****Text in red has been updated for 2019. Please read through the entire rulebook as we have changed the formatting and it is possible that some of the rule updates for 2019 may not have been highlighted in red text. It is the competitor's responsibility to read, understand, and follow these rules.****

Note: In addition to the class specific rules herein, all general rules written for each applicable series apply as well. Please refer to the series general rule book for more information.

2019 Lucas Oil Midwest Short Course League (LOMSCL) PRO SXS Class Rules

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all Lucas Oil Midwest Short Course League (LOMSCL) events, and, by participation in these events, all LOMSCL members are deemed to have acknowledged, accepted and complied with these rules. No express or implied warranty of safety shall result from publications of, or compliance with these rules and/or regulations. The rules are intended as a guide for the conduct of the sport, and are in no way a guarantee against injury or death to participants, spectators or others.

LOMSCL rules are the sole property of the Lucas Oil Midwest Short Course League. Use of these rules by any other organization or individual is forbidden unless prior written consent is given by LOMSCL.

LOMSCL, its parent, affiliates, members, officers, directors or staff assumes no responsibility, legal or otherwise, for failure or malfunction of any products of manufacturers listed in this rulebook. LOMSCL is NOT liable for actions or decisions made by individuals, promoters, or organizations, etc. using LOMSCL rules.

Specifications and/or suggested standards contained in this rule book are intended for use as a guide with respect to safety and for no other purpose either expressed or implied. The use of the specifications and/or suggested contained herein by any association, organization, manufacturer or individual is entirely voluntary and **LOMSCL will NOT** accept any responsibility for consequences resulting from the application or said specifications and/or suggested standards.

Pro Stock SxS: Up to 1000cc Production based Normally Aspirated Side by Side (SxS) vehicles.

Pro Modified SxS: Up to 1000cc Modified Production based Turbocharged & Normally Aspirated Side by Side vehicles.

The spirit and intent of the rules is going to be the standard by which Lucas Oil Midwest Short Course League is guided. **These Side by Side (SxS) classes are production based, and as such if this rule book does not specifically say that you can do something, then you must consider that the change or modification is illegal.** It is the responsibility of each participant to ensure that his/her conduct and equipment complies with all applicable rules. **These rules are subject to amendment or change by Lucas Oil Midwest Short Course League headquarters at any time in the interest of competition.**

This rule book is intended to serve as a guide for the conduct of short course racing and is in no way a guarantee against injury or death to participants, spectators, or others.

The Technical Director holds final decision-making power on any stock/ non-stock component deemed legal or illegal to race.

SXS-1 VEHICLE SIGNAGE:

A. Advertising on race vehicles must be in good taste.
B. LOMSCL may require the use of specific sponsor decals.
C. Team vehicles with the same paint and colors must have prominent distinguishing markings of some kind. Tech Director reserves the right to require additional markings to help distinguish between vehicles.

SXS-2 NUMBERS AND STICKERS:

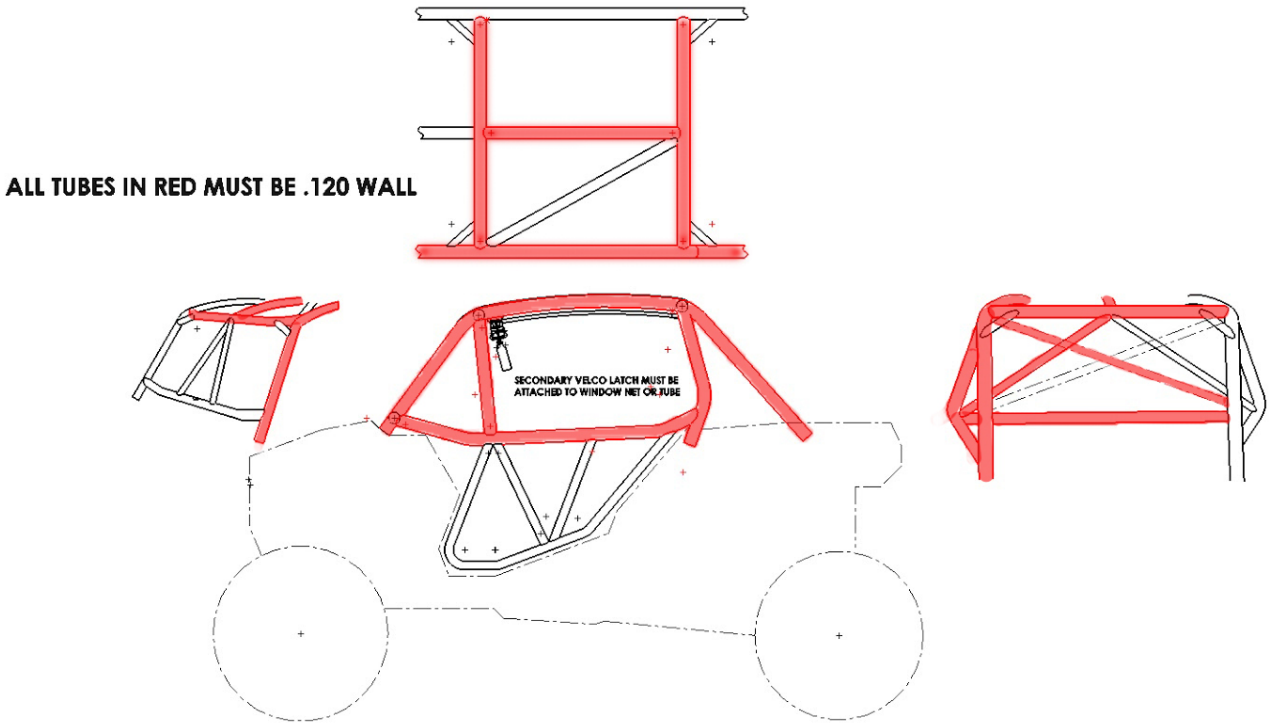
A. All LOMSCL vehicles are required to have LOMSCL stickers on each side of the front of the door area, 4 inches down from the window opening.
B. All UTV vehicle numbering is assigned by LOMSCL.
C. All UTV classes will have vehicle numbers from 0 through 99.
D. Both Pro-Stock UTV & Pro-Mod UTV classes will have solid black numbers on white background for all 5 numberplate locations.
E. Numbers on all number plates must be applied side by side. No slanted (or italic'd) numbers.
F. Fonts must be chosen from one the below approved styles only:
    a. Impact
    b. Helvetica Black
    c. Mechanical Bold
G. Numbers must be mounted in a manner that keeps them as clean and unobstructed as possible.
H. LOMSCL officials may require a competitor to use a different number to avoid confusion or duplication at an event.
I. In the event that a number is not visible from the timing and scoring area, the competitor will not be scored. It is the competitor's responsibility to make sure that the number is visible during all race conditions.
J. Foil or reflective numbers are not permitted.
K. Side number plates: One number on each side of the vehicle, on a number plate mounted high and close to the back of the roof, and parallel with the front to rear tire line. Minimum number plate size: 10 inches high by 14 inches long. Minimum number size: 8 inches by 1 ½ inches.
L. Rear of vehicle: The back of the vehicle facing the rear, on a number plate mounted directly in the center rearmost area of the vehicle so that it can be seen above (but not attached to) the bumper when viewed from the rear of car. Minimum number plate size: 6 inches high by 8 inches wide. Minimum number size: 5 inches by 1 ½ inches.
M. Roof of vehicle: Positioned so that the number is read from the passenger side, parallel with the passenger side outer roof bar. Minimum number plate size: 10 inches high by 14 inches long. Minimum number size: 8 inches by 1 ½ inches.
N. Upper left hand corner of windshield area: Minimum Number plate size 5 inches high by 6 inches long. Minimum number size: 4 inches.
O. All numbers are required to be BLACK on a solid WHITE background.
P. All numbers must be easily visible with no obstructions by bodywork or chassis.

SXS-3 ROLL CAGE AND CHASSIS:

A. All vehicles must utilize the stock chassis and maintain stock appearance. The stock chassis (frame) is defined as the main lower rails running along the inner sides of the SXS and the front and rear tubes that connect them. The chassis may be modified for durability and strength but must retain the stock width, length, and configuration. Any modifications and/ or repairs must be pre- approved by LOMSCL officials in writing. E-mail all requests to baxup@lucasoiloffroad.com.
B. No carbon fiber or titanium materials allowed in chassis or body construction. Carbon Fiber and titanium allowed in engine configuration, only if produced OEM or in the construction of a LOMSCL approved exhaust system. Carbon fiber may only be used in exhaust mufflers, cans, and resonators.
C. Unnecessary tabs and brackets on the OEM chassis may be removed only if pre-approved in writing by LOMSCL officials.
D. Series approved aftermarket roll cage required.
E. Cages may be constructed with one front vertical hoop, one rear vertical hoop, two interconnecting top bars, two rear down braces, one diagonal brace, or with one vertical hoop on each side of the vehicle with interconnecting bars at the bottom of the windshield area, the top of the windshield area (between C pillars/ windshield side support bars), and between the tops of the B pillars.
    1. On cages with side to side main hoops, the two top interconnecting bars must be placed as far to the outside of the top part of the front and rear hoops as possible.
    2. Rear down braces and diagonal brace must angle a minimum of 30 degrees from vertical. At the bottom of the diagonal brace there must be a cross member of the same tubing material and dimensions as the hoop.
F. There must be a minimum of 3 inches clearance between driver's helmet and roll cage and roof.
G. All single tube intersections must be reinforced with gussets.
H. Gussets must be installed at all intersections, including diagonal and rear down braces, where single weld fractures can affect occupant's safety.
I. Triangular gussets may be constructed of minimum .090 inch x 3 inch x 3 inch flat plate or tubing gussets made of same material and thickness as roll cage.
J. Roll cage terminal ends must be attached to a frame or body member that will support maximum impact and not shear or allow more than 1 ½ inches of movement in the cage terminal end.
K. Minimum tubing diameter and thickness is 1 ½ inch diameter by .095 for main roll cage tubes not specified as requiring 1 ½ inch by .120" tubing. This includes the front to back mid rail shoulder bar. Rear cage 'X' or diagonals and windshield brace tubes may use 1 ¼ inch diameter by .095 tubing.
L. Roll cage material must be 4130 chromoly or DOM.
M. All tubing, welds, gussets, and roll cage construction must be approved.
N. Entire roof must be covered with sheet metal or .063 inch minimum aluminum.
O. It is recommended that stock cage and seat belt mounting plates be reinforced, especially on Pre-2012 vehicles.
P. Rear Firewall: Complete vertical portion of the rear firewall is required. Stock plastic is allowed, but competitors are encouraged to use .063 aluminum minimum. This means that the whole firewall is required from the floor all the way up to the portion that makes the bend rearward at the top, NOT just the lower portion.
    a. Pro-Stock vehicles are not allowed any openings in the rear firewall and the firewall must remain full height from side to side of the vehicle.
    b. Pro-Mod vehicles are allowed to relocate the radiator, and/or intercooler into the driver's compartment but they must be completely covered on the driver's side and top.
Q. Beginning January 1, 2019, all new vehicles that have not raced previously in LOMSCL, TORC, LOORS, or LORORS competition events will be required to meet the following roll

cage rules. With pre-approval, Pro-Stock and Pro-Modified vehicles that have raced prior to January 1, 2019 will be allowed to compete during the 2019 season using the 2018 roll cage rules. As of January 1, 2020 all vehicles will be required to meet the following roll cage rules.

a. 1 ½ inch 4130 chromoly or DOM tubing is required for main roll cage tubes, and 1 ¾ inch is highly recommended. Refer to drawing for required .120" tubes.
b. Driver's side only main A pillar hoop must be .120 inch minimum tubing on all new roll cages. On RS1 cages both A pillars must be .120 inch minimum tubing. This is the tube from the left front top of fender cage mount up to the A pillar back over driver's left shoulder to rear main hoop. Refer to drawing for required .120" tubes.
c. 2 seat vehicles: One front to back center bar is required in top cage. Top left half of roll main cage above driver's head must have one 1 ½ inch x .095 inch diagonal bracing bar. RS1: One 1 ½ inch x .095 inch diagonal bracing bar is required above driver's head.
d. It is recommended that stock cage mounts and seat belt mounting plates be reinforced.
e. Roll cage width must be similar in style to a stock 2 seat UTV. No narrow width cages. RS1: must also maintain stock cockpit width or wider.
f. Preferred method of race cage mounting is welded on roll cage. Bolt-on cages are allowed but must be approved and must utilize Grade 8 or better bolts. Secondary reinforcement of the bolt together clevises is required in the form of either two 1 inch long welded doubler plates on each side of clevis joint, or two 1 inch long welds on each side of clevis joint.
g. Other than the original bolt-in clevis, no additional material may be removed from the original chassis for roll cage attachment.
h. Must have a 1-½ inch by .095 inch minimum size DOM or chromoly dash bar located between the A-pillar joints connecting the two sides of the car with 1 single un-interrupted tube.



Pro-Stock/ Pro-Modified RS1 BASIC ROLL CAGE DESIGN

2019 UPDATED RS1 DRAWING COMING SOON

SXS-4 DOORS:

A. Door area must be covered with sheet metal or a minimum of .063-inch thick aluminum. Panel must be attached with bolts or dzus buttons.
B. Fully integrated door bars to OEM chassis are also allowed. Driver and passenger side tubes must be a minimum 1-½ inch diameter by .095, 4130 Chromoly or DOM. Refer to drawing for all tubes required to be .120" wall or thicker.
C. U shaped tube must be attached in multiple spots to stock frame or chassis.
D. Doors must have 'X', 'A', 'V' or Ladder design bracing designed to provide maximum protection to the driver's side.
E. X, A or V designs must use a minimum 1-¼ inch diameter by .095, 4130 chromoly or DOM.
F. Ladder design must use a minimum 1-¼ inch diameter by .095 for main rails and 1-¼ inch by .095 for rungs.

SXS-5 DRIVER COMPARTMENT:

A. Driver must be able to enter and exit, unassisted and with great ease, the driving compartment with the vehicle in any position. Firewalls and/or bulkheads must separate the driving compartment from any fuels, engine fluids, and acids.
B. Driver's seat must be mounted within 2 inches of stock location and be bolted in. Race seat is required. Must meet SFI Requirements. If it does not meet SFI 39.2 standard, it is subject to approval by LOMSC. Seat may be lowered. Stock plastic panel below seat to floor may not be cut down or trimmed with the exception of minimal holes allowed for seat tabs or mounting of seat. Minimal trimming may be allowed in the case of full containment seats. Any interior trimming for seat installation must be pre-approved by LOMSCL officials.
C. If no passenger seat is used, gas tank area must be completely covered with aluminum firewall.
D. A 5-point motorsports specific harness is mandatory. It must be SFI 16.1 or 16.5 rating with the manufacturer's date tag not expired (on harness' manufactured after Jan 1 2018), or less than 2-years from the punch date on belts manufactured prior to Jan 1 2018.
E. Driver side window net is mandatory, and must be latch style mounted in the top left corner as per the roll cage drawing,
    a. No spring loaded retention bars allowed.
    b. Both top and bottom mounting rods must be 1/2 inch solid steel rod and extend past any retaining bracket at least 1 inch.
    c. No holes will be allowed in the roll cage tubes for window net rods.
F. The driver's side front triangle window opening must be covered if the driver's hand can reach out past the side bar in front of the C-pillar (side windshield support bar)
G. Reinforced floorpan is recommended. (For 2020 season, a .095" thick aluminum floor will be required. This floor panel will be required to reach from the front firewall rearward past the driver's seat, and from the door panel to the center console in the middle of the car)
H. Rock screens must cover entire area in front of driver.
    a. Construction to be a minimum of .120 rod and rod spacing shall be no greater than a maximum 1.5" opening.
I. Dash and all floor and interior panels in stock location are required. Stock dash is recommended, however aluminum will be allowed. Minimal cuts or openings are allowed for roll cage and tabs. Glove box and door and center foam lined storage box may be removed.
J. Rear Firewall: Complete vertical portion of the rear firewall is required. Stock plastic is allowed, but competitors are encouraged to use .063 aluminum minimum. This means that the whole firewall is required from the floor all the way up to and including the portion that makes the bend rearward at the top, NOT just the lower portion.
    a. Pro-Stock vehicles are not allowed any openings in the rear firewall and the firewall must remain full height from side to side of the vehicle.
    b. Pro-Mod vehicles are allowed to relocate the radiator, and/or intercooler into the driver's compartment but they must be completely covered on the driver's side and top.
K. With pre-approval, the lower front firewall (foot box area) can be covered or replaced with .063" aluminum for safety.
L. If the vehicle has a .090" or thicker aluminum or steal floor on the driver's side (from front firewall to rear firewall, and center console to outer driver's side tube of chassis), the center console may be removed to allow easier relocation of the shifter handle. If the removal of the console exposes any parts of the driveline they must be completely covered by .063" aluminum.
M. No complete aluminum interiors are allowed. With the exception of the panels specified above, all other floor and interior panels must remain stock.

SXS-6 MEASUREMENTS AND WEIGHTS:

A. All measurements will be performed with LOMSCL technical instruments and gauges. LOMSCL officials determine all measurements and center points.
B. Weights:
   Pro Stock minimums:
      a. RZR1000 & RS1 1600 LBS with driver.
      b. YXZ1000R 1775 LBS with driver.
      c. Wildcat XX 1825lbs with driver.
      d. Any new models not listed above will be required to begin competition at the same weight as the heaviest existing model until sufficient data has been collected in order to determine a new minimum weight to maintain long term competition parity among the different makes and models
   Pro Modified minimum vehicle weight:
      a. Pro Mod with Turbo:
         1.) RZR Turbo & Turbo S: 1750lbs with driver
         2.) X3 Turbo: 1825lbs
         3.) YXZ 1000R with GYTR turbo kit. 1825lbs.
         4.) Any new models not listed above will be required to begin competition at the same weight as the heaviest existing model until sufficient data has been collected in order to determine a new minimum weight to maintain long term competition parity among the different makes and models
      b. Pro Modified Naturally Aspirated (NA) 1600 LBS with driver.
C. Added weight must be securely bolted in place to the chassis in a safe and strong manner using at minimum 2 3/8" Grade 8 (or better) bolts for each 10 lbs added. For blocks of weight over 10 lbs, 2 x 1/2" Grade 8 (or better) bolts are required. Weights cannot be attached using Velcro or clamps.
D. Dislodged weight cannot be returned to the vehicle for weighing at the end of the race.
E. All block ballast must be painted white and identified with vehicle number.
F. Weight can be sealed at the discretion of officials.
G. No weight shifting devices of any kind are allowed. This includes, but is not limited to hydraulic or electronic devices.
H. All vehicles will weigh in before and/or after competition at the discretion of officials. Failure to do so will result in disqualification.
I. All weight loss on track will result in a $5.00 per pound fee.
J. Weight may be adjusted at the discretion of officials throughout the season in the interest of competition.

SXS-7 BODY & FENDERS:

A. Fenders must be securely attached to vehicle. The removal of fenders during competition during any reason other than damage incurred during the race will result in disqualification.
B. Fenders must be attached in such a fashion as not to create a pointed or sharp extrusion when removed. A loop body mounting bracket construction is mandatory.
C. Additions to the body of the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.
D. Vehicles must maintain an appearance similar to the stock SXS.
E. Beds can be removed for the purposes of strengthening the integrity of the rear framework.
F. Hoods must remain stock and mounted exactly in the stock location.
G. All other body panels must be stock or aftermarket stock replacement and mounted in OEM location. No rolling fender flares under, or sucking rear fenders in at the back!
H. Additions to the body of the race vehicle, such as fins, scoops, wings, and other extruding additions will not be permitted.

SXS - 8 BUMPERS:

A. Vehicles must have front and rear bumpers. LOMSCL officials must approve all bumpers.
B. Bumpers must be designed in such a way as to inhibit two vehicles from becoming locked together.
C. Ends must be capped and rounded with no sharp edges.
D. All classes are to have side nerf bars.
    a. Nerf bar to be a minimum 1" x .095" diameter mild steel.
    b. Must be as wide as centerline of tire or wider from front of vehicle to back.
    c. Must be capped and have rounded (looped) ends, no sharp edges exposed.
    d. Distance of protection must be no greater than 12" from rear tire.

SXS - 9 SKID PLATES AND FLOORBOARDS:

A. Skid plates designed to reasonably protect the front suspension, steering, and brake components are recommended on all vehicles. Plates must be made of metal and be securely attached.
B. Stock SXS floorboards are acceptable but extra protection made of metal or aluminum is highly recommended.
C. For the 2020 season, Driver side foot floor well must be covered or replaced with .090" (or thicker) aluminum or steel, from the front firewall to the rear firewall, and from the outer OEM chassis tubes to the center console (or center of the car if the center console is removed).

SXS-10 SUSPENSION:

A. All A-arm mounting points must remain in the stock location and position as delivered from the manufacturer, however they may be reinforced for strength.
B. Pro Stock:
    a. Maximum width is 72.5" as measured at the widest part of the tires (front and/ or rear) with the vehicle at ride height.
    b. This is meant for all vehicles to retain stock dimension hubs in their stock locations but to allow for the use of aftermarket wheels and/ or wheel spacers.
    c. Control arms and trailing/ control arms must remain stock lengths and stock shock mounting locations (i.e. leverage ratio) and fit into a jig that has stock pick-up points, shock mounting points, and ball joint location.
        1. RZR1000 trailing arms will be allowed to relocate the shock side to side on the trailing arm provided that the leverage ratio is not altered from OEM.

    Pro Modified:
    a. Maximum width is 76" as measured at the widest part of the tires (front and/ or rear) with the vehicle at ride height.
    b. Only OEM dimension, or LOMSCL pre-approved commercially available long travel suspension components are allowed.
C. Must maintain OEM Wheel Base. No shortening or lengthening.
D. Minimum ride height of 8" as determined by technical inspector measuring to any chassis, floor, or skid plate along the bottom of the vehicle. This includes any suspension mounting points that may hang down below the main chassis.
E. Aftermarket sway bars are permitted.
F. LOMSCL approved stock dimension aftermarket hubs are allowed.
G. No ceramic or polished wheel bearings will be allowed.
H. Trailing/ control arm mounting points may be re-enforced but may not be moved or relocated.

SXS-11 STEERING:

A. All steering components must be in good condition and proper working order. Drag link and tie rod ends must be secured with a cotter pin or safety wire in each one.
B. Power steering is permitted.
C. Steering "quickeners" are permitted.
D. LOMSCL officials must consider steering reasonably safe before vehicle is permitted to compete.
E. LOMSCL approved steering wheel quick release is allowed
F. Tie-rods may be replaced with heim joints provided they mount like stock at each end.
G. Aftermarket direct replacement rack and pinion allowed provided it mounts in the stock location and accepts all stock steering components.

SXS-12 SHOCKS:

A. There must be at least one and only one shock absorber per wheel in working condition at the start of the race.
B. Pro Stock:
    a. All shock mounts must remain in stock location.
    b. No bolt on extensions.
C. Pro-Mod:
    a. Shock mounts may be relocated.
D. BUMP STOPS - Suspension bump stops must be of the solid type.
E. TORSION SYSTEM - The only torsion system that is acceptable is a coil- over shock.
F. On-board shock adjustments are NOT permitted unless using unmodified OEM original equipment shocks (i.e. Polaris Dynamix) and must use OEM control system. Shock ECU can only be remapped with pre-approval by LOMSCL officials.
G. Aftermarket externally adjustable shocks are allowed, but can't be able to be adjusted while the vehicle is on track
H. Bypass shocks are not permitted unless using unmodified (only allowed to modify piston valving and nitrogen pressure) OEM original equipment shocks (i.e. Can Am X3 rear shocks and Polaris Velocity shocks) that came on the same model vehicle from the factory).

SXS-13 BRAKES:

A. Brakes must be in safe working condition and be able to apply adequate force to lock up all four tires.
B. Brakes must remain in safe working condition during entire event. If at any time a competitor loses any brake function they should exit the track and park the vehicle.
C. Turning or cutting brakes are not permitted.
D. Rotors, calipers, and brake pads may be upgraded provided all components are commercially available, bolt on (no welding required) using OEM mounting holes, and are LOMSCL approved.
E. OEM master cylinder is required.
F. Brake bias adjusters are not allowed.

SXS-14 ENGINE:

A. All vehicles must use OEM engine cases and cylinder head. LOMSCL reserves the right to mark engine blocks prior to event.
B. All vehicles must use same fuel delivery system as stock and designed by factory.

C. Electric fuel pumps are permitted in accordance with LOMSCL safety requirements for fuel pumps.
D. Engines may be replaced during a LOMSCL event only after competitor has notified LOMSCL officials and brought the engine being removed to the tech trailer.
E. Two adjacent head bolts must be drilled with a .125" minimum diameter hole so that a LOMSCL official can install an engine seal. Failure to drill these head bolts may result in a penalty. Engine seals may only be removed by LOMSCL officials. If a sealed engine is found to be illegal in any way the engine will be confiscated and disqualification for all rounds of competition said engine was used in during the event the engine was inspected for.
F. Head bolts may be replaced with a head stud kit with LOMSCL approval. Approved .125" holes will still be required so that LOMSCL officials can install an engine seal.
G. All vehicles can replace cam chain tensioners with commercially available LOMSCL approved manual timing chain tensioner.
H. All vehicles can replace the fuel rail with a commercially available LOMSCL approved fuel rail provided that it is a direct replacement and serves no other purpose other than to route fuel to the fuel injectors.
I. Pro Stock specific engine rules:
    a. Engine displacement not to exceed 1000 cc.
    b. Engines must remain completely stock. No internal modifications.
    c. Stock throttle body must be used. No modifications allowed.
    d. All internal and external components must be used in their original OEM condition.
    e. All Yamaha YXZ1000R can update to 2019 connecting rods
    f. All Polaris XP1000 and RS1 can replace the cam buckets with OEM XP900 cam buckets, lash shims, and retainers.
J. Pro-Modified specific engine rules:
    a. Normally Aspirated engines:
        1.) Approved pistons and rings with an increased bore size may be used so long as the displacement does not exceed a maximum of 1075cc.
        2.) Stroke may not be increased or decreased. Crank must remain unaltered as delivered by the OEM.
        3.) Approved steel aftermarket rods can be used but must retain OEM critical dimensions (center to center length, big end diameter and width, and wristpin diameter and width)
        4.) Block may be sleeved with LOMSCL pre-approval
        5.) Head Gaskets are open
        6.) Intake and exhaust ports as well as the combustion chambers may be ported.
        7.) Camshaft(s), valves, valve springs, retainers, and cam followers can be changed but must be approved by LOMSCL officials and available to all competitors
        8.) Fuel Injectors, fuel pump, and fuel pressure regulator can be replaced/ upgraded with LOMSCL approval
        9.) Flywheel may be modified with LOMSCL approval
    b. Turbocharged engines:
        1.) All engine components and engine modifications not specifically mentioned in these rules must remain unaltered as delivered from OEM.
        2.) Wastegate actuators can be upgraded or altered (for the 2020 season, unaltered OEM wastegate actuators will be required).
        3.) Upgraded impellers with factory inducer and exducer diameters are allowed with LOMSCL pre-approval. (for the 2021 season no turbocharger modifications will be allowed).
        4.) Upgraded blow-off/ air recirculating valves are allowed with LOMSCL approval

5.) Upgraded fuel injectors are allowed with LOMSCL approval (for the 2020 season unaltered OEM injectors will be required)
6.) A female 1/8"npt port in the intake manifold must be provided for LOMSCL officials to verify boost pressures when required. Boost pressure can be checked at any time. If a competitor does not provide the necessary 1/8"npt vacuum/boost port for series officials when requested a penalty may be assessed.
7.) Intercoolers may be upgraded and/or relocated but must not be mounted in a manner that extends outside the rollcage. YXZ1000R vehicles are not allowed to relocate, upgrade, modify, or substitute the GYTR intercooler.
8.) Polaris air to water intercooler may be replaced with air to air intercooler. If the heat exchanger is located inside the intake manifold it may be removed and a bolt on cover used in its place.
9.) Flywheel may be modified with LOMSCL approval
10.) YXZ1000R vehicles can install a COMPLETE unmodified GYTR turbo kit on an unmodified engine/longblock. No alterations, deletions, additions, or substitutions allowed on any GYTR turbo kit components allowed other than the required female 1/8"npt port in the intake manifold, adding the 2019 OEM rods, the exhaust after turbo outlet, and the ECU tune.

SXS-15 ECU:

A. Must maintain factory OEM ECU.
B. Engine control tunes/ reflashes are allowed.
C. All OEM CAN protocols must remain unaltered.
D. Competitors must install a LOMSCL Y-cable and data logger if requested by LOMSCL officials.

SXS-16 AIR INTAKE BOX:

A. Pro-Stock class requirements:
    a. Any air filter/ velocity stack/ plenum is allowed on the inlet side of the throttlebodies.
    b. Air intake must not extend forward of the rear firewall, or extend out past the roll cage.
B. Pro-Modified class requirements:
    a. Turbocharged vehicles:
        1.) Any air filter/ intake system allowed provided that all OEM sensors are used and mounted in their OEM locations. YXZ1000R vehicles must run the filter and intake system as delivered in the GYTR turbo kit.
        2.) Air intake must not extend forward of the rear firewall, or extend out past the roll cage.
    b. N/A vehicles:
        1.) Any air filter/ velocity stack/ plenum is allowed on the inlet side of the throttlebodies.
        2.) Air intake must not extend forward of the rear firewall, or extend out past the roll cage.

SXS -17 SUPERCHARGERS & TURBOCHARGERS:

A. Superchargers or turbochargers are not permitted in Pro Stock class.
B. Aftermarket turbochargers and/ or superchargers are not permitted without pre-approval of LOMSCL officials.
C. At this time, the only aftermarket turbo kit allowed in the Pro-Mod class is the GYTR with specific requirements outlined under the engine requirements.
D. Dealer installed superchargers or turbochargers are considered “aftermarket”.

SXS-18 AUXILIARY EQUIPMENT:

A. All vehicles must start race with a functional generator or alternator, fan, water pump (water-cooled vehicles), and a complete functional electrical system.

SXS-19 IGNITION:

A. All vehicles must use a stock ignition switch or have a positive action on/off switch in good working order. Switch must be labeled “ignition on/off”, have a red circle around it, be located on the left-hand side of the dash panel, and must be accessible from the outside of the race vehicle. Red locater decal/circle must be at least 1 inch wide around switch.
B. All electric fuel pumps with independent switches must be labeled “fuel on/off” and be within easy reach of the driver and accessible from the outside of the vehicle. (For the 2020 season all power to the fuel pump must be run through the factory on/off switch or a master cut-off switch for the entire vehicle. At no time can the fuel pump be powered while the ignition switch or master disconnect switch is in the off position)

SXS-20 BATTERIES:

A. Batteries must be securely mounted with metal-to-metal tie downs.
B. Wetted fiber or gel cell batteries only. Liquid lead acid batteries are not permitted.
C. Batteries may be located in the driver’s compartment with an adequate firewall or factory engine cover.

SXS-21 COOLING:

A. Oil coolers, transmission coolers, and radiators located ahead of the driver, behind the cockpit or in the passenger compartment must have a shroud that will prevent liquids from blowing back or leaking onto the driver in the event of a rupture or leakage. All radiator caps must be shielded from driver.
B. All hoses running through the driver compartment must be shielded. Steel braided hose does not constitute a shield.
C. Radiator may be relocated to back behind passenger cab area. If radiator is mounted close to driver, panels are required to keep hot coolant off of driver. Radiator must have a rock screen to protect it with maximum opening size of ½ inch by ½ inch.

SXS-22 EXHAUST:

A. Pro-Stock: Aftermarket exhaust is allowed.

B. In all classes, exhaust systems must be a minimum of six inches away from fuel lines and twelve inches away from fuel filler.
C. Titanium exhaust is allowed but must be pre-approved by LOMSCL officials.
D. All vehicles must have functioning LOMSCL approved muffler.

SXS-23 STARTER:

A. All vehicles must be self-starting by use of an onboard electric starter.

SXS-25 FUEL:

A. Competitors must use either Sunoco SS100 or VP UTV96 fuel.
B. No mixing of fuels at any time.
C. Each competitor must designate which fuel they will be running on for the entire event weekend when they come through tech.
D. No switching fuel types during an event.
E. If a competitor is found with fuel that doesn't match either of these fuels at any time during the event the competitor will receive a dis-qualification.
F. If the fuel is found before or after qualifying the competitor will receive a disqualification for qualifying and will have to start at the rear of the field for the race. A competitor found with illegal fuel before qualifying will not be allowed to compete in the qualifying round.
G. If the fuel is found before or after a race, the competitor will receive a disqualification for that race.
H. If a competitor is found with illegal fuel before a race, he/she will not be allowed to compete in the race.
I. Cooling of any type of fuel is not permitted during competition.
J. LOMSCL has tested fuel samples of both SS100 and UTV96, and the LOMSCL test results are the benchmark from which all competitor's samples will be judged.
K. LOMSCL has the right to sample a competitor's fuel at any time. All samples will be impounded for observation and/or testing by LOMSCL or outside laboratories at LOMSCL discretion.
L. No nitrous oxide.
M. If LOMSCL officials suspect maskers in the fuel, chemical testing will be conducted at possible expense to the competitor.
N. Penalties for use of hazardous chemicals will be severe including fine, and/or reduction of points, and/or suspension.
O. No adding any chemicals or compounds to the required fuels. Fuels must be run exactly how they come from the manufacturer.

SXS-26 FUEL CELLS:

A. All fuel cells must be mounted in the OEM location and be LOMSCL approved.
B. LOMSCL will reject any previously approved fuel cell, which appears to be defective, damaged, not in proper condition, or one that no longer meets the series requirements.
C. No pressure systems will be allowed. Any concealed or not concealed pressure type containers, feed lines or actuating mechanisms will not be permitted, even if inoperable.
D. Icing, Freon type chemicals, or refrigerants may not be used in or near the fuel system.
E. The use of a commercially manufactured fuel cell is mandatory. Aluminum cans with foam inside are not allowed.

F. Safety fuel cells shall consist of a bladder enclosed in a smooth skinned container. The container shall be constructed of 20-gauge steel, 0.060- inch aluminum or 0.125inch Marlex. Rotary molded polymer cells are acceptable only if they have an internal bladder.
G. No material other than standard foam as provided by the fuel cell manufacturer is permitted.
H. Fuel cell must have a chassis or body cross member of substance between the fuel cell and driver and be protected from ground obstacles.
I. Fuel cells must be dated from manufacturer. Fuel cell bladders will become obsolete five years after date of manufacture and must be replaced.
J. All fuel cells will be required to have a vent hose routed so that fuel will not drain out no matter what direction the cell is turned. Vent hose must extend the length of the fuel cell in length, height, and width along with the end being routed away from driver and any exhaust or electrical components.
K. Fuel filler lines and positive-locking non-vented fuel filler caps must be located and secured in such a manner as to prevent them from being knocked off or opened during movement, rollover, or impact.
L. A splash shield must be in place to direct any spill away from the driver, motor, and motor exhaust. A body panel is considered a sufficient splash shield.
M. Fuel cell cannot be vented into the driver's compartment of any vehicle.
N. All mountings must be LOMSCL approved. Fuel cell must be mounted to chassis and cannot be mounted on skid plate.
O. All fuel cells mounted in the passenger compartment area must be fully enclosed with sheet metal or aluminum.
P. Any battery or electrical components mounted in the passenger compartment with the fuel cell must be separated by sheet metal or aluminum.
Q. Stock fuel tank is allowed in stock location. Tank, lines and fuel filler may not be modified in any way. Any modification to the factory system is NOT allowed when using the stock fuel tank including relocation.
R. Minimum 1/8 inch aluminum plate must be added on right outer side of chassis to protect the fuel tank/ fuel cell.

SXS-27 FUEL VENT ROUTING:

A. All fuel tank/ cell vents and lines must come out of the top of the fuel tank/ fuel cell
B. All fuel cell vent hose routing must be routed to extend past the width of the cell, length of the cell, the height of the cell, and extend out of the driver's compartment away from any hot components or electrical components.

SXS-28 TRANSMISSION & DIFFERENTIALS:

A. Every vehicle must use the OEM transmission and clutch design.
    a. No aftermarket, performance, or gear sets from a different model vehicle allowed.
    b. Vehicles may update or backdate transmission and front/rear differential ratios so long as they are currently available through OEM dealers and were original equipment in the same model of vehicle.
    c. Cryo treating and/ or polishing allowed. (for 2020 season, polished gears and components will no longer be allowed. Any components that are visibly altered will not be allowed.)
B. The stock front & rear differentials used must be from the model of vehicle used. Polaris XP1000 and XP Turbo models may replace the sprag and armature plate in the front differential with pre-approved LOMSCL components.
C. All vehicles must have a functional High, Low, and Reverse gear at all times.
D. Aftermarket CV's and axles may be used.

SXS-29 CLUTCH:

A. Pro Stock: Must use OEM clutch and design as delivered from manufacturer.
    a. Yamaha YXZ100R: Coil spring conversion is allowed with LOMSCL approval.
    b. CVT clutches may only be upgraded with LOMSCL approved helix, springs, and weights
    c. No billet or unapproved aftermarket clutches.
    d. Clutches may not be modified in any way.
    e. OEM flywheel may not be modified in any way.
B. Pro Modified: Must use OEM design clutch
    a. CVT equipped vehicles may use billet clutches (for 2020 season billet CVT clutches will not be allowed. All CVT vehicles will be required to follow the same rules as the Pro-Stock class)
    b. Flywheel can be modified (for 2020 season all flywheels must be unaltered OEM parts.
    c. Yamaha YXZ100R: Coil spring conversion is allowed with LOMSCL approval
C. Factory paddle shifters as delivered from factory are allowed. No retrofitting to other years, makes or models.

SXS-30 WHEELS AND TIRES:

A. Original or aftermarket tires may be used.
B. Maximum tire size is 30 inches outside diameter.
C. No more than 1 tire per corner is permitted.
D. Tires will be visually checked and must be considered reasonably safe by LOMSCL prior to competing.
E. Bead locks allowed, must have recessed bolts only that do not protrude past the face of the clamp ring, or must use button head style bolts.
F. Any wheel offset combination is permitted.

SXS-31 FASTENERS:

A. All components on the vehicle's suspension system, chassis, and running gear must be secured with S.A.E. Grade 8 or better nuts and bolts.
B. Bolts must be secured with either lock nuts, lock washers, cotter pins, or safety wire and have at least one full thread showing through the nut.

SXS-32 HOSES

A. All fuel and brake line hoses including metal lines and fittings must be clamped and/or safety wired.

SXS-33 MIRRORS:

A. Rear view mirror with at least 6 square inches of mirror surface and a reasonably unobstructed view of area behind vehicle is recommended on all vehicles.

SXS-34 TRANSPONDERS/TIMING:

B. Remote score timing devices will not be permitted by teams, owners, or anyone associated with an entry, unless approved by LOMSCL.
C. All teams are required to purchase remote timing transponders. Transponders can only be purchased through LOMSCL and numbers must be recorded with LOMSCL officials.
D. Drivers are responsible for the charging and installation of all transponders. Any entry without a properly installed, functioning transponder may not be scored and may be subject to further penalty.
E. Transponders must be mounted 10 inches back from the leading edge of the front bumper and a maximum of 15 inches in height with a clear view to the track surface.

SXS-35 DUST LIGHT:

A. A dust light is not required at this time.