only locked rear drive assemblies will be permitted.

E. Only magnetic steel axle tubes will be permitted.

F. The distance, measured from the center of the rear end housing to the rear hubs, left and right, at the point the wheels bolt on, must be within three (3) inches in length.

G. The rear end must be mounted so that the inside edge of the left rear tire is even with or outside the outermost edge of the left side frame rail.

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

I. The race officials reserve the right to have all cars use a final drive gear ratio within the limits set. Any method or transmission gear higher than 1.18:1 designed to override the gear rule will not be permitted. The only high gear transmission ratio permitted will be 1.00:1. A tire circumference and air pressure minimum limit may also be in effect.

J. For purposes of checking a pre-determined final drive gear ratio, when jacked up both rear wheels must rotate in the same direction with each traveling the same rotational distance.

Wheels / Lug Bolts / Lug Nuts

The wheels must be acceptable to race officials and meet the following requirements:

A. Only 15 inch diameter five (5) lug reinforced magnetic steel wheels with a maximum width of 15 inches will be permitted.

B. Any offset (backspacing) will be permitted.

C. Valve stem hardware specified by the manufacturer must be used. Valve stem caps must be installed at all times during competition.

D. Only solid, one-piece, heavy-duty 5/8 inch magnetic steel lug bolts and standard one (1) inch hex, fully threaded, solid, one-piece magnetic steel lug nuts, tapered on at least one (1) side, will be permitted. The first thread on each lug bolt must be visible from the front of the lug nut when the lug nut is installed. The same style lug bolt must be used for practice, qualifying and the Race.

E. Bead locks will not be permitted.

F. Any device, modification or procedure to the tire, wheel or valve stem hardware, that in the judgment of race officials is used to release pressure (beyond normal pressure adjustments) from the tire and/or inner shield, will not be permitted.

Tires

Only approved tires will be permitted. Hoosier M20 and M 30 compounds will be utilized for competition. The M20 tire may only be used on the left side of the car and the M30 tire may only be used on the right side. Tire usage will be restricted and may be done without prior notice.

Physical Requirements

A. Any approved tire will be permitted provided the tire does not exceed the maximum sidewall measurement of 16.45 inches at 20 pounds air pressure mounted on a 15 inch width rim.

Tire Measurement Procedure

An approved measuring device will be used to determine the maximum size of the tire. Tires may be selected at each event by race officials for measurements. Tires to be measured must be mounted on a 15 inch wheel of the proper rim width. Twenty pounds air pressure will be required for the measurements.

Tire Usage Rules

A. All tires will be checked prior to racing for softening agents. Any altering of the tire is prohibited.

B. Should identification numbers or serial numbers be defaced on any previously approved tire, this tire will be ruled ineligible for competition.

C. Tires that, in the judgment of race officials, have been altered by unauthorized treatment will not be permitted and will be confiscated.

D. Hand grooving, buffing, grinding, and/or cutting on any area of the racing tire will not be permitted.

E. Tire or wheel warming, using heaters, blankets, micro-wave or any other method will not be permitted.

F. Any tire found to have been altered or softened will result in loss of qualifying run. Any earned monies or points at that event will be forfeited.

FRAMES

All frames and frame components must be approved.

General Frame Eligibility

All frames must be acceptable to race officials and meet industry standards. The frame used must meet the minimum requirements described in the following paragraphs.

Frame Requirements

A. All frame components must be made of steel and welded. The frame must consist of a front and a rear sub-frame connected to the main frame on which the roll cage is welded. Holes and/or other modifications to the frames, frame supports, weight containers (if applicable), front and rear sub-frames, crossmembers, and any other frame components that, in the judgment of race officials, were made with the intent of weight reduction, will not be permitted. A minimum ground clearance of two (2) inches must be maintained on any part of the frame. Any frame rejected by race officials will not be permitted to compete.

B. Main Frame -The side rails must be magnetic steel box tubing two (2) inches in width by three (3) inches in height and a maximum of three (3) inches by four (4) inches and must have a minimum wall thickness of 1/8 inch meeting the ASTM A-500 specification. The distance from the centerline of the driveline to the left side frame rail, measured anywhere along the frame, must be within eight (8) inches of the distance from the centerline of the driveline to the right frame rail. A minimum width of 34 inches, and maximum 46 inches, measured from the center of the left frame rail to the center of the right frame rail, must be maintained in the driver's compartment.

C. The fuel cell reinforcement bar, using a minimum 1-1/2 inches seamless magnetic steel tubing, must be installed behind the fuel cell. This reinforcement bar must be as wide as the fuel cell and as low to the ground as the fuel cell with a minimum of two (2) uprights from the reinforcement bar to the rear frame crossmember, evenly spaced behind the fuel cell. An X crossmember made of one (1) inch magnetic steel tubing must be installed beneath the fuel cell from corner to corner. The X crossmember must be welded or bolted to the rear frame rails in a secure manner. Two (2) additional support bars, one (1) at each corner of the reinforcement bar, must extend forward and be welded to the rear frame assembly.

D. Front Sub-Frame - The front sub-frame assembly must be constructed using two (2) inches wide and three (3) inches high magnetic steel tubing a minimum wall thickness 0.083 inch meeting the ASTM A-500 specification. A minimum of 27 inches, and a maximum of 32 inches, measured from the center of the left frame rail to the center of the right frame rail, must be maintained from the mounting point of the upper A-frames forward. All front sub-frame assemblies must maintain a minimum of a 30 degree angle from the side frame rails up to the top of the sub-frame. All sub-frame assembly support bracing must be a minimum wall thickness 0.090 inch by 1-3/4 inches round magnetic steel seamless tubing. The front sub-frame bars (#16 A & B), left and right, must extend from the roll cage to the sub-frame and must have a downward radius bent into the bars before they are welded to the sub-frame. The left and right front sub-frame bars (#16 A & B) must not have any additional braces added between the front roll bar legs (#2 A & B) and where they attach to the front sub-frame assembly. A flex support tube may be added to the front sub-frame bars (#16 A & B) at the radius and extend forward and be attached to a crossmember.

E. Rear Sub-Frame - The rear sub-frame assembly must be constructed using

(2) two inches wide and three (3) inches high magnetic steel tubing a minimum wall thickness of 0.083 inch meeting the ASTM A-500 specification. A minimum width of 31 inches and a maximum of 46 inches, measured from the center of the left frame rail to the center of the right frame rail, must be maintained on the rear sub-frame assembly, with the exception for suspension and tire clearance. All rear sub-frame assemblies must maintain a minimum angle of 18 degrees from the rear axle housing up to the top of the sub-frame rail assembly.

SUSPENSION

All suspension systems and components must be approved.

Coil Springs

All downward chassis movement while the race car is in competition must be limited only by the normal increasing stiffness of the springs or the bottoming of the chassis against the race track, whichever occurs first. Any device or procedure that in the judgment of race officials attempts to detract from or compromise the above will not be permitted.

Only coil spring suspension will be permitted. All coil springs must be constructed using round magnetic steel wire. Ovate and flat wire will not be permitted. The coil spring wire diameter must be the same size from the top to the bottom of the springs. All of the coils in a spring must be active. The coil springs at all four (4) wheels must be active and permit suspension movement. All coil springs must not be colder than ambient temperature.

A. Coil Over Front Springs

(1) Coil over springs must mount to the lower A-frames.

(2) Strut bars will not be permitted for mounting of coil over front springs.

(3) Coil over springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.

(4) Only one (1) spring per wheel will be permitted.

(5) Coil springs may be coated but coating thickness and material must be acceptable to race officials.

B. Coil Over Rear Springs

(1) The rear spring position may be changed, but both rear springs must be located either inside or outside of the frame rails.

(2) Coil over springs must be heavy-duty magnetic steel and must be constructed with both coil ends closed and ground.

(3) Only one (1) spring per wheel will be permitted.

Sway Bars (Anti-Roll Bars)

Front sway bar(s), when used, must be for the purpose anti-roll only. The front sway bars must freely rotate in their mounts. The movement of the front sway bar arms must not be prevented or restricted beyond that of normal use as an anti-roll bar.

A. Only magnetic steel front sway bars will be permitted.

B. Rear sway bars (anti-roll bars) will not be permitted.

Shock Absorbers

A. Coil over shock absorbers may be used. Shock absorbers and coil over shock and spring, by visual reference, must remain within the outline of the body and no holes can be cut in the outer body for the mounting of shocks.

B. Shock absorbers must provide a resultant force dependent upon piston velocity and must be acceptable to race officials. Shock absorbers and components must be acceptable to race officials. Shock absorbers and components must be used as supplied by a manufacturer and approved. Shock absorbers and components must be available to all Competitors and must meet the following minimum requirements:

(1) Shock absorbers must be either a mono-tube or twin-tube telescoping type. Mono-tube shock absorbers must be of the nitrogen-gas pressurized, deflective disc valve type with an integral gas reservoir and with steel deflective disc valve shims sealing the primary metering faces of the single piston in the main shock body. Shock absorber bodies must be made of aluminum. If the shock absorber is of the twin-tube type then it must use a maximum 1.375 inch diameter piston with compression bypass valves that are the coil-spring loaded disc type or the coil-spring loaded spool or poppet valve type and a compression head (may also be called foot valve or head valve). The twin-tube shock absorber may use a gas cell located between the tubes. An external gas reservoir will not be permitted. Inertial valves will not be permitted. Twin-tube shock absorbers and internal components must remain as produced by the manufacturer, approved and as displayed on the approved component shock board and as such, are not considered to be interchangeable and will not be permitted to be modified by the Competitor.

(2) Mono-tube shock absorbers must meet the following dimensions:

Overall Length (Extended) 23.60 Inches Maximum

(center to center) Piston/Shock Body Outside Diameter 2.16 Inches Maximum Piston/Shock Body Length 10.00 Inches Maximum Gas Reservoir Outside Diameter 2.60 Inches Maximum Gas Reservoir Length 3.80 Inches Maximum Shock Shaft Diameter 0.540 Inches Minimum and 0.630 Inches Maximum

(3) Changes in shock absorber force must not be made by the position of the shock absorber shaft, only by the velocity of the shaft through the compression and rebound stroke. Only one (1) piston per shock with one (1) shim stack on compression side and one (1) shim stack on the rebound side of piston, will be permitted.

(4) Only a single, manual, external shaft bleed adjustment through a tapered needle into a fixed orifice in the hollow shaft, acceptable to Race officials, will be permitted on the shock absorbers of the mono-tube type.

(5) The shock absorber shaft must not have any sleeves or spacers, that could limit the travel of the shaft into or out of the main body.

C. Shock absorbers and internal components are subject to inspections.

D. Race 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.

E. A maximum of one (1) shock absorber per wheel will be permitted.

F. External shock absorber reservoirs will not be permitted.

G. Remote or electronically controlled shock absorbers will not be permitted.

H Heating pads and/or blankets will not be permitted for warming the shock absorbers.

I. It is the responsibility of the race team to ensure the shock absorbers are used in accordance with the manufacturer's instructions and specifications.

A-Frames

A. The upper A-frames, lower A-frames and ball joints must be acceptable to race officials and meet the following minimum requirements.

B. A-frames must be made of magnetic steel.

C. The ball joints must not have any adjustment with the exception of a free play adjustment in the housing for the ball and socket.

D. When attaching the upper A-frames to the mounting plate, only standard type castor-camber shims or washers will be permitted.

Spindles / Wheel Bearings / Hubs

The spindles, wheel bearings, and hubs must be acceptable to race officials and meet the following minimum requirements:

A. Heavy-duty magnetic steel spindles must be used.

B. Wheel bearings must be magnetic steel, tapered roller bearings and bearing races. The bearings, races and seals must be assembled separately in the hubs.

C. Aluminum or magnetic steel hubs will be permitted. Only standard type wide five hubs using an inner bearing race with a maximum inside dimension of 1.995 inches and an outer bearing with a maximum inside dimension of 1.885 inches will be permitted. This does not apply to the 5 X 5 design steel hub designs. All hubs must use a moly type grease. Hubs that require oil as a lubricant will not be permitted.

D. The front spindles must be linked to the frame using two (2) Vectran® HS V-12 fiber cables. The fiber cables must be attached around the frame in front of the top A-frame using a choker-type hitch or with a 1-1/4 inch diameter magnetic steel sleeve passing through the frame from top to bottom and welded, top and bottom, forward of the top A-frame. A 3/4 inch diameter bolt with a heavy-duty metal washer, minimum two (2) inches in diameter and minimum 1/8 inch thick steel or 1/4 inch thick aluminum on each side of the Vectran® fiber cable eye passing through the steel sleeve in the frame with a lock nut on the bolt will attach the fiber cables to the frame. The fiber cables must be attached to the frame or crossmember. The eye of the fiber cables must loop over the upper portion of the spindle and must be secured in a manner acceptable to race officials. The fiber cables must be constructed from a continuous loop of 5/16 inch diameter 12 strand cable (with a blue or red tracer thread) woven from Vectran® HS V-12 fiber.

Tread Width Requirements

A. All cars must maintain the following tread width requirements. A minimum front and rear tread width of 82 inches and a maximum tread width of 83-3/4 inches will be permitted. The tread width will be determined by measuring the left outside wheel bead surface to the right outside wheel bead surface at spindle height.

B. Only magnetic steel spacers will be permitted to utilize the maximum allowable tread width.

Wheelbase Requirements

A. The minimum wheelbase that will be permitted is 107 inches.

B. When measuring the wheelbase, the maximum allowable tolerance must not exceed one (1) inch plus or minus (+/-) on the opposite side.

Body Height / Ground Clearance Requirements

Body Height Requirements

A. Body height will be determined by measuring (with the driver) the overall height of the car six (6) inches back from the leading edge of the roof at the roof centerline. The minimum height must be 40 inches. The rear of the roof at the highest point must not be more than 3-1/4 inches higher than the actual front measurement.

B. Competitors presenting cars for inspection of the minimum body height and the minimum ground clearance must have their tires inflated to the recommended technical inspection air pressure as specified by the participating tire manufacturer for the Event. This will apply to pre-qualifying and Pre-Race inspection. If tire pressure(s) are not at the recommended technical inspection pressure(s) after competition, tires will be re-inflated to the recommended technical inspection pressure(s) as specified by the participating tire manufacturer for the event.

Ground Clearance Requirements

The frame rail and sheet metal ground clearance will be a minimum of two (2) inches. All ground clearance requirements will be measured with the driver in the car.

Car Height Adjustment

A. The only device permitted for adjusting the height of a car will be the front and rear coil over spring units as described in sub-sections 20D-12.1 and 20D-12.3. Adjustments will be permitted during an Event but must be done in a manner that results in the car maintaining body height requirements, as described in sub-section 20D-12.8.1

B. Mechanical devices for adjusting the car's height which can be activated by the driver will not be permitted inside of the driver's compartment.

C. Electrical, pneumatic, hydraulic, remote control, or any other devices which change the handling characteristics or height of the car will not be permitted.

D. Devices and/or procedures to, or used to, reduce or hold the car lower than the normal stiffness of the springs will not be permitted.

E. Car height adjustments will not be permitted on the left front suspension during a race unless approved by the race officials.

STEERING COMPONENTS

All steering components must be approved. A. Rack and pinion steering will be permitted.

B. All cars must be equipped with a magnetic steel steering shaft.

C. Tie rods, drag links and component parts must be heavy-duty. Holes and/or other modifications in steering components that, in the judgment of race officials, have been made with the intent of weight reduction, will not be permitted.

D. The center top of the steering post must be padded with at least two (2) inches of resilient material acceptable to race officials.

E. A quick-release steering wheel coupling with a magnetic steel housing acceptable to race officials must be used. The steering wheel coupling should meet the SFI 42.1 specification and should display a valid SFI 42.1 label on the outside surface. The magnetic steel housing must not be covered with plastics or coatings.

F. The use of universal joints in the steering shaft must be acceptable to race officials. It is recommended that a minimum of two (2) universal joints be used forward of the firewall.

G. Only magnetic steel solid-spoke steering wheels will be permitted.

H. The power steering pressure pump must be mounted and driven off the front of the engine.

BRAKES / BRAKE COOLING

All brakes and brake cooling components must be approved.

Holes and/or other modifications in the braking system or components that, in the judgment of race officials, have been made with the intent of weight reduction will not be permitted.

Brake Components

A. Four (4) wheel disc brakes must be used. Only magnetic cast iron or cast steel round, circular rotors will be permitted. **Brake rotors must be used as manufactured.** Only metal brake calipers will be permitted.

B. Brake calipers must be from an approved manufacturer. Race officials may use a brake caliper provided by the respective manufacturer as a guide in determining whether a Competitor’s brake caliper conforms to the specifications of the Rule Book.

C. Brakes must be operational on all four (4) wheels at all times. Valves of any type will not be permitted in the brake lines that will reduce or cut off the flow of brake fluid to a single wheel.

D. Master cylinder(s) and reservoir(s) should be mounted on the engine side of the front firewall. The master cylinder(s) must be metal and must be the push-piston type. Pull type master cylinders will not be permitted

E. Inboard brakes will not be permitted.

F. Electronic wheel speed sensors or brake actuators will not be permitted.

G. Power assisted braking systems will not be permitted.

H. Only one (1) brake caliper per wheel using only two (2) brake pads per caliper will be permitted. Brake calipers must be acceptable to Race officials.

I. Only a single brake bias system which connects to the balance bar of the brake pedal assembly will be permitted. Inline brake proportioning systems will not be permitted.

J. Holes and/or other modifications in the brake pedal arm that, in the judgment of race officials have been made with the intent of weight reduction, will not be permitted.

K. Brake pad retraction devices will not be permitted.

L. Brake pads must have a magnetic steel backing plate.

M. A maximum of six (6) pistons will be permitted in all brake calipers.

Brake Cooling

A. One (1) air duct per wheel may be used for brake cooling using a maximum three (3) inch diameter brake hose. All scoops must be acceptable to race officials. The maximum dimension of the front and rear brake air scoops will be three (3) inches wide by eight (8) inches long. All front air scoops must be mounted to the outside of the front frame rails with the leading edge of the brake scoops not farther forward than the frame rail at the rear edge of the front bumper mount. All brake scoops must be mounted vertical and must be operational. The rear brake air scoops mounted in the quarter panel or door must be painted the same color as the car. If the rear brake ducts are routed beneath the car, they must not be mounted lower than the bottom of the frame rail and must be mounted in a 1/2 inch by 1/2 inch angle frame. Only maximum three (3) inch brake blowers, one (1) per rear wheel, will be permitted. Brake scoops (NACA duct) mounted in the door or quarter panels must be flush with the outside of the body. A 1/2 inch air deflector may be attached to the rear brake scoops. If the brake scoops are not operational, they must be blocked off. Screens and air ducts, from the opening to the brakes, must be acceptable to NASCAR Officials.

B. Only mechanical type brake fluid recirculating systems will be permitted. Motor driven brake fluid recirculators will not be permitted.

C. Liquid or gas cooling of the brakes will not be permitted.

FUEL

The RoC Tour reserves the right to have all cars use the same brand of fuel in a given Event. When this right is exercised, it will be stated prior. The official fuel of the tour is the SUNOCO brand. Their decals must be displayed. Competitor decals are not permitted.

Definition

In the event there is no "Official Fuel" at a given Event, the term "Fuel", wherever used in this document, shall be understood to mean automotive gasoline that complies with the specifications below. Race officials may use a sample of the actual fuel(s) provided at the track by the fuel supplier(s) to determine whether the fuel used by a Competitor conforms to the specifications in the Rule Book.

Specifications

A. The fuel must be automotive gasoline only.

B. The gasoline must comply with ASTM D-4814 entitled, "Standard Specification for Automotive Spark Ignition Engine Fuel," except limited to liquid hydrocarbons only, Class A, B, C, D, or E, but without regard to geographical or seasonal limitation.

C. The gasoline must not be blended with alcohols, ethers or other oxygenates and it must not be blended with aniline or its derivatives, nitro compounds or other nitrogen containing compounds.

D. Icing or cooling of the fuel system will not be permitted during the Event in the garage, pit, or racing premises.

Fuel Samples

Race officials have the right to sample a Competitor's fuel at any time during the Event. Samples will be impounded for observation and/or testing by independent or other agencies.

FUEL SYSTEM

All fuel systems and fuel system components must be approved.

A. Race officials will not permit the use of any previously approved fuel cells, containers, or check valves that appear to be damaged, defective or do not function properly. Fuel cell vent pipe check valves must be used. Check valves and the fuel cell must be acceptable to race officials.

B. Pressure systems will not be permitted. Any concealed pressure type containers, feed lines or actuating mechanism will not be permitted, even if inoperable. Icing, freon type chemicals or refrigerants must not be used in or near the fuel system.

Fuel Cell

A. Fuel cell bladders must be approved.

B. The approved nominal fuel cell size shall be 24-1/4 inches by 16-3/8 inches by 13-1/4 inches.

C. Only the following fuel cell bladders are approved for use in competition.

AERO TEC LABORATORIES, INC. (ATL)
PART NUMBER FB 222 B FB 322 B

AIRCRAFT RUBBER MANUFACTURING, INC.
(FUEL SAFE)
PART NUMBER
RB024
RB124

D. Modifications to the approved fuel cell bladders, including the nut ring, will not be permitted.

E. The maximum fuel cell capacity, including the filler spout and overflow, must not exceed 24 gallons.

F. Materials other than standard foam, as provided by an approved fuel cell manufacturer, will not be permitted.

G. All approved fuel cells must be equipped with a steel ball or fuel resistant flap type fuel filler and a steel ball or steel poppet fuel vent check valve assembly that meets the following minimum requirements:

FUEL CELL CHECK VALVE HOUSING (STEEL BALL TYPE)

(1) The fuel cell check valve housing must be manufactured of aluminum or magnetic steel plate not less than 1/4 inch thick. A cast aluminum check valve housing assembly will not be permitted. The bottom surface of the check valve plate must be flat. Spacers will not be permitted between the check valve plate and the fuel cell bladder. Only one (1) gasket, with a minimum thickness of 0.065 inch will be permitted between the check valve plate and the fuel cell container.

(2) The solid steel ball check valve must be encased in a four (4) rail carriage. The carriage rails must be constructed of solid aluminum or magnetic steel not less than 1/4 inch thick by not less than 3/4 inch wide material. The carriage rails must be positioned such that the surface of the 1/4 inch thick edge rides against the steel check ball. Outside surfaces of the carriage must not have any sharp edges. The carriage must not be altered in any way and must remain perpendicular to the fuel cell check valve top flange plate.

(3) The fuel filler check valve carriage must not exceed a maximum depth of 8-1/2 inches. The maximum inside diameter of the filler neck including the check ball seat must not exceed 2-1/8 inches. When seated at least 1/2 of the check ball must be visible. The diameter of the solid steel check ball must be 2-3/8 inches. The filler neck must not be made of cast aluminum.

(4) The fuel vent check valve carriage must not exceed a maximum depth of 8-1/2 inches. The maximum inside diameter of the vent pipe neck including the check ball seat must not exceed 1-1/4 inches. When seated, at least 1/2 of the check ball must be visible. The diameter of the solid steel check ball must be 1-3/8 inches. The fuel vent check valve must not be made of cast aluminum.

(FLAP TYPE)

(1) The fuel cell check valve housing must be from an approved manufacturer and be made of aluminum or magnetic steel plate not less than 3/16 inch thick. A cast aluminum check valve housing assembly will not be permitted. The bottom surface of the check valve plate must be flat. Spacers will not be permitted between the check valve plate and the fuel cell bladder. Only one (1) gasket with a maximum thickness of 0.065 inch will be permitted between the check valve plate and the fuel cell bladder.

(2) The fuel filler check valve assembly equipped with a fuel resistant flap, must maintain a minimum outside diameter of 3-1/2 inches. The maximum inside diameter of the fuel filler inlet must not exceed 2-1/8 inches. The fuel filler check valve assembly must not be made of cast aluminum.

(3) The fuel vent check valve carriage must not exceed a maximum depth of four (4) inches. The maximum inside diameter of the vent pipe neck including the check ball seat must not exceed 1-1/4 inches. The diameter of the solid steel ball/poppet must be 1-3/8 inches. The fuel vent check valve neck

must not be made of cast aluminum.

H. The fuel inlet tube and vent tube should have a bead around its circumference for hose retention.
I. Fuel cells must not be used beyond five (5) years after the date of manufacture.

Fuel Cell Container

The fuel cell container must be acceptable to race officials.

A. The fuel cell must be encased in a container of not less than 22 gage (0.031 inch thick) magnetic sheet steel. The fuel cell must be fitted within the container so that the maximum capacity, including the filler spout will not exceed 24 gallons.

B. The maximum fuel cell container size must be 25 inches in length by 16-3/4 inches in width by 13-5/8 inches in depth (inside dimensions).

C. Interior magnetic sheet steel must allow access to the top of the fuel cell for inspection.

D. The fuel cell should be coated bright red.

Fuel Cell / Fuel Cell Container Installation

The fuel cell and fuel cell container must be installed in a manner acceptable to race officials.

A. The fuel cell and fuel cell container must be installed as far forward as possible in the trunk compartment behind the rear axle and maintain a minimum ground clearance of six (6) inches.

B. The fuel cell container must be secured by one (1) inch by one (1) inch by 0.065 inch minimum thick square steel tubing meeting the ASTM A-513 specification or one (1) inch by 1/8 inch thick magnetic steel straps two (2) lengthwise and two (2) crosswise. The straps must be located as close to the fuel filler check valve housing as possible.

C. A firewall of magnetic sheet steel not less than 22 gage (0.031 inch thick) must be located between the trunk and the driver's compartment.

Fuel Filler / Vent Requirements

Fuel Filler

At Events where refueling is required during the Event, the fuel filler must be acceptable to race officials and meet the following minimum requirements:

A. Dry coupling systems, using a probe on the fuel filler cans and receptacle on the car, must be acceptable to race officials. Dry coupling receptacles must be bolted from the inside of the quarter panel and at an angle on the left rear quarter panel. The mounting must be as near to the top of the panel and as far back as possible.

B. The check valve filler neck inside diameter must not exceed 2-1/8 inches. The outside diameter must not be less than 2-1/4 inches and not more than 2-1/2 inches.

C. The maximum filler spout size is 4-1/4 inches outside diameter by eight (8) inches long, then tapering over the next 8-1/2 inches to 2-1/2 inches outside diameter, extending to an over all length of 18 inches.

D. A minimum of six (6) inches of 2-1/2 inches maximum diameter flex hose must be used between the end of the filler spout and the fuel cell neck.

Fuel Cell Vent

The fuel cell shall be vented as follows:

A. A single, one (1) inch maximum vent to outside of body must be installed at the left rear corner in the taillight area only. The vent must have a self-closing flap-type valve at all tracks, that can only be opened by inserting a wire or flat metal strip to allow refueling.

B. The fuel cell check valve vent hose neck inside diameter must not exceed 1-1/4 inches inside diameter and three (3) inches in length. The fuel cell check valve vent hose must have a bead around its outside circumference for hose retention. The fuel cell vent flexible hose must have a maximum inside diameter of 1-1/2 inches and a maximum length of 60 inches when measured from the outside end of the fuel vent pipe to the top of the fuel cell fill plate. The hose must be secured with two (2) clamps at the fuel cell fill plate.

C. When fuel is added during a pit stop, a crew member must catch any overflowing fuel into a container acceptable to race officials. The overflow container must be metal and coated red.

Fuel Lines / Fuel Pump

Electrical devices or electrical connections will not be permitted on the fuel cell, fuel lines, or between the fuel pump and the carburetor fuel line assembly. Fuel pressure gauge isolators or sensors for electronic fuel pressure gauges must remain on the engine side of the front firewall. Fuel lines from the carburetor will not be permitted on the cockpit side of the front firewall.

Fuel Lines

The fuel lines and fuel line connections must be acceptable to race officials and meet the following minimum requirements:

A. The size, material, and location of the fuel cell pickup must be acceptable to race officials.

B. Only one (1), maximum 5/8 inch inside diameter fuel line with a maximum AN-10 fitting, will be permitted from the fuel cell to the carburetor.

C. All fuel lines must be stainless steel, full coverage, outer braid protected synthetic rubber hose attached with threaded, nipple design hose end fittings and should be covered with flame resistant covering acceptable to race officials.

This includes the fuel line to the fuel pressure gauge and/or sending unit.

D. The fuel line from the fuel cell to the fuel pump may be relocated to prevent vapor lock. If the fuel line runs through the right side of the driver's compartment, it must be enclosed in a straight or parallel to the drive shaft and transmission tunnel (as viewed from above) one (1) inch outside diameter metal tube, coated red and labeled "FUEL LINE".

E. An approved check valve mounted at the fuel line outlet on the fuel cell may be used.

F. Additional lines or extra length must not be used on the fuel system. Extra fuel lines or fuel cells, concealed or otherwise, will not be permitted.

G. It is recommended that an on/off valve be mounted within easy reach of the driver.

H. Quick disconnect fittings will not be permitted.

I. Only one (1) fuel filter may be used between the fuel cell and the fuel pump. The fuel filter must be mounted on the same side as the fuel line. The size of the fuel filter must be acceptable to race officials.

Fuel Pump

Only one (1) fuel pump, acceptable to race officials meeting the following requirements, will be permitted.

A. Mechanical, lever-action, camshaft actuated fuel pumps in the approved location will be permitted.

B. An approved remote, cable-driven mechanical fuel pump will be permitted. The pump must be driven off of the rear of the engine oil pump. The cable driven fuel pump must be mounted in the trunk area forward of the fuel cell container near the center of the chassis. If a remote fuel pump is used, the fuel line fitting on the inlet side of the remote fuel pump may be a manufacturer certified, crash-worthy, break-away, self sealing type. It is recommended that the remote cable assembly meet the SFI 8.1 specification.

C. Electric fuel pumps will not be permitted.

D. Liquid cooling of the fuel pump will not be permitted.

Fuel Filler Cans

A. Unless authorized, only two (2) approved maximum 12 gallon metal fuel filler cans will be permitted in pits for refueling at all tracks.

B. The metal fuel filler cans must be coated red and be acceptable to race officials. The only decals used beyond those of race officials that will be permitted on any fuel filler can will be those of a participating fuel supplier that is approved. The fuel filler cans must be metal, ventilated and equipped with a flexible filler nozzle.

C. The use of two (2) fuel filler cans at the same time while refueling the car will not be permitted.

D. Elevated fuel drums or refueling towers will not be permitted.

E. Only metal fuel filler cans, coated red, acceptable to race officials, will be permitted to be used to refuel the car in the garage or pit area. When adding or removing fuel to/from the car in the garage area, the car must be outside of the garage structure.

F. Fuel filler cans must not be stored in the garage structure.

G. Fuel filler cans must only be transported from the fuel station to the pit area in an approved cart.

PERSONAL SAFETY EQUIPMENT

A. General B. Protective Clothing

(1) Each Competitor is solely responsible for the effectiveness of personal safety equipment used during an Event. The Race of Champions IS NOT RESPONSIBLE FOR THE EFFECTIVENESS OF ANY PERSONAL SAFETY EQUIPMENT.

(2) Each Competitor is expected to investigate and educate himself/herself fully with respect to the availability and effectiveness of personal safety equipment. Race officials may, from time to time, schedule information sessions with Competitors and safety experts. Each Competitor is expected to attend and participate in such sessions.

(1) Each driver must wear a fire resistant uniform meeting the SFI 3.2A/5 specification, as a minimum, and visibly display a valid SFI 3.2A/5 label on the outside surface of the left sleeve.

(2) Each driver must also wear fire resistant accessories that effectively cover the remaining parts of the body. Shoes and gloves must meet the SFI 3.3 specification, as a minimum, and visibly display, on the

outside surface, a valid SFI 3.3 label. It is recommended that underwear, head socks and socks meet the SFI 3.3 specifications.

(3) During Race conditions, any crew member involved in fueling the car or handling and transporting fuel in the garage or pit area, must have all parts of the body protected by fire resistant clothing and/or equipment. The fuel handlers must wear a fire resistant uniform meeting the SFI 3.2A/5 specification, as a minimum, and display a valid SFI 3.2A/5 label on the outside surface of the left sleeve. A one-piece uniform is recommended. Shoes and gloves must meet the SFI 3.3 specification and visibly display a valid SFI 3.3 label on the outside surface. A fuel resistant apron must be worn during refueling operations. The fueler apron must meet the SFI 52.1 specification and must visibly display a valid SFI 52.1 label. It is recommended that underwear and socks meet the SFI 3.3 specification.

(4) IT IS THE RESPONSIBILITY OF THE DRIVER AND CREW MEMBER, NOT THE RACE OF CHAMPIONS OR ITS OFFICIALS, TO ENSURE THAT HE/SHE MAINTAINS, WEARS AND PROPERLY USES PROTECTIVE CLOTHING.

C. Other Safety Devices

(1) It is required that each car have, within the driver's reach, a manually controlled push or pull knob which activates a built-in, fully charged fire extinguishing pressurized cylinder with a visible, operating pressure gauge. It is recommended that an automatic thermally activated discharge nozzle be used in addition to the manually controlled push or pull knob. This extinguisher system must meet the SFI 17.1 specification and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer’s label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This fire extinguisher cylinder must be securely mounted beyond the right side of the driver's seat, above the interior sheet metal on the horizontal shoulder bar (#7) or on the top right side door bar. Mounts must be secured to the horizontal shoulder bar (#7) or the top right side door bar and it must use a mounting system which secures both ends of the cylinder for its full circumference and attaches securely to the roll cage structure of the car. Hose clamps, worm drive clamps or cable ties must not be used to mount this cylinder. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. This cylinder must contain a minimum of five (5) pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36 or equivalent type agent. The primary purpose of this system is to protect the driver. Nozzle(s) must be designed for the extinguishing agent used and should not be pointed directly at the driver, but should be mounted to provide flooding of the driver's compartment to the manufacturer's recommendation. If engine compartment nozzle(s) are used with this cylinder, the fire extinguishing cylinder size must be increased to a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36 or equivalent type agent to be used for this system. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.

(2) It is recommended that each car have an additional fire extinguishing cylinder solely dedicated to extinguish the fuel cell area (trunk) and as an option, the same fire extinguishing cylinder may also be directed to the underhood area with the use of a T-type fitting and thermally activated discharge nozzles. This extinguisher must meet the SFI 17.1 specifications and display a valid SFI 17.1 label. This extinguisher must be certified by the manufacturer every two (2) years. An additional manufacturer’s label with a visible date code must be located directly below the pressure gauge on the surface of the cylinder. This cylinder must be mounted beyond the right side of the driver's seat above the interior sheet metal on the horizontal shoulder bar (#7) or the top right side door bar in the driver's compartment and it must use a mounting system which secures both ends of the cylinder for its full circumference and securely attaches to the roll cage structure of the car. Hose clamps, worm drive clamps or cable ties must not be used to mount this cylinder. A device(s) must be installed to keep the cylinder from sliding out of the mounting system. This cylinder must contain a minimum of 10 pounds of fire extinguishing agent, visibly designated on the label as DuPont FE-36 or equivalent type agent. This cylinder must be activated by an automatic, thermally activated discharge nozzle(s) recommended by the manufacturer for this application. This automatic system may have a manual and/or pneumatic override from the driver-activated system. If the underhood discharge option is used, then an additional automatic, thermally activated discharge nozzle must be located under the hood forward of the firewall. All discharge lines and fittings must be steel or steel reinforced hose although nozzles may be aluminum. All cylinders must have an indicator gauge and identifying label readily visible for inspection purposes. The gauge must be compatible with the agent used in the cylinder. Cylinders for all agents must be DOT-approved steel or aluminum. Carbon fiber or composite cylinders will not be permitted.

(3) All entrants should have in their garage or pit area as part of their equipment, at all times, a fully charged minimum 10 pound Class B fire extinguisher with a visible, operating pressure gauge.

(4) Halon 1211 and Halon 1301 will not be permitted and must be recycled by a licensed recycler after December 31, 2007.

Passengers will not be permitted in or on a race car at any time.

Pit registration or entrance wrist bands should always be worn outside of the drivers protective clothing. It is

recommended that any roll cage padding within the driver cockpit being fire resistant.

Helmets / Head and Neck Restraint Devices / Systems

A. Helmets

(1) Drivers must wear a full-face helmet carrying at least a valid SA 2000 or SA 2005 Standard Snell and/or a valid SFI 31.1, SFI 31.2 or SFI 31.1/2005 label at all times on the race track.

(2) The driver must 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.

(3) During Race conditions, any crew member who steps into the car servicing area must wear a helmet.

(4) During Race conditions, any crew member involved in fueling the car must wear a full face helmet and a fire resistant head sock. It is recommended the head socks meet the SFI 3.3 specifications.

(5) IT IS THE RESPONSIBILITY OF THE DRIVER/CREW MEMBER, NOT NASCAR, TO ENSURE THAT HIS/HER HELMET IS APPROVED, CORRECTLY WORN, MAINTAINED AND PROPERLY USED.

B. Head and Neck Restraint Devices/Systems

(1) At all times during an Event (practice, qualifying and competition), drivers must connect their helmet to an approved head and neck restraint device/system which is SFI-approved and acceptable to NASCAR. The device/system must meet the SFI 38.1 specification and must display a valid SFI 38.1 label. The head and neck restraint device/system, when connected, must conform to the manufacturer's mounting instructions, and it must be configured, maintained and used in accordance with the manufacturer's instructions.

(2) IT IS THE RESPONSIBILITY OF THE DRIVER, NOT THE RACE OF CHAMPIONS, TO ENSURE THAT HIS/HER DEVICE/SYSTEM IS APPROVED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

(3) The following are the SFI-approved Head and Neck Restraint Devices/Systems that are currently acceptable to industry standards:

DEVICE	MODEL	OPTIONS
HANS Device	Professional Series	Fixed or Sliding Tethers
HANS Device	Extra/Economy Series	Fixed or Sliding Tethers
HANS Device	Sport Series	Fixed or Sliding Tethers
Hutchens Device	Hybrid	

Seat Belts

A. Each car must be equipped with an SFI 16.5-approved 6-point seat belt restraint system and display a valid SFI 16.5 label. Unapproved seat belt restraint systems or components will not be permitted. Seat belts three (3) inches wide or less and SFI 16.5-approved will be permitted. The shoulder harness must not be less than two (2) inches wide as it passes over the approved head and neck restraint device. Approved 6-point seat belt restraint systems must have a latching mechanism attached to the lap belt or, if a cam lock latching mechanism is used, it must be attached to the lap belt, the shoulder harness or the anti-submarine belts. This latching mechanism must provide a common connection and release for the lap belt, shoulder harnesses and the anti-submarine belt(s), and must be designed with a quick and easy one-handed, gloved release of all belts in all conditions. It must have one (1) of two (2) approved release designs:

(1) **Latch/Lever:** Utilizes a lever opening away from the body in a right to left hand movement, parallel to the lap belt with a complete release of all belts. The lever must have a provision to prevent an unintentional release.

(2) **Cam Lock:** A circular handle or raised surface that turns in both directions for a motion of not less than 30 degrees before completely releasing all belts. A downward facing tab or toggle may be used, provided that its length does not extend more than 1/2 inch beyond the outer diameter of the release mechanism unless a provision to prevent unintentional rotation or release is provided.

B. The seat belt restraint system must be installed in accordance with the directions provided by the system supplier and/or manufacturer. In addition, please note the following guidelines:

(1) Lap belts must be installed and used in such a manner that, when secured to the latching mechanism, the seat belt webbing travels in a straight, clear and free path from the belt mount through the seat opening to the latching mechanism. When a driver is buckled in the seat, the free end of the seat belt webbing must rest in a position clearly aligned over the seat belt webbing entering any adjustment or latch release hardware.

(2) On the left lap belt, if a roller adjuster is used, it must have tension springs installed and it must be attached to and be a part of the latch release mechanism directly without any webbing loop. The roller adjuster must not be attached to the lap belt mounting tab at the frame. A 3-bar slider, threaded to the manufacturer's instructions, may be used for the left lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned outside the seat opening and as close to the mounting tab as possible. On the right lap belt, if a roller adjuster is used, it must have tension springs installed and the adjuster may be located anywhere on the belt except at the frame mounting tab. A webbing link may be used to connect the roller adjuster to the latching mechanism or a 3-bar slider, threaded to the manufacturer's instructions, may be used for the right lap belt length adjustment, in the absence of the roller adjuster. The 3-bar slider must be positioned outside the seat opening and as close to the mounting tab as possible. Wrap-around style lap belt mounts and clip-on/hook/eyebolt style mounts will not be permitted; only tab style lap belt mounts secured with a nut and bolt will be permitted for aluminum seats. Approved composite material seats must use the lap belt mounts which are integral with the seat and must be of the same mount style as approved with the seat.

(3) Shoulder belts must mount to horizontal shoulder bar (#7) or shoulder belt bar (#7B) only (as shown in the diagram at the rear of the Rule Book). If the shoulder belt bar (#7B) is used, and the center-to-center distance from the horizontal shoulder bar (#7) is more than four (4) inches, then the shoulder belts must mount directly to the shoulder belt bar (#7B) or to tabs welded directly to the shoulder belt bar (#7B). The opening in the seat for this type of belt must be either a single or double open slot with a finished inside edge or a grommet installed. Only individual shoulder harness belts will be permitted. Y-type shoulder harnesses will not be permitted. Wrap-around shoulder harness mounts will be permitted provided the belts do not cross behind the driver and all wrap-around mount style shoulder belts must be retained by a guide on horizontal shoulder bar (#7) or shoulder belt bar (#7B) to prevent lateral movement of the belt on the roll bar. Shoulder belts may cross behind the driver provided they use a tab-style mount and not a wrap-around mount. The seat opening for these crossed shoulder belts must be a single, open slot with a finished inside edge or grommet where the shoulder belts cross behind the driver. Each shoulder belt using a tab mount must use an individual mounting tab or steel sleeve welded through horizontal shoulder bar

(#7) or shoulder belt bar (#7B) and be secured with a nut and bolt. Roller adjusters on the shoulder harnesses must have tension springs installed. Sternum or cross belts using metal or hard surface hardware will not be permitted.

(4) Approved 6-point anti-submarine belts must be mounted to the seat frame or a steel reinforced seat bottom mount. Either wrap-around or tab-style anti-submarine belt mounts will be permitted and must be installed in accordance with the directions provided by the system supplier and/or manufacturer.

C. The manufacturer's label must 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 must be removed and relocated in a manner that does not affect the integrity of the belt material. The date of manufacture must remain visible on the belts at all times. Seat belt restraint systems must not be used beyond two (2) years after their date of manufacture.

D. The driver must 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, as set forth above.

E. The SFI 16.5-approved seat belt restraint systems will remain approved until their expiration date which is two (2) years after the date of manufacture. The seat belt restraint systems must be used as a complete restraint system. Brands may not be mixed.

F. IT IS THE RESPONSIBILITY OF THE DRIVER, NOT THE RACE OF CHAMPIONS OR ITS OFFICIALS, TO ENSURE THAT HIS/HER SEAT BELT RESTRAINT SYSTEM AND ALL COMPONENTS ARE SFI 16.5-APPROVED AND LABELED, CORRECTLY INSTALLED, MAINTAINED AND PROPERLY USED.

Seats

A. Custom-manufactured aluminum seats constructed from solid aluminum sheet material from the seat bottom to above the driver's shoulders, acceptable to race officials, will be permitted. Holes and/or other modifications that, in the judgment of race officials have been made with the intent of weight reduction, will not be permitted. Approved composite material seats will be permitted.

B. All seats must have padded side protectors and padded aluminum seat leg extensions on the left and right side. Composite material seat leg extensions should meet the SFI 56.1 specification for flammability.

C. A headrest/head surround acceptable to race officials must be used. Headrests/head surrounds should be designed to provide rigid support around both sides of the helmet and across the back and from the forward most point of the helmet chin bar in addition to allowing extra length for forward head motion during an impact. The left side of the headrest/head surround may be shortened to permit egress of the driver. The headrest/head surround must be rigidly bolted to the top of the seat and/or the roll cage using a minimum of

5/16 inch diameter bolts, except for the approved composite seats. Steel brackets welded to the roll cage must be a minimum of 1/8 inch thick and aluminum brackets welded to the headrest/head surround should be a minimum of 3/16 inch thick. All bolts must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket. In addition, it is recommended that the headrest/surround be bolted to the shoulder supports (if used) with minimum 3/16 inch thick brackets and a minimum 5/16 inch diameter bolts. The headrest/head surround must not extend into the window opening beyond the area defined by the upper roll cage. All headrests must be fabricated in a rigid construction and of materials which provide adequate support in an impact. It is recommended that all headrests/head surrounds and hard surfaces around the driver's seat be padded with a minimum of two (2) inches of flat impact absorbent material meeting the SFI 45.2 specification.

D. Optional strap-type headrest supports or nets must be equipped with a quick release fastener accessible by the driver.

E. The upper seat back must be secured to horizontal shoulder bar (#7) or to a bracket that is secured to horizontal shoulder bar (#7) with a minimum of three (3) high quality 5/16 inch minimum diameter bolts through the horizontal shoulder bar (#7). For aluminum seats, if a seat bracket is used to attach the seat to the horizontal shoulder bar (#7), the bracket must be constructed using a minimum of 3/16 inch thick metal plate and it must have a minimum of 3/4 inch of metal from the center of the mounting bolt to the edge of the bracket. For composite seats, the seat bracket must attach the seat to the horizontal shoulder bar (#7) and be the same material and construction as was submitted for approval by the manufacturer. The seat bracket must be fastened to the seat with a minimum of four (4) high quality 5/16 inch minimum diameter bolts for aluminum seats, and two (2) high quality 5/16 inch minimum diameter bolts for composite seats.

F. The seat bottom must be secured to the car's structure with a minimum of two (2) high quality 5/16 inch minimum diameter bolts per side. Seat mount brackets or slotted mounting systems welded to the seat frame must be a minimum of 1/4 inch thick. All mounting brackets must have a minimum of 1/2 inch of metal from the center of the mounting bolt to the edge of the bracket. All seat mounting brackets, welded to the frame rail, frame crossmembers, floors, roll bars, or removable seat mounting frame assemblies, must be made of a minimum 1/4 inch magnetic steel if single shear or a minimum of 3/16 inch if the double shear configuration is used. If a slotted mount is used to mount the seat to the seat frame, the seat must be bolted to the seat frame bracket using an additional bolt to prevent sliding. When mounting through the aluminum seats or brackets large diameter washers must be used.

Roll Bars

A. As a minimum, all cars are required to have the basic and typical roll cage configured as shown in Diagrams #2, #3, #4, and #5 in the rear pages of the rule book. Unless otherwise specified below, all roll bars must be made from round magnetic steel seamless tubing 1-3/4 inches by 0.090 inch minimum wall thickness meeting the ASTM A-519 specification. Electric resistance welded tubing, aluminum and/or other soft metals will not be permitted. Roll bar joints and intersections must be welded according to the ASTM specification for the material being welded. Once constructed and installed, the roll cage must be acceptable to race officials. Holes and/or other modifications that, in the judgment of race officials, were made with the intent of weight reduction will not be permitted.

B. <u>Basic Roll Cage Structure</u>

(1) The main roll bar (#1 in Diagram #5) must be a continuous length of tubing with one end welded to the top of the right frame rail and one end welded to the top of the left frame rail and with both rising to maintain a minimum clearance with the "B" posts and follow along the inner surface of the roof panel with a minimum clearance for the roof panel. The main roll bar (#1) may be tilted a maximum of 20 degrees rearward. The main roll bar (#1) must also be braced with one (1) diagonal bar (#5) and one (1) horizontal shoulder bar (#7). All bends in the main roll bar (#1) must be as symmetrical as minimum clearances permit.

(2) The distance from the center of each of the front roll bar legs (#2 A & B) to the center of the main roll bar (#1) must not measure less than 39-1/2 inches. Each of the front roll bar legs (#2 A & B) must be constructed from a continuous length of tubing. One leg must be welded perpendicular to the top of the right frame rail and one leg welded perpendicular to the top of the left frame rail with both legs raising vertically a minimum of 21-1/4 inches before bending inward and rearward to maintain a minimum clearance with the "A" posts. Both legs must follow along the inner surface of each respective "A" post. The front roll bar legs (#2 A & B) must be welded to the roof bar (#3) near the upper corners of the windshield opening.

(3) The roof bar (#3) extends forward from the outer edges of the main roll bar (#1) with minimum clearance to the roof panel and remain parallel to the main frame rails. The roof bar must follow the contour of the windshield opening as it bends across the front and be within four (4) inches to the top of the windshield opening. The roof bar (#3) must extend from the edge of the roof on the left side across to the right side. The center to center width of the roof bar (#3) must be a minimum of 39 inches, and a minimum distance of 37-1/2 inches must be maintained from the center of the roof bar (#3) to the center of the main roll bar (#1).

(4) The centerline roof bar (#4) must be welded from the main roll bar (#1) forward to the roof

bar (#3) near the car's centerline. The center windshield bar (#4A) must extend forward from the roof bar (#3) near the car's centerline and bend downward and be welded to the dash panel bar (#8) near the car's centerline.

(5) The main roll bar diagonal bar (#5), must form a straight line, with no bends and must begin near the upper left bend of the main roll bar (#1) behind the driver's head and after intersecting the horizontal shoulder bar (#7), it must be welded to the lower right side of the main roll bar (#1).

(6) One (1) horizontal shoulder bar (#7) must be a continuous bar and must be welded, with no bends, inside the vertical legs of the main roll bar (#1) at a minimum height of 15-1/2 inches above the main frame rails. An additional shoulder belt bar (#7B) may be added above the horizontal shoulder bar (#7) to facilitate shoulder harness mounting height. The shoulder belt bar (#7B) must be welded to the main roll bar (#1) and the main roll diagonal bar (#5) or it may be bent tube

constructed of 1-3/4 inches by 0.090 minimum wall thickness steel, round tubing, meeting ASTM A-519 specification, welded at each end to the horizontal shoulder bar (#7) to form a loop above the horizontal shoulder bar (#7).

(7) The dash panel bar (#8) must be a continuous bar, with no bends, welded beneath the dash panel between the two (2) front roll bar legs (#2 A & B) at a minimum height of 15-1/2 inches above the main frame rail.

(8) (a) The door bars (#9 A & B), on both the left and right sides, must have a minimum of four (4) bars equally spaced from top to bottom that must be welded horizontally between the vertical uprights of the main roll bar (#1) and the front roll bar legs (#2 A & B). The top door bar on each side must maintain a minimum vertical height of 15-1/2 inches from the top of the main frame rails to its centerline and match up with the intersection of the dash panel bar (#8) at the roll bar legs (#2A & #2B) at the front and the intersection of the horizontal shoulder bar (#7) at the main roll bar (#1) at the rear. All door bars must be convex in shape. The door bars (#9 A & B) must have a minimum of six (6) vertical supports per side with two (2) equally spaced between each door bar. These supports must be made from a minimum of 1-3/4 inches by 0.090 inch wall thickness magnetic steel seamless round tubing (not numbered but shown in the left side view of diagram #3). Right side door bars must cover a minimum of 25 inches of door length and may be either four (4) horizontal bars with six (6) vertical studs or two (2) horizontal bars and two (2) bars configured in an X design. If the X design is used, a vertical bar must connect through the center of the X from the top horizontal bar to the frame.

(b) A 13 gage (0.0897 inch thick) magnetic steel anti-intrusion plate(s) must be securely welded to the outside of the left side door bars. The anti-intrusion plate(s) must fill the area between the horizontal centerlines of the top and bottom door bars, and vertical centerlines of main roll bar (#1), and the left front roll bar leg (#2A). The plate(s) must be formed to match the curvature of the door bars. Plate(s) welded between the vertical upright bars should be as large as possible. All plate(s) must have the corners welded with one (1) inch of weld followed by a maximum of three (3) inches of surface not welded and followed again by a minimum one (1) inch weld.

To facilitate emergency removal of the left side door bars (#9A), the anti-intrusion plate must have six (6), 2-1/8 inch diameter holes cut in the anti-intrusion plate, with three (3) holes forward of the front vertical supports and three (3) holes rearward of the rear vertical supports in the following locations:

The upper two (2) holes must be centered vertically between the left side door bars (#9A-1&2), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support.

The middle two (2) holes must be centered vertically between the left side door bars (#9A-2&3), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support.

The lower two (2) holes must be centered vertically between the left side door bars (#9A-3&4), at an on-center distance of three (3) inches from the center of the front vertical support and the rear vertical support (see Diagram #9A, in the rear pages of the Rule Book).

(9) All cars must have a foot protection bar acceptable race officials installed on the left side of the roll cage. The foot protection bar must be located at or in front of the pedal assembly, when viewed from the side and above. The foot protection bar must be completely welded to the left front roll bar leg (#2A) and extend forward and be completely welded to the main frame rail or front sub-frame.

(10) The vertical vent window bars (#10 A & B) must be welded from the upper surface of the top door bars on the right side and left side to the front roll bar legs (#2 A & B). The vertical vent window bars (#10 A & B) must be perpendicular to the top door bars (#9 A & B). An optional vertical bar may extend from the roof hoop bar (#3) radiused outward and turn down to the top horizontal door bar (#9A) on the driver's side. The minimum 1-1/2 inch magnetic steel seamless round tubing should be located in line with the driver.

(11) The two (2) angular supports (#11 A & B) must be welded to the top of the main frame rail and to the bottom surface of the bottom door bar on both the left and right side.

(12) The rear support bars (#13 A & B) must be continuous lengths of tubing welded to the left and the right back side of the main roll bar (#1) near the roof panel at the top. They must extend to and be welded to the top of the rear sub-frame rail within one (1) inch of the rear edge of the fuel cell.

(13) The two (2) front sub-frame bars (#16 A & B) must be a minimum 1-3/4 inches by 0.083 inch wall thickness magnetic steel seamless round tubing. They must be welded to the right side and the left side of the front roll bar legs (#2 A & B) at a minimum height of 15-1/2 inches. The front sub-frame bars (#16 A & B) must extend forward, turn down, and must be welded to the front sub-frame rails.

C. Gussets

(1) Gussets must be used at the intersection where the main roll bar (#1) and the front roll bar legs (#2 A & B) meet the main frame, and the gussets must be constructed using a minimum one (1) inch wide by two (2) inches high magnetic steel box tubing.

(2) Gussets must be used at the intersection where the front roll bar legs (#2 A & B) intersect the roof bar (#3), and the gussets must be constructed from a minimum 0.095 inch minimum thickness triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.

(3) Gussets must be used at the intersection of main roll bar (#1) and the front roll bar legs (#2 A & B) with door bars (#9 A & B) and the gussets must be constructed from a minimum 0.095 inch minimum thickness triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.

(4) Gussets must be used at the intersection of main roll bar (#1) and the rear support bars (#13 A & B), and the gussets must be constructed from a minimum 0.095 inch minimum thickness triangular-shaped magnetic steel flat plate measuring a minimum of 1-1/2 inches long on each side that is to be welded.

D. For the approved location of the various roll bars, please reference both the basic roll cage diagrams and the typical roll cage diagrams in the rear pages of the Rule Book.

E. No Modifications to the above outline is permitted.

F. All roll bars within the driver's reach must be covered with impact absorbent material manufactured to the SFI 45.1 specification and be acceptable to race officials. Impact absorbent material used on roll bars must meet the SFI

45.1 specification and be imprinted on the outside surface with the SFI logo.

Rulebook clarifications -

2009 RACE OF CHAMPIONS ASPHALT MODIFIED TOUR RULE CHANGES

The following is an update listing of rule clarifications for the Race of Champions Asphalt Modified Tour.

Rules for the body: Short track races will permit for the side/rear quarter panel to have modifications made to enhance potential marketing space and creativity among teams. **The events chosen are all "short track" venues which include: Chemung Speedrome and Wyoming County International Speedway**. All other events on the schedule must strictly meet the above dimensions. Please note the only change over the traditional 2006 body rules is that .040 gauge aluminum door panels will be permitted.

Unchanged body rules:

The minimum body height is 40 inches measured 6 inches back from the top of the windshield on the roof centerline.

The rear of the roof at its highest point must not be more than 3 inches higher than the actual front measurement.

The height of the roof angle, pitch and length must remain the same under previous rules.

The tail panel height must remain the same under previous rules (35 inches maximum height off the ground).

The spoiler height must remain the same under previous rules (43 inches maximum height off the ground).

The side/rear quarter panels may extend a minimum of 34 inches to a maximum of 42 inches off the centerline of the rear axle to the rear of the body (tail light panel).

Allowable changes for the new body styles:

The maximum height of the side/rear quarter panels will be no more than 46 inches - measured off of the ground.

The maximum height of 46 inches may not exceed 6 inches past the centerline of the rear axle. At this point the body must begin to taper to meet the rear deck height of 35 inches.

The side/rear quarter may extend a maximum of 24 inches forward from the centerline of rear axle forward. (This is the point where it attaches to the top of the door panel).
A window is will not be required in the side/rear quarter panel. This space can be utilized for sponsorship.

Mufflers:
A muffler is required at all Race of Champions Modified Tour events. All Spencer Speedway events will require the Lobak RCM 12" spiral flow muffler. The part number is RCM351235. This is the 12" body length – 3 ½ muffler. No alterations or tampering of any type will be permitted to this muffler. Mufflers must be removable for access and quick inspection. Any alterations will result in a disqualification.

Radios:
The Raceceiver type one – way radio is mandatory at all events in 2009. This radio is a frequency of 454.000. You may utilize any scanner that works off of this frequency. We are only recommending the Raceceiver as it is proven, cost effective and small in size. There will be a time in 2009 where starting line ups are not posted – cars will be called to their spot by using this one – way radio – this means you will want to make sure it works at all times. **2 – WAY RADIOS ARE STILL PERMITTED IN CONJUNCTION WITH THE ONE WAY FREQUENCY.** As normal, the two – way radio frequencies for each team must be registered with the R.o.C race officials.

Tires:
As discussed at the winter meetings – the tire manufacturer and compounds will not change for 2009. French's Auto Parts is the official tire vendor for the Race of Champions Tour. They can be reached at 607-774-4500. **To be eligible for point fund monies tour tires must be purchased from French's Auto Parts.** If you are not interested in season ending point fund money you must have the proper compound and manufactured tire purchased from any Hoosier Racing Tire vendor.

Weight Clarification:
Race of Champions officials reserve the right to make changes in weight if deemed necessary.
All cars must make weight after the qualifying heat races or time trials with no additions. All specific minimum car weight requirements will be with the driver seated in the car NO gas, oil or water will be added. Failure to make weight after a heat will result in starting dead last in the consolation event. When cars are scaled for weight after a race, wheels and tires cannot be changed prior.
Weight for steel headed motor minimum is 2575 lbs. Aluminum head motor weight minimum is 2600 lbs. Anything over 368 cubic inches must add 50 lbs. Maximum cubic inches is 376.
Maximum left side weight is 55% at all times.

Time trials will be conducted as follows if needed:
Qualifying: Drivers will draw a chip upon arrival at the speedway. This will determine the order that drivers will go on the speedway for time trials. The top twelve (12) fastest drivers from time trials will be qualified for the feature. Those top twelve (12) drivers will re-draw for feature starting positions per normal R.o.C procedure. Five (5) heat win bonus points will be awarded to the four (4) fastest qualifiers from time trials.

The remainder of the field will have qualifying heat races to determine feature starting positions. **These heat lineups will be determined by the original chip drawn upon arrival at the speedway – not by time trial results. These heat races will not award bonus points.**
Consolations events will be run as normal after the completion of heat qualifying races as needed.

Memberships:
Drivers are required to have a Race of Champions Tour Membership whether you are competing at one event or all events. A new 1 event temporary license is available this season. Crew memberships are also available. Race of Champions Tour Crew Memberships are not required by the R.o.C. However, events at nascar weekly racing facilities will require everyone to either possess a R.o.C license, track license or nascar license at those facilities.

Point Fund:
Point fund will be paid out at the conclusion of the season at the awards banquet. Recipients must be present at the awards banquet to be eligible for point fund monies.

2009 - 358 Steel Head Modified Motor Rules

1. Block

a) 2009 Engine blocks Chevrolet or Dart
b) Comp Series Dart little (M) No. 31131111
c) Bowtie cast iron blocks 10051183, 10185047 or stock block allowed.
d) Bore size of 4.00 to **4.060** plus or minus .005
e) No Angle cutting of Block Deck
f) Block must be mounted within 2" of centerline of lower ball joints and have securely bolted mounts
g) No Tilted blocks
h) Min 2" ground clearance on oil pan
i) All blot holes and bores must remain in OEM location

2. Crankshaft
   a) Standard steel magnetic production design crankshaft only. 2009 Minimum of 48lbs with 2.100 rod journal 2.448 main journal. Undersizing of crank journals permitted to .040 providing rod bore is 2.225.
   b) Stock stroke of 3.480 only. Tolerance of +.005 - .010
   c) Counterweights must be same shape as original OEM Mass production crankshaft use with this block
   d) Leading and trailing edges may be round nosed or Knife edged only.
   e) Mains & Rod journals may be drilled.
   f) Outside diameter of counter weights may be drilled or machined or ground for balancing
   g) No undercut or tapered counterweights. Counterweights must be same width from main and rod journals to outside diameter of counterweight
3. Rods
   a) Solid magnetic steel only
   b) Maximum length 6 inches
   c) No stainless steel, aluminum, titanium or any other materials on or in rods
4. Pistons
   a) Flat top, dished aluminum round pistons and Dome pistons permitted.
   b) Must have three functioning ring grooves
   c) Maximum overbore or 0.060
   d) No ceramic, plastics or any other materials on or in pistons (aluminum only)

5. Heads 2009 Steel head Engines
   a) GM Bowtie casing 14011034, 14011058, or 12480034 only.
   b) Dart Platinum No. 10310010P
   c) Valves Maximum size intake 2.05 exhaust 1.60
   d) No repositioning of head on block. Stock location only
   e) Valve centerline and guide angle in relationship to heads must be as OEM stock.
   f) Porting and polishing by the removal or grinding of the original casting in runners is permitted. NO Epoxy fillers, welding spray welding or any other coating or materials on or in heads.
   g) External painting is allowed.
   h) No air directional devices on any valve surface.
   i) Push rod and valve springs must be steel only – no titanium.
   j) Valve spring retainers can be titanium.

<u>Maximum compression is 12.0:1 NO TOLERANCE</u>

6. Cam / Lifters
   a) Cam and bore, lifters and bores must be in original location.
   b) Lifter steel only, solid or hydraulic with roller tappets or mushroom tapers only
   c) Rev kits permitted.
   d) Roller rocker, stud girdles, shaft rockers allowed.
   e) No gear drives or belt drives permitted.
   f) Roller cam bearings permitted.
7. Ignition
   a) HEI, MSD, or magneto allowed must be mounted to driver right and in plain view.
   b) 6ALN MSD box only. All MSD boxes will be subject to a claimer of $325.00. Refusal of claimer will result in loss of points earned to that point and no earnings for that event.
   c) Distributor must mount in stock location. Rotation and firing order must be OEM stock.
   d) No adjustable timing controls permitted.
   e) No ignition parts in driver's side area—must be mounted to driver right and in plain view.
8. Intake manifold

a) The following manifolds are legal:

i. Brodix HV 1000
ii. Edelbrock 2975 / 2999 / 2925 / 2926
iii. Bowtie 2972 / 2996
iv. Weiland Team G 7530 / 7532
v. Holly 300-25
vi. GM 10051102 / 10093374
vii. HVH 10003
viii. DART No. 42411000

2009 Intake Manifolds Maybe Ported. No welding or Epoxy fillers allowed.

b) No painting or coating.
c) Intake manifold gasket max thickness is .125
d) No Spacers between intake manifold and heads.

9. Carburetor
   a) Holley 4777 650 CFM only.
   b) No internal or external modification allowed carburetor must remain stock.
   c) Changing power valve accelerator pump and jets is allowed but must be same as OEM.
   d) Choke plate and horn may be removed. Gasket ring area must remain stock.
   e) Boosters must be stock size and location but can be aligned.
10. Carburetor Spacer
   a) One piece. Maximum thickness is 2 inches. No taper or bevel shape, spacer must conform to base of carburetor and use 2 paper gaskets that are no more than 0.065 thick each.
   b) Spacer must position carburetor over original mounting position on intake manifold.
11. Air Cleaner
   a) Round dry type diameter between 12 to 14 inches and between 1 ½ to 5 inches in height, top and bottom of air cleaner housing must be round and solid with the exception of the carburetor opening.
   b) All air that enters engine must pass through air cleaner. No devices of any kind will direct or duct air to or from filter.
   c) Filter must be centered on carburetor
   d) Shield up to one half air cleaner circumference is allowed on front of air cleaner.
   e) No performance enhancing additives or chemical on or in air cleaner or anywhere else.
12. Engine Lubrication
   a) Dry sump systems recommended.
   b) No oil, tanks or lines in drivers compartment.
   c) Maximum stages of pumps is 5. Max length 10 inches x 3 ½" across.
   d) No oil deflecting of individual rod or main journals.
   e) Oil coolers allowed. If mounted above interior sheet metal must be no larger than 5w height and 10w wide. Outside edges of cooler must be sealed with sheet metal.
   f) No partition oil pan of any kind. Oil pans subject to tech approval.
   g) 1 inch inspection plug must be placed in bottom of oil pan for inspection.
13. Engine / Car Electrical System

Ignition System

a) Approved ignition systems may be used in competition. If the crank trigger ignition system is being used, triggering devices or pick ups will not be permitted inside o f the distributor housing.
b) Ignition amplifier boxes and RPM limiters that are analog only which **do not** contain programmable, computerized, or memory circuits will be permitted.
c) Magneto systems will be permitted.
d) 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.
e) Crank trigger ignition systems will be permitted.
f) Ignition system equipment or wiring may not be located in the driver's side door area. All ignition system equipment must be mounted to the driver's right.
g) Adjustable timing controls will not be permitted.
h) No ignition delay devices permitted.
i) RPM limiting devices must be approved by ROC Officials and be attached and wired to the ignition amplifier boxes in a visible manner.

14. Alternator

The alternator system, if used, must be working within specifications and mounted on the front of the engine.

15. Starter

The self-starter must be in working order. Gear reduction starters acceptable to ROC officials will be permitted. After the race is underway, cars may be started by hand pushing in the pit area only, but under no circumstances is any car permitted to be pushed onto the race track from the pit area.

16. Battery

The battery must be located between the frame rails. The battery must be located under the hood or floor of the car. If located under the floor, the battery must be completely encased, if located under the hood; the battery must have a suitable cover. The battery must not be forward of the radiator or rear of the housing of the car. The battery location must be acceptable to ROC Officials.

17. Electrical Switch Location

All electrical switches must be located on the dashboard panel or within easy reach of the driver. A labeled on/off master switch to the battery cable must be installed on the cowl behind the windshield opening on the right side of the driver. The switch must be easily accessible and in plain view.

18. Cooling System

a) Radiator must appear and work like OEM radiator and be centered in front of engine.
b) No cooling or icing type chemicals in engine compartment.
c) Mechanical water pump in stock location turning in same rotation of crank.
e) Coolant must flow in same direction as production engine.

GENERAL RULES

RULEBOOK DISCLAIMER: The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events and, by participating in these events, all participants are deemed to have complied with these rules. **No express or implied warranty of safety shall result from publications of or compliance with these rules and/or regulations.** They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. All competitors, crew members and officials should be familiar of the rules in this book.

The tour officials shall be empowered to permit minor deviation from any of the specifications herein or impose further restrictions that in their opinion do not alter the minimum acceptable requirements. No expressed or implied warranty of safety shall result from such alteration of any of the specifications. Any interpretation or deviation of these rules is left to the discretion of the tour officials. Their decision is final.

PROCEDURAL RULES:

1. All drivers are required to attend the driver's meeting at each event. Attendance will be taken. Any driver not attending the meeting will forfeit their drawn heat starting position and will start last. These meetings are held for the benefit of the drivers.
2. The flaggers count of laps is official.
3. No drinking of intoxicants by any participants entering the pit area prior or during any of the racing activities is permitted. Anyone in the pit area suspected of drinking alcohol will be removed from the pit area.
4. At all race meets, driver and owner assumes the responsibility for the action of their pit crew in every aspect and in all areas of the speedway property. This means that no unprofessional actions of any type are permitted in the pits, on the speedway, in the grandstands or parking lots of the facility. The driver and owner shall be the only spokesperson for any team.
5. In the event of any disagreement, any member taking physical action for any reason will automatically be suspended and fined a minimum of $500. Suspension to be no less than one event and no more than four events. Any driver or owner in a physical altercation will also result in the suspension of the race car during that period.

6. IF YOU FIGHT ON THE SPEEDWAY GROUNDS IT MAY RESULT IN PENALTIES ALONG WITH CRIMINAL FILING WITH LOCAL AUTHORITIES. No one expects to build a retirement fund from their purse earnings, the racing environment is designed to be fun and safe, those that cannot comply or function in that environment will not be welcomed at the facility.
7. **No one is permitted to enter the scorer's tower during or after the racing program.** Anyone entering the tower will face a mandatory fine of no less than $250 and possible suspension. Anyone wishing to discuss a scoring decision must report to the pit steward and make a request. All scoring decisions are final but scoring sheets may be discussed ONLY Y after tour officials have a chance to review the request.
8. Both membership holders and non-membership holders are expected to adhere to all rules set forth in this book. Denial of admittance to the pits or grandstand can be made at any time by tour officials.
9. No excessive speeding is permitted in the pit area. Penalties will be issued for speeding.
10. Only safety personnel are permitted on the speedway surface during any incidents. At no time will pit crews, family members be permitted on the racing surface.
11. No repairs may be made on the speedway for any reason. The car must be pulled off the racing surface to make a repair, no matter how minor it may be. Any car that pulls off of the speedway to make a repair will start in the last position upon their return.
12. Each car must start the event under their own power or start in last position.
14. All drivers must be ready to compete and have their cars on line before each event or start in the last position.
15. Starter and race director have complete charge of speedway while racing is underway. No protests may be made regarding their decisions.
16. If there is an accident before the first lap is official, the field will be restarted with the car or cars involved in the caution falling into the rear of the field.
17. Any car that is involved, spins or stops to avoid an incident is considered to be involved in the caution. Better to stop and try to avoid a wreck and restart in the back of the field then to try and drive through or over a wreck and end upon the tow truck and out of the event.
18. If a caution is thrown in turn 1 for a mishap and a car spins in turn three after the initial caution, they are eligible to remain in their spot prior to the spin. Only the cars involved in the initial incident location will be sent to the rear.
19. ON a caution or red flag, any car going into the infield or pit area must return at the rear of the field.
20. Anytime the red flag is displayed. All cars are to slow and then stop as soon as safely possible. No cars are permitted to enter the pit or infield area or move once the red flag has been displayed. No car may be worked on during a red flag period.
21. Any driver causing excessive delays in a race, such as spinning out three times on their own will be sent to the pits. Drivers not maintaining a competitive and safe speed will be sent to the pits.
22. ALL RESTARTS WILL BE DOUBLE FILE UP UNTIL THE HALFWAY POINT OF THE RACE UNLESS TWO CAUTIONS OCCUR ON THE SAME LAP. CARS WILL THEN RESTART SINGLE FILE. AFTER THE HALFWAY POINT,RACING WILL RESUME IN A SINGLE FILE RESTART. WHEN THE YELLOW IS DISPLAYED ALL DRIVERS ARE TO FALL INTO SINGLE FILE SO THAT SCORERS CAN REVIEW THE LINEUP - **ANY DRIVER FAILING TO FALL INTO SINGLE FILE FOR ANY REASON WILL BE SENT TO THE REAR.** DURING YELLOW FLAG PERIODS, OFFICIALS ARE ON THE SPEEDWAY TENDING TO AN INCIDENT. DRIVING IN A DOUBLE FILE FASHION CAN INJURE SOMEONE. THIS WILL NOT BE ALLOWED AT

ANYTIME. ONCE THE SPEEDWAY IS CLEAR THE STARTER WILL CALL THE FIELD TO A DOUBLE FILE FASHION.

23. Any driver that challenges their on track position will be sent to the rear of the field. Under each yellow flag period, the scorers check the standing line-up, pulling out of line will not change the written starting order. This is an unsafe practice and will not be tolerated.
24. The leader has the option of starting on the inside or outside of the front row on restarts. That same leader will restart the race at the designated starting point.
25. Any driver guilty of violating any of the flag rules will be penalized at the discretion of the starter and race director.
26. Rough riding decisions will be left up to the discretion of on track officials and the race director. Drivers may be fined up to $500 for rough riding and suspended for up to three weeks.
27. Any driver being fined or suspended for any speedway infraction will have their payout held on the night of the event. Any fine amount will be deducted from the purse payout with any remainder paid back to the driver or due upon return to the next tour event.
28. Anytime the word "stock" or OEM is used in this rule book to describe a part or component, it is defined to mean a part or component that is available over the counter - untouched or unaltered from General Motors, Chrysler Corp, Ford Motor Company or AMC authorized dealers.
29. **No driver is permitted to stop at the flagger stand for any reason.** Any time the flagger has to stick his head into a stopped car on the homestretch he is in a position to be injured. The only time that a driver may stop to communicate with a track official is when debris is on the race track. Driver should pull to the inside of the backstretch racing surface and communicate this to the backstretch official. No positions may be questioned by stopping on the speedway.
30. The top five cars in each division will be weighed immediately following their feature event. Other inspections may take place as well after the feature event. A possible randomly drawn car may also be weighed or teched post race. Any illegal car will forfeit their earnings and points for that event.

FLAG RULES

GREEN FLAG: Indicates the start of the race or warm up session. On an original start, all cars must stay in line until they reach the cone on display in turn 4. This means no passing until your race car gets to that spot (not when the leader hits that spot). Only exception to the rule is when a car experiences a mechanical problem that slows the field.

YELLOW FLAG: Indicates a hazard, debris or accident on the speedway. When the yellow flag is displayed drivers are to slow down immediately. Any driver trying to gain positions by passing under the yellow flag will be sent to the rear of the field. There is absolutely no racing under yellow flag conditions.

A. In the event that a pace car is used, no one is permitted to pass the pace car unless directed otherwise. Anyone passing the pace car will be penalized one lap.

B. Passing other cars under the yellow flag will result in a penalty of being sent to the rear of the field.

C. In championship events in which the yellow flag laps will be scored, the race must finish under green. The final two laps will be held under green flag conditions meaning a race could go past the original laps should a caution come out with one lap to go. Example - yellow comes out on lap 99 of a 100 lap event - yellow flag laps will be counted until the green comes out, the race could windup being official at lap 104.

RED FLAG: Indicates an immediate danger on the speedway or a violent crash has taken place. The red flag will be displayed maybe also displayed during a rain delay situation. Drivers are indicated to slow down then stop as soon as safely possible. No work of any kind may be done to a race car under a red flag condition.

BLACK FLAG: May be used to indicate a penalty, too slow of a pace, or a possible mechanical malfunction. A black flag will be displayed to indicate a possible problem. The black flag will be displayed for two laps on a particular car - on the third lap the car will no longer be scored. If the black flag is displayed for a mechanical problem the yellow flag may be displayed to avoid a possible on track hazard. Once the black flag is displayed on a car they are to pull into the infield or pit area in the safest possible fashion as soon as possible.

BLUE AND YELLOW LAPPED FLAG: Indicates a driver is about to be lapped. Driver is asked to pull to the bottom of the speedway allowing the leaders the opportunity to cleanly pass. Any driver ignoring the lapped flag will risk the chance of no longer being scored and being displayed the black flag.

WHITE FLAG: Indicates one lap is left in your event. Could be used in warm-ups and racing events. White flag will also be displayed one lap prior to a restart situation to indicate a green flag is going to come out.

CHECKERED FLAG: Indicates the (end of the event. When the checkered flag is displayed to the leader, the balance of the field receives the checkered flag in the same lap. Finishing positions will be paid off according to most laps completed in the least time, regardless of whether the car is still running or not. A yellow/checkered flag being displayed will result in the event being

Additional Guidelines: The driver that receives the checkered flag first in any feature race must report to the scales and then immediately to victory lane to participate in post-race ceremonies. The race winner is to remain in victory lane until released by a tour official.

Additional Procedural Guidelines:

1. Any team may as a matter of right, protest any violation of the rules including specifications. Visible protests must be made before event. Any time a tool or mechanical device has to be used by an official to determine a car's legality it is not considered a visible protest. For the purpose of a subsequent appeal, any track officials measurements are presumed to be correct and cannot be-appealed absent a showing of a mistake or prejudice.
2. All protests involving a particular event must be in writing, specifying the matter of protest, no later than ten minutes after completion of the event in which the alleged violation occurred. Each separate protest shall be given to the Pit Steward,
   accompanied by $200 (U.S. Funds) cash or bond protest fee, with the following exception on fees: P & G Test - $125 - Motor Tear Down - $300- In the event of a motor tear down, the team being protested is found to be legal they will receive $200. If the team is found to be illegal, the protesting team will receive $200 back.
3. A protest of race results must be made orally within 5 minutes upon the completion of any event to the Pit Steward. At that point officials will re-check the official finish prior to posting it as official.
4. Race and specification protests can be rejected at the discretion of tour officials if it is considered to be an unreasonable or harassing effort on the part of the protesting team.
5. Any time you protest another car for specifications you must be able to prove that your car is legal for the same item you are protesting.

THE RACE OF CHAMPIONS TOUR MANAGEMENT RESERVES THE RIGHT TO CHANGE ANY RULE OR RULES IF THEY FEEL IT IS NECESSARY IN THE BEST INTEREST OF RACING. ALL FINES AND/OR SUSPENSIONS WILL BE IN EFFECT AT ALL RACE EVENTS. THE INTERPRETATION AND INVOKING OF THE RULES HEREIN SHALL BE DETERMINED BY TRACK OFFICIALS ONLY IN THEIR PROFESSIONAL DISCRETION. THE RULES SETFORTH IN THIS BOOK ARE A GENERAL GUIDELINE AND IN NO WAY ARE IMPLIED TO PREVENT INJURY OR DEATH.

PROCEDURAL RULES – SUMMARY

1. Location for original starts will be announced at mandatory drivers meeting at each facility – Flagger starts the race. Leader starts the race on restarts at the designated restart line or position. Nose to tail for restarts, simple fact is if you can see the back bumper of the car in front of you, you won't be called on a jump. First improper start results in a restart. Second improper start, the cause of the improper start goes to the rear of the field. If the leader is jumped on a restart, the race will still go green with the yellow being displayed on the backstretch to avoid any "brake check" situations.
2. Penalty for jumping restarts – If you have advanced your position, at the next caution you will go back to the position you were in when you jumped. (Start in position five (5), jump the start, you will return to position five (5) when the next yellow is thrown. If there are no yellows prior to the finish of the event, your finishing position will revert back to fifth place (even if you cross the line in the first position).
3. All restarts will be double file up until the halfway point of the race. (**Exception: Numerous cautions or track conditions that require a single file restart prior to halfway may be deemed necessary**. When the yellow is displayed, **ALL** drivers are to fall into single file so that scorers can review the lineup – **ANY DRIVER FAILING TO FALL INTO SINGLE FILE FOR ANY REASON WILL BE SENT TO THE REAR.** During yellow flag periods, officials are on the speedway responding to an incident. **DO NOT JEOPORDIZE THE SAFETY OF AN ON TRACK OFFICIAL TO TRY AND GAIN A SPOT UNDER YELLOW!** Driving double file under yellow to challenge a spot will **NOT** be allowed at any time. Once the speedway is cleared, the starter will call for the field to re-assemble in double file fashion.
4. **ANY DRIVER THAT CHALLENGES THEIR ON TRACK POSITION WILL BE SENT TO THE REAR OF THE FIELD.** Under each yellow flag period, the scorers check the standing lineup, pulling out of line will not change the written starting order. This is an unsafe practice and will not be tolerated.
5. Any car that is involved, spins or stops to avoid an incident is considered to be involved in the caution. Better to stop and try to avoid a wreck and restart in the back of the field then to try and driver through or over a wreck and end up on the tow truck out of the event.
6. If a caution is thrown in turn one (1) for a mishap and a car spins in turn three (3) after the initial caution, that driver is eligible to remain in their spot prior to the spin. Only the cars involved in the initial incident location will be sent to the rear.
7. No repairs are to be made on the speedway or on pit road at the turn four exit, for any reason. The car must be pulled off the racing surface to make a repair, no matter how minor it may be. Any car that pulls off of the speedway to make a repair will start in the last position upon their return.
8. No driver is permitted to stop at the flagger stand for any reason. Any time the flagger has to stick his head into a stopped car on the homestretch he is in a position to be injured. The only time that a driver may stop to communicate with a track official is to notify the official of debris on the racing surface. Driver should pull to the inside of the backstretch racing surface and communicate this to the backstretch official. No positions may be questioned by stopping on the speedway.
9. If you are involved in an accident on the speedway **STAY IN YOUR RACECAR** unless a safety issue arises. If you do not stay in your car it will be towed to the infield and not the pits. The tow truck drivers need to be informed as to where your parking spot is.
10. Any competitor who uses their car to ram or spin another competitor or retaliates to such, while running under caution or at the completion of an event, will be disqualified for the night. IN addition, drivers are responsible for their own actions, and the actions of their crew, families and friends. Any member of a race team that enters another pit area or tower for purposes of confrontation, altercation or intimidation or takes physical action against any tour official, will be disqualified for the night. There will be no money or points awarded as a result of the disqualification. Such action may also result in the revocation of racing privileges.