



REAL STREET RULEBOOK

Revised April 2024

CLASS DESCRIPTION: Designed for street-legal sport bikes with limited modifications. Parity is maintained among diverse rider sizes with a series of wheelbases based on rider weight. In an effort to both control costs and keep the visual appearance as close to the original product design, the rules in Real Street restrict the use of aftermarket components and require the retention of the OEM components whenever practical. Typically, if the OEM parts will perform their required tasks sufficiently and safely, aftermarket replacement parts are discouraged. Racers should construct their bikes with the spirit and intent of these goals in mind.

DESIGNATION: The class designation is RST. All entrants must display this designation on both sides of their motorcycle by their bike number. Example: RST675

FORMAT: This is a 1/4 mile heads-up class run on a .400 pro tree. The class will qualify for a 16-bike field and be placed on a pro ladder. There will also be a "B Class" for riders that qualified 17th – 32nd, and they will be placed on a separate pro ladder. No alternates will be used in either class if a rider is broke.

CHANGING BIKES: 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). The bike and rider that runs the first round is the one that must be used for the remainder of eliminations, even if the class is completed on another weekend due to weather.

OEM PARTS: Original Equipment Manufacturer (OEM) parts are those parts that were originally equipped on the year, make, and model of the motorcycle as indicated by the chassis VIN#. If a rule states that an OEM part is required, then you cannot replace that part with one from a different year motorcycle or a different model or a different brand bike unless such replacement parts are identical. Suppose the OEM manufacturer has a superseded or replacement part listed in factory literature as the current OEM replacement. In that case, those parts are also legal and share the same manufacturer's part number. Parts listed as "OEM" will have certain modifications allowed to such parts, and those modifications will be specifically defined within that section of the rule book. Any modifications to an OEM part that are not specifically defined as legal in the rule book are **prohibited**. Any racer that exploits any grey areas in the rules or attempts to debate the legality of parts with creative rule interpretations will have the parts in question deemed illegal. All racers need to construct their bikes within the spirit of these rules.



OEM FACTORY STOCK PARTS: Any part defined as OEM factory stock may not be modified from the OEM design in any fashion.

LICENSE PLATE: All motorcycles in this class must have a license plate mounted on the motorcycle. Valid stickers and registration are not required, and the plate can be used from another motorcycle. The license plate must be mounted securely.

FRAME: OEM frames must be used, and cannot be modified in any way unless otherwise noted. Minimal drilling of holes or welding of small tabs for attachment purposes is permitted. Cast or welded components designed for the installation of factory center stand mounts may be removed. Sidestand mounts may not be removed. Powder coating, painting, and polishing of the frame are permitted. VIN numbers must be on frame and readable.

SUBFRAME: OEM sub-frames must be used, and cannot be modified unless otherwise noted. Minimal drilling of holes or welding of small tabs for attachment purposes is permitted. Powder coating, painting, and polishing of the sub-frame are permitted. Aftermarket "inner fenders" can be bolted to the sub-frame for more tire clearance.

WHEELIE BARS: Wheelie bars are prohibited.

BODY: OEM plastic upper fairing and side fairings are required. Side fairings may be trimmed for ground clearance, clutch cover, and exhaust clearance only (however, 3/4 or 1/2 side fairings are not permitted). Aftermarket front fenders are permitted but cannot mix between models (i.e., cannot put GSXR fender on a Hayabusa). Aftermarket extended tail sections are permitted, but cannot be mixed between models. Aftermarket windscreens are allowed. All bodywork must be in stock location. The upper fairing bracket must be stock and unmodified, with minimal drilling or the addition of small tabs allowed for mounting. Any OEM body parts or frame tabs used for body mounts on the bottom of the bike that affects ground clearance may be removed (i.e., tabs on the bottom of the frame underneath the suspension on a Hayabusa). All bodywork must have an OEM stock paint job or may be custom painted (no primered parts allowed).

GAS TANK: OEM tank is required, and dimensions cannot be modified in any way. Adding fuel bungs underneath the tank and minimal notching underneath the tank for clearance is the only modification permitted to the OEM Factory stock gas tank.

LIGHTS: OEM factory stock headlight system (including low beam and high beam) is required and cannot be modified. OEM factory brake light (including tail light and brake light) is required. All lights must be on during all qualifying and elimination runs.



SEATS: Minimum seat height, with the rider in position, seat compressed, and 8 psi in the rear tire, measured from the lowest point of seating position to ground, is 22 inches. Stock OEM seat pan and seat latches are required. Upholstery and padding may be modified or replaced. Seats must be covered with fabric, leather, or vinyl.

ENGINE: Any internal engine modifications are allowed. Engine swaps from different year models are permitted, but the motor must bolt into the stock unaltered frame. If a factory counter balancer is removed, any aftermarket “dummy” shafts must be manufactured from aluminum. Aftermarket blocks are prohibited. Dry sumps are prohibited. Vacuum pumps are permitted on all n/a bikes.

OIL PANS: Stock oil pan is permitted and may be shortened, but the drain bolt must be relocated to the side of the oil pan. The minimum pan height for all models of bikes is 1.00” on all sides. All aftermarket pans must be manufactured from aluminum and must be dimensioned relative to the OEM parts they are replacing. The combined total weight of the oil pan, pickup, windage trays, and any other non-OEM oil/windage control components installed on/in the engine cases may not exceed 5 lbs.

ENGINE COVERS: Aftermarket engine covers must be manufactured from aluminum, magnesium, or carbon fiber, and must be sized relative to the OEM parts they replace. IF any carbon replacement parts use metal inserts, the total weight of the finished cover may not exceed the weight of the OEM part it is replacing.

CLUTCH: Slider clutches are prohibited. No pneumatic, electric, or hydraulic clutch engagement, activation, or engagement force systems are allowed. Clutch baskets, inner hubs, spacers, standoffs, slave cylinders, and pressure plates can be switched between the different years of motorcycles. Billet clutch baskets and inner hubs are permitted. Modification of the clutch to eliminate factory-style back-torque cam assembly is permitted. Modifications of spacers and stand-offs to alter spring install height is allowed.

POWER ADDER ENTRANTS: OEM or aftermarket True Hand Clutches only are permitted. All lockup types are prohibited.

NORMALLY ASPIRATED ENTRANTS: Any style of hand-operated centrifugal-assist lockup is allowed. Lockup clutches coupled to the outer basket or otherwise driven by the engine are allowed. MANUFACTURERS CUP technical staff has the final word on the legality of any clutch system or component, and new designs must be pre-approved prior to their use. Clutch engagement and disengagement must be controlled by conventional cable or hydraulic-actuated clutch lever. With the engine off and the bike in gear, the clutch must have sufficient engagement force to prevent the bike from being rolled without either sliding the rear tire or



rotating the engine. With the brakes locked or the bike otherwise blocked from rolling, the clutch system must have sufficient engagement force at idle to kill the engine if the clutch lever is released. Idle may be set between 1500-2000rpm for this test. The use of ECU mapping or electrical system functions to simulate the positive results of this test is not allowed, engine kill must be a direct result of clutch engagement drag.

TRANSMISSIONS:

ALL POWER ADDER BIKES: All entrants must utilize an OEM-style shift drum, shift forks, and transmission. Shift drum must fit into unmodified OEM engine cases. Transmission components may be modified or replaced with aftermarket components of a similar design and function. “Automatic,” no-kill, or override-shiftstyle transmissions are not allowed. No components may be used that are designed to allow the transmission to be simultaneously engaged in more than one gear. This includes, but is not exclusive to, windowed shift drums, split shift drums, split forks, split gears, split fork slider rings, gear or fork detent, and/or return springs, etc. Any entrant with any of these components is considered to have an automatic transmission, even if a fuel cut, ignition cut, or ignition retard is being utilized.

ALL MOTOR BIG BORE BIKES: All entrants must utilize an OEM-style shift drum, shift forks, and transmission. Shift drum must fit into unmodified OEM engine cases. Transmission components may be modified or replaced with aftermarket components of a similar design and function. “Automatic,” no-kill, or override-shiftstyle transmissions are not allowed. No components may be used that are designed to allow the transmission to be simultaneously engaged in more than one gear. This includes, but is not exclusive to, windowed shift drums, split shift drums, split forks, split gears, split fork slider rings, gear or fork detent, and/or return springs, etc. Any entrant with any of these components is considered to have an automatic transmission, even if a fuel cut, ignition cut, or ignition retard is being utilized.

ALL MOTOR LITER BIKES: All entrants may utilize a full auto transmission with components that allow override shifting in any or all gear change positions.

STARTING SYSTEM: The battery must remain in the OEM factory stock location. A second battery is permitted but must be mounted behind or next to the stock battery location in the subframe. Push starts are not permitted.

CHARGING SYSTEM: OEM factory stock charging system components are required. Charging systems must be functional and operational at all times during qualifying and eliminations. All components of the lighting system must be on at all times during the run, including the burnout and shutdown. Multiple light systems must have all bulbs operating. In the event of failure of either the charging system or the lighting system, the tech department will allow repairs to be



made prior to the next round of competition. This courtesy repair opportunity is only allowed once per event, per system. Failure by the rider or crew member to activate either the charging or lighting system is considered to be a system failure. Any failure of either system for the second time in the same event will result in an automatic disqualification.

COOLING SYSTEM: An OEM radiator is required. The radiator must be located in the original OEM location and must utilize the original OEM upper radiator mounts. The radiator may be modified or shortened to allow for proper tire clearance by removal of the lower section of the OEM tank and radiator core. Non-OEM tanks and/or cores are not allowed. Welding of caps or plugs to seal and/or enclose modified radiator is allowed. Modifications to the OEM tank and core to relocate hose inlets/outlets are allowed. Modifications to create lower or side mounting points are allowed. Oil coolers/oil heat exchangers may be removed.

INDUCTION: Any entrant may use electronic fuel injection or carburetors. Mechanical fuel injection systems are not allowed. Aftermarket fuel injection throttle bodies are not allowed. Aftermarket carburetors are permitted.

FUEL INJECTION THROTTLE BODIES: Fuel injection-equipped entrants are required to use OEM-based throttle bodies. Any throttle body from any production 4-cylinder motorcycle may be used on any model bike. Throttle body shafts throttle body mounts and spacers, and throttle cable attachments may be modified to allow alterations to throttle body spacing. Modifications to the throttle body housings are limited to over-boring, and injector bore modification to accommodate aftermarket injectors. Aftermarket throttle plates are permitted. Secondary throttle plates (if originally equipped) may be modified, deactivated, or removed.

FUEL SYSTEM: Aftermarket fuel pumps, injectors, regulators, filters, fuel lines, and fuel rails are permitted.

ENGINE MANAGEMENT SYSTEMS: Engine management systems (EMS), also known as Engine Control Units (ECU), may be either factory or aftermarket units. Factory ECUs may be swapped from other makes or models of bikes.

FACTORY ECU: Factory ECUs may be used and may be reflashed to any desired configuration. They may also be physically modified to allow a higher rev limit, limited to a small opening no larger than 1 square inch on the outer case, and that opening must be filled with epoxy or silicone. Aftermarket ECUs and related components, including firmware and software, must be commercially available for delivery within 30 days prior to the event and must be listed in the manufacturer or distributors' catalog and/or website. All components must be used as delivered from the manufacturer. No modification to any hardware, firmware, or software is allowed unless performed by the manufacturer. Any violation of this rule or any attempt to hide



files or otherwise conceal the functions of any portion of the ECU will result in an immediate, mandatory one-year suspension of the rider and/or race team and forfeiture of all points earned for the season.

TECH INSPECTION: MANUFACTURERS CUP tech may, at any time, on any motorcycle in competition, examine the maps, settings, data downloads, or any function of any factory or aftermarket EMS, piggyback or inline fuel injection controller, ignition system, data acquisition system, or any other electronic device on the motorcycle. Tech officials may conduct this examination in any manner, including performing the examination with a team representative as an observer only. It is the responsibility of the competitor to have ready, at all times, the required components to submit to this examination. This can include a laptop or PC, software, passwords, download cables, etc. It is also necessary that the competitor, or someone within the competitor's team, is knowledgeable in the system being used, and is capable of assisting tech officials in navigating through any and all portions of the software. MANUFACTURERS CUP tech may also impound any component of an ECU or data recording system for further examination either on-site or off-site. Refusal to submit to any examination or failure to supply the required components for examination is grounds for disqualification and/or suspension.

ECUs may not detect and 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.

DATA ACQUISITION: Any electrical or mechanical device that may be used to activate, adjust, or tune any engine function based on ride height, track position, front wheel speed, or front suspension conditions, is prohibited. Any sensors, including infrared or ultrasonic, that measure the track Christmas tree or timing system, the track surface, or any structure of the track facilities are prohibited. Any non-contact sensor (sonic, infrared, radar, laser, etc.) designed to detect or measure distance, position, or location is prohibited. The use of GPS, locator or position beacons, and locator or position transmitters is prohibited. Third wheel sensors, which is the use of any wheel or rolling device other than the normal front steering or rear drive wheel/tire to measure speed, distance, or track position, are prohibited. Any sensors measuring front wheel/tire speed, position, temperature, or pressure are prohibited. Any sensor measuring any function of the suspension, including travel, distance, position, or external or internal fork or shock conditions, is prohibited. Any mechanical, infrared, ultrasonic, or other types of sensor that measures ride height is prohibited. In addition to standard electronic data measurement sensors, any electrical or mechanical device that may be used to activate, adjust, or tune any engine function based on ride height, track position, front wheel speed, or suspension conditions, is prohibited.



ELECTRICAL: Air shifters, shift lights, ignition kill boxes, multiple fuel injection controllers, and ignition timing control boxes are permitted. Auto shifters are prohibited.

INSTRUMENT PANEL: OEM factory-style dash panels must be mounted on the motorcycle in the original location, utilizing the OEM mounting devices. OEM or Aftermarket dashes are permitted. Aftermarket single-function analog or digital gauges are also permitted.

EXHAUST: Any type of exhaust is permitted.

FUEL: Any gasoline is allowed. Nitromethane, propylene oxide, ethanol, and methanol are not allowed.

GASOLINE: MANUFACTURERS CUP defines gasoline to be a complex mix of hydrocarbons, with a maximum of 25% oxygenates, and a maximum of 1% non-energetic anti-knock and/or lubricant additives. Methanol and ethanol may not be used as oxygenates or additives.

NITROUS OXIDE: Any style nitrous system is permitted with any number of solenoids or nozzles permitted.

SUPERCHARGERS: Any style engine-driven supercharger is allowed. Supercharged entrants shall follow the nitrous injection rules. Supercharging and nitrous may not be used in combination.

TURBOCHARGERS: Turbocharged entrants are limited to one turbo with a maximum turbo inlet opening of 54.5mm. MANUFACTURERS CUP defines maximum turbo size as the maximum allowable diameter of the inlet housing at the point where the leading edge of the compressor wheel meets the inlet housing. All air entering the turbo must pass through this opening. No stepped inducer wheels permitted, the contour from the inducer to the exducer must be continuous with no steps. The leading edge of the inducer wheel may not exceed 54.5mm and must fit inside the 54.5mm area of the inlet housing. The use of restrictor plates or stepped inlet housings in an effort to limit compressors with inducers larger than 54.5mm is not acceptable. Intercoolers are not permitted. Any type of boost controller is permitted. Water injection is permitted. The turbocharger may not be combined with nitrous oxide.

NORMALLY ASPIRATED: Naturally aspirated engines are permitted. The air supply for the air shifter must be contained within the swingarm or in a DOT-style tank as long as it has no bottle valve and is connected by a plastic line with a maximum burst pressure rating of no more than 300psi. No other DOT bottles are permitted on the motorcycle for any other purpose.

TIRES: DOT-approved motorcycle street tires only. Slicks are prohibited.



NITROUS BOTTLES: Bottles must be fully enclosed within the bodywork or swingarm. Bottles may not be mounted to foot pegs or outside of the swingarm.

BALLAST: Ballast is not permitted. Ballast is defined as any component attached to any part of the motorcycle, whose purpose is to add weight to the motorcycle. Any component, regardless of weight, which serves a structural, mechanical, and/or performance-enhancing function, is not considered to be ballast. Any non-ballast component which is deemed to be built excessively heavy in an attempt to side-step the ban on ballast will be subject to disqualification. The tech director has final discretion on this subject.

EXOTIC HEAVY MATERIALS: MANANUFACTURERS CUP defines an exotic heavy material as any material with a density higher than 8.1 grams per cubic centimeter. With the exception of components considered to be part of the front wheel assemblies or internal fork components, no components on the motorcycle may be manufactured from exotic material.

WHEELS: Aftermarket wheels are permitted, but must be the same diameter as the stock wheels. Cast wheels must have a 180mm or greater width tire. Maximum rear width is 6.25 inches. Front and rear wheels must be of matching styles and materials. Wheels can be painted, powder coated, or polished. Ceramic wheel bearings are permitted.

MAXIMUM FRONT WHEEL WEIGHT: Front wheel and brake rotor components may be manufactured from any material. The total weight of the front wheel rotating assembly, including tire, rotor, bearings, etc., cannot exceed 29 lbs. Inner bearing spacers and any non-OEM axle spacers required to install aftermarket wheels are included in the wheel weight.

FRONT SUSPENSION: OEM factory stock bearings/races, lower triple clamp, axle and axle hardware, wheel spacers, and forks required (none of these parts can be swapped with different year or model motorcycles). All front suspension components must be assembled as designed by the OEM, no reversing or relocating of forks or brake components. Aftermarket top triple clamp is permitted but must retain factory offset. Forks may be internally lowered, cut, re-valved, and shortened. Internal components may be constructed of any material. Rigid front forks are not allowed, and a minimum of 1" of front suspension travel is recommended. The front suspension must have sufficient hydraulic damping to allow safe operation. Modifications to OEM forks that completely removes or otherwise defeats the function of the damping system are not acceptable. Steering dampers are recommended and may be required in the future. Front-end lowering retention straps are permitted.

MAXIMUM FORK WEIGHT: The maximum fork weight for all models is 9.0 lbs per side. Fork weight includes all internal and external components of the fork, including the fork oil. Weight



does not include axles, axle spacers or hardware, brakes, brake brackets or hardware, fenders, fender mounts or hardware, or any other components mounted externally of the fork.

REAR SUSPENSION: Aftermarket shocks and aftermarket suspension linkages may be used. Aftermarket dogbones are permitted.

BIKE & RIDER MINIMUM WEIGHT: No minimum weight for the class.

RIDER WEIGHT: All riders must weigh in at tech inspection. Riders will only be allowed to wear one pair of underwear, one pair of shorts, one short-sleeved shirt, and one pair of socks while being weighed in (Shoes, jewelry, hats, watches, etc. must be removed, and all pockets must be empty). Riders will only be given one chance to weigh in at tech inspection and will be required to run the wheelbase placed for that weight. Any rider caught attempting to hide ballast on their person will be disqualified from the event and will face a one-year suspension from MANUFACTURERS CUP.

BRAKES: OEM factory stock front and rear brake calipers are required. Aftermarket disks of OEM diameter are permitted. Carbon fiber brake pads or disks are prohibited. Titanium brake rotors or rotor carriers are prohibited. One brake caliper and rotor may be removed from the front. Aftermarket brake lines are permitted.

GROUND CLEARANCE: Static ground clearance measurements will be taken with the rider seated on the bike, hands on handlebars, and feet forward, with heels only contacting the ground.

OIL RETENTION: Lower oil retention device (diaper) or belly pan is highly recommended.

Power Adder Bikes: All components, including bodywork, must have a minimum of 3 inches of static ground clearance.

Naturally Aspirated Bikes: All components, including bodywork, must have a minimum of 2 inches of static ground clearance.

DYNAMIC GROUND CLEARANCE: Ground clearance during the run, or dynamic ground clearance, constantly changes due to tire flex/growth, suspension movement, chassis and swingarm flex, etc. Because of the many variables involved in actual ground clearance during the run, there is no reasonable method to measure this value. Static ground clearance, or ground clearance with the bike sitting stationary, is the only defined measure for ground clearance. However, in the interest of safety, any entrant observed by the MANUFACTURERS CUP technical staff to have an unsafe amount of dynamic ground clearance may be required to alter their bike or setup, even if they pass the static ground clearance measurement. This may



be done at any time during the event, and the manner or methods of these alterations will be determined on a case-by-case basis.

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. A 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.

RULE REVISIONS: In order to maintain a level playing field, MANUFACTURERS CUP will monitor the performance numbers of the numerous combinations of rider weights and power adders found in this class. From time to time, it may be necessary to adjust the wheelbase and rider weights to help promote class parity. Racers should take this into consideration when constructing their bikes and should allow room in their swingarms, bodywork, fenders, etc., for changes in the wheelbase. Any rule revisions deemed necessary by MANUFACTURERS CUP would be officially posted on the MANUFACTURERS CUP website a minimum of 14 days prior to the event in which they become effective (the rulebook on the MANUFACTURERS CUP website on the day of the event is in full effect). Any rule revision deemed necessary for the reasons of safety may be made at any time, even after the start of an event, and may be made effective immediately.

WHEELBASE MEASUREMENTS: In order to aid in performing wheelbase measurements, all entrants must have axles with either dimples or holes located in the center of the axles. These holes or dimples must be at least ¼" in diameter and at least ¼" deep, and must be located on both front and rear axles. All components must be mounted in a fashion to allow an unobstructed access to the axles from both sides of the motorcycle. With the front wheel straight and standing from a perpendicular side view on both sides, there must be a direct line



of sight to both axles large enough to allow a wheelbase measurement tool of up to 1.5” in diameter to access the axles. No components of the bodywork, fender, turbo, exhaust, or any other components may block this view. Fabrication and design should take into consideration these requirements.

MAXIMUM ALLOWABLE WHEELBASE MEASUREMENTS:

Minimum Rider #	All Motor Liter	All Motor Big Bore	Nitrous Liter	Nitrous Big Bore	Turbo Liter	Turbo Big Bore	Supercharged Liter	Supercharged Big Bore
M0	71"	68"	64"	65"	63"	63"	64"	64"
M120			65"	66"			65"	65"
M125	72"							
M130		69"			64"	64"		
M135	73"		66"				66"	
M140		70"		67"				66"
M145	74"		67"					
M150		71"			65"		67"	
M155	75"		68"					
M160		73"		68"		65"		67"
M165		74"	69"		66"		68"	
M170		75"						
M175			70"					
M180				69"	67"		69"	68"
M185			71"					
M190			72"		68"	66"	70"	
M195			73"					69"
M200			74"	70"	69"		71"	
M205			75"		70"			
M210					71"	67"	72"	70"
M215					72"			
M220				71"	73"		73"	
M225					74"			71"
M230					75"	68"	74"	
M235								
M240			72"				75"	72"
M245						69"		
M250								
M255				73"				73"
M260						70"		
M265				74"				

N/A Bikes:

Bikes originally OEM without front fairing: Add 2”

ZX-10R, R1, S1000RR, CBR 1000RR: Add 2”

Bikes on gasoline: Add 1”

Bikes with True Hand Clutch: Add 3”

Nitrous Bikes:

ZX-10R, R1, S1000RR, CBR 1000RR: Add 2”

Turbo Bikes:

R1, S1000RR, CBR 1000RR: Add 2”

ZX-10R: Add 1”

Supercharged Bikes:



ZX-10R, R1, S1000RR, CBR 1000RR: Add 2"