

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) 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 antiabrasion karting suits are highly recommended. No loose clothing (un-tucked or un-buttoned shirts, etc).

MOWER ELIGIBILITY

- A) Events are open to all self-propelled rotary or reel type lawn mowers; the main provision being that the mower must originally have been designed, mass produced, and sold commercially through a dealer network to mow residential lawns. It must remain suitable for lawn cutting, apart from the modifications permitted below or in the supplementary regulations of an event.
- 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) 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.**
- D) A STA-BIL Fuel Stabilizer and/or a STA-BIL Series sticker must be displayed in clear view on the right side and front of mower.
- E) Organizers reserve the right to reject at any time any mower, which in their opinion represents an attempt to defeat the spirit of these Regulations, even though it complies with the letter of them.

TECHNICAL INSPECTION

Any mower may be inspected at any time at the discretion of the Race Day Chief Steward or any Staff-level Tech Inspector of the event. If found to be in noncompliance

with these Regulations, any mower may be removed from competition. 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.

Drivers must show their personal safety equipment at Technical Inspection before

practicing or racing at any event.

The Race Day Chief Steward shall have the right to remove from competition at any time any driver, crew member or guest in the paddock who does not comply with these Regulations, who fails Technical Inspection or who, in the Race Day Chief Steward's sole discretion, is exhibiting behavior which is dangerous to participants or spectators.

If, after reading these Regulations you need a clarification, you are encouraged

to contact one of the Staff members PRIOR TO RACE DAY. We want everyone

to race, BUT Safety and fair competition remain our primary concerns.

Competitors

GENERAL MOWER REQUIREMENTS

NOTICE

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

A) CUTTING BLADES MUST BE REMOVED COMPLETELY FROM ALL MOWERS. ALL MOWERS MUST HAVE A CUTTING DECK SECURELY MOUNTED IN THE STOCK POSITION, WITH A MINIMUM OF 2.5" GROUND CLEARANCE UNDER THE LOWEST POINT OF THE DECK.

B) No 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 wheels.

F) Brakes may be improved in any way.

G) Throttle and brake controls may be relocated.

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 No excess dirt, oil, grease, rust or primer. Sponsor graphics must not interfere with

mower's racing numbers or class letters.

M) No bumpers, nerf bars or push bars.

N) **All mowers that do not have the top of the engine completely covered by the**

hood must have the flywheel covered by either the recoil housing, the stock wire

housing or racer made cover.

O) Race numbers should be a minimum of 5" high and of a sharply contrasting color

from their background, and should be visible from all four sides 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. Tires must match in size per axle. Lawn mower seats only, in the stock location, no lower than the tops of the fenders 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) Maximum width 38" sidewall to sidewall unless otherwise stated in the class build section.

T) Steering wheels and handlebars may be replaced with any commercially available pieces, but not substituted for each other. May not be mounted off center unless originally mounted offset. Steering columns must pass through the original hole in hood or dash at the original angle.

Handlebar type grips may not be added to steering wheels.

U) Tires must be lawn tractor tires. No Snow Hog, tiller, A.T.V, commercial mower

or performance compound or competition kart tires. **Flat tires will be black-flagged!**

V) No centrifugal and/or torque converter clutches.

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**

a. Unmodified Stock.

b. 100% Billet.

c. Modified Stock along with an approved scatter shield (guidelines

below).

All Scatter shields used on a USLMRA lawnmowers must adhered to the following specifications:

1. Scatter shields must be fabricated from 1/8" steel minimum.

2. The scatter shield must be form fitting and follow all of the contours of the blower housing.

3. The scatter shield must be the same height (vertical shaft) or same width

(horizontal shaft) as the blower housing and be bolted to the block using the original mounting points.

4. A 1" X 1/8" minimum steel strap must run across the face of the blower housing to reinforce the scatter shield, side to side.

5. Notches for starter drives must be reinforced to at least one inch past each end of the notch.

6. Any holes drilled into shield for items such as dip stick holder or fuel pump must be 1/4 inch or less.

7. The scatter shield must be painted to match the engine's blower housing.

Z) Fuel lines must be clamped at all joints.

FUEL and FUEL DELIVERY

The only acceptable fuel is pump gasoline. Additives, other than STABIL Fuel Stabilizer are prohibited. Any apparatus other than the carburetor or fuel injector, 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.

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

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

RACING CLASSIFICATIONS

- A) **STOCK**. Class designation: **S**
- 1) **Governed engines, 3650 RPM max. (No load)**
 - 2) Any replacement parts used must be exact replacements for original, and may not offer any improvements in power or reliability over the stock part.
 - 3) **Maximum 15 PSI tire pressure**
 - 4) **INTENT:** A race class for Local Chapters (if desired) and a race day class at STA-BIL National point series races at the discretion of the venue host.
- Stock will not count in US Points standings**

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, steering column behind

motor, stamped steel frame and manufactured as such, as delivered except for

the modifications listed below. Mid engine frames are not allowed

2) **ENGINE: Governed engines, 3650 RPM max. (No Load).** Single-cylinder

valve-in block engines, not to exceed factory rating of 15 horsepower.

3) **DRIVELINE:** *Transmission or Transaxle must be shift able and of lawnmower origin and gear ratio in highest gear is to be no less than 8 to*

1 **Example:** *while in the highest gear the rear wheels can turn no more than*

one revolution every time the engine rotates eight times. No Veri-Drives

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

5) Front and rear axles must remain in stock location. Front spindles are to be

min. 5/8" in diameter. All steering linkages must use ball-type or spherical threaded rod ends

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

7) Front axle and steering may be reinforced, substituted or fabricated. In the case

of racer-fabricated axles, these will be subject to the judgment of the Technical Inspector as to their apparent safety for racing.

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

8) Maximum width 38" sidewall to sidewall.

9) Shaft locks, center drilled axle with locking bolts and castellated nuts with

cotter pins are acceptable for securing front wheels. Cotter pins, E-rings, and C-rings alone, bent nails, hitch pins, over-center pins, and quick-release pins are

not sufficient for wheel retention and are not approved.

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

Rear tires maximum is 16" diameter as written on the side wall of the tire. Actual

diameter may not exceed 16 1/4"

Maximum 15 PSI tire pressure

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

wheels.

12) **DECK:** Mowers must mount steel factory decks. The deck must be at least as

wide as either running boards or body edge whichever is wider. Decks may

not extend any more than 2" beyond the tire sidewalls on each side. Deck halves may be mounted to running boards. Decks must be secure.

13) Engines must be stock and complete. After market consumable parts such as

air filters and spark plugs may be used as long as they are a direct stock replacement.

14) **Exhaust design is open, but must terminate away from driver and competitors, in a rearward and/or downward direction and present**

no

apparent safety hazard.

15) Footholds must be discrete, and no more than 2" high, made of flat or "L"

stock (no rod stock), and made such that the foot can not become entangled in

a rollover.

16) Minimum 39" unaltered wheelbase.

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.

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.

*******WARNING!*******

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) **PREPARED:** Class designation: **A/P, 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. Crankshaft must be in original orientation and clearance hole in the frame.

Engine may be internally modified.

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

only utilize a shiftable lawnmower transmission or transaxle. Vari-drivers may

be used in an original installation.

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 have a 1-piece beam.**

10) Front axle and steering may be reinforced, substituted or fabricated. In the case of racer-fabricated axles, **these will be subject to the judgment of the 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

rings pins, are acceptable for securing front wheels. Cotter pins, E-rings and C-rings alone, bent nails, hitch pins, over-center pins and quick-release pins are not sufficient for wheel retention and are not approved.

12) Wheels must be the same size on each axle, of any origin, made of metal.

No dual or tandem wheels.

13) **DECK:** Mowers must mount steel factory decks: The deck must be at least as

wide as either running boards or body edge whichever is wider. Decks may not

extend any more than 2" beyond 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 rollover.

16) Class is determined by the OEM factory rating of the lawn mower engine.

17) All parts should be of lawn mower origin with the exception of those specifically mentioned above or otherwise 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 but not altered.**

22) **Must use axle mounted brakes, no lawnmower transaxle or transmission mounted brakes.**

CLASSES DEFINED: (based on OEM BLOCK designation)

A/P: Valve-in block 4 stroke engines **8.5hp and under with a factory maximum stock original displacement of 22 cubic inches and under** (The Tecumseh 22 cu in

and the Briggs 19 cu in blocks are the largest allowed). 34" minimum unaltered wheelbase. 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.

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

C/P: All single-cylinder overhead valve and two cylinder valve in block, 4 stroke engines, **20hp and under**. 42" minimum unaltered wheelbase. Mid engine frames are

not allowed. 6" minimum front wheels. 8" minimum rear wheels.

B/P: All overhead valve V-twin 4 stroke engines, **20hp and under**. 42" minimum unaltered wheelbase. Mid engine frames are not allowed. 6" minimum front wheels. 8" minimum rear wheels.

INTENT:

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

D) **FACTORY EXPERIMENTAL**. Class Designation: **F/X**. These are mowers as delivered from the factory except for the modifications listed below.

- 1) **Maximum engine displacement (465cc) single cylinder.** 4-cycle, originally manufactured for use in lawn mowing equipment. They may be internally and externally modified.
- 2) Exhaust is open as long as it exits away from the driver and presents no apparent hazard.
- 3) Driveline choice is open.
- 4) Wheels may be of any origin, made of metal, 10" diameter maximum.
- 5) Kart tires allowed, Snow hogs allowed on front only.
- 6) Rear axle should use shaft locks, center bolts or thru-bolts to secure rear wheels.
- 7) All steering linkages must use ball-type or spherical threaded rod ends.
- 8) Front axle may be pinned, bolted, or welded into position. No suspension, no shock absorbers. Axle must have 1-piece beam. Center-pivoted axles may be dampened.
- 9) Front axle and steering may be reinforced, substituted or fabricated. In the case of racer-fabricated axles, these will be subject to the judgment of the Tech Inspector as to their apparent safety for racing.
- 10) Shaft locks, center drilled axle with locking bolts, castellated nuts with cotter pins, and washers with new cotter pins are acceptable for securing front wheels. Cotter pins, E-rings, and C-rings alone, bent nails, hitch pins, over-center pins, and quick-release pins are not sufficient for wheel retention and are not approved.
- 11) Throttle and brake controls may be relocated.
- 12) **Must use axle mounted brakes, no lawnmower transaxle or transmission mounted brakes.**
- 13) Cutting deck may be simulated, to extend no more than 2" beyond tire sidewall.
- 14) Stagger is allowed, however offset is **not**.
- 15) Footholds must be discrete, and no more than 2" high, made of flat or "L" stock (no rod stock) and made such that the foot can not become entangled in a rollover.
- 16) Handle bar type grips may be added to steering wheels but must have some form of protection on them such hand grips.
- 17) Mid-engine frames may be updated, but must retain the form of the original factory frame. Mid-engine frame updates must follow the following specifications:
 - a. 15 inch maximum width outside to outside of the frame (rails).
 - b. The frame may not exceed an overall length of 48 maximum.
 - c. 42 inch maximum wheelbase, center front to center rear axles.
 - d. Must be replaced with steel only. Round tubing is not allowed.

e. Hoods, grills and fenders must be original or retain the original form.

18) Pan chassis frames may be altered to shorten wheelbase. The minimum wheelbase on altered pan chassis frames is 42 inches center front to center rear axles. They Must retain the original pan chassis and body parts.

19) Engine must remain in original position (front, mid or rear) in reference to the steering column and the seat.