



## Motor Mountain Masters Late Model Rules

**Jennerstown Speedway**  
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## **PREFACE**

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 events, and by participating in these events, all participants are deemed to have complied with these rules. No expressed or implied warranty of safety shall result from publications of or compliance with these rules and/or regulations. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official. The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. No expressed or implied warranty of safety shall result from such alteration of specifications. Any interpretation or deviation of these rules is left to the discretion of the officials and their decisions are final.

Jennerstown Speedway Complex 2018 General Rules will apply for this event unless specifically specified by Jennerstown Speedway management.

### **1. TRACK COMMUNICATION:**

RACEceivers frequency 454.000.

All teams are required to have a spotter in the designated area during heats and features.

### **2. ENGINE:**

#### **2.1. ENGINE SET BACK:**

- 2.1.1. All Engines must be located so the forward most spark plug is no more than four inches (4") from the centerline of the upper ball joints.
- 2.1.2. Engines may not be offset more than one inch (1") from centerline of car

### **3. ENGINE OPTIONS:**

#### **3.1. Gm ZZ4 Engine Option #1:**

- 3.1.1. 2675 lb 6800 RPM Maximum left side weight is 58%
- 3.1.2. This engine option must be used in factory produced form without modification.
- 3.1.3. ACT legal sealed engine will be approved
- 3.1.4. P/N 12551483 Stock Valve Spring.
- 3.1.5. **OIL PAN**  
P/N 25534354 Oil pan may be replaced with either of the following part #s:
  - CV1106LTRB, CTR-102, 8 quart oil pan
  - Moroso parts #21319, and #21315
  - CP106KORB with matching p/u assembly
  - Champ CP106KORB with factory form without modifications.
- 3.1.6. Harmonic balancer may be changed (min. 5.7" dia)
- 3.1.7. ADD 40 lb for cam, lifter, and 1.6 rockers Change

3.2. **604 GM Engine Option #2:**

- 3.2.1. Factory Stock or SPEC Rebuild 604 GM crate engine #19318604 or 88958604 2700 lbs. 6800 RPM Maximum left side weight is 58%
- 3.2.2. These engines are sealed at the intake manifold, cylinder head, front cover, and oil pan with special twist off bolt heads originally from GM.
- 3.2.3. Engines "must" be sealed in all of the above stated locations with either the "original" GM twist off bolt heads, "original GM Barcoded Cup Seals", or authorized rebuilder seals. Only RUSH, SEAL, Crate USA, I.M.C.A ACT seals will be honored
- 3.2.4. No changes are allowed to the engine- intake manifold, heads, valve covers, front cover, oil pan, harmonic balancer, or any other part or parts on or in the engine.

Valve Spring Specifications – New				
Description		88958602	88958603	88958604
Valve Spring P/N		10212811	12551483	12551483
Valve Spring P/N -set of 16		n/a	12495494	12495494
Diameter (+/- .010")	(A)	1.250"	1.340"	1.340"
Free Height (+/- .015")	(B)	2.021"	2.154"	2.154"
Installed Height (Ok to shim to proper height)	(C)	1.70"	1.780"	1.780"
Pressure @ Installed Height (+/- 5 lbs)	(D)	80 lbs.	110 lbs.	110 lbs.
Open Height	(E)	1.270"	1.300"	1.300"
Open Pressure (+/- 10 lbs)	(F)	195 lbs	270 lbs.	270 lbs.
Coil Bind	(G)	1.20"	1.21"	1.21"
Wire Diameter		.177"	.178"	.178"

**New Beehive (blue) Valve Springs:**

Valve Spring Specifications – New (Blue) Beehive Valve Spring		
Description	Engine	19318604
Fast Burn Cylinder Head		19300955
Valve Spring P/N -16		12625033
Valve Spring P/N –Retro Conversion Kit		19300952
Diameter Top (+/- .008")		1.060"
Diameter Bottom (+/- .008")		1.270"
Free Height (+/- .015")		2.122"
Installed Height (Ok to shim to proper height)		1.780"
Pressure @ Installed Height (+/- 5 lbs)		98 lbs.
Open Height		1.300"
Open Pressure (+/- 13 lbs)		264 lbs.
Coil Bind		1.210"
Wire Diameter		Ovate

3.3. **GM #88958604 Engine Option #3:**

- 3.3.1. GM #88958604 CRA UPDATES
- 3.3.2. 2800lbs., 6800 RPM, Maximum left side weight is 58%
- 3.3.3. The above engines must be raced as produced by the Manufacturer or within the rebuilder guidelines EXCEPT WHERE NOTED IN THESE RULES.
- 3.3.4. Option #3 GM engine may utilize 1.6 rocker arms, GM valve spring kit #12586484, Comp Cams valve spring kit #941-16, Champ Oil Pan # CP106LTRB, and may have the balancer replaced with an SFI approved aftermarket balancer. The GM engine may also use the Chevrolet Performance FastBurn upgrade cam part #24502586.
- 3.3.5. Motors must contain the proper S.E.A.L tags.

3.4. **Ford M06007-D347-SR Engine Option #4:**

- 3.4.1. Ford crate engine Ford M06007-D347-SR
- 3.4.2. 2800lbs., 6400 RPM, Maximum left side weight is 58% or
- 3.4.3. 2700 lbs with Jennerstown Issued Restrictor plate, Maximum left side weight is 58% **Note: Must request restrictor plate no later than 7-15-18**
- 3.4.4. All motors must comply with the Ford Performance Handbook issued of August 2, 2017 Handbook link [https://performanceparts.ford.com/download/pdfs/FR\\_347\\_Series\\_Sealed\\_Engine\\_Handbook.pdf](https://performanceparts.ford.com/download/pdfs/FR_347_Series_Sealed_Engine_Handbook.pdf)
- 3.4.5. **Exclusion: The Ford D347 Engine may utilize the KEVKO Oil Pan and Pick-up #F201 & F201-1, as well as an SFI approved aftermarket balancer.**

3.5. **Ford McGunengill 425LM Engine Option #5:**

- 3.5.1. Ford McGunengill 425LM
- 3.5.2. 2800lbs. 6400 RPM Maximum left side weight is 58%
- 3.5.3. All motors must comply with the McGunengill Engine Performance 425LM Crate Engine Technical Specifications handbook published on 1/1/17

**4. WEIGHT/ENGINE RPM REQUIREMENTS:**

- 4.1. **Option #1 Gm ZZ4 Engine:** 2675 lbs. Maximum left side weight is 58%
- 4.2. **Option #2 604 GM Engine:** 2700 lbs. 6800 RPM Maximum left side weight is 58%
- 4.3. **Option #3 GM CRA UPDATES #88958604 Engine:** 2800lbs., 6800 RPM, Maximum left side weight is 58%
- 4.4. **Option #4 Ford M06007-D347-SR Engine:** 2800lbs., 6400 RPM, Maximum left side weight is 58% or 2700 lbs with Jennerstown Issued Restrictor plate, Maximum left side weight is 58%
- 4.5. **Option #5 Ford McGunengill 425LM Engine:** 2800 lbs., 6400 RPM, Max left side weight is 58%
- 4.6. All weights are taken before the feature event.
- 4.7. **All LMSC perimeter cars may run 58.5% left side weight**
- 4.8. A 75 lbs weight break will be allowed for the RUSH Bilstein Bandit Shock Package (See Rule 21.3 Shocks)

**5. CARBURETOR:**

- 5.1. Holley 650 HP #4150-80541, Holley 650 HP #4150-80541-1, or Holley 650 HP #4150-80541-2 carburetors permitted. Must be gauge legal.
- 5.2. May use one carburetor spacer (1" - one piece with 0.040" tolerance maximum) and two standard paper gaskets (maximum 0.070" thick), one gasket between intake to spacer and one gasket between spacer to carburetor. Carburetor spacer may not protrude down into intake manifold.

**NOTE: The Ford #347-SR and McGunegill 425LM engines "may not" utilize a carburetor spacer**

**6. IGNITION BOXES:**

- 6.1. No digital programmable or crank trigger ignitions allowed.
- 6.2. Ignition boxes must be MSD or Crane type boxes with either a rev limiting chip or rpm limiting adjuster.
- 6.3. All adjustable rev limiting ignition systems will be set and sealed in pre-practice and pre-race tech by a Jennerstown tech official. Likewise all rev limiting chips will be installed and sealed in place during pre-practice and pre-race tech by a Jennerstown tech official and will be subject to post race inspection.
- 6.4. All ignition box wiring and plug connectors shall be easily accessible for inspection by tech officials.
- 6.5. Ignition boxes and rev control units shall be mounted in the right side front of the driver's compartment well out of reach of the driver.
- 6.6. Ignition box shall have an easily accessible weather pack or Deutsch 6 pin wiring harness connector to enable Jennerstown tech officials to plug in and tech ignition boxes and rev control devices.

**7. TRANSMISSION:**

- 7.1. No automatics allowed.
- 7.2. Must have at least 2 working forward gears and 1 working reverse gear.

**8. DRIVESHAFT:**

- 8.1. The driveshaft must be a minimum of 2"-inches in diameter.
- 8.2. All drive shafts must be painted white.

**9. BATTERY/STARTER:**

- 9.1. Maximum one 16-volt battery.
- 9.2. All cars must have a starter in working order.
- 9.3. A clearly marked main electrical cut off switch mounted in the driver's compartment must be clearly marked and easily accessible to driver and safety crews

**10. FUEL:**

- 10.1. Only Sunoco Racing Fuel purchased from the speedway permitted
- 10.2. Standard (commonly referred to as 110 and/or purple) or CRATE '91' will be the specified fuels permitted for competition- NO MIXING

**11. TIRES:**

Jennerstown: McCreary Speed: 27.0 JMRW4 & 26.5 JMRWJ

**12. TRACTION CONTROL DEVICES:**

Absolutely no Traction control of any type.

**13. TREAD WIDTH:**

- 13.1. Maximum tread width, front or rear, is 76 inches, measured from bead flange to bead flange of wheel, or 66 inches as measured by the referee.
- 13.2. Track width will be measured at hub height.
- 13.3. Crews are permitted to "set" the suspension (kneel on the bumper cover) before tread width is measured.
- 13.4. No one is permitted to be touching or pushing down while the measurement is being taken.

**14. AGE REQUIREMENTS:**

All drivers must be at least 14 years of age to compete.

**15. FUEL CELL:**

- 15.1. All cars must have a 22-gallon maximum fuel cell consisting of a rubberized bladder with a fill plate that meets or exceeds FT3 specifications housed in a minimum 22 gauge steel container.
- 15.2. The fuel cell must be mounted behind the rear axle assembly between the rear tires and be a minimum of 8 inches above the ground.

**16. WHEELS:**

- 16.1. Steel wheels with a maximum bead width of 10" ONLY.
- 16.2. Bleeders or anything that attempts to reduce air during the event is prohibited

**17. CHASSIS CONSTRUCTION:**

- 17.1. Any made for racing tubular steel frame, straight rail or perimeter late model stock car chassis with a wheelbase of 101" to 108".
- 17.2. Chassis center section must be constructed of minimum .090 steel tubing.
- 17.3. Main roll cage must be a minimum of 1 ¾" .090 steel tubing.
- 17.4. Main frame rails must be a minimum of 2x3 .090 box steel tubing.
- 17.5. Must have a minimum of 4 horizontal driver's side door bars 1 ¾ .090 steel tubing.
- 17.6. Must have a minimum 1/8th" steel or ¼" aluminum driver's side door plate.

**18. APPROVED BODY TYPES:**

- 18.1. Any ARP or 5- STAR ABC or straight up body (ABC Monte Carlo, Impala, Fusion, Charger, Camry).
- 18.2. Nonconforming down force enhanced body types (must be approved) and will receive a 100lb weight penalty before participating.



- 18.3. All bodies must be mounted in an approved manner.
- 18.4. Cars must be maintained in a neat and clean manner. Bodies must be complete with no missing panels.
- 18.5. Full front, rear and quarter windows must be used.
- 18.6. Front windshield must have 3 vertical braces inside.
- 18.7. No rub rails on the exterior of the body.
- 18.8. No nose splitters, wickers, wings or other aero devises shall be added to the body.
- 18.9. No belly pans or front or rear under pans.
- 18.10. No air deflecting devices allowed.
- 18.11. Front R & L lower nose valance must not protrude out past the widest part of the tire bulge. '

**NOTE: If it doesn't come in the box it can't be on the car."**

- 18.12. The following dimensions will be measured with the car sitting on 4" ride blocks:
  - 18.12.1. A minimum roof height (measured in the center, 10" back from windshield) will be 47"
  - 18.12.2. The rear quarter panel height measured where the spoiler meets the top rear of the quarter panel on the right and left side will be 34" min / 35 1/2" max
  - 18.12.3. The front and rear overhang measured from the axel/wheel centerline to the forward most or rearward most part of the front or rear bumper cover will be 47"

#### **19. SPOILERS:**

- 19.1. Rear spoiler may be a maximum of 60" wide and 6 1/2" tall and must be centered and equally spaced on the tail.
- 19.2. No side braces or forward struts allowed.

#### **19. SWITCHES:**

- 19.1 All cars must have an ignition switch, which is easily accessible within the driver's compartment. The ignition switch should be labeled ON/OFF with bright colored paint for safety crew to recognize

#### **20. SUSPENSION:**

- 20.1. No fifth coil or lift bar type suspensions will be permitted.
- 20.2. No birdcage of any kind (3 or 4 link).
- 20.3. Rear trailing arms must mount to a non-moveable rear axle bracket with a heim-end.
- 20.4. Rear axle housing bracket must be fastened solid to the axle housing in such a fashion as to not allow it to move in any manner.
- 20.5. No driver suspension adjustments permitted.
- 20.6. Brake bias driver adjustments ONLY.
- 20.7. Coil springs and spindles must be of steel construction.

## **21. SPRINGS AND SHOCKS:**

### **21.1. SPRINGS**

- 21.1.1. One spring per wheel
- 21.1.2. Must be a magnetic steel spring.
- 21.1.3. Bump stops and springs allowed. Must be urethane, or metal. No carbon fiber.

### **21.2. SHOCKS**

- 21.2.1. One shock per wheel, aluminum or steel.
- 21.2.2. Shocks must be only mechanical in nature and no part of the shock or the suspension may use electricity or any type of computerization

### **21.3. RUSH Bilstein Bandit Shock Package "Option" 75 lbs. weight reduction**

- 21.3.1. Cars must be equipped with RUSH Bilstein Bandits on all four corners; one shock, per wheel permitted to receive weight break. Cars found with non-RUSH Bilstein Bandits Shocks must weigh under standard shock rule weight or will be disqualified from the event.
- 21.3.2. Only RUSH Bilstein Bandit Late Model Series shocks by Bilstein or CR USA shocks by Bilstein may be used in competition to be permitted to compete at the designated Bilstein Bandit weight break (GM or Ford).
- 21.3.3. In order to further insure that all competitors are racing on unaltered shocks, competitors agree to allow race car to be inspected by Track Officials at any time and for any reason, and agree to immediately relinquish any one or all shock(s) from any position or all positions on his or her race car to tech officials as a swap. Competitor must accept from tech officials a shock(s) of the same valving part number in return for the shock(s) relinquished. Refusal of a driver to accept the "swap" will disqualify the driver from the night's events.
- 21.3.4. RUSH/Bilstein package consist of eight (8) shocks with the following part numbers:
  - RUSH RF 12-2, or CRUSA RF 12-2, RUSH RF 9-3 or CRUSA RF 9-3,
  - RUSH RF 7-3, RUSH 16-2, RUSH LF 2.5-2.5 or CRUSA LF 2.5-2.5,
  - RUSH 4-3, RUSH 5-2, RUSH 6-1.5

**Note: It is the driver's responsibility to notify Officials that he/she is competing with the RUSH Bilstein Bandits Shock package in order to receive weight break and display a Bilstein Bandits Weight sticker on both sides of car near rear window area.**

**Note: Shocks are sold individually. Bilstein Bandit Shocks can be purchased at Precise Racing Products, Sarver, PA (724) 360-8000; ask for Brett Neupert for ordering. For specific technical info contact Bilstein Representative Jim Hiland (704) 907-4167**

**22. BRAKES:**

- 22.1. Must have working brakes on all 4 wheels.
- 22.2. Must use magnetic steel rotors.
- 22.3. No titanium, carbon fiber or ceramic rotors allowed.

**23. EXHAUST:**

Exhaust must exit right side of car.

**24. PAINT & NUMBERS:**

- 24.1. Car numbers must appear on both doors and roof of car.
- 24.2. Each number must be a minimum of 24" high.
- 24.3. Roof number must read from scorers stand.
- 24.4. Minimum 4" number must appear on upper right hand corner of windshield and in right rear tail light area. No Duct Tape.
- 24.5. All numbering jobs must meet with scorer's approval.

**25. SAFETY:**

**25.1. General**

- 25.1.1. IT IS THE RESPONSIBILITY OF THE DRIVER, Not the TRACK OFFICIALS, OR THE PROMOTER TO INSURE HIS/HERS PROTECTIVE CLOTHING, SAFETY RESTRAINT SYSTEMS, SEAT AND ALL OTHER SAFETY ITEMS INSTALLED CORRECTLY, PROPERLY MAINTAINED AND USED.
- 25.1.2. Must have all standard safety equipment including two (2) drive shaft safety hoops.

**25.2. Helmets**

- 25.2.1. All driver's will wear a full-face helmet that meet a minimum safety rating of Snell SA2010/FIA-8860, Snell SA2015/FIA-8860 or SFI 31/1/2015
- 25.2.2. Head and Neck restraints required. The head and neck restraint system should be mounted and connected to the helmet per the helmet manufacture and head and neck manufacture instructions.
- 25.2.3. Arm restraints are recommended and should be connected and used as instructed by the manufacture.

**25.3. Seat Belt/Restraint System**

- 25.3.1. Minimum 5-point seat & shoulder harness system minimum 3" wide and maximum required
- 25.3.2. Each car should be equipped with minimum of an SFI 16.5 or SFI 16.1 approved restraint system, until the date of the belt expiration (two years from the date of manufacturer). Seat belt restraint systems shall be installed and used in accordance with manufacturer's instructions.

- 25.3.3. Seat belt material should not be permitted to come in contact with any sharp or metal edge, including when the material passes through the seat metal.
- 25.3.4. Rolled and/or de-burred and/or flanged edges or anywhere seatbelt webbing passes through and may come in contact with abrasive edge are recommended.

#### **22.4. Cockpit Window Net**

An approved driver's cockpit net required. The net must be a minimum of three ribbons and meet SFI 37.1 specifications, installed per the manufacturer's specifications.

#### **25.5. Protective Clothing**

- 25.5.1. All drivers will be required to wear a fire resistant driving uniform meeting minimum of the SFI 3.2A/5 specification and display a valid SFI 3.2A/5 label.
- 25.5.2. Drivers must wear gloves at all times they are on track during practice and competitions.
- 25.5.3. Driver's gloves must meet or exceed the SFI 3.3 specification and have a legible and valid SFI 3.3 label.

#### **25.6. Seat**

- 25.6.1. All cars must be equipped with an aluminum safe racing seat, high back type recommended. Aluminum seats with an FIA and/or SFI 39.2 rating are recommended.
- 25.6.2. All seats must be mounted to the frame as required by the seat and chassis manufacturer. Full containment seat(s) and/or aftermarket bolt on head restraints are recommended.
- 25.6.3. All areas surrounding the head should have padding.
- 25.6.4. The driver's seat must be securely fastened to the frame and/or cage in six positions with a minimum of six (6) 3/8"-inch bolts. There should be a minimum of four (4) bolts on the bottom and two (2) in the back of the seat. All seats must be a minimum of 1/8"-inch magnetic steel plate under and up the back 4" inches and be as wide as the seat.
- 25.6.5. The seat must be positioned completely to the left of the centerline of the car (no center steering) on the driver's side.
- 25.6.6. NO FIBERGLASS SEATS.

#### **25.7. Safety Other**

- 25.7.1. Fire extinguisher must be a minimum of 5 lbs. and be mounted securely within driver's reach and be fully charged.
- 25.7.2. An approved head and neck restraint system is HIGHLY recommended.
- 25.7.3. Only SFI frame retardant seat, roll bar, knee and steering pads and/or padding should be utilized.

**26. RULE BOOK DISCLAIMER:**

26.1. 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 events, and, by participating in these events, all participants are deemed to have complied with these rules.

26.2. **No expressed or implied warranty of safety shall result from the publication of or compliance with these rules and/or regulations.** They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

26.3. The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in their opinion do not alter the minimum acceptable requirements.

26.4. **No expressed or implied warranty of safety shall result from such alterations of specifications.** Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final. On occasion when situations arise that are not covered by written rules, the track officials may put special rulings into effect. Once such rulings are acted upon, they may become an act of policy and will be added to the existing rules of procedures.

The Management of JENNERSTOWN SPEEDWAY COMPLEX, LLC