

2008 OSHKOSH SPEEDZONE AMENDMENTS

GRAND NATIONALS

Amendment for Grand Nationals rule FRAMES: 1978 to 1988 GM metric frames only unless run previously. All cars must maintain a minimum wheelbase of 108.0 inches at all times. The measurement from the grease fitting on the lower ball joint to the center of the rear axle must be identical from side to side. Frames must be X-ed; side rails must be plated where open. Front cross member may be notched and plated for fuel pump clearance and non-Chevrolet engine installation only. Cross member notch for non-Chevrolet engine installation may not exceed 2-inches. Weight jacks or screw jacks allowed. Frame rails behind rear spring pockets may be cut and fabricated. No other improvements allowed except to repair rusted or damages areas or as noted for specific items.

Amendment for Grand Nationals rule ENGINE:

Cylinder Heads: Stock steel production or World Products S.R. 4266B, 4267B, 4360 or 4361. No alterations of any kind allowed to the original "as cast" configuration. ~~Angle milling of head is prohibited.~~ Stock valve guide length required. No bowl cutting permitted. Minor relieving for push rod clearance. No Bowtie, Vortec, fuel injection type, SVO, W2, GT 40 or other after market heads allowed. Only two valves and one spark plug per cylinder. No titanium parts allowed in the valve train. Valves must be stock production size and in stock location. Small block Chevy maximum valve size is 2.02" intake and 1.60" exhaust, measured across the face of the valve. Stock production valve spring diameter for heads used only. Beehive springs are prohibited. Screw in studs and guide plates allowed.

Engine Location: Engine must be centered between frame rails. Engine Set-Back to be measured as 33 1/2" from top steering box mounting bolt to rear of engine and 15 1/2" from steering box mounting bolt to #1 cylinder spark plug. Engine Set-Back for non-Chevrolet motors will be determined by the difference between the measurement from the center of top steering box mounting bolt on the frame to back of engine minus the measurement from the back of the engine to the center of #1 factory spark pulg hole. This dimension must not exceed 15 1/2 inches. Crankshaft centerline a minimum of 7 1/2" from bottom of front cross member. No traction control devices allowed.

Amendment for Grand Nationals rule TRANSMISSION AND DRIVE TRAIN:

Rear End: Stock rear end matching frame or Ford 9". No aluminum parts except drive plates and spools. No offset allowed. Drive flanges to be of equal distance on both sides of frame. No independent rear end. Rear trailing arms must remain mounted in stock frame locations. One hole upper and lower on the rear end housing for each trailing arm mount location. No after market limited slip or ratchet style rear ends. (Example: Gold Track, True Track or Gleason, etc.). No gun drilled axles.

Grand Nationals

Must meet all Track Operational Rules and the following:

FRAMES: 1978 to 1988 GM metric frames only unless run previously. All cars must maintain a minimum wheelbase of 108.0 inches at all times. The measurement from the grease fitting on the lower ball joint to the center of the rear axle must be identical from side to side. Frames must be X-ed; side rails must be plated where open. Front cross member may be notched and plated for fuel pump clearance only. Weight jacks or screw jacks allowed. Frame rails behind rear spring pockets may be cut and fabricated. No other improvements allowed except to repair rusted or damages areas or as noted for specific items. **See diagram.**

ROLL CAGES: Four-point roll cage constructed of 1 3/4" x .095" wall steel round tubing. One front and one rear cross brace, recommended height at 20". The main hoop behind driver must be cross braced. Two passenger side and four driver side door bars, with driver side door bars plated and having two upright bars between each driver door bar. Wing window bars on drivers side mandatory; passenger side recommended. Foot protection bar (may be plated for added safety). Two front support bars must start at cross brace height at roll cage corners and extend forward to frame. Four rear support bars must extend to frame, two starting at the rear cross brace at roll cage corners and two from the top corners of the rear cage hoop. Halo bar must have one cross bar running either front to back, or diagonally, made of 1 3/4" x .095 wall round steel tubing. **See diagram.**

DRIVER'S COMPARTMENT: Seat belt and shoulder harness must be date stamped, 2006, 2007, or 2008 and be in good condition. Y-type shoulder harness prohibited. Belts must not be frayed. Seat belt and shoulder harness must be installed according to manufacturer's recommendations. Lap and shoulder belts must be approved snap-type release belts at least three (3) inches wide and securely fastened to the frame and or roll cage. A crotch or anti-submarine belt is mandatory, and must be a minimum two (2) inches wide. The shoulder belts must be mounted level with or slightly below the driver's shoulders. At no time should the shoulder belts wrap around the top of the driver's shoulders and mount to the floor.

Window net required, large mesh type highly recommended. Net should release from top front corner with a seat belt snap and drop downward. Net must be up and fastened at all times while car is on the track.

All cars are required to have adequate roll bar padding and an approved fan shroud.

The center of the steering wheel must be padded.

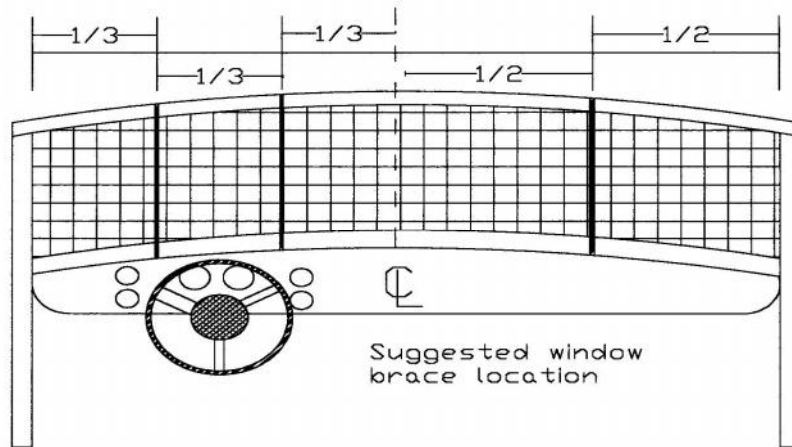
All roll cages must provide 2" or more clearance, measured from the bottom of the roll cage to the top of the driver's helmet, when the driver is seated and strapped in, with the helmet on and in a driving position.

Aluminum, high back racing seat is mandatory. Seat must be bolted securely with a minimum Grade 5, 3/8" minimum diameter bolts in a minimum of six (6) places. Four (4) in the bottom of the seat and two (2) in the back. No carriage bolts.

All in-car communication devices are prohibited. A SW1600 model Raceciever, tuned to channel 1561 (469.500) is mandatory.

BODIES: 1960 or newer U.S. manufactured production auto. No pickups, station wagons or convertibles. Other models may be approved by Speedzone officials, provided they are of the same body configuration and meet the spirit and intent of competitive racing. Cars must be stock appearing. Five Star "Dirt Sportsman Short Track" body dimensions will be used as a guide to determine stock appearance. The car at its widest point including rub rails, tires, etc. may not exceed 78". Body must be neat and well painted. Hood must be steel, aluminum or fiberglass and the back of the hood must be sealed down completely; no holes, hood scoops or air induction of any type allowed. Two and one half (2 1/2") nonfunctional hood scoop allowed. Must have hood to start a race. Hood pins must be used for securing hood and trunk. Plastic front fenders allowed. Door panels and rear quarters must be stock sheet metal or aluminum with the door handles, locks, moldings, factory plastic & chrome pieces removed. Nose of car must look stock appearing and neat looking - no wedge type or late model noses.

Nose and tail pieces can be aftermarket plastic. Rear of car, fender to fender above bumper must be completely enclosed. No glass or plastic windows allowed. Entire windshield area must have 1" or smaller steel screen; minimum of .063" for mesh larger than 1/2" or minimum of .035" for 1/2" or smaller mesh. Screen must be supported with minimum of three braces top to bottom of 3/8" or larger solid rod. Two of the reinforcements must be evenly spaced on the driver's half of the windshield opening and one reinforcement must be centered on the passenger's half of the windshield opening See diagram.



Spoiler allowed on rear of trunk lid maximum of 6" from base to tip. Rear spoiler to be 60½" wide at widest point; no sideboards. No rear window for safety reasons. Interior sheet metal to cover all openings: front; rear; and side. Tapered floor from driver to right side can be any style as long as it is no higher than cross brace. Floor plate minimum 1/8" steel, 20" wide required from under driver seat to pedals. No mirrors of any kind allowed.

ENGINE:

Block: American made production cast iron V-8 with standard external measurements in all respects with the exception of bores a maximum of .060 over. No Bowtie, Rocket, SVO, 'X', or 'R' blocks allowed. No grinding, lightening or removing of casting and/or part numbers allowed.

Crankshaft: OEM stock production with I.D. numbers intact, stock stroke for the block being used and remain unaltered except for balancing. Other aftermarket crankshafts may be permitted provided the journal diameter and stroke are the same as OEM. Lightweight, knife-edge, and undercut counterweight crankshafts are prohibited. Minimum crankshaft weight is 48.0 lbs.

Rods: Forged magnetic steel connecting rods only. Stock OEM length for block being used. Maximum 5.7" length for 350 CI Chevy. 400 CI Chevy may use 5.7" length rod. Other model engines must use OEM rod length that matches block being used. H-beam not allowed. Through bolts or cap screws allowed.

Pistons: Any flat top or reverse dome. Valve relief may be cut. No portion may protrude above the top of the block. Pin placement must remain stock for the engine used (except 400 CI Chevy).

Camshaft: Steel hydraulic or flat tappet with a maximum of .500 lift measured at the retainer.

Stock diameter tappets only. No mushroom or roller tappets. No stud girdles or rev kits. Standard timing chain only - no gear drive or belt drives will be allowed. Roller rockers and roller tipped rockers allowed. No shaft rockers.

Cylinder Heads: Stock steel production or World Products S.R. 4266B, 4267B, 4360 or 4361. No alterations of any kind allowed to the original "as cast" configuration. Angle milling of head is prohibited. Stock valve guide length required. No bowl cutting permitted. Minor relieving for push rod clearance. No Bowtie, Vortec, fuel injection type, SVO, W2, GT 40 or other after market heads allowed. Only two valves and one spark plug per cylinder. No titanium parts allowed in the valve train. Valves must be stock production size and in stock location. Small block Chevy maximum valve size is 2.02" intake and 1.60" exhaust, measured across the face of the valve. Stock production valve spring diameter for heads used only. Beehive springs are prohibited. Screw in studs and guide plates allowed.

Oil System: After market oil pans and breathers allowed. One inch (1") inspection hole in oil pan is recommended for viewing crankshaft markings. Oil pump must remain in stock location. No dry sumps or external oil pumps allowed. Oil cooler must be in engine compartment. Oil accumulators (Accusump's) may not be located in the driver's compartment.

Intakes: Stock production cast iron for engines over 365 cubic inch. The following aluminum intake numbers allowed on 365 cubic inch or less - GM: Victor Jr 2975 or 2972 and 2101, Wieland 7546 or 7547. Ford: 2981 or 2760 and 2665 or 2750, Cleveland 7516 or 7517. AMC: 2930 or 2035. Chrysler: 2915 or 2176. Elderlbrock: 7101 and 7501. No marine type intakes. No alterations of any kind allowed.

Exhaust Manifolds: OEM cast iron or headers. No 180 degree headers or step headers. Exhaust must exit under car, behind driver.

Ignition: Factory type ignition, no Multi-spark discharge or mags. HEI type distributors must have the coil mounted in the distributor cap. Single chip rev limiter systems allowed.

Carburetor: A single 2 or 4 barrel carburetor with maximum spacer height of 1-1/4". Only 2 gaskets (1 per side), with a maximum thickness of 0.065 inches, may be used on the adapter plate. Two carburetor return springs, mounted in two directions, required. No throttle cables allowed, must be mechanical linkage. Toe strap on gas pedal required.

Radiator: After market aluminum water pump allowed. One radiator only. Must be in front of motor. Metal shroud to cover top 180 degrees of fan. Absolutely no anti-freeze in radiator. Two-quart overflow can mandatory. No devices permitted that spray liquid onto radiator.

Starter: Mini-Starter allowed. No reverse mounted starter.

Engine Location: Engine must be centered between frame rails. Engine Set-Back to be measured as 33 1/2" from top steering box mounting bolt to rear of engine and 15 1/2" from steering box mounting bolt to #1 cylinder spark plug. Crankshaft centerline a minimum of 7 1/2" from bottom of front cross member. No traction control devices allowed.

OPTIONAL ENGINE: Only V-8 engines with a maximum displacement of 360.0 cubic inches are permitted. The maximum compression ratio is 11.00 to 1. Engine must be sealed by a Speedzone Technical Official.

Block: Block must be a factory production **cast iron** block with external measurements identical to the standard production engine. Angle milling of block is prohibited. **All** engine block markings must remain. No aluminum engine blocks permitted. The maximum cylinder bore is 4.060 inches.

Crankshaft: Titanium crankshafts are prohibited. Only OEM cast iron or forged steel, or the following aftermarket crankshafts are permitted:

Manufacturer	Pro-Line	Scat	C.A.T.	Eagle
GM	-----	5-350-3480-5700	-----	435034805700
FORD 351W	-----	4-351W-3500-6000	-----	435135006200

Crankshafts with rod journal sizes less than 1.970 inches or undersized rod journals less than original factory specifications are prohibited. GM crankshaft must have a 3.48 inch stroke. Ford crankshaft must have a 3.50 inch stroke. Minimum crankshaft weight is 50 lbs. Lightweight, knife-edge, and undercut counterweight, crankshafts are prohibited. Steel type balancer only - aluminum balancers are prohibited.

Rods: Titanium rods are prohibited. Only OEM magnetic steel, or the following aftermarket, connecting rods are permitted:

Manufacturer	Pro-Line	Scat	C.A.T.	Eagle
GM	ROH-1-1	2-350-5700-2000	CRS-5700	CRS5700B3D
FORD 351W	ROH-2-6	2-351-5955-2311-912	CRS-5956	CRS5956F3D

Piston: Any flat top, dished, or inverted dome piston may be used. Valve reliefs may be cut into pistons. No part of the piston may protrude above the top of the block. Wrist pin hole must be in the stock location.

Camshaft: Any steel or cast-iron camshaft may be used. Chain and sprocket camshaft drive system only. Camshaft journals must be stock for engine. Rollerized camshaft bearings are prohibited. The maximum camshaft lift is 0.500 inches, measured at the valve. Roller tappets are permitted. Any steel solid lifter is permitted. Hydraulic lifters of any type are prohibited. Rev kits are prohibited. Only the following lifter diameters are allowed:

Manufacturer	Maximum Diameter
GM	0.843 inches
FORD	0.875 inches

Only magnetic steel push rods are allowed. Roller rocker arms are permitted. Shaft type rocker arms are prohibited. Stud girdles are permitted.

Cylinder Heads: Only the following approved cast iron cylinder heads may be used:

Manufacturer	Cylinder head	Intake Runner Volume Measured in cc's
GM	World Products Sportsman II WRDO11150	200 cc's
FORD	M-6049-N351	195 cc's

Cylinder heads must remain stock. All cylinder head markings must remain. Angle milling, chemical treating, acid dipping, acid flowing, abrasive blasting, bowl cutting, addition of material to the ports or combustion chamber, or

other alterations to the original, as cast, head is prohibited. Valves, rocker studs, head bolts, and spark plugs may not be relocated. No polishing or grinding of ports, runners, or combustion chamber is permitted. The cylinder head to block surface may only be machined a maximum of 0.050 inches from OEM. Minimum combustion chamber size shall be 62.0 cc's for all models. A three angle valve job may be done as long as no machining marks are more than 1/8" above the head of the valve. The maximum valve sizes, as measured across the face, are as follows:

Manufacturer	Intake	Exhaust
GM	2.020 inches	1.600 inches
FORD	2.020 inches	1.600 inches

Use of titanium valves is prohibited. The maximum allowable spring diameter is 1.57 inches. Beehive valve springs are prohibited.

Oil System: Steel oil pan only. All aftermarket oil pans must have an O.E.M style pan rail. 1 inch plug in oil pan for inspection recommended. The plug must be directly inline with a rod journal. Engines equipped with a windage tray must provide a hole in the tray, in line with the plug.

Intakes: Only the following approved intake manifolds may be used:

Manufacturer	Intake Manifold
GM	Victor Jr. 2975
FORD	Victor Jr. 2981 (Ford Part No. M-9424-V351)

No material may be added to the intake manifold. Grinding or polishing of the ports is prohibited. Port matching of the intake manifold is prohibited. Only one flat gasket, with a maximum thickness of 0.120 inches, may be used between the intake manifold and cylinder head. No spacer or wedge type gaskets are permitted between the intake manifold and head.

Exhaust Manifolds: Stock cast iron exhaust manifolds or headers permitted. No 180 degree headers, or merge collectors. Maximum O.D. of headers 1 3/4 inches. Exhaust must exit under car, behind driver and be angled down. Mufflers are mandatory and car must pass noise level test (95 decibel at 50 feet).

Ignition: Factory type ignition only. Multi-spark discharge or mags prohibited. MSD, HEI ignition, with traction control detection module (PN 83645) and internal HEI coil (PN 8225) permitted.

Carburetor: One (two or four barrel) carburetor only with maximum spacer height of 1 1/4". Only 2 gaskets (1 per side), with a maximum thickness of 0.065 inches, may be used. Two return springs mandatory. No throttle cables allowed must be mechanical linkage. Toe strap on gas pedal required.

Radiator: Stock cast iron or after market aluminum water pump. One radiator stock brass or aluminum in front of motor. Metal Shroud to cover top 180 degrees of fan. No electric fans. Absolutely no anti-freeze in radiator. Two-quart overflow can mandatory. No devices permitted that spray liquid onto radiator.

Starter: Mini-Starter allowed. No reverse mounted starter. Must be able to start car.

Engine Location: Engine must be centered between frame rails. Engine Set-Back to be measured as 33 1/2" from top steering box mounting bolt to rear of engine and 15 1/2" from steering box mounting bolt to #1 cylinder spark plug. Crankshaft centerline can be no less than 7 1/2" from bottom of front cross member.

Optional Engine Weight: The minimum weight for all cars with the Optional Engine is 3100 pounds. All weights are with the driver, **after competition**. The weight on Optional Engine cars will be periodically reviewed and adjusted up or down as necessary to ensure uniform competition.

TRANSMISSION AND DRIVE TRAIN:

Transmission: 3 or 4 speed unaltered U.S. manufactured passenger car or light truck transmission only. Converterless automatic transmission allowed. Flex plate must be steel, unaltered OEM, or OEM replacement only. No lightweight, spoke type, flex plates allowed. Steel blow proof bell housing. Upper 270 degrees of bell housing must remain in tact.

Flywheel: Unaltered stock or after market. Except for balancing and resurfacing. Clutch and pressure plate may be 10-1/2" diameter. 7 1/4" minimum diameter, closed style, steel and or aluminum, single or multi disc clutch allowed. V-drive clutch prohibited. Flex plate must be steel, unaltered OEM, or OEM replacement only. No lightweight, spoke type, flex plates allowed. Magnetic steel drive shaft, 2 1/2" O.D. minimum, painted white with car # marked on it (recommend also etching car number). Steel safety loop minimum 1/8" x 1" located 10-12 inches from tail stock of transmission.

Rear End: Stock rear end matching frame or Ford 9". No aluminum parts except drive plates and spools. No offset allowed. Drive flanges to be of equal distance on both sides of frame. No independent rear end. Rear trailing arms must remain mounted in stock frame locations. One hole upper and lower for each trailing arm mount

location. No after market limited slip or ratchet style rear ends. (Example: Gold Track, True Track or Gleason, etc.). No gun drilled axles.

SUSPENSIONS AND STEERING: Steering wheel must be quick release style. Stock steering box and linkage only. Outer tie rod end may be replaced by 0.625-inch, steel, heim joint with a steel adjuster sleeve, and steel jamb nuts. Steering quickener allowed. Steering shaft must have 2 U-joints or be collapsible style. Stock lower 'A' arms only in stock mounting positions. Front upper control arm may be replaced with complete steel tubular drop in replacement, one-piece control arm of stock length (8"). Must be plus or minus 1/2" of stock length using stock ball joints. No cutouts or modifications allowed. No aluminum components allowed. Stock unaltered spindles and rotors except for wheel bolt pattern. No after-market or dropped spindles. Steel body shocks only, one per wheel at any mounting position. No externally adjustable, coil over, air, or remote reservoir shocks. No Schrader or gas fill ports. A Coleman hub may be used on the front only. All A-frame, trailing arms, steering components and suspension mountings must remain stock for frame in factory frame position. Stock dimension ball joints only. Any O.E.M. type sway bar permitted. One hole allowed in frame for mounting. Unaltered stock or neoprene replacement bushings only. No offset bushings or offset bearing type (mono ball) allowed.

BRAKES: Four-wheel foot operated hydraulic brakes in working order. Dual master cylinder allowed. Limiting or proportioning valves okay. GM Metric frames must use unaltered GM Metric calipers only. No after market caliper replacements. Brake shut off valves are prohibited.

FUEL AND TANKS: EA85 fuel permitted. Pump gas only, no aftermarket alcohol or additives permitted. Approved fuel cell to be enclosed in 22 gauge sheet metal with 2 straps in both directions. Straps to be 1" X 1/8" steel. Ground clearance minimum of 10". A protection bar at rear of fuel cell is required. Minimum of 1 1/2" X .065 Wall Square tubing fuel cell hoop with two or more braces to frame. (One on each side of the fuel cell.) Fuel cell to be filled from top and have approved cap. No fuel lines in driver area. Stock style fuel pump in stock location. No electric or belt drive pumps. No bottom draw fuel cells. Outlet must be on top. The fuel cell breather or vent must have a one-way check valve to prevent spillage in case of a rollover and end below bottom of tank.

BUMPERS AND PROTECTION BARS: Stock bumpers may be reinforced; ends must be strapped to fenders. Must have both bumpers to race. Radiator protection bar may be no higher than the front of the hood or exceed 8" above the frame rail and no wider than the frame rails and may not extend beyond the front of the bumper. Trunk protection bar no higher than rear of trunk lid. Protection bars to be 1 3/4" X .095 wall round tubing or smaller. Side protection bars to be no larger than 1" X 0.095 wall square tubing with the ends capped at 45-degree angle. Polycarbonate rub rails allowed.

WHEELS AND TIRES: Wide five wheels are prohibited. After market 15" diameter by 8" wide steel racing wheels only, weighing a minimum of 19lbs. Bead locks are allowed on the right rear only. 1" hex steel lug nut mandatory. Studs must pass through lug nut completely. Hoosier "E-MOD RC-4" tires only. No alterations of any kind allowed. Tire reconditioning to be done with fiber disk, 16 grit or finer. Metal disk prohibited. Tire reconditioning subject to approval of Speedzone Officials. One foam type or press-in soft plastic mud plug allowed on right rear only. Polycarbonate style mud plugs are prohibited. Compression ring style mud plugs are prohibited.

TIRE DUROMETER LIMIT: Five cars will be selected, at random, prior to the start of qualifying races. Durometer readings will be taken at three points across the rear tires (outside, middle, inside) of each car. The readings will be averaged together. The minimum allowable durometer reading of any tire prior to the qualifying races, B Main race, and A Main race will be ninety percent (90%) of the average reading.

Example: Average durometer reading of five selected cars: 50
 Minimum allowable reading prior to race: 45

ELECTRICAL: 12 volt electrical system only. One 12-volt battery only, which must be located behind driver area, between the frame rails, no lower than the bottom of the frame rail, and securely fastened. The positive terminal must be covered. On/off and start switch to be clearly marked in driver area and easily reached by driver and safety crew. In addition to the ignition switch, a battery disconnect switch, mounted behind the driver and within reach of the safety crew, is also required. The disconnect switch must shut off all power to the car.

WEIGHTS: Weights to be bolted securely and painted white with car number and division on each weight. Loss of weight during a race will disqualify driver for the night. No weights allowed in driver's compartment.

Added weight (ballast) may be steel or lead. All weights must be securely attached. Loose weights are prohibited. Added weights must be painted white and have car number on each piece. Weight must be secured by no less than two 1/2-inch diameter bolts. The maximum spacing between bolts is 10 inches. No more than 50 pounds of weight for every two bolts. No weights may be added outside the body or inside driver's compartment. Weights added behind the rear end shall be no lower than the bottom of the frame.

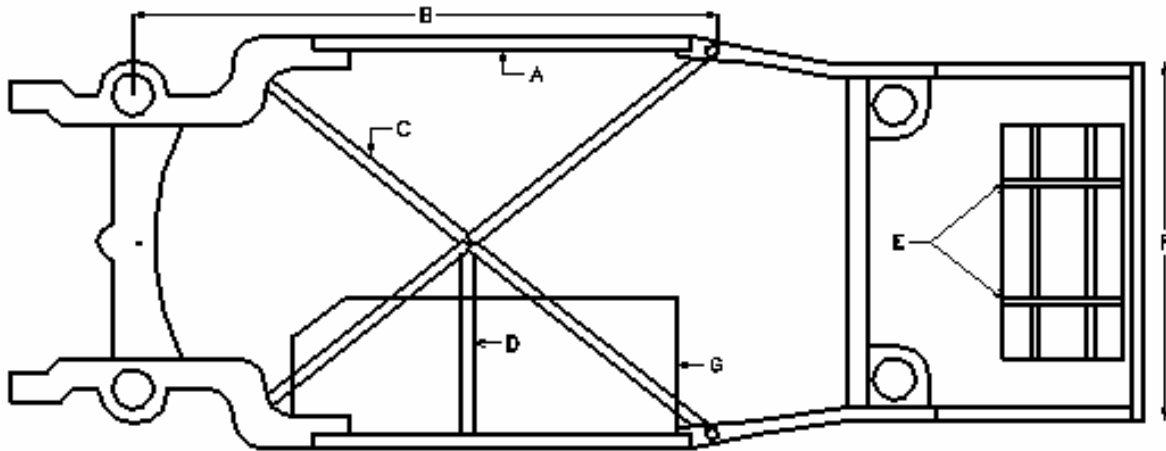
MIRRORS: Mirrors are prohibited.

DRIVER'S SAFETY: A, full face, helmet and face shield that meets SA2000 Snell Foundation specifications is mandatory. It is recommended that a driver wear a SFI fire retardant head sock and underwear (Mandatory for driver under the age of 18). All drivers must have sufficient eye protection while on the track. Goggles or shield are mandatory.

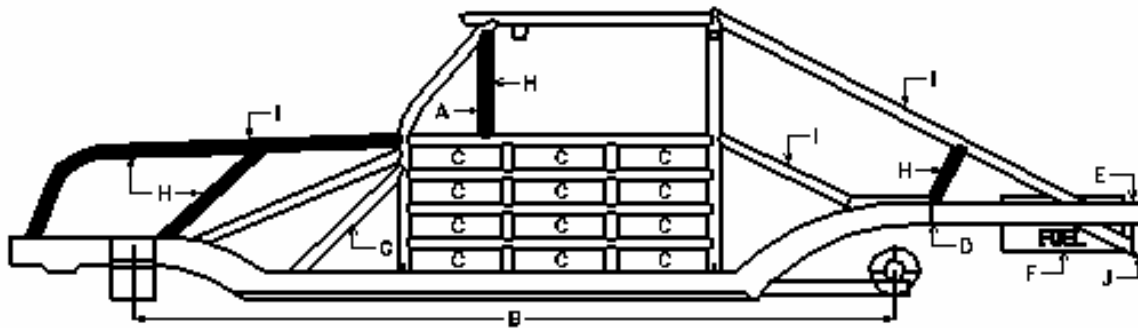
SFI approved fire/driver suit mandatory. Neck collar optional. Drivers not wearing a neck collar will be required to wear a fire retardant head sock. Head and neck restraint recommended. Condition of suit is subject to safety inspector approval. May be two- (2) piece. SFI Fire retardant gloves are mandatory at all times car is on the track. SFI Fire retardant racing shoes or leather shoes with fire retardant socks are required.

It is mandatory that all pit stalls have a readily accessible 5 lb., dry chemical, fire extinguisher for use in the pits.

IMCA STOCK CAR CROSS-OVER RULE: Stock Cars must run their rules with the exception of using Hoosier "E-MOD RC-4" tires, and may utilize a four barrel carburetor.



- A - FRAME PLATING MATERIAL (4" x 1/8") FLAT STRIP STEEL
 - B - ROLL CAGE MAIN/HOOP SET BACK 82-1/2" MEASURED FROM CENTER OF LOWER BALL JOINT TO BACK OF MAIN/HOOP TUBING
 - C - MANDATORY X-BRACE (CHOOSE 1 NO MIXING OF MATERIALS)
1-3/4" x 0.095 ROUND; 1-3/4" x 1-3/4" x 0.083 or 2" x 2" x 0.065 SQUARE
 - D - DRIVER'S COMPARTMENT SAFETY/BAR (SAME MATERIAL AS X-BRACE)
 - E - FUEL/CELL SAFETY STRAPS (MIN. 4) 1" x 1/8" STRAP STEEL
 - F - TAIL SECTION REPLACEMENT SAME DIMENSIONS AS STOCK FRAME
 - G - FLOOR PLATE 1/8" STEEL PLATE MINIMUM WIDTH 20" AT SEAT
- *** NOTE ***
X-BRACE MUST TIE IN TO ORIGINAL FRAME, NOT FRAME PLATING



CONSTRUCTION GUIDELINES

- A - WING WINDOW BARS (MANDATORY)
- B - WHEEL BASE (108" MINIMUM)
- C - MANDATORY SAFETY PLATING (1/8" STEEL MINIMUM)
- D - STOCK FRAME THIS POINT FORWARD
- E - REAR END SECTION (2" x 3" x 0.095 WALL STEEL TUBING)
- F - FUEL CELL CAN MANDATORY (MATERIAL - 20 GAUGE STEEL)
- G - FOOT AREA PROTECTION BAR (MANDATORY)
- H - DARK SHADED BARS MAY BE 1-1/2" x 0.065 WALL STEEL TUBING ALL OTHERS MUST BE 1-3/4" x 0.095
- I - ALL CAGES MUST HAVE THESE FRONT & REAR SUPPORT HOOPS/BARS
- J - BRACED 0.065 WALL STEEL TUBING FUEL CELL GUARD

(DRIVERS/SIDE DOOR)

DOOR BAR CONFIGURATION

A - APPROVED RACING WINDOW NET (MANDATORY)
 B - RECOMMENDED DOOR/BAR LENGTH 44"
 C - 3 DOOR/BAR UP-RIGHTS BETWEEN EACH DOOR/BAR (MANDATORY)
 D - 4 - DOOR/BARS EVENLY SPACED ON DRIVERS/SIDE (MANDATORY)

*** NOTE ***
 ALL DRIVERS SIDE DOOR/BAR MATERIAL (MIN 1-3/4" x 0.095)

(REAR VIEW)

TOP HOOP (HALO BAR) DETAIL

A - MAIN HOOP (VERTICAL TO FRAME) 36" HIGH FROM TOP OF FRAME
 B - DOOR/BARS SHOULD BE FLUSH TO DOOR PANEL (WITH THE BODY CENTERED & MOUNTED IN STOCK LOCATION ON THE FRAME)
 C - DOOR/BAR HEIGHT - (MIN. 20" HIGH FROM TOP OF FRAME)
 D - FLOOR PAN - (MIN. 20" WIDE IN DRIVERS SEAT AREA)
 E - EXTRA MAIN HOOP/HEAD REST BAR (OPTIONAL)
 F - CROSS/BAR RECOMMENDED HEIGHT 20" (FOR SHOULDER HARNESS)
 G - ROOF/HOOP TO FIT ROOF SIDE TO SIDE (MIN. LENGTH 34")
 H - ROLL CAGE WIDTH - (SAME AS STOCK FRAME WIDTH)
 I - TOP HOOP DIAGONAL BRACE