



# 2022 Historic Bolivar Speedway Modified Rules

The guidelines and/or regulations set forth herein are designed to establish minimum acceptable requirements. No expressed or implied warranty of safety shall result from publication of, or compliance with these guidelines and/or regulations. And are in no way a guarantee against injury or death.

1. The track reserves the right to modify these rules as may be necessary to keep the class competitive for all participants.
2. The track cannot anticipate every situation, circumstances or interpretation of these rules. Therefore it reserves the right to **INSPECT, TECH or TEAR DOWN** any competing car at any time.
3. Additional weight may be added to any car at track's discretion to keep the class competitive.
4. Any parts found to be illegal by Historic Bolivar Speedway rules will be confiscated by Chief Tech Official and not returned to team found to be illegal.
5. 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.*
6. 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.
7. Just because it not in the rules, doesn't mean that it isn't.

## A. FRAMES

1. Factory production full American passenger frames with parallel rails (both sides) may be cut off maximum 36" from rear axle centerline.
2. **Frame rails must extend to a point beyond the base of the driver's seat.**
3. Rear clip may be fabricated out of tubing.
4. Front and rear pick up loop is required.
5. Frame height minimum of 4-inches without driver, on both sides of car.
6. Minimum of 10 ½-inches from the centerline of the crankshaft to ground.
7. **Front cross-member may be altered for oil pan clearance but bottom of cross-member cannot be altered for ground clearance.**
8. Must not be widened or narrowed at front (except for notching for radiator clearance) and must be able to support main vertical bars of main roll cage.
9. **Any fabricated or stock stub not approved by Historic Bolivar Speedway tech officials is subject to weight penalty.**

## B. ROLL CAGE

1. Must consist of continuous hoops not less than 1 ¾ inch outside diameter and must have a wall thickness of at least .095-inch carbon steel round mechanical tubing.
2. Must be welded to frame in at least 6 places. Body mounted roll cages are not acceptable.
3. Must consist of configuration of front and rear hoops connected by tubing on sides or side hoops in a manner deemed acceptable by the inspector.



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4. Driver's head must not protrude above cage with helmet on, while strapped in driver's seat. A minimum of 3 inches of clearance to nearest tubing.
5. Roll cage must have 3/16-inch inspection hole in non-critical area.
6. Minimum requirements for all roll cages are as follows:
  - A) 4 upright bars and 3 overhead bars
  - B) Must have at least 4 curved horizontal bars at driver's door welded to front and rear cage members and must have a .125 minimum thickness steel door plate from front to rear welded to outside of driver's door bars. And 3 in passenger door connected by vertical tubing.
  - C) 1 horizontal bar in dash area connecting front uprights.
  - D) Roof support bar (see diagram #2).
  - E) Rear hoop brace (see diagram #3).
  - F) Tubing to protect driver's feet (see diagram #4).
  - G) Vent window brace on driver side (see diagram # 4).
  - H) Complete engine compartment and truck compartment braces are required.
7. Bends must not have any kinks.
8. See diagrams # 2, # 3, # 4, #5 and # 6.

### C. BODY

1. IMCA type modified body.
2. Bodies must be symmetrical in size from side to side and from front to rear.
3. Original roofline of body must be maintained with a maximum 2-inch drop rear to front.
4. No half roofs are permitted.
5. Top to be rounded in all directions (No Flat Tops).
6. Roof width: 42-inches minimum; 50-inches maximum.
7. Roof length: 41-inches minimum; 56-inches maximum.
8. Bodies should extend no further forward than the back of the block. Front wheels must not be covered. Engine compartment must have completely open sides.
9. Must have full floorboards and completely enclosed interior and sealed metal firewalls, both front and rear.
10. Rear bumper to deck lid enclosure is optional. If enclosed, it should be a solid panel at least 8-inches high and include car number (on passenger side).
11. If no rear panel, use 6-inch by 6-inch number plate on rear (on passenger side).
12. Driver and passenger side window must have at least a 12-inch vertical opening. Driver must have easy access into and out of both sides of the car.
13. Driver's window must have an approved window net with quick release. When in place window net must be tight and fit opening.
14. A 5-inch spoiler is allowed made of clear lexan only, **No holes in spoiler.**
15. No wings or any other type of air / ground effects are allowed anywhere inside or outside the car.
16. No protruding objects allowed.
17. Full Lexan windshield or 3 safety bars must be installed in front of driver, and may have screen attached. Lexan / glass are not permitted in door windows.
18. Rear deck width, measured from outside to outside of quarter panels at widest point, is 53- inches minimum and 66 inches maximum.
19. Quarter panel length, measured from centerline of rear axle to rear bumper, is 34-inches minimum and 49- inches maximum.
20. Rear deck height is 28-inches minimum and 37-inches maximum.
21. Must be kept in good condition all season long.



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### D. BUMPERS

1. Bumpers must be used both front and rear.
2. Two bar front bumpers must be mounted frame end to frame end with bottom loop parallel to ground.
3. Front bumper must be 10-inches high from bottom bar to top of top bar.
4. Front bumper material must be 1 ¼-inch minimum and 2-inch maximum outside diameter steel pipe.
5. Rear bumpers may be constructed of aluminum I-Beam, steel pipe or steel square tubing, must rounded or tapered ends with no sharp edges.
6. Rear bumpers and nerf bars must not extend beyond width of rear tires.
7. Must have tow hook or cable, front and rear, capable of supporting car.

### E. WHEELBASE

1. 108 inches minimum and 112-inches maximum on both sides.
2. Tread width, measured from outside of tire sidewall to outside of tire sidewall, is 80 ½-inches maximum at spindle height.

### F. WEIGHT

- A) GM # 602-19258602 6400 RPM Chip / Min. Weight 2450 lbs with 59% Left Side
- B) GM # 604-88958604 6400 RPM Chip / Min. Weight 2475 lbs with 58% Left Side
- C) Ford # M-6007-D347SR 6300 RPM Chip / Min. Weight 2475 lbs with 58% Left Side
- D) McGunegill #MEP425LM 6300 RPM Chip / Min. Weight 2500 lbs with 58% Left Side
- E) McGunegill # MEP604 6400 RPM Chip / Min. Weight 2500 lbs with 58% Left Side
- F) IRON HEAD ENGINES 7400 RPM Chip / Min. Weight 2500 lbs with 58% Left Side

1. Maximum left side weight is figured with driver sitting in normal driving position in seat.
2. All ballast must be in block form of 5 pound minimum, painted white, must have car number painted on it, and be securely fastened. Cannot be located in driver's compartment.
3. No ballast weight is permitted to be welded or attached to leg or doorplates.
4. Lead shot, liquid or ballast adjustment devices are not permitted.
5. Tungsten, bb, or liquid weight is not permitted at any time for ballast weight.
6. **Weight penalties may be added to any car not meeting rule requirements. Weight Penalties that apply**
  - A) 25 lbs for Quick Change
  - B) 25 lbs for Shocks not meeting pricing rule
  - C) 25 lbs for Frame rails not meeting specs
  - D) 25 lbs for Front stub not meeting specs
  - E) 25 lbs for Spindle not meeting specs

### G. NUMBERS

1. Numbers are required to be registered with track. All cars must have large legible numbers on both doors and on top (reading from passenger side) numbers should have 1-inch outline in contrasting color from body.
2. Numbers must be at least 4-inches thick and 18-inches high on doors and 24-inches high on roof.
3. Number is to be placed on front (driver's side) and rear (passenger side) of car that are at least 1-inch thick and 6-inches in height.



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## H. WHEELS

1. Only steel wheels with a maximum width of 8 inches permitted. Minimum weight is 19-pounds. No aluminum wheels.
2. Wide 5 wheels are not permitted.

## I. TIRES

1. 2022 TIRES – 8” American racer AR 870.
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.

## J. BRAKES

1. Must have operating brakes on all 4 wheels at all times.
2. Only 1 brake line per caliper. No brake re-circulators permitted.
3. Only steel or cast iron brake rotors permitted.
4. Carbon fiber brakes are not permitted.
5. Rotors may be re-drilled for different bolt pattern or larger studs but must not be drilled to lighten.
6. Disc or drum brakes may be used front and rear.
7. Brake floaters are allowed on rear brakes.
8. Aluminum calipers are allowed, but car must add weight penalty of 15 pounds.

## K. SEAT, SEATBELTS & SAFETY ITEMS

1. Full containment, high backed steel or aluminum racing seat is mandatory.
2. Seats must be attached with a minimum of 6, 5/16-inch or larger bolts (minimum of grade 8) with fender washers; 4 on bottom and 2 in back.
3. All cars must be equipped with an approved quick release type 5 point safety harness, securely fastened to frame and roll cage.
4. Seat belt and shoulder harness material should be at least 3-inches wide and **CANNOT be older than 5 years**. Minimum requirements consist of lap belt, shoulder harness and crotch strap. And should be routinely checked and maintained through-out the season. No sewing or altering allowed on seatbelt material. Seat belts must be attached to main structure with a minimum of 7/16-inch grade 8 bolts with double or self-locking nuts. See diagrams # 7, # 8 and # 9.
5. Seat and steering wheel may be located to suit driver, but must be kept on the left side.
6. Master “ON/OFF” switch on battery cable must be located just inside driver side window, between ledge and roof, just behind driver for easy access. Switch is to clearly marked OFF and ON. See specifications (page # 10).
7. Must be equipped with a fully charged fire extinguisher with working gauge and must be mounted in a quick release holder to be accessible by the driver. Onboard fire-out system is recommended. A minimum of a 5-pound fire extinguisher is required.
8. 2 way radios are allowed.
9. **Scanner tuned to track frequency is required. Driver or spotter must be able to monitor track frequency.**



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### L. FUEL SYSTEM / FUEL CELL

1. Gasoline only. Must meet track specifications.
2. No fuel additives of any type permitted.
3. No pressurized fuel systems.
4. Fuel cells are *mandatory*. Fuel cells with a bladder highly recommended and must be encased in an approved metal container of no less than 20 gauge steel or 1/8 inch aluminum. Cell must have an additional 1/16 inch steel or aluminum protection plate between fuel cell and rear end housing that is attached to square tubing, straps or frame of car. See diagram # 1.
5. Fuel cells must be mounted between frame rails as far forward as possible and using minimum of 2, 2-inch by 1/8-inch metal straps.
6. Fuel cell must not extend below the rear end housing. Must be equipped with a drag loop extending below bottom of the cell.
7. **Maximum of 22 gallon capacity. Example: 26" L x 15.5" H x18.5" W**
8. Only OEM type mechanical fuel pumps mounted in stock location permitted. No electric fuel pumps.
9. Fuel lines must be armored hose, or installed in metal conduit or steel fuel lines and must not be routed through driver compartment.
10. Fuel cell height is measured from ground to lowest point of bottom of fuel cell. 8 inches minimum permitted.
11. Must have check valve on vent tube in cap.
12. Fuel cell must provide ample fuel to run 55 lap features.
13. **All cars must have an OBERG Vacuum Style (preferred) or ball valve type fuel shut off placed at the point the fuel exits the cell. This is to stop the flow of fuel to a damaged line or pump.**

### ENGINE OPTION # 1 – CAST IRON HEAD ENGINES

#### 11.0:1 COMPRESSION

1. **7400 RPM Chip with minimum weight 2500-pounds with 2 barrel with 58% left side weight.**
2. Must use OEM cast iron, American make V-8 engines only.
3. External engine castings and thread holes cannot be altered.
4. No aluminum, titanium or carbon fiber components allowed.
5. **NO ANTI-FREEZE ALLOWED. WATER ONLY, NO ADDITIVES!!** Violators will be subject to penalties.
6. Rear of engine (bell housing flange) must be 72-inches minimum from centerline of rear axle.
7. Center of the crankshaft must be within 1½-inches of center of upper ball joints.
8. Centerline of crankshaft must be located at least 10 ½-inches above ground plane.
9. Maximum compression is 11.0 to 1. **NO TOLERANCE.**



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10. Engine must remain strictly stock in appearance.
11. Only standard OEM stock cast iron engine block permitted.
12. Engine block must retain all standard dimensions with exception of maximum allowable overbore and surfacing of block deck.
13. No angle cutting of engine deck permitted. No internal polishing of engine block permitted. Deburring is permitted.
14. ENGINE SIZES V-8 small block engine, 11.0:1 compression ratio;
  - A) Chevrolet / General Motors – 350 cubic inch displacement engine block plus a maximum of .080 inch overbore per cylinder.
  - B) Ford – 351 cubic inch displacement engine block plus a maximum of .080 inch overbore per cylinder.
  - C) Chrysler – 340 or 360 cubic inch displacement engine plus a maximum of .080 inch overbore per cylinder.
  - D) 355 cubic inch displacement Chrysler engine is not permitted.
  - E) All built motors will be check for Cubic Inches (365 Max) and Compression Ratio (11:1 Max).

### 1-A CAST IRON HEAD ENGINES - VALVE TRAIN

1. Maximum 2.02-inch intake valves and 1.60-inch exhaust valves.
2. Only steel valve springs permitted. No titanium (or other expensive or exotic material) valve spring or retainers.
3. Guide plates and screw in shoulder studs allowed.
4. No angle milling permitted. Flat milling is allowed.
5. Flattop or dished pistons only.
6. Must use flat tappet cam and lifters.
7. No mushroom lifters.
8. Rev-kits are not permitted.
9. Cannot alter lifter bores. May have bronze inserts but diameter must remain O.E.M at .842-inch.
10. Must use OEM size lifters for block being used.
11. Any length push rods allowed.
12. Aluminum roller rocker arms, stud girdles are permitted Poly locks ok..
13. No canted valves. Inline valves only.
14. Maximum valve spring diameter 1.44-inches.
15. No portion of piston above engine block surface permitted.
16. Only solid steel connecting rods permitted.
17. No air directional devices on any valve surface permitted.
18. Valve stem diameter is .34375-inch (11/32-inch) minimum.

### 1-B CAST IRON HEAD ENGINES - BLOCKS

1. Aftermarket blocks permitted.
  - A) General Motors – Stock cast iron blocks: 305, 327, or 350.
  - B) Ford – Stock cast iron blocks: 260, 289, 302, or 351.
  - C) Chrysler – Stock cast iron blocks: 273, 318, 340, or 360





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### **1-C CAST IRON HEAD ENGINES - HEADS**

1. No aftermarket head allowed except those listed.
  - A) General Motors: Any stock GM head except the Bowtie Vortec head.
    - 1) Dart – 10320010 or 10310010
    - 2) World Products – 011250 or 011150
    - 3) RHS – 12319 or 12320
    - 4) EQ – CC200BA
    - 5) Bowtie – 034
  - B) Ford: Any stock Ford head.
    - 1) World Products – 053040 or E351 or Roush 200
    - 2) RHS – 35302
    - 3) SVO – N351 or N352
  - C) Chrysler: Any Stock OEM factory production Chrysler head allowed with inline valves (no canted valves). Must meet maximum intake and exhaust. No W-2 or aftermarket heads allowed. Chrysler may use OEM rocker arm bars.
2. Only unaltered stock cast iron production heads limited to 2 valves per cylinder permitted.
3. No port matching or flow work of any kind permitted. Gasket matching will be permitted.
4. No angle cutting of heads to block mating surface is permitted.
5. No offset drilling head stud or bolts holes permitted.
6. 3-angle valve job permitted.
7. Combustion chamber may be polished.
8. Intake manifold cannot be altered. Must remain as manufactured. No port matching or flow work of any kind permitted. Outside may be powder coated, but interior cannot be painted.
9. Part numbers must remain visible.

### **1-D CAST IRON HEAD ENGINES - CRANKSHAFT / HARMONIC BALANCER**

1. Only steel or cast iron production design crankshaft permitted with a minimum weight of 45- pounds.
2. After market crankshaft is permitted, but must be identical in appearance and construction as OEM crankshaft. Crank must be a minimum of 45 lbs.
3. Stroke must be OEM dimension for engine block being used.
4. No Honda journal crankshaft permitted.
5. Leading edge of counterweights must not be knifed edge, have pendulum cut or holes across counterweights.
6. Standard OEM style steel harmonic balancer permitted. After market balancer may be used, but must be of conventional design. Balancer cannot contain fluid.
7. Extra capacity oil pans are permitted. Oil pump must mount in stock position. **MUST HAVE 3/4" INSPECTION HOLE ABOVE OIL LEVEL FOR INSPECTION.** Inspection hole needs to be installed in a manner were Tech officials can see crankshaft & rods for proper inspection. If not pan may be removed for inspection.

### **1-E CAST IRON HEAD ENGINES - CARBURETOR**

1. Stock Holley 500 CFM 2-barrel carburetor, part # 4412, "box-stock" with a minimum weight of 2500- pounds with 58% left side weight.



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2. A Carburetor track claim rule will be in effect:
  - a) Claim will be \$500 with NO EXCHANGE.
  - b) Claim to be made by track.
3. **No use of any type of Epoxy or other coating of any type is permitted.**
4. Fuel injection, superchargers or nitrous oxide are not permitted.
5. Alterations to allow additional air to be picked up below opening of venture will not be permitted.
6. Double return spring required.
7. Base plate must not be altered in any way.
8. No modifications. Air horn must not be removed.
9. No polishing, grinding or drilling of holes permitted.
10. No tapered boosters. Boosters may not be changed or altered in any way.
11. Venturi area must not be altered in any way. Casting ring may not be removed.
12. May use Edelbrock Intake # 2100 Series or # 2900 Series with no weight penalty.
13. May use any other factory made steel or aluminum intake with a 50lb weight penalty.
14. If using a 4 barrel intake you may use any straight bore adapter - Aluminum or Phenolic - 1.700 diameter hole and 1" tall.
15. No spacers are allowed.
16. Carburetor must be securely fastened to intake manifold. Carburetor and adaptor gaskets maximum .05- inch thickness.

### **1-F CAST IRON HEAD ENGINES - OIL PAN**

1. No dry sumps allowed.
2. Extra capacity oil pans are permitted. Oil pump must mount in stock position. **MUST HAVE 3/4" INSPECTION HOLE ABOVE OIL LEVEL FOR INSPECTION.** Inspection hole needs to be installed in a manner were Tech officials can see crankshaft & rods for proper inspection. If not pan may be removed for inspection.

### **ENGINE OPTION # 2 – CRATE MOTOR**

**All crate 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.**

**Engine must be registered with Historic Bolivar Speedway and documentation along with spec sheet on file with Historic Bolivar Speedway.**

**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.**

Factory stock new and sealed motor can run Holley 650 C.F.M. 4-Barrel carburetor. Must have stock 1.5 rockers, stock balancer and oil pan. Any 604 that does not have factory seals will run Holley 2-Barrel 500 C.F.M. carburetor. Any straight bore aluminum or phenolic adapter 1" tall and 1.700 straight holes may be used with either carburetor. A full spec sheet must be on file with the I-44 Speedway office including McGunegill MEP425LM.





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### **APPROVED ENGINES – All Crate Motors must use the following R.P.M. chips**

- A) GM # 602-19258602 6400 RPM Chip / Min. Weight 2450 lbs with 59% Left Side
- B) GM # 604-88958604 6400 RPM Chip / Min. Weight 2475 lbs with 58% Left Side
- C) Ford # M-6007-D347SR 6300 RPM Chip / Min. Weight 2475 lbs with 58% Left Side
- D) McGunegill #MEP425LM 6300 RPM Chip / Min. Weight 2500 lbs with 58% Left Side
- E) McGunegill # MEP604 6400 RPM Chip / Min. Weight 2500 lbs with 58% Left Side

**If at any time it is deemed by Historic Bolivar Track Officials that Crate Motors have an unfair advantage for any reason cars running that particular model of crate or crates will be required to add 50lbs of lead (25lbs per side) at engine head level in front of back of engine**

1. Engine must be used as STOCK as delivered from dealer.

### **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 except those listed, alteration, physical changes, machining, re-shaping or tampering with any part of the original parts, internal or external, is prohibited.
- D) No use of any type of Epoxy or other coating of any type is permitted.
- E) Fuel injection, superchargers or nitrous oxide are not permitted.
- F) Alterations to allow additional air to be picked up below opening of venture will not be permitted.
- G) 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.

### **M. CARBURETOR AIR CLEANER / AIR INTAKE**

- 1. A dry type round air cleaner element will be required. It must have metal top and bottom with a minimum diameter of 12-inches, maximum of 14- inches, and maximum height of 4- inches. No additives allowed in air filter.
- 2. Air cleaner base must be no higher than top of choke horn.
- 3. All air must be filtered through air cleaner.
- 4. No air intakes facing forward permitted.
- 5. No air boxes permitted.



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## **N. IGNITION / ELECTRICAL SYSTEM**

1. All wiring for ignition boxes has to be visible for inspection, no unused plugs, only wires to ignition & distributor can pass thru dash and distributor plug to distributor cannot be in a harness. Must run separately from ignition box to distributor.
  2. Must have working starter and be capable of starting engine on demand.
  3. All ignition systems must be 12 volts. MSD Ignition boxes allowed. **MUST BE WIRED AT 6-PIN CONNECTOR THE SAME AS CRANE BOX.**
  4. Crane HI-6R P/N 6000-6400, HI-6RC P/N 6000-6700 or HI-6 P/N 6000-6440
  5. MSD Distributor is allowed.
  6. Crank triggered or multiple coil ignition systems are not permitted.
  7. Master "ON/OFF" switch on battery cable must be located just inside driver side window, between ledge and roof, just behind driver for easy access. See diagram, on page 14.
  8. Only one, 6 terminal ignition box permitted, and it must be out of driver's reach.
  9. MSD Connector: The 6 wire harness must be a maximum of 24-inches long, and have a female 6 pin, weather pack connector.
- A) 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)
- B) TWO PIN OPTION FOR THESE TWO**
- a) Battery Positive (Large red)
  - b) Battery Negative (Large black)
10. Onboard electronics such as but not limited to lap timing devices, suspension monitors, computers, torque limiter ignitions, and other electronic devices are not permitted.
  11. Battery must be securely fastened with cover and must not be mounted in driver compartment. A marine type battery box, or equivalent, is recommended.

## **O. ENGINE COOLING SYSTEM**

1. All engine-cooling radiators must be mounted in engine compartment.
2. Must have operational radiator overflow tank with a minimum capacity of 1-gallon, securely mounted.
3. Water only as coolant. **NO ANTI-FREEZE.** Violators subject to penalties.
4. Fan shroud must cover a minimum of top 180-degrees of fan. Shroud must extend at least to centerline of fan blades.

## **P. CLUTCH / FLYWHEEL / BELLHOUSING**

1. High speed multiple discs clutch is permitted. Minimum clutch size is 5 ½ inch.
2. Absolutely no carbon fiber or poly clutches allowed.
3. Clutch assemblies must be mounted inside bell housing.
4. Only steel, heavy cast iron, or aftermarket aluminum bell housing is permitted.
5. Must be capable of being put into and taken out of gear with engine running.
6. Must have flywheel with a starter ring on it.
7. Reverse mounted starter will be permitted.



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## Q. TRANSMISSION

1. 3 or 4 speed transmission must be OEM production manufactured that is cataloged through regular dealer channels.
2. Bert or Brinn style transmissions ARE permitted.
3. Must have minimum of 2 forward and a reverse gear, plus a neutral position, all in working order.
4. Transmission must bolt directly to bell housing, which bolts directly to rear of engine block.
  - A) Automatic transmission is permitted. Must be unaltered, 2 or 3 speed, OEM production case with a functioning stock appearing pump. Must have an approved scatter shield constructed of .125- inch by 3-inches steel, 270-degrees around top of flex plate. Splined drive flange coupler with internal pressure relief device, gate valve, or torque converter (10-inch minimum) only. Hydraulic lines may not extend into driver compartment.
  - B) Manual transmission 3 or 4 speed only, No 5 speeds (or more) allowed. Must have explosion-proof steel bell housing and 1 hole for throw out bearing lever or hose, must be 270-degrees around top of clutch and flywheel area.

## R. DRIVE SHAFT

1. Minimum 2-inch diameter, painted white, steel drive shaft.
2. Steel slip-yokes only.
3. 360-degree drive shaft loop required and must be constructed of at least ¼-inch by 2-inch steel, or 1-inch tubing, mounted 6-inches back from front U-joint.

## S. REAR END

1. Only Steel approved OEM passenger car or truck non-cambered rear end permitted.
2. All components must be steel, except lowering blocks, axle caps and drive flange.
3. Open tube rear end not permitted. Aluminum rear end is not permitted.
4. Independent rear axles not permitted.
5. Rear ends may be Quick-Change (no 8") with full-floating hubs or 9-inch Ford type, but a weight penalty of 25 pounds will be required.
6. No aluminum center section is allowed in 9-inch Ford rear end.
7. Full floating (safety hubs) rear axles are recommended.
8. Ring gear, center section and yoke cannot be lightened.
9. Steel full or mini-spools only.
10. Solid steel axles and one piece drive flanges only. No aluminum axle tubes, No titanium axle shafts.
11. No lockers, tru-trac, gold track etc.
12. Inspection hole in housing is required.

## T. EXHAUST

1. Headers may be used but must be collector type.
2. Exhaust may exit in front of firewall but must turn down toward ground or may exit behind driver and turn down toward ground.
3. Crossover pipe permitted.
4. Expansion chamber not permitted.
5. Must be sealed tight and securely mounted.
6. Noise level is set at a maximum of 100 dB measured at 100 feet from car.
7. If muffler is used, muffler choice will be left up to competitor.



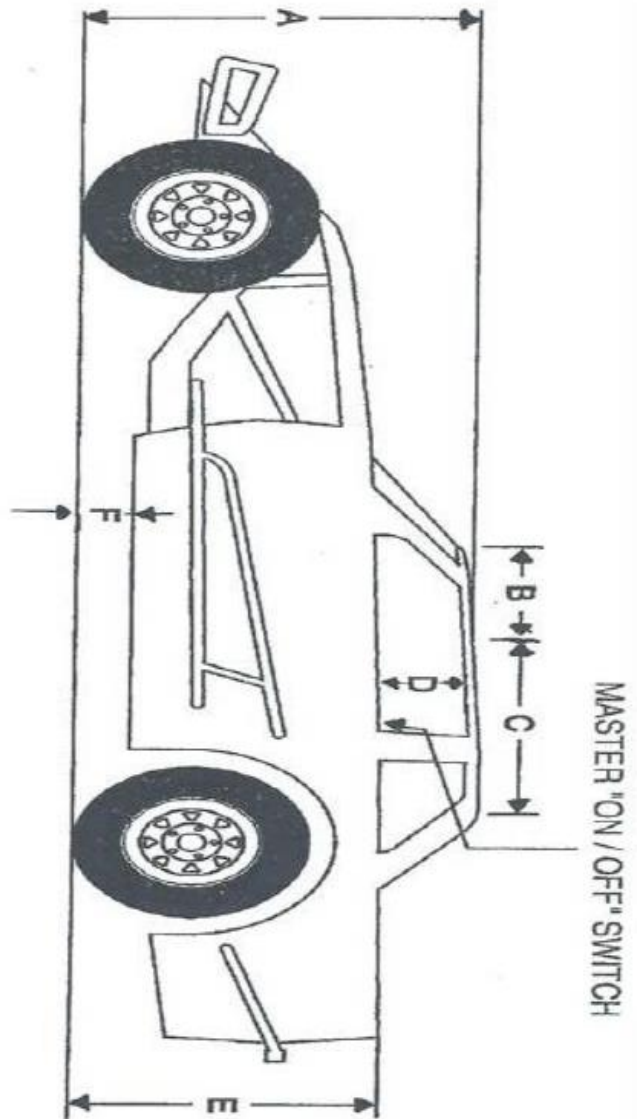
## 2022 Historic Bolivar Speedway Modified Rules

### U. SUSPENSION / STEERING COMPONENTS

1. Steel shock. No aluminum body, threaded body or Schrader valve shocks. Only shocks cataloged from a reasonable recent period, at a cost less than \$175.00 (racer's net are allowed). It is the Driver or owner's responsibility to prove cataloged pricing upon request from I-44 Tech. Official. Failure to provide cataloged pricing will result in weight penalty.
2. Conventional setups only - No bump stop, coil bind setups, or snubbers on shocks
3. All suspension parts must be made of steel.
4. Lower A-frames must be stock production for type of frame and must mount in stock location. Lower A- frame cannot be altered.
5. Upper A-frames may be stock or tubular type and frame-mounting brackets may be relocated.
6. Any 5 on 5 spindle and hub will be allowed.
7. Any cast iron spindle allowed. **If an aftermarket spindle or fabricated spindle is used, a weight penalty of 25-pounds will be required.**
8. Spindle steering arms and OEM drag link may be drilled to accept spherical type tie rod ends.
9. Pitman arm and idler arm must be OEM.
10. Weight jacks permitted. No hydraulic weight shifting devices are permitted.
11. Coil over shock / springs are not permitted.
12. Coil over eliminators is not permitted on front.
13. Adjustable strut bars may be used on front only.
14. Adjustable sway bars are permitted, but cannot be changed from inside driver compartment.
15. No adjustable suspension components or weight shifting devices that can be adjusted inside driver compartment permitted.
16. Must have a collapsible steering shaft or use at least 2 universal joints, which are not mounted in same plane.
17. Must have an approved steering wheel disconnect.
18. Steering box must be stock OEM type and be in stock location.
19. Rack and pinion steering not permitted.
20. Either rear coil or leaf springs are permitted.
21. No transverse coil spring mounts permitted.
22. Coil springs must be a minimum of 4 ½ inches in diameter.
23. Rear suspension has two options: Aftermarket 3 link design or multi-leaf design. All components must be steel. All mounts and brackets must be welded or bolted solid. No floating of trailing arms or brakes. One trailing arm per side only.
  - A) **THREE LINK DESIGN REQUIREMENTS:** Must be only 1 lower solid bar per side. Must use 1 upper control arm, may use pull bar spring or biscuit assembly, located at top center of rear end housing. May use pan hard bar located in front of or behind rear end housing. May mount rear spring directly over axel housing or use coil over eliminators (sliders). Lower spring perch or coil over mount must be welded to rear-end housing. No coilovers. Must use steel upper weight jack is spring are mounted over axel housing.
  - B) **MULTI-LEAF SPRING DESIGN REQUIREMENTS:** Must use steel multi-leaf springs. Dampener shock on top of rear end allowed. One shock per wheel. Adjustable aluminum lower blocks are allowed.



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### CAR BODY INSTALLATION

DIMENSIONS	INCHES
A. ROOF HEIGHT (MIN.) MEASURED AT B	42
B. MEASURING POINT OF ROOF (from windshield)	10
C. ROOF SLOPE (MAXIMUM)	2
D. SIDE WINDOW OPENING (MINIMUM)	12
E. REAR DECK HEIGHT (MAXIMUM)	37
F. GROUND CLEARANCE WITHOUT DRIVER IN CAR (MIN.)	4





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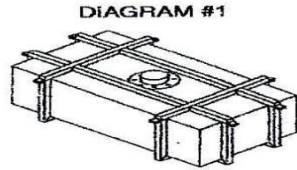


DIAGRAM #1  
1 INCH STEEL SQUARE TUBING  
OR  
2 INCH BY 1/8 INCH STEEL STRAP

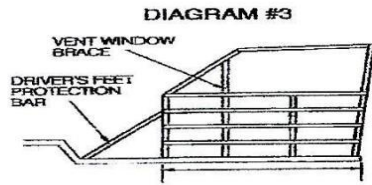


DIAGRAM #3  
VENT WINDOW BRACE  
DRIVER'S FEET PROTECTION BAR  
THIS AREA TO BE .095 INCH WALL THICKNESS BY 1.66 INCH O.D. TUBING MINIMUM.

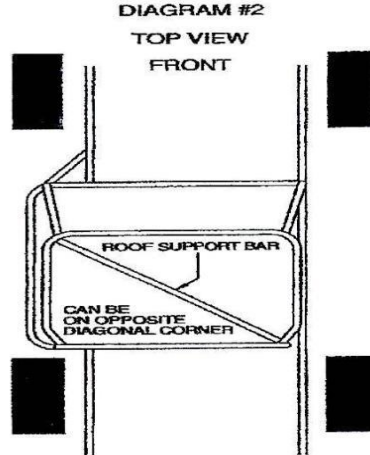


DIAGRAM #2  
TOP VIEW  
FRONT  
ROOF SUPPORT BAR  
CAN BE ON OPPOSITE DIAGONAL CORNER

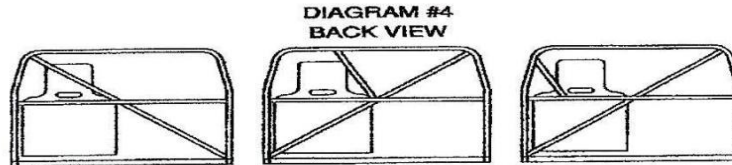


DIAGRAM #4  
BACK VIEW  
ADDITIONAL BRACING BEHIND DRIVER'S HEAD IN MAIN HOOP REQUIRED. THESE DIAGRAMS ARE MEANT TO BE SUGGESTIONS ONLY.

## PROPER DRIVER SIDE DOOR PLATE INSTALLATION

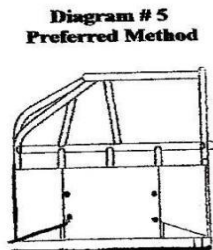


Diagram #5  
Preferred Method

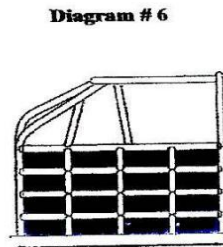


Diagram #6

## SEAT / SAFETY HARNESS

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 # 9 is mandatory. At Least 4-inches of webbing material must extend out from the adjuster after this final wrap is completed.

Diagram # 7  
Lap Belt Angle

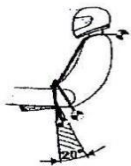


Diagram # 8  
Sub Strap Angle

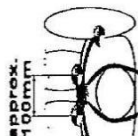


Diagram # 9  
Proper Wrapping of  
Shoulder Harness Belts

