# 2023 GENERAL REGULATIONS

**GENERAL SAFETY**

**HELMET:**
A Full-face SNELL: M2015, M2020, SA2015, SA2020, ECE 22.06, FIA 8860-2010, 8860-2015 or 8860-2018, helmet mandatory. A shield is mandatory. Goggles are prohibited.

**PROTECTIVE GEAR:**
Full all-leathers or SFI Spec 40. 1/2 suit is mandatory on all motorcycles running 120mph or faster. Two-piece suits must be joined together with a metal 360-degree zipper at the waist. SFI Spec 40.1/1 40.1/2 suit or leather jacket, leather boots/shoes above the ankle, and leather gloves are mandatory on all motorcycles. Gloves must be Kevlar lined or equipped with side buttons. Nylon or textile jackets and pants are not permitted, even if they have pads. All jackets and pants must be made of 100% leather. Tether kill switches are required on all entrants. The kill switch, when activated, must disable the ignition, fuel pump(s), and nitrous system solenoids.

Any rider running faster than 10.99 must also have leather pants. Pants and jackets are required to be zipped together 10.99 or quicker.

## TECH:

All Motorcycles must be teched in before any passes down the track, **NO EXCEPTIONS.** The Motorcycle, rider, and rider protective gear must be present during the tech process. Motorcycles in the Man Cup Annual Tech Inspection program must follow all program rules and are solely responsible for keeping compliant. Any violation of tech inspection can include but is not limited to penalties of points loss, event ejection, and suspension from the season or series. Additionally, racers must comply with our tech spotter in front of the staging lanes before entering the water box.

**MEMBERSHIPS:** Man cup does not charge a membership fee; however, all bikes must have a Man Cup decal located on both sides of their motorcycle in a visible area.

**PRE-REGISTRATION:** Tech cards are required to be pre-purchased online. In the case where you have purchased a tech card, but the class didn't meet the minimum to run, you will be refunded 100% via the method of payment.

**RIDER AGE:** All participants must be at least 16 years old with a valid state driver's license. If you do not have a valid state driver's license, then you must be at least 18 years old with proper identification.

**DIAL-IN:** Always be sure to verify your dial-in on the dial-in board in front of the water box. There are no re-runs if you stage to an incorrect dial-in.

**SPEED LIMIT IN PITS:** The speed limit in the pit area is 10 mph at all times.

**TECH INSPECTION:** Pro classes will be tech inspected at the scales. Sportsman classes will be tech inspected at the racetrack's normal tech location. Tech inspection reserves the right to inspect a motorcycle before, during, or after the event is concluded for any reason.

**PIT BIKES:** ATVs, UTVs, and full-size dirt bikes are prohibited at Man Cup events. Golf Carts, scooters, and minibikes only are permitted for use. Pit Bikes are permitted for race team use only. Spectators are not permitted to have pit bikes of any kind. All pit bikes must have the participant's bike number on them. Anyone who operates a pit bike, bicycle, golf cart, or anything else with wheels must be at least 16 years old with a valid state driver's license.

**STARTING LINE:** If, for some reason, you are held up by a track official, such as to change a wrong dial-in, cleaning or getting debris from the track, waiting for slow bikes to turn off of the shutdown area, etc., and your engine is too hot to race or tires to cold, let an official know immediately. Once you stage, it is a race.

**Auto Start**

| Class | Staged Minimum | Staged to Start | Timeout |
|---|---|---|---|
| Pro Bagger | 0.6 | 0.7 | 10 Seconds |
| Top Sportsman | 0.6 | 1.1 | 10 Seconds |
| Ultra Sportsman | 0.6 | 1.1 | 10 Seconds |
| Pro Ultra 4.60 | 0.6 | 0.7 | 7 Seconds |
| Pro Mod | 0.6 | 0.7 | 7 Seconds |
| Top Gas | 0.6 | 0.7 | 7 Seconds |
| Super Comp | 0.6 | 0.7 | 7 Seconds |
| Pro ET | 0.6 | 1.1 | 10 Seconds |
| Street ET | 0.6 | 1.1 | 10 Seconds |
| Pro Open | 0.6 | 0.7 | 7 Seconds |
| V-Twin | 0.6 | 0.7 | 10 Seconds |
| Grudge | 0.6 | 0.7 | 15 Seconds |
| Pro Stock Limited | 0.6 | 0.7 | 7 Seconds |
| Pro Street | 0.6 | 0.7 | 7 Seconds |
| Real Street | 0.6 | 0.7 | 7 Seconds |
| Super Stock | 0.6 | 0.7 | 7 Seconds |
| Super Eliminator | 0.6 | 0.7 | 7 Seconds |
| Top Fuel | 0.6 | 0.3 | 15 Seconds |

* Stage is the minimum amount of time the tire breaks the beam to begin autostart

*Staged to start is the amount of time both bikes are staged to begin AutoStart countdown.

* Timeout is when one bike is pre-staged and staged, and the other bike is only pre-staged, this is the amount of time left before tree activates.

**QUALIFYING SHEETS & LADDERS:** Always be sure to review the qualifying sheets and ladders. In addition, these sheets and ladders will be sent to all individuals registered for the racer messenger service. Please dial "mancup" to 77222 to enter. Standard messaging rates apply.

**BURNDOWNS:** If two racers are in the middle of a burndown, the starter will only let them continue for a reasonable amount of time. If any unreasonable amount of time is used, the starter will point the racers to go in and stage. If the racers do not go in within 20 seconds of the starter pointing them in, then both racers are subject to disqualification.

**STAGING LANES:** During eliminations, once you have entered a particular side of the staging lane and come to a stop, you are committed to that side and cannot jump to the other side or move around someone. The bye-run will be pulled with a deck of cards even if there is an even amount of bikes to shuffle the order. Bikes will be run side by side in the lanes. If we run out of bikes in one lane, then they will be run front to back with the front bike having lane choice.

**CLEAN-UPS & WARNINGS:** If you have a problem with your bike, such as: not running right, smoking, or excessive tire spin due to leaking fluids. Please pull over and stop as soon as you can safely. This will aid in clean-up time, allowing officials to get the track back up and going as soon as possible. If you are given an official warning, you are subject to disqualification if the starter must check the track behind you a second time.

**BYE RUN PROCEDURE:** Man Cup has adopted the policy of any rider being able to skip his/her legal bye run or competition breakage pass altogether in the interest of saving time and keeping the elimination process moving forward. All Pro, Sportsman, and ET riders now have two choices when it comes to a bye run or competition break pass.

1. Announce to the head of staging that he/she is electing to forego their earned bye or competition break pass. This eliminates the need to take the tree under power. Making this election will assure the said rider of not having lane choice in the next round.
2. Announce to the head of staging that you intend to make a pass on your legal bye run or competition break pass. If selecting this option, once the rider passes the ready line, he/she is obligated to be able to take the tree under power. Failure to do so will disqualify the rider from further competition.

**LANE BOUNDARY:** Any bike touching the center line, touching the wall, or hits a foam block during the measured race will be disqualified. In situations where a rider has a true bye or a broke bye in eliminations, he/she is considered the automatic winner once he/she stages under power, regardless if the bike touches the center line, touches the wall, or hits a foam block during the measured race. However, the rider will lose lane choice in the next round.

**HITTING FOAM BLOCKS:** In the event that a foam block is hit/moved by a rider, his or her bike, or apart from his or her bike during TESTING, then a $50 fine must be paid before the rider can make any more runs at the event. If the foam block is hit/moved by a rider, his or her bike, or apart from his or her bike during official TIME RUNS, QUALIFYING or ELIMINATIONS, then a $50 fine must be paid before the rider can make any more runs at the event and the rider will also receive a 10-point deduction in their championship points chase.

**RECORD CLAIMS:** Any Man Cup racer that wishes to claim a record must notify tech inspection at the scales upon a "record run" or a "back-up run" so an inspection of the bike can be made. All record claims must be made at tech at the conclusion of the run. If the record was not claimed at tech at the conclusion of the run, then that run cannot be counted as it was not verified. There is no limit to the amount of "record runs" or a "backup runs" made at an event. All Manufacturers Cup records must be backed up by 1% on the same weekend during qualifying or eliminations only. Any racer that wishes to claim a record must proceed to tech inspection in order to claim that record.

**UNSPORTSMANLIKE CONDUCT:** Any racer that causes physical harm to another person, or acts in an unsportsmanlike manner is subject to be barred from all Man Cup events for up to 1 year, forfeit all season points, and have to pay a $1,000 fine before returning to Man Cup. Please handle yourself like a sportsman.

**MALICIOUS CHEATING:** Any racer caught maliciously cheating can be barred from all Man Cup events for up to 1 year, forfeit all season points, and have to pay a $2,000 fine before returning to Man Cup. Read the rules and make sure your bike is legal.

**GRUDGE RACING:** In the event that there is a time slip printer failure and you need to pick up your time slip in the tower, only the rider whose name is on the tech card may pick up the time slip, and they must bring their ID to the tower with them. This is done to protect the privacy of your time slip.

**CHANGING BIKES:** See policies below for changing bikes in different classes:

**Pro E.T. & Street E.T**: A racer can change his or her bike in time runs or in 1st round (You still need to notify the tower to change). Whichever bike and rider runs the first round, it is locked and neither the bike nor the rider can be changed for the rest of eliminations for any reason.

**Ultimate Sportsman**: A racer can change his or her bike in qualifying or in 1st round because these are all run fields (You still need to notify the tower to change). Whichever bike and rider

runs the first round it is locked, and neither the bike nor the rider can be changed for the rest of eliminations for any reason.

**Top Gas – Super Comp:** A racer can change his or her bike in qualifying if there is still another qualifying session for the class; however, all previous qualifying data will be erased, and the racer must re-qualify the new bike (You still need to notify the tower to change). A racer cannot enter a new bike into 1st round or any other round that was not qualified. The rider cannot be changed either.

**Top Fuel Twin Fuel, Pro Mod, Pro Street, Pro Open and Real Street**: A racer can change his or her bike in qualifying if there is still another qualifying session for the class, however, all previous qualifying data will be erased, and the racer must re-qualify the new bike (You still need to notify the tower to change). A racer cannot enter a new bike into 1st round or any other round that was not qualified. The rider cannot be changed either.

**COURTESY STAGING**: Both bikes must pre-stage before either bike stages. A bike that accidentally activates both lights may be allowed to back up and pre-stage if time allows. If the tree is activated during this process, and the entry is not re-staged, they will be eliminated.

**ELECTRONICS IN STREET ET TYPE CLASSES –** MSD SB6, Schnitz Ignitions, stand-alone ECU, ECU editors, etc., are permitted in Crazy 8, Street Fighter, and Street ET classes. The 2-step feature cannot be used. Though, if certain wires can be unhooked, they need to be. In other words, the clutch switch should not be wired to a 2-step input on the box if there is a designated input for that. If someone had an MSD 2-step or MSD 4350 whose sole purpose is for a 2-step, then it must be removed. Any other box that has other functions is permitted. There really is no way to outlaw everything, as technology keeps progressing, but it will be monitored. Wheel height sensors are permitted in all classes.

**Policies**
**REFUNDS:** There are no refunds for disqualified racers

**SCHEDULE:** The schedule may be changed due to weather or other circumstances

**TECH:** Fuel and Weight – Cup reserves the right to conduct random fuel and or weight checks at any time and without prior notice. Failure to provide a fuel sample or scale the bike and or rider when requested is grounds for disqualification.

**LEGITIMATE PRO ENTRIES:** Man Cup will not accept entries deemed to be field fillers in the interest of meeting minimum pro field size nor entries to push a class to another payout level.

Each and every Pro entry needs to be legitimate and be a viable entry for the class entered. Man Cup reserves the right to exclude any entry deemed a field filler.

**PAYOUTS:** All payouts will be made directly to the rider unless alternate arrangements with Cup officials are made prior to eliminations. Any participant experiencing irreparable damage and is unable to make the next round call will be paid (if applicable) only through the *last* round of competition won.

**RAINOUT:** The Man Cup will do everything possible to complete the event in a timely manner. In the event of adverse conditions beyond our control, the Cup reserves the right to finish the event in whatever it takes, including early start times, running late, canceling a qualifying session(s), or finishing the event the following day(s). If the Cup has determined that it is no longer prudent to continue to wait to finish an event, that event will be considered complete, and the following policies will remain in effect.
If any elimination rounds are complete prior to an event being declared a rainout, points and payouts will be awarded to that point in the contest under the normal system, and the event will be declared complete.

**ELIMINATIONS:** In order to be a legitimate race winner of a particular round, a competitor's motorcycle must self-stage under its own power and take the start signal. Any motorcycle unable to self-stage under its own power to take the start signal, for any reason, will be declared the loser of that round of competition. Crossing the centerline, touching the guard wall or the outer boundary line, or impacting any timing equipment is ground for disqualification (excluding bye runs). Payout is based on the last round won.

**LADDERS:** Any errors on the ladder must be brought to the attention of the Race Director in a timely fashion after the ladder has been posted.

**PRO CLASSES:** No Pro Entry already on an elimination ladder is allowed to make a Sunday morning "test pass" in any of the classes during their Sunday morning test pass.

**DEEP STAGING:** Deep staging is permitted but will not be honored; the tree will not be held, and cannot be displayed on your bike. The starter will not make any changes to the starting line procedure for those deep staging.

**FACILITY RENTAL:** Man Cup, in cooperation with each event facility, has established the following facility usage protocols prior to a Man Cup event;

Competitors, and potential competitors, of the coming Man Cup event, will find the host facility of said Man Cup event NOT to be available to book any type of testing for any Man Cup legal

entry in the days preceding that Man Cup event. Those days are defined as Monday, Tuesday, Wednesday and Thursday in advance of a Man Cup event that coming weekend. All Man Cup events include pre-event testing as part of the overall event, and the purpose of this rule is to establish and maintain a fair and level playing field for all event competitors at each Man Cup event by not allowing Man Cup event participant testing at that facility in the days leading up to an event.

**ENGINE**

**CATCH CAN:** Catch cans are mandatory on all motorcycles that do not utilize a stock crankcase breather routing to the air box. Engines with a breather hose plumbed into a vacuum pump system also require a catch can for catastrophic failure. The catch can must be securely mounted. All vents to the ambient atmosphere must have an air filter to catch any oil mist. Use of suitable size hose clamps is required.

**DRY SUMPS:** Entrants equipped with dry sump oil systems must have catch cans. Oil-holding tanks do not qualify as catch cans. The oil holding tank venting system must contain a catch can with a minimum capacity of .5 quarts. All vents to the ambient atmosphere must have an air filter to catch any oil mist.

**COOLANT**: Antifreeze containing ethylene glycol is prohibited. The radiator must contain water or approved Glycol-free replacement only.

**CYLINDER HEADS:** In classes where they are accepted, aftermarket cylinder heads will be permitted with prior approval and consent of the Man Cup Technical Department. Cylinder heads must be stock-appearing with fins (on air-cooled models) and stock bolt pattern. Stock cam chain drive method must be used, (i.e., center crank drive or end crank drive).

**CYLINDER HEAD RESTRAINTS:** Injected V-twin nitro engine must utilize SFI 46.1 cylinder head engine restraints.

**ENGINE TYPES:** Must be an AMA-accepted stock-type engine specifically designed and manufactured for production motorcycle use. Snowmobile engines are permitted in PET. Automobile, aircraft, or marine engines are prohibited. Any new concept must be submitted to the Tech Department for approval prior to competition. All engines must be started by a self-contained starter or detachable electric starter. Push or roller starts are prohibited.

**OIL RETENTION:** Lower oil retention device (diaper) or belly pan is required.

**GROUND CLEARANCE:** Flexible ballistic blankets are exempt from the minimum ground clearance rules. Bikes with blankets interfering with the ground clearance inspection may remove the blanket in order to pass the inspection. With the blanket removed, all other components must pass ground clearance inspection. Competitors with a blanket below the minimum ground clearance will be required to remove the blanket every time that tech requires a ground clearance inspection.

Bikes will belly pans, or other solid ballistic retention devices must pass ground clearance will all components attached.

**DRIVETRAIN**

**CHAIN / BELT GUARD:** Mandatory on all bikes. Chain or belt guards are to cover the width and at least the top run to the centerline of the sprocket of any chain/belts. The clutch assembly must have at least half of the side surface covered. The guards should be steel or .125" aluminum unless otherwise stock equipped and must be firmly mounted. Rear fender and seats are not chain guards.

**CLUTCH**: No stress-bearing part of any aftermarket centrifugal clutch may be cast material. The clutch cover must be adequate to protect the rider in the event of mechanical failure. Motorcycles with an engine-driven lock-up clutch may not be fired in pits unless the rear wheel is elevated off the ground by a secure stand and/or the front wheel is placed against a solid object (competitor's trailer, bike, van, etc.).

**CLUTCH COVER:** Any clutch covers constructed in multiple pieces must have screws, bolts, or welded components. No epoxy or similar material may be used bond pieces.

**TRANSMISSIONS**

**AUTOMATIC TRANSMISSIONS:** Defined as any constant-mesh transmission which uses override-style shifting for any or all of the gear changes. Override shifting means that, during up-shifts, the transmission is briefly engaged in two gears at once, allowing power to be continuously applied to the rear tire during gear changes. Any transmission containing components that would allow the transmission to engage two or more gears simultaneously is considered to be automatic. These components include, but are not exclusive to, windowed shift drums, split forks, split gears, split fork slider rings, gear or fork detent springs, etc.

Any aftermarket transmission utilizing pneumatic, hydraulic, electric, or other styles of drumless engagement is considered to be automatic. Any transmission utilizing planetary gears is considered to be automatic.

**OEM-STYLE TRANSMISSIONS:** Only transmissions utilizing constant-mesh design gears, with a rotating, ratcheting shift drum and forks, are considered to be OEM-style. All components must be contained within the engine cases and must be in their original location.

**BRAKES & SUSPENSION**

**BRAKES**: Must meet OEM brake specifications. Operational front and rear brakes are mandatory and must be in safe operating condition. Brake lines must be OEM type or braided steel hose or stainless steel line. A braided steel hose is highly recommended. Brake lines are to be routed and mounted properly to ensure no contact with moving parts. Carbon fiber brake pads or disks are prohibited. The spreading of pads away from the disk is prohibited. Drilled disc brakes may be used if commercially manufactured, or they meet the following requirements:

The original diameter must be maintained at a minimum.
Minimum thickness: .187”
Maximum hole size .500” with all holes countersunk.
No two holes closer than 1.25” center to center.

**FRONT SUSPENSION:** Unless specified otherwise within specific class requirements, all entrants must meet the following front suspension requirements:

**FRONT FORKS:** Rigid forks are prohibited. Hydraulic-dampened tube type only, with a minimum tube diameter of 34mm. All entrants must have a minimum of 1” travel in front forks, with sufficient clearance around the fender, fairing, headlight, exhaust, etc., to allow the forks, fender, and wheel/brake assembly to safely move across the full range of fork travel at any steering angle. Forks must have enough front spring force to keep forks extended at least .50” above compression bump stop with the bike sitting level and the rider seated in the riding position. Travel is measured from the compression bump stop to the rebound bump stop. NOTE: Having 1” of exposed fork slider DOES NOT guarantee that 1” of travel exists.

No more than 1.5” of the upper tube (2” on inverted forks) may be exposed above the top triple clamp or clip-on, whichever is higher.

**STEERING STOPS:** Positive fork stops are required, with a maximum turning arc of 12 degrees in either direction. Stops must be cast or machined into the frame or steering neck or may be welded to the frame or steering neck. Stops must have a shear strength equal to a 3/8” bolt.

**LOWERING STRAPS:** Nylon straps designed to limit front fork travel are legal in certain classes; check individual class rules for legality. Straps must be specifically designed for the purpose of

front suspension lowering. Generic tie-downs are not permitted. Travel limiting straps are not allowed on any wheelie bar-equipped bike, regardless of class. Retention straps are allowed only in SC and TG (if not using a wheelie bar). Retention straps must be no more than three years from the date of manufacture. Manufacturers Cup Tech Officials may disapprove lowering straps that are not sufficient and could cause a safety issue. The front fork must travel a minimum of 1" when the lowering strap is in use.

**FRAME**

FRONT SUSPENSION & WHEEL ASSEMBLY: No ballast may be mounted to any portion of the front suspension, brake system, fender system, or rotating assembly. No parts of the front suspension, brake system, fender system, or rotating assembly may be remanufactured from exotic heavy materials, including tungsten steel, HD-17, or Mallory metal. No portion of the front fork leg assemblies may be replaced with a heavier replacement component. Aftermarket or custom forks may not be heavier than industry-standard OEM sport bike forks. The legality of such forks will be considered on a case-by-case basis.

Front suspension components other than the fork leg assemblies (this includes triple clamps, clip-ons, fender mounts, brake calipers, and hangers, etc.) may be remanufactured from any legal materials, but must be constructed to dimensions reasonable for the application, with hardware reasonably sized for the application. Whenever possible, OEM components will be used as a reference when determining what appropriate sizes and dimensions are. Lightening holes, gun-drilling, and other weight-saving techniques utilized on the OEM components may be deleted. Pre-approval of custom or aftermarket components is highly recommended. The tech staff has the final decision on all front suspension component matters and will be closely monitoring the use of these components. Abuse of these rules will result in the Manufacturers Cup implementing a maximum weight for suspension components, resulting in racers being required to remove their front ends during post-race inspections. Implementation of this weight rule may occur at any time during the season.

**FRONT AXLES:** Front axle assemblies may be remanufactured or replaced with aftermarket components. No part of the axle or nut may protrude more than .75" beyond the outside of the fork legs. No part of the axle, axle nut, or spacers may exceed 1.50" in diameter. The total weight of the front axle assembly, including spacers, nuts, washers, etc., may not exceed 5 lbs. total weight. The use of lead or other heavy materials is not allowed on any axle components.

**FRAME CONSTRUCTION:** All welding shall be performed using industry-standard TIG heliarc methods. The material should be 4130 chrome-moly. The minimum diameter for all sections, except braces, brackets, and gussets, shall be 1.00". If the top main tube is of a one-piece design, it must be a minimum of 2.00" in diameter.

The minimum wall thickness of all tubing is .058”. Aluminum chassis is prohibited without prior approval. Minimum seat height (with the rider in position and seat compressed) measured from the lowest point of seating position to ground, 20 inches unless otherwise instructed per class rules.

**WHEELBASE & WHEELIE BAR LENGTH MEASUREMENT PROCEDURES:** Overall measurements will be done as follows: Measure from the center of the front axle in a straight line to the center of the rear axle at the most extendible point on the swing arm, then from the rear axle (at its most extendible point) to the center of the wheelie bar axle; then add the two together to determine the overall length.

**WHEELIE BARS:** Highly recommended for safety in all legal classes with slicks. The lowest point of the wheelie bar wheels may not be more than 3 inches from the ground. May not exceed the wheelbase of the bike and must be sufficiently cross-braced to prevent side whip. On all mounting bars, butt welds or inner-sleeved bar designs must have visible welded reinforcement (i.e., inner sleeve with rosettes, clam shells, bolted, etc.). Wheels must be non-metallic. All side panels must be securely fastened at 24-inch intervals minimum.

**GROUND CLEARANCE:** Minimum ground clearance for wheelie bar bikes is 2” measured with the rider sitting on the bike, straight up perpendicular to the ground with 4 psi (car tire), and 8 psi (motorcycle tire) in the rear tire. A minimum of 2 or 3” is required for non-wheelie bar bikes, depending upon particular class rules.

The minimum ground clearance value indicates the minimum height above the ground for every part and component on the bike, except for the portions of the tires and wheels which are supporting the bike. Both hard parts and flexible components, such as bodywork, must be above this minimum value. The only exception to this rule is for ballistic blankets.

**TIRES & WHEELS:** Tires must be in good condition. The depth of tread or wear indicator in the center of a tire must be a minimum of 0.060 inches. DOT tires on any wheel wider than 6.25 inches must have a bead lock. Manufacturers Cup highly recommends that all car tires utilize a bead lock or rim screws, to attach tires to the wheel. Non-bead lock wheels should utilize locking screws and should be installed at 45 to 90-degree angle in addition to side-mounted screws only. It is recommended that drag slick mounting screws only are used to prevent tire beads from unseating at high speed. Follow instructions from the screw manufacturer. Holes drilled in the wheel must have enough clearance to allow screws to pass freely through the wall. Four screws per side minimum, with eight per side, recommended. For safety, tire width should not exceed rim width by more than two inches, bead seat to bead seat. All stock wheelbase entries must maintain OEM front tire sizing.

**WHEELS**: The use of “spinner” style wheels or any wheel design that incorporates movable pieces while the vehicle is in motion is prohibited. The use of carbon fiber or composites as any component on a drive wheel is prohibited on any car tire entry.

**FUEL**: Fuel lines that do not use AN-type connectors must be fastened with a metal clamp, band, or fitting (no wire). Be careful not to over-tighten. Carburetor-equipped entries using a gravity-feed fuel system and flexible fuel lines such as Tygon or PVC may use wire ties or safety wire as clamps on these fuel lines. Any fuel line that is part of a pump-forced fuel system must use hose clamps or AN fittings at all connections.

**NITROUS BIKES:** The use of steel braided or reinforced fuel lines are highly recommended on all nitrous bikes. Flame-retardant covering, such as fiberglass or Silicone, is recommended on ALL fuel lines on carbureted nitrous entries. Covering must cover the entire run of fuel lines. Carburetor feed lines must be clamped at both ends and covered. The use of safety wire or wire ties as clamps is permissible on carburetor feed lines only.

**METHANOL (Alcohol):** Methanol is a clear, colorless liquid with a mild odor at ambient temperatures. Methanol is sold in two U.S. Federal Grades: A and AA. Either grade is permitted for use in the Manufacturers Cup competition, and racers should ensure that the methanol they purchase meets Federal standards of purity. The purity standards for each grade are listed in the NHRA rulebook. Methanol is tested and certified at Manufacturers Cup events through the application of various chemical analyses as considered appropriate by Fuel Check personnel. To be considered legal, methanol used in the Manufacturers Cup competition must meet the Federal standards of purity. Any deviation from these standards because of impurities (beyond the limits established in the Federal specification) in the fuel sample will result in disqualification.

**NITROUS OXIDE:** Nitrous oxide systems must be commercially manufactured with manufacture I.D. on all parts. Nitrous bottles must be DOT rated with a pressure relief valve and secured with a bottle bottom anti-drop strap to prevent the bottle from falling off. The use of a frame or swing arm in place of a bottle for nitrous oxide is prohibited. The mounting of a nitrous bottle outside the frame rail is permissible on street bikes only with the use of a Manufacturers Cup-approved nitrous bottle valve protector; otherwise, N2O bottles must be completely contained within the bike frame rail. Outside-the-frame bottles must be securely fastened with an approved bottle bracket. See Ballast (2.4.1) for requirements for bottle mount hardware.

**BOTTLE HEATERS:** Heating of nitrous bottles is only permissible if accomplished by use of a thermostatically or pressure switch-controlled heating blanket. Bottles must be mechanically fastened; hose clamps or tie wraps are prohibited. All nitrous bikes must have thumb (butterfly) body fasteners. Purge lines must face away from the rider. It is highly recommended for all nitrous bikes to utilize a “backfire strap”, required in PM. An oil blanket or oil catch pan is

mandatory on all nitrous bikes. An oil blanket or oil catch pan is mandatory on all nitrous bikes not utilizing a street-type exhaust passing under the oil pan. Single-stage nitrous is defined as one nozzle per cylinder.

**BODY**

**BODIES**: All nitrous bikes must have thumb (butterfly) body fasteners; all body fasteners must be able to be removed by hand without the use of tools to access nitrous bottles. The leading edge of the front of the body may have regular fasteners. Note that in case of an accident and/or the potential of fire, if the nitrous bottle and fuel shutoff cannot be accessed, damage to the body may occur. All bikes must have front fenders, excluding Super Eliminator. All street bikes must utilize a seat. Seats must be covered in upholstery. The tail section or rear fender must extend past the rear axle.

**FAIRING & BODY MOUNTING:** Care should be taken in the attachment of full fairing and side body panels. Wind load directly affects handling and steering input. Panels that become detached may result in loss of control. Fairings should be mounted in a position similar to the street bike it represents (i.e., the headlight portion must point straight forward). Sufficient clearance is required between the front fender and headlight or fairing to allow 1" of suspension travel across the entire range of fork travel and steering angles. For aerodynamic and handling reasons, the lower "nose" of the bottom fairing should be placed close to the back of the front tire.

Mounting points should be as follows: At least two mounting points on the top half of the fairing are mandatory. One in the center of the headlight supported by the steering neck and/or one on each side placed properly to support the entire side of the fairing, attached back to down tubes of chassis. Two points on each side of the lower fairing are mandatory and must be securely fastened; no tie wraps or wire ties. The floor pan is the foundation for mounting the fairing and should be solidly mounted. All structural mounts from inside the fairing back to the chassis should be angled towards the front of the bike to properly carry the wind load. A mounting plate, suggested minimum size 1.5" x 2" must be used on the inside of the fairing at attachment points. All fastening must be fiberglass to metal; no fiberglass to fiberglass. Braces, brackets, and gussets material should be 4130 chrome-moly steel with a minimum diameter of .375".

**ELECTRICAL / CONTROL ACCESSORIES**

**AIR SHIFTERS AND BOTTLES: AIR STORAGE TANKS:** Must be Manufacturers Cup accepted. All pressurized bottles (i.e., air, CO2, etc.) used for air shifters, clutches, etc., must meet, and be engraved as meeting DOT specs. Standard low-pressure air shift systems under 150psi may use

non-DOT aluminum tanks if purchased from an approved supplier. All high-pressure regulated air shift systems must use DOT-approved tanks. PVC or plastic tanks are prohibited. Tanks must be mechanically fastened with a metal clamp or band. Tie wraps and zip ties are prohibited. Use of frame or swing arm as air storage permitted.

**AIR SHIFTERS:** Electric over-air shifters are permissible in all classes where air shifters are allowed. Shifter systems that use an electric or hydraulic force to make shifts are considered to be air shifters.

**AUTO-SHIFTING:** Auto-shifting, not to be confused with an automatic transmission, is any electrical or mechanical system that causes the transmission to shift gears with no input from the rider. This is typically done based on engine speed or time-delay methods but could include many other methods. Classes are not allowed the use of auto-shifters may not have components that would allow any system on the bike to function in this manner. Any bike utilizing electrical components which have an auto-shifting capability must have the auto-shifting function disabled in some satisfactory manner, and may not have the air shifter system wired in any manner that would allow the use of an undetectable auto-shift system. Due to the many available components and systems now on the market, the tech director should be consulted to discuss the acceptable methods for satisfying these requirements on a case-by-case basis.

**BATTERIES**: Batteries must be securely mounted within the frame, swing arm, or bodywork.

**ELECTRICAL DEVICES:** The use of any device, electric, electronic, pneumatic, hydraulic or mechanical, etc., that displays or transmits any on-track data or track location data, or any device mounted anywhere on the bike or in or around the track facilities that utilize any tree sensing system will be grounds for immediate disqualification from the event and loss of all Manufacturers Cup points for the season. In addition to disqualification, the rider and any team members with knowledge of the use of such equipment are subject to fines and suspension from Manufacturers Cup events for one year.

**DELAY BOXES:** Class Specific. A delay box or Delay Device is defined as any device (electronic, pneumatic, hydraulic or mechanical, etc.) built for the express purpose of creating a delay between the release of the line lock button, or release of the foot or hand brake, or release of the clutch lever and the resultant action of the motorcycle. Delay devices may only delay the amount dialed in; analog or digital display is permitted. A delay device may serve only to create a preset delay between the release of the launch button and the resultant release of the launch rpm rev limiter, line lock, clutch, etc., causing initial movement of the motorcycle. The delay device may only be connected to clutch engagement systems, i.e., launch rpm rev limiter and/or trans brake and/or line lock, and/or clutch, dependent on the motorcycle. Delay devices connected to data recorders or any other equipment are prohibited. The wiring of the delay

box/device must be fully visible and traceable by the technical inspector. Only delay boxes/devices fitting this description will be permitted.

**TRANSMITTING DEVICES:** Any device mounted on the bike or rider that is capable of transmitting data or information wirelessly is considered to be a transmitting device. This includes wireless transfer systems for pit communications to and from onboard data recorders, EMSs, ignition control boxes, nitrous or boost controllers, and any other electronic devices. These are permitted during Man Cup competition.

**DATA MEASUREMENT**: Data measurement is the process of using electronic sensors to measure various engine and chassis parameters. These sensors take physical properties such as pressure, temperature, speed, travel, acceleration, position, etc., and convert these properties into an electronic signal. These signals may then be used and/or recorded by various onboard electronic control systems, including data recorders, boost or nitrous controllers, OEM or aftermarket engine control systems, etc. Some classes do not allow non-factory equipped data measurement devices, and some classes allow them, but with restrictions as to their function. Check individual class specifications for additional limitations.

While most types of data sensors are allowed, some types are specifically prohibited, unless they are OEM equipment. If an otherwise-banned sensor is installed by the OEM (such as a speedometer that uses front wheel speed), the sensor may remain intact and functioning, but it must function exactly as originally designed by the OEM, and may not be used by any non-original system or component on the bike.

**DATA RECORDING:** Data recording is the process of storing data produced by data measurement sensors, with the intent and capability of reviewing the data after the completion of the run. Internal control values from ECMs and other electronic control devices may also be stored for later review and troubleshooting. Data recording is typically an internal function of an aftermarket EMS Data may also be recorded by passive recording-only devices.

Data recorders may not detect, and they may not be activated by, radio transmitters, infrared, laser or sonic devices, or any track position devices or beacons. Also, they may not wirelessly (i.e., radio, infrared, sonic. etc.) transmit or receive information during the run to or from any source. Any communication or transmission of information between components on board the bike must be done via hardwired communications.

**2-STEPS & LAUNCH CONTROLS:** 2 steps are devices designed to limit the engine RPM while allowing the rider to position the twist-throttle at full-throttle or near-full-throttle launch. This is typically done by cutting off the ignition, but it may also be accomplished by retarding the

ignition or, on fuel-injected entries, by cutting the fuel delivery. This may also be accomplished by using throttle stops, secondary butterflies or restrictor valves, or any other device capable of restricting engine RPM by limiting air intake.

**DATA LOGGING PARAMETERS:** Manufacturers Cup tech may require any or all competitors not allowed 2 steps to data-log parameters relevant to the control of 2-step rule violations. These could include ignition and/or injection timing, switch inputs, speed inputs, map-switching parameters, etc. It is the responsibility of each and every team to know and understand the data-logging capabilities of their electronic devices, and to be capable of setting them to data-log any information requested by tech. Failure to do so, either by refusal or inability, is grounds for disqualification.

**LEGAL ELECTRONICS:** Legal electronics include: Delay boxes, ignition boosters, stutter boxes, two-steps, nitrous timers, electronic throttle stops, electric shifters, and shift lights. Motorcycles with electronic timers turning on nitrous oxide must also have a throttle switch to turn off the system when not at full throttle. RPM or timer-activated automated shifters are permitted in TG and SC. The wiring harness must be loomed in a fashion that would allow easy tracing and inspection of wiring (i.e., no taped or covered wires).

**IGNITION SHUTOFF:** Must have a positive ignition cutoff switch attached to the rider with a lanyard. No part of the kill lanyard may be constructed of solid plastic. Lanyards must be made from leather, metal cable, solid nylon, or plastic with a nylon or cable-reinforced core. Solid or hollow plastic-only lanyards are no longer allowed. Lanyard cable must pass through metal loops or attachments, and then must be crimped back to itself utilizing a steel crimp. Non-looping crimped ends, similar to that commonly used for electrical wire terminals, are not allowed. The lanyard and end crimp must form a loop capturing the end attachment. Attachment clips or attachment rings must be constructed of metal.

The switch must be on the low-voltage side of the ignition circuit. Ignition shutoff must disable all fuel pumps and nitrous systems. Many stock machines are equipped with a handlebar-mounted thumb switch which can have a lanyard easily attached for the above purpose. The engine must shut off if the ignition or fuel lanyard is pulled.

All bikes must be equipped with a rider-operated switch that will allow them to kill the ignition system without removing their hand from the handlebars.

While it is fully legal to use a tether fastened to the kill switch, the preferred method is to use a kill switch that disconnects from the bike and disconnects the electrical circuit. In the event of a fall, it is possible that the OEM kill switch will not be actuated properly or that it can get knocked back on after the fall.

**LIGHTS:** All entries must have a functional taillight attached to the motorcycle during night operation. Once sufficient darkness requires that the track turn on its lighting system, all bikes must activate their taillights during competition. Night operation lights must be powered in a manner in which they will remain operational even if the lanyard kill switch or rider thumb switch is cut off. Bikes utilizing a taillight powered through a factory key-style ignition switch must leave the switch in the “ON” position until after they clear the end of the track. Failure to have the taillight activated during night competition will constitute run disqualification.