

# MOSPORT SPEEDWAY SPORTSMAN 2010

(Revised April 28, 2010)

- Body style – Any North American built fiberglass, aluminum or steel car.
- Body appearance – must be stock appearing. No carbon fiber body parts permitted. No wedge style, slab side or high performance bodies or DIRT noses allowed.
- Wheels must not extend outside body or scrub rails.
- Frame height minimum 5.5” excluding the front cross member but including ballast weight (without driver).
- Body height will be a minimum of 46 inches, measured 10" behind the top of windshield on the roof centerline (without driver).
- Crush panels, minimum 0.040” aluminum, can be used to separate the body panels and the windshield from the interior.
- The trunk deck lid must be hinged or easily removable for easy access in case of fire.
- Battery - One 12 volt battery only and it must be anchored securely and separated from the driver’s compartment by a firewall.
- Brakes - Four wheel hydraulic brakes in good working condition are compulsory.
- Four-wheel disc brakes are allowed.
- A dual master cylinder with a balance bar is allowed.
- Single piston steel calipers must be used. Rotors must be a minimum  $\frac{3}{4}$ ” thick. Caliper mounts must be constructed of Steel only.
- Bumpers must be stock appearing and must be mounted in stock position with no sharp edges exposed. After market nose and tail cones are allowed. A fabricated bumper reinforcement may be used but a stock bumper or cover must be installed over the top.
- Body, engine and chassis are interchangeable.
- The wheelbase will be a minimum of 105" on a full frame chassis and the frame rails can be altered to meet this measurement. Wheelbase must be within 1 inch from one side to the other side. (I.E. 105" minimum, 106" maximum) of the car at all times. A maximum of 66" of track width is allowed.

- Fabricated rear clips are allowed. Underslung cars are allowed but must have 50 lbs mounted directly above the highest part of the axle housing.
- A factory production stock front clip may be used from the firewall forward. Factory front clips must extend from in front of the steering box rearward to the main rail. Frame may be built out of 2" x 3" or 2" x 4" tubing, minimum .095" wall thickness.
- Where the main frame rail ends, forward may be built out of smaller material if desired to accommodate mounting of the front bumper. This will be referred to as the bumper crush tube.
- A stock steering box is mandatory and aftermarket center link, aluminum tie rod sleeves, and Heim joint tie rod ends may be used.
- Main frame rails must be no less than 24" outside of rail to center line of chassis.
- Chassis from front firewall rearward may be fabricated from no less than 10" circumference by .095" box tubing.
- Front coil springs, strut rods, and sway bars may be interchanged, provided they fit original mounting and are not altered from stock appearance and position. Sway bar must be mounted to lower control arm and may be adjustable. Front sway bar must be no larger than 1 1/4" outside diameter.
- A maximum of 4 load bolts may be used.
- Hubs may be drilled for larger wheel studs with minimum 5/8" wheel studs being mandatory.
- No coil over suspensions or coil over eliminators allowed. A Minimum 4" O.D. coil spring is allowed and spring rubbers may be used.
- Spindles must be stock passenger car and of one piece construction. Aftermarket spindle pins may be used. No cutting or welding of spindles. Reaming of spindle holes will be allowed to accept bigger ball joints and tie rod ends. Howe spindles and parts are not allowed. Rotors and hubs must be one piece. E.g. (Stock GM hub and rotor.)
- Steering arms may be altered to fit steering linkage.
- Any steel front upper control arm may be used. Sliders allowed.
- Stock O.E.M. lower control arms must remain in stock mounting location. Left lower control arm can be altered in length to assure positive camber. Measurement from grease nipple to mounting hole in frame must be within 1 inch of factory specifications at all times. Ball joint can be realigned to eliminate binds.

- One shock per wheel. Must be PRO WB only. No split valve shocks

- **DRIVE LINE: STEEL DRIVE SHAFTS ONLY - Must have steel 360 degree retaining loops ¼" by 2" positioned at the front and rear of the drive shaft within 6" of each u-joint. Drive shaft must be painted white or fluorescent.**
- **V8 engines only or sealed crate engine part #88958602 permitted.**
- **Make of engines are GM, Chrysler, and Ford.**
- **Chrysler and Ford engines will be dealt with on a one to one bases.**
- **Engine - Block Assembly – Only engines that were factory available for the make, model and year being run are permitted. No modifications to engine block, cylinder head, crankshaft, and camshaft or connecting rods unless specified.**
  - **Maximum c.i. GM – 350 plus .060 for clean-up**
  - **Ford – 351 c.i. plus .060 for clean-up**
  - **Dodge – 360 c.i. plus .060 for clean-up**
  - **Block may be zero decked. No part of the piston can protrude above back deck.**
- **Pistons – OEM cast or forged pistons allowed No high performance pistons.**
- **Camshaft – OEM style Hydraulic cams and valve lifters only. Double roller timing chains are allowed.**
- **Maximum Valve Lift: GM 410**  
**Ford 448**  
**Dodge 412**
- **Intake – stock or 2101 Edelbrock. (New style only and unpainted)**
- **Carburetion – 1 stock quadrajet (quadrajet not allowed on crate motor) or one 4412 – 500 C.F.M. Holley factory stock produced two-barrel carburetor only. The only changes allowed are jets, power valve and removal of choke parts. Two throttle return springs and stop are mandatory. Carburetor hats are allowed and air cleaners are mandatory. An accelerator toe bar is mandatory. Air filters boxes are permitted. No boost venture below the throttle plate. No ram air systems. A quick change jet kit (part #3425 float bowl) may be used. No Keith Dorton performance carburetors. Where metering block is attached to main body, a small amount of resurfacing is allowed. Choke accessories may be removed. Adaptor plates are allowed for 4412 carb only. Maximum spacer thickness is 1 ¼" including gaskets.**
- **Holley factory stock measurements are as follows:**
  - \* **Metering block must have the following ID# stamped on it. Factory stock #5924 or #5925. The #10570 will appear on replacement or service**

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metering blocks

- \* **Metering block power valve channel restriction ports (2 holes behind the**

- \* power valve) maximum .0635".
  - \* Metering block idle feed restriction ports (2 holes) maximum: .035".
  - \* Metering block main passage to discharge nozzle (2 holes) maximum: .141".
  - \* Main body high speed air bleeds (2 holes) maximum: .028".
  - \* Main body idle speed air bleeds (2 holes) maximum: .074".
  - \* Butterfly (throttle plate) thickness: .0398" - .0438".
  - \* Hole in butterfly: .090" - .096".
  - \* Butterfly must have stamped on it ID #215.
  - \* Throttle shaft diameter .368" - .369".
  - \* Throttle shaft thickness at flat of shaft: .152".
  - \* Venturi bore diameter: 1.373" - 1.377".
  - \* Boost venturi inner bore diameter .377" - .383".
  - \* Boost venturi outer diameter .610" - .630".
  - \* Throttle bore diameter 1.6855" - 1.6865".
  - \* All air entering the engine for combustion purposes must enter through the air horn of the carb.
- Compression rule – Maximum compression ratio of 9:1 and must not whistle above 9.4:1 if checked hot.
  - Cylinder heads – must be stock for engine being used with no modifications. NO DOUBLE BUMP TYPE HEADS. No 2.02 or vortec V8 heads are permitted.
  - Valves – Cylinder heads may be changed from year to year provided they are not high performance. Stock ratio rocker arms only. Screw in studs and guide plates are allowed.
  - Valve size:
    - GM Max. 1.94 intake and 1.60 exhaust
    - Cleveland Max. 2.04 intake and 1.65 exhaust
    - Windsor Max. 1.84 intake and 1.64 exhaust
    - Chrysler Max. .188 intake and 1.60 exhaust
  - Valves – Valve stem diameter must be stock. Stainless steel or stock type valves are allowed. No turning of valve stems permitted. Undercut and light weight valves are not permitted. Dodge may use adjustable rockers.
  - Engine location – must be located so as the front most spark plug is no further back than the center of the upper ball joint with zero tolerance.
  - Minimum engine height of 12" from center of crankshaft to ground level.
  - Exhaust manifolds – log type or small ram horn with maximum 2-1/4" outlet.
  - No polishing or matching of ports, manifolds must bolt to head without spacers.

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- Exhaust system - The maximum O.D. of the exhaust tubing is 3".
- Pipes must be firmly mounted and exit ahead of the rear tire. Pipes are to be

cut flush to the body and above the frame rail or turned down at the exhaust end and exit under the car. Any muffler may be used but is mandatory at Mosport.

- Cross over is allowed in the exhaust system.
- Fuel pump - Mechanical pump only.
- Fuel – Maximum 103 octane.
- Distributor and ignition - Battery operated 12 volt ignitions only.
- Car must be self-starting and have an ignition kill switch within reach of the driver on the left hand side of the car.
- OEM electronic ignition may be used and require stock type coil and stock type ignition modules. No MSD type boxes allowed.
- No traction control devices are allowed.
- Starter must be in stock position and functional.
- Fire walls - Interior: all flammable materials must be removed.
- Front firewall does not have to be original, but must use a minimum 22 gauge steel. Passenger side of firewall may be moved as far back as the front of the roll cage, to allow for easy access to the drive line, and may be .040" aluminum.
- All sheet metal work must be neat and properly fitted. All holes are to be covered with sheet metal either welded or riveted.
- Floor must be complete and have all holes covered with sheet metal.
- Fire control - Cars must have a 2 ½ lbs minimum fire extinguisher with a steel or aluminum head mounted in a steel mounting bracket and must be bolted down and within driver's reach with seat belts fastened. Fire extinguisher must be serviced and inspected each year and dated no earlier than January 1<sup>st</sup> of the current year.
- Driver's fire suit is mandatory. No coveralls. Driver and suit must maintain a clean looking appearance. Fireproof gloves, contoured neck collar, balaclava, underwear, socks, shoes and Hans or Hutchins type devices are highly recommended. No nylon shoes allowed.

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- Fuel cell – A fuel cell is mandatory.
- The fuel cell must be mounted between the frame rails (no notching of the rails allowed) and the bottom must be mounted with no less than 9" ground clearance. Fuel cell must be secured with steel straps made of 1" x 1/8" or

equivalent, not less than two lengthwise and two crosswise, full 360 degrees.

- Fuel cell must have left side, right side and rear hoop protection bars, minimum 1 3/4 x .095" tubing.
- Fuel cell must have a one way check valve in the vent line and have a shut-off valve installed in the fuel line which is accessible to the driver and the safety crew and it must be clearly marked OFF and ON.
- The gas cap must have an appropriate attaching line to prevent its loss. A ground strap from the tank to the chassis is mandatory.
- Steel fuel lines must be used and neoprene can be used for connection purposes only. Fuel lines must be securely fastened under the floor. No copper lines are allowed. Metal fuel filters only.
- Oil line to oil pressure gauge must be braided, copper or steel line. No plastic lines.
- Instruments - Oil pressure and heat gauges mandatory.
- Paint and lettering - All cars must be neatly painted. Numbers assigned by the track must be painted on both sides of the car and roof, with a minimum 20" high by 3" wide letters (roof numbers read from right side) of a color offering a distinct contrast to the color of the car. No trick numbers. 4" numbers on both headlight and tail light caps are required. Block type numbers 6" high, white in color, must be displayed on the upper right hand side of the windshield.
- Radiators - Must be in stock location and include an overflow can securely mounted ahead of engine firewall and under the hood. No antifreeze. No remote rads.
- Rear end and suspension - Any three or four point hook up may be used. Lower arms must not exceed 30" from mounting holes on rear end of mounting holes of frame. Upper arms must not exceed 30". Rubber biscuits allowed at one end of trailing arms. Panhard bar must be a one-piece solid type. Heim joints are allowed.
- Rear ends to be welded, mini spool or full spool only. No aluminum or titanium parts excluding the spool and the differential housing (3<sup>rd</sup> member).
- Rear ends are interchangeable. (i.e.: Ford to Chev.)

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- Floaters with steel or aluminum hubs recommended.
- Rear ends must remain in stock position.

- No ratchet rear ends. No traction assist or control devices allowed.
- No cambered rear ends allowed.
- Final gear ratio cannot be greater than 5.5:1.
- Roll bars - Cage must be constructed of 1 ¾ inch round steel tubing by .095" wall thickness.
- Four point cage compulsory.
- Base of uprights must be electric or mig welded to the frame of the car.
- The roll cage must be braced to the rear frame kick-ups and diagonally between the rear uprights.
- A transfer bar between the rear diagonal and the front frame optional.
- A minimum of four horizontal bars must be inside the left side door and three bars inside the right door and a minimum of two vertical bars between each horizontal bar. Minimum 40" length by 14" high, 16 gauge metal between door bars and body skin on driver's side is recommended on all cars.
- A center overhead bar running fore and aft between transverse members is recommended.
- No pipe fittings allowed.
- All roll bars in the driver's area must be properly padded and taped with foam rubber.
- Left leg protection bar must be installed between roll cage and left front frame rail. All welds will be subject to the approval of the tech inspectors.
- Safety belts and harness - A quick release lap belt of no less than 3-inch width and 3-inch shoulder harness is mandatory. Belts must be securely fastened to frame and/or roll cage with minimum ½ inch grade 5 bolts or equivalent. A crotch belt is mandatory and seat belts must be dated within the last 3 years or be in excellent condition. Padded steering wheel hubs are mandatory and no one piece steering columns will be allowed.
- Safety helmet -A Snell 2000 SA or newer approved racing safety helmet is mandatory and complete driver's fire suit must be worn in all practice and race events. Goggles and a full face helmet are highly recommended.

- Seat - An aluminum racing seat must be securely bolted to the roll cage and not bolted to the floor. When mounting the seat, use minimum 3/8" bolts with large flat washers to hold the racing seat to seat framework. A minimum of two

bolts on the seat back and two bolts on the seat bottom are required. The seat must be positioned completely to the left of the centerline of the car. An approved head restraint must be made of an energy absorbing material and headrest side plates are recommended.

- TIRES - All entries are required to use a brand of tire that is approved by the track management.
- Automatic transmissions must be used and remain stock as produced and a transmission cooler is highly recommended. The torque converter must be a minimum diameter of 11".
- Racing rims only - Maximum wheel width allowed is 8 inches with a minimum weight of 17 lbs. No aluminum, magnesium, wide 5 bolt pattern wheels. Wheel spacers are allowed.
- Windshields must be safety glass with 4 safety clips or lexan. No plexiglass allowed.
- Window net is mandatory with minimum 3/8 inch rod and it must have a quick release latch.
- Window pillars must be approximately stock width and in stock location.
- Front windshield center bracing mandatory. A minimum of two secure braces must be on the inside of the car. No exterior bracing, front or back.
- No added film spray tinting permitted. Minimum side window openings 22" length x 14 1/2" high.
- No obstruction of driver's view, in or out of race car, with the exception of the top 4" of the front windshield for sponsor decal. No letters or numbers on rear window.
- MIRRORS - One rear view permitted.
- Radios - No radios unless track authorized one-way.
- All new Mosport crate motors must be sealed by Mosport Tech before delivery to the driver or owner.
- Crate motors - not sealed by Mosport Officials are subject to further inspection by Tech. Any motor found to be questionable will be dyno'd and evaluated for its legality.

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Percentages – with driver in car - 1<sup>st</sup> Generation - 55% left side weight  
- 50% rear weight

- 2<sup>nd</sup> Generation - 53% left side weight  
- 50% rear weight

**Classification**

- **First Generation** – Thunder Cards using stock frame rails.
- **Second Generation** – Camero Clip or Cars using any OEM clip without stock frame rails

**Weights**

- **1<sup>st</sup> Generation** - Built Motor – 3000 lbs.
  - Crate Motor – 3100 lbs.
- **2<sup>nd</sup> Generation** – Crate or built motor – 3200 lbs.

**Thanks and we hope to see you at the track.**