

Pro Street Drag Bike

Qualifying Information, Ladder Type, & Tree
16-Bike Field, NHRA Pro Ladder, Pro .400 tree, Heads-Up.

4.2.5 *PRO STREET CLASS REQUIREMENTS

DESIGNATION: PST, followed by rider number.

This class contests the ultimate in street-legal motorcycles. Created to legitimize illicit street racing, Pro Street is reserved for stock-appearing motorcycles with unlimited engine modifications.

In addition, any approved motorcycles originally produced as 1000cc displacement sport bikes will be allowed to compete, with power-adders. This designation is intended to entice the use of the highly popular current class of late-model liter bikes. Only the latest lightweight, high-tech import offerings, with a maximum production size of 1000cc, will be allowed to race under this designation, and each model must be approved for use by TSDRA. Currently, the following 2001 or newer models are approved for use:

HONDA: CBR929RR, CBR954RR, and CBR1000RR.

KAWASAKI: ZX-9 and ZX-10

SUZUKI: GSXR1000

YAMAHA: YZF-R1

In addition, expanded allowances for V-Twin entrants, including the use of multiple power-adders, will allow the competitive use of both import and domestic V-Twins. All bikes must be street legal with VIN tag, self-starting with motorcycle engines only. Pro Street is run "heads up, no breakout" with a qualified field up to 16 motorcycles on a (.400) Pro tree. Separate records will be allowed as follows: Turbo, Nitrous, All-motor and V-Twin.

4.2.5.1 *ENGINE

4.2.5.1.1 ENGINE

Production-based motorcycle engines allowed, with any internal modifications permitted. Nitrous oxide may not be used in conjunction with any turbocharged entrants, with the exception of draw through carbureted turbo, V-Twins. Air or electric shifters permitted. All engines must be self-starting and utilize OEM-style starting systems. No push or roller starts. V-TWINS: Non-production engines may be approved for use in this class, but their concept and design must be approved prior to any construction.

DISPLACEMENT:

Type Max Displacement Weight

All Motor Unlimited No Minimum

Original Liter 1070cc 565 lbs

Nitrous Unlimited No Minimum

EFI Turbo 1370cc 685 lbs

Supercharger 1370cc 685 lbs

V-Twin Unlimited No Minimum

4.2.5.1.2 *TURBOCHARGERS

TURBOCHARGING: Limited to one turbo with a maximum turbo inlet opening of 62.5mm. TSDRA 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 62.5mm, and must fit inside the 62.5mm area of the inlet housing. The use of restrictor plates or stepped inlet housings in an effort to limit compressors with inducers larger than 62.5mm is not acceptable.

INLET COOLING: Any type of inter-cooling permissible. Turbocharged entrants that are prohibited from the use of nitrous may not use nitrous as cryogenic cooling source.

Entrants utilizing water injection must have the water tank mounted in a manner to allow tech to easily inspect its contents. Absolutely no substance other than water is allowed to be in the tank.

4.2.5.1.3 SUPERCHARGERS

Any style engine-driven supercharger is allowed.

4.2.5.2 *DRIVETRAIN

4.2.5.2.1 CLUTCH

All clutch systems must be approved by TSDRA Tech for use in this class. Each interested manufacturer or team must submit sample parts for approval a minimum of 60-days prior to any event in which it desires approval eligibility. No pneumatic, electric, or hydraulic clutch engagement or activation systems are allowed.

TURBOCHARGED & SUPERCHARGED 4-CYLINDERS: Slider clutches prohibited. Clutch engagement and disengagement must be controlled by conventional cable or hydraulic-actuated clutch lever. Minimum 80 lbs of static spring pressure at installed height required. Engine RPM must decrease with the release of clutch lever at 1200 RPM.

V-TWINS & NON-TURBOCHARGED 4-CYLINDERS: Any approved clutch system allowed.

4.2.5.2.2 TRANSMISSION

All entrants must utilize an OEM-style shift drum and transmission.

TURBOCHARGED & SUPERCHARGED 4-CYLINDERS: Automatic transmissions prohibited. (See Transmission 2.2.3) No transmission which could allow override-style shifting is 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 not exclusive to, windowed shift drums, split forks, split gears, split fork slider rings, gear or fork detent springs, etc.

NON-TURBOCHARGED 4-CYLINDERS & V-TWINS: Automatic transmissions allowed.

4.2.5.3 *BRAKES & SUSPENSION

4.2.5.3.1 FRONT SUSPENSION

The use of retention straps prohibited. Front fork must travel minimum of 1.00 inch up and down with no more than 50% of travel due to sag. Front tire must have a minimum of 1.25 inches of clearance between top of tire and bottom of triple tree. Add additional clearance for fender thickness as needed to not allow tire to contact triple tree under full compression.

4.2.5.3.1.1 TRIPLE CLAMPS

EXISTING: Illustration under 4.2.4.3.1.1

The steering stem offset on top and bottom triple clamps must be equal. Front axle offset may not be less than 1/2-inches. (See illustration Above) The use of triple clamps, steering stems, stem bearings, offset bearing races, or any other components designed to increase or decrease the rake is prohibited. Axle must be in the center of the forks. Triple clamps can be made of heavy material only after TSDRA approval of concept. Bottom of lower triple tree cannot be higher (must be flush or lower) than webbing of lower steering neck.

4.2.5.4 FRAME

4.2.5.4.1 FRAME

Stock OEM frames required. No modifications to any portion of frame allowed, unless specifically noted.

Max wheelbase for both classes 68"

ALLOWABLE MODIFICATIONS:

ALL BIKES: Frames may be polished, chromed, painted, powder coated, or otherwise cosmetically altered, as long as such modifications do not remove substantial material or weaken the frame. No braces, gussets, or crossbars may be removed, unless specifically listed. Additional braces, gussets, or crossbars may be added, as long as they do not weaken the frame in any manner.

Small accessory brackets, tabs, mounts, etc., using fasteners no larger than 5/16" (8mm) may be removed, relocated, or modified. New accessory mounts may be installed, and new mounting holes may be drilled into the frame, as long as the

hole size does not exceed 5/16" (8mm). An excessive number of mounting holes will be considered lightening of the frame, and is not allowed. Exhaust mounting brackets, center-stand, and side-stand brackets, regardless of fastener size, may be removed as long as doing so does not weaken the frame

Steering heads must remain stock, with the exception of the bottom steering stem bearing race. The bottom bearing race cup may be re-machined to allow the bearing race to be recessed farther into the frame. New bearing race cup must use the factory bearing race. The bearing race cup must be machined along the same axis as the original location, i.e., the rake of the steering stem may not be altered during this modification. The original bearing race cup may be machined off to be flush with the bottom webbing of the steering neck, but no farther. No other material may be removed from the steering neck casting, with the exception of removal or modification of the steering stops and/or the headlight/fairing mount.

Seat rails/sub-frames may be modified or relocated. Mounting tabs or brackets for these items may be modified or relocated as well.

Rear suspension mounts including shock mount and rising rate linkage mounts may be relocated. However, due to the extreme loads and potential safety issues, modifications to these components will be heavily scrutinized. Swingarm pivot mounts may not be modified. Swingarm pivot centerline cannot be moved in any manner, including offset bushings, plates, etc. Proper design, welding, and bracing are crucial in these areas.

Engine mounting tabs and brackets may not be modified. Bolt-on engine mounts may be replaced, but must maintain the same mounting dimensions as the factory mounts. Engine relocation in any manner is not allowed.

HONDA BLACKBIRD: The round tubular cross-brace, located directly behind the steering stem, may be removed. Upper rear sub-frame mount may be removed. It may be cut off flush with the top of the factory frame spar, but no farther.

KAWASAKI ZX-12, ZX-14: Airbox inlets may be welded shut, or modified for better sealing with turbo dump pipe, as long as these openings are not enlarged. Access panels for throttle body/airbox connectors may be modified, as well as the mounting area for the connectors. These modifications may not weaken the frame. Opening for turbo pop-off valve may be cut in airbox area of frame as needed, as well as mounts or bungs for air sensors.

SUZUKI GSXR (EARLY MODELS): 1986-1987 750 and 1986-1988 1100 models may remove the square tubular cross-brace located generally above the carburetors. Late-model liquid-cooled models, factory-equipped with engine mounts connecting between the cylinder head and the upper frame spar, are not required to use these mounts. The mounting tabs for these mounts may be removed from the frame.

SUZUKI HAYABUSA: The round tubular cross-brace, located directly behind the steering stem, may be removed. Upper rear sub-frame mount may be removed. It may be cut off flush with the top of the factory frame spar, but no farther.

V-TWINS: Aftermarket frames may be approved for use in this class, but their concept, appearance, and design must be approved prior to any construction.

4.2.5.4.2 GROUND CLEARANCE

Minimum 2" with rider sitting on bike, straight up perpendicular to ground with 8 psi in rear tire.

4.2.5.4.3 SEAT

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.

4.2.5.4.4 WHEELBASE

TURBOCHARGED 4-CYLINDERS and SUPERCHARGERS: Maximum wheelbase 68 inches.

ALL MOTOR / NITROUS-ONLY 4-CYLINDERS / V-TWINS: Maximum wheelbase 75 inches.

4.2.5.5 TIRES & WHEELS

4.2.5.5.1 TIRES

DOT motorcycle street tires only, slicks allowed for all motor, nitrous, and draw

through turbo bikes only. Max of "7.00 slick. Tech must be informed prior to tire change for verification. (See Tires 2.5.1)

4.2.5.5.2 *WHEELS

Cast wheels must have a 180mm or greater width tire. Wheels 6.75 inches must have bead-lock unless utilizing Mickey Thompson MCR2 or TSDRA approved tire. Bead-lock highly recommended on all rear wheels. 16-inch minimum diameter front wheel. Total weight of front wheel rotating assembly, including tire, rotor, bearings, etc cannot exceed 29 lbs.

4.2.5.6 FUEL

4.2.5.6.1 FUEL

TURBOCHARGED 4-CYLINDERS: Any TSDRA-approved gasoline.

NITROUS-ONLY 4- CYLINDERS and V-TWINS: Any TSDRA-approved gasoline or alcohol may be used.

SUPERCHARGERS: Any TSDRA-approved gasoline or alcohol may be used on a crank driven supercharger permissible. (See Fuels 2.6.1)

4.2.5.7 BODY

4.2.5.7.1 BODY

All main body parts, including tail sections and seat, must have stock appearance and shape, (i.e., no one piece bodies or tank shell, unless originally equipped). Tail section or rear fender must extend past the rear axle. Alterations of gas tanks are limited to sloping at rear of tank; brand name must appear on both sides of bike. Replacement parts are permitted, but must retain the shape of the stock parts they replace. Altering of stock body shapes must be approved by TSDRA. (See Body, 2.7: 1 & 2). To allow access to nitrous bottle, all nitrous bikes must have thumb (butterfly) body fasteners on any aftermarket body pieces that cover bottle to allow removal of panel or section by hand without the use of tools.

FUEL TANKS: Aftermarket fuel tanks are limited to TSDRA approved manufacturer and part numbers only. In order for a tank to be legal, it must be commercially available, at a fair market price, to anyone desiring to purchase one. Manufacturer or distributor must be able to maintain availability at all times, and must be able to make delivery within 30 days of order. Manufacturer or distributor has the right to demand full pre-payment, including any shipping charges, before considering an order to be completed.

CURRENTLY APPROVED AFTERMARKET TANKS:

Catalyst Racing Composites:

- BUSOTK99
- BUPSTK99
- ZX14PSTK06

Velocity Racing

- Pro Street Tank

ALCOHOL TANKS: Due to fuel incompatibility problems with alcohol, any entrant using alcohol as a fuel may use a fuel tank with an aluminum or steel inner structure as a fuel holding tank. Tanks must have an accessible fuel filler cap in a similar location to the approved tanks. The outer shell of the tank must be identical in shape and appearance to the currently approved fuel tanks. Companies manufacturing approved tanks must also be able to deliver the outer tank shell within 60 days of completion of order placement, at fair market price, to any competitor desiring to construct such a tank. Part numbers will need to be determined and submitted to TSDRA at that time.

Companies desiring to produce production tanks for this application may submit tank designs for approval. Individual competitors may construct their own tanks using an approved outer shell, but design must be approved by AMA Tech prior to use. For further questions or inquiries, contact TSDRA technical department.

TAIL SECTIONS: Seat location will be determined by a minimum distance of 29.5-inches measured from the centerline of the steering stem to the back of the seat, including padding, at the bottom most point measured at a 90 degree angle to the ground. Approval of all parts will be limited to 30-days prior to an event. Photos of

parts installed on the exact bike must be submitted for approval.

4.2.5.8 ELECTRICAL/CONTROL

4.2.5.8.1 ELECTRICAL

Functional charging system, head and taillight w/ brake light, and kill switch required. Headlight and taillight must be retained in stock locations and operate automatically when ignition is switched to the ON position. Turn indicators optional. Headlight is required to be on during all qualifying and eliminations. In the event of failure, charging system and bulbs will be inspected and repairs will have to be completed prior to next round. Auto shifters are prohibited. Two-steps are prohibited on turbo entrants but permissible with nitrous entries.

HEADLIGHTS: Factory headlight systems must be used. The complete lighting system, including lens, housing, reflectors, bulbs, etc. must be intact. Mounts may be modified or removed. Bottom of headlight housing may be modified for greater front tire and/or fender clearance, but housing must remain enclosed to prevent the escape of light from under the fairing. Headlight must be mounted in the front fairing in the factory location. Non-fairing bikes must have headlight mounted in factory location. During competition, all bulbs normally operating during the factory low-beam setting must be burning at all times. High-beam setting need not be functional.

TAILLIGHTS: All entrants must have a functioning taillight system, with operational tail and brake lights. Factory taillights are highly recommended. Non-factory tail lights must emit red light, and must be sufficiently bright to be reasonably visible.

4.2.5.9 SUPPORT GROUP

4.2.5.9.1 *WEIGHT

All weights include both the bike and rider, and will be taken at the conclusion of the run.

TURBOCHARGED & SUPERCHARGED 4-CYLINDERS: Minimum weight, 685 lbs.

PRODUCTION 1000cc 4-CYLINDERS: Add 565 lbs.

V-TWINS & NON-TURBO 4-CYLINDERS: No minimum weight.

4.2.5.10 RIDER

4.2.5.10.1 QUALIFYING

Riders of Pro Street must hold a TSDRA Class 2C license. (See Licensing, 3.11.2)

TSDRA REQUIRED DECALS:

TSDRA will provide a list of required decals for competition in TSDRA events prior to the 1st race of the season. Series and Class Sponsor decals must be displayed on bike as instructed.

All rules subject to change at any time to maintain parity.

MUST MEET ALL NHRA RULES INCLUDING LICENSE AND CERTIFICATION

Rule modification 2/5/10

The only rule change in AMA this year was a reduction in weight for the 1000's. The change is reflected in the three lines below and will be placed in the printed rule book.

4.2.5.9.1 *WEIGHT All weights include both the bike and rider, and will be taken at the conclusion of the run. TURBOCHARGED & SUPERCHARGED

4-CYLINDERS: Minimum weight, 685 lbs.

PRODUCTION 1000cc 4-CYLINDERS: Minimum weight, 550 lbs

V-TWINS & NON-TURBO 4-CYLINDERS: No minimum weight.