

# **2017 MIDWEST LATE MODEL SERIES**

(MLMS) RULES

THE RULES 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 RULES SHALL GOVERN THE CONDITION OF ALL SPEEDWAY EVENTS, AND, BY PARTICIPATING IN THESE EVENTS, ALL SPEEDWAY COMPETITORS ARE DEEMED TO HAVE COMPLIED WITH THESE RULES. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF, OR COMPLIANCE WITH THESE RULES AND REGUALTIONS. THEY ARE INTENDED AS A GUIDE FOR THE CONDUCT OF THE SPORT AND IN NO WAY A GUARANTEE AGAINST INJURY OR DEATH TO PARTICIPANTS, SPECTATORS, OR OTHERS.

#### **GENERAL RULES**

RaceCeiver will be mandatory

1. Standard Motor Rule (See weight rules) including all open motors

# **SECTION 1: WHEEL BASE**

- 1. The minimum average wheelbase is 103 inches. No tolerance.
- 2. Rear suspension is optional, but no devices allowed of any kind that are designed to change the wheel base of the car while in competition will be permitted.
- 3. Control arms with springs or rubber bushings not permitted on the rear of the car. Limiting devices will be allowed.

# **SECTION 2: ENGINES**

#### 1. Engine Set-Backs

- a) All competing models using an engine larger than G.M. 361 cubic inches, excluding 525 crate, or Ford, or Chrysler larger than 364 cubic inches are allowed a maximum engine set back of 6 inches (to be measured from the center of the forward most spark plug hole to the center of the upper ball joint)
- b) All competing models using a Ford or Chrysler engine 364 cubic inches or smaller or a G. M. Engine 361 cubic inches or smaller <u>including 525, 602 & 604 crates</u> are allowed a maximum engine set back of 8 inches.
- 2. Steel Head Engine Rules (Small Cubic Inch)

- a. GM steel 23° Heads will be allowed
- b. Ford M-6049-n351, Mopar head casting number 4532693, Mopar may run Chrysler R block #P4532907 or P#4532908. Mopar heads may be 15 or 18 degrees. O.E.M. J Design Mopar heads are no legal. No modifications outside of the combustion chambers, except surfacing, three angle valve jobs, and touching up the combustion chamber. Titanium valves and retainers allowed.
- c. Roller camshaft, lifters, and rocker arms will be allowed. Shaft rockers will be allowed.
- d. Any aluminum intake may be used with a maximum total height of 7 % from top of intake to the floor of the plenum. Up to a 2 "spacers may be included in the 7 %" inch height. Plenum must have flat floor.
- e. May run up to and including the Holley 4150 series 850 C.F.M. carburetor.
- f. No titanium engine parts, except titanium valves and retainers.
- g. Engine casting numbers stamped on the engine will be left on the block at the bell housing area.
- h. No epoxying of block numbers will be allowed. Block numbers will be stamped by inspector if needed.

#### **SECTION 3: FUEL AND FUEL CELL**

- 1. Gasoline (Preferred VP 110 or VP Late Model +) No propylene, Fuel testing with a digitron dielectric meter reading must be +2 or below.
- 2. E-85 and all gasoline with a digitron dielectric meter reading of +3 or above must add 50 lbs to their current weight rule 50lbs of your weight must also be placed in front of the bell housing.
- 3. Methanol (No additives allowed)
- 4. Anyone with a +3 must be registered with tech official Pre-race
- 5. Commercially manufactured fuel cells mandatory, fuel cell capacity may be from 5 to 32 gal including fill spout.
- 6. Fuel cell cannot extend below rear end tubes.
- 7. All fuel cells must be encased in a metal container.
- 8. All fuel cells must be mounted securely to the frame of the car, and must be mounted in framework.
- 9. Fuel cells must have non-vented caps, rollover valves in return and vent lines, must pickup from the top of the fuel cell.
- 10. All cars must be equipped with a fuel guard that is mounted separate to the fuel cell and is mounted securely to the frame of the car.
- 11. Fuel cell guard must be made of at least 1" tubing and must extend to the bottom of the fuel cell.
- 12. No electrical fuel pumps allowed. (Belt driven fuel pumps or mechanical pumps will be permitted)

- 1. All cars are recommended to have a screen in front of the driver, with a frame and at least 4 vertical bars in the frame besides the sidebars. Screen to have openings no smaller than  $\frac{1}{2}$  X  $\frac{1}{2}$  and no larger than 2" X 2".
- 2. All cars are required to use a roll cage with at least 3 horizontal bars across the drive's door.
- 3. All competing models will be required to have a vent window bar and a bar in the center of the roll cage over the driver's head.

#### **SECTION 5: CARBURETORS AND AIR CLEANERS**

- 1. Any eligible carburetor may be used. Approval of carburetor means approval for all competitors within the same guide lines.
- 2. All competing models may run the Holley 4150 series carburetor, 850 C.F.M. max.
- 3. All competing models may run C & S or Willy's with 750 C.F.M max.
- 4. Any eligible dry element round air cleaner will be permitted. (Min.12" Max. 17" in diameter and maximum 5" height.)
- 5. Only round metal air filter housing will be permitted. The top and bottom of the air filter housing must be solid and must be of the same diameter. A max. of a 1" lip will be permitted from the air filter element to the top edge of the air filter-housing top and bottom. The air filter housing must be centered and set level on the carburetor. It is permissible to attach a shield to air filter housing. The shield can be no higher than the height of the air filter element. Tubes, Funnels or any device which may control the flow of air will not be permitted inside of the air cleaner or between the air filter housing and carburetor.
- 6. Cowl induction may be used as long as the air box is designed to draw air from under the hood.
- 7. One side or end of the air box must be open. Hood scoops will be permitted to be open in the rear only.
- 8. No carburetor air dams or devices allowed increasing the airflow to the carburetor, either inside or outside air cleaner.

# SECTION 6: CYLINDER HEADS, INTAKE MANIFOLDS, SPACER PLATES, AND IGNITION SYSTEMS

- 1. No MSD Rev Limiting Chip Rule.
- 2. Any eligible cylinder head may be used. Approval of cylinder heads means approval for all competitors within the same guidelines.
- 3. The valve centers must remain the same as production manufactured steel cylinder heads for the make and model of the engine being used.
- 4. Intake must be stock configuration of OEM. Manifold. (Inside of the bottom intake manifold must be flat. No devices permitted inside of intake manifold to disrupt the air flow to the engine)
- 5. Any aluminum intake may be used with a maximum total height of 7 ¼" from top of intake to floor of plenum. Up to a 2" spacer may be included in the 7 ¼" height.
- 6. A spacer plate may be used between the carburetor and the intake. May be a 1-hole or 4-hole spacer plate, with nothing inside of the spacer plate to enhance or increase the airflow to the engine.

- 7. No onboard computer, micro-controllers, processors, automated electronics, recording devices, Electronic memory devices, memory chips, or digital readout gages of any kind permitted. Digital Tachometers will be allowed.
- 8. Only one (1) electronic firing module amplifier is permitted, if used.
- 9. Only one ignition coil permitted.
- 10. NO Traction Control of Any Kind.

# SECTION 7: CLUTCH, FLYWHEEL AND BELL-HOUSING

- 1. High speed multiple disc clutches are permitted.
- 2. All cars must be able to be put in and out of gear with the engine running and the car sitting still.
- 3. All competing models must be equipped with the flywheel and an operable starter.
- 4. A production manufactured steel bell housing or a heavy duty explosion proof aluminum bell housing may be used on all models.

# SECTION 8: TRANSMISSION, DRIVE-SHAFTS, REAR AXLES AND REAR TREAD WIDTH

- 1. OEM. Production manufactured 2 to 4 speed transmissions that are cataloged through dealer channels will be permitted. Bert, Brinn, and Falcon circle track transmission are permitted.
- 2. All transmissions must have at least 2 speeds forward and one reverse.
- 3. No 5 speed, over drive or automatic transmissions allowed.
- 4. All transmissions must bolt directly to the rear of the bell housing which bolts directly to the rear of the engine block.
- 5. All drive shafts must be painted white.
- 6. All cars must have a 360-degree hoop toward front of drive-shaft, made of at least 1/8 by 2"steel strap.
- 7. It is recommended to have a drive-shaft safety hoop built out of 4 or 5-inch diameter by 6 inch long round tubing.
- 8. Full floating rear ends are compulsory. Rear end must be quick-change type and series approved.
- 9. Rear end coolers may be used, but cannot be mounted inside of the driver's compartment.
- 10. No open tube rear ends allowed.
- 11. No cambered rear ends permitted.
- 12. The rear tread width can be no wider than the front tread width. (Both sides)
- 13. Axles must be made of steel only.

# SECTION 9: BATTERY, MIRROR, WINDOW NET, SEATBELTS, RADIATOR, FAN BLADE, WATER PUMP, AND OIL COOLER

- 1. All batteries must be mounted in a safe and approved manner.
- 2. No mirrors permitted inside or outside of car.
- 3. Recommended all cars to have an approved 18 x 22 window net in the driver's door.
- 4. All cars are required to have 3" lap belt crotch belt and 3" shoulder harness. Required to be no more than 2 years old.

- 5. All belts must be securely fastened to the frame of car.
- 6. Helmets must be SF131.1/2005 or Snell rated Sa2005 or newer Mandatory.
- 7. Only 1 radiator permitted for the purpose of cooling water. Radiator must be mounted in front of the engine.
- 8. Water pump must mount in stock location.
- 9. No electric fans permitted. No flat bladed fans permitted (Electric fan permitted with ct525)
- 10. Oil reservoirs must be mounted in front of rear end housing.
- 11. Oil reservoirs or oil coolers cannot be mounted inside or driver's compartment.

# **SECTION 10: ROOFS, BODIES, AND NOSE PANELS**

- 1. Bodies must be mounted in a similar manner to stock appearing.
- 2. Aftermarket production manufactured nose panels must be mounted in approved manner. The length measurement of the nosepiece for all models will be 51" from the center of hub to front edge of nose. The front and sides of nose panel cannot be cut of altered, with the sides mounted no lower than 4 inches from the ground with the car at racing height. The sides of the nose panel must be parallel to the ground.
- 3. The series officials must approve any bars ahead of the nose panel.
- 4. Roofs may be made of fiberglass or aluminum, but must meet specifications as set forth in the rules and must be approved by the officials.
- 5. All roof panels must have front mounting posts and rear roof panels.
- 6. The front roof posts will be required to be a minimum of (1) one inch wide and a maximum of (2) two inches wide. Left and right side will be required to go to the outer rear corner of the front fenders.
- 7. Rear roof panels will be required to extend out to the quarter panels.
- 8. Left and right side rear roof panels must be the same length and design.
- 9. Car or opening covers are not permitted. Exception: In the event of rain or inclement weather you may cover your car until the weather passes or the rain stops.

#### **SECTION 11: REAR SPOILERS AND REAR DECKS**

- 1. All competing makes and models will be permitted to use a one-piece solid rear spoiler 8" in height. 602 and 604 engines may have 10" spoiler.
- 2. All spoiler measurements will be made from the deck and will be a measurement of all spoiler material.
- 3. All competing models will have a maximum rear spoiler width of 72"
- 4. All competing models will be permitted to use 3 spoiler braces. Spoiler braces may be 18" maximum at base but cannot extend past the rear roof posts.
- 5. All spoiler braces will be required to fit the series template, be no higher than 4" at the front of the base and can be no higher or extend rearward past the rear spoiler.
- 6. Spoiler braces will be permitted to have up to a 1/2" break in them.

# SECTION 12: WEIGHT RULES FOR ENGINE SPECIFICATIONS: All weight rules are to be met after all races.

Weight rules may be changed at any time as determined by Series Officials to equal the competition.

- 1. 602,604 GM crate Motors, 2200 lbs weight minimum
- 2. GM ct525 minimum weight 2300 lbs minimum
- 3. Complete IMCA Spec Motor rule weight 2300 lbs
- 4. 364 or smaller all steel engine with compression ratio 11 to 1 or less must weigh 2325 lbs
- 5. Compression ratio greater than 11 to 1 must weigh 2375 lbs
- 6. Chevrolet Motors under 364 cu inch motors with standard valve angle ported steel or aluminum heads must weigh 2375 lbs
- 7. Wisota Spec motor must weigh 2375 lbs
- 8. Chevrolet Motors 365 cu inch through 410 cu inches motors with standard valve angle ported steel or aluminum heads must weigh 2450 lbs and 1 1/8 restrictor.
- 9. 411 cu inches or greater with steel or aluminum heads must weigh 2450 lbs and 1 inch restrictor.
- 10. Aluminum Blocks must add 50 lbs in front of motor plate.
- 11. All weights must be in block form of no less than 5lbs and must be painted white with the car number on them.
- 12. All weight must be bolted to the frame of the car in a secure manner. Should use at least 2 half inch bolts for each weight that is bolted to the car. No stacking of weights permitted.
- 13. Any weight mounted behind the fuel cell must be mounted below the frame of the car.
- 14. Any mounting of weight inside of the driver compartment of above the interior of the car is NOT permitted.

#### **SECTION 13: TIRE RULES**

- 1. The series tire will be Hoosier WRS or WRS 2-D55 or W30 (all 4 tires the same)
- 2. 11.0/88, 11.0/90 or 11.0/92 only will be permitted
- 3. The composition and character of the tire may not be altered from original. This includes NO soaking, softening, and conditioning, chemicals of any kind or recapping. D-55 tire should be no softer than 55 points on the durometer, warmers and any other means of artificially warming tires are prohibited.
- 4. Recommended washing tire with water only. Warning soaps and cleaning products may be detected as chemicals or altering the tires and is subject to disqualification.
- 5. D55 only maybe cut, grooved, needled, siped, or altered beyond 24 grit sandpaper.
- 6. W30s' may only use 24 grit sandpaper to remove the glaze.
- 7. You may only use sandpaper up to and including #24 grit to remove the glaze on the top layer of tires. When you are completed with the sanding of the tires, the edges of the tread block must remain the same as the edge of the block next to it. You will only be able to create the look of a worn tire and not something of a different tire face appearance (example: no wavy tread pattern or deep grinding will be allowed). Metal grinding disks are not permitted.

#### SECTION 14: LINEUPS AND RACE PROCEDURES

- 1. All drivers will draw for heat races.
  - a. Opening night will be standard draw-and-redraw of top 6 in passing points.
  - b. After opening night draw will be divided by top down split draw. Example: If there are 3 heats 1<sup>st</sup>-2<sup>nd</sup>-3<sup>rd</sup> place in points standings will be in different heats by draw with the group containing the lowest pill draw by all drivers in the first heat.
- 2. Cut off for the draw will be 30 minutes before the stat of the 1st heat race.
- 3. Draw for heat race starting positions with a passing point system of 1.76 per car for A Feature.
- 4. Top 14 in passing points go to the A rest to the B Feature(s).
- 5. All cars not drawing or choosing to start in the back of their heat will not receive passing points, only finishing points in the heat.
- 6. All cars must start the heat race ASSIGNED or they will start last in their assigned B Feature.
- 7. 20 cars will qualify to start the A Feature event through qualifiers unless 30 of more cars are entered. Then 22 cars will make the A Feature event through qualifiers.
- 8. Heat race & B Features will restart single file.
- 9. A Feature will use Delaware double restart. Single lead car with double file behind, second place car choosing high or low.
- 10. Any driver with 2 single car yellows may be asked to go to the pits.

EIRI (except in rare instances) Decisions of the officials are final and binding without exceptions! Any rule changes or clarifications during the course of the year will be published, and will be considered as an official part of the rules.

#### **TECH INFORMATION**

Dale Furby 605-359-1779

Kevin Larson 605-366-3376

Al Lewis 605-359-6305