

2019 ARCA MIDWEST TOUR RULES released 12/19/18

These rules are property of GA Promotions, LLC dba 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 any time outlaw any engine, chassis, or body part that is not in the best interest of 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. Any car or part may be held for examination at any time. We also discourage the use of carbon fiber and other expensive parts and/or materials in many areas. We are working towards compliance to the USRA Rules Alliance.

ARCA MIDWEST TOUR PREFERRED PACKAGE

Super Late Model with ACE Engine Package with Holley 4412 2bbl, 105 decibels at 100', Conventional Shock and Spring Package, ABC Approved Body

1. ELIGIBLE CARS AND BODIES

All competing cars will be full-sized, stock American manufactured passenger car bodies. Only ABC approved bodies (2004-2017) allowed. Current Original ABC Body rules apply unless otherwise specified herein. Refer to ABC rule book, body guidelines will be posted at www.arcamidwesttour.com OR <http://www.abcbodies.com/>

~~—ARP Muscle Car Bodies may be allowed based on home track rules.~~

~~Non-approved bodies may be subject to a minimum 100 lbs weight penalty~~

Wheelbase 103 plus or minus 2" Front and rear tread width is a maximum of 66 Inches. Over 66 inch's Not Allowed.

No attempt to get any aero advantage allowed, panning of nose or sides, windows, side skirts, noses, tail panels, etc. Rocker Panels must be of original ABC design with original ABC stamps.

Five Star Bodies or flat 12 inch side vent windows only, 3 window braces front and 2 rear window braces. Must be approved.

No cutting, lightening, or excessive trimming around windows or drilling of holes in any body panels or windows to exhaust air. Any attempt to lighten bodies will result in a 25 pound weight penalty. All holes or vents must remain open for qualifying except nose

panel.

The ABC Referee will be the official method of body measurement of the ARCA Midwest Tour including TREAD WIDTH.

No panels allowed to extend tops of doors.

Panning of radiator to front bumper and between frame rails for air intake to radiator allowed, maximum 29 inches, **with only four sides which consist of continuous planes.** Panning under car (weight trays) we will allowed per USRA rules. Panning may start at foot box and only run to back of drivers area (cockpit) and remain inside frame rails.

Exhaust that exits from door must be flush and must have door flange and mounted flush to door.

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.

Right side door inner panel must drop down from the door and must be official approved.

The use of a 6.5 inch CLEAR spoiler will be allowed at all tracks.

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.

Teams will have the option of utilizing 4" blocks to set car for measurements

2. ENGINES

STATEMENT- it is in the best interest of the ARCA Midwest Tour to allow various engine combinations to compete in series events. ~~Your engine combination is approved for competition by the ARCA Midwest Tour office if otherwise not stated in the rules and regulations.~~

Home Track engine packages (~~including the 604 GM and 5.3 LS~~) will be allowed for non-Tour teams (NOT in top 20 in ARCAMT points and/or Touring Star and/or Rookie) at Home Track with weight/rev limits/carb/etc noted on event entry form for competitive balance.

All ARCAMT approved engine packages are listed below. Weights for all engines will be listed below.

Important NOTICE: ~~the USRA is looking at removing the use of a 9-1 engine in the coming years.~~ We have no intentions of eliminating the 9-1 engine, **we would prefer to see this combination worked into the Southern Super Parts Engine by 2021.** ~~This is an advisement only. So our drivers can relate to what others are looking at doing.~~

Block must meet specs for your chosen engine package. May be stock or aftermarket if allowed in your engine packages. Spec/SEAL engine packages may not change without the approval of the AMWT and/or the SEAL Board, and will be deemed illegal for use if changed. ACE, Hamner, LST, MEP, Wegner LS. All SPEC/SEAL Approved engine packages (as well as 'Home Track') will have a complete parts list including part numbers/modifications/serial numbers/displacement and compression ratio/block and head numbers/crankshaft manufacturer and weight/camshaft manufacturer and dimensions/rocker manufacturer and ratio/valve material and numbers on file with series office. Any changes to the specifications will be put in writing and approved by ARCAMT prior to changes being allowed to any SPEC/SEAL engine package. Any seal at any time may be broken for inspection. Any engine found to be non-compliant may result in all sealed engines from builder to not be allowed.

No 18 degree or SB-2 Chevrolet heads.

Minimum crank height is 10 inches measured from the center of the forward crank bolt or back of crankshaft.

~~All GM cast iron engines must be located so that the center line 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.~~ **The Referee will be used to determine axle centerline, all cast iron engines allowed max 4 inch set back to forward most spark plug hole center, LS engines allowed 3.5 inch of set back.**

~~Set back will be measured from either front upper ball joint for cars without offset upper A-frames, center line measurement for offset A-frames.~~

All engine setbacks will remain the same.

Antifreeze is strictly prohibited.

Dry sump engines are highly recommended. Call with questions for wet sump engines.

3. ACE TYPE ENGINES

Must be able to sell heads, complete for \$2500.00 (hardware, valves, valves springs, retainers, keepers and guide plates.)

ACE cylinder heads and intake manifolds must be unmodified, stock out of box. 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. The use of Mopar ACE Engines has been allowed.

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.

-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".

-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 362 ci. Dodge will be 364 ci. and minimum 350 ci. for GM, 346 ci. for Ford.

-ACE Engine Camshaft

The max lift on any roller cam is .625. Duration rule is 270 at 50 thousandths. No mushroom type lifters. Inlay-ed 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.

-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

-ACE Engine Blocks

Must be standard factory production cast iron. (Only 010 or bow-tie 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.

-ACE Engine Crankshaft

Standard steel type only, minimum allowed weight of 43 lbs. (or stock type for block used) stock angle crankshaft allowed. No Honda journal crankshafts. Stroke 3.400 min to 3.500 maximum. LS firing order may be used.

Minimum 1.980-rod journals or any under sized journals under factory dimensions.

-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.

4. 9 to 1 ALUMINUM HEAD ENGINES

-Engine Block

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

-Crankshaft

• Standard steel type only, minimum allowed weight of 38 lbs., stock angle crank shaft allowed.

-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 362 c.i. and minimum 347 c.i. aluminum headed motors may use dished or inverted dome pistons.

-Connecting Rods

Only ARCA Midwest Tour approved steel rods allowed. No titanium, aluminum, graphite rods or stainless steel are allowed.

-Camshaft

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

-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 restrictions. 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 center line.

-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.

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.

-Other

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

5. LST ENGINE

Exact guidelines forthcoming.

6. SOUTHERN SUPER PARTS ENGINE (SSPE)

May be Claimed for \$21,000 plus pulling fee

-SSPE Cylinder Heads

Listed Brodix Cylinder Heads only. Heads may be surfaced to achieve proper compression ratio. Absolutely no other work of any kind will be permitted to the intake ports, exhaust ports, or combustion chambers. Ford part #: SP STS T-1 F STD 225-SSPE. Must retain minimum valve angle of 20°. Chevy Part #: SP STS T-1 STD 227-SSPE. Must retain min. valve angle of 21°. Multi-angle valve job permitted. Absolutely no blending of valve job below valve seat permitted. Chamber must retain shape 3/8" above valve seat. Minimal blending due to multi-valve jobs permitted. Maximum valve size: Intake 2.08", Exhaust 1.60", Stem size 11/32". Intake valve may be titanium or stainless steel. Exhaust must be stainless steel. No Titanium valve springs permitted. Maximum racer cost: \$425.00 per set. Titanium retainers permitted. Lock angles not specified.

-SSPE Manifolds

Intake must remain stock. Absolutely no match porting or blasting of any kind permitted. Slotting of bolt holes, water lines and matching of sides allowed. Ford part #: Edelbrock 2928, 2929, or 2934 only. Chevy part#: Edelbrock 2814 or 2892 only.

-SSPE Pistons

Maximum Engine displacement is 362 cubic inches. Maximum compression ratio is

11.5:1 with +.5 tolerance. Any flat top piston permitted with 927 wrist pin and .043 x .043x 3mm ring package only. Pistons must not extend out of the top of engine block. Maximum racer cost of \$1400.00 per set.

-SSPE Camshaft

Camshaft must be Competition Cam Part #: 21151712. Camshaft must be installed on 104° intake centerline +/- 1°. Roller lifters, maximum racer cost of \$700.00 per set. Maximum lift of .715" while using 1.6 rockers checked at valve with zero lash. Maximum 1.6 rocker arm racer cost of \$1,500.00 per set. Magnetic-type push rods only. No keyway guided lifters permitted.

-SSPE Connecting Rods

Connecting rods: Minimum rod journal size 1.850". Absolutely no piston-guided rods permitted. Maximum racer cost of \$1400.00 per set. No titanium rods permitted. Minimum rod weight 560 grams.

-SSPE Blocks

Cast Iron engine blocks only.

-SSPE Crankshaft

Crankshaft must have a minimum weight of 40 pounds (with front timing pulley or sprocket). Minimum main size Chevy 2.300/ Ford 2.250. Maximum advertised racer cost of \$1400.00

-Other

Maximum 5 stage dry sump oil pump permitted. Maximum racer cost of \$1,250.00. Oil pan must have 1" inspection hole. Absolutely no sectional pans permitted. Open box pans only (NO windage tray / scrapers etc.). Maximum racer cost of \$550.00. 14. Ignition System may only be FAST Ignition part # 6000-6701. Mount on right side of car dials point out the passenger side. The mag positive & negative shall be a maximum length of 62 inches. Must remain uncut or spliced and on top of dash in clear view. Mandatory 8000 RPM Rev Limiter must be installed and fully functional. Absolutely no crank trigger pickups permitted. Cylinder head removal after any race may be required for inspection purposes.

7. CARBURETORS AND SPACER PLATES

All cars will use **an unaltered** Holley 4412 style 2bbl approved carburetor. The Ultra series will not be allowed. The HP or parts may also be used.

All carbs must pass all ARCA Midwest Tour gauges and specs, **at any time regardless of temperature.**

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. **Ford Ace with 2934 intake max 5/8" spacer.** No tapered spacers unless allowed on approved engine package.

Approved spacers must be used on MEP, Hamner, LST and Wegner LS. ~~The LST may test fuel injection and fuel injection may be allowed for LST, in future seasons.~~

-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.

8. 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 may be inspected at any time.

Fuel cells with rubber bladders, fuel cell plates or fuel cell tubs are mandatory. Teams are responsible to verify that fuel cells and bladders are up to date and in good condition.

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. 1/8" fuel cell can recommended.

Fuel cell minimum height ~~will remain at 8~~ 10 inches for 2018. Fuel cell must be securely mounted behind rear axle and centered between rear frame rails. Must maintain industry standards as far as rear frame rails. We have the measurements of most chassis builders on hand. Official approval required. The use of U style cells has been prohibited in some series.

Fuel cell must be banded both ways with two steel straps each way. 1-inch minimum Steel 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 and any part of the fuel cell including plates, straps, and mounting must be magnetic steel with a minimum of 14- 3/8 bolts with flat washers on top and lock washers on bottom

All fuel cells must have check balls in place. All cars must have a **functioning OBERG, SRI or other Series approved vacuum style fuel shut off switch mounted in line at the point where fuel exits the cell.** ~~or a working fuel shut off valve or other approved device.~~ Must be mounted within 12 inches of the fuel cell and in plain view. A weight penalty may also be assessed for non-conforming cars not running series regularly.

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 and/or plates will be asked to change or be disqualified.

A sonic tester will be used to check fuel cell can thickness. Fuel cell can pictures will follow.

ADD minimum 25 pounds for non-approved fuel cells and plates.

9. 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.

All cars will be 58% left side weight. 58.3% is maximum

All added weight must be solid LEAD, no tungsten. Must also be painted WHITE with car numbers on weights. There is a \$10 per pound fine for any lead that is mounted loose or falls off car on track at any time for the team. Cars may not be able to pass tech if numbers are not on weights and painted white.

2750 lbs. – ACE engines with 4412 2bbl Holley – 500 cfm

2775 lbs. – LST Sealed Engine (7600 RPM, with builder ID), Southern Super Parts Engine (8000 RPM), 5.3 WAR Sealed Engine (7600 RPM) all with 4412 2bbl Holley – 500 cfm

2800 lbs. – McGunegill Sealed (7600 RPM), Ford S374D (7600 RPM), Hamner Sealed (7600 RPM), 9 to 1 Aluminum Engines, Tesar Sealed (7600 RPM), Wegner 6.0 Sealed (8000 RPM) all with 4412 2bbl Holley – 500 cfm

~~Other types of Engine combinations may be considered for competition but they must be approved prior to use and tested with the series.~~ Starting weight minimum 2775 lbs.

~~2700 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. Must be SEAL approved. Must also be run as delivered from said manufacturer. Must have all seals and proper documentation. Must also be on approved SEAL builders spec/info sheets. All sealed engines run in AMT must have inspection hole in oil pan under rod journal.

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

- ~~• 2750 lbs. – McGunegill sealed engine (7600 RPM) with 4412 2bbl Holley – 500 cfm~~
- ~~• 2750 lbs. – Ford sealed S374D (7600 RPM) with 4412 2 bbl Holley – 500 cfm~~
- ~~• 2750 lbs. – Wegner sealed engine (7600 RPM) 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 (7600 RPM) 4412 2 bbl. Holley – 500 cfm~~
- ~~• 2725 lbs. – LST Sealed engine (7600 RPM, with builder id) Holley 4412 2 bbl 500 cfm or fuel injected if/when approved.~~

ALL ENGINES MAY HAVE A CHIP INSTALLED **OR ADJUSTED** AT ANY TIME! We feel that this will/may be a cost saving measurement to all engine packages. Any new engine package looking to be allowed in the AMWT must have the approval of the SEAL ENGINE BOARD. Engines may be tested at any time with official approval.

Engines not of SEAL or AMWT approved types may be run with prior approval. Weight for those engine packages will be determined at event.

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

10. MUFFLERS AND HEADERS

Mufflers are required for competition in the ARCA Midwest Tour.

Any car not meeting the 105 decibels at 100' will add 25 lbs. min

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 without a cone style inserts. No one off custom header allowed.

ANY CAR NOT MEETING THE 105 DECIBELS WILL ADD 25 lbs min

11. AIR INTAKE/AIR BOX

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. No additions to air box what so ever.

No devices for directing the flow of the air into the air cleaner or air box are permitted.

No additives allowed in air filter.

You may not grab or funnel air into air box.

12. CLUTCH

–5.5 inch or larger will be the only clutch allowed. Max price MSRP. \$1600

Absolutely no carbon fiber or poly clutches allowed.

Bell housing must have a minimum 2 1/2" hole at bottom (to allow a clear view of clutch).

Only standard material clutches allowed. No Slipper or Centrifugal clutches allowed.

13. TRANSMISSIONS

Bert or Brinn style transmissions are allowed.

No bottom load transmissions.

Must have two forward and 1 reverse working gears minimum.

One single lever shifter. No push and pull rods.

Must be self-starting.

This area will continue to be monitored, we encourage teams to NOT buy the latest options as they will likely NOT be allowed in the coming seasons.

14. BRAKES

All cars must have functioning brakes on each wheel.

Maximum 4 piston brake calipers.

Fixed mounted or floating rotors only. Steel rotors only. Maximum \$500 limit on brake calipers for all ARCA Midwest Tour cars.

All brakes must be ARCA Midwest Tour approved

Must also be sold on open market.

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

All air for brake blowers for front wheels 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 fans are not approved.

15. SHOCKS

Maximum cost on racing shocks is MSRP \$850 for a complete unit

The following shock (bodies) may be used in ARCA Midwest Tour Competition. JRI

ST-08, SC-07 (SC-07 must be on approved list by JRI) Ohlins TTX 36 Series Penske 7300, 7500, 8300 Series, PRO ACF46, ACF47, ACF 48, ACF 49 SP ARCA Series.

All conventional type other shocks that are now in use may be used. Any new JRI, Ohlins, Penske, or redesigned shock body from these companies will not be allowed in Midwest Tour competition. The limit on shock cost will stay the same or as listed above.

Conventional shocks now in use: Afco, Bilstein, Integra, Koni, Pro, QA1

Any other shock will need official approval before use in Midwest Tour Competition.

Any of these companies making new products not in use at this time will also have to be approved. (12/17/13) Please contact the tech director for questions.

The use of bump springs will be allowed. A bump spring must act like a bump rubber and may not be larger than 2 inches in diameter and 3.75 inches tall. No other types of bump springs may be use. The car may have 4 springs, one for each wheel and 4 shocks, one for each wheel. A bump spring should look like the ones sold at www.bumpspring.com as of 12/17/13. A bump spring may be used on a remote shock eliminator type set up, but again must look and act like a bump rubber. Shocks must be mounted in a conventional style and with an approved mounting style.

No cantilever, wishbone, or torsion type suspensions maybe used. No air blow up bump stops or non-conventional style bump stops.

All springs for suspension must be magnetic steel including bump springs.

All shocks must be ARCA Midwest tour approved

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

Use of eliminators is allowed.

No shock blankets or covers allowed

No air adjustable springs or air bump springs

No electronic shocks permitted, shocks must be mechanical and no part of the shock or suspension may utilize electricity.

No Magnetic Shocks.

~~Weight break per entry blank for Big 8 approved shock/spring 'Conventional' on all corners or Koni Spec Shock on all corners.~~

~~-Shock Manufacturers and Series as listed in 2018 Big 8 Series rules.~~

16. SUSPENSION

Coil over or leaf allowed. No computer or hand operated controlled suspension. No titanium axle shafts, No aluminum rotors, No carbon fiber rotors. No cantilever, wishbone, or torsion type suspensions maybe used.

17. ROLL CAGE CONSTRUCTION

The 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/**front bumper**, right side kick outs and rear bumper/**tail** 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 including bumpers

NOTICE: The USRA is working on minimum roll cage, front and rear stub and right side door bar thickness.

-Driver Side Door Plates

All left side door bars must be plated.

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. Front of outrigger bar must go to right front frame behind right wheel.

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

18. DRIVESHAFT

The drive shaft shall be made of steel or aluminum only. Carbon-fiber drive shafts are not permitted at this time. Due to increased safety and reduced costs, these may be tested for future approval.

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.

19. 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 and spring 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 outside the body of the car or be accessible to the driver in the driver's compartment.

Manual or power steering may be used.

No electronic power steering.

20. REAR SUSPENSION

Non-independent, live axle type rear suspension is mandatory.

Rear ends may be quick-change, minimum 8 inch ring gears, with full-floating hubs or 9-inch Ford type. **Aluminum tubes allowed on quick-change, must add 5 lbs. per tube to total weight.**

Starting June 1, 2019, cars utilizing a spool will receive a 25 lbs weight deduction, 2020 those not utilizing a spool will receive a 50 lbs weight penalty, 2021 only a spool will be allowed.

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 or move.

Trailing arms mounting behind the driver must have a 1/8" steel protection plate protecting driver.

21. 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. Wheels must meet AMWT approval. Steel wheels only, light weight wheels will not be allowed.

-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.

22. SAFETY

In all matters pertaining to safety, car owners, drivers and crew members must review and educate themselves in all safety standards. It is the responsibility of the car owners, drivers and crew members 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

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 undertow.

-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 may also be Carbon Fiber or Carbon Composite or others. This should not be used as a weight saving measure. We have found several new seats that are affordable and safe and meet with the rules and thoughts of the AMWT. See officials for types that maybe used. Video attached of one seat type.

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 approved 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.

-Seat Belt and Shoulder Harness Installation

All seat belt and shoulder harness systems must meet SFI specification 16.1, type 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 shoulder strap. 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.

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

-Driver Helmet

Effective with the 2017 season, all driver helmets must reflect a Snell SA2015 certification minimum. SFI or Snell approval sticker must be visible for ARCA Midwest Tour officials inspection.

Eye protection is mandatory at all times.

-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.

-Fire Suppression System

A minimum five-pound (5) on-board fire suppression system, with multiple discharge point is highly recommended for series traveling competitors.

Cold Fire fire systems recommended for cockpit usage.

Temperature activated (automatic) cockpit system recommended, 10 lbs weight break.

Must have gauge in view.

Must be fully charged.

-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.

23. TIRES

Hoosier tires are the official tire of the ARCA Midwest Tour.

The Hoosier 3035 left side and the Hoosier 3045 right side will be required at all tracks under $\frac{3}{4}$ of a mile unless otherwise recommended by Hoosier Tire Company. See official event entry form.

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 may be checked at any time.

Tire samples may be taken and sent to an independent lab at any time. Tires must be logged in to qualify for any event.

24. TRACTION CONTROL AND ON-BOARD ANALYSIS

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.

Only one camera pointing out front windshield allowed
Multiple cameras allowed ONLY with pre-approval and when installed by industry videographers. No in-car data logging equipment of any kind allowed.

No computer or video analysis equipment of any kind allowed

No digital gages and/or data logging systems allowed

Transponder Standard Location TBA

25. IGNITION

All ignition systems must be 12 volts. Only one 12 volt battery may be 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:

Crane Cams/**FAST** Ignition, HI-6RC (p/n 6000-6700) PS92N Coil (p/n730-0192), and Ignition Tray (p/n 6000-6363P). Or complete ignition kit (p/n 6000-6701). Must be mounted as shown and also not within the reach of the driver. Adjustment tabs may be 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 modifications to allow tech officials to test system. ~~Tour has several boxes to loan for people from other tracks that do not have a Crane System.~~

MSD Ignition and others are allowed, provided they are wired correctly for the use of a CRANE IGNITION tester.

FAST (p/n 6000-6701) mandatory for use with SSPE

MSD (p/n 6014 ct) mandatory for use with LST

Teams will have 20 minutes to correct the wiring harness or face disqualification and/or fines. If you believe you have a problem please ask.

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

Wiring of the Crane system with a six pin weather pack approved style plug in.

- 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.
- g – battery positive (large red)
- h– battery negative (large black)

Only one ignition box allowed in car at any time. Car may be wired for dual boxes but must have only one box in car while on track.

Box must be in clear view, mounted on right side of dash with dials to right window opening. Crane Ignition must be kept complete with plate, coil, and box as a unit.

Must be able to remove in five minutes

26. NOTICE

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.

Furthermore any ACE, Spec,/ Sealed,9 to 1 or LST builder caught with non-approved items in engine will have a penalty put on all engines of that type from said builder. All engines will be checked and then approved along with a fine of a minimum of \$1000.00. Failure to pay will also result in engine builder being excluded from building said engine packages and/or all his engines will have a 50 pound weight added and a 250.00 inspection fee before weight penalty is **removed** lifted per engine. Engine builder will also correct any parts found to be non-compliant.

27. ILLUSTRATIONS



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

Video on race-tech seats. <https://www.youtube.com/watch?v=0F7hlz0DKXk&feature=youtu.be> HYPERLINK
"https://www.youtube.com/watch?v=0F7hlz0DKXk&feature=youtu.be"v=0F7hlz0DKXk HYPERLINK "https://www.youtube.com/watch?v=0F7hlz0DKXk&feature=youtu.be"& HYPERLINK

"https://www.youtube.com/watch?v=0F7hlz0DKXk&feature=youtu.be"feature=youtu.be

Thank you to Race -Tech Seats.

Simpson Seat Belt Mounting Tips at Simpson Race Products Mounting Tips. Thank you

to Simpson Race Products.