

**CLASS DESCRIPTION:** Designed for street-legal sport bikes with limited modifications and a hand clutch. Parity is maintained among diverse rider sizes with a series of wheelbases based on rider weight.

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

**FORMAT:** This is a 1/4 mile heads-up class run on a .400 pro tree. The class will qualify a 16-bike field and place them 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.

**POINTS:** This class will be a points class at all IDBL & MAN CUP events.

**OEM FACTORY STOCK PARTS:** "OEM factory stock" means that the part must have been originally equipped on the year, make, and model of motorcycle as indicated by the chassis VIN# (i.e., If a rule says OEM factory stock part is required, then you cannot replace a part from a different year motorcycle or a different model or a different brand bike). 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.

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

**FRAME:** OEM factory stock frames must be used, and cannot be modified in any way. VIN numbers must be on frame and readable. OEM factory stock 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 frame or sub-frame are permitted. Aftermarket "inner fenders" can be bolted to sub-frame for more tire clearance.

**WHEELIE BARS:** Wheelie bars are prohibited.

**BODY:** OEM Factory stock 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 allowed. All bodywork must be in stock location. 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 effect ground clearance may be removed (i.e., tabs on bottom of 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 Factory stock gas 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 rider in position, seat compressed, and 8 psi in rear tire, measured from 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 or vinyl.

**ENGINE:** Any internal engine modifications are allowed. Engine swaps from different year models are permitted, but motor must bolt into stock unaltered frame. Aftermarket blocks are prohibited. Dry sumps or vacuum pumps are prohibited. Stock oil pan is permitted and may be shortened, but drain bolt must be re-located to side of oil pan. The minimum pan height for all models of bikes is 1.00" on all sides.

**CLUTCH:** Slider clutches are prohibited. No pneumatic, electric, or hydraulic clutch engagement, activation, or engagement force systems are allowed. Clutch baskets, inner hubs, spacer, standoffs, slave cylinders, and pressure plates can be switched between different year motorcycles. Billet clutch

baskets and inner hubs are permitted. Modification of 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:** Input-driven centrifugal-assist single-stage lockup clutches (commonly called “snowflake” clutches) are allowed by all entrants, with a wheelbase penalty. Input-driven lockups must be mechanically attached to the transmission input shaft, and may not be mechanically attached to the clutch basket or any component positively driven by the crankshaft. The use of clutches with counter-force springs to delay centrifugal arm engagement (commonly called “multi-stage” or “MTC Gen I” clutches) is not allowed. No clutch design which uses springs, cams, over-ride gears, or any other device to delay the engagement of centrifugal arms is allowed. No clutches coupled to the outer basket or otherwise driven by the engine (commonly known as “MTC Gen II”, “Hayes”, and “Gann” clutches) are allowed. IDBL & **MAN CUP** technical staff has the final word on legality of any clutch system or component, and new designs must be pre-approved prior to their use.

**NORMALLY ASPIRATED ENTRANTS:** Any style hand-operated centrifugal-assist lockup is allowed. Lockup clutches coupled to the outer basket or otherwise driven by the engine are allowed. IDBL & **MAN CUP** technical staff has the final word on 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 as a direct result of clutch engagement drag.

**TRANSMISSIONS:** 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-shift style transmissions 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 sliders 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.

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

**CHARGING SYSTEM:** OEM factory stock charging system is required. Charging systems must be functional and operational at all times during qualifying and eliminations. All components of 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:** OEM factory stock radiator is required. Radiator may be modified or shortened to allow for proper tire clearance. 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 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 event, and must be listed in the manufacturers 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:** IDBL & MAN 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. IDBL & MAN 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 (ie 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 upon 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, is 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 are prohibited. Any mechanical, infrared, ultrasonic, or other type 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 upon 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 exhaust is permitted.

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

**GASOLINE:** IDBL & MAN 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. IDBL & MAN 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 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. Turbocharger may not be combined with nitrous oxide.

**NORMALLY ASPRIATED:** Naturally aspirated engines are permitted. 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 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 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:** IDBL & MAN 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 an exotic material.

**WHEELS:** Aftermarket wheels are permitted, but must the same diameter as the stock wheels. Cast wheels must have a 180mm or greater width tire. Maximum rear width is 6.25-inch. 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. Total weight of 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, revalved, 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. Front suspension must have sufficient hydraulic damping to allow safe operation. Modifications to OEM forks which completely removes or otherwise defeats the function of the damping system is not acceptable. Steering dampers 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 9.0lbs 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 external 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 IDBL & MAN 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 rider seated on bike, hands on handlebars, and feet forward with heels only contacting the ground.

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 IDBL & MAN 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:** All riders must have full leathers (zipped together leathers are recommended and may be mandatory in future). All riders must have a SNELL 95 or higher full-face helmet with shield, leathers gloves, and shoes above the ankle. All motorcycles and riders must pass IHRA safety inspection. Ballistic blankets are recommended but are not required. Tether kill switches required on all entrants. Kill switch, when activated, must disable ignition, fuel pump(s) and nitrous system solenoids.

**RULE REVISIONS:** In order to maintain a level playing field, IDBL & MAN 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 wheelbase. Any rule revisions deemed necessary by IDBL & MAN CUP would be officially posted on the IDBL & MAN CUP website a minimum of 14 days prior to the event in which they become effective (the rulebook on the IDBL & MAN 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.

# 2015 RULEBOOK REAL STREET

Changes from last season are made in **BLUE**.

Revisions during the season are made in **RED**.

Revised **9/25/15**

MAXIMUM ALLOWABLE WHEELBASE MEASUREMENTS: **CHANGES IN GREEN BELOW WERE REVISED ON 8/28/15**

Minimum Rider Weight	Nitrous - Big Bore (Integral Engine Cases)	Nitrous - Big Bore (Separate Block/Cases)	Nitrous - Liter	Turbo - Liter
0 #	60"	61"	63"	60"
120 #	61"	62"	64"	61"
135 #	62"	63"	65"	62"
150 #	63"	64"	66"	63"
165 #	64"	65"	67"	64"
180 #	65"	66"	68"	65"
195 #	66"	67"	69"	66"
205 #	67"	68"	70"	67"
215 #	68"	69"	71"	68"
225 #	69"	70"	72"	69"
235 # Effective 9/25/15	70"	71"	73"	70"

"Snowflake" lock-up clutch: Deduct 1"  
 Honda & BMW Motorcycles: Add 1"  
 Yamaha Motorcycles: Add 2"

Minimum Rider Weight	Turbo - Big Bore
0 #	60
120 #	61
140 #	62
160 #	63
180 #	64
200 #	65
220 #	66
240 #	67

"Snowflake" lock-up clutch: Deduct 1"  
 Honda & BMW Motorcycles: Add 1"  
 Yamaha Motorcycles: Add 2"

Minimum Rider Weight	Naturally Aspirated Big Bore	Naturally Aspirated Liter
0 #	67"	67"
125 #	68"	68"
140 #	69"	69"
155 #	70"	70"
170 #	71"	71"
185 #	72"	72"

Honda & BMW Motorcycles: Add 1"  
 Yamaha Motorcycles: Add 2"  
 Bikes originally equipped from OEM without front fairing: Add 2"