

Potterville Sod Slingers

2017 Rulebook

Updated 02-13-17

Potterville Sod Slingers Lawn Mower Racing Affiliated Club (PSSLMRAC) of the United States Lawn Mower Racing Association (USLMRA)

Website www.pottervillesodslingers.com

The PSSLMRAC is run primarily for racing enthusiasts and their friends. Members race for the love of competition. All who share this philosophy are welcome to join the PSSLMRAC and participate in its activities.

These regulations which include any supplementary regulations issued for a particular event are designed for the orderly conduct of lawn mower racing in the United States to establish minimum acceptable requirements for such events

These regulations are only intended as a guide of the sport and are in no way a guarantee against injury to a person or property of participants, spectators, or others. Nor are they a substitute for due care which should be exercised by participants in any event.

Finally, the PSSLMRAC assumes no liability discharging the PSSLMRAC from such liability

The PSSLMRAC reserves the right to accept, deny, suspend, or revoke any membership at any time.

The PSSLMRAC Officers having made known these rules may modify, add to, delete from, or grant exceptions to these rules at any time. By entering and participating in these events all participants agree to abide by these regulations as may be amended from time to time.

It is the responsibility of the builder and driver to adhere to and be familiar with the requirements of this rule book.

Any questions concerning these rules may be directed to the appropriate staff member

POTTERVILLE SOD SLINGERS LAWN MOWER RACING AFFILIATED CLUB EXECUTIVE STAFF:

PSSLMRAC PRESIDENT - Mike Baley 517-484-3637

PSSLMRAC VICE PRESIDENT - Jim Shilling 517-652-9335

PSSLMRAC SECRETARY - Belinda Baley 517-484-3637

PSSLMRAC TREASURER - Belinda Baley

Code of Conduct for Potterville Sod Slingers Lawn Mower Racing Affiliated Club:

The PSSLMRAC expects its Staff Officers, Racers, General Membership, and Volunteers to always act in a courteous and professional manner for the benefit and growth of lawn mower racing.

The PSSLMRAC reserves the right to accept, deny, suspend, or revoke the membership of any member. PSSLMRAC may place any member on probation for any action(s) deemed detrimental to the sport of lawn mower racing. Membership fees are as follows:

\$30.00 to join \$20.00 annually thereafter to keep membership.

Any member under suspension, revocation, or probation may be barred from participation in any point's

race, no point's race, and/or Affiliated Club racing events. They may also be barred from any entry to any area at any race venue controlled by the PSSLMRAC or local chapter (LC)

As stated in the PSSLMRAC Rule Book, "The driver is responsible for the conduct of his/her crew, even while on the race track." Should anyone attending an event be found committing a detrimental act, that person will be removed from the premises. The member driver will be held responsible for the conduct of that guest or crew member may be subject to suspension.

Revocation, suspension, or probation period of membership may be enacted without prior notice and will be the sole discretion of and by majority agreement of the PSSLMRAC Executive Staff.

Staff Officers must approve any time changes or functions held under the PSSLMRAC name by other members.

IT IS IMPORTANT THAT YOU READ AND UNDERSTAND THIS CODE OF CONDUCT

Actions or conduct that may lead to suspension, revocation, or probation include, but are not limited to:

1. A conscious effort by a member to ignore or circumvent in any way the PSSLMRAC rules as defined in the rulebook.
2. Verbal assault either public or written of any PSSLMRAC staff member, LC official, volunteer, or other PSSLMRAC member.
3. Physical assault of any PSSLMRAC staff member, LC official, volunteer or other PSSLMRAC member
4. Persistent on-track violations including but not limited to, rough driving, passing under yellow, and failure to follow on track instructions.
5. Any conscious effort to undermine the ability of the PSSLMRAC, its staff, LC officers, volunteers, or fellow members to conduct their activities at any race venue hosting a USLMRA or LC sanctioned event.
6. Any disruptive behavior which in the opinion of track officials, LC officers, USLMRA officers and staff, or PSSLMRAC officers and staff that interferes with the orderly conduct of sanctioned or affiliated lawn mower races.

Any member of the PSSLMRAC Executive Staff may give reasons for suspension, revocation, or probation in writing to all offenders at his or her discretion.

Appeal of any suspension, revocation, or probation will be handled on an individual basis. However, the right to appeal may not be granted in every case. Any request for appeal must be submitted in writing to the PSSLMRAC Executive staff stating the specific reason(s) for the appeal. The PSSLMRAC serves at the discretion of the President.

Suspensions or probation may be a period of up to one year. Revocations will be permanent unless cause can be shown for reinstatement.

GENERAL COMPETITION REGULATIONS

I. RULES OF THE TRACK

- A) No driver who has consumed any alcoholic beverage on the day of an event may participate in a practice or race. **NO alcoholic beverages may be consumed by ANY driver or race staff before the end of the last race or other on-track activity.** NO illegal drugs or controlled substances will be tolerated on the premises **AT ANY TIME.** No one in the pits may consume any alcoholic beverage before the end of the last race or other track activity. Violation **will** result in disqualification and loss of points.
- B) **NO ROUGH DRIVING WILL BE TOLERATED**
- C) **The responsibility for a safe pass rests with the overtaking driver.**
- D) The following flag signals will be obeyed without question:
GREEN: The race/practice is underway when the green flag is waved.
YELLOW: Take care, Danger. **NO PASSING ON ENTIRE COURSE.** Drivers form a single line and close up with the leader, and follow the Starter's directions. Very slow machines may signal following machines to pass under yellow.
YELLOW & WHITE: These two flags drawn together by the starter are to indicate that the field is not sufficiently bunched for the restart. If you see this signal, close it up!
RED: Stop racing immediately. Clear the course as much as possible.
BLACK: Generally for a driving infraction or equipment violation. Driver must complete lap and pull into the pits for consultation with the Track Official at the designated spot. A furred black flag means the driver must clean up his/her act or receive a full black flag.
BLUE with YELLOW STRIPE: Slow traffic to yield to the leaders coming up on them.
WHITE: One lap to go. Crossed with GREEN means ½ way point.
CHECKERED: End of race or practice session. Driver must complete lap and pull into pits or **impound area.**
- E) Driver must keep **both hands** on the steering wheel, except to momentarily operate other controls.
- F) If a driver leaves the course, he/she must re-enter the course as close as possible to the same point the driver left the marked track. The driver may not simply reenter further down the track.
- G) If a driver stalls on the course, the driver's first responsibility is to move the driver to a safe position at least 10 feet off the course. **Pit Crew or guest may not go on the course at any time during a race unless specifically directed to do so by the safety crew. This could lead to Driver Disqualification!**
- H) Driver must be completely stopped before driver dismounts.
- I) Unsafe on track/off-track driving practices may result in disqualification.
- J) All drivers must attend all announced driver's meetings. Roll may be called, and drivers may be penalized or disqualified for failure to attend.
- K) Protests against another driver or his/her driver must be lodged in writing with the Race Day Track Official on an official protest form prior to the start of the race, or within 30 minutes of its completion.

- L) Starts will be a rolling start. On the GREEN flag all drivers will cross the start line and then go racing. Crew members will not go on the track or assist or push the mower from the grid without a Track Official's permission.
- M) Laps will not be counted under the yellow flag. However, there will be a minimum of two laps under green, after yellow to finish a race. If there is a yellow after the white flag the race will be considered finished in the order the drivers crossed the start/finish line at the white flag lap.
- N) The first three finishers in each Feature race must return to the start/finish line for racer interviews and/or trophy presentations unless otherwise directed.
- O) No onboard communication devices allowed.
- P) All on track and competition (i.e. non technical) issues must be raised with the appointed Track official.
- Q) During racing events the switching of mowers will not be allowed meaning the mower used by a driver during practice & heat races must be the same mower raced in features. No longer will a backup mower be teched for use as a backup mower.
- R) If you are the cause of the caution, or you leave the race track for any reason, you will restart at the back of the grid. You will have up to 5 caution laps to repair your mower and restart at the back of the grid.

II. RULES OF THE PITS & GRID

- A) No person under 16 years of age shall be on the grid except for Junior Class. Persons 16 or 17 years of age may be on the grid with an approved parent's consent form on file with the Race Day Track Official.
- B) Mower pit speed is 5 mph maximum.
- C) No mower may have more than 1 attendant on the grid, in addition to the driver.
- D) Long pants, closed leather over the ankle shoes and shirts are required in the track area. No tennis shoes allowed.
- E) No smoking in the track area.
- F) Refueling: Driver must dismount and engine must be turned off when fuel is added. A fire extinguisher (liquid fire rated) must be in the hands of a crew member any time fuel is added to a hot machine.
- G) Mower must be completely stopped before driver dismounts.
- H) Crews are under the direction of the Track Officials at all times.
- I) The driver is responsible for the conduct of his/her guests and crew, even while on the track.
- J) Unauthorized personnel shall not enter the racing course. All individuals entering the controlled area which includes but is not limited to the racing course, grid and pit area, including crew members and guests, must sign a release and display a wristband discharging the PSSLMRAC from liability.
- K) No pets are allowed on the racing course. Pets in the pits must remain on a leash and owners are responsible for cleaning up after their pets
- L) The PSSLMRAC reserves the right to limit pit space. Campers and RV's may be permitted on Race day only if space allows.
- M) No vehicles other than racing mowers and official vehicles such as tow mowers shall be on or near the track.
- N) Entry fee for pits shall be \$5.00 for members (membership card must be present) and \$10 for non members. Race fee shall be \$5.00 per machine. These fees are subject to change during the season.
- O) **NO ALCOHOL IN THE PITS**
- P) Everyone in the Pits, Racers and Guests must have NKA wristbands purchased at registration table.

Q) Driver must have tether attached and secure when mower is running. NO EXCEPTIONS

III. DRIVER ELIGIBILITY

- A) All Drivers must be members of the PSSLMRAC to compete for points.
- B) Drivers must be at least 18 years of age. Drivers 16 and 17 years of age may compete with an approved parent's consent form on file with the Race Day Track Official at each event. For Junior drivers a Parental Consent form can be filled out by a parent or legal guardian prior to the event. Note that this applies to the first time you race at a facility. Once one is signed for a particular facility, it is good for the year
- C) New drivers must take a flag test and know the rules.
- D) Course parameter locaters on the race track are not to be hit or moved. This could be grounds for disqualification or black flag.

IV. DRIVER SAFETY EQUIPMENT

- A) All drivers must wear an automobile racing or motorcycle-type full face helmet with Facesheild or Goggles approved by the U.S. Department of Transportation or the Snell Foundation.
- B) The helmet must fit snugly and be securely buckled when driver is on the track. Long hair must be kept tucked inside the helmet.
- C) Every driver must wear long pants, long-sleeved shirt or jacket, full-finger gloves and leather over-the-ankle footwear on the track. Motorcycle leathers or antiabrasion karting suits are highly recommended. No loose clothing (un-tucked or un-buttoned shirts, etc).
- D) An approved, racing neck support is MANDATORY.
- E) Driver must have a full 10BC-rated fire extinguisher in his/her equipment.

V. MOWER ELIGIBILITY

- A) Events are open to all self-propelled rotary or reel type lawn mowers; the main provision being that the mower must originally have been designed, mass produced, and sold commercially through a dealer network to mow residential lawns.
- B) The generally accepted category is riding mowers and lawn tractors with rear tires 20 inches diameter and under. See class rules for engine size limits.
- C) Final determination of eligibility and classification is up to the Chief Technical Inspector.
- D) A STA-BIL Fuel Stabilizer and/or a STA-BIL Series sticker must be displayed in clear view on the right side and front of mower.
- E) Organizers reserve the right to reject at any time any mower, which in their opinion represents an attempt to defeat the spirit of these Regulations, even though it complies with the letter of them.

VI. TECHNICAL INSPECTION

- A) Every mower entered in any PSSLMRAC event must be approved for competition by Technical Inspection before practicing or racing at any event. A **Safety Tech/Build Tech** sticker will be issued at **each** race. All JP's and GP's will remain on track for RPM & Air Pressure check. Inspection after feature races. JP racers may be required to check gear ratio

compliance as a group, participation is mandatory. Any mower may be re-inspected at any time at the discretion of the Race Day Track Official or any Staff-level Tech Inspector of the event. If found to be in noncompliance with these Regulations, any mower may be removed from competition.

- B) Drivers may be tested by race officials at any time for knowledge of flag procedures and these Regulations. Drivers must pass all tests in order to practice or race.
- C) Drivers must show their personal safety equipment at Technical Inspection before practicing or racing at any event.
- D) The Race Day Track Official shall have the right to remove from competition at any time any driver, crew member or guest in the paddock who does not comply with these Regulations, who fails Technical Inspection or who, in the Race Day Track Official's sole discretion, is exhibiting behavior which is dangerous to participants or spectators.
- E) *If, after reading these Regulations you need a clarification, you are encouraged to contact one of the Staff members PRIOR TO RACE DAY. We want everyone to race, BUT we are creating fairness, safety, consistency and enforcement of PSSLMRAC rules.* Competitors must be aware that Clarifications are offered in good faith and do not afford specific mowers protection from subsequent protest.

VII. GENERAL MOWER REQUIREMENTS

NOTICE

These general requirements apply to ALL racing classes. Any EXCEPTIONS to these requirements are listed in the individual class build rules.

- A) CUTTING BLADES MUST BE REMOVED COMPLETELY FROM ALL MOWERS. ALL MOWERS MUST HAVE A CUTTING DECK SECURELY MOUNTED IN THE STOCK POSITION, WITH A MINIMUM OF 2.5" GROUND CLEARANCE UNDER THE LOWEST POINT OF THE DECK.
- B) No liquid cooled engines in any class.
- C) All mowers MUST be equipped with an automatic throttle closing device.
- D) All mowers must be equipped with a kill switch, which will turn off the ignition if the driver leaves the mower. Mowers shall use a tether, mechanically attached to mower and driver. Velcro is not acceptable. Pressure switches are not allowed. Kill switch must remain in closed position (engine not running) until driver mounts mower. Additional switches that can by-pass the kill switch are not allowed under any circumstance. The ignition interrupter kill switch and cap/prong must be commercially available for racing type vehicles such as jet skis, snowmobiles, 4-wheelers etc. Magnetic or any other form of homemade switch is not allowed. Kill switch lanyard length shall be as short as necessary to effectively stop the mower as quickly as possible. Lanyard length shall not exceed 40" when fully extended. This device must be commercially available for racing and/or recreational vehicles such as ATVs, jet skis snowmobiles, etc. Homemade and/or magnetic switches are not allowed. Tether must be physically attached to your wrist or upper body or belt loop with a clip. A Jet ski type wrist band is acceptable. Slip knots over your wrist and or attaching to your legs is not acceptable.
- E) Mower brakes must be in good condition, easily operated and operating on at least two rear wheels. **Rear brakes may not be mounted on jackshafts, only rear axle.**

- F) Brakes may be improved in any way.
- G) Throttle and brake controls may be relocated. All mowers in all classes to be fitted with sturdy double return springs mounted at two different mounting points on both ends to help eliminate throttle from sticking or failure to completely close when released.
- H) FRAME: Discrete strengthening is allowed. Front and rear axles must use original frame as primary mounting point. 4 inch minimum ground clearance at frame.
- I) Mowers must be free of projections, which could injure the driver or a competitor, or damage another mower. No axle or wheel mounting bolts may protrude beyond the face of the tire sidewall.
- J) Mowers must be safe and complete, all parts and panels in place, with no missing nuts, bolts, cotter keys, etc.
- K) All exposed chains and sprockets must be fitted with metal guards, which will direct a broken chain downward.
- L) Mowers must be neat and clean, with paint in new or very good condition. No excess dirt, oil, grease, rust or primer. Sponsor graphics must not interfere with mower's racing numbers or class letters.
- M) A rear bumper is mandatory. Bumper material must be steel with a minimum of 3/4" and max of 1" tubing. Rear bumper must be a two bar enclosed loop design with the bottom no lower than 4 inches off the ground, and no higher than 6 inches off the ground. It must be as wide as the center of the rear tires +/- 1 1/2 inches. No Smaller than 4 inches and no bigger than 6 inches tall. Front bumper is optional and **must** be 17 inches wide of a two bar enclosed loop design 3 inches tall with the bottom no lower than 4 inches off the ground and no higher than 6 inches off the ground. The entire bumper must be removable and follow the contour of the grill and be within 3/4" from the grill. This will be checked.
- N) All mowers that do not have the top of the engine completely covered by the hood must have the flywheel covered by either the recoil housing, the stock wire housing or racer made cover.
- O) Race numbers should be a minimum of 3" high and of a sharply contrasting color from their background, and should be visible from all four sides of the mower. Class letters, should be a minimum of 2" high, and be shown on 1 side of the mower. All mowers must have their number visible from the front for grid line up and scoring purposes. It is recommended that racing numbers be pre-registered with the Track Official. Machines without numbers will have them assigned on race day. Racing numbers are "owned", and will force unregistered duplicates to change.
- P) All positively charged terminals must be insulated with a cover or heavy tape, and battery must be well secured.
- Q) Lawn mower seats only. Wheelbase may not be altered.
- R) Glass headlights must be taped or removed.
- S) Maximum width 40" sidewall to sidewall unless otherwise stated in the class build section.
- T) Steering wheels may be replaced with any commercially available pieces. May not be mounted off center unless originally mounted offset. Steering columns must pass through the original hole in hood or dash at the original angle. Handlebar type grips may not be added to steering wheels in any class. No handle bars allowed.
- U) Tires must be lawn tractor tires. No Snow Hog, tiller, A.T.V, commercial mower or performance compound or competition kart tires. Tires must be of same tread design, make, and size on each axle. Flat tires will be black-flagged!
- V) No centrifugal and/or torque converter clutches except in FXS, and FXT Classes
- W) Minimum 4" ground clearance to frame.
- X) All mowers must utilize a working clutch.
- Y) Flywheels: Billet Flywheels are mandatory in all classes with the exception of JP, IMOW, GPK, GPT and GP.

Z) Fuel lines must be clamped at all joints

AA) You will now be allowed to discreetly move, modify and alter fenders so that the driver can lower the seat assembly. **Fender trimming allowed, however chopping of fenders not allowed.** The following guidelines are given:

- a. Trimming fenders so that ½” of clearance between fender edge and the top of the tire
- b. Flaring the fender so that ½” of clearance remains between the fender edge and the top of the tire.
- c. Trimming should follow the contour line of the fender, not just merely remove sheet metal in the immediate area.
- d. Trimming or flaring that results in sharp edges will not be allowed.
- e. Fender should retain its original look
- f. Modifications to the fenders assembly will be allowed to allow the lowering of the seat; however certain guidelines are given. Seat bottom will be no lower than 13” from the ground. Fender cutouts are permitted but must have protective trimming to eliminate the possibility of having sharp edges.

BB) No slick tires in any class

FUEL and FUEL DELIVERY

PSSLMRAC.

ALL FUEL IS SUBJECT TO TESTING WITH DIGITRON. BE ADVISED THAT WE WILL BE CALIBRATING WITH LOCALLY OBTAINED FUEL, AND IT IS STRONGLY RECOMMENDED THAT RACERS PURCHASE FUEL LOCALLY TO AVOID POSSIBLE FUEL VIOLATIONS DUE TO REGIONAL DIFFERENCES IN FUEL BLENDS.

Electric fuel pumps are not allowed on closed-course machines

The only acceptable fuel is pump gasoline. Additives, other than STABIL Fuel Stabilizer are prohibited. Any apparatus other than the carburetor, which can be used to introduce any gaseous or liquid substance into the induction flow, whether connected or not, is prohibited, and will result in disqualification. Such devices include, but are not limited to, Nitrous Oxide, alcohol or water injection systems, turbo or superchargers, and/or the attendant hardware consistent with these systems. Any attempt to conceal or disguise such apparatus will be considered a flagrant violation and may result in expulsion from the PSSLMRAC

VIII. RACING CLASSIFICATIONS

A) **Junior Prepared Class (for Ages 10 – 15)** Class designation: JP

This is a highly regulated class that is specific to the modifications that are done. The intent is to have as nearly identical mowers as possible so that Junior Prepared Drivers can gain experience and develop skills needed to advance to the “Prepared Class” when they become of age.

Special requirements:

- a. All JP drivers 10-15 years old must be members.

b. Parents/ legal guardian must be present

c. Parents/ legal guardian must be available to work corners or in the infield if needed during JP Race

1) **TYPE:** Must be a full-size lawn tractor, front engine, stamped steel frame and manufactured as such, as delivered except for the modifications listed below.

Mid engine frames are not allowed

2) **ENGINE: Governed engines, 3650-RPM max. (No Load).** Single-cylinder Over-Head Valve Engines must be stock, complete, and not to exceed a factory rating of 17 horsepower.. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement. Old style L-Head engines may still be used.

3) **Exhaust design is open, but must terminate away from driver and competitors, in a rearward and/or downward direction and present no apparent safety hazard.**

4) **Driveline:** Transmission or Transaxle must be shift able and of Lawnmower origin and gear ratio in highest gear is to be no less than 8 to1.

Example: while in the highest gear the rear wheels can turn no more than one revolution every time the engine rotates eight times. No Veri-Drives, No centrifugal and or torque converter clutches. Mowers using a chain drive type transmission must use an axle-mounted brake system.

5) **Body:** Must be stock, without external alterations, although discrete strengthening is allowed. Hood must be secured. Also Hoods must be hinged or a hole in grill for access to spark plug wire for "RPM" checks. Minimum 4" ground clearance to frame, 2 ½" from the ground to the bottom of deck. Footholds must be discrete, and no more than 2" high, made of flat or "L" stock (no rod stock), and made such that the foot can not become entangled in a rollover.

6) **Deck:** Mowers must mount steel factory decks. The deck must be at least as wide as either running boards or body edge whichever is wider. Decks may not extend any more than 2" beyond the tire sidewalls on each side. Deck halves may be mounted to running boards. Decks must be secure.

7) **Front and rear axles** must remain in stock location. Front spindles are to be min. 5/8" in diameter. All steering linkages must use ball-type or spherical threaded rod ends. **Shaft locks**, center drilled axle with locking bolts and castellated nuts with cotter pins are acceptable for securing front wheels. Rear axle should use shaft locks, center bolts, or thru-bolts to secure the rear wheels. **Cotter pins, E-rings, and C- rings alone, bent nails, hitch pins, over-center pins, and quick-release pins are not sufficient for wheel retention and are not approved.** Rear axle may use open differential, locked, "live" or solid axle. No single wheel drive.

8) **Steering;** Front axle and steering may be reinforced, substituted or fabricated. In the Case of racer-fabricated axles, these will be subject to the judgment of the Technical Inspector as to their apparent safety for racing.

Aluminum may not be used as the material for the one-piece axle.

9) **Wheelbase;** Minimum 39" unaltered. **Width;** Maximum 40" sidewall to sidewall.

10) **Wheels:** Metal rims 5" minimum front wheels, 8" minimum rear wheels.

Rear tires maximum is 16" diameter as written on the sidewall of the tire.

Actual Diameter may not exceed 16 ¼" Maximum 15 PSI tire pressure

11) **Kill Switch:** Mowers must be equipped with an automatic throttle-closing device. All mowers must be equipped with a kill switch, which will turn off the ignition if the driver leaves the mower. Velcro is **not** acceptable. Pressure switches are not allowed. Kill switch must remain in closed position (engine not running) until driver mounts mower. Additional Switches that can by-pass the kill switch are not allowed under any circumstance.

12) All mower using hand throttles that are adjustable must disable them so that they cannot be adjusted/moved by the driver at anytime during competition. Cables must also be secured so that the engine RPM will not be affected by moving the cable in anyway, or at any time.

MODIFICATIONS NOT LISTED ARE NOT APPROVED

INTENT: To provide a safe opportunity to demonstrate the driver's ability when in competition with essentially identical mowers. This is a highly regulated class to insure uniformity between JP machines. As you can see, these machines are essentially Prepared Chassis' (*SP, CP, & BP*) with IMOW drive trains. This allows young racers to gain race experience at IMOW speeds which will approximately reach 15-20 mph (on a USLMRA US Points Track), but with a more stable platform that can easily be upgraded into the prepared classes when the driver reaches the Minimum age.

B) IMOW. Class designation: **IMOW**

This is a highly regulated class that is specific to the modifications that are done. The intent is to have as nearly identical mowers as possible so that this class is based on driving ability.

1) **TYPE:** Must be a full-size lawn tractor, front engine, with steering column behind motor, stamped steel frame and manufactured as such, as delivered except for the modifications listed below. Mid engine frames are not allowed

2) **ENGINE: Governed engines, 3650-RPM max. (No Load).** Single-cylinder Over-Head Valve Engines must be stock, complete, and not to exceed a factory rating of 17 horsepower. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement. Old style L-Head engines may still be used.

3) **DRIVELINE:** Transmission or Transaxle must be shift able and of lawnmower origin and gear ratio in highest gear is to be no less than 8 to 1 **Example:** while in the highest gear the rear wheels can turn no more than one revolution every time the engine rotates eight times. *No Veri-Drives*

4) **BODY:** Must be stock, without external alterations. Hood must be secured.

5) Front and rear axles must remain in stock location. Front spindles are to be min. 5/8" in diameter. All steering linkages must use ball-type or spherical threaded rod ends

6) Minimum 4" ground clearance to frame, 2 1/2" ground to deck.

7) Front axle and steering may be reinforced, substituted or fabricated. In the case of racer-fabricated axles, these will be subject to the judgment of the Technical Inspector as to their apparent safety for racing.

Aluminum may not be used as the material for the one-piece axle.

8) Maximum width 40" sidewall to sidewall.

9) Shaft locks, center drilled axle with locking bolts and castellated nuts with cotter pins are acceptable for securing front wheels. Cotter pins, E-rings, and C-rings alone, bent nails, hitch pins, over-center pins, and quick-release pins are not sufficient for wheel retention and are not approved.

10) **WHEELS:** Metal rims 5" minimum front wheels. 8" minimum rear wheels. Rear tires maximum is 16" diameter as written on the side wall of the tire. Actual diameter may not exceed 16 1/4"

Maximum 15 PSI tire pressure

11) Rear axle should use shaft locks, center bolts, or thru-bolts to secure the rear wheels.

12) **DECK:** Mowers must mount steel factory decks. The deck must be at least as wide as either running boards or body edge whichever is wider. Decks may not extend any more than 2" beyond the tire sidewalls on each side. Deck halves may be mounted to running boards. Decks must be secure.

13) Engines must be stock and complete. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement.

14) **Exhaust design is open, but must terminate away from driver and competitors, in a rearward and/or downward direction and present no apparent safety hazard.**

15) Footholds must be discrete, and no more than 2" high, made of flat or "L" stock (no rod stock), and made such that the foot can not become entangled in a rollover.

16) Minimum 39" unaltered wheelbase.

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17) Rear axle may use open differential, locked, "live" or solid axle. No single wheel drive.

18) No centrifugal and or torque converter clutches

19) Mowers using a chain drive type transmission must use an axle-mounted brake.

20) Hoods must be hinged or with a hole in grill provided for access to spark plug wire for RPM checks

21) 24v/ dual/single battery starting systems are not authorized

22) All mower using hand throttles that are adjustable must disable them so that they cannot be adjusted or moved by the driver at anytime during competition. Cables must also be secured so that the engine RPM will not be affected by moving the cable in anyway, or at any time.

MODIFICATIONS NOT LISTED ARE NOT APPROVED.

INTENT: To provide a safe opportunity to demonstrate the driver's ability when in competition with essentially identical mowers. This is a highly regulated class to insure uniformity between machines.

C) Prepared: Class designation GPK, GPT, GP, SP, CP and BP. These mowers are delivered from the factory except the modifications listed below.

- 1) Engine must be originally manufactured for use in lawn mowing equipment and be stock in appearance with the exception of air filter, air cleaner or velocity stack. GP, GPK, and GPT must have stock air filter assembly and filter. Crankshaft must be in original orientation and clearance hole in frame.
- 2) Exhaust design is open, but must terminate away from driver and competitors in a rearward and/or downward direction and present no apparent safety hazard.
- 3) **Starter must be onboard, electric or pull start.**
- 4) Driveline may be modified from the engine pulley to the rear wheels, but must utilize a shiftable lawnmower transaxle or transmission.
- 5) Rear axle may use open differential, locked, live or solid axle. No single wheel drive.
- 6) No centrifugal and/or torque converter clutches
- 7) Rear axle should use shaft locks, center bolts or thru-bolts to secure rear wheels.
- 8) All steering linkages must use ball-type or spherical threaded rod ends.
- 9) Front axle may be pinned, bolted, or welded into position. No suspension, no shock absorbers. Axle must have 1-piece beam.
- 10) Front axle and steering may be reinforced, substituted or fabricated. In the case of racer-fabricated axles, these will be subject to the judgment of the Tech Inspector as to their apparent safety for racing.
- 11) Shaft locks, center drilled axle with locking bolts, castellated nuts with cotter pins, and washers with new cotter pins are acceptable for securing front wheels. Cotter pins, E-rings, and C-rings alone, bent nails, hitch pins, over-center pins, and quick-release pins are not

- sufficient for wheel retention and are not approved.
- 12) Wheels must be the same size on each axle. Of any origin, made of metal. No dual or tandem wheels.
 - 13) Deck, Mowers must mount steel factory decks. The deck must be at least as wide as either running boards or body edge whichever is wider. Decks may not extend any more than 2" beyond tire sidewalls on each side. Deck halves may be mounted to running boards. Decks must be secure.
 - 14) SAE rated trailer or lawnmower tires must be used
 - 15) Footholds must be discrete, and no more than 2" high, made of flat or "L" stock (no rod stock) and made such that the foot can not become entangled in a rollover.
 - 16) Class is determined by the oem factory rating of the lawn mower engine.
 - 17) All parts should be of lawn mower origin with the exception of those specifically mentioned above or otherwise noted.
 - 18) Hoods and body parts such as fenders may be upgraded from year to year only if parts are from the same company and any subsidiary company of said mother company.
 - 19) External ignition systems allowed.
 - 20) **Must use axle mounted brakes, no lawnmower transaxle or transmission brakes.**

Classes defined:

G/P:) ENGINE: Governed engines, 3650 RPM max. (No Load). Single-cylinder Over-Head Valve & Valve in block ("L" Head") Engines must be Factory stock, complete, and not to exceed a factory size of 33ci. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement. Twin cylinders engines and Mid Engine frames are not allowed. 6" minimum front wheels, 8" minimum rear wheels, and there is no gear ratio restriction.

G/P/K: Age requirements are altered for this class; JP Drivers between the ages of 12- 15 years old (or with board approval) with no less than 2 years JP Experience. Once the driver steps up to GPK , you will not be able to compete in the JP class. Build requirement will be identical to the adult GP build requirements.

G/P/T: ENGINE: Governed engines, 3650 RPM max. (No Load). No drivers under 18 years old. Twin-cylinder Over-Head Valve & Valve in block ("L" Head") Engines must be Factory stock, complete, and not to exceed a factory size of 44ci.. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement. Mid Engine frames are not allowed. 6" minimum front wheels, 8" minimum rear wheels, and there is no gear ratio restriction.

S/P: Valve-in block single cylinder 4 stroke engines *over 8.5hp* . 39" minimum unaltered wheelbase. Mid engine frames are not allowed. 5" minimum front wheels. 8" minimum rear wheels. Engine may be internally modified.

C/P: All single-cylinder overhead valve and two cylinder valve in block, 4 stroke engines, *20hp and under*. 42" minimum unaltered wheelbase. Mid engine frames are not allowed. 6" minimum front wheels. 8" minimum rear wheels. Engine may be internally modified.

B/P: No drivers under 18 years old. All overhead valve V-twin 4 stroke engines, *20hp and under*. 42" minimum unaltered wheelbase. Mid engine frames are not allowed. 6" minimum front wheels. 8" minimum rear wheels. Engine may be internally modified.

FXS & FXT Class (Basic Rules)

1. ENGINES: Each Class has a specific maximum Horse power rating (OEM rating) and max cubic inch displacement. Any allowable modifications will be stated for that class, **If it does not say you can do it, it's not allowed.** Billet flywheels Required. All cooling fins and safety shields must be intact. No diesel or liquid cooled engines in any class. **FXS & FXT Engines must be mower engines or direct replacement engines (example Clone engines), no 305 or star engines.**

2. CHASSIS: Frames, parts, must retain original manufacturers (OEM) specifications (no chopping) re: wheel base unless modifications specified in particular class. Material (steel) may be added for structural strength. It is recommended that front axles be bolted or welded rigid eliminating the stock pivoting. No rear engine lawnmowers must be front engine traditional style lawn tractor with a hood covering the engine and rear fenders. No handlebars, to prevent a racer from being pierced in the event of a roll over. All tractors must have been a factory built lawn cutting tractors. Frame width is 15" max.

3. BODY WORK: Can be customized (where allowed) but must retain some resemblance of a lawn tractor. All parts must be securely fastened to chassis i.e. fuel tanks, batteries, body work, etc.

4. FUEL: Only pump gas unless specified in that class.

5. BRAKES/CLUTCHES: Must be intact and working. If not equipped with a neutral gear all tractors must have a clutch lock out so machine can be pushed by hand. When running a centrifugal clutch, driver must be seated on machine to have it started ***or rear wheels securely off the ground.***

6. THROTTLE: No fixed throttles. Foot and trigger throttles will have the two return springs as mandated in ALL CLASSES. No solid throttle cables must be braided cable like a bicycle brake cable.

7. KILL SWITCH: Tractor must have a working commercially manufactured tethered kill switch and be fastened to driver when on track in BOTH CLASSES.

8. EXHAUST: Is open, as long as it points **down and away** from driver and presents no apparent hazard. No stacks.

9. SPINDLES/AXLES: Front spindles must be drilled and cotter pinned or safety pinned. Rear axles must be locked up with axle lock collars. Rear axles must be in stock location and if a custom front axle is allowed it must be located close to the original location and not on top of chassis

10. MOWER DECKS: If mower deck is left on, blades must be removed and the deck must be securely fastened to chassis. Minimum ground clearance is 2".

11. SEATS: Must be mounted in center of frame from one side of the frame to the other side. Go karts seats allowed

12. BUMPERS/NERF BARS: Max width front: Inside tires not to cover front face of the tire. Side nerf bars max 1.5" in from outside of tires. No sharp edges. Rear bumpers and side bars when equipped must have a standard height of 7" from the ground and must stay in from the outside of the tires 1/2" on each side. Rear bumpers must be of round tube design to prevent climbing. A closed or continuous loop bumper is the only authorized bumper on the rear. Side crash bars/nerf bars, when equipped must be installed no more than 1.5" in from outside of tires. They must have a kart style secondary hoop that can withstand side impact. **Front Bumpers on FXS & FXT cannot exceed 2 past the sides of the Hood, and at no time will the front bumper cover or protect the front tires, they are intended to protect the front hood only. They will be made of round or square stock not exceeding 1-1/2" in diameter.**

13. NUMBERS: All tractors must have a visible number. Minimum 3" height is recommended, on a contrasting background.

14. Wheels and Tires: Though offsetting of axles permitted, tire sizes will be of the same size

per axle

15. FXS & FXT Frames must be original mower frames, no homemade frames. However they can be reinforced and widened to meet the width standard if desired.

Factory Experimental Single (FXS) CLASS:

1. AGE GROUP: 18 years old with 1 full year experience in prepared class to race in FXS.

2. MAX ENGINE: single cylinder Max 18hp or 33ci OEM rated OHV or Opposed twin Flat Head 44 ci maximum flathead coming from the lawn equipment origin (4 cycle engines). No fuel injection.

3. OHV ENGINES

-OHV engines 33ci or less.

-internal modifications allowed

-carburetors size/type open

-custom intake manifolds allowed

-external ignition devices are allowed, cross brands of lawn tractor OEM ignition systems allowed

-External shields must remain stock.

- Mandatory billet flywheel

4. NOTE: IF the rules don't say you can do it, YOU CAN'T!

5. FLAT HEAD TWIN ENGINES:

-44ci max displacement, factory oversize pistons used to repair engine accepted

-internal modifications allowed

-carburetors size/type open

-custom intake manifolds allowed

-external ignition devices are allowed, cross brands of lawn tractor OEM ignition systems allowed

6. FUEL: Pump racing fuel allowed. No electric fuel pumps

7. DRIVE TRAIN: Centrifugal clutch, traditional belt clutches allowed. 90 degree gear boxes, jackshaft setups allowed. All chain guards must be a min thickness of 1/8" aluminum or steel.

8. STEERING: Direct steering is mandatory, must use lock nuts on all connections.

9. WHEELBASE AND MAXIMUM WIDTH: 39" min wheelbase. 42" max width. No more than 4" of total offset. (Take a measurement from the center of your frame to the outside of your right tire and doing the same on the left side. With this the difference should be no greater than 4")

10. FRAME: No minimum ride height. Firewall protection recommended. Discreet chopping of chassis to install after market clutches, gear box, seats and axles allowed, must retain original OEM wheel base. Frame width 15" max.

11. BRAKES: Hydraulic Brakes are mandatory. Front brakes optional

12. WHEELS/HUBS: Go Kart dirt tires are allowed, max 8" rims on rear and 6" on front. Lawn mower tires, kart dirt tires, and mini sprint tires are authorized. Custom steel or aluminum rims allowed. **No stock lawn mower wheels.** Custom hubs or spindles must have lock collars, lock nuts or new HD cotter pins to prevent movement.

13. BUMPER/SIDE BARS: Side/crash bars mandatory, see general rules. Closed loop rear bumper mandatory, Front bumpers optional in this class, see general rules.

14. MINIMUM WEIGHT: 450lbs with driver

Factory Experimental Twin (FXT) CLASS

- 1. AGE GROUP:** 18 Years old with 1 year experience in prepared class to race in FXT.
- 2. ENGINE OPEN:** V-Twin vertical or horizontal Max 22 HP max 44ci OEM Rated 4 cycle lawn equipment engines. Internal and external modifications allowed for all engines. After market aluminum billet flywheels are mandatory. Modification to block and heads are open. Ignition is open.
- 3. FUEL:** Pump racing fuels permitted.
- 4. Fuel pumps:** no electric fuel pumps are allowed
- 5. DRIVE TRAIN:** Is open to live axle, belt or chain drive custom gear boxes or transaxles. Centrifugal clutches allowed. Where custom drive train may be hazardous to driver protective shields must be installed, all chain guards must be a min thickness of 1/8" aluminum or steel. ATV drive train and suspension not allowed. No all wheel drive machines allowed.
- 6. STEERING:** Direct steering is mandatory. No plastic steering wheels unless it is the type that is reinforced with steel.
- 7. WHEELBASE AND MAXIMUM WIDTH:** 42" min wheelbase. 42" max width. Offsetting of axles, center of frame to outside of right tire is to be 23" and from center of frame to outside of left tire is to be 19" giving a total offset of 4".
- 8. FRAME:** No minimum ride height. IT is recommended that engines are separated by a safety shield or stock cowling from the driver. Discreet chassis modifications allowed for axle installation and reinforcement. Scalping of frame allowed in getting seat down on tunnel type chassis. Frame width 15" max.
- 9. BRAKES:** Hydraulic brake mandatory. Front brakes are Highly Recommend.
- 10. WHEELS/HUBS:** Go Kart dirt tires are allowed, max 8" rims on rear and 6" on front. Lawn mower tires, kart dirt tires, and mini sprint tires are authorized. Custom steel or aluminum rims allowed. **No stock lawn mower wheels.** Custom hubs or spindles must have lock collars, lock nuts or new HD cotter pins to prevent movement
- 11. BUMPER/SIDE BARS:** Closed loop rear bumpers and left side crash bars are mandatory and right side crash bars recommended. Front bumpers optional in this class. See general rules
- 12. BODY:** Body can be home made but must resemble a lawn tractor. No sharp edges. Rear fenders must not be wider than the bulge or widest part of the rear tires.
- 13. MIN WEIGHT:** Min weight with driver is 500lbs

IX. PSSLMRAC SERIES AWARDS POLICY

This point system is designed to encourage and recognize participation. Points are awarded for all PSSLMRAC races. Points are given and awarded trophies for the point's winners. Series points will be announced at the conclusion of the season. First through Third place points winners will receive prizes and/or trophies

- A) Points will be given for placement in feature races.
- B) The top ten in points will grid in the first ten starting positions with order determined by points standing at the **final race day**. Grid heats or random draw will determine the remainder of the grid. Race day officials will make this determination.

PSSLMRAC POINT STRUCTURE:

Feature Races:

- 5 points for starting or
- 14 points for fourth
- 16 points for third
- 18 points for second
- 20 points for first

NOTE: If a mechanical failure occurs on the white flag the driver only may push the mower across the finish line.

Races officially start after the green flag drops. If a yellow or red flag is thrown before the lead mower completes the first lap the race will be restarted. The race is defined by the first completed lap of the lead mower. Racers will receive no points for any race they receive a DQ. The driver that causes a yellow flag to be thrown will restart at the back of the grid the first time. Third yellow for the same driver will be cause for a DQ in that race.

The following flag signals will be obeyed without question:

GREEN: The race/practice is underway when the green flag is waved.

YELLOW: Take care, Danger. **NO PASSING ON ENTIRE COURSE.** Drivers form a single line and close up with the leader, and follow the Starter's directions. Very slow machines may signal following machines to pass under yellow.

YELLOW & WHITE: These two flags drawn together by the starter are to indicate that the field is not sufficiently bunched for the restart. If you see this signal, close it up!

RED: Stop racing immediately. clear the course as much as possible.

BLACK: Generally for a driving infraction or equipment violation. Driver must complete lap and pull into the pits for consultation with the Track Official at the designated spot. A furled black flag means the driver must clean up his/her act or receive a full black flag.

BLUE with YELLOW STRIPE: Slow traffic to yield to the leaders coming up on them.

WHITE: One lap to go. Crossed with GREEN means ½ way point.

CHECKERED: End of race or practice session. Driver must complete lap and pull into pits or **impound area**.

Reminder: The PSSLMRAC is an affiliated member of the United States Lawn Mower Racing Association (USLMRA), which is a highly respected and honorable group. We are expected to act in a courteous and professional manner. Disrespectful behavior will not be tolerated.