

AMERICAN RACING MOWER ASSOCIATION RULEBOOK



MOWER RACING SERIES

2011 RACING SEASON

Rules that differ from the 2010 rulebook have been highlighted in bold faced red print.

Additional rule changes may be implemented as needed. Please monitor the National website- www.golawnmowerracing.com- or your local chapter for updates.

The American Racing Mower Association (ARMA) is an organization designed for lawn mower racers by lawn mower racers. This sport provides racers, their families and friends the opportunity to get involved with competitive racing that is affordable.

This rulebook provides the standards that regulate the operations within ARMA. While the information contained within this rulebook will provide acceptable guidelines for building a race eligible machine, this document does not guarantee the safety of the driver or others around him/her. These regulations should not serve as a substitute for the extreme caution that should be maintained when interacting with machines of this caliber. ARMA assumes no liability, thus removing ARMA from said liability. Participation in ARMA sanctioned events provides the implication that the driver will abide by the rules listed herein as well as any additional necessary amendments to this document.

A lot of time, money, and energy have been spent on mower fabrication, engine building, and traveling to and from race venues. Keep that in mind when racing and race clean and safe. Although mishaps will happen from time to time on the track, let's look out for each other and keep ourselves and our mowers in the same conditions when we started the race as when we leave. Let's keep this sport what it was meant to be- FUN.

General Regulations

1. On Track Regulations

Any deliberate actions to circumvent the safety features of a mower at either a Local Chapter or National Points Series race will result in sanctions for the driver. These sanctions will include a minimum of the following:

Total loss of points for said event

Suspension from 2 race events immediately following the incident

Based upon the severity of the incident sanctions may be increased at the discretion of the Local Chapter representatives and/or their board of directors or the ARMA National Board of Directors (dependent upon where the incident occurred).

Actions to deliberately violate the rules for any mower class will result in the same sanctions found above.

No alcoholic beverages or illegal drugs are allowed within the controlled area of the racing activity, including the pit area.

- **a.** Any person who is actively participating in a race event (at any level) who has consumed alcoholic beverages, illegal drugs, or controlled substances that is mind and/or motor skills altering may not participate in any capacity.
- **b.** Completing a safe pass is the responsibility of the overtaking driver. No bumping will be tolerated. This means if you initiate a pass and during execution you realize you cannot complete the pass in a safe manner then it is up to the overtaking driver to return to a safe position on the track while avoiding contact with other racers. You will gain more respect by taking yourself out then placing the other racers in an unsafe situation causing personal injury and mower damage.
- **c.** If you are being overtaken by another racer and it is clear that they are faster make room for the overtaking racer and let them pass.
- **d.** Multiple mower blocking is not permitted.
- **e.** The racer that causes an incident will restart the race at the end of the field. This will be determined by the track officials.
- **f.** Flags will be used to communicate to the racers the following on track conditions:

Green: The race/practice is underway when displayed.

Yellow: CAUTION, DANGER. No passing on the entire track and the drivers will form a single line at a safe pace speed and close up to the leader and follow the starter's directions.

Yellow & White: The field is not bunched up for restart. If this is displayed, close it up.

Red: Stop all racing action immediately and shut off your engine. This flag is used in emergency situations where personal injury has occurred or the track is blocked.

Black: This for driver or equipment infractions. The driver must safely exit the track and consult with the Chief Steward. A furred black flag is a warning to a driver to clean up his/her act or receive the full black flag indicating he/she needs to exit the track.

White: One lap to go. Crossed white and green indicates race is **halfway** complete.

Checkered: End of race or practice session. Winner may choose to make a victory lap with the checkered flag. The remaining drivers will complete the lap and safely exit the track to the pit area.

- **g.** Driver must keep both hands on the steering wheel, except to momentarily operate other controls. Driver's body may not be intentionally positioned out of the mower seat onto or over the mower fender.
- **h.** If you leave the course during the race re-enter the track as close as possible to the exiting point. Exiting the course and reentering in order to gain position will result in the driver being placed at the rear of the field.
- **i.** If the mower stalls move the mower to a safe place at least 10 feet off course.
- **j.** Anyone dismounting a mower in anger will be removed immediately from that race. Anyone touching another racer or track official in anger will be removed from the property where the race is being held.
- **k.** Unsafe off track driving will not be tolerated.
- **l.** Drivers must attend all drivers meetings. If an unforeseen circumstance forces a driver to miss the meeting they shall begin at the rear of the field after meeting with the Chief Steward for a briefing on the day's racing information.
- **m.** Starting positions will be determined by random draw for a rolling start.

2. Pit Area and Track Regulations

- a. Mower pit speed is 5 MPH maximum.
- b. Long pants, closed shoes and shirts are required in the track area.
- c. Refueling: Driver must dismount and engine must be shut 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.
- d. Mower must be completely stopped before driver dismounts.
- e. Track crews are under the direction of the Track Steward at all times.
- f. The driver is responsible for the conduct of his/her guests and crew, even while on the track.
- g. Only authorized personnel and drivers shall enter the racing course during racing activity. All individuals entering the pit area, including crew members and guests, must

sign a release discharging ARMA from liability. All individuals entering the track area must have a wrist band.

- h. No pets are allowed on the racing course.
- i. ARMA reserves the right to limit pit space. Campers and RV's may be permitted on race day only if space permits.
- j. No vehicles other than racing mowers and official vehicles such as tow mowers shall be on or near the track.

3. Driver Eligibility

- a. Drivers must be members of the American Racing Mower Association.
- b. Prepared class drivers (Super Stock class and above) must be at least 16 years of age. Drivers under 18 years of age must have an approved parent's consent form on file.
- c. Drivers participating in Junior Prepared must be at least 10 years old and no older than 15 years old. No driver under 16 years old may operate or compete on a mower other than a JP mower.
- d. All drivers must sign a release discharging the ARMA from liability.
- e. Drivers should conduct themselves in a professional, mature manner while on the track. If a driver feels there is an issue requiring attention, he/she will bring the issue to the Chief Steward in an appropriate manner. Failure to do so will result in removal from the remainder of the day's racing action.

4. Driver Safety Equipment

- a. Every 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. The helmet must fit snugly and be securely buckled when driver is on the track.
- c. Goggles or a face shield are required. Glasses are not adequate protection.
- d. All drivers must wear long pants, long sleeved shirt, neck brace, full-fingered gloves and leather over the ankle footwear on the track. Chest protectors and other anti-abrasive suits are highly recommended. No loose clothing on the track.

5. Mower Eligibility

- a. Events are open to all riding type lawn mowers and garden tractors (with tires 20" or less) that were mass-produced and commercially available to mow residential lawns. Zero turn riders are not permitted. The mower may be modified from its original configuration as noted in section 7 General Mower Specifications Modified Classes.
- b. Final determination of eligibility and classification is up to the technical inspector.
- c. Organizers reserve the right to reject at any time any mower, which in their opinion, represents an attempt to defeat the spirit of these rule, even though it complies with the letter of them.
- d. A single mower may participate in multiple classes, however points will only be awarded for the class the mower is built for. This will be identified by using the class letters on the machine.
- e. Driver's owning two machines prepared for the **same** class may race one machine in the heat and a second mower in the feature. Both mowers must pass through technical

inspection prior to the start of the day's racing action. If a driver utilizes a back up mower, that driver must start at the rear of the field.

6. Technical Inspection

- a. All mowers entered in any ARMA event must inspected for compliance by the Technical Inspector prior to participating in practice or racing.
- b. Drivers must complete the registration process and sign insurance releases prior to entering the tech line.
- c. Drivers may be questioned on the content of this document and must pass in order to practice or race.
- d. All required safety equipment must be present at technical inspection.
- e. Any driver, guest, crew member or official that displays behavior that is considered dangerous to other drivers, guests, crew members or spectators may be removed from the event by authorized event officials.
- f. If it is the opinion of an ARMA official designee (Local Chapter President or other officer, ARMA Board of Directors member) that a Stock, Super Stock or Junior Prepared mower is out of compliance with rules for these classes said mower may be internally examined. This may include removal of cylinder heads, opening of transmissions, etc. See sanctions in Section 1
- g. Initial build inspection will occur at the first National Points Series Race a driver attends. Subsequent inspections will be for safety issues. If a mower is involved in an on-track incident at a National Points Series Race, it will receive a full inspection at the next National Points Series Race before being permitted to return to competition.

7. General Mower Specifications- Modified Classes (All classes except Stock)

- a. Cutting blades must be removed.
- b. Cutting decks must be securely mounted in near stock location. Only Pro-X and Super Modified mowers may simulate a cutting deck. Decks may extend beyond the tire sidewalls a maximum of 2". Decks must be as wide as the body edge or running boards whichever is wider.
- c. Mowers must maintain a minimum of 2.5" ground clearance under the lowest point of the deck except Super Modified class mowers.
- d. Mowers must maintain a minimum of 4" of ground clearance under the lowest point of the frame except Super Modified classes. Unused brackets and non-structural material may be removed to gain clearance.
- e. Exhaust design is open, but must terminate away from the driver and competitors, in a rearward and downward direction without creating a safety hazard.
- f. Starter and functional battery must be on board, either electric or pull rope in all classes except Pro-X.
- g. Rear wheels must be secured to the rear axle with shaft locks, center bolts or thru-bolts.
- h. All non-stock mowers shall have an automatic, throttle closing device.

- i. 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.
- j. Mower brakes on any Sportsman or X series mower must be upgraded to a brake system on the rear axle.
- k. Brakes may be hydraulic or mechanical.
- l. Throttle and brake control may be relocated.
- m. The steering wheel, seat, body and frame must be centered between the right and left wheels. Offset is not permitted. See Super Modified Rules.
- n. Drive line may be modified from the engine pulley to the rear wheels. All classes except Pro-X and Super Modified must use a shift able lawnmower transmission or transaxle. Vari-drives may be used if originally equipped.
- o. No centrifugal or torque converter clutches permitted in any class except Pro-X and Super Modified.
- p. Rear axle may use open differential, locked, live or solid axle. No single wheel drive. Aluminum rear axles are permitted.
- q. Wheels must be the same size on each axle, of any origin, but made of metal. Duel or tandem wheels are forbidden.
- r. Front axle and steering may be modified or fabricated. Front axles may be pinned, bolted or welded into place. No suspension allowed. All modifications and fabrications are subject to the judgment of the technical inspector.
- s. All steering linkage must be ball-type or spherical threaded rod ends.
- t. Footholds and seat side boosters must be minimally designed so as not to entangle body parts. Foot guards should be no higher than 4” from the bottom of the bar to the top and be flush with the bottom of the frame. Bars should be 2” off of the rear tire. With wheels turned to extreme position, there should be 2” of clearance between tire and bar.
- u. External ignition systems and aluminum flywheels are authorized.

IMPORTANT SAFETY NOTE

It is highly recommended that **there be no alterations to a stock flywheel. This is to include removing the magnets and/or removing metal from the flywheel in various locations. Altered flywheels are not tested under any standards for safety and may not withstand high rpms.** Recognizing that other sanctioning bodies are extending their implementation date for mandatory billet flywheels, ARMA will permit drivers to continue to run their stock flywheels for the 2011 season. By doing so, drivers assume all risks related to running said flywheel.

- v. All steering and wheel retention fasteners must terminate with locking nuts, castellated nuts with cotter pins, washers with new cotter pins, shaft locks, or locking bolts. Cotter pins, E-rings and C-rings alone, bent nails, hitch pins, over center pins and quick-release pins are not permitted.
- w. Mowers may reach a maximum width of 38”sidewall to sidewall except Super Modified classes.

- x. Carburetors must be of lawnmower origin and from the same manufacturer as the engine block. Prepared mowers participating in the Mini-Sportsman class and above will be required to have dual return springs on the throttle.
- y. Mowers may only operate on pump gasoline. No additives or additions to the fuel are allowed. No nitrous oxide, rocket fuel, alcohol or other oxidizers are permitted. No combustion enhancing substances may be added to the crankcase oil or air cleaner assembly. Any attempt to circumvent this rule will result in disqualification from the event. No electric fuel pumps.
- z. All engines must be naturally aspirated. Blowers, turbochargers, and water injection systems are not allowed.
- aa. Tires must be lawn tractor tires in all classes except Pro-X and Super Modified.
- bb. Substituted steering wheels are permitted. They may not be mounted offset unless originally mounted offset. Steering “wheel” consists of a 360 degree circular device. This wheel may not be pegged or have steering devices attached to them. Hand throttle and brake controls are permitted.
- cc. All positively charged terminals must be insulated with a cover or heavy tape. Battery must be well secured on the mower.
- dd. All mowers must be safe and complete with all parts and panels in places with no missing fasteners. Machines that have been involved in a on-track incident resulting in removal of body parts will only be allowed back on the track after the mower has been inspected to determine if its return would present a safety issue.
- ee. All exposed sprockets, chains, rotating shafts and pulleys must be fitted with metal guards 1/8 inch thick minimum deflecting a broken chain downward and preventing entanglement with mower parts.
- ff. Mowers must be free of sharp edges, projections and protrusions.
- gg. A rear bumper is highly recommended and should be no wider than the rear tire width, fabricated from either 1” or 3/4” outer diameter tubing with radius bends and installed a maximum of 2” from closest surface of the rear tire. Recommended height of no higher than 8”. The bumper should be centered on the rear axle. The intent of the bumper is to prevent mowers from “climbing” the rear tires and making contact with a driver. No other bumpers are permitted, even those offered as factory options.
- hh. Seats must be present and of lawn mower origin except Super Modified classes. Seat is defined as being a separately attached device on which the driver will place his body during racing competition. They should be securely mounted to the mower, on the center of the frame. Seats may be adjusted more towards the front or rear of the mower along the center line to help achieve better weight balance for handling.
- ii. The lowest portion of the seat pan should not be mounted lower than the top of the rear tires except in Super Modified classes.
- jj. Sheet metal should be as delivered from the factory with the following exceptions:

Substitutions:

- Where original factory sheet metal is not available or is damaged in a way that renders it unsafe or unusable sheet metal from another similar model mower that would otherwise be eligible to race may be used.

- Replacement sheet metal must fit properly and be as close in shape to the factory panel as possible.
- Substitute sheet metal should be attached to the frame in as close to the original position as possible.
- All panels must be securely fastened so as not to create a safety hazard.
- Substituted panels must be modified to fit properly and safely.
- Minimal under hood mounting brackets are acceptable.
- Panel substitution is provided in order to give the opportunity for a racer to run a mower that might otherwise be sidelined. Panels may not be substituted simply to modify or customize a mower's appearance. Panel substitutions that make a mower look radically different than other mowers in a class will not be allowed.
- **Fiberglass parts are permitted as substitution for metal parts when metal parts are not available.**

Modification:

- The hood and/or its components may be modified to provide clearance to allow tires to turn and steer without contact with sheet metal.
- Sheet metal maybe bent or cut to allow for clearance of modifications otherwise allowed such as air cleaners, exhaust, brakes, clutches or other controls.
- Openings cut in sheet metal shall not be more than 2 inches from the obstruction.
- Fenders may be modified to allow for tire clearance issues due to chassis lowering as well as for handling purposes. Allowable modifications include:
 - ❖ **Trimming fenders such that there remains 1/2" of clearance between the fender edge and the top of the tire.**
 - ❖ **Flaring of the fender such that there remains 1/2" of clearance between the fender edge and the top of the tire.**
 - ❖ **1" of vertical material must remain on the fender. This will ensure the structural integrity of the fender.**
 - ❖ **Fender trimming should follow the contour line of the fender, not merely remove sheet metal in the immediate area.**
 - ❖ **Fender trimming or flaring that results in sharp edges will not be permitted.**

Removal:

- Any sheet metal originally on a mower may not simply be removed. A mower originally delivered with fenders must have fenders. A mower originally delivered with a hood must have a hood.
- ll. Race numbers should be a minimum of 3" high and of a sharply contrasting color from its background, and be visible from all four sides of the mower including the rear . Mowers without numbers or mower with same number will be assigned one during registration. Mowers will also have class designation letters of the same size. See individual rules for class abbreviations.
- mm. All mowers must have a functioning mechanical clutch. No chain drive from engine to transmission is allowed.

- nn. Mowers must present a neat and clean appearance. No written profanity is allowed.

8. Mower Class Requirements and Designations

Mower Specifications **ALL MOTORS MUST BE OF LAWN MOWER ORIGIN**

| Class Designation | Engine Type (of lawn mower origin)* | Original Factory Rated Horsepower | Wheelbase | Front Rim Size | Rear Rim Size |
|---------------------------------------|---|--|---|-----------------------------|--------------------------|
| Stock | Governed engine | 3650 RPM | Factory Stock | Stock | Stock |
| Super Stock and J/P (Junior Prepared) | Governed engine- Single cylinder VIB or OHV | 3650 RPM 17 HP and under | Factory Stock | 13"-15" tires 15 psi max | 16" tires 15 psi max |
| Mini-Sportsman | Valve in block 4 stroke | 8.5 and under 19 ci and under ** | 34" unaltered Minimum | 4" minimum | 6" minimum |
| Sportsman | Valve in block single cylinder 4 stroke | 8.5 and over | 39" unaltered minimum | 5" minimum | 6" minimum 8" maximum |
| Mod X | Single OHV and Twin Opposed VIB | 20 and under or unlimited | 39" unaltered minimum | 5" minimum | 6" minimum 8" maximum |
| Super Sportsman | All overhead valve and 2-cylinder 4stroke | 25 and under | 42" unaltered minimum | 6" minimum | 6" minimum 8" maximum |
| Pro-X | Single cylinder 4 stroke | Unlimited | 42" maximum on mid-engine chassis 45" maximum on pan style chassis | 4" minimum 8" maximum | 4" minimum 8" maximum |
| Super Modified Single | Single Cylinder 4 stroke horizontal or vertical | unlimited | 42" minimum unaltered | 5" minimum 6" maximum | 6" minimum 8" maximum |
| Super-Modified Twin | Twin cylinder 4 stroke flathead or ohv vertical or horizontal | 25hp 44ci max | 42" minimum unaltered | 5" minimum 6" maximum | 6" minimum 8" maximum |

* No overhead cams allowed

** Addresses the current usage of the same engine block covering several horsepower ranges.

STOCK MOWERS:

- This class will be held as requested by individual race venues. Results from races in this class will not count towards Finals.
- These are “as manufactured” riding lawn mowers with governed engines that do not exceed 3,650 RPM.
- Any replacement parts must be exact replacement for the originals. They may not offer any performance improvements over the stock part.
- Tech inspection will be for general operating condition, brakes, safety issues, RPM, and blade removal. Tech inspectors may sanction modifications to ensure safety.

SUPER STOCK (SS) and JUNIOR PREPARED (JP):

- Must be a full-size lawnmower with a 39” unaltered wheelbase, front engine origin, stamped steel frame, and have a steering column located behind the motor.
- Mowers will use a governed engine with a 3650 RPM maximum. RPM’s will be checked at tech inspection, following the heat race and following the feature race. Mowers failing the inspection following the heat race will be placed at the rear of the field. Multiple mowers failing post-heat inspection will be gridded based upon the variance of failure in their RPM’s.
- Failing to report to the designated area for post race inspection will result in the loss of points for the day. If the infraction occurs following the heat race, the driver will lose registration points for the day.
- Motors may be any single-cylinder valve-in-block (flathead) or overhead valve (ohv) engines 17 horsepower in the original factory location.
- The engine must be as delivered from the factory, internally and externally, with only the following exceptions; air cleaner, air filter or velocity stack, open exhaust and the removal of the debris screen covering the flywheel to allow quick and easy access to the flywheel nut while checking the 8 to 1 gear ratio.
- Transmission or transaxle must be shift able and of lawnmower origin. Vari-drives are not permitted.
- The gear ratio in the highest gear must be 8 to 1- lockouts are not permitted. For example, while in the highest gear, the rear wheels can turn no more than one revolution every time the engine rotates eight times.
- Body must be stock, without external alterations.
- Discreet frame strengthening is allowed. The front axle may be reinforced, substituted or fabricated. Racer-fabricated axles will be reviewed by the Tech Inspector to determine their apparent safety for racing. Aluminum is not permitted as the material for the axle.
- Front spindles are to be a minimum of 5/8” in diameter.
- Metal rims are to be used both front and rear. Rim size will be 6” diameter in the front and 8” diameter in the rear. Rear rims may be reinforced on the inside.
- Front tires may be 13”-15” in diameter. Rear tires will be 16” diameter.
- Tire pressure may not exceed 15 psi. This will be checked immediately following the feature race.
- Mowers must have steel factory decks.
- **Mowers must have rear bumpers (see details in section 7gg).**
- **RPM may not be adjusted at the throttle control lever. RPM’s must be adjusted at the governor spring. A screw is to be placed at the throttle control box to**

limit cable travel. If the throttle control is equipped with an adjustable nut at the lever on the steering wheel it must be firmly tightened and taped. No adjustment at this point on the mower is allowed.

- **Must have stator and choke in place on the motor.**

MINI-SPORTSMAN (M):

- Engines must maintain stock outward appearance with the exception of the air filter, air cleaner or velocity stack.
- Crankshaft must be in original orientation and clearance hole in the frame.
- Engine may be internally modified.
- 34" minimum wheelbase
- 4" minimum front wheels, 6" minimum rear wheels.

SPORTSMAN (SP) and MOD X (MX):

- Engine must maintain stock outward appearance, with the exception of the air filter, air cleaner or velocity stack.
- Crankshaft must be in original orientation and clearance hole in the frame.
- Engine may be internally modified.
- 39" minimum wheelbase
- Mid-engine frames not allowed
- 5" minimum front wheels, 6" minimum rear wheels
- Crankshaft must be in original orientation

SUPER SPORTSMAN (S):

- Engine must maintain stock outward appearance, with the exception of the air filter, air cleaner or velocity stack.
- Crankshaft must be in original orientation and clearance hole in the frame.
- Engine may be internally modified.
- 42" minimum wheelbase
- Mid-engine frames are not allowed
- 6" minimum front wheels, 6" minimum rear wheels
- No monkeys at the track.

PRO-X (PX):

- Engine may be internally and externally modified.
- Engine location may be modified.
- Maximum wheelbase 42" on mid-engine chassis, 45" on pan style chassis.
- Mid-engine frames and pan chassis may be altered to shorten wheelbase to A minimum of 37".
- Pan chassis frames must maintain the original pan chassis and body parts.
- Mid-engine frames may be updated, but must retain the form and substance material of the original factory frame.
- Mid-engine frames are limited to a maximum width of 15" and length of 48".
- Round tubing, chrome molly and aluminum are not permitted.
- Drive train does not require a shift able transmission.
- Drive line is open.
- Wheels 4" minimum 8" maximum front and rear.
- Kart tires are allowed. Snow Hogs limited to the front end only.
- Stagger is allowed, offset is not.

SUPER MODIFIED SINGLE (MS)

- **REQUIREMENTS:** Minimum age **17** years. **NO ROOKIES ALLOWED.** Drivers must have 1 year of ungoverned mower racing experience.
- **ENGINE:** Open- Max 20 HP OEM rated 4-cycle single cylinder engines of lawn mower origin, either vertical or horizontal orientation. Internal and external modifications are permitted for all engines. After-market aluminum billet flywheels are **MANDATORY.** Modifications to the block and heads are unlimited. **All OHV single cylinder engines must retain OEM block and cylinder head. Single cylinder L-head engines must retain the OEM cylinder but will be allowed an after-market flat head.**
- **FUEL DELIVERY:** No fuel injection, blower or turbo's. NO electric fuel pumps allowed.
- **IGNITION:** Open.
- **SAFETY SHIELDS:** Cowling or safety shields (blower housings) must remain, subject to safety inspection. Engines must be separated by a safety shield or stock cowling (blower housing) from the driver.
- **CHASSIS:** ENGINE MUST BE IN THE FRONT. Frames and parts, must retain original manufacturers (OEM) specifications (no chopping) re: wheel base, length and width. Material (steel round or square) may be added for structural strength. It is recommended that front axles be bolted or welded rigid eliminating the stock pivoting.
- **RIDE HEIGHT:** 1.5" minimum from lowest point of chassis. 4" maximum height.
- **WHEEL BASE:** 42" minimum.
- **OVERALL WIDTH:** Wheel width max 42" wide. Offset allowed and measured from center of chassis. Maximum offset is center of chassis to outside right tire 23" and center of chassis to outside left tire 19"
- **BODY WORK:** MUST USE MOWER BODY WORK . Can be customized but must retain some resemblance to a lawn tractor. All parts must be securely fastened to chassis i.e. fuel tanks, batteries, bodywork, etc.
- **FUEL:** Only pump gas, 114-octane max (no additives). N.O.S is not permitted. No fuel injection, blowers or turbo's. No electric fuel pumps permitted.
- **THROTTLE:** Foot or trigger throttles with automatic spring return mandatory. Dual return springs are mandatory.
- **KILL SWITCH:** Tractor must have a working tethered kill switch and be fastened to driver any time engine is running. Kill switches cannot be homemade.
- **EXHAUST:** Is open, as long as it points down and away from driver and presents no apparent hazard.
- **MOWER DECKS:** May be fabricated but must appear to be a deck to and must maintain a minimum 1.5" ground clearance.
- **SEATS:** Can be of Kart origin and must be mounted in center of tractor. Must be securely mounted. While some degree of inclination is expected with kart seats, drivers should not be seated in a "lay down" position.

- **BUMPERS/NERF BARS:** Not mandatory BUT highly recommended. If installed, they should meet the following specifications- height within 2" of the centerline of axles, not to protrude 2" beyond the furthest point of body or tires. Maximum width of rear bumper is 38". Maximum width front should remain inside tires and not cover the face of the tire. Side crash bars must remain 1.5" in from outside of tires. No sharp edges.
- **BRAKES:** Hydraulic brakes mandatory, front brakes highly recommended
- **DRIVE TRAIN:** Is open to live axle, belt or chain drive custom gearboxes or transaxles. Chain guards must be made of at least 1/8" thick material. Centrifugal clutches are permitted. In instances where custom drive train may be hazardous to driver (exposed) protective shields must be installed. Discreet chassis modifications are allowed for axle installation and reinforcement, but must maintain OEM stock wheelbase. ATV drive trains and suspensions are not permitted.
- **STEERING** any improvements or modifications to steering are allowed and recommended. NO stock steering allowed. All steering components must be double nutted or drilled and safety wired for maximum safety. Padding should be added to the center of the steering wheel.
- **TIRES:** Go kart dirt slicks or grooved tires are allowed, (no snow hogs or deep lug tires).
- **WHEELS:** Must be made of metal. While smaller rim sizes are permitted, 6" front wheels and 8" rear wheels are strongly recommended. All wheels must have wheel retention in the form of castle nut with cotter pins, lock collars, and snap rings, thru bolts or center bolts. Cotter pins alone are not sufficient.

SUPERMODIFIED TWIN (MT)

- **DRIVER REQUIREMENTS:** Minimum age 18 years of age. NO ROOKIES ALLOWED. Drivers must have 1 year of ungoverned racing.
- **ENGINE:** Open- Maximum 25 HP/44 ci max OEM rated 4-cycle twin cylinder engines of lawn mower origin, either vertical or horizontal orientation. Internal and external modifications are permitted for all engines. After-market aluminum billet flywheels are MANDATORY. Modifications to the block and heads are unlimited. Block and heads must be of original OEM casting.
- **FUEL DELIVERY:** No fuel injection, blower or turbo's. NO electric fuel pumps allowed.
- **IGNITION:** Open.
- **SAFETY SHIELDS:** Cowling or safety shields (blower housings) must remain, subject to safety inspection. Engines must be separated by a safety shield or stock cowling (blower housing) from the driver.
- **CHASSIS:** ENGINE MUST BE IN THE FRONT . Frames and parts, must retain original manufacturers (OEM) specifications (no chopping) re: wheel base, length and width. Material (steel round or square) may be added for structural strength. It is recommended that front axles be bolted or welded rigid eliminating the stock pivoting.
- **RIDE HEIGHT:** 1.5" minimum from lowest point of chassis. 4" maximum height.
- **WHEEL BASE:** 42" minimum.
- **OVERALL WIDTH:** Wheel width max 42" wide. Offset allowed and measured from center of chassis. Maximum offset is center of chassis to outside right tire 23" and center of chassis to outside left tire 19".

- **BODY WORK:** MUST USE MOWER BODY WORK .Can be customized but must retain some resemblance to a lawn tractor. All parts must be securely fastened to chassis i.e. fuel tanks, batteries, bodywork, etc.
- **FUEL:** Only pump gas, 114-octane max (no additives). N.O.S is not permitted. No fuel injection, blowers or turbo's. No electric fuel pumps permitted.
- **THROTTLE:** Foot or trigger throttles with automatic spring return mandatory. Dual return springs are mandatory.
- **KILL SWITCH:** Tractor must have a working tethered kill switch and be fastened to driver any time engine is running. Kill switches cannot be homemade.
- **EXHAUST:** Is open, as long as it points down and away from driver and presents no apparent hazard.
- **MOWER DECKS:** May be fabricated but must appear to be a deck to and must maintain a minimum 1.5" ground clearance.
- **SEATS:** Can be of Kart origin and must be mounted in center of tractor. Must be securely mounted. While some degree of inclination is expected with kart seats, drivers should not be seated in a "lay down" position.
- **BUMPERS/NERF BARS:** Not mandatory BUT highly recommended. If installed, they should meet the following specifications- height within 2" of the centerline of axles, not to protrude 2" beyond the furthest point of body or tires. Maximum width of rear bumper is 38". Maximum width front should remain inside tires and not cover the face of the tire. Side crash bars must remain 1.5" in from outside of tires. No sharp edges.
- **BRAKES:** Hydraulic brakes mandatory, front brakes highly recommended.
- **DRIVE TRAIN:** Is open to live axle, belt or chain drive custom gearboxes or transaxles. Chain guards must be made of at least 1/8" thick material. Centrifugal clutches are permitted. In instances where custom drive train may be hazardous to driver (exposed) protective shields must be installed. Discreet chassis modifications are allowed for axle installation and reinforcement, but must maintain OEM stock wheelbase. ATV drive trains and suspensions are not permitted.
- **STEERING:** any improvements or modifications to steering are allowed and recommended. NO stock steering allowed. All steering components must be double nutted or drilled and safety wired for maximum safety. Padding should be added to the center of the steering wheel.
- **TIRES:** Go kart dirt slicks or grooved tires are allowed, (no snow hogs or deep lug tires).
- **WHEELS:** Must be made of metal. While smaller rim sizes are permitted, 6" front wheels and 8" rear wheels are strongly recommended. All wheels must have wheel retention in the form of castle nut with cotter pins, lock collars, snap rings, thru bolts or center bolts. Cotter pins alone are not sufficient.

ARMA Point Structure

Drivers participating in ARMA sanctioned national points races will receive points for their participation and finishing position. These points will be recorded with the national office on a database that covers all ARMA racers. Points will accumulate through the racing season. The United States is divided into three regions. An imaginary line runs through Richmond, VA. Racers living in northern Virginia, Maryland, Delaware, Pennsylvania, New Jersey, West Virginia are competing in the Northern Region. Racers living below Richmond, North Carolina, South Carolina, Georgia, Tennessee, Alabama, and Florida are competing in the Southern Region. Mid-west Region drivers are designated as those living in Michigan, Ohio, Indiana, Illinois, Wisconsin, etc. If possible, a Southwest region will be added as well that would include Texas, California, Montana and other chapters that are in the planning stages.

In order to compete in the National Points Series a driver must race in at least two local chapter races. At the end of the season, are awarded full points for their top 5 National Points Series races. These points are be used to identify a Northern, Southern, and Mid-West Series points champion (also second through fifth place drivers) in each class. This enables points winners in the top 5 positions from each class in all three regions to go to finals and race it out to determine an overall champion, second and third in each class. Drivers competing at finals will bring with them points based upon their final ranking for the year- 400 for 1st, 350 for 2nd, 300 for 3rd, 250 for 4th and 200 for 5th. At the finals the top fifteen drivers in each class (5 Northern series drivers , 5 Southern series drivers, 5 Mid-West) will have starting positions secured in the front of the grid. The top fifteen drivers will draw for positions 1-15 on the grid for their class (number may change if less than all eligible drivers travel to compete in finals.) Other drivers in the same class will draw for the remaining positions. Finishing points will be awarded just as in any other National Points Series races. The regional driver with the highest point value for the day in each class will be designated as the champion. Second place through fifth place national points series winners would be identified in the same way. Ties will be broken using the following criteria- greater number of wins regionally, greater number of national points races attended, third criteria tbd (if necessary) by the ARMA Board of Directors.

Point Values:

50 points for registration
50 points for starting the race
50 points for finishing the race

****** In order to receive points for completing a race the mower must cross the finish line under mechanical power. An exception to this rule occurs if a mower experiences mechanical problems on the **white** flag lap. Then the mower may be pushed by the **driver** across the finish line.

50 points for 5th place finishing position
100 points for 4th place finishing position
150 points for 3rd place finishing position
200 points for 2nd place finishing position
250 points for 1st place finishing position

TRACK PROCEDURES FOR 2011

The Track Steward position will be carried forth as a service for the racers of ARMA. This position is in place to improve track safety and the accuracy of decision making. We will try to have at least four radios in place at each event. The Track Steward along with the Head Flagger and two Corner Flaggers will when possible be wearing head sets. The event announcer will have a radio with an external mike so he/she can listen in and be another pair of eyes when needed. Our goal is make the race safe, fair and enjoyable for all. Below is a list of operating procedures.:

1. Whenever possible the track will be set up with Head Flag Person located **at the entry to the track.**
2. The Track Steward will be the last communication with the Head Flagger who will declare the race ready to begin.
3. Gridding for the next class will be outside of, but nearby the entry point. After the previous race is over and all racers have exited the track, racers will then be **invited** onto the track. Once the starting grid for a class is on the track, the entry will be closed and a red cone placed at this point. If a driver misses line up, they will pull up to the cone and **WAIT** to be invited onto the track by the Track Steward. Every attempt will be made to permit the driver to race. **If during ANY racing activity you leave the track, do not reenter the track until you are invited by one of the flaggers or Track Steward. Any unauthorized entry will be black flagged.**
4. Incidents such as bumping, cutting racers off and other unsportsmanlike behaviors will be monitored by the track personnel. The flagger who has the best view of an incident will contact the Track Steward through his/her radio. Input from all flaggers will be considered, but ultimately the final decision will be by the Track Steward. In order to maintain the greatest degree of fairness the decision rendered will, whenever possible, be by more than one person. Drivers are urged to keep in mind that the track personnel are located at key points around the track and therefore are most of the time better able to view incidents than anyone else
5. **When a call is made regarding a line up or a driver is sent to the rear, no discussion about the call will transpire on the track or from the pits. All calls are final, not responding to a call will result in a black flag to the driver.**
6. Races will begin with a side-by-side rolling start. Two attempts (including the original start) will be made to start the race. If after two attempts a flag is thrown, the line up will be single file. The driver causing the restart will move to the back of the pack. At that point everyone will simply move up one spot (if the person in front of you caused the flag he/she goes to the back and you move up, same with the person on your side.)
7. **Restarts may be side by side at the discretion of the Track Steward. Following a caution drivers will line up single file using the running order of the last green flag lap. There will be a cone placed in the center of the track between turns two and three. After the lead mower has passed the cone he/she may choose the inside or outside line. Other drivers upon passing the cone may decide to either stay in their line up or change to a position created by the mower in front of them.**

8. Anyone who dismounts a mower in anger will be removed from the track for that race. Anyone touching another driver or official in anger will be removed from the property where the race is being held.
9. Know your flags! Red means **stop** as soon as it is safe to do so, **not slow down**. Drivers will be given one warning for an on track incident. They will be shown the black flag in a rolled up position. If a driver is shown it a second time in the unfurled position, they must exit the track.
10. Drivers breaking down on the track will be provided two caution laps to make repairs. Once the mower is repaired it will be placed at the rear of the field. If after two laps repairs will not permit the mower to continue it must leave the track (racing area). When drivers see a yellow flag flown they should raise their right hand so others know mowers are slowing down. Drivers should use the same sign anytime they leave the track.
11. When the race is over **take a cool down lap and then exit the track at a safe speed, maintaining appropriate speed in the pit area.**
12. When the Super Stock/JP drivers are finished they should exit the track, stopping as close to the track as is safe to wait to have their RPM and gear ratio checked. **NO ONE WILL BE CHECKED ON THE TRACK.** If a hood needs to be removed, it must be off when the tech inspector arrives to check the rpms. There **must** be clear access to the spark plug wire in order for the mower to be checked. It will be up to the tech inspector if he/she feels able to safely tach the machine.
13. **We apologize if you encounter a situation where you feel that you received what you perceive to be a bad call. We will do our best to ensure that this does not happen. But, in the event it does, please do not stop the race. After the race is over any concern you may have will gladly be discussed.**

Flaggers: As we do not have designated flaggers, we welcome anyone who wants to help. However, we ask that you conduct yourself in a professional manner and stay off the main track and behind the bales/barriers. Please only go on the track to assist someone under yellow, black or red flag.

ONLY designated flaggers are allowed on the track, no further assistance is needed. Due to insurance regulations no persons except track personnel are allowed onto the track.

When you decide a flag is warranted, throw it quickly and with authority. If you slip part way through your decision to throw the flag-throw it anyway! A half thrown flag could cause a wreck. Restarting the race is not a problem.

Remember that we race for fun, friendship, trophies and very often to help deserving charities. No one wants their hobby to land them in a hospital. Keep this in mind as you race in a safe, respectful, professional manner.

LET'S GO RACING!!!!!!!!!!