

## LIMITED STREET 235 SHOOTOUT CLASS RULES & REGULATIONS

2022 Rules Set – 10/10/2022

### CLASS OVERVIEW

Limited Street 235 is a heads-up small tire class designed for American production vehicles. Small block and big block engines are allowed the use of a single power adder which is restricted in size to maintain class parity. Cross breeding of an engine to a different make/manufacturer body is permitted.

Note: This set of class rules is presented to all competitors under the assumption that any modifications not specifically written within these rules shall be deemed illegal, unless the competitor has the expressed written consent from the Event Tech Director.

### RACING FORMAT

This class will be an all run heads-up field, 1/8 mile, NHRA Pro Style Ladder on a .400 Pro Tree.

### ENGINE POWER ADDER BASE CID – (WEIGHT)

Naturally Aspirated

SB naturally aspirated – 2600

BB NA 3000 (+100 lbs. for big chief style head)

4cyl VW 1600

### Nitrous Oxide

SB nitrous - 8.2 deck or modular 2950

SB nitrous - 2950 cylinder head add see bottom for additional weights

BB nitrous 3250

BOP Mopar 3150

### Forced Induction \*any blower combination must remove the inlet bell prior to competition

SB cast turbo - 3200

6 Cyl turbo – 3175

6 Cyl any listed supercharged/Blower – 3000

SB P1X – 3100

SB D1, NOVI 2000, Kenny Bell 3.6 – 3100

SB 6-71 3100

SB V7/V30 JTB Trim 3125

SB D1x 3250

SB YSI cast – 3250

4cyl turbo manual trans 2025

4cyl turbo auto trans 2225

Inline 6 turbo manual trans 2900

Inline 6 turbo auto trans 3100

Twin 71 mm turbo full size car with bench seat 3700 lbs.

NOTE:

- Maximum CID for all small block N/A entries is 480 inches. (Add 7lbs per cu in over 470 up to 480 cu in.)
- Maximum CID for all small block Boosted entries is 440 inches.
- Maximum CID for all small block Nitrous entries is 440 inches.
- Maximum CID for all Big Block Naturally Aspirated combos is 632 inches.
- Maximum CID for big block Nitrous entries is 588 inches. (Deduct 50 lbs. for 540 and under)
- Maximum CID for Buick, Olds, Pontiac, Mopar Nitrous combinations is 588 inches.
- Buick, Olds, Pontiac, Mopar combinations are permitted Blower/Boosted applications. Blower combo will be 440 cu in with blow thru, belt, and E85 (3200 lbs)
- Any engine in question will be measured with a P&G gauge. A correction factor of 1.5% will be used. Competitors may be asked to remove a cylinder head for bore and stroke measurements should any discrepancies arise.
- All weights will be rounded down to the nearest 5lb. increment.

DXP Street Cross-Over to be eligible to run 235

- Carry over at your DXP Street Weight plus below additions.
- Add 25lbs for any combo > 440 cubic inches and < 465 inches.
- No Add for Mickey Thompson P275/60R/15 ET Street S/S Radial – Part Number 3453

WEIGHT ADDITIONS/DEDUCTIONS

- Add 25 lbs. for Holly High Ram or equivalent on power adder SBF/SBC/LS
- Add 25 lbs. for a nitrous controller on BB NOS / SB no weight add for nitrous controller
- Add 50 lbs. for a boost controller
- Add 50 lbs. for gear drive
- Add 50lbs for BBF A head
- Add 50lbs for All\* SB High port, Ford TFS-R, TFS High port
- Add 50lbs. for class spec 76/105 billet 96/88 Turbine NEW
- Add 50lbs. for W5 Mopar head on Nitrous SB
- Add 75 lbs. for All SB Nitrous 20 degree high port SR20 –FT1 or T1RI or equivalent, 15\* SBF, 12\*LS RHS and SBC Nitrous 18\* and 23\* raised runner heads. No turbo/ supercharger combos with these heads.
- Add 150 lbs. Ultra Cast Turbo 76 x 116 - 96 x 88
- Add 75lbs for any > 365 inch Supercharged Combo

Deduct 50lbs for 235 S/S radial (any combo can take weight break)

Deduct 50lbs for SBC and SBF Stock block.

Deduct 50lbs. for Mod and LS Stock iron block.

Deduct 50 lbs. Stock 7.4L/9.8 deck and smaller factory block

Deduct 50lbs for 6AL or equivalent box with no add on.

Deduct 50lbs. for non-intercooled boosted/blown combos only

## REQUIREMENTS & SPECIFICATIONS

### ENGINE: 1

#### BLOCK

Any aftermarket cast iron or cast aluminum block permitted. All blocks are restricted to factory OEM bore spacing for brand being used. LSX block bolt pattern is permitted for LS based engines. World Products Man-O-War bolt pattern is permitted for small block Ford engines.

All entries are permitted to bush lifter bores. Billet Blocks prohibited.

SB Power Adder Limited to 440 cubic inch (NA permitted up to 470 cubic inch at 1.5 lbs. added over 440)

BB NA Limited to 620 cu in (over 572 add +3 lbs. per cubic inch up to 600 add 3.5 601-620)

BB NOS to 588 (over 572 add +3 lbs. Per cubic inch up to 588.) (Includes BOP – Mopar entry)

#### HARMONIC BALANCER

SFI Spec 18.1 balancer is required.

#### ENGINE MOUNTS & LOCATION

Engine/motor plates and mid-plates are permitted. Engine block and cylinder heads cannot be in contact with the firewall.

#### CYLINDER HEADS

Factory OEM or aftermarket cast iron or aluminum cylinder heads are permitted. Billet and one-off fabricated heads are prohibited. All cylinder heads must maintain factory OEM bolt pattern for head and intake manifold bolts of manufacturer brand being used. Porting is permitted. All cylinder heads must maintain factory OEM valve angles of +/- 2 degrees. The Event Tech Director reserves the right to check valve angle either on or off the vehicle.

NA BB permitted Big Chief/Big Duke style and Ford C head.

NA SB permitted any cast cylinder head with prior approval.

Power Adder cylinder heads for SB limited to, 23 degree Chevrolet, 15 degree LS, 18 degree Mopar, 20 degree Ford, OEM Ford casting 4v Modular, any 2v Modular, Trick Flow Twisted Wedge and LS 13.5 OK  
All cylinder heads must maintain the automobile OEM intake manifold bolt pattern.

Nitrous Big blocks limited to stock valve angle/stock port layout/no raised runner.

Note: Stock factory OEM heads are those cylinder heads that are factory production line installed on production vehicles as recognized by NHRA.

Inline non stock valve angle not permitted on boosted combos

Any splayed or canted valve (non-inline) head not permitted on boosted combos

#### INTAKE MANIFOLD

Any aftermarket, commercially available, mass produced, single carburetor, 4150 or 4500 series, cast intake manifold permitted. Modified opening cast tunnel ram intake manifolds are permitted for Small Block & BB N/A combinations only. Porting is permitted. Cast Holley EFI ram intake or similar short ram permitted on SBF/SBC/LS boosted combinations only. See note in add/deduct section.

#### NITROUS OXIDE

All entries are permitted to use any conventional single stage plate system or any conventional single stage fogger system. The use of water injection is permitted. The use of a plate system with a fogger system is prohibited. Nitrous push systems are prohibited. The use of agents other than nitrous oxide as part of, or mixed in, the system is prohibited. All entries must use only gasoline for the fuel enrichment circuit. All nitrous jets must be as-supplied, un-modified from the manufacturer and must be a concentric circle. No other shapes such as ovals, diamonds, etc... permitted. All entries are permitted to use a maximum of two 10lb nitrous bottles or a single 15lb nitrous bottle. Any method of cooling the nitrous bottle inside the vehicle is strictly prohibited. Bottle temperatures will be randomly checked before and/or after a run. If the bottle temperature is found to be colder than 65 degrees, the run will be disqualified.

Plate System: Any conventional single stage or cross-bar single stage plate nitrous system with a maximum of four spray bars (two nitrous & two fuel) permitted.

#### Big Block Nitrous entries maximum jetting

1 jet .088

2 jets .062

8 jets .030

#### Small Block Nitrous/BOP Mopar entries maximum jetting

1 jet .098

2 jets .073

8 jets .036

### Small Block Nitrous entries maximum jetting

(8.2 Deck/2V mod motor ONLY!!!)

1 jet .104

2 jet .078

8 jet .040

Progressive systems are permitted. If you are claiming NO PROGRESSIVE all grounds and wiring must be traceable and visible.

Purge System: Nitrous purge systems are permitted a maximum of 1 solenoid. Progressive systems are permitted to use one inline "safety" solenoid. Purge line must clearly exit the hood/cowl or body in a fashion to not allow purged nitrous to enter the engine when racing.

Nitrous Lines: All entries are required to have one continuous -8 maximum (Plate System) and -8 maximum (Fogger System) uninterrupted (no coiling) nitrous supply line from the nitrous bottle to the engine. Maximum length of nitrous supply line from nitrous bottle to nitrous supply solenoid is 15ft. The line from the valve to the engine cannot store/hold nitrous oxide when the system is not in use.

### SUPERCHARGER

Centrifugal superchargers are limited to the following dimensions: Maximum impeller inducer diameter of 3.70 inches. Supercharger impeller must be constructed from aluminum. Centrifugal superchargers are permitted to use any gear drive or transmission system, including the Vortech V30 series. Maximum supercharger sizes P1, P1X, D1, D1X V-7/V30 JTB Trim, NOVI 2000, Kenny Bell 3.6, YSic, Roots 6-71 blowers must be off the shelf street style – B&M type/TBS) Sb w/ single carb on gas only.

### TURBOCHARGER

Max cast turbo size 76mm measured tip to tip. Compressor inducer will not exceed 76 mm Compressor Exducer will not exceed 102 mm Turbine will be 96 mm X 88 mm. The Borg Warner S400SX4 S475 1.32 a/r with T6 flange fits into this category.

Forced Inductions carries our SPEC class spec 76/105 billet 96/88 Turbine unit. (preferred part)

(No reducers allowed to achieve this size and no clipped wheels)

V6 and 4cyl permitted billet wheel. (see additional notes below)

You may be required at any time to remove your turbo and/or your turbo cover to be checked.

If you are claiming NO BOOST CONTROLLER: A single line from the manifold to the wastegate only  
Nothing else to top of wastegate or blow off valve

### RAMAIR

Permitted

### INTERCOOLING

Air-to-water intercoolers are permitted for supercharged and turbocharged entries only. Only one intercooler is permitted for all boosted applications.

### METH INJECTION

Meth injection permitted on Nitrous combos only. Any use of nozzle/injector in any engine combination forward of throttle body/ carburetor is strictly prohibited. All injectors on boosted combos must be directly mounted to the intake manifold.

### OILING SYSTEM

Any Oil System permitted. Any oil pump, vacuum pump, and oil pan permitted. All entries are required to use an oil retention device. Device can be either a ballistic style blanket or a custom built metal pan. Metal pan must extend from the engine/motor plate rearward to the back of the engine. Metal pan must fit inside the frame rails and be 3 inches above the ground.

### COOLING SYSTEM

Any cooling system permitted. Radiators are not required.

### EXHAUST SYSTEM

Any exhaust system permitted. All exhaust systems must be directed out of body and away from driver and fuel tank. Exhaust may exit underneath car or out the front fenders but must not affect timing or staging beams. Bull horns prohibited. Zoomies prohibited.

### FUEL SYSTEM

Any electronic, mechanical or belt driven fuel pumps are allowed. Electronic fuel pumps must shut off with the master electric cut-off switch. Fuel cell must have a pressure cap and be vented to the outside of the body. Front mounted fuel cells must meet SFI Spec 28.1 and be mounted between the frame rails or enclosed in a round tube frame. A round tube frame must be constructed of a minimum of 1 ¼-inch O.D. x .065-inch chrome moly tubing. Artificial cooling or heating of fuel (i.e., cool cans, ice, Freon, etc.) prohibited. Circulating systems that are not part of the normal fuel pump system are prohibited.

### EFI SYSTEM

Any aftermarket electronic or mechanical fuel injection may be used. Fuel injector size and or type are unlimited.

### THROTTLE BODY

Any single aftermarket throttle body permitted NA. 4150 or 4500 for power adder combos.

### CARBURETOR

Maximum carburetor size for all power adder entries is a single 4500-style or a Pro-Systems 115mm SV1.

### THROTTLE LINKAGE

Throttle control must be operated by the driver's foot.

#### FUEL

VP Racing Fuels Gasoline, Q16, C-85, E-85, C12, 16, 23, 25, 45, or NO2 are the only fuels permitted. Event Tech Director reserves the right to inspect fuel at any time during competition. Failure to pass Fuel Check is grounds for disallowance of the run during competition and disqualification from the event during eliminations. Fuel is checked using various means. Samples given to Fuel Check Technical Inspectors are compared to data taken from known fuel samples provided by VP, adjusted for temperature, and within a tolerance determined by Event Tech Director. Failure occurs when the sample readings fall outside those tolerances. M1 and M5 prohibited.

#### DRIVETRAIN: 2

##### CLUTCH, FLYWHEEL & FLYWHEEL SHIELD

Flywheel and clutch meeting SFI Spec 1.2, 1.3, 1.4, or 1.5 is mandatory. Clutches are limited to a dual disc maximum. Flywheel shield meeting SFI Spec 6.2 or 6.3 is mandatory. Clutch must be manually operated by the driver's foot. Electronics, pneumatics, hydraulics, or any other device may in no way affect the clutch system. The throw-out bearing must release all fingers, levers, stages, etc. simultaneously. Staged or variable release clutches are prohibited.

##### MANUAL TRANSMISSION

OEM or aftermarket transmissions with a maximum of 5 forward speeds permitted on N/A combinations only. Clutchless models permitted. Any gear change must occur from direct action by the driver. Pneumatic, electric, hydraulic, etc. shifters prohibited. Torque converter not permitted with this type of transmission. Manual transmissions must utilize SFI approved bell housing.

##### AUTOMATIC TRANSMISSION

Any OEM or aftermarket automatic transmission is permitted. Lock-up style transmission and/or torque converters are prohibited unless OEM equipped (i.e. A.O.D.). The use of transmission-to-engine adaptors is permitted. The use of trans-brakes is permitted. Pneumatic, electric, hydraulic, etc. shifters permitted.

##### STEERING

Any American production type steering system permitted.

##### SHOCKS/STRUTS

Aftermarket stock-type shocks/struts permitted. Rear coil-over shocks are permitted.

##### FRONT SUSPENSION

Factory type front suspension only. Coil over shocks are allowed. Aftermarket replacement control arms are allowed. Aftermarket K-Members/Commercially available sub-Frames allowed. (Must have prior approval from tech) Strut towers must be in factory location with factory sheet metal attaching factory

frame rail to top of strut tower, can be notched, windowed, or trimmed for header clearance but must maintain factory sheet-metal attachment.

#### REAR SUSPENSION

Stock-type and ladder bar rear suspension systems are permitted.

#### WHEELIE BARS

The use of wheelie bars is prohibited.

#### FRAME: 4

#### CHASSIS

All vehicles must have a chassis that meets the guidelines set by SFI for their respective speed and elapsed time. A valid NHRA serialized sticker is mandatory at an NHRA Member Track.

#### FRAME

Stock frame required from the radiator support to the back of the rear wheel tub. Back-halved cars are prohibited. Front and rear sub frames may be joined together. Horizontal and vertical notching of rear frame rail is permitted for tire/rear end clearance.

#### WHEELBASE

Entries must retain stock wheelbase dimensions of + or – 1 inch. Maximum wheelbase variation from left to right is 1 inch.

#### GROUND CLEARANCE

A minimum of 3 inches from the front of the vehicle to 12 inches behind front spindle centerline is mandatory. A minimum of 2 inches for the rest of the vehicle is mandatory (except for oil pan and exhaust headers).

#### TIRES & WHEELS: 5

#### TIRES

#### LEGAL TIRES:

Any 235/60 or 26 x 8.5 bias or radial tire

deduct 50 lbs. for 235 S/S tire

#### WHEELS

Aftermarket racing wheels permitted.



## INTERIOR: 6

### UPHOLSTERY

Interior must maintain a factory upholstered appearance. OEM dash board is required and can be made of fiberglass or carbon fiber. Any aftermarket racing style seat is permitted. Driver's seat must be located in the stock location. Passenger seat is not required. Door panels are required. Floor and transmission tunnel where visible must be carpeted or upholstered.

### STEERING COLUMN/WHEEL

Aftermarket steering columns and steering wheels are permitted.

### PEDALS & PEDAL LOCATION

Stock type pedals/linkage is required.

## BODY: 7

### BODY

Body must retain original appearances and profiles for year being used. OEM body shell must be intact. Light weight body panels are restricted to hood, fenders, bumpers, doors and deck-lid/truck-lid or hatch. Composite roof panels are permitted on 2005 and newer vehicles. Hood and deck-lid/trunk-lid must be hinged or lift off style. All front ends must be of factory dimensions and cannot be lengthened. No extenders permitted. Alterations or aerodynamic modifications are prohibited. Body must be finished or painted. Pre- 1964 body style will receive -25 deduction

### HOOD SCOOPS

The use of aftermarket forward facing hood scoops is permitted on NA. The use of cowl induction style hoods are allowed on any vehicle with a maximum height of halfway point of windshield.

### COWL AREA

OEM cowl is required and modifications are permitted.

### GRILLE

Grille must maintain a "professional appearance" for year, make and model being claimed.

### FIREWALL

Stock, factory firewall is required. Notching and smoothing of firewall is permitted but must be identifiable as being in the factory location. Factory OEM fiberglass firewalls (Corvette) are permitted to replace the factory firewall with a minimum of .024 thick steel located in the factory location.

### RADIATOR CORE SUPPORT

Radiator core support is not required.

### FENDER SPLASH PANS

Fender splash pans may be altered.

### WINDSHIELD & WINDOWS

OEM glass or NHRA approved Lexan is required.

### FLOOR

Stock floor in stock location is required under driver and passenger seats. Flat area of floor-pan behind seat area and rearward may be replaced with a minimum of .024-inch thick steel or .032-inch aluminum. All entries are allowed a removable trans-tunnel.

### WHEEL WELLS

Aftermarket style mini-tubs are permitted.

### WING/SPOILERS

All entries are permitted to use rear wing/spoilers. Wing/spoilers are allowed a maximum length of 26 inches. Any adjustments to the wing/spoiler during a run are prohibited.

### STREET EQUIPMENT

All entries must have operational headlights/fog lights and taillights.

### APPEARANCE

All cars in competition must be painted or wrapped. Advertising graphics are permitted on the body. In order to be eligible for the Limited Street 235 Shootout points championship program, all sponsors' decals must be easily visible and located on the outside of the vehicle. Failure to do so can result in the driver forfeiting all claimed championship points for that particular event. The Limited Street 235 Shootout points championship program requires that all entries run the following decals:

1. Championship Windshield Banner: Decal needs to be located on the top of the windshield or just above the windshield located on the body.
2. Championship Series License Plate: Plate must be located on the front of the vehicle
3. Class Sponsor(s): Decal must be located on the passenger's side lower portion of the windshield.
4. Class & Competition Numbers: Numbers must be easily visible/legible and located on the front, back, and both side windows.

### ELECTRICAL: 8

#### BATTERIES

Battery may be relocated and must be an automotive type.

#### IGNITION

Any battery-operated ignition system permitted. Distributorless ignition systems are limited to one coil per cylinder only. Optical devices and magneto ignitions are prohibited.

#### MASTER CUTOFF

A master cutoff switch is mandatory on all vehicles with a battery located in the trunk.

#### STARTER

Aftermarket starters, in stock location permitted.

#### SUPPORT GROUPS: 9

#### BRACKET RACING AIDS

The use of any bracket racing aids such as optical sensors, delay boxes, shutter boxes, throttle stops, etc. are prohibited. The use of any device (electrical or mechanical) that allows a driver to ascertain the position of their vehicle to the starting line is prohibited.

#### PRESSURIZED BOTTLES

All pressurized bottles must meet D.O.T. 1800lb minimum specification.

#### TOW VEHICLES

The use of tow vehicles is permitted.

#### DRIVER: 10

#### DRIVER

The driver when in the vehicle, from the ready line until the vehicle is safely stopped on the return road, is required to have all safety restraint systems (including the helmet) on and be securely fastened in the vehicle at all times.

#### CREDENTIALS

A Valid state or government issued driver's license beyond a learner/s permit level is mandatory for cars running 10.00 or slower. A valid NHRA competition license is mandatory for cars running 9.99 or quicker, at a NHRA Member Track. A valid NHRA or an IHRA competition license is mandatory at an IHRA Member Track.

Note: It is ultimately the competitor's responsibility to familiarize themselves with the Limited Street 235 class requirements as well as all NHRA safety requirements. The competitor agrees they bear the ultimate responsibility when it comes to safety and how it complies with Ultra Street Class rules and NHRA rule books. The competitor also agrees that no one else other than the competitor is in the best position to know about how their particular race car has been constructed and how to safely operate it.

RTRA Motorsports will reserve the right to adjust the rules for parity at any time. Any rules adjustment request must be sent via email to: [john@X275motorsports.com](mailto:john@X275motorsports.com)