

# **NWDB Rulebook**

## **2007 NORTHWEST DRAGBIKE SUPER STREET CLASS RULES**

### **DESIGNATION**

S/ST followed by rider number.

### **CLASS DESCRIPTION**

The Super Street Class contests street legal, production based, stock appearing motorcycles with engine mods, optional power adders, on street tires, without a wheelie bar.

Rules are structured to keep the competition close between a wide range of street bike types. The weight, wheelbase and other limits may be adjusted pending the parity of performance numbers between naturally aspirated, NOS and Turbo entrants.

### **FORMAT**

Qualifying and eliminations will be heads up on a .400 pro tree. Eliminations are on a NHRA pro ladder.

### **ROAD COURSE**

Bikes should be street legal and, in order to prove street ability, may be required to perform a road test. The road course can be up to 10 miles long, and following the end of the course, all bikes will be required to turn off their engines and re-fire them within one minute and pass a designated point under power. Bikes not able to restart within one minute of the instructions to fire will be disqualified. Any bike that shuts off engine prematurely, is stopped by officials for safety reasons, pulls off or stops on the assigned course for any reason will be disqualified. Head and taillight must be on at all times. Bike must be muffled during road test. Substitute riders will be allowed during the road course, all riders during the road course must have full safety equipment, including SNELL helmet, full leathers, gloves and boots. Current registration tag and license plate must be mounted on bike and visible from the rear, and remain on bike during qualifying and eliminations.

### **ENGINE**

Any engine originally used in a production motorcycle may be used. Factory OEM cases, cylinder blocks and heads must be used. Air-cooled engines may use aftermarket cast aluminum cylinder blocks. Unlimited displacement and engine modifications are allowed.

Any ignition, electrical systems, and fuel injection controllers are allowed.

Crankcase and all tanks containing fluids must have vent tubes routed to a catch can or have non-spill breather system.

The use of aftermarket oil pans is allowed. For the Suzuki Hayabusa, ZX12R, and ZX14, aftermarket pans must be a minimum of 2" in height. Minimum pan height for other models will be determined on a model-to-model basis and pre-approval is required.

It is recommended and may be required in 2007, that all bikes use a flat oil pan with no protrusions and have a recessed or side-mounted drain plug.

One power adder is allowed and is defined as NOS or Turbo. NOS cannot be used in conjunction with a Turbo.

**TURBOS** -. Maximum turbo size is 54mm. Maximum size is defined 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 allowed, the contour from the inducer to the exducer must be a continuous curve with no steps. The leading edge of inducer wheel may not exceed 54mm, and must fit inside the 54mm area of the inlet housing. The use of restrictor plates or stepped inlet housings in an effort to limit compressors with inducers larger than 54mm is not acceptable.

Boost controllers are limited to a 2-stage boost control (waste gate spring plus one other stage). The use of electronic boost controller is prohibited. Multi-stage, ramped, or progressive boost controllers are prohibited. All wires, hoses, wastegates, etc. must be clearly visible for tech inspection

Water injection, intercooling, or any form of intake air cooling is prohibited. Turbo bikes may not have NOS contained in any tank or holding cell anywhere on the bike.

NOS - NOS bottles must be stamped DOT-1800 rating and securely mounted inside perimeter of frame members and or bodywork. Bottles may be mounted to swing arm only if mount is welded or attached by a minimum of two 5/16" bolts with a bottle anti-drop device. Bottle must have a clamp to keep bottle tight in mount. No hose clamps or tie wraps. Line from bottle to solenoid must be high pressure steel braid or steel. To allow access to NOS bottle, all NOS 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.

### **ENGINE SWAPS**

Engine swaps of the same family are allowed. All engines within a given engine family must have the motor mounts and cam drive in the same location, as well as have the same cylinder spacing (i.e. Katana, Bandit, and oil cooled GSXR motors can be interchanged.

GSXR 750 motors may be swapped out for GSXR 1100 motors). No modifications can be made to the frame or the motor mount plates. Frame must be 100% stock relative to motor mounting, and must use the stock unaltered motor mounts. All motor swaps must be direct bolt-in only.

### **FUEL**

Gasoline only. Alcohol or nitromethane is prohibited.

### **COOLING SYSTEM**

Water cooled bikes must retain complete functional cooling system - radiator, water pump, hoses, coolant, etc. Filled or solid blocks not allowed. Cooling system must be sufficient to operate bike during road course. All components of the cooling system used during the road course must remain on bike during all qualifying and eliminations. Any OEM, modified, or aftermarket components may be used.

### **STARTING SYSTEMS**

Engine must be self-starting and use stock starter. No external starters, batteries, or boosters allowed. No push starts.

### **CHARGING SYSTEMS, LIGHTS**

Electrical charging systems, OEM headlight, and OEM tail light required and must be functional and operational at all times during qualifying, eliminations and road course. Any factory or aftermarket components may be used. Turn indicators optional. In the event of failure, charging system and bulbs will be inspected and repairs will have to be completed prior to next round.

### **TRANSMISSION**

Transmissions may be modified. All bikes must utilize an OEM-style shift drum and transmission. Automatic transmissions, no-kill autos are not allowed. Transmissions, which could allow override-style shifting, 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 not limited to, windowed shift drums, split forks, split gears, split fork slider rings, gear or fork detent springs, etc. Air or electric shifters are allowed.

### **CLUTCH**

Stock type or two-stage lockup clutches allowed. Clutch engagement must be completely controlled by the rider's hand with the clutch lever. No other devices can be utilized to assist clutch engagement. Multi-stage clutches and slider clutches are prohibited.

### **KILL SWITCHES, DATA LOGGERS, SPECIAL CONTROLS, SENSORS**

Tether kill switches are required and when activated must disable ignition, fuel pump(s) and nitrous system solenoids.

Traction control or wheelie control systems are not allowed. No type of electrical or measuring devices may be mounted to or activated by any part of the front or rear suspension.

Data loggers are allowed for data gathering only, and are not allowed to control any other device. Front wheel speed sensors or third wheel speed sensors are not allowed. Rear wheel speed sensors, both directly measured and those derived from countershaft or other shaft speed sensors, may be used for information gathering only. Rear wheel speed data may not be used to activate or deactivate any electrical or mechanical devices.

Devices that measure track performance, on track location, the tree, or any other part of the track or timing system, are not allowed.

## **FRAME**

Stock OEM frames must be used, no aftermarket frames are allowed. Frame must have unaltered OEM VIN number in the original location. Frames cannot be modified to allow bigger displacement engines or relocation of engine. Strengthening modifications to stock frames are permitted as long as the frame is not weakened. Strengthening gussets and/or tubes may be added but none removed. Frame strengthening gussets/tubes and replacement brackets must be made from 4130 chrome moly steel on OEM steel frames or a compatible aluminum on OEM aluminum frames. All welding must be done by using accepted heliarc process in a workmanship-like manner.

Altering of the rake, neck location, neck length, bearing race fitments, etc. is not allowed. No modifications to mainframe or engine cradle tubes will be allowed, except as noted otherwise. On factory perimeter style frames, engine cradle tubes must remain intact and unmodified; i.e. no cutting sectioning, splicing, relocating, etc. allowed. Engine cradle tubes will be defined as the tubes that connect to the steering neck, pass down the front and under the motor, back up behind the motor, and across the top of the motor, reconnecting to the steering neck and or front down tubes. On factory spar-style frames (includes most modern sportbikes), main frame spars must remain intact and unmodified. Main frame spars are defined as the large formed tubes that connect the steering neck, engine mounts and swingarm pivot.

Swingarm pivot bolt location cannot be relocated. Rear shock mounting structures and attachment points cannot be removed or relocated, and must be used to attach rear shock(s) or strut(s). Subframe or seat rails may be modified, moved, or replaced. Small accessory brackets (radiator, shock reservoir, body tabs, etc.) may be modified, relocated or removed or replaced unless they also serve as a strengthening member. Frames may be polished. Wheelie bars prohibited.

## **FRONT SUSPENSION**

The stock rake angle cannot be altered. 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. The steering stem offset on top and bottom triple clamps must be equal. Replacement or aftermarket triple clamps with the same offset as the OEM triple clamps, or no less than 1.25" measured from the center of the steering stem to the center of the forks, are allowed. Aftermarket or OEM forks that are the same diameter or larger than the originally equipped OEM forks are allowed. Front axle location relative to fork tube center cannot be changed. Rigid front forks are not allowed. Lightweight aftermarket drag racing front-end assemblies are not allowed. Minimum front fork travel is 1 inch. The use of front suspension retention straps are allowed but may be prohibited in 2007. Steering dampers recommended and may be required in 2007.

## **REAR SUSPENSION**

Swingarm style rear suspension required, no fully welded tail sections allowed. Any stock, modified stock, or aftermarket swingarms will be allowed. Swingarm pivot location must remain in original location. Original style front pivot bolt or bolts must be used. Bikes with working rear suspension are allowed any type suspension system, as long as it utilizes a conventional-style single front pivot. Bikes with solid rear suspension are allowed struts only to replace the factory shock(s). No other struts are allowed. Swingarm may not be welded to the frame in any manner.

### **TIRES**

DOT approved motorcycle tires with a Z rating or higher are required. Maximum rear tire width is 190mm. Type and size tire cannot be switched after road course.

### **WHEELS**

DOT approved street bike wheels are allowed. Carbon fiber wheels are prohibited. Wheels wider than 6.25" must have a beadlock. Beadlock recommended on all rear wheels.

### **BRAKES**

Front and rear hydraulic brakes are mandatory. OEM Rotors and calipers are recommended and cannot be modified. Replacement rotors must be DOT approved and be the same diameter and thickness or larger than stock rotors and cannot be modified.

Titanium, magnesium or carbon fiber rotors/carriers are not allowed unless originally equipped. Replacement calipers must be DOT approved and have the equivalent or better braking capability of the OEM calipers they replace. Small, lightweight drag race only calipers are not allowed. Any brake pads, or stainless steel braided brake lines may be used.

### **GROUND CLEARANCE**

Minimum 2 inches with rider sitting on bike, straight up and perpendicular to ground, with 15 PSI in the rear tire. Motorcycles utilizing front end tie down straps will be measured with front suspension compressed to within 1" of suspension stop. The minimum clearance may be changed to 3" in 2007.

### **WHEELBASE/WEIGHT**

Motorcycles are classified into several groups that have different maximum wheelbase and minimum weight requirements. This has been done in an effort to achieve better parity and closer competition between a wide range of motorcycle types which will result in greater class participation.

Engine displacement in the following chart is based on the displacement of the engine as it left the factory. Wheelbase will be measured with rider sitting on bike with 15 PSI in the rear tire. A power adder is defined as a motorcycle equipped with Turbo or Nos.

1189cc or less Naturally Aspirated - 68" Maximum wheelbase, no minimum weight  
1189cc or less with Power Adder - 64" Maximum wheelbase, no minimum weight

1190cc or more Naturally Aspirated - 68" Maximum wheelbase, no minimum weight  
1190cc or more with Power Adder - 64" Maximum wheelbase, 675 pounds minimum weight

Heavy Hitter Wheelbase Adjustment - Extra wheelbase limits for heavy riders is: +1" for 220-239 riders, +2" for 240-259 pound riders, +3" for 260+ pound riders. Minimum bike/rider weight increases accordingly (+20, +40, +60). Rider will be weighed during tech while wearing shorts and tee shirt, no shoes.

In order to maintain the most level playing field possible, NWDB 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, ground clearance and weights to help promote class parity. Racers should take this into consideration whenever they are constructing their bikes, and should, whenever possible, allow room in their swingarms, bodywork, fenders, etc. for changes in wheelbase and ground clearance. Any rule revisions deemed necessary by NWDB will be officially posted a minimum of 14 days prior to the event in which they become effective. The official rules effective for any event will be those posted on the official NWDB website on the day that event begins. 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.

### **BALLAST**

Ballast is defined as any component attached to any part of the motorcycle, whose sole purpose is to add weight to the motorcycle. All ballast must be securely mounted. Ballast cannot be mounted forward of the crankshaft centerline. Any component which serves a structural or mechanical function, is not considered to be ballast. As a general reference, if the component in question can be removed without affecting any mechanical functions of the motorcycle, or decreasing structural integrity of the motorcycle, it is considered ballast. If, however, removing a given component would cause a failure within some mechanical system (such as the wheel rolling or the brakes working) that component is considered to not be ballast.

### **HEAVY PARTS**

NWDB reserves the right to deem any non-ballast component to be illegal, if it's excessive weight creates a safety hazard, or if the part is made extra heavy in order to achieve the effect of ballast. Extra weight in the form of heavy parts cannot be utilized on front suspension components, including but not limited to: axles, triple trees, forks, wheels and brake components, etc., and these parts may not be filled with any non-structural, weight adding material, including lead. Tires may not be filled with any liquid or solid materials. Oversized or overweight front axle spacers or brake rotors are not allowed.

### **BODY**

All body parts, including fairings, fenders, tank, and tailpiece can be original, or

aftermarket fiberglass duplicates. Alterations are permitted if modified in a manner that still maintains the general overall appearance and shape of original bodywork of the make and model as depicted by the VIN number. Altering of stock body shapes must be approved by NWDB, and is highly recommended to be approved prior to race day. Size and dimension of the body parts must be similar to original parts, except as noted. Scoops and air inlet openings may be filled in or added. Body parting seams may be relocated or removed. Aftermarket windscreens allowed. One-piece bodies are not allowed unless originally equipped. Lower portion of fairing may be trimmed for exhaust system clearance, or for increased ground clearance. Bottom of fairing may be closed in and/or extended rearward to create sealed belly pan for oil retention. Bikes originally equipped with full front fairings may remove lower portion of front bodywork, but bodywork must still extend low enough to completely cover cylinder head. Tailpiece may be extended to cover the rear tire, but must maintain general overall appearance and shape of the original. Seat may be integrated into tailpiece. Gas tanks are required on all bikes, and may be lowered, sloped or altered, but must maintain general overall appearance and shape of the original. Pre-approval is required for all no-stock shaped fuel tanks. Tanks need not be functional, sump area may be modified, or a fuel cell may be used. Brand name must appear on both sides of gas tank. No aerodynamic devices, such as wings, fairings, or air dams, may be used, unless originally equipped.

### **SEAT**

Seat may be modified or a fabricated seat, can be lowered, and must remain in the same general location as the original seat. Minimum seat height, with rider in position, seat compressed and 15 psi in rear tire, measured from lowest point of seating position to ground is 20 inches.

### **BELLY PAN**

It is highly recommended (and may be required in 2008) that all bikes utilize either a ballistic blanket or belly pan. Belly pan must have a minimum lip of 1 inch and be of sufficient volume to contain the entire contents of the crankcase fluids.

### **CHAINGAURDS**

OEM or fabricated chaingaurd is required, and must cover the width of the chain and the top run of the centerline between the sprockets. Fabricated chaingaurds must be constructed from .060" steel or .125" aluminum, and must be bolted on with at least two mounting points, with rear mounting point within six inches in front of rear axle.

### **CONTROLS**

Handlebars must measure at least 20" wide with grips removed. Grips may not extend below bottom of fork crown. Snap back throttle return mandatory. Foot pegs may be rear set. Any Shifter or brake pedal that can be operated with the foot on the peg is permitted. Launch pegs may be used.

### **SPECIAL CLASS RULES**

AHDRA Street Pro Dragbikes are allowed to compete and will use AHDRA's Street Pro rules instead of NWDB's standard Streetbike Shootout Class Rules. AHDRA Street Pro

motorcycles can use Nitrous Oxide.

### **GENERAL SAFETY REGULATIONS AND RACING CREDENTIALS**

Rider must have NHRA competition motorcycle license (or equivalent) for motorcycles running 9.99 or quicker. All motorcycles and riders must pass NHRA and/or local track motorcycle safety inspection.

#### **Pro Mod Rules:**

All bikes must pass basic NHRA tech inspection (performed by track official). Belly-pan oil containment is highly recommended on power-adder bikes (and may be required in '07).

In addition, Pro-Mod bikes must meet the following weight requirements. Bikes may be weighed after any passes to check for compliance:

Normally Aspirated.....no weight minimum  
Power-adder, 9" tire.....600lbs bike/rider min.  
Power-adder, 10" tire.....625lbs bike/rider min.  
Power-adder, 11" tire.....650lbs bike/rider min.

Gasoline or Alcohol. No nitromethane permitted.

Racers will be ladderred on a standard NHRA Pro Ladder (all-run). Lane choice is determined by best ET in qualifying, and by best ET in previous round for next pairings.

#### **Street ET Rules:**

All bikes must pass basic NHRA tech inspection (performed by track official). Wheelie-bars prohibited. Bikes must have DOT approved tires.

Time-trial passes prior to eliminations will be grouped with Pro ET and split into .500 Full Tree and .400 Pro Tree.

Bikes will be ladderred randomly on a NHRA sportsman ladder. Lane choice will be by best RT in qualifying and best RT in previous round in subsequent rounds (each pair of racers will determine this on their own. No printouts of RT's will be available).

All dial-ins will be on bike, and include a "P" if a .400 pro tree is desired. It is up to the racer to make sure their dial is correct on the board before staging. Also, different tracks may use either the Pro or Full tree as the default. It is up to the racer to make sure the symbol on the board is correct.

### **Pro ET Rules:**

All bikes must pass basic NHRA tech inspection (performed by track official). Wheelie-bars required. Slicks or DOT tires OK.

Time-trial passes prior to eliminations will be grouped with Street ET and split into .500 Full Tree and .400 Pro Tree.

Bikes will be ladderred randomly on a NHRA sportsman ladder. Lane choice will be by best RT in qualifying and best RT in previous round in subsequent rounds (each pair of racers will determine this on their own. No printouts of RT's will be available).

All dial-ins will be on bike, and include a "P" if a .400 pro tree is desired. It is up to the racer to make sure their dial is correct on the board before staging. Also, different tracks may use either the Pro or Full tree as the default. It is up to the racer to make sure the symbol on the board is correct.

### **Entry Fees and Payouts:**

All racers must pay a tech-card fee at the gate. This will vary by track and event. Some events are one day and some are two day events. If you cannot attend the Sunday of a two day event, you still must pay the two day fee at the gate. Any refunds of tech-card fees will be done on an individual basis. Talk to a NWDB official.

Class Fees: \$25 per class at the NWDB pits. All races are for NWDB Members ONLY. Non-members may compete in one race. Any prize-money won by a non-member will have membership fees deducted from winnings.

Payouts: Pro-Mod: \$200 winner, \$100 runner-up, \$50ea semi's  
Pro-Street: \$200 winner, \$100 runner-up, \$50ea semi's  
\*based on an 8 or more bike field. Less than 8 pays  
\$150 winner, \$75 runner-up

Pro-ET: \$200 winner, \$100 runner-up, \$50ea semi's  
Street-ET: \$200 winner, \$100 runner-up, \$50ea semi's  
\*based on a 16 or more bike field. Less than 16 pays  
\$150 winner, \$75 runner-up