#### **ARCA MIDWEST TOUR RULES 2013**

12/01/12 Update.

These rules are property of the ARCA Midwest Tour.

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 Tech Director, or the management, 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 ARCA Midwest Tour officials, whose decisions are final.

The ARCA Midwest Tour may at anytime out law any engine, chassis, or body part that may be to costly for super late model racing. Our goal is to keep short track racing as affordable as we can.

All cars and drivers must have car and driver data sheet on file with Tech Director before the car is allowed on track.

We are working towards compliance to the USRA Rules Alliance.

A. Eligible cars and bodies

1. All competing cars will be full-sized, stock American manufactured passenger car bodies that

conform to the current ABC Body rules are allowed, 2004 or newer. Current ABC Body rules

apply unless otherwise specified herein. Refer to ABC rulebook body guidelines will be posted at

www. arcamidwesttour.com OR http://www.abcbodies.com/

Wheelbase 103 plus or minus 2" Front and rear tread width is a maximum of 66 Inches. Less then 65 inch's deduct 25 Lbs. Over 66 inch's Not Allowed. Once tread width declared at pre tech this may not change during event.

- 2. No attempt to get any aero advantage allowed, panning of nose or sides, windows, side skirts, noses, tail panels, etc.
- 3. Five Star Bodies or flat 12 inch side vent windows only
- 4, 3 window braces front and 2 rear window braces. Must be approved.
- 5. No holes in any body panels or windows to exhaust air. All holes or vents must remain open for qualifying except nose panel.
- 6. The ABC Referee will be the official method of body measurement of the ARCA Midwest Tour including TREAD WIDTH.

- 1. No panels to extend tops of doors.
  - 2. No panning of bottom of car except from radiator to front bumper and between frame rails. For air intake to radiator.
  - 3. Exhaust that exits from door must be flush and must have door flange and mounted flush to door.
  - 4. Add to ABC Rules MEASUREMENT "A" Must be
  - a minimum of 11.5 inches and nose measurement must be 20 inches minimum from hood to bottom of the nose.
  - 5. Right side door inner panel must drop down from the door and must be official approved.
  - 6. The use of a 6.5 inch CLEAR spoiler will be allowed at all tracks.
  - 7. All air for brake blowers must be taken from nose or radiator air box only, may not pull air from under car at any time, max 2 per wheel, Air must only be blown on brake rotors.

# B. Engines

STATEMENT- it is in the best interest of the ARCA Midwest Tour to allow various engine combinations to compete in series events. Providing, your engine combination is approved for competition by the ARCA Midwest Tour office if otherwise not stated in the rules and regulations. There will be two (2) engine combinations approved for all events at all times. (9 to 1 aluminum, ACE. are the (2) preferred choices) "other" types of engine packages will be approved for competition and listed in these rules. Weights for all engines will be listed below.

- 1. Block must be cast iron.
- 2. No 18 degree or SB-2 Chevrolet heads.
- 3. Minimum crank height is 10 inches measured from the center of the forward crank bolt or back of crankshaft.
- 4. All GM cast iron engines must be located so that the centerline of the forward most spark plug hole is no more than 2 inches back from the center of the upper ball joint. Ford, Mopar, and LS 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.
- 1. Will be measured from either front upper ball joint for cars with out off upper A-frames. We will also be working on a new measurement for cars with off set A-frames.
- 2. All Set backs will remain the same.
- 3. Antifreeze is strictly prohibited
- 4.Dry sump engines are highly recommended.

Call with questions for wet sump engines.

C. ACE Type Engines

Must be able sell heads, complete for \$2500.00 (hardware, valves, valves springs, retainers, keepers and guide plates.) Heads must be stock out of box.

ACE cylinder heads and intake manifolds must be unmodified. Machining, cutting, grinding, abrasive blasting, use of chemicals, or any alterations to change or alter the cylinder head or intake manifold from its as cast state is prohibited.

Valves 11/32 valve stem or 5/16 valve stem may be used.

No titanium valves allowed.

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. Ace Engine Manifolds

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 of .120 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. Ace Engine 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. and minimum 350 c.i. for GM. 346 c.i. for Ford.

# 3. Ace Engine Camshaft

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. Ace Engine Connecting Rods

Only Midwest Tour approved steel rods allowed. No titanium, aluminum, graphite or stainless steel. Rods using 3/8" bolts are allowed.

## 5. Ace Engine 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. No

big bore short stroke ace engines will be allowed. No carbon composite or light weight blocks allowed.

# 6. Ace Engine Crankshaft

Standard steel type only, minimum allowed weight of 43 lbs. (or stock type for block used)stock angle crankshaft allowed. Lightweight, 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. Ace Inspection

A 1.5" 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.

## D. 9 to 1 Aluminum Head Engines

# 1. Engine Block

Must be cast iron. No carbon composite or light weight blocks allowed. Must be stock appearing.

#### 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 9.51 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 ARCA Midwest Tour 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 ARCA Midwest Tour and all modifications must be submitted to the ARCAMT 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 GM heads. Heads that are already approved are on file with the

ARCA Midwest Tour. All other heads must be approved prior to any competition by ARCAMT.

For all 9.5 compression motors the cylinder

heads must be acceptable to ARCAMT officials and meet the following requirements: Only steel or titanium valves will be permitted. Only magnetic steel valve springs will be permitted and only 2 valves per cylinder will be permitted there are no valve size restriction internal polishing and porting will be permitted spark plug holes must remain in stock location valve angle must remain within 2 degrees of stock angle valves must remain in the stock location in relation to the cylinder bore centerline.

# 7. Intake Manifolds

No fabricated intakes must be made of aluminum. Only one flat gasket with maximum of .120 may be used between intake manifold and cylinder head no spacer or wedge type gaskets allowed. May be polished and ported.

# 8. Not Permitted Will Be

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

#### 9. Others

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

# E. Iron Headed Concept Engine

Not In Use.

F. Carburetors and Spacer Plates

All cars will use Holley 4412 style 2bbl approved carburetor.

The HP or parts

may also be used.

All carbs must pass all ARCA Midwest Tour gauges and specs.

Boosters must be stock appearing and as cast for carbs style and no extra holes may be drilled. May not be tapered. Must also be in stock location in body. No modifications of boosters allowed. Spacers can be 1 1/2 max and bores must be perpendicular to the base. No tapered spacers.

These parts must be ARCA Midwest Tour gauge legal.

Throttle bores

Boosters and booster legs

Throttle plates

Throttle shafts

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.

#### G. Fuel and Fuel Cell

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. A series fuel to be determined will be mandatory at all events. Ethanol (E-85) will be permitted on a test basis only. Fuel cells with rubber bladders fuel cell plates or fuel cell tubs are mandatory. Fuel cell protector plate 1/8 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. Fuel cell minimum height 10 inches. Fuel cell must be banded both ways with two steel straps each way. 1-inch minimum straps. Fuel cell tub 1/8 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 steel straps with two in each direction. All fuel cell cans must be magnetic steel. All fuel cells must have check balls in place. Racing pump fuel only any over the axle style rear tail style chassis must use approved 1/8 inch magnetic steel fuel cell can. Any chassis with incorrect fuel cell can will be asked to change or be disqualified. The cell must be bolted in with a minimum of 14-3/8 bolts with flat washers on top and lock washers on bottom. The top for this cell will be 18 gauge steel with steel straps in both directions. A sonic tester will be used to check fuel cell can thickness. Fuel cell can pictures will follow.

# ADD 25 pounds for non approved fuel cells and Plates.

Minimum Height is 10 inches.

H. Weight Combinations- (please note that all weights are subject to change based on performance and track size. Any other engine combinations will need to be approved by the series office prior to entry of any event.

The ARCA Midwest tour recognizes two engines as official engines of the series. 9to1 and ACE.

- Ii. All other engines must be approved for competition.
- Iii. All cars will be 58% max left side weight.

All added weight must be solid LEAD no tungsten. Must also be painted WHITE with car numbers on weights.

There is a \$10 per lb fine for any lead that is mounted loose or falls of car on track at any time for the team.

Other types of Engine combinations maybe considered for competition but they must be approved prior to use and tested with the series.

2725 lbs- Ace engines with 4412 2bbl Holley- 500 cfm

All sealed engines will be within all the rules of the USRA rules package except for carb rules and spacer plates.

These will be the only alterations to the USRA

rules. All USRA spec/sealed engines must use ignition box supplied with engine package. Any engine weight maybe adjusted at any time.

2725 lbs- Mcgunegill sealed engine with 4412 2bbl Holley- 500 cfm

2725 lbs- Ford sealed S374D with 4412 2 bbl Holley-500cfm

2725 lbs- Wegner sealed engine with 4412 2 bbl Holley- 500 cfm

2775 lbs- 9 to 1 aluminum engines with 4412 2 bbl Holley- 500 cfm

2750 lbs-Hamner Sealed engine.

Add RPM Limits for MEP and Hamner engines.

7200 RPM for MEP on tracks ½ Mile and over.

7400 RPM for MEP on tracks under ½ Mile.

7600 RPM for Hamner Sealed.

# All Wegner spec engines will be sealed to be run in the ARCA Midwest Tour.

I. Mufflers and Headers

Mufflers are required for competition in the ARCA Midwest Tour. Any car not meeting the 95 decibels will not race. All exhaust highly recommended to exit under car to meet this requirement. All exhaust systems must have mufflers that are not tampered with or hollowed. No custom high dollar headers (no lightweight stainless, titanium or inconeal) allowed. Any collector may be used with out a cone style inserts. No one off custom header allowed.

#### \*\*\*ANY CAR NOT MEETING THE 95 DECIBELS WILL NOT RACE\*\*\*

- J. 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 or AR part.
- 2. No devices for directing the flow of the air into the air cleaner or air box are permitted.
- 3. No additives allowed in air filter.
- 4. You may not grab or funnel air into air box.
- K. Clutch
- 1. The 5.5 inch or larger 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 1/2" hole at bottom (to allow a clear view of clutch).
- 1. Only standard material clutches allowed. No Slipper or Centrifugal clutches allowed.
- L. 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. No push and pull rods.
- 5. Must be self starting.
- M. 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 only. Steel rotors only. Maximum \$500 limit on brake calipers for all ARCA Midwest Tour cars.
- 4. All brakes must be ARCA Midwest Tour approved.

Must also be sold on open

market.

5. No other material may be used other than steel for rotors. No Carbon Fiber or any other material.

All air for brake blowers must be taken from nose

or radiator air box only. May not pull air from under car at any time. Max 2 per each wheel. Air must only be blown on brake rotors. Ultra cool Fans may also be used. Carbon Fiber not approved

N. Shocks

1. Maximum cost on racing shocks is MSRP \$550 and canisters are MSRP \$300.

All shocks must be ARCA Midwest tour approved

2. One shock and coil spring per wheel and or corner.

Use of eliminators is

allowed.

- 3. No shock blankets or covers allowed
- 4, Coil spring maximum cost is\_\_\_TBA\_\_\_\_\_
- 5. No electronic shocks permitted.

Shocks must be mechanical and no part of the shock or suspension may utilize electricity. No Magnetic Shocks.

# O. Suspension

Coil over or leaf allowed. No computer or hand operated controlled suspension. No titanium axle shafts, No aluminum rotors, No carbon

fiber rotors.

# P. Roll Cage Construction

Following is the minimum specification requirements for roll cage construction approved for ARCA Midwest Tour competition. ARCA Midwest Tour 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. Drilling holes to lighten any part of the body, chassis, suspension or bolts is not permitted. Only steel round; rectangular or square tube is approved for roll cage or chassis construction of any main or supporting sub-structures. Wall thickness; size and/or diameters are specified where necessary. 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. The entire structure must be welded to the primary frame structure with a minimum of four (4) horizontal driver side door bars. A minimum of 2" x 3" x .095" wall steel tubing is mandated for main frame rails. Main frame rails are identified as midsection rails. Main frame rails and side rails must be located within the normal

tread width of the car. 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. 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. 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. Absolutely no aluminum allowed on the structure of the chassis.

#### Q. Driver Side Door Plates

Left side driver support bars or plates are mandatory. See option a or b listed. No material substitution is permitted. All support bars or plate installation is subject to approval. All door bars need to be plated. All plates must be steel. 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.

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. All supporting substructure must be constructed of 1-inch x .063-inch wall round or square steel stock. No material substitutions permitted.

#### R. Driveshaft

The driveshaft shall be made of steel or aluminum. Carbon-fiber driveshaft's are not permitted.

Containment hoops (2 required), constructed of a minimum 0.1875-inch thick steel, are mandatory and

The forward hoop Must be 4-5 inches minimum behind front yoke.

#### S. Front Suspension

Independent front suspension with articulated upper and lower control arm(s) is mandatory. The type of shock absorbers and suspension springs are optional. One (1) shock absorber per corner of the car is permitted. 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 Or in reach of driver at any time in car. Knob-type brake bias adjusters are recommended. Weight transfer or suspension adjustment devices, adjustable while the car is under way are prohibited. Spring rubbers are permitted and must be removed manually. No

removal devices may extend out side the body of the car or be accessible to the driver in the drivers compartment. Manual or power steering maybe used. No electronic power steering.

## T. Rear Suspension

Non-independent, live axle type rear suspension is mandatory. Rear ends may be quick-change NO 8 inch ring gears. With full-floating hubs or 9-inch Ford type.

No open tube rear ends permitted. Maximum rear

camber is + or - 1 degree measured with the rear axle level. Material used for rear end center section is at the discretion of the team, but hub pins must be steel. Rear end coolers are recommended. 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. All pumps used to circulate fluid for the purpose of cooling the rear end, must be mounted in the center of the car.

No bird cage set ups of any kind. No part of the trailing arm mounting bracket may rotate of move.

## U. Wheels

Approved wheels must be 15-inch diameter; five-lug (5) steel; 5" x 5" hub or wide 5 patterns; 10-inch rim width. Bleeder and/or pop-off valve devices are not permitted; 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.

## V. Wheel Studs and Spacers

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. Wheel spacers, if used, must be made of steel or aluminum and a minimum 6.75 inches in diameter. Shims are not permitted when mounting wheel studs to hubs.

## W. Safety

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. Drivers wearing dental plates or dentures are required to remove them for any hot-track activity

New 2010- all cars must have tow hooks installed (2 in front on bay bars and 2 in back on fuel cell protector bars. Must be able to support weight of car under

tow.

#### X. Driver seat

All driver seats must be manufactured by a recognized manufacturer of seat and safety equipment, multi-layer aluminum seat and approved by ARCA Midwest Tour officials. 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. 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. A head restraint system, manufactured by a recognized manufacturer of seat and safety equipment, is mandatory and subject to ARCA Midwest Tour officials approval. Bolt on systems are approved for competition. 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.

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.

## A.1 seat belt and shoulder harness installation

All seat belt and shoulder harness systems must me 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. Competitors using the HANS device may use a standard three-inch (3") or the schroth racing two inch (2") wide should strap. The Schroth Racing should 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. 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

#### **B.1** Driver Helmet

Effective with the 2010 season, all driver helmets must reflect a Snell \*2010\* certification minimum. SFI or Snell approval sticker must be visible for ARCA Midwest Tour officials inspection. Eye protection is mandatory at all times.

### C.1 Left Side Window Net

Left side driver window net is mandatory. Construction must be web-type safety net with mechanical release. 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. Mechanical release must be welded to the front or "a" pillar end of the bar. Spring-loaded releases are not approved for

competition. Driver net must be secured in place and centered in the door area and must be secured to the upper roll cage horizontal member. Window nets must drop down. Must latch on top. No Fish net style window nets.

D.1 Fire Suppression System

A minimum five-pound (5) on-board fire suppression system, with multiple discharges point is highly recommended for series traveling competitors. Cold Fire recommended for cockpit usage. Must have gauge in view. Must be fully charged.

E.1 Driver Head/neck Restraint System and Driver Uniform

Use of head and neck restraint devices is highly recommended for all hot-track activity. Approved devices are the HANS device, LFT Technologies R3, Simpson and the Hutchens ii device. 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.

F.1 Tires

Hoosier tires are the official tire of the ARCA Midwest Tour. The Hoosier F-25 left side and the Hoosier F-48 right side will be required at all tracks under ¾ of a mile unless otherwise recommended by Hoosier Tire Company.

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.

Tires: 2013 Tire: Hoosier F25 Left and F48 Right

G.1 Traction Control and On-Board Computer or Analysis Equipment.

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 ARCA Midwest Tour.

1. Only one camera pointing out front windshield allowed.

Multiple cameras not

allowed.

No computer or video analysis equipment of any kind allowed.

H.1 Ignition

All ignition systems must be 12 volts. Only one 12 volt battery maybe used at any time. Ignition boxes may be switched by ARCA Midwest Tour from car to car or swapped with tour's house ignition boxes.

Ignition boxes approved:

Mandatory ignition will be the Crane Cams Ignition, HI-6RC (p/n 6000-6700) PS92N Coil (p/n 730-0192), and

Ignition Tray (p/n 6000-6363P). Or complete ignition kit (p/n 6000-6701). Must be mounted as shown and also not with in the reach of the driver. Adjustment tabs maybe sealed by Midwest Tour Officials. May be switched, changed, tested, or removed by Midwest Tour Officials at any time. RT side dash mounting highly recommended. Car side harness must match all factory connections per diagram below with no modifacations to allow tech officials to test system.

Connector: the 6 wire harness must be 24" long maximum and have a female 6 pin, weather pack connector.

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 positive (small orange)

e – battery positive (large red)

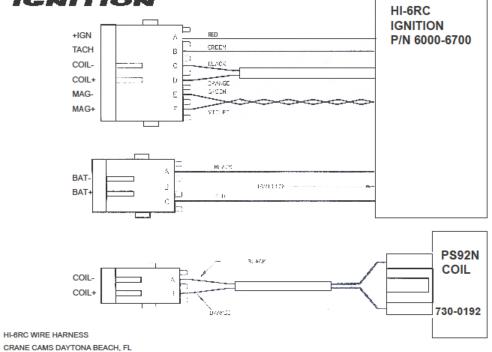
f – battery negative (large black)

two pin optional for these two.

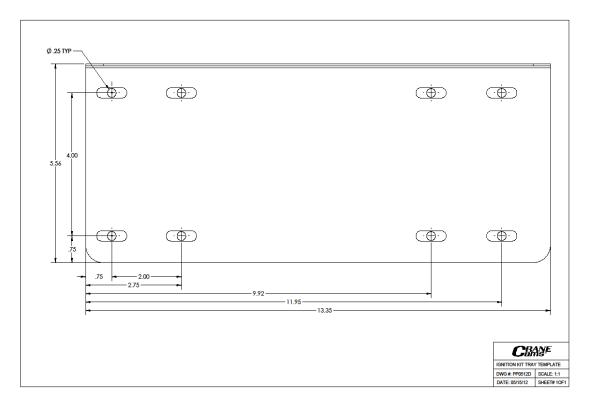
a – battery positive (large red)

b - battery negative (large black)





4/11 P/N PP0411C



- 1. Only one ignition box allowed in car at any time. Car maybe wired for duel boxes but must have only one box in car while on track.
- 2. Box must be in clear view.

Must be able to remove in five minutes,

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 series technical inspector.

Owner/driver must provide tools to remove part.

## Illustration

A.1---

Proper Driver side door plate installation Illustration

A.2---

Proper Mounting Angles of Lap, Shoulder, and Sub---Straps Lap Belt Angle Sub Strap Angle Shoulder Belt Angle Illustration

A.3-

Proper Wrapping of shoulder Harness Belts

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.

Please call Mike Lemke Tech Director between 5 and 6 pm at  $\frac{920\ 863\ 8012}{1000}$  or Tim Olson for questions 612-327-5831.