# UNITED STATES LAWN MOWER RACING ASSOCIATION RACING RULEBOOK

USLMRA
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U.S. Lawn Mower Racing Association
December 31, 2015

# **2016 RACING SEASON**





U.S. Lawn Mower Racing Association P.O. Box 628 Northbrook, Il 60065 Office 847-272-2120

E-mail: <a href="mailto:letsmow@gmail.com">letsmow@gmail.com</a>
Web Page: <a href="www.letsmow.com">www.letsmow.com</a>
<a href="http://www.facebook.com/uslmra">http://www.facebook.com/uslmra</a>

#### Effective date for this Rule Book is 1 January 2016

Heading into the 24<sup>rd</sup> year of USLMRA racing we all look forward to another exciting year of this great sport. During this coming season we will begin planning for the 25<sup>th</sup> Anniversary of USLMRA.

In past years we have always looked at reasonable changes to make this sport safer and more enjoyable. This year we have made some minor changes to the Rule Book. We reached out and listened to what racers were saying and if what they said made sense and fitted our vision, then we strongly considered what they had to say.

Let us all remember that we should strive to maintain professionalism in our appearance and conduct, and we hope to keep participation fun, affordable, safe and competitive. As always, for those who wish to spend time seeking loopholes in the rulebook, or defeat the spirit of the rules, we suggest you are racing in the wrong organization.

Running USLMRA is a business and business is good! Steps continue to be taken to ensure that we can continue running this business in the green. Always remember that wherever we do race it will be conducted in a safe, professional manner and we would hope that our members would conduct themselves the same manner whenever at a USLMRA Event.

Keep in mind it's nearly impossible to please every driver and not all will be completely satisfied with these changes, but we feel it is in the best interest of this great sport to make these changes as we continue to grow.

For questions concerning these rules, we highly recommend addressing them on our Facebook Page <a href="https://www.facebook.com/USLMRA">https://www.facebook.com/USLMRA</a> so our members may see the questions and answers. You may also contact the designated staff members by e-mail for answers to any questions you may have.

So, Welcome to the 2016 Season! We hope that everyone has a safe, exciting season and enjoys the fellowship of your fellow racers.

Sincerely,

Bruce Kaufman USLMRA President

Kerry Evans USLMRA Vice President of Administration

Richard Webb USLMRA National Chief Steward

Manny Torres USLMRA Race & Technical Director/National Chief Steward

Home of the STA-BIL Lawn & Garden Mower Racing Series

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

If, after reading these Regulations you need a clarification, you are encouraged to contact one of the Staff members listed on page 3 <u>PRIOR TO RACE DAY</u>. We want everyone to race, BUT we are creating fairness, safety, consistency and enforcement of USLMRA rules. Competitors must be aware that Clarifications are offered in good faith and do not afford specific mowers protection from subsequent protest.







# 2016 Rule Book Update/Changes

#### Greetings!

The following are specific items of concern/changes that will be added to the 2016 Rule Book. These items are broken down in two areas. First areas that drivers need to be reminded of since it appears that many do not read the entire Rule Book and second, items that are going to change:

The following are thing all drivers need to pay special attention to prior to arriving to National events;

- Governed Engine classes (JP, IMOW, GPK, & GP), engines must be completely stock! With the exception of exhaust. In
  other words, as removed from a grass cutting mower with no modifications, example; Starter, air cleaner, double batteries, or
  internal modifications. The only authorized modification is the exhaust system.
- Throttle cables must be secured so that RPM cannot be increased by pulling them on Governed classes stated above. <u>This</u> will be checked closely!
- Fuel can only be fuel bought from service stations (pumped gas), like SUNOCO, Marathon gas stations that sell 100 octane or VP Racing Fuel. No Alcohol or other type of additives of any type can be used.
- Mowers MUST be clearly marked with correct class, number, and Sta-Bil Stickers and be clearly visible from at least 100 feet. This is to assist Timing and Scoring and the Chief Steward during the race and during line up. Which means lettering/numbers must stand out clearly both during day and night racing. This is repeated regularly at drivers meetings, however drivers continuously fail to comply.
- Mowers must be clean and free of oil and fuel leaks prior to coming through Technical Inspection. Many have been identified to have fuel & oil leaks and rejected. Again this is repeated regularly at drivers meeting, however drivers continuously fail to comply. Any type of fuel or brake fluid leak/seepage will result in failing Tech, no exceptions
- In every class <u>original engine block assemblies</u> must be used, example; cylinder block, sumps, side covers and cylinder heads. The only exception is the valve cover which billet/aftermarket valve covers can be used to allow clearance for roller rockers if used. What does this mean? Billet side covers and sumps or forged aftermarket cylinder heads are illegal
- Correct tire type and sizes for class running may be used, example no Hoosier tires in prepared classes,
- All Prepared Classes must have shiftable transmissions with an exposed shifter lever and an operational clutch which engages/disengages the driveline.
- Remember only FXS/FXT can have the axles offset as stated in the rule book.
- All positive battery cables will be covered at all connection( starter, solenoid, battery) with tape or boot covers

#### Changes to the 2016 Rule book;

- Tires must match in regard to size and type on each axle. No staggering will be allowed
- Due to the decrease in the number of entries in the FX class, USLMRA will no longer run this class at the National Level. Local Chapters may still run this class.
- Due the increased speeds that today's race mowers are achieving it has been decided to change the 2016 rule book to allow
  all "Prepared Class Mowers" to have Side Bars commonly known as Nerf Bars mounted on the running boards as long as
  they meet the set dimensions noted below.



• When going through Tech ensure you bring the complete mower, which means with hood and transponder, no exceptions!

- Only the driver will accompany the mower thru tech with the exception of minors, a parent may accompany them. This is to eliminate crowding around the tech line.
- "Prepared Class" Mowers with Horizontal Engines that were factory built with such will be permitted to have driveshaft's as long as the mower has an operational clutch, however the drive shaft will be covered and go to a shift able transmission and the transmission will connect to the rear axle by either chain or belt.
- In the FXT Class driveshafts will be permitted as long as the driveshaft is covered and connects to a gear box. At no time will the driveshaft be connected directly to the rear axle.
- FXS & FXT frame MUST be original lawnmower frames. NO homemade frames of any type are authorized example: tubular type homemade frames, round or square are illegal.
- At National point races where there are not a sufficient number of mowers entered in certain classes, the National Chief Steward may at his discretion combine classes, example combining SP with CP, GP with SP, AP with SP etc.
- Since 2012 front bumpers have been authorized in both FXS & FXT, however drivers have continued to drive in an unsafe or over aggressive manner. The USLMRA staff has taken a close look at our options and discussed this subject in-depth and while considering all the pros and cons we have decided that beginning with the 2016 racing season that front bumpers will no longer be authorized in the FXS and FXT classes. There has been much chatter about this topic on social media and we understand the negative comments, but we have to consider the safety of all drivers in these classes. It all depends on drivers looking carefully at their driving habits and respecting other racers in these classes. We have also read numerous positive comments and these drivers have also commented on their safety concerns. Bottom line is to police yourselves and drive with common sense and remember your only racing for a \$15-\$25 trophy. Local Chapters and Affiliated Clubs may continue to allow the use of front bumpers within their local groups, however if any of their members attend a USLMRA Sponsored National Point Race these bumpers must be removed.
- Finally this will severe as a last notice to drivers in the FXT class that if they continue to drive in a unsafe, over aggressive manner, that USLMRA may decide to eliminate the class in 2017 or sooner if we feel that becomes too dangerous and the possibility increases of drivers getting injured.

This reminder is not intended to discourage anyone from participating, but rather to encourage all to <u>download the USLMRA Rule</u> <u>Book</u> and read it! Then, if any questions arise, <u>contact the USLMRA</u> for clarification of the rules.

We all come to the track to race and have fun and socialize, it's just a sport with no money involved just a \$15-\$25 Trophy/Plaque so let's all just have fun.

Again we will do everything possible to allow everyone to race, but Local Chapter Presidents/Tech Inspectors and Drivers must also do their part in ensuring that mowers in their clubs are built to USLMRA standards and drivers conduct themselves in a professional manner on and off the track.

Keep in mind it nearly impossible to please every driver and not all will be completely satisfied with these changes, but we feel it is in the best interest of this great sport to make these changes as we continue to grow.

We look forward to seeing you at USLMRA National Point races and hope you have a safe journey to and from our events in 2016

v/r

# Manny

Manny Torres National Tech Director



# USLMRA NATIONAL STAFF

#### **USLMRA President**

Bruce Kaufman (847) 272-2120 bruce@letsmow.com

# USLMRA Vice President of Administration & Chief Timing & Scoring

Kerry Evans (251) 645-2942 kerry@letsmow.com

#### **National Chief Steward**

Rich Webb

richardwebb@letsmow.com

# National Race/Technical Director/Chief Steward

Manny Torres (410) 808-5641 manny@letsmow.com

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# **2016 USLMRA Licensing Rules**

<u>USLMRA License</u>, <u>Definition</u>: A USLMRA License is issued to a person who has raced at a prescribed class level and their experience is such that they are believed to be capable of racing within the licensed class in a safe manner.

Rookie Racer, Definition: A person who has not competed in a STA-BIL National Lawn Mower Racing Series US Points Race (STA-BIL Series) in any Prepared Class or FXS, & FXT Class within the past 12 months of a Race Day.

<u>Jr. Pro. License Qualifying:</u> The purpose of the Jr. Pro License is to allow experienced Jr. Races a method to move up in class to faster classes. Only Classes allowed to move up to are IMOW, GP, AP, SP, CP and FX/Single, not BP or FX/T.

Testing procedures as outlined in Section 1 above will be followed. Additional requirements:

- 1. Parents Signature of Release and Approval.
- 2. 16 years of age by December 31st of the race year and have or obtain a Valid Driver's License from the State of Residence.
- 3. If 15 years of age, Racer must have a Valid Drivers Learners Permit from the State of Residence and obtain Driver's License when s/he turns 16 years of age of that race year.
- 4. 15 yrs. old drivers can test for IMOW, GP, AP, SP, CP and FX/Single only, not BP or FX/T.
- 5. A minimum of one (1) year racing experience in the Jr's class, J/P or G/PK and have raced more than 12 Competitive Events races the year. Definition of a Competitive Event: On any given Race Day you have at least one (1) heat and one (1) main. That equals two (2) Competitive Events. Two (2) heats and one (1) main = three (3) Competitive Events. 12 will add up quick. In other words heats and mains count toward the 12 required Competitive Events. The goal is seat time.
- 6. Allowed to be tested on Rules of Racing, such as Flags and passing.
- 7. To be tested in the class desired to class into, by at least 2 staff members picked by USLMRA Executive Staff
- 8. It is recommended that this procedure be followed across all levels of USLMRA Lawn Mower Racing, A/Cs L/Cs and the STA-BIL Nationals and that all racers age 15 years and under stay in classes that have governed engine controls until they meet these criteria. All Guidelines and Approvals must come from our either USLMRA Southern Office (Wilmer, Alabama, Kerry Evans) or Central Office (Northbrook, Illinois, Bruce Kaufman) for Final Approval.
- 9. \*Note: If Racer has special reasons why they cannot obtain a valid State Issued Driver's License, and it is a non-criminal matter, they can contact either USLMRA Office and discuss.
- 10. Example: The State requires a driving course before a driving test can be given and the waiting list Is 6 months. We can talk about it on your intentions. A birth certificate will be needed to verify age.

<u>Veteran Racer, Definition:</u> A person who has competed in a STA-BIL Series Race in Class, Prepared Class or FXS, & FXT Class within the past 36 months.

<u>Pro Racer, Definition: (BP, FXS, & FXT)</u>: A person, 18 years of age or older, who has raced in at least ten (10) USLMRA Races (STA-BIL Series, Local Chapter Races or Affiliated Club Races) in the <u>BP, FXS, & FXT</u> Class, with at least four (4) of the races having been STA-BIL Series Races.

#### I. LICENSING: STA-BIL SERIES

- 1) A Rookie Racer shall not compete at a 2016 STA-BIL Series Race in BP, FXS, & FXT Class.
- 2) License will be issued in each class a racer competes in.
- 3) A License for one race class does not grant licensure for any other class. Licensure will be provided for each class.
- 4) Pro Racers shall be permitted to race in all classes at any STA-BIL Series U.S. Points Race.
- 5) "Veteran License" will be issued to racers meeting licensing criteria in (J) Prepared Class, IMOW, A Prepared, C Prepared, G Prepared, S Prepared, FXS & FXT and Junior.
- 6) "Pro License" will be issued to racers meeting licensing criteria in BP, FXS, & FXT Classes.
- 7) A License may be issued to a racer for any class at the discretion of the Race Day Chief Steward for situations including, bit not limited to a racer who can verify participation in a similar class in non-USLMRA affiliated race events; a satisfactory display of driver competence; a racer 16 to 18 who has previously raced in at least four (4) STA-BIL Series races.

## II VETERAN RACERS OBTAINING A PRO LICENSE

Veteran Racers may obtain a Pro License by racing in at least ten (10) USLMRA Races (STA-BIL Series or Local Chapter Races) in any Veteran Racer Class, with at least four (4) of the races having been STA-BIL Series Races, subject to approval of the National Race Director.

#### III. LICENSING AT THE USLMRA LOCAL CHAPTER LEVEL

Issuance of License is at the discretion of each Local Chapter

#### IV. INTENT

To recognize the ever-increasing speeds of racing lawn mowers and the wide range of racer experience and to create a competency level to be adhered to and legislated. To recognize the fact that racers may purchase entire racing machines or component parts, creating the potential for a disparity of driving expertise. To raise entry criteria in the B Prepared and FX Classes.

#### V. SPECIAL CIRCUMSTANCES

Age Limits have been modified for racing in the AP class for those drivers who meet the following criteria;

- ✓ be at least 13 years of age
- ✓ have 2 years' experience in JP at National level events
- ✓ have 1 year experience in GPK at National Level events

# These are not negotiable and are for the safety of the young drivers who meet the above mentioned requirements.

USLMRA realizes special circumstances may arise regarding Licensing. Racers are encouraged to communicate with the National Chief Steward to discuss their situation.

# 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 event. *NO alcoholic beverages* may be consumed by <u>ANY driver</u>, or race staff before the end of the last race or other on-track <u>activity</u>. NO illegal drugs or controlled substances shall be tolerated on the track premises *AT ANY TIME*. Violation will result in disqualification and loss of points.
- B) NO BUMPING 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 Chief Steward at the designated spot. A furled black flag means the driver must clean up his/her act or receive a full black flag.

WHITE: One lap to go. When Crossed with GREEN it means half 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 mower left the marked track. The driver may not simply reenter further down the track.
- G) If a mower stalls on the course, the driver's first responsibility is to move the mower 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) Mower must be completely stopped before driver dismounts.
- I) Unsafe on track/off-track driving practices may result in disqualification.
- J) <u>All drivers must attend all announced driver's meetings</u>. Failure to attend the MANDATORY Drivers Meeting will result in not being allowed to participate in the day's events, Practice, Heats, or Features.

All first-time **USLMRA National Event** drivers must attend an announced rookie driver's meeting. Roll may be called, and drivers may be penalized or disqualified for failure to attend. The race day Chief Steward may override this ruling on a case by case situation with approval from the USLMRA President or Vice president in his absence.

- K) Grid positions will be determined on race day by random public draw during registration.
- L) Protests against another driver or his/her mower must be lodged in writing with the Race Day Chief Steward on an official protest form prior to the start of the race, or within 30 minutes of completion of the day's last race. Enforcement of these rules depends on a protest being filed with the Race Day Chief Steward or any Race Day Staff. The Race Day Chief Steward has final say on all protests.
- M) In the JP & IMOW Class we will still use the modified Le-Mans Style Start; however drivers will no longer be required to "Run to their Mowers!" This is to accommodate Handicapped, and Elder racers who have difficulty running across the track and are completely over whelmed by the young drivers in this class. The IMOW Class is designed to test driver's skills with governed engines and Gear ratio mandated drive trains, not their ability to run across the track. Drivers will stand directly behind their mowers with their tether in hand arms stretched straight in the air. When the Head-flagger drops the green flag the driver will move either to the right or left side of the mower and mount the mower, start it and begin to race. At no time will the driver JUMP over the back seat/fender to mount the mower.
- N) Laps will be counted under the yellow flag. However, there will be a minimum of two laps, under green, after a yellow to finish the race (Green, White, and Checkered). A time limit will be set to the running of each class of 15 min's. The White flag will be thrown followed by a Checkered after this time regardless of laps finished. A Red Flag will stop the Clock.
- O) Drivers involved in an incident must be inspected in the grid area at the discretion of the Technical Inspector(s) and the Race Day Chief Steward.
- P) All mowers involved/causing a caution/accident will be moved to the end of the racing order after it's determined that they are safe to continue.
- Q) The first five finishers in each class of a feature Race *MUST* return to the start/finish line for racer interviews and/or trophy presentation unless otherwise directed (victory laps are permitted).
- R) No onboard communication devices or spotters on the side of track are allowed
- S) Staring in 2012 rolling starts replaced Le Mans starts for all classes except JP and IMOW. Local Chapters and affiliated clubs may still use Le Mans if they wish.
- T) Starting grid will be determined by a random draw during registration for heat races, not by time trials. Starting grid for STA-BIL Finals will be determined as stated in section VIII, 2
- U) Due to the extreme speeds and the width of the New FXS & FXT classes the race day Chief Steward will determine if No more than 8 of these mowers will be allowed to race at one time. An A Main and B Main race may be used to determine the feature finalist.
- V) The racing order for all National Points Races: JP, AP, GPK, SP, IMOW, GP, CP BP, FXS, & FTX.
- W) In JP & IMOW <u>If a Yellow or red flag is thrown before the lead mower completes the first lap, the race will be restarted, And drivers will be lined up in original starting grid, but only once, if a second yellow/red flag is thrown before completion of the first lap, the race order will be determined by the order the mowers crossed the Start/Finish line at the start and they will resume racing by using a rolling start. The racer causing the 2<sup>nd</sup> Caution goes to the rear.</u>
- X) The Race Day Chief Steward shall have the right to remove from competition at any time any driver, crewmember or guest in the paddock who does not comply with these Regulations, who fails Technical Inspection or who, in the Race Day Chief Steward's sole discretion, is exhibiting behavior which is dangerous to participants or spectators.
- Y) At National point races where there are not a sufficient number of mowers entered in certain classes, the National Chief Steward may at his discretion combine classes, example combining SP with CP, GP with SP, AP with SP etc.

#### II. RULES OF THE PITS & GRID

- A) No person under 16 years of age shall be on the grid. Persons 10 to 17 years of age may be on the grid with an approved parent's consent form on file with the Race Day Chief Steward.
- 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 shoes and shirts are required in the track area.
- E) No smoking on the track or track infield during the racing event.
- 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 Chief Steward or Pit Steward at all times.
- I) Driver's are 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 USLMRA 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 USLMRA 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 fees shall be: \$20.00 maximum for USLMRA-sanctioned STA-BIL Points and Local Chapter races; \$30.00 for the **STA-BIL 360 Performance Finals.**
- O) <u>"EFFECTIVE IMMEDIATELY":</u> Only one person shall be allowed on a racing lawn mower. This will include parade laps, sanctioned races, and/or any occasion sponsored or administered by, or with the knowledge of, the USLMRA or which uses the STA-BIL logo or publicity in any way. The person on the mower must be a registered as a racer for the event.
- P) Everyone in the Pits, Racers and Guest MUST have NKA Wrist Bands purchased at the registration table. These wrist bands are for the entire racing weekend (Both days of racing) if lost the individual must purchase another wrist band.

# No exceptions will be made to this rule.

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.

#### III. DRIVER ELIGIBILITY

- A. All Drivers **must** be members of the United States Lawn Mower Racing Association.
- B. Drivers must be at least 10 years of age. Drivers 10 to 17 years of age may compete with an approved parent's consent form on file with the Race Day Chief Steward at each event. For JP drivers a Parental Consent form can be filled out by a parent or legal guardian prior to the event. However, it must be an original, and it must be notarized. Note that this applies to the first time you race at a facility. Once one is signed for a <u>particular facility</u>, it is good for the year.
- C. Age on race day, 10 years old on the day or in the race year?? NKA Says Age reached by July 1. For us Sept. 1, so if you are 9 years old now but will be 10 before Sept. 1 you can race this season in J/P. If you are 17 years old and will be 18 before Sept. 1 you can race Pro this year with Prepared Experience.

#### IV. DRIVER SAFETY EQUIPMENT

- A) Every JP, IMOW, GP, GPK, Prepared Classes, FXS, & FXT driver must wear an automobile racing or motorcycle-type full face helmet approved by the U.S. Department of Transportation or the Snell Foundation.
- B) Whenever held, Stock drivers must wear an automobile racing or motorcycle-type helmet approved by the U.S. Department of Transportation or the Snell Foundation.
- C) The helmet must fit snugly and be securely buckled when driver is on the track. Long hair must be kept tucked inside the helmet.
- D) Goggles or a face shield are required. Glasses are not sufficient.
- E) 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 anti-abrasion karting suits are highly recommended. No loose clothing (un-tucked or un-buttoned shirts, etc).
- F) An approved, racing neck support is MANDATORY in, JP, IMOW, GPK, GP, Prepared, FXS, and FXT.
- G) Driver must have a full 10BC-rated fire extinguisher in his/her equipment.
- H) It is highly recommended but not mandatory that Drivers wear Chest Protectors of their choice for their safety

#### V. TECHNICAL INSPECTION

A) Every mower entered in any USLMRA 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. Top five finishing machines **may be required to go directly** from the track to the impound area (when provided), and be inspected for Build Tech compliance. **Failure to impound** directly from the track may be cause for automatic disqualification and loss of points. All JP's, IMOW'S, GPK, & GP's will remain on track for Post Race inspection after feature races. JP & IMOW racers at the discretion of the Chief Steward may be required to have gear ratio checked as a group, participation is mandatory if this is determined to be needed.

- B) The generally accepted category is riding mowers and lawn tractors with rear tires 20 inches diameter and under. Mowers from England (with trailer seats) may compete. Grass catchers are not permitted. See class rules for engine size limits.
- C) <u>Final determination of eligibility and classification is up to the Chief Technical Inspector. Note: Race Day Chief Steward if the Chief Technical Inspector is not available.</u>
- 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) 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.
- F) Drivers must show their personal safety equipment at Technical Inspection before practicing or racing at any event.
- G) When going through Tech ensure you bring the complete mower, which means with hood and transponder, <u>no</u> <u>exceptions!</u>
- H) Only the driver will accompany the mower thru tech with the exception of minors, a parent may accompany them. This is to eliminate crowding around the tech line.

# VI. 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. Decks cannot have any type of bumper/Guard (with the exception of FXS and FXT) around it unless it is Factory designed. All prepared classes and JP/IMOW; GPK & GP must have a factory type deck not home design.

- B) No overhead cam engines allowed except in the stock class. No liquid cooled engines in any class
- C) All non-stock mowers MUST be equipped with an automatic throttle closing device. Stock mowers MAY be so equipped if desired.
- D) All mowers must be equipped with a kill switch, which will turn off the ignition if the driver leaves the mower. Non-stock 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.

- E) Mower brakes must be in good condition, easily operated and operating on at least two rear wheels.
- F) Brakes may be improved in any way. Rear Brake rotors may not be mounted on jackshafts only on rear axles
- G) Throttle and brake controls may be relocated.
  - 1.) All mowers <u>in all classes</u> 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.

Below are two photos to help understand these precaution measures: (these are just some examples of the intent)

**Photo 1**: This is the correct way to attach the throttle return springs on the carburetor Notice they are mounted on two different Locations and not together;



**Photo 2:** Notice that the springs are attached to the same bracket **this is incorrect!** They must be mounted on two separate mounting brackets. This way if for any reason one breaks you will still have one spring attached.



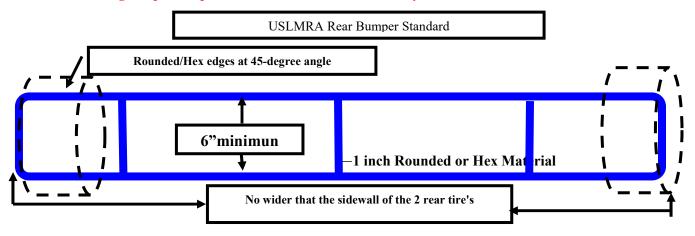
For V-twins and different style carburetors' used on FXS/FXT, the same principle must be used. For example FXS/FXT using Mikuni or the CV style Keihn Carburetors the Slide Spring can count as one return spring and you must have a separate external spring attached as the safety spring.

- H) FRAME: Discrete strengthening is allowed. Front and rear axles must use original frame as primary mounting point.
- 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) No front bumpers, nerf bars or push bars.
- N) All mowers that 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 <u>all four sides</u> 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 RACE NUMBER

**COORDINATOR.** Machines without numbers will have them assigned on race day. Racing numbers are "owned", and will force unregistered duplicates to change. Class letters, should be a minimum of 3" high, and be shown on both sides of the mower.

- P) All positively charged terminals must be insulated with a cover or heavy tape, and battery must be well secured.
- Q) No offset or stagger. Body must be mounted in the center of the wheels. <u>Tires must match in Size, Brand and tread design per axle.</u> Once again No staggering will be allowed or exposed rear tires and on centerline. Offset measured from centerline to the outside of tire sidewall. Wheelbase may not be altered.
- R) Glass headlights must be taped or removed.
- S) You will be allowed but not required a Maximum width 40" <u>sidewall to sidewall unless otherwise stated in the class build section.</u>
- T) Steering wheels and handlebars may be replaced with any commercially available pieces, but not substituted for each other. Steering Wheels 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. All Nuts and bolts attaching the steering assembly (tie rods and spindles) must be secured with Lock Nuts, castle nuts with carter pins, or close pins. Handlebar type grips may not be added to steering wheels in any class.
- 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 and size on each axle (front tires the same, rear the same). Flat tires will be black-flagged!
- V) No centrifugal and/or torque converter clutches except in FXS, & FXT or Open Classes.
- W) Minimum 4" ground clearance to frame, 2 ½" ground to deck unless otherwise stated in class build section.
- X) All mowers must utilize a clutch.
- Y) **Flywheels:** Billet Flywheels are mandatory in all classes with the Exception of JP, IMOW, G/PK and G/P. USLMRA considers Flywheels to be a major safety issue. As RPM's and speeds increase, it is also highly recommended that in all stock ungoverned classes that a scatter-shield be built and mounted for added safety protection, but not required.
- Z) Fuel lines must be clamped at all joints.

**AA) Rear Bumpers:** Will be allowed but not required. If used must be built to these standards: **Single Pipe bumpers are NOT of standard and may NOT be used.** 



- **BB)** No slick tires in any class
- **CC)** You are allowed to discreetly move, modify and altered Fenders, so that 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 a ½" of clearance between the 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 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 fender assembly will be allowed to allow the lowering of the seat; however certain guidelines are given (See Photos). Lawn mower seats only, 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.

#### **Most Preferred Fender/Correct Modifications**













If in doubt, it is best to check with the National Tech Inspector or National Chief Steward for further clarification.

DD) Due the increased speeds that today's race mowers are achieving it has been decided to change the 2016 rule book to allow all "**Prepared Class Mowers**" to have Side Bars commonly known as Nerf Bars mounted on the running boards as long as they meet the set dimensions noted below.



EE) "Prepared Class" Mowers with Horizontal Engines that were factory built with such will be permitted to have driveshaft's as long as the mower has an operational clutch, however the drive shaft will be covered and go to a shift able transmission and the transmission will connect to the rear axle by either chain or belt.

FF) Governed Engine classes (JP, IMOW, GPK, & GP), engines must be completely stock! With the exception of exhaust. In other words, as removed from a grass cutting mower with no modifications, example; Starter, air cleaner, double batteries, or internal modifications. The only authorized modification is the exhaust system.

#### **FUEL and FUEL DELIVERY**

The only acceptable fuel is pump gasoline. Fuel must be pumped fuel bought at Service stations, example SUNOCO racing fuel or VP Racing Fuel sold at Marathon Service stations. 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 USLMRA.

Electric fuel pumps are not allowed on closed-course machines.

#### VII. RACING CLASSIFICATIONS

Race Mowers will only be allowed to enter and race in the class that they were built for, i.e. AP in AP, SP in SP, CP in CP, BP in BP, FXS in FXS, & FXT in FXT. The JP and IMOW classes are the only two that the same mower can run in both classes' races. GPK and GP can run in both classes also, this is to allow Parents or another driver to run in the either class

#### 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 current members of USLMRA
- 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/JPK Races
- 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 33CI.. After market consumable parts such as air

<u>filters and spark plugs may be used as long as they are a direct stock replacement</u>. Old style L-Head engines may still be used.

- 3) Exhaust design is open, <u>but must terminate away from driver and competitors, in a rearward and/or downward direction and present no apparent safety hazard.</u>
- 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 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, 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, and 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 1/4" 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 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 JP machines. As you can see, these machines are essentially Prepared Chassis' (AP, 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: I

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 he 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 33CI. 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 ½" 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 \(\frac{1}{4}\)"

# 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, <u>but must terminate away from driver and competitors</u>, in a rearward and/or <u>downward direction and present no apparent safety hazard</u>.
- 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 cannot become entangled in a rollover.
- 16) Minimum 39" unaltered wheelbase.
- 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.

Remove mower blades before modifying or removing the engine governor. Governor alterations will allow the engine to over speed, which may cause blade or blade assembly to explode, presenting grave danger to participants, spectators and officials around the mower, and may lead to damage of the engine and/or engine components.

- C) <u>PREPARED:</u> Class designation: <u>G/P/K</u>, A/P, <u>G/P</u> S/P, C/P and B/P. These mowers are as delivered from the factory except for 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. (G/P/K & GP must have stock air filter assembly and filter) Crankshaft must be in original orientation and clearance hole in the frame. Engine may be internally modified. In every class <u>original engine block assemblies</u> must be used, example; cylinder block, sumps, side covers and cylinder heads. The only exception is the valve cover which billet/aftermarket valve covers can be used to allow

clearance for roller rockers if used. What does this mean? Billet side covers and sumps or forged aftermarket cylinder heads are illegal

- 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, either electric or pull-rope.
- 4) Driveline may be modified from the engine pulley to the rear wheels, but must utilize a shift able lawnmower transmission or transaxle.
- 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 the 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 stock position. No suspension, no shock absorbers.

# Axles must be a 1-piece beam design.

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 Technical Inspector as to their apparent safety for racing.

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

- 11) Shaft locks, center-drilled axle with locking bolts, castellated nuts with cotter pins, are acceptable for securing front wheels. Cotter pins, E-rings and C-rings alone, bent nails, hitch pins; overcenter 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 the 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 roll over.
- 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 allowed under Sec. VII.
- 18) Hoods and body parts such as fenders may be upgraded from year to year only if the parts are from the mother company and any subsidiary company of said mother company.
- 19) External ignition Systems are allowed.
- 20) Aluminum Flywheels are allowed.
- 21) Fenders may be discreetly moved and altered as noted in section VII, (BB).
- 22) Must use axle mounted brakes, no lawnmower transaxle or transmission mounted brakes.

#### **CLASSES DEFINED: (based on OEM BLOCK designation)**

A/P: 4 stroke engines 10.5hp and under with a factory maximum stock original displacement of 22 cubic inches must provide spec's (This includes all engines both Valve-in-Block L Head and Over Head Valve with a maximum displacement of 22ci). 34" minimum unaltered wheelbase, Width; Maximum 40" sidewall to sidewall, 4" minimum, front wheels, 6" minimum rear wheels. Crankshaft must be in original orientation. Engine plate may be welded to frame rails in as close to the original location as possible.

<u>S/P:</u> Valve-in block single cylinder 4 stroke engines <u>over 8.5hp</u>, 39" minimum unaltered wheelbase. Width; Maximum 40" sidewall to sidewall, Mid engine frames are not allowed, 5" minimum front wheels, 8" minimum rear wheels.

<u>G/P:</u> 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 rating of 33ci. <u>After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement.</u> Twin cylinders engines and Mid Engine frames are not allowed. 42"minimum unaltered wheelbase, 6" minimum front wheels, 8" minimum rear wheels, and there is no gear ratio restriction, **Width;** Maximum 40" sidewall to sidewall.

<u>G/P/K:</u> Age requirements are altered for this class; JP Drivers between the ages of 12-15 years old with no less than 2 years JP Experience and has competed in 4 STA-BIL Points Races are eligible to compete in this class. Build requirement will be identical to the adult GP build requirements.

<u>C/P:</u> All single-cylinder overhead valve and two-cylinder valve in block, 4 stroke engines, <u>20hp and under</u>, 42"minimum unaltered wheelbase, **Width;** Maximum 40" sidewall to sidewall. Mid engine frames are not allowed, 6" minimum front wheels, 8" minimum rear wheels.

<u>B/P:</u> All overhead valve V-twin 4 stroke engines, <u>20hp and under</u>, 42" minimum unaltered wheelbase, Width; Maximum 40" sidewall to sidewall. Mid engine frames are not allowed, 6" minimum front wheels, 8" minimum rear wheels.

#### **INTENT:**

To allow competitors the opportunity to compete in a faster class of racing, Mowers must maintain a recognizable form of a lawn mower.

**Special Note:** Due to the decrease in the number of entries in the **FX class**, USLMRA will no longer run this class at the National Level. Local/Affiliate Chapters may still run this class at the local level.

#### **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 length 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.
- <u>3. BODY WORK</u>: 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*.
- <u>6. THROTTLE</u>: 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.
- <u>7. KILL SWITCH</u>: 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.
- <u>9. SPINDLES/AXLES</u>: 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
- 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: Front Bumpers on FXS & FXT are no longer legal! Rear bumpers and side bars when equipped 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.

- 13. NUMBERS: All tractors must have a visible number. Minimum 3" height is recommended, on a contrasting background.
- 14) Wheel/tires: though offsetting of axles is permitted, tire sizes will be of the same size per axle, example: from left and right the same size for the front and left and right the same size on rear axles.
- **15)** FXS & FXT frame MUST be original lawnmower frames. NO homemade frames of any type are authorized example: tubular type homemade frames, round or square are illegal.
- **16)** In the FXT Class driveshafts will be permitted as long as the driveshaft is covered and connects to a gear box. At no time will the driveshaft be connected directly to the rear axle.

#### **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 46 ci maximum flathead coming from the lawn equipment origin (4 cycle engines). No fuel injection.
  - 3. OHV ENGINES
    - -<u>Original engine block assemblies</u> must be used, example; cylinder block, sumps, side covers and cylinder heads. The only exception is the valve cover which billet/aftermarket valve covers can be used to allow clearance for roller rockers if used. What does this mean? Billet side covers and sumps or forged aftermarket cylinder heads are illegal
    - -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 OE 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:
    - -46ci 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. 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".
  - **10. FRAME:** 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 is 15" max.
  - 11. BRAKES: Hydraulic Brakes are mandatory. Front brakes optional
  - **12. WHEELS/HUBS:** Go Kart dirt tires are allowed, mim 6" rims on rear and 5" 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 are illegal.
- **14. MIMNUM WEIGHT:** 450 lbs with driver

#### **Factory Experimental Twin (FXT) CLASS**;

**Special Note:** This will severe as a <u>last notice</u> to drivers in the FXT class that if they continue to drive in a unsafe, over aggressive manner, that USLMRA may decide to eliminate the class in 2017 or sooner if we feel that it becomes too dangerous and the possibility increases of drivers getting injured.

- 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 24HP 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. **Original engine block assemblies** must be used, example; cylinder block, sumps, side covers and cylinder heads. The only exception is the valve cover which billet/aftermarket valve covers can be used to allow clearance for roller rockers if used. What does this mean? Billet side covers and sumps or forged aftermarket cylinder heads are illegal
- **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. No more than 4" of total offset. 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:** 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. Scalloping of frame allowed in getting seat down on tunnel type chassis. Frame width is 15" max.
- **9. BRAKES:** Hydraulic brake mandatory. Front brakes are Highly Recommend.
- 10. WHEELS/HUBS: Go Kart dirt tires are allowed, mim 6" rims on rear and 5" 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 are illegal.
- **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
- 14. NOTE: IF the rules don't say you can do it, YOU CAN'T!

# VIII. STA-BIL NATIONAL LAWNMOWER RACING SERIES POINT SYSTEM AND AWARDS POLICY

The point system is designed to encourage and recognize participation. Points are awarded for all STA-BIL National Lawn Mower Racing Series (aka US National Points) races. Points are awarded and trophies given for points winners

in each class. Series point's winners will be announced at the conclusion of the **STA-BIL 360 Performance Finals.** First through fifth place points winners will receive prizes and/or trophies. You are still allowed to make each and every Regional Points Race, should you have the time, money and desire. Your participation is always encouraged. When figuring the points standings, **USLMRA** will use the following procedures for the following:

STA-BIL Nationals Championship Weekend will consist of a practice and the STA-BIL 360 Performance Finals.

#### 1) Qualifying for STA-BIL 360 Performance Finals:

Racers in the STA-BIL 360 Performance Finals *must qualify by class* competing in a minimum of two (2) 2015 USLMRA STA-BIL National Lawn Mower Racing Series races.

## 2) Procedure to set the starting line-up for the STA-BIL 360 Performance Finals:

The Top Ten racers in points in each class will grid by descending order, 1<sup>st</sup> thru 10th in Points. The remainder of the field will qualify through elimination or qualifying heat(s). If elimination heats are not required for a particular class, a gridding heat may be run.

# 3) Procedures for the Points Tie Breaker for the US National Points Championship:

In the event of a TIE in points **coming into** the STA-BIL 360 Performance Finals, we will first look at:

- 1. The amount of 1<sup>st</sup> place wins
- 2. Then 2<sup>nd</sup> place wins
- 3. Then 3<sup>rd</sup> place wins with the most breaking the tie
- 4. If this still does not settle the issue, we then go to the number of events attended

In the event of a TIE in points after the STA-BIL 360 Performance Finals, we will first look at:

- 1. We will first go to the number of events attended
- 2. The amount of  $1^{st}$  place wins
- 3. Then 2<sup>nd</sup> place wins
- 4. Then 3<sup>rd</sup> place wins with the most breaking the tie
- 5. Finally the race finishes position in the STA-BIL 360 Performance Finals

<u>INTENT:</u> It is possible that in the event of a tie for US National Points, a racer who finished behind another racer in the STA-BIL 360 Performance Finals can still finish higher in year-end U.S. Points. This is by design and is intended to factor in a racers' performance over the duration of the season rather than use the finish in the STA-BIL 360 Performance Finals as the 1st tiebreaker. USLMRA chooses to recognize and possibly reward support of the Series for the entire racing season.

#### **USLMRA Points Structure**

100 points each for registration, starting and finishing a point's race

100 points for 5th

150 points for 4th

200 points for 3rd

250 points for 2<sup>nd</sup>

300 points for 1st

Note: Mower must cross the finish line under power to receive points for that race unless mechanical failure occurs on the white flag lap. (The driver can then push the mower across the finish line.)

- A racer is allowed to race and receive points on an individual mower in the race class for which the mower was built for only.
- Races officially start after the green flag drops.
- The *race* is defined by the first complete lap by the lead mower.
- If a Yellow or red flag is thrown before the lead mower completes the first lap, the race will be restarted, And drivers lined up in original starting grid, but only once, if a second yellow/red flag is thrown before completion of the first lap, the race order will be determined by the order the mowers crossed the Start/Finish line at the start and the racer causing the 2<sup>nd</sup> Caution goes to the rear.

\*\*Racers DQ'D will receive no points only "race credit" towards Qualifying for the STA-BIL 360 Performance Finals for any race they received a disqualification (DQ).\*\*

## **Code of Conduct for USLMRA Members**

The United State Lawn Mower Racing Association (USLMRA) expects its staff, Local Chapter (LC) Presidents, racers, general membership, and volunteers to always act in a courteous, professional manner for the benefit and growth of lawnmower racing.

The USLMRA reserves the right to accept, deny, suspend or revoke the membership of any member, or place any member on probation, for any action(s) deemed detrimental to the sport of lawnmower racing. Any member under suspension, revocation or probation may be barred from participation in any Sta-Bil National Points race, non-points race, and any sanctioned and/or affiliated Local Chapter racing events. Additionally, any person whose membership has been suspended or revoked may be barred from entry to any area at any race venue controlled by the USLMRA or local chapter. These areas include but are not limited to: the race track, pit area, and any area used for race administration purposes.

As stated in the USLMRA/Sta-Bil Racing Series Rulebook (Sect. II, par. I), "The driver is responsible for the conduct of his/her guests and crew, even while on the race track." Should anyone attending a sanctioned event be found committing any detrimental act, that person will be removed from the premises, and the member driver will be held responsible for the conduct of that guest/crew member and will be subject to suspension or revocation. Revocation, suspension or probation period of membership may be enacted without prior notice, and will be at the sole discretion of, and by majority agreement, of the USLMRA National Executive Staff.

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, USLMRA rules as defined in the Sta-Bil Racing Series Rulebook.
- 2. Verbal assault, either public or written, of any USLMRA staff member, LC official, volunteer, or other USLMRA member.
- 3. Physical assault of any USLMRA staff member, LC official, volunteer or USLMRA member.
- 4. Persistent on-track violations, including, but not limited to rough driving, passing under yellow, failure to follow on track instruction.
- 5. Any conscious effort to undermine the integrity of the USLMRA, its staff, LC officers, volunteers and fellow members
- 6. Any conscious effort to undermine the ability of the USLMRA, its staff, LC officers, volunteers and fellow members to conduct their activities at any race venue hosting a USLMRA or LC sanctioned event.
- 7. Any disruptive behavior, which, in the opinion of track officials, Local Chapter officers and staff and/or USLMRA staff, interferes with the orderly conduct of sanctioned and/or affiliated lawn mower races.

Any member of the USLMRA National 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 USLMRA National Executive Staff, stating the specific reason(s) for the appeal. The National Executive Staff serves at the discretion of the USLMRA President.

The USLMRA National Executive Staff members are published in page 3 of this USLMRA Rulebook. Suspensions or probation may be for a period of up to one year. Revocations will be considered permanent unless cause can be shown for reinstatement.