



2012

**LATE MODEL
RULES**

2012 Lebanon I-44 Speedway Late Model Rules

Rules changed by Mike Lemke for use at an ASA Member Track .
With permission of the ASA Midwest Tour.

Anyone having questions may call Larry Magnussen (Chief Tech.) at 417-531-0775.

The Guidelines 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. These guidelines shall govern the condition of events and participation therein. They are intended as a guide for the conduct of events and are in no way a guarantee against injury or death to a participant, spectator, or official. The Director of competition, or his authorized designate, shall be empowered to permit minor deviation from any of the guidelines and or regulations herein, or impose any further restriction, which, in his or her opinion, does not alter the purpose of the organization. Deviation of these guidelines and or regulations will be the responsibility of the Lebanon I 44 Speedway officials, whose decisions are final.

A. Eligible Cars and Bodies

1. All competing cars will be full-sized, stock American manufactured passenger car bodies that conform to the current A-B-C body rules are allowed, 2000 or newer. Current A-B-C Body Rules apply unless otherwise specified herein. Refer to A-B-C Rulebook Body Guidelines will be posted at:
<http://www.abcodies.com/>
 - A) **Full ABC body meeting Referee & template guides will get a weight break of 25 lbs.**
 - B) **Camaro & Mustang bodies will be permitted, but will not receive weight break.**
 - C) **Non-conforming ABC bodies will be allowed to compete for the 2011 season, but must meet ABC rules for 2012. Cars must use (basic) ABC Body Rules Guidelines, (roof heights, nose heights, spoiler heights, side heights, windows basic dimensions and other basic dimensions).**
2. Spoilers- 6 ½ x 60 required. Clear lexan is recommended.
3. 103 min. wheelbase plus or minus 2” 64 inch's plus or minus 1 inch. 65 inch's to 66 inch's ADD 25 lbs. You must declare this at pre-tech and your car sticker must show the plus 25 lbs. Over 66 inch's DQ.

B. Engines

1. Statement- It is in the best interest of the Lebanon I-44 Speedway to allow various engine combinations to compete in series events. Providing, your engine combination is approved for competition by the office if otherwise not stated in the rules and regulations. There will be four engine combinations approved for all events at all times. (I-44 Speedway Iron Engine, I-44 Crate Engine, ACE Engine and the 9.0 to 1 Aluminum head engine. “Other” types of engine packages will be approved for competition and listed in this section. Weights for all engines will be listed below.
2. Block must be cast iron. (Exception: Schwanke and Wegner Spec engines only)
3. No 18-degree or SB2 Chevrolet Heads.
4. Minimum Crank Height is 10 inches for all except, 10 ½ inches for crate engines measured from the center of the forward crank bolt.
5. Built GM V-8 engines must be located so that the centerline of the forward most spark plug hole is no more than **3.5** inches back from the center of the upper ball joint. Ford, Mopar and Crate engines may be located so the center of the forward most spark plug hole of the engine is a maximum of **4** inches rearward of the centerline of the upper ball joint.
6. **All built motors will be checked for cubic inch and compression ratio.**
7. Water only **as coolant**. NO ANTI-FREEZE. **Violators subject to penalties.**

B-1. I-44 SPEEDWAY – Cast Iron Head Engine

1. Only V-8 engines with a minimum displacement of 350.0 cubic inches and a maximum displacement of 358.0 inches are permitted. The maximum compression ratio is 11 to 1.

2. ENGINE 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 4.045 inches.

3. CRANKSHAFT and HARMONIC BALANCER

Only cast iron or forged steel crankshafts are permitted. Titanium crankshafts are prohibited. Crankshafts with journal sizes less than 1.980 inches or undersized journals less than original factory specifications are prohibited. Minimum crankshaft weight is 42 lbs. Lightweight, knife-edge, and undercut counterweight, crankshafts are prohibited. Steel type balancer only - aluminum balancers are prohibited.

4. PISTONS AND RODS

Any flat top piston may be used. Valve reliefs may be cut into pistons. No part of the piston may protrude above the top of the block. Only magnetic steel connecting rods are permitted. Titanium rods are prohibited.

5. OIL PANS

Steel oil pan only. Oil pan must be equipped with a 3/4 inch plug for inspection. 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.

6. CYLINDER HEADS

Only the following I-44 Speedway stock type approved cylinder heads may be used:
Manufacturer Cylinder head Intake Runner Volume Measured in cc's

GENERAL MOTORS

Part # 14011058 187 cc's

Part # 10134392 187 cc's

Cast # 14011034 187 cc's

CHRYSLER CORP.

P249769 198 cc's

P452946 198 cc's

FORD

M-6049-N351 197 cc's

M-6049-E351 197 cc's

These I-44 Speedway Aftermarket Heads maybe used:

GENERAL MOTORS

Dart – 10320010 or 10310010

World Products – 011250 or 011150

RHS – 12319 or 12320

EQ – CC200BA

Bowtie – 034

Ford.

World Products – 053040 or E351 or Roush 200

RHS – 35302

SVO – N351 or N352

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 or runners is permitted (combustion chamber may be polished). 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 inch above the head of the valve. The maximum valve sizes, as measured across the face, are as follows:

Manufacturer	Intake	Exhaust
GENERAL MOTORS	2.020 inches	1.600 inches
CHRYSLER CORP.	2.020 inches	1.625 inches
FORD "CLEVELAND"	2.046 inches	1.656 inches
FORD "WINDSOR"	2.020 inches	1.600 inches

Use of titanium valves is prohibited. The maximum allowable spring diameter is 1.57 inches.

8. **CAMSHAFT, VALVE LIFTERS, & ROCKER ARMS**

Any steel or cast-iron camshaft may be used. Camshaft journals must be stock for engine. Rollerized camshaft bearings are not prohibited. The maximum camshaft lift is 0.625 inches, measured at the valve. Roller tappets and rev kits are not permitted. Any, all steel lifter is permitted. Only steel push rods are allowed. Roller rocker arms are permitted. Maximum rocker arm ratio is 1.6 to 1. Shaft type rocker arms are permitted on Chrysler motors only. Stud girdles are permitted.

9. **INTAKE MANIFOLD**

Any readily available, production type, intake manifold is permitted. Retail cost must not exceed \$350.00. No material may be added to the manifold. Grinding or polishing of the ports is prohibited. Port matching of the intake manifold is permitted to a maximum of 1 inch. The maximum height of the manifold, as measured from the top of the cylinder block to the base of the carburetor (including adapter plate and gaskets), is 7 inches. Only a straight bore adapter plate permitted. NO chamfering, tapering, or beveling of the adapter plate is permitted. 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.

10. **CARBURETOR**

One carburetor only, must be official approved. Any 4412 Holley 2 bbl 500 CFM. Must pass I-44 Speedway inspection.

11. **WEIGHT**

Starting weight is 2700 pounds, maximum 58% left side weight after race with driver, **sitting in normal driving position**. With the following weight penalties:

- 1) 50 pounds for over stock stroke.
- 2) 25 pound weight penalty for dry sump system.

B-2. I-44 Speedway Crate Engine

Lebanon I-44 Speedway's Exclusive Dealer is McGunegill Performance (765-282-1913).

All engines used must be sealed by the manufacturer and / or Certified Engine Rebuilder and must remain in the "as shipped" condition. A double redundant sealing system, which must be visible at all, times. All engines, with or without this seal are subject to testing and / or confiscation at any time during an event. Competitor's refusing confiscation, impounding and / or replacement will be disqualified from the event, and all future events until engine issue has been resolved. Teams fined or penalized for engine infractions are not eligible for competition until all fines and / or penalties have been paid or fulfilled.

If Crate motor is protested a \$1,000.00 in CASH fee must be presented to track officials with a written protest listing 1. Car # and Driver's name being protested, 2. Item of protest, and be signed by person(s) doing protest. The motor will be pulled (by car owner/driver under the supervision of track officials), taken to McGunegill Engine Performance for Dyno & testing, & returned to car owner. All expenses will be deducted from \$1,000.00 protest fee and balance will be given to rightful team.

- a) **All engines must have FULL documentation of engine purchase and all history with car at all times. It is the Car owner or driver's responsibility to provide paperwork on Crate motor. If no paperwork or motor is not verified it will be required to run Holley 500 CFM. 2-barrel carburetor. Otherwise no points or payoff will be issued until proper paperwork is provided, within 5 business days.**
- b) **Engine must be registered with Lebanon I-44 Speedway and spec sheet on file with I-44 Speedway.**
- c) Engine mounts must be reinforced steel or aluminum.
- d) Aftermarket SFI Approved engine harmonic dampers are permitted. There can be no moving parts or viscous style damper permitted.
- e) Use of, or installation of an open or closed loop vacuum system, to evacuate air from the engine is prohibited.

1. APPROVED ENGINES – All Crate Motors must use 6300 R.P.M. chip.

- A) GM part # 88958604*
- B) Ford part # M-6007-D347R2
- C) Dodge part # P5007958 – Call for Approval
- D) Updated engines from the Sunoco Series maybe used but must have all documentation with engine at all times. All FACTORY seals and builder seals must be in place. A full spec sheet must be on file with the I-44 Speedway office.

*GM part # 88958604 Factory Box Stock Engine with NO updates will be given a weight break of 50-pounds. Engine must have factory – installed Info-Glyph dot matrix seals. No re-man seals allowed. NO UPDATES are allowed. When factory seals are removed or engine is rebuilt it is no longer eligible for weight break. Minimum weight must be posted on windshield.

GM 88958604 have the option of using Champs Oil Pan # CP106LTRB (6 ½-inches deep) with a pickup #10111SP or 106sb, 1.6 rockers arms, an upgraded valve spring and retainer kit available from Phil Harper Motorsports.

All Ford engines must run 1.5 rocker arms purchased from McGunegill Engine Performance.

- E) Engine will be installed in a normal, upright position. Engine ground clearance shall be 10 ½-inch minimum measured from centerline of the crankshaft at the harmonic balancer to a level ground plane.
- F) Engine set back of 4-inches will be measured from the center of the # 1 spark plug to the center of the upper ball joint.
- G) All engines must be sealed by the manufacture and/ or a Certified Engine Rebuilder and must remain in the “as shipped” condition.

2. CARBURETOR

- A) Stock Holley 650 CFM 4-barell carburetor, part # 4150 or # 80541-1, “box-stock” is required.
a-1) Any Crate motor without the proper documentation will be declared “altered” and must run the Holley 500 CFM. 2-Barrel carburetor.
- B) Carburetor must be securely fastened to the intake manifold with 1 (.0625-inch (1/16 inch or smaller flange) gasket.

- C) Drop-in spacers, alteration, physical changes, machining, re-shaping or tampering with any part of the original parts, internal or external, is prohibited.
- D) EXCEPTION: The General Motors 604 crate engine is permitted a maximum 1-inch tall aluminum spacer with 4 round non-tapered holes as manufactured.
- E) No use of any type of Epoxy or other coating of any type is permitted.
- F) Fuel injection, superchargers or nitrous oxide are not permitted.
- G) Alterations to allow additional air to be picked up below opening of venture will not be permitted.
- H) Following is a list of tuning and replacement parts permitted for use on the Holley 4150 HP Carburetor. Only genuine Holley replacement parts are permitted and must match exactly parts replaced.
 - a. Jets
 - b. Bleeds
 - c. Needle & seat
 - d. Emulsion bleeds
 - e. Power Valves
 - f. Accelerator pump nozzles
 - g. Accelerator pump can
 - h. Floats include all offered by Holley for the HP 4150 650 CFM Carburetor
 - i. Floats maybe modified/angle cut.

3. OIL PUMP

- A) Must mount in stock location.
- B) External oil pump is not permitted.

4. WEIGHT

Starting weight is 2700 pounds, maximum 58% left side weight after race with driver, **sitting in normal driving position**. Unless noted otherwise.

B-3. A.C.E. Head Engine

Must be able to sell Heads, complete for **\$2500.00** (hardware, valves, valves springs, retainers, keepers and guide plates.) Heads must be stock out of box. Valves 11/32 Valve Stem or 5/16 Valve Stem may be used.

Approved valve part numbers

<u>GM-Ford</u>	<u>Intake</u>	<u>Exhaust</u>
BRODIX	BR81019	BR81621
Engine Tech	BR810198	BR81621
FERREA	F1121P	F1476P
MANLEY	11818	11595
REV	CL-1643 CL-1604	CL-8003 CL-1171
<u>Mopar</u>		
BRODIX	BR60029	BR60037

All valve spring sizes must be 1.55 MAX. No shaft rocker arms allowed except on Mopar engines. Steel or Titanium Valve Spring Retainers are permissible. Maximum 4 stage oil pump. May have one extra water line per head. Valve job may be blended into combustion chamber 3/8 inch from seat.

1. MANIFOLD

Any production type intake manifold allowed - provided it is readily available to all competitors from local race part suppliers. (**Maximum cost \$375.00**) Maximum height of manifold is 7.25" (including any carb spacer and gaskets) the manifold height will be measured from the base of carb to top of cylinder block. Only one flat gasket with a maximum thickness of .120 inch may be used between intake manifold and cylinder head - no spacer or wedge type gaskets allowed. No additional material may be added to manifold. No grinding or polishing of any part of the manifold - except you may match port the runners a maximum of 1".

2. PISTONS

Flat top pistons only - no part of piston may protrude above top of cylinder. (Maximum) compression ratio 10.5 to 1 (10.510 is illegal). Maximum Engine displacement for GM and Ford is 358 C.I. inches, Dodge will be 360 C.I. Minimum 350 C.I. for GM, 346 C.I. for Ford.

3. CAMSHAFTS

The max lift on any roller cam is .625. Duration rule is 270 at 50 thousandths. No mushroom type lifters. Inlayed cams are prohibited. The maximum rocker ratio is 1.6 to 1. Rev kits of any type are prohibited. Only steel push rods (Titanium, aluminum or graphite are prohibited). No roller bearing camshaft journals. Magnetic steel lifters no ceramic.

4. CONNECTING RODS

Only I-44 Speedway approved steel rods allowed. No titanium, aluminum, graphite or stainless steel. Rods using 3/8 inch bolts are allowed.

5. BLOCKS

Must be standard factory production cast iron. (Only 010 or bowtie approved). No aluminum blocks permitted. No altering of Engine block permitted. * Absolutely NO Grinding or lighting of blocks . The use of aftermarket blocks will be allowed in ACE engines. The engine builder must be on the Approved Engine Builder List and a bond must be on file. No big bore short stroke ACE engines will be allowed.

6. CRANKSHAFT

Standard steel type only, Minimum allowed weight of 43 Lbs. Stock angle crankshaft allowed. Light weight, undercut counter weight crankshaft are prohibited. No Honda journal crankshafts. Stroke 3.400 Min to 3.500 Maximum. Minimum 1.980-rod journals or any under sized journals under factory dimensions.

7. INSPECTION

A 1.5 inch plug must be installed in the oil pan for inspection purposes. This hole must be directly under or side of the rod journal. If a windage tray is used, a hole must be provided in line with the hole in the oil pan. Cylinder head removal after any race may be required for inspection purposes.

8. CARBURETOR

One carburetor only, must be official approved. Any 4412 Holley 2 bbl 500 CFM. Must pass I-44 Speedway inspection.

9. MISC.

No engine part maybe composite. All part numbers must remain on all engine parts.
No crank fire Ignitions

10. WEIGHT

Starting weight is 2800 pounds, maximum 57% left side weight after the race with driver, **sitting in normal driving position.**

B-4. 9 to 1 Engines.

1. ENGINE BLOCK

Must be standard factory production cast iron. Stock appearing. No aluminum blocks permitted.

2. CRANKSHAFT

Standard steel type only, minimum allowed weight of 38 lbs., stock angle crankshaft allowed.

3 PISTONS

Flat top pistons - no part of piston may protrude above top of cylinder. 9 to 1 aluminum headed motors will have a 9.5 to 1 compression ratio (a ratio of 9.6 to 1 or higher will not be allowed). Maximum engine displacement of 358 C.I. and minimum 347 C.I. Aluminum headed motors may use dished or inverted dome pistons.

4. CONNECTING RODS

Only I 44 Speedway approved steel rods allowed. No titanium, aluminum, graphite rods or stainless steel are allowed.

5. CAMSHAFT

Only steel push rods (titanium, aluminum or graphite are prohibited). 9 to 1 Aluminum headed engines are allowed roller cams and rev kits.

6. HEADS

All cylinder heads must be approved by I 44 Speedway and all modifications must be submitted to I 44 Speedway before any proposed modifications will be approved. All cast in part numbers must remain unaltered. Painting and /or coating of the heads will not be permitted. No 18-degree Chevrolet heads. Heads that are already approved are:

General Motors

- a. Air Flow Research AFR 215 and 220
- b. All Pro AP227
- c. Brodix 3941075
- d. Chevrolet 10051101
- e. Edelbrock 7755
- f. Pontiac 10033867

Ford

- a. Brodix 3941078
- b. Ford M-6049-C302 with 4 degree valve cant

Mopar: Call for approval

All other heads must be approved prior to any competition by I 44 Speedway.

For all 9.5 compression motors the cylinder heads must be acceptable to I 44 Speedway officials and meet the following requirements:

- a) Only steel or titanium valves will be permitted
- b) Only magnetic steel valve springs will be permitted
- c) Only 2 valves per cylinder will be permitted
- d) There are no valve size restriction
- e) Internal polishing and porting will be permitted
- f) Spark plug holes must remain in stock location
- g) Valve angle must remain within 2 degrees of stock angle
- h) Valves must remain in the stock location in relation to the cylinder bore centerline.

7. INTAKE MANIFOLDS

No Fabricated Intakes.

Only one flat gasket with maximum of thickness of .120 inches may be used between intake manifold and cylinder head.

No spacer or wedge type gaskets allowed.

May be polished and ported.

Not permitted will be:

- a) Added directional devices will not be permitted inside the intake manifold
- b) Air holes will not be permitted to be opened in the intake manifold
- c) Painting and /or coating of the intake manifold will not be permitted.

9. CARBURETOR

One carburetor only, must be official approved.

Any 4412 Holley 2 bbl 500 CFM. Must pass I 44 Speedway inspection.

10. MISC

No engine part maybe composite. All part numbers must remain on all engine parts.

No crank fire Ignitions.

11. WEIGHT

Starting weight is 2850 pounds, maximum 57% left side weight after race with driver, **sitting in normal driving position.**

RULES THAT APPLY TO ALL CARS UNLESS NOTED OTHERWISE

C. Carburetors and Spacer Plates

1. 4412 2bbl 500cfm part number 0-4412s, 0-4412c, 0-80583-1 or Dorton 2300 HP carbs will be allowed. Must be used stock as cast, may have choke plate removed. Boosters must be stock appearing and as cast for carb style and no extra holes may be drilled, and may not be tapered. Must also be in stock location in body. No modifications of boosters allowed. Spacers can be 1 1/2 inch max and bores must be perpendicular to the base. No tapered spacers. These parts must be I-44 Speedway gauge legal.

- a) Throttle bores
- b) Boosters and booster legs
- c) Throttle plates
- d) Throttle shafts
- e) Main body

Metering blocks must be stock as cast for carb style and no extra holes may be drilled. Block may be plugged and may be machined but must remain stock appearing no aftermarket blocks.

2. Holley 650 CFM. (See info under Crate Motors).

12. A Carburetor track claim rule will be in effect:
 - A) Claim will be \$500 with NO EXCHANGE.
 - B) Claim to be made by track

D. Fuel and Fuel cell

1. No oxygen bearing or performance enhancing additives may be introduced into the inductions or fuel supply, either at the fuel cell or upstream in the system. Violations will result in immediate disqualification from the event; forfeiture of Owner and Driver points, and monies/contingencies earned for the event.
2. A Series fuel to be determined, will be mandatory at all events. Ethanol (E-85) will be permitted on a test basis only.

3. Fuel cells with rubber bladders. Fuel cell plates or fuel cell tubs are mandatory. Fuel cell protector plate 1/8 inch thick steel must be mounted on outside of frame rails. The plates must cover the sides and rear of the fuel cell and be official approved.
4. Fuel cell minimum height 10 ½ inches. Fuel cell must be banded both ways with two straps each way, 1-inch minimum straps.
5. Fuel cell tub 1/8 inch thick steel with one-inch lip. Front, bottom and rear will be one piece. The top of the box will use current 18 or 20 gauge top with 1 inch by 1/8 inch straps with two in each direction.
6. All fuel cell cans must be magnetic steel. All fuel cells must have check balls in place. Racing pump fuel only.
7. Any over the axle style rear tail style chassis must use approved 1/8 inch magnetic steel fuel cell can.
8. Any chassis with incorrect fuel cell can will be asked to change or be disqualified.
9. The cell must be bolted in with a minimum of 14-3/8 inch bolts with flat washers on top and lock washers on bottom. The top for this cell will be 18 gauge steel with straps in both directions.
10. A sonic tester will be used to check fuel cell can thickness.
11. Fuel cell can pictures will follow.

E. Weight Combinations

All other engines must be approved for competition. **All weights are with driver sitting in normal driving position.**

1. I-44 Speedway Cast Iron Head Engine - Starting weight 2700 lbs. 58% Max. Left side.
2. Stock Crate Engine – Starting weight 2650 lbs. 58% Max. Left side.
3. Update Crate Engine – Starting weight 2700 lbs. 58% Max. Left side.
4. A.C.E. Engine – Starting weight 2800 lbs. 57% Max. Left side.
5. 9-1 Engine – Starting weight 2850 lbs. 57% Max. Left side.

F. Mufflers and Headers

1. Any car not meeting the 100 decibels WILL NOT RACE.
2. Exhaust must exit behind driver.
3. All exhaust highly recommended to exit under car to meet this requirement.
4. No custom high dollar headers (no lightweight stainless, Titanium or Inconel) allowed.
5. Any collector may be used with out a cone style inserts. No one off custom header allowed.

G. Air Intake

1. Forward intakes are not allowed. Air boxes are permitted. The back of the air box must be flat or must be stock five star part.
2. No devices for directing the flow of the air into the air cleaner are permitted.
3. No additives allowed in air filter.

H. Clutch

1. The 5.5 inch or bigger will be the only clutch allowed. Max price msrp. \$1600
2. Absolutely no carbon fiber or poly clutches allowed.
3. Bell housing must have a minimum 2 ½ inch hole at bottom (to allow a clear view of clutch).

I. Transmissions

1. Bert or Brinn style transmissions ARE allowed.
2. No bottom load transmissions.
3. Must have two forward and 1 reverse working gears minimum.
4. One single lever shifter.
5. Must be self starting.

J. Brakes

1. All cars must have functioning brakes on each wheel.
2. No more than 4 piston brake calipers.
3. Fixed mounted or Floating rotors are the only steel rotors allowed.
4. Maximum \$500 limit on brake calipers.

K. Shocks

1. Maximum cost on racing shocks is MSRP \$400.
2. Canisters are not allowed.
3. There will be track claim rule on shocks.
 - a) Claim will be \$400 with NO EXCHANGE.
 - b) Claim to be made by track.

L. Suspension

1. Coil over or leaf allowed.
2. No computer or hand operated controlled suspension.
3. No aluminum axle tubes
4. No titanium axle shafts
5. No aluminum rotor
6. No carbon fiber rotors.

M. Roll Cage Construction

Following are the minimum specification requirements for roll cage construction approved for I-44 Speedway competition. I-44 Speedway Officials reserve the right to sonic test any or all, structural chassis members at any time during a sanctioned event. Structural chassis member(s) found in violation of minimum requirements render that chassis ineligible for competition until minimum standards are met or exceeded.

1. Drilling holes to lighten any part of the body, chassis, suspension or bolts is not permitted.
2. Only steel round; rectangular or square tube is approved for roll cage or chassis construction of any main or supporting sub-structures.
3. Wall thickness; size and/or diameters are specified where necessary.
4. A four-point (4) roll cage structure utilizing a minimum 1.75-inch x .090-inch (1-3/4"x.090") OD D.O.M. steel tubing is mandatory.
5. The entire structure must be welded to the primary frame structure with a minimum of four (4) horizontal driver side door bars.
6. A minimum of 2" x 3" x .095" wall steel tubing is mandated for main frame rails. Main frame rails are identified as Mid-Section Rails. Main frame rails and side rails must be located within the normal Tread width of the car.

7. A minimum of 2" x 3" x .083" wall steel tubing is optional for Front Clip Rails, Rear Clip or Kick-up Rails. No material substitution permitted.
8. Roll cage structure must be braced to the front frame stub, with the hoop section surrounding the engine compartment; running rearward with diagonal member's connection to the rear frame section.
9. Nose, right side kick outs and rear bumper cover supporting structures must be a minimum 1.500-inch x .063-inch OD steel tube. No material substitution permitted.
10. ABSOLUTELY NO Aluminum allowed on the structure of the chassis.

N. Driver Side Door Plates

1. Left side driver support bars or plates are mandatory. See Option A or B listed. No material substitution is permitted.
2. All support bars or plate installation is subject to approval. See Illustration A.1
 - Plan - A – 0.125-inch, 1/8" solid steel plate bolted to the left side door portion of the roll cage. Doorplate must be bolted to the roll cage using a minimum of six (6) each 3/8" (.375-inch) aircraft quality bolts and washers. Welding of the plate to the roll cage is prohibited.
 - Plan - B – Minimum 0.125-inch (1/8") thickness steel plate must be welded to the space between each left-side door bar.
4. Offset chassis right side door bars commonly called The Outrigger or The Kick-Up Bar, must be constructed of a minimum 1.250-inch x .065-inch wall round or square steel stock.
5. All supporting Sub-structure must be constructed of 1-inch x .063-inch wall round or square steel stock. No material substitutions permitted. All door bars must be plated.

O. Driveshaft

1. The driveshaft shall be made of steel or aluminum. Carbon-fiber driveshafts are not permitted.
2. Containment hoops (2 required), constructed of a minimum 0.1875-inch thick steel, are mandatory and the front most strap must be 4-5 inches minimum behind front yoke.

P. Front Suspension

1. Independent front suspension with articulated upper and lower control arm(s) is mandatory.
2. The type of shock absorbers and suspension springs are optional.
3. One (1) shock absorber per corner of the car is permitted.
4. Front suspension adjustment must be done from under the car or by lifting the hood. No holes in the hood, fenders or other body parts from the windshield forward to adjust front suspension component(s) are permitted. No suspension adjustment devices are permitted in the driver's compartment area. Knob-type brake bias adjusters are recommended. Weight transfer or suspension adjustment devices, adjustable while the car is under way are prohibited.
5. Spring rubbers are permitted and must be removed manually. No removal devices may extend outside the body of the car or be accessible in the driver's compartment.

Q. Rear Suspension

1. Non-independent, live axle type rear suspension is mandatory.
2. Rear ends may be Quick-change (no 8") with full-floating hubs or 9-inch Ford type.
3. Rear axle tubes must be steel.
4. No open tube rear ends permitted.
5. Maximum rear camber is + or - 1 degree measured with the rear axle level.
6. Material used for rear end center section is at the discretion of the team, but hub pins must be steel.
7. Rear end coolers are recommended.

8. Remote rear suspension adjusters are permitted when accessible through the rear window. A maximum of three (3) one-inch (1") diameter holes are permitted in the rear window. Each hole can allow access to one adjustment device only. No adjuster may extend forward of the rear window area.
9. All pumps used to circulate fluid for the purpose of cooling the rear end, must be mounted in the center of the car.

R. Wheels

1. Approved wheels must be 15-inch diameter; five-lug (5) steel; 5" x 5" hub or wide 5 patterns; 10-inch rim width.
2. Bleeder and/or pop-off valve devices are not permitted.
3. Alteration or defacing of wheel identification numbers; labels; code numbers or serial numbers is not permitted. Wheel(s) failing this criteria will be ineligible for competition.
4. A minimum weight of 17lbs is required.

S. Wheel Studs and Spacers

1. A minimum of five (5) lug nuts per wheel, minimum 0.625-inch (5/8") solid steel nuts, showing a minimum of two (2) threads through the nut, must extend through the lug nut when clamping the wheel to the hub.
2. Wheel Spacers, if used, must be made of steel or aluminum and a minimum 6.75 inches in diameter.
3. Shims are not permitted when mounting wheel studs to hubs.

T. Safety

1. In all matters pertaining to safety, Car Owners, Drivers and Crewmembers must review and educate themselves in all safety standards. It is the responsibility of the Car Owners, Drivers and Crewmembers to install, wear and maintain all safety equipment as specified by manufacturer's instructions. This includes, but is not limited to, helmets, fires suits, racing suits, gloves, shoes, flame-resistant underwear, flame-resistant head sock, head and neck restraint systems, driver's racing seat and safety belts. Any Safety infraction will deem the car ineligible for competition until the infraction has been repaired or corrected and the car re-inspected.
2. Drivers wearing dental plates or dentures are required to remove them for any hot-track activity
3. **All Cars must have tow hooks installed (2 in front on bay bars and 2 in back on fuel cell protector bars).**

T-1. Driver Seat

1. All driver seats must be manufactured by a recognized manufacturer of seat and safety equipment, multi-layer aluminum seat and approved by I-44 Speedway Officials.
2. Seats must remain "as purchased and produced", no holes or other modifications made for weight reduction. Homemade seats or sprint car type seats are not permitted.
3. Seat construction must be solid aluminum sheet material from the seat bottom to above the driver shoulder area; must be fully padded, with padded pelvis, rib and shoulder supports on both the left and right side. Exception – LaJoie seat where construction is such that rib supports are not required.
4. A head restraint system, manufactured by a recognized manufacturer of seat and safety equipment, is mandatory and subject to I-44 Speedway Officials approval. Bolt on systems are approved for competition.
5. Seats must be equipped with left and right leg extensions, fully padded, running from the edge of the seat to the entrance of the foot box area.
6. Recommendation – a minimum 1/8" (.125-inch) thick steel plate be mounted on the front of backside of the rear hoop of the mid-section in front of the left rear wheel. Plate should extend from the horizontal shoulder bar downward the height and width of the driver seat.

T-2. Seat Belt and Shoulder Harness Installation

1. All seat belt and shoulder harness systems must meet SFI Specification 16.1, type 1. Y-type shoulder belts are not approved for use. Seat belts and shoulder harness systems must have a production date within three years of the event date. A minimum five-point harness system is mandatory.
2. Competitors using the HANS Device may use a standard three-inch (3") or the Schroth Racing two inch (2") wide shoulder strap. The Schroth Racing shoulder strap system has been specifically designed for use with the HANS Device. Schroth part numbers are Profi III-6FH; Hybrid III-H; Profi III-6H.
3. Shoulder harness belts shall not be mounted lower than the shoulder line of the driver or 10 degrees. All lap belt and shoulder harness mounting must be done with aircraft-quality bolts and washers. See Illustration A.2 and A.3

T-3. Driver Helmet

1. Effective with the 2011 season, all driver helmets must reflect a Snell 2005 certification minimum. SFI or Snell approval sticker must be visible for ASA Officials inspection.
2. Eye protection is mandatory at all times.
3. If you purchase a new helmet please make sure it is a 2010 model or above in certification.

T-4. Left Side Window Net

1. Left side driver window net is mandatory. Construction may be either wide-mesh or web-type safety net with mechanical release.
2. Net bar must be a minimum of .1875-inch (3/16") flat steel or .375-inch (3/8") round stock and run the entire length of the window net between mounting points.
3. Mechanical release must be welded to the front or "A" pillar end of the bar. Spring-loaded releases are not approved for competition.
4. Driver net must be secured in place and centered in the door area and must be secured to the upper roll cage horizontal member.

T-5. Fire Suppression System

1. A minimum five-pound (5) on-board fire suppression system, with multiple discharge points is highly recommended. Five-pound extinguisher minimum.
2. Cold Fire recommended for cockpit usage.

T-6. Driver Head/Neck Restraint System and Driver Uniform

1. Use of head and neck restraint devices is HIGHLY RECOMMENDED for all hot-track activity.
2. Approved devices are the HANS Device, LFT Technologies R3, Simpson and the Hutchens II Device.
3. Driver uniform must be a multi-layer, full-coverage, one-piece fire-retardant uniform specifically designed for racing; fire retardant gloves; socks; underwear; and shoes.

U. Tires

1. F 40 Hoosier Tires will be used on the left and F 50 tires will be used on the right.
2. Tires will be bar coded and put into teams inventory and each team may purchase one new tire per week, **but new tire must be ran in that week's feature event**. You may start the season with six (6) tires in your tire bank.
3. **It is the Car owner or Driver's responsibility to make sure that tires that are sold or swapped between teams or cars:**
 - a) **Tire #'s are recorded in tire book and scanner.**
 - b) **If tire is swapped to another car it must be removed from original purchaser and placed on new car's tire list.**

c) Any tire found on car that it is not registered to that car will be disqualified. NO EXCEPTIONS!

4. All tires must be purchased from the I-44 Speedway tire dealer.
5. Alteration of a tire(s) is not permitted and defined as changing the physical and/or chemical composition of the tire by cutting; grinding; buffing; warming; cooling or the use of chemicals whereby the tread area or the interior surfaces of the tire is changed from the manufacturer's specifications; alteration or defacing of tire identification numbers; labels; code numbers or serial numbers. Any violation of this nature causes the tire(s) to be deemed ineligible for competition.

V. Traction Control and On-Board Computer or Analysis Equipment.

1. No equipment of this nature is permitted on any car or located in the pit area of any event and will subject the team(s) to confiscation of equipment and penalties by the I-44 Speedway officials.

W. Ignition

1. All ignition systems must be 12 volts.
2. MSD boxes may be switched by I-44 Speedway officials from car to car or swapped with Tour's house MSD box. **Boxes must be mounted out of reach of driver.**
3. MSD Boxes approved: MSD 6A, MSD 6T, MSD 6AL, MSD 6ALN, MSD 6TN,
Crane HI-6R P/N 6000-6400, HI-6RC P/N 6000-6700 OR HI-6 P/N 6000-6440
4. MSD Connector: The 6 wire harness must be 24" long Maximum and have a female 6 pin, weather pack connector.

5. SIX PIN WIRING DIAGRAM

A – IGNITION Switch 12v (SMALL RED)
B – POINTS PICK-UP (SMALL WHITE) brown gm boxes
C – COIL NEGATIVE (SMALL BLACK)
D – COIL POSTIVE (SMALL ORANGE)
E – BATTERY POSITIVE (LARGE RED)
F – BATTERY NEGATIVE (LARGE BLACK)

6. Two pin optional for these two.
A – BATTERY POSITIVE (LARGE RED)
B – BATTERY NEGATIVE (LARGE BLACK)

X. Misc.

1. **Anyone under the age of 18 (Driver or crew member) must have a signed and notarized minor's parental waiver / release form(s). Both parents must sign. Questions, please call before showing up at track. Proof of age is required and no one under 10 will be permitted in pits at any time, (special rules and pit areas, apply for 10-13 years old).**
2. **At no time is anyone allowed to ride in or on the car with any part of their body outside the car. This includes in the pit or on the track. Disqualification from event can result.**

Illustration A.1- Proper Driver side door plate installation

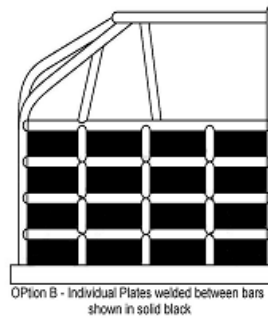
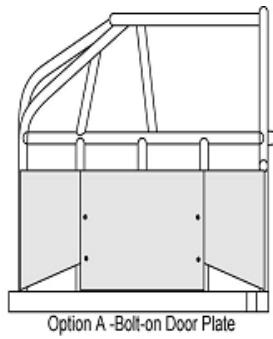
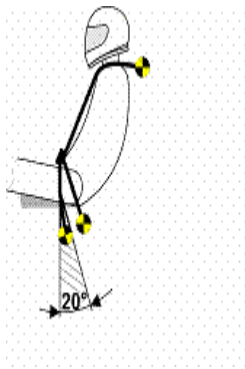
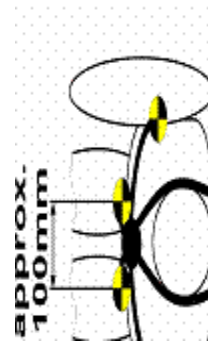


Illustration A.2- Proper Mounting Angles of Lap, Shoulder, and Sub-Straps

3-bar adjuster should be positioned as close possible to harness bar or snap-on/bolt-on bracket. This applies to both lap and shoulder belt points. The final wrap as pictured in Figure 8 is mandatory. At least 4" of webbing material must extend out from the adjuster after this final wrap is completed



Lap Belt Angle



Sub Strap Angle

Shoulder Belt Angle

Illustration A.3- Proper Wrapping of shoulder Harness Belts

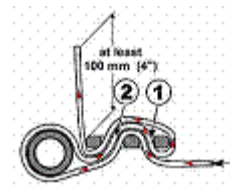
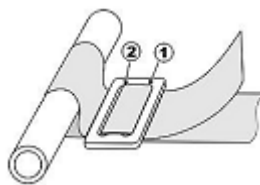
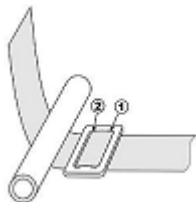
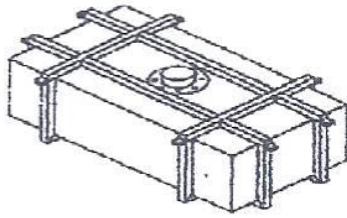
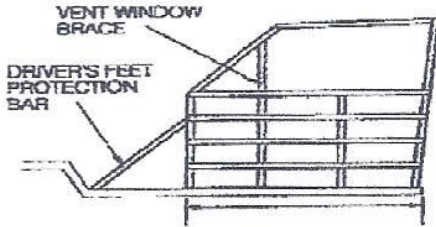


DIAGRAM #1



1 INCH STEEL SQUARE TUBING
OR
2 INCH BY 1/8 INCH STEEL STRAP

DIAGRAM #3



THIS AREA TO BE .095 INCH WALL THICKNESS BY
1.65 INCH O.D. TUBING MINIMUM.

DIAGRAM #2

TOP VIEW
FRONT

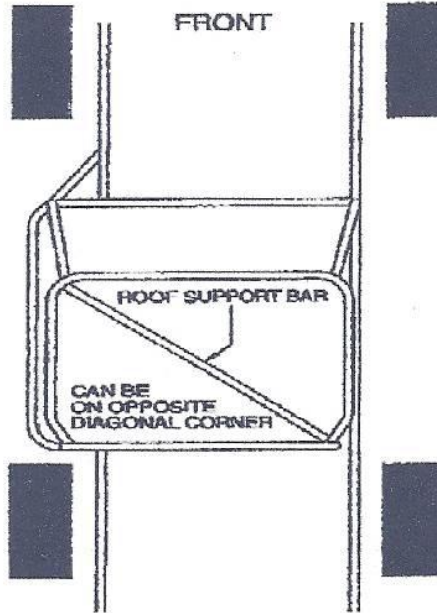
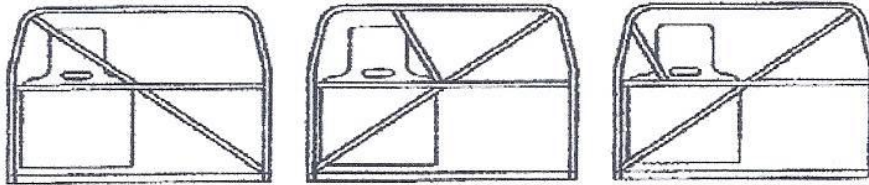


DIAGRAM #4
BACK VIEW



ADDITIONAL BRACING BEHIND DRIVER'S HEAD IN MAIN HOOP REQUIRED.
THESE DIAGRAMS ARE MEANT TO BE SUGGESTIONS ONLY.

NON - COMPLIANCE WITH THE SPECIFICATIONS OUTLINED HEREIN MAY SUBJECT THE PARTICIPANTS (OWNER/DRIVER) TO DISQUALIFICATION, LOSS OF MONIES AND POINTS EARNED AT THE EVENT. FURTHERMORE, THE OWNER MAY BE FINED UP TO \$5000 AND ALL NON-COMPLYING COMPONENTS WILL BE SEIZED BY THE SPEEDWAY TECHNICAL INSPECTOR. OWNER/DRIVER MUST PROVIDE TOOLS TO REMOVE PARTS

Mike (Lumpy) Lemke
ASA Racing