

# Marshfield Motor Speedway Rules 2009

Tech Inspector: Tentative

## **Master Power Switch:**

Master Power Switch is required and must be located in the middle of the car, within the easy reach of the driver and safety officials from both sides of the car, highly recommended on the middle of the dash, mandatory 2008. Ignition systems must be 12 volts.

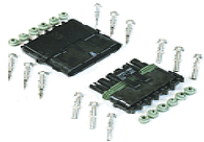
MSD boxes may be switched by track from car to car or swapped with track's house MSD box.

## **MSD Box:**



No dual MSD systems.

## **MSD Connector:**



The 6 wire harness must be 24" long  
Maximum and have a female 6 pin,  
weather pack connector.

## **Fire Extinguisher:**

All cars are required to carry an operable, working approved ABC rated Fire Extinguisher (5 lb. size minimum), with a current tag, which is securely installed within easy reach of the driver.

## **Driver Side Window Net:**

Drivers window net is mandatory. Strap or mesh type (Large mesh 12 inch minimum length) must be mounted securely on bottom, with seat belt type release at top front corner of window net. No windows are allowed on right side of car, except rear quarter. Sprint car net or triangle net on driver's side window. Triangle mount recommended.

## **Harnesses:**

Head and neck support device is a *highly recommended* – For example the: (HANS, HUTCHENS, SIMPSON) Five point racing harness of 3 inch shoulder and 3 inch made-for- racing belts are mandatory. Seatbelts must be dated 3 years or newer. The belt anchors must be mounted to a cage or frame member. Lap belt must be anchored at a point below the plane of the seat and secure the driver across the hips. Shoulder belts must be secured to the roll cage within 1 inch of the height of the Shoulders. Seat belts must be mounted to roll cage.

**Seats:**

Aluminum made-for-racing seats are mandatory and must support the head from the rear. Aluminum seats must have proper steel reinforcement for mounting to the cage.

**Fuel:**

Fuel must meet specific gravity for said manufacturer. No additives of any kind.

**Fuel Cell:**

-Fuel cells with rubber bladders the soft “bag style” are mandatory. (FT-3 spec. minimum)

-All fuel cells must contain “full foam”.

-Fuel cell plates or fuel cell tubs are mandatory.

1/8” Fuel Cell Tub - The fuel cell tub must be 1/8” thick steel (10 gauge) and must have a 1” lip. The front, bottom, and rear must be one piece. The top may be either 18 or 20 gauge steel, and have two 1” x 1/8” steel straps in each direction.

Fuel Cell Container with 1/8” Protector Plates – The fuel cell container may be either 18 or 20 gauge steel and must have a 1” lip. The container must have two 1” by 1/8” steel straps, around the top, sides, and bottom, in both directions. The top may be either 18 or 20 gauge steel. The 1/8” steel fuel cell protector plates must be mounted on the outside of the frame.

The plates must cover both sides and rear of the fuel cell. The only holes allowed in the plates are for attachment or a 2” hole for safety vehicle pickup points.

-All fuel cells must have check ball rollover valve in place.

-Fuel cell minimum height is 11”

-The hard plastic cells are not allowed.

**Overflow Bottles:**

Overflow bottles/surge tanks are mandatory and must be in engine compartment and overflow tubes must be directed onto the outside passenger side windshield. Overflow bottles must be securely mounted. No anti-freeze allowed at any time.

**Exhaust System:**

Exhaust must run tight and leak free to point at least behind drivers seat. Mufflers required. Decibel limit 100, taken from center of main grandstand. If exhaust runs out the side behind the driver, the exit pipe must be pointed down and no more than one foot off the ground.

No Exceptions!

**General tire treatment:**

Tire softeners, tire conditioner or unauthorized tire treatment is illegal. The tire softness must

not be below the track's set points of softness on the "official track tire durometer" (Use of tire softening products or possession of tire softening products will result in loss of points, money and a suspension for car and driver for the entire year.)

**Inspection:**

All cars are subject to inspection, anytime, before, during or after a race. Officials reserve the right to disqualify cars, require changes, confiscate illegal parts, etc. and the decisions of the officials will be final. Any interference with any official(s) and his/her duties will result in an automatic disqualification. Official's decisions will be based upon fair play, safety, and to protect the 'Spirit of Stock Car Racing'. Disqualification (except weight violation) is retroactive to ALL previous events competed in that race meet. Non-compliance with the specification outline herein will subject the participants (owner/driver) to disqualification. Furthermore, all non-complying components will be seized by track officials. Any driver/owner refusing to allow the track officials to inspect a car, will loose points and money earned and will have the car attempting to be inspected confiscated. (The entire car, until inspection is performed with crew chief and driver present) Owner/driver must provide tools.

**Inspection Hole:**

A 3/4 inch diameter plug must be installed in the oil pan on either side (which ever is easiest to get at), in line with the second or third rod journal (the easiest to get to), above the oil sump area (oil level), for inspection purposes. The crew must have a wrench for the plug removal. If a windage tray is used, there must be a hole provision to inspect.

**Driveshaft:**

All cars must have driveshaft hoops, made of heavy gauge steel, looped around the driveshaft.

**Weight:**

Any weight (ballast) added to the car must be secured by ½ " bolts. Loose weights are prohibited. No weighs may be added outside the body. Added weights must be painted a bright color (safety orange or white) and have car number on weight. Any ballast that falls off a car during competition cannot be returned to the car for determining weight after the race.

**Car Number:**

All cars must have a 16 inch number on both doors. All cars must have a 4 inch number in the upper right-hand corner of the windshield.

**Car Appearance:**

All cars must be painted and kept in good shape the entire year. (No "duct tape" for numbers)

**Bodies:**

- Competing models 1995 to current year.
- No sports cars allowed.
- Minimum wheel base 104 inches, minus ½ inch.
- Must be mounted on frame so that it is stock appearing.
- Body components must remain the general contours of stock components and may not be excessively shortened, narrowed, lengthened or deformed.

- Roof must be centered in relation to body. Full size roof.
  - No downforce bodies of any type.
  - No forward air intake for carburetor.
  - Back end must be enclosed with either metal or solid type enclosure.
  - Rear end of deck lid above bumper must be enclosed, no holes.
  - No part of the tires may extend more than 3 inches outside of the body.
  - Maximum overall width is 82 inches (measured from outside of tires or body).
  - Cars must meet template within 1/2 inch.
  - Tow hooks required. Rear tow hooks mandatory. Hinged trunk lid is *mandatory*. Must be at least 6" x 18". Must be removable without using tools.
  - 1/8 inch floor and tunnel, aluminum seat with leg and shoulder protector, center of seat 16 1/2 inches to 18 1/2 inches,
  - No Carbon Fiber or Kevlar products of any kind allowed. (Except the hood and the roof)
  - Ride height will be measured with driver in the car, with the helmet on, and driver in seat.
  - 3 1/2 inch frame height.
- 4 inch nose and rocker height.  
All measurements with driver in car
- Nose, belly, or flash panning is strictly prohibited. Panning radiators is limited to width of radiator and not to extend rearward of the leading edge of the radiator.

#### **Spoilers:**

- Maximum of 90 degrees and no bigger than 5 inches X 60 inches in length.
- No sides or extensions of any kind.
- Must meet Five Star requirements.
- The width of the spoiler will be measured across the rear of the spoiler

#### **Drivers Compartment:**

- Firewall, Floorboards and trunk area must be sealed off with 22 gauge steel or 18 gauge aluminum.
- No fuel lines in drivers compartment.
- Impact collar required on steering column, 1 1/2 inch diameter minimum.

#### **Windshields/Side Windows/Rear Window:**

A 10 inch maximum vent window is allowed on either side including air vents.  
All cars must have a full windshield, and rear window made of Lexan. Right side mirrors are prohibited. Both windows must be braced to keep window and body from deforming at high speeds. ABC Bodies will meet ABC rules.

#### **Frame:**

All main frames must be after market construction. No stock passenger car frames allowed. All main frame rails must be steel box tubing minimum 10 inches in circumference and must have a minimum wall thickness of 0.083 inches.

#### **Roll Cage:**

All cars must have a full cage welded to the frame including uni-body. There must be 360 degrees welds around tubing of all joints and gussets where cut and welded, expect where

tubing is bent. Four or more bars are required on drivers side, braced at four points or more perpendicular to cross braces, top bar on left side 29 inches from ground.

Minimum O.D. tubing of 1 3/4 (1.75) inches for roll cage.

- No tail-pipe tubing allowed.
- All roll bars exposed to driver must be padded.
- Minimum of three right side door bars.
- Jack post must be guarded on inside of body.
- Minimum .095 wall tubing mandatory.
- Mark Martin foot protector bars are mandatory.
- Mandatory that all door bars on drivers side be plated 1/8 steel.

### **Engine:**

- Block must be cast iron.
- No titanium Engine Components of any kind, other than valve spring retainers.
- No 18 degree or SB2 Chevrolet heads.
- Minimum crank height - 10 inches (Measured from the center of the bolt)
- All General Motors V-8 engines must be located so that the centerline of the forward most spark plug hole is no more than two (2) inches back from the center of the upper ball joint. Ford and Mopar engines may be located so the center of the forward most spark plug hole of the engine is a maximum of four (4) inches rearward of the centerline of the upper ball joint.

<i>Engine</i>	<i>Comp.</i>	<i>Cubic Inch</i>	<i>Bore</i>	<i>Stroke</i>
9-1 Alum.	9.5 max	350 min-358 max	None	None
Steel Concept	10.8 max	350 min-358 max	4.045 max	None
ACE (Ford/Chevy)	10.5 max	350 min-358 max	4.000 min-4.045 max	3.50 max
ACE (Mopar)	10.5 max	350 min-360 max	4.000 min-4.045 max	3.50 max

### **Crankshaft:**

- Steel crankshafts only.
- Minimum weight 43 lbs.

### **Pistons:**

- 9 to 1 engines may have dish or inverted dome.
- Flat top pistons only, no part of piston may protrude above the cylinder.
- Maximum compression ratio 10.800 to 1 (a ratio of 10.810 to 1 or higher will not be allowed.)
- Maximum compression ratio 9.500 to 1 (a ratio of 9.510 to 1 or higher will not be allowed.)
- Maximum compression ratio 10.500 to 1 (a ratio of 10.510 or higher will not be allowed.)
- All compression tests will be done with Marshfield Super Speedway whistler.

### **Camshaft:**

- All engines are allowed roller cams and rev kits
- Inlayed cams are prohibited
- Only steel push rods (Titanium, aluminum or graphite are prohibited)
- No solid gear camshaft drive.

### **Heads:**

#### **For 10.8 to 1 engines**

<u>Manufacturer</u>	<u>Cylinder Head</u>	<u>Intake Runner Volume Measured in cc's</u>
General Motors	Part #14011058	187 cc's
	Part #10134392	187 cc's
	Part #14011034	187 cc's
Chrysler Corp	P249769	198 cc's
	P452946	198 cc's
Ford	M-6049-N351	197 cc's
	M-6049-E351	197 cc's

Cylinder heads must remain stock. All cylinder head markings must remain. Angle milling, chemical treating, acid dipping acid flowing, abrasive blasting, bowl cutting addition of material to the ports or combustion chamber, or other alterations to the original, as cast, head is prohibited. Valves, rocker studs, head bolts, and spark plugs may not be relocated. No polishing or grinding of ports or runners is permitted (combustion chamber may be polished). The cylinder head to block surface may only be machined a maximum of 0.050" from OEM. Minimum combustion chamber size shall be 62.00 cc's for all models. A three angle valve job may be done as long as no stones are used more than 1/8" above the head of the valve.

The maximum valve sizes, as measured across the face, are as follows:

<u>Manufacturer</u>	<u>Intake</u>	<u>Exhaust</u>
General Motors	2.020"	1.600"
Chrysler Corp	2.020"	1.625"
Ford "Cleveland"	2.046"	1.656"
Ford "Windsor"	2.020"	1.600"

Use of titanium vales is prohibited. The maximum allowable spring diameter is 1.57"

### **Camshaft, Valve Lifters & Rocker**

cast-iron camshaft may be used. be stock for engine. Rollerized camshaft The maximum camshaft lift is 0.625", Roller tappets and rev kits are permitted. permitted. Only steel push rods are

**MSD 6A**  
**MSD 6T**  
**MSD 6AL**  
**MSD 6ALN**  
**MSD 6TN**

**Arms:** Any steel or Camshaft journals must bearings are prohibited. measured at the valve. Any, all steel lifter is allowed.

Roller rocker arms are permitted. Maximum rocker arm ratio is 1.6 to 1. Shaft type rocker arms are permitted on Chrysler motors only. Stud girdles are permitted.

### **For 9 to 1 Aluminum head engines:**

- Chevy must use 23 degree heads; only plus or minus 2

### **SIX PIN WIRING DIAGRAM**

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

degrees.

- Ford cylinder head 10 degrees
- Mopar cylinder head 18 degrees
- Head must have prior approval.
- Aluminum heads may have shaft style rocker arms.
- Maximum valve spring diameter 1.570.
- Polishing and porting allowed.
- Use of titanium exhaust valves is prohibited. Titanium intake valves permitted.

### **For the ACE head:**

- Must be able sell Heads, complete for \$2100.00 (hardware, valves, valves springs, retainers, keepers and guide plates.)

### **Cylinder Heads:**

Only BRODIX ACE cylinder heads may be used. Coating of the cylinder heads prohibited. Cylinder heads must be unmodified. Machining, cutting, grinding, abrasive blasting, or any alterations to the cylinder head is prohibited. A three angle valve job is permitted. No cutting down or reshaping of the valve guides is permitted. Exhaust port machining is prohibited. Intake port matching is prohibited.

Use of titanium valves is prohibited. Valve stem diameter may be 11/32 or 5/16 inch. Only the following valves may be used:

The maximum allowable spring diameter is 1.55 inches. Steel or titanium valve spring retainers are permitted. Cylinder heads may have one extra water line per head. Metal valve covers only.

### **Camshaft, Valve, Lifters, & Rocker Arms:**

Any magnetic steel, or cast-iron camshafts may be used. Camshaft journals must be stock for engine. Rollerized camshaft bearings are prohibited. The maximum camshaft lift is 0.625 inches, measured at the valve. The maximum camshaft duration is 270 degrees at 0.050 inches lift. Roller tappets and rev kits are permitted. Any, all steel, lifter is permitted. Only steel push rods are allowed.

Roller rocker arms are permitted. Maximum rocker arm ratio is 1.6 to 1. Shaft type rocker arms are permitted on Chrysler motors only. Stud grids are permitted.

- Spacer must be perpendicular to base of the carburetor with no taper or bevel
- Maximum height of manifold is 7 inches( including any carb spacer and gasket )
- 4 inch Minimum with a 4.045 inch Maximum engine bore.
- Stroke 3.500 Maximum
- Minimum Cubic inch 350 - Maximum Cubic Inch 358
- Maximum Cubic Inch 360 for Mopar
- Maximum compression ratio 10.5 to 1 (10.510 is illegal)
- Minimum 1.980 rod journals or any under sized journals under factory dimensions.
- Magnetic steel rods only-- NO Aluminum, Titanium, Or Plastic Rods...
- Must have 7/16 rod bolts only!
- Max. 4-Stage oil pump
- All blocks must be stock appearing (Including the oil filter housing)

### **Intake Manifold:**

- 9 to 1 Aluminum headed engines, only, may polish intake.
- Maximum height of manifold is 7" (including carb spacers/gaskets).
- (Steel and Ace engine only)No grinding or polishing of any part of the manifold, except you may match port the runners a maximum of 1 inch.
- Any production type intake manifold allowed, provided it is readily available to all competitors from local race parts suppliers (Maximum cost \$350.00)
- Maximum height of manifold is 7 inches (including any carburetor spacer and gaskets).
- An adapter plate, with a straight bore and maximum thickness of 1 ½" may be used between the intake manifold and carburetor. NO chamfering, grinding, or drilling of the adapter plate is permitted.
- The manifold height is measured from the base of the carburetor to top of cylinder block.
- Only one flat gasket with a maximum of .120 of an inch may be used between intake manifold and cylinder head , no spacer or wedge type gaskets allowed.
- No additional material may be added to manifold.

### **Carburetors:**

- No tapered boosters.
- 4412 2 bbl. Removal of choke (Butterfly) is the only modification allowed. Air horn removal not permitted.
- Holly 500CFM Model #'s 0-4412s or 0-4412c. 2 bbl carb, HP 80583-1
- Carburetors must pass track inspection using track's tech tools.
- Double return springs required.
- Air cleaner required. Air box allowed with cowl inlet only (rear of hood).
- No 4bbl carbs allowed.

### **Air Intake**

- Forward intakes are not allowed. Air boxes are permitted. The back of the air box must be flat.
- No devices for directing the flow of the air into the air cleaner are permitted.
- No additives allowed in air filter.

### **Clutch:**

- The 5.5 inch or bigger will be the only clutch allowed.
- Absolutely no carbon fiber or poly clutches allowed.
- Internal clutch style transmissions are not allowed.
- Bellhousing must have a minimum 2 ½" hole at bottom (to allow clear view clutch).

### **Brakes:**

- All cars must have functioning brakes on each wheel.
- No more than 4 piston brake calipers.
- Fixed mounted rotors are the only rotors allowed.

### **Suspension:**

- Stock, coil over or leaf allowed.
- No computer or hand operated controlled suspension.

- No aluminum axle tubes, no titanium axle shafts, no aluminum rotors, no carbon fiber rotors.

**Weight Rules:**

- All cars must be 60/40 left to right side weight bias.

Concept engine: 2750 lbs total weight, wet sump less 50 lbs

Ace headed engine: 2750 lbs total weight

9 to 1 engine: 2750 lbs total weight

**Other engines/cars welcome, ASA crate, LLM and other crate/spec engines. 2650 lbs starting point, subject to change.**

- You are allowed 1 pound per lap off total weight per race, for that race only.
- You must be 60/40 left to right side weight bias after the race.
- Weighing of cars will be with driver in the car, helmet on, steering wheel on, and driver's hands on the steering wheel.

### **Tire Rules:**

No unauthorized treatment to tire of any kind. **Tires can only be purchased at Marshfield Motor Speedway** and stamped by the official tire dealer of Marshfield Motor Speedway, Hoosier shall be approved. No mechanical tire working of any kind.  
(Grinding etc.)

Teams may get only 6 tires marked for the first night of competition, May 2, 2009.

After the first night teams may only get one tire marked-new tire must be ran at least 1/2 of the feature to be eligible for the next new tire. If a driver has an issue with a tire prior to one half of the race being completed, it is the discretion of the promoter to allow another tire for the next week.

Tires are serial numbered by the track and recorded on a master sheet. Any tires run not conforming to the master sheet for that car will be deemed illegal and that car will not be scored in it's feature event. Tires will be durometered at anytime during the race night. Any tire that durometers below your new tire will be taken for that race night inspected, it will be confiscated if it is deemed outside of the competition parameter. *There is **no** reason an old tire should be softer than a new tire.*

You **MUST** run 2009 tires purchased from Marshfield Motor Speedway and serial numbered/marked tires for your car in qualifying and ALL race events. You **MUST** get your new tire marked before qualifying. Tires you qualify on must be ran all night.

You may only run tires purchased at the track in 2009 from Marshfield Motor Speedway, which are marked by Marshfield Motor Speedway's tire marshal. Tires must be taken directly to impound after purchase.

Hoosier is the tire, 3035 left side only, 3045 right side only.

Each tire is coded to assure that each *new* tire is used in the feature.

Tires will be considered new until it completes at least one half of any feature. You must run the tire you purchased that night in your feature event, or you will not be able to purchase a tire for the next week.

Tires follow the driver, not the car.

*New* cut or damaged tires may be replaced if the tire has a code for that night, providing the tire has not completed on half of the feature laps. A damaged tire must be inspected by the tire Marshal and/or Competition Director to approve a new tire for the following week.

Tires will be monitored throughout the year by the track management. Speedway officials may make amendments or changes to these rules at any time.

Any new team with four new tires must start in the rear of the field for his feature event. Heat races will be run as timed.

A team may sell and/or buy tires from other teams as long as the tire has more than two events (features) old and has not left impound. Any sales must be reported to the tire Marshall.

**Tires will be impounded from the first week on.** Drivers must bring all four tires to impound the first night, the second night they may check out three of their tires to run along with their new tire, you must run these tires all night. At the end of night two, the driver will return those three tires plus the new tire. Drivers will continue this until they have a maximum of eight (8) tires in impound. At that point the driver will need to decide which tire he is eliminating from his stock. Once a tire is checked out on race night and not returned to impound after the feature, that tire is no longer allowed on the car except for practice. You must report any tire you are eliminating from impound. You may not check out your tires (including your new tire) until 5:10 p.m. for the final scuff session. You must return your tires to impound within 15 minutes of the end of your feature/semi-feature.

Tires for a following race event may be purchased after the feature event. Tires must stay with impound until the following race event and will be marked and mounted then. The tire trailer will open

at 4:30 pm on race day.

Marshfield Motor Speedway tires must be used. NO EXCEPTIONS!

Anyone caught marking tires will result in loss of all points for entire year and will not be credited for racing that night.

If a driver removes his tires from impound, he will be required follow this rule if he returns. During the 2009 season to race a regular points race the only tire option will be to choose (3) tires from the speedway's collection that has been kept in impound and will be allowed to purchase (1) new tire. The driver's race starting position will be determined by where he qualified.

19. 65" maximum tread width, Rim width 10" maximum, minimum weight is 17 lbs.

20. Wheels must be attached with 1 inch lug nuts. Wheel studs must be a minimum of 5/8 inch in diameter.

21. No Electronic traction controlling or data acquisition devices. No cable, wires or sensors from any such devices are allowed on the car at anytime.

22. No suspension may be adjustable from drivers compartment

23. If you are caught not conforming to these rules, you will be subject to loss of points, pay and starting positions.

Any questions on any of these rules, please feel free to speak with our tire Marshall or Competition Director.

**Claim Rule:** Speedway has the right to claim.