

# **OFFICIAL RULES 2020/21**

## **GENERAL RULES:**

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 track. 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 YELLOW, it means half way-point.

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

**BLUE/YELLOW:** Means you are being approached by the leaders. Hold your line and allow faster machines to pass. If safe, you may go to the far outside of the track.

## **TRACK RULES:**

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 ANY driver, crew member, friend, enemy, family member, or race staff before the end of the last race or other on-track activity. You as a driver are responsible for your crew. NO illegal drugs or controlled substances shall be tolerated on the track premises AT ANY TIME. Violation of any of the above will result in disqualification, loss of points and possible membership termination.

NO BUMPING WILL BE TOLERATED!!! Rubbing is not racing on an open wheeled mowchine!!!

Driver must keep both hands on the steering wheel, except to momentarily operate other controls.

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. If you are being PASSED by another racer and it is clear that they are faster make room for the overtaking racer and let them pass.

Lap traffic should safely hold their position and/or move to the far outside of the track and be aware of passing drivers.

If a driver leaves the track, 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.

If a mower stalls on the track, the driver's responsibility is to move the mower to a safe position at least 15 feet off the course into the infield. Pit Crew or guest may not go on the track at any time during a race unless specifically directed to do so by the safety crew. This could lead to driver Disqualification!

Mower must be completely stopped before driver dismounts.

Unsafe on track/off-track driving practices may result in disqualification.

All drivers must attend all announced driver's meetings. 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 drivers must attend an announced rookie driver's meeting and drivers may be penalized or disqualified for failure to attend. The race day officials may override this ruling on a case by case situation with approval from President or Vice president in his absence.

Protests against another driver or his/her mower must be logged in writing with the race officials 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 officials, or any race day staff.

The race day officials have final say on all protests.

Laps may be counted under the yellow flag under the event of a time constraint. However, there will be a minimum of two laps, under green, after a yellow to finish the race (Green, White, and Checkered). The White flag will be thrown followed by a Checkered after this time regardless of laps finished. The race may be shortened due to time constraints, or poor organization of the field to get started, or 3 or less mowers.

Drivers involved in an incident and become dismounted from mower must be inspected at the area of incident at the discretion of the EMT and or club officers.

All mowers causing a caution/accident will be moved to the end of the racing order after it's determined that they are safe to continue. You, as a good sportsman, will be required to raise a hand if you are at fault for incident and go to the rear of the field. IF YOU ARE UNSURE WHERE YOU ARE IN THE LINE UP OR HAVE A DISAGREEMENT WITH YOUR LINE UP POSITION YOU SHOULD PROTEST BY MOVING OUTSIDE OF THE MOWER WHERE YOU THINK YOU ARE SUPPOSED TO BE AND WATCH FLAGGERS TO TELL YOU THE POSITION YOU SHOULD BE IN.

The first 3 finishers in each class of a feature Race may be called to return to the start/finish line for racer interviews and/or trophy presentation unless otherwise directed (victory laps are permitted).

No onboard communication devices or spotters on the side of track are allowed.

Racing will begin with rolling starts for all classes.

Starting grid will be determined by a random draw during registration for heat races, features will order by results of heat race.

Due to the extreme speeds and the width of the FXS, FX-LITE, and FXT classes the race day officials will determine the number of mowers that will be allowed to race at one time. A Main and B Main race may be used to determine the feature finalist. This may also be needed and used in other classes.

The racing order for races may change to accommodate schedule, racers, track prep, etc.

Mowers may be tech inspected at any time for any reason by decision of track officials.

The officials, or club officers, shall have the right to remove from competition at any time any driver, crew member or guest on the property who does not comply with these regulations, who fails technical inspection or who, in the race day officials sole discretion, is exhibiting behavior which is dangerous to participants or spectators.

Races where there are not a sufficient number of mowers (3 or more) entered in certain classes, the race director may, at his discretion combine classes, for example combining JP with IMOW, GPS with GPT, AP with CP etc.

ALL governed classes will remain on the track after feature and kept running for RPM checks and/or tire pressures, gearing, etc for specific class rules. Leaving the track or shutting the engine down will result in Disqualification.

Minors must have signed parental release in every part of the pit and track area.

Mower pit speed is 5 mph maximum.

No mower may have more than 1 attendant in line up area, in addition to the driver.

Long pants, closed shoes over the ankle and long sleeve shirts with safety vest are required in the track area.

No smoking on the track or track infield during the racing event.

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 and a catch pan must be under machine.

Driver's, including minors, are responsible for the conduct of his/her guests and crew, even while on the track. (including wives and mother-in-laws)

Unauthorized personnel shall not enter the track area. This could lead to disqualification of your driver!!

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 NASGRASS from liability.

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. This is a no tolerance policy!!!

NASGRASS reserves the right to limit pit space. Campers and RV's are permitted and encouraged!!! Pit arrangements may change in the event of a large special event and your typical parking area may be moved.

No vehicles other than racing mowers and official vehicles such as tow mowers shall be on or near the track.

Entry fees shall be subject to change on special events.

Only one person shall be allowed on a racing lawn mower and it must be the person who is registered to race said mower.

Everyone in the pits, racers and guests must have wrist bands, if lost the individual must purchase another wrist band. No exceptions will be made to this rule. **EVER**. Even if there is a fire. If you see someone without a wristband, it is encouraged to notify the person that they need one for insurance coverage, or they will be removed.

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. If you feel the need to have back up mowers, you need to move up to the Nascar level of racing.

During a rain delay or rain out, it is the discretion of the track officials to determine the outcome of the event.

## **DRIVER ELIGIBILITY:**

All drivers must be club members of Nasgrass Inc. and have filled out membership paperwork. Drivers must be at least 6-11 years of age in MINI MOW, 9-13 MINI MOW PRO, 14+ for KARTS and 13+ for FX-NOVICE.

FX-LITE, AP, SP, CP, 16 and older, 18 and older on FXT, FXS and BP. FXT, FXS and BP must have extensive racing background/resume and must pass on track testing before you are approved to race. All club officers must sign off on new drivers. 16 and older in all other classes. Age on race day, 9 years old (J/P Only) in the race year. So, if you are 8 years old now but will be 9 in the race year, you can race this season in J/P. If you are 15 years old and will be 16 years old in the race year, you can race this year with Prepared classes. The age of GPK is 11 years old and you must have at least 1 race year with more than 3 races in the J/P, MM OR MMP class before moving up to the GPK Class.

## SAFTEY EQUIPMENT:

In all class's drivers must wear an automobile racing or motorcycle-type full face helmet approved by the U.S. Department of Transportation or the Snell Foundation, including special exhibition races whenever held.

The helmet must fit snugly and be securely buckled when driver is on the track. Long hair must be kept tucked inside the helmet.

Goggles or a face shield is required. Glasses are not sufficient.

Every driver must wear long pants, long-sleeved shirt/jacket, full-finger gloves and leather over-theankle footwear on the track. Motorcycle leathers or anti-abrasion karting suits are highly recommended. No loose clothing (un-tucked or un-buttoned shirts, etc).

An approved, racing neck support is MANDATORY in every class.

Driver must have a full, in date, 10BC-rated fire extinguisher in his/her pit area.

It is highly recommended, but not mandatory, that drivers wear chest protectors of their choice for their safety.

## **TECHNICAL INSPECTION:**

All mowers entered in any NASGRASS event must be inspected for compliance by the Technical Inspector prior to participating in practice or racing.

Events are open to all riding type lawn mowers and garden tractors that were mass-produced and commercially available to mow residential lawns. Zero turn riders are not permitted.

Final determination of eligibility and classification is up to the technical inspector.

The officials reserve the right to reject, at any time, any mower, which in their opinion, represents an attempt to defeat the spirit of these rules.

Drivers must complete the registration process and sign insurance releases **prior** to entering the tech line.

All required safety equipment must be present at technical inspection.

Drivers may be questioned on the content of this document and must pass in order to practice or race.

## **PREPARED CLASS RULES:**

## CLASS DESIGNATIONS: IMOW, GP, GPT, GPK, AP, CP, SP and BP.

## These mowers are as delivered from the factory except for the modifications listed below.

## GENERAL:

The age of GPK is 11 years old and you must have at least 1 race year with more than 6 Races in the J/P, MM, or MMP class before moving up to the GPK Class. All JP drivers 9-15 years old. You may enter into JP with one year experience in MM or MMP. All other prepared classes age 16 and above.

Parents/ legal guardians must be present and available to work corners or in the infield if needed during JP Races.

Cutting blades must be removed and Cutting decks must be securely mounted in near stock location. Mowers may simulate a cutting deck. Decks must be as wide as the body edge or running boards whichever is wider. Mowers must maintain a minimum of 2-inch ground clearance under the lowest point of the deck and mowers must maintain a minimum of 4 inch of ground clearance under the lowest point of the frame. Unused brackets and non-structural material may be removed to gain clearance.

Starter must be onboard, either electric or pull rope except FXS AND FXT.

All mowers shall have an automatic, throttle closing device.

Kill switch lanyard length shall be as short as necessary to effectively stop the mower as quickly as possible. 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.

Mower brakes must be upgraded to a brake system on the rear axle and must be hydraulic on all classes. Front hydraulic brakes highly recommended.

Throttle and brake control may be relocated.

The steering wheel, seat, body and frame must be centered between the right and left wheels.

All Prepared classes must use a shift able lawnmower transmission or transaxle.

Wheels must be the same size on each axle, 6" minimum, 8" maximum. Can be steel or aluminum.

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. All steering linkage must be ball-type or spherical threaded rod ends with lock nuts.

Mowers may reach a maximum width of 40 inches sidewall to sidewall. No offset.

All governed classes must retain OEM CARBURETOR for their specific engine!!

Prepared chassis mowers may only operate on pump gas. No additives or additions to the fuel are allowed. No nitrous oxide, rocket fuel, alcohol or methanol are permitted. Any attempt to circumvent this rule will result in disqualification from the event and or fines/suspensions. All engines must be naturally aspirated. Blowers, nitrous, turbochargers, and water injection systems are not allowed in ANY class.

Tires must be lawn tractor tires in all classes except for FX, KARTS, FXS or FXT.

Substituted steering wheels are permitted. They may not be mounted offset.

All positively charged terminals must be insulated with a cover or heavy tape. Battery must be well secured on the mower.

All mowers must be safe and complete with all parts and panels in places no missing fasteners. Machines that have been involved in an accident resulting in removal of body parts will only be allowed back on track after the mower has been inspected to determine if safe.

All exposed sprockets, chains, and pulleys must be fitted with metal guards deflecting a broken chain downward.

A rear bumper is highly recommended and should be no wider than the rear tire width, fabricated from tubing with radius bends and installed a maximum of 2" closest surface of the rear tire. Recommended height of 6" and 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.

Seats 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. The lowest portion of the seat pan should not be mounted any lower than 13" from the ground.

Sheet metal should be as delivered from the factory with the following exceptions:

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 All panels must be securely fastened so as not to create a safety hazard. **Mowers must be free of sharp edges, projections and protrusions**.

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. Mowers must present a neat and clean appearance.

Trimming fenders such that there remains ¼" of clearance between the fender edge and the top of the tire. Fender trimming should follow the contour line of the fender, not merely remove sheet metal in the immediate area. 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.

Race numbers should be a minimum of 5" high and of a sharply contrasting color from its background, and be visible from all four sides of the mower. Mowers without numbers or mowers with same number will be assigned one during registration. Duplicate numbered mowers will be assigned based on the order of arrival.

All motors must be of lawn mower origin! Engine must be originally manufactured for use in lawn mowing equipment and be stock appearing, with the exception of air filter, air cleaner or velocity stack. (GP, GPT, GPK, IMOW and JP 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 for AP, SP, CP and BP ONLY!! In every class, original engine block assemblies must be used, example; cylinder block, sumps, side covers and cylinder heads. The only exception is the valve cover in which billet/aftermarket valve covers can be used to allow clearance for roller rockers if used. Billet side covers and sumps or forged aftermarket cylinder heads are illegal. No overhead cams allowed on any Prepared class.

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.

Starter must be onboard, either electric or pull-rope.

All mowers must have a functioning mechanical clutch. No chain drive from engine to transmission is allowed on Prepared chassis. Driveline may be modified from the engine pulley to the rear wheels, but must utilize a shift able lawnmower transmission or transaxle. No Veri-Drives, No centrifugal and or torque converter clutches.

Axles must be a 1-piece beam design.

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. All steering linkage must be ball-type or spherical threaded rod ends with lock nuts.

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

Rear axles must either use lock collars or a nut and bolt through the axle, no longer will C-clips be allowed. Must use axle mounted brakes, no lawnmower transaxle or transmission mounted brakes.

Front spindles will use either lock collars or castle nuts with cotter pins. Lock nuts will no longer be sufficient. Cotter pins, E-rings and C-rings alone, bent nails, etc.. are not sufficient for wheel retention and are not approved.

Lawnmower tires must be used.

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 roll over.

All parts should be of lawn mower origin with the exception of those specifically mentioned. Hoods and body parts such as fenders may be upgraded from year to year only if the parts are from a similar lawn mower. Aluminum Flywheels are mandatory for AP, SP, CP AND BP class racing mowers, however all governed class racing Mowers (IMOW, JP, GPK, GP and GPT) must have original stock flywheel. No modifications to any governed engines!! No TOLERANCE!!

JP/IMOW: All JP drivers 9-15 years old. You may enter JP with one year experience in MM or MMP.

IMOW age 16 and above.

Parents/ legal guardians must be present.

Parents/ legal guardians must be available to work corners or in the infield if needed during JP Races.

ENGINE: Governed engines, 3650-RPM max. (No Load). Single-cylinder Over-Head Valve & Valve in block ("L" Head") engines must be factory stock. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement. Twin cylinders engines are not allowed.

CHASSSIS: Gear is to be 8 rotations of the motor to no more than 1 rotation of the tire. NO TOLERANCE!!!

Example: while in the highest gear the rear wheels can turn no more than one revolution every time the engine rotates eight times. Mowers using a chain drive type transmission must use an axle-mounted brake system.

Rear tires maximum is 16" diameter as written on the sidewall of the tire. Actual Diameter may not exceed 16 ¼". Maximum 15 PSI tire pressure.

**GP:** Governed engines, 3650-RPM max. (No Load). Single-cylinder Over-Head Valve & Valve in block ("L" Head") engines must be factory stock. After market consumable parts such as air filters and spark plugs may be used as long as they are a direct stock replacement. Twin cylinders engines are not allowed.

CHASSIS: 42" minimum unaltered wheelbase. 46" maximum.

6" minimum front wheels, 6" minimum rear wheels, and there is no gear ratio restriction. Width is a maximum 40", sidewall to sidewall.

GPT: Twin cylinder engine not to exceed 49ci. Governed at 3650 RPM max (No load)

Chassis build requirements will be identical to GP.

**GPK:** Ages 11-15 years old. The age of GPK is 11 years old and you must have at least one race year with more than 6 Races in the J/P, MM, or MMP class before moving up to the GPK Class.

Chassis build requirements will be identical to GP.

**SP:** All single cylinder 4 stroke valve in block. Any internal modifications allowed. Must be stock appearing.

Chassis build requirements will be identical to GP.

**CP**: All single cylinder overhead valve and two cylinder valve in block, 4 stroke engines. Any internal modifications allowed. Must be stock appearing.

Chassis build requirements will be identical to GP.

**BP**: All overhead valve V-twin 4 stroke engines, 49 ci and smaller.

Chassis build requirements will be identical to GP.

**AP**: 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. Maximum width, 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.

# **FXS and FXT**

**ENGINES:** Billet flywheels required. All cooling fins and safety shields must be intact. No external welding on block or heads to increase clearances. No diesel or liquid cooled engines in any class. No alchohol, methanol, nitrous or any other additives than gasoline. FXS & FXT Engines must be mower engines or direct replacement engines (example Clone engines), no 305 or star engines. Exhaust is open, as long as it points down and away from driver and presents no apparent hazard. No stacks.

**CHASSIS:** We highly recommend when building to use frames, parts, and retain original manufacturers (OEM) specifications.

No chopping of the frame, ie; wheel base must retain stock specs.

Material (steel) may be added for structural strength. It is recommended that front axles be bolted or welded rigid eliminating the stock pivoting. Round or square front axles ok as long as in stock location.

## NO KART LIKE/TYPE FRAMES!!

No rear engine lawn mowers, must be front engine traditional style lawn tractor with a hood covering the engine and rear fenders.

Rear axles must be in stock location, cassettes no wider than 15", and a front axle must be located close to the original location and not on top of chassis. Rear axles must either use lock collars or a nut and bolt through the axle, no longer will C-clips be allowed. Rear axle may use, locked, live or solid axle. No single wheel drives.

All steering linkages must use ball-type or spherical threaded rod ends.

Front axle may be pinned, bolted or welded into stock position. No suspension, no shock absorbers. Axles must be a 1-piece beam design. 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 onepiece axle. Front spindles will use either lock collars or castle nuts with cotter pins. Lock nuts will no longer be sufficient. Cotter pins, E-rings and C-rings alone, bent nails, etc.. are not sufficient for wheel retention and are not approved.

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

No handlebars, to prevent a racer from being pierced in the event of a roll over. All tractors must have been factory-built, lawn cutting tractors. Frame width is 15" max. In other words, rear axle cassettes mounted no wider than 15" and in stock location in accordance to factory frame.

All positively charged terminals must be insulated with a cover or heavy tape. Battery must be well secured on the mower.

All mowers must be safe and complete with all parts and panels in places no missing fasteners. Machines that have been involved in an accident resulting in removal of body parts will only be allowed back on the track after the mower has been inspected to determine if safe.

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". Firewall protection recommended. Discreet chopping of chassis to install aftermarket clutches, gear box, seats and axles allowed. Must retain original OEM wheel base.

**WHEELS/TIRES:** Though offsetting of axles is permitted, tire sizes will be of the same size per axle, example: same tires across the front and same tires for the rear.

BRAKES: Hydraulic Brakes are mandatory. Front brakes optional. Mounted to axles.

**WHEELS/HUBS:** Go Kart dirt tires are allowed, minimum 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..

**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 .

**STEERING:** Direct steering is mandatory, must use lock nuts on all connections. All exposed sprockets, chains, and pulleys must be fitted with metal guards deflecting a broken chain downward

**BODY WORK:** Can be customized (where allowed) but must retain some resemblance of a lawn tractor. All parts must be securely fastened to chassis i.e. fuel tanks, batteries, body work, etc. Front and rear wings are allowed, 3" maximum. Body can be homemade 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.

**FUEL:** Pump gasoline fuels are permitted. No electric fuel pumps are allowed. Any gasoline carburetor. No fuel injection.

# THERE WILL BE NO REFUELING ON HOT MOTORS AND YOU MUST HAVE A FIRE EXTINGUISHER PRESENT WHILE FUELING

**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.

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

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

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

**BUMPERS/NERF BARS:** Mandatory. Max width front: Inside tires not to cover front face of the tire. Side nerf bars are flush to the outside of tires. No sharp edges. Rear bumpers and side bars 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 must be installed no more than 1.5" in from outside of tires. They must have a kart style secondary hoop that can withstand side impact. Front Bumpers on FXS & FXT cannot exceed 2" pass the sides of the Hood, and at no time will the front bumper cover or protect the front tires, they are intended to protect the front hood only. They will be made of round or square stock not exceeding 1" in diameter.

**NUMBERS:** All tractors must have a visible and of contrasting color number. Minimum **5**" height on a contrasting background.

FXS:

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

**MAX ENGINE:** Single cylinder OHV or Opposed twin Flat Head coming from the lawn equipment origin (4 cycle engines). No fuel injection.

**OHV ENGINES:** 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. Billet side covers ok. Billet sumps or forged aftermarket cylinder heads are illegal. Single cylinder 4 stroke OHV lawn equipment engines. Internal modifications allowed. Carburetors size/type open and 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.

**FLAT HEAD TWIN ENGINES:** Any internal modifications allowed. Carburetors size/type open and custom intake manifolds allowed and external ignition devices are allowed. Cross brands of lawn tractor OEM ignition systems allowed. Mandatory billet flywheel.

## MIMNUM WEIGHT with the driver is 450 lbs.

FXT:

**AGE GROUP:** 18 Years old with more than 2 years experience in prepared class and or extensive professional experience to race in FXT.

**ENGINE OPEN:** V-Twin vertical or horizontal Max 49ci OEM Rated 4 cycle lawn equipment engines. Internal modifications allowed for all engines. After market aluminum billet flywheels are mandatory. 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. Billet side covers ok. Billet sumps or forged aftermarket cylinder heads are illegal. Any gasoline carburetor.

## MINIMUM WEIGHT with the driver is 500lbs.

## **FX CLASS RULES:**

MM/MMP/FX-N/FX-L

Rules of the track, pits, grid, driver safety equipment, code of conduct and points will be the same as above per NASGRASS general rules.

Frame build may be of round or square tubing. Frame width max 15". Must be steel, No aluminum frames. Bumpers mandatory as lined out above for FXS and FXT. Side nerf bars no greater than 1" past tire width.

Body/hood may be home made but be formed like a mower. Stock mower body/hood/ is the PREFERRED CHOICE, especially old school hoods!!

Min 5" diameter or 6" diameter aluminum wheels.

Wheelbase minimum 39". Maximum 46". Maximum 42" width and offset allowed as lined out above for FXS and FXT.

All steering components must be fastened securely with nylocks or safety pins or cotter keys.

Kill switch must be of jet ski type tether as per NASGRASS specs.

Hydraulic KART type brakes intact and working safely, front brakes optional.

Exhaust routed down, away from driver and competitor, if exposed must have header wrap.

Carburetors must have double springs as per NASGRASS standard.

Front axle round tube or boxed and steel. Axles must all have safety clips, bolts or pins.

Chains, sprockets and clutches must have METAL guard covers protecting driver. Any shoe or drum type clutch allowed.

May use foot pedals or hand throttles.

Numbers must be a bright contrasting color with A minimum height of 5" tall.

Moving up to advanced classes within the FX chassis classes will be contingent on approval from track officials.

## FX CLASS SPECIFIC RULES:

MINI-MOW: Ages 6-11.

The intent is to start racing at the age of 6 with one chassis and be able to move up without having to build multiple machines. IE..one chassis for 4 classes.

Entry level, low cost solution for getting kids into racing with a machine that can be moved up to 3 other class levels.

6:1 Final drive rule. NO EXCEPTIONS!! Example: 12T clutch, 12T on Jack shaft and 72 axle sprockets.

1" inspection hole at clutch drum. Mark on clutch and should be one revolution of the tire to 6 revolutions on the clutch. NO EXCEPTIONS!!!

Tires maximum 12" diameter, 5 or 6" wheel and checked with a tech gauge. No tolerance!! 12" means 12"!!

Engine: 6.5 HP 212 predator motor max RPM 3650. No tolerance and teched after feature race. Aftermarket air filter and pre-filter ok. No modifications whatsoever other than header and cone type air filter.

### MINI MOW PRO: AGE 9-16.

A class to step up after kids have mastered MM.

Only changes that can be made from MM to MMP is you can change gear ratio of 4.35 (12-12-14-61) or (16-16-69). These are the only 2 sprocket set ups allowed. No other options.

Must have minimum 1-year experience in MM.

#### FX NOVICE: AGES 13+.

A class for FX style chassis and driver's to prepare and introduce the speeds of the FX-LITE class.

#### The following engine modifications are allowed:

No governor or RPM restrictions.

Billet flywheel Mandatory. (ARC Non-Adj. Only.)
Stock ignition.
Stock or Billet rod. (Stock Length Only)
Stock piston no modifications.
No head or valvetrain modifications PERIOD!!
Thin .009 head gasket ok.
Cam – Stock or Mod 2 Grind ONLY!!!
18# Valve springs max.
Stock appearing carburetor.
Pump gasoline only, no additives. No methanol, nitrous or alcohol.

Open gear ratio, no rule.

Any clutch.

Any 5" or 6" diameter kart tire, grooved or slick.

FX-LITE: AGES 16+.

Built race chassis with top speeds, not for beginners.

212 clone engines. open to internal modifications and head modifications. No billet cylinder heads, stock factory heads only!! Any gasoline carburetor. Any internal modification, no external welding allowed. Billet side covers and valve covers ok. Any intake. Pump gasoline only, no additives. No methanol, nitrous or alcohol.

Open gear ratio, no rule. Any clutch.

Any 5" or 6" diameter kart tire, grooved or slick.

**Avon Park Mower-Plex Kart Class Rules:** 14 years old at the beginning of the season with at least 2 years experience in other classes. Must give proof of prior race experience to qualify for this class.

Must be sprint kart chassis only. NO CHAMP, WINGED OR YARD KARTS.

Rules of the track, pits, grids, driver safety equipment, code of conduct and points will be the same as above per NASGRASS general rules including no bumping or aggressive driving. This will NOT BE TOLERATED!!!

Engine: must be Predator or clone 212/6.5hp block and have billet flywheel and a chain guard. Stock appearing, no external welding. Any gasoline carburetor. Only approved external billet components are the flywheel, valve cover and side cover.

Open Weight.

35 chain only, no 219 chain allowed.

Open tire brands. Slicks only, no larger than 13".

Karts must have numbers minimum of 5 inches on all four sides.

Unleaded pump gas only. No methanol or race fuel.

Clutch may be a shoed or disc clutch.