

## NMCA STREET OUTLAW

### CLASS OVERVIEW

Street Outlaw is a heads-up class designed for small tire, single power adder small block and big block engine combinations to compete on the eighth mile. Centrifugal Superchargers, Turbochargers and Nitrous Combinations are restricted to specific dimensions/sizes to ensure overall class parity. All entries have the option to run either a 275 drag radial tire or 28inch by 10.6inch bias slick on any type of rear suspension.

**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 NMCA Tech Director.

### RACING FORMAT

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

<u>ENGINE</u>	<u>POWER ADDER</u>	<u>BASE CID</u>	<u>BASE WEIGHT</u>
6 Cylinder diesel (Cummins)	Turbo 88mm	431	3200
6 Cylinder/4 Cylinder	Turbo 80mm	431	2750
6 Cylinder/4 Cylinder	Turbo 88mm	431	2800
Small Block	Nitrous	500	2300
Small Block	Supercharger 4.025" Inducer	480	<del>2825</del> 2775
Small Block	Supercharger 4.200" Inducer	480	3075
<u>Small Block (M1 W/ BILLET BLOCK OR HEADS)</u>	<u>Roots Supercharger 871</u>	<u>480</u>	<u>3100</u>
Small Block	Turbo 80mm	480	2825
Small Block	Turbo 85mm	480	3075
Small Block	Turbo 88mm	480	3125
Big Block	Naturally Aspirated	750	2600
Big Block Conventional Head	Nitrous	up to 588	2875
Big Block Un-Conventional Head	Nitrous	up to 588	3000
Big Block Conventional Head	Nitrous	589-610	2975
Big Block Conventional Head	Nitrous	611 to 650	3025
Big Block Un-Conventional Head	Nitrous	up to 650	3075
Big Block 5.00 bore space	Nitrous	up to 740	3200

***ALL COMBINATIONS BASE WEIGHTS ARE BASED ON GASOLINE AS FUEL!***

## **NOTES:**

Maximum CID for all small block boosted entries is 480 inches.

Maximum CID for all small block nitrous entries is 500 inches.

Maximum CID for nitrous big block entries is 650 inches on Non 5.00 bore space combinations.  
(add 2.5lbs per cubic inch over 632 for non 5.00 bores space nitrous combos)

Maximum Deck Height for all small block combinations is 10.000 inches.

Maximum Deck Height for GM Big Block combinations is 10.200 inches.

Maximum Deck Height for Ford Big Block Combinations is 10.300 inches.

Maximum Deck Height for Mopar Big Block Combinations is 10.700 inches.

Maximum CID for nitrous big block entries is 740 inches on 5.00 bore space combinations.

Maximum CID for naturally aspirated big block entries is 750 inches.

6cyl/4cyl combinations – no adder/deducts apply

6cyl/4cyl combinations are permitted intercooler and Nitrous with gasoline as fuel. (Prohibited with M1 as fuel)

Boosted diesel combinations may only use nitrous oxide as a second power adder.

## **WEIGHT ADDITIONS/DEDUCTIONS**

Add ~~75~~100lbs for M1 WITH Turbocharger (intercooler not permitted with M1)

Add 50lbs for M1 with Supercharger (intercooler not permitted with M1)

~~Add 25lbs for E85 with Intercooler~~

Add 25lbs for inline non-SVA on any Small Block Nitrous combination.

Add 50lbs for non-inline any intake/carb on any Small Block Nitrous Combination.

Add ~~75~~50lbs for any combination using a lockup transmission/convertor. (No adder for N/A, ~~or~~ SB Nitrous, or SVA Turbo combinations)

Add 50lbs. for billet head (must be used with cast block only and be stock bore space)

Add 50lbs. for billet block (must be used with cast head only and be stock bore space)

Add 50lbs. for SR20 or equivalent BB cylinder head must maintain 20 deg. Valve Angle and conventional port layout

Add ~~25~~50lbs for any turbocharger with 142.5mm exducer tip to tip and 133 exducer back plate measurement. (Except 6cyl, 8.2 deck height or Mod Motor combinations)

Add 50lbs for inline non-SVA on any Small Block Super charger 4.025 inducer combination.

Add 75lbs for non-inline on any Small Block Supercharger 4.025 inducer combination.

~~Deduct 25lbs. 2015 and newer Ford Mustang (S550) body/chassis combinations~~

Deduct 25lbs. for any small block 85mm or 88mm turbo combination on Gas/Q16.

Deduct 25lbs for any Nitrous combination using inline non-stock valve angle 12deg to 18deg cylinder head.

Deduct 25lbs. Leaf-spring style rear suspension vehicles.

Deduct 50lbs for cast iron small block Chevrolet or LS with stock deck height.

Deduct 50lbs for turbo without ram-air.

Deduct 50lbs for IRS

Deduct 50lbs for belt driven centrifugal supercharger.

Deduct 50lbs. for 3.700 inducer diameter Centrifugal Super charger (from 4.025 base weight)

Deduct 50lbs for any N/A or Nitrous combinations using a 4150 carb/throttle body

Deduct 50lbs on any 5.00 bore space combination with cast intake manifold

Deduct 50lbs for any SB Nitrous combination using Stock Valve raised runner heads (23\*GM, 20\* Ford, 18\* Mopar, and square port 15\*LS)

Deduct 50lbs for any boosted combination using inline 12deg or down cylinder heads.

Deduct 75lbs for any Small Block boosted combinations using 13deg to 15deg inline, square port heads or Stock Valve Angle, (23\*GM, 20\* Ford, 18\* Mopar, 15\*LS) Inline raised runner heads

Deduct 100lbs. for combos using 4.100 Centrifugal Supercharger (from 4.200 base weight)

Deduct 125lbs. GTX55-85 GTX55-88 GEN 1 (118 mm compressor exducer backplate)

Deduct 100lbs. for any plate nitrous system

Deduct 50lbs for 710 cubic inch or smaller 5.00 bore space nitrous combinations.

Deduct 100lbs. Small block nitrous and Small Block boosted entries using cathedral port LS 13.5/15 degree or Stock Valve Angle 23\*GM, 20\* Ford, 18\* Mopar non raised runner, inline valve heads.

Deduct 100lbs for any Ford Modular combinations, 8.2 deck height combinations or 365cid or smaller pushrod combinations using billet block.

Deduct 200lbs for any Ford Modular engine combinations, 8.2 deck height combinations or 365 Cubic inch or smaller pushrod combinations (No billet block (Coyote billet permitted))

## REQUIREMENTS & SPECIFICATIONS

### ENGINE: 1

#### BLOCK

Any aftermarket cast iron or aluminum engine block permitted. Billet engine blocks are permitted. Billet blocks are only permitted to be used with cast cylinder heads. The use of billet cylinder heads on billet blocks is prohibited. Factory OEM bore spacing for particular engine brand being used is required for all entries. Diesel combo exempt.

#### HARMONIC BALANCER

SFI Spec 18.1 balancer is required.

#### ENGINE MOUNTS & LOCATION

Engine block and cylinder heads cannot be in contact with the firewall.

### **CYLINDER HEADS**

Any aftermarket cylinder head is permitted. Small block entries are permitted to use billet cylinder heads. Billet cylinder heads are only permitted to be used with cast engine blocks. The use of billet cylinder heads with billet blocks is prohibited. Big block entries are permitted to run any cast conventional and unconventional style heads. Twin spark plugs per cylinder are permitted for Factory OEM applications (Gen III Hemi). Diesel combo exempt.

### **INTAKE MANIFOLD**

Any intake manifold is permitted. Except on Big Block conventional or Big Block unconventional stock bore space, nitrous combos. (A commercially available, mass produced, cast aluminum intake manifold is required).

### **NITROUS**

*Small Block Entries:* Allowed to use any multi-stage system.

*Big Block Entries:* Allowed to use any single-stage system with a maximum of one nozzle per intake runner.

Big Block & Small block nitrous are permitted water/meth injection. All EFI Big Blocks will only be allowed 2 nitrous solenoids for a dry nitrous system and will only have 1 line per nozzle/per cylinder. (Using both sides of the fogger nozzle on a dry EFI NOS BB combo is prohibited (Cold nitrous systems permitted))

### **CENTRIFUGAL SUPERCHARGERS**

Centrifugal superchargers are allowed a maximum impeller inducer diameter of 4.200 inches with a maximum air inlet outside diameter of 5.00 inches. Supercharger impeller must only be constructed of cast or billet aluminum. Supercharger is permitted a fresh air source from either the front bumper or grille area of the vehicle.

### **ROOTS SUPERCHARGER**

Maximum roots Supercharger permitted is 8-71. Any overdrive permitted for 8-71 superchargers. Manifold burst panel meeting SFI Spec 23.1 plus restraint system meeting SFI Spec 14.2, including injector restraint straps mandatory. Cast or billet cases permitted. NMCA Tech reserves the right to tear down and inspect blower at any time.

### **TURBOCHARGERS**

Single turbocharger limited to 88mm maximum.

\*Garrett GTX GEN II/PTE XPR Permitted using current Street Outlaw exhaust turbine measurements with weight penalty. Turbocharger size will be verified by measuring the

housing bore at the leading edge of the impeller wheel and must maintain the contour of the compressor housing. (Stepped compressor wheel prohibited) Inducer dimensions may not exceed 80.9/85.9mm/88.9mm and Exducer backing plate and blade tip to tip dimensions may not exceed 133mm on MID FRAME turbos except where noted.

\*The Garrett GTX GEN II/PTE XPR Inducer dimensions may not exceed 85.9mm/88.9mm, Exducer backing plate dimensions may not exceed 133mm. The Exducer tip to tip measurements may not exceed 142.5mm. On mid-frame turbo claiming 85.9/88.9 on tip to tip inducer measurements the inspection tool must capture .200 of the blade tip to be eligible for the latest deductions in weight. On LARGE FRAME turbos the inducer may not exceed 85.9/88.9mm and Exducer dimensions may not exceed 141.224mm. The maximum diameter of the housing bore at the leading edge of the wheel may not exceed 2 mm more than the maximum allowable turbocharger size permitted. Inserts or reducers to achieve inlet or outlet dimensions prohibited. Compressor map groove will not exceed .250 of an inch. Any turbocharger entry may be asked to remove the compressor cover and/or turbine housing for inspection. The turbine wheel may not exceed 113mm X 103mm on any turbocharger. Turbine wheels are only allowed to be constructed of Inconel material. Billet aluminum compressor wheel/impeller permitted. Any modifications to compressor or turbine wheel, blades, hubs, cover, or housing, as originally manufactured is PROHIBITED.

### **INTERCOOLING**

All boosted gasoline, diesel or E85 entries are permitted to use one intercooler. Intercoolers can either be air-to-air or air-to-water. Water and/or ice are the only agents allowed to be used with intercoolers. The use of any other agent to assist in the cooling of discharge and/or inlet air for boosted applications is prohibited. Use of intercooler with M1 (Alcohol) is prohibited (except on 6cyl/4cyl with M1).

### **METH INJECTION**

Meth injection permitted, except on gasoline combinations. Any use of nozzle/injector in any engine combination forward of throttle body/carburetor in charge tube is permitted. Must be located within six (6) inches of throttle body and must be supplied fuel by intake mounted fuel rail. Diesel Combinations use of standalone fuel supply permitted.

### **OILING SYSTEM**

Any oil pump/system permitted.

### **OIL RETENTION DEVICE**

All entries are required to have an oil retention device. The device can either be a custom built ballistic blanket or a "belly" style pan. The pan may be constructed from composite or metal. It

must have vertical walls of at least 2 inches in height. Pan must extend from frame rail to frame rail and must extend from front of the engine mounting plate to the rear of the engine block. Pan must be attached with a minimum of three attachment points per side.

### **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.

### **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.

### **FUEL INJECTION**

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

### **THROTTLE BODY**

Any aftermarket throttle body permitted. Boosted applications are limited to a single throttle body and N/A entries are permitted two. Any throttle bodies permitted on 5.00 BS combinations.

### **CARBURETOR**

Aftermarket carburetor is permitted. Split carburetor is permitted. No carburetor limitations on 5.00 BS combo.

### **THROTTLE LINKAGE**

Throttle control must be operated by the driver's foot

### **FUEL**

VP Racing Fuels Gasoline, M1, C-85, and E-85 are the only fuels permitted. Diesel combinations must use VP Racing Fuels Torque Diesel (Car must be equipped with fuel sample valve). NMCA 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 NMCA. Failure occurs when the sample readings fall outside those tolerances.

## **DRIVETRAIN: 2**

### **CLUTCH, FLWHEEL & FLYWHEEL SHIELD**

Clutch and flywheel meeting SFI Spec 1.1 or 1.2 up to a twin-disc maximum is mandatory. Steel flywheel shield meeting SFI Spec 6.1 is mandatory. Flywheel shield cannot be modified for clutch adjustment and/or cooling holes

### **MANUAL TRANSMISSION**

Aftermarket transmissions with a maximum of 5 forward speeds are permitted. Clutchless transmissions are permitted. All gear changes must be a direct action of the driver. Pneumatic, electric, hydraulic, etc. shifters are prohibited.

### **AUTOMATIC TRANSMISSIONS**

Any OEM based automatic transmission is permitted (example-TH400, Powerglide, etc.). Any internal modifications permitted. Lockup convertors permitted. Trans-brakes are permitted. Pneumatic, electric, hydraulic, etc. shifters are permitted.

### **DRIVELINE**

Any steel, aluminum or carbon fiber driveshaft meeting SFI 43.1 spec is required.

### **REAREND**

Any automotive type rear-end is permitted.

## **BRAKES, STEERING & SUSPENSION: 3**

### **BRAKES**

Front and rear hydraulic brakes are required. Automated brakes are prohibited. The application and release of the brakes must be a function of the driver. Dual reservoir master cylinder is required. Line-lock is permitted only on the front wheels using one line-lock button and solenoid. Any other electrical, pneumatic, hydraulic, etc. switch in braking system is prohibited.

### **STEERING**

Any American production type steering system permitted.

### **SHOCKS/STRUTS**

Aftermarket stock-type shocks/struts 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.

*Pre-1978 and Older Vehicles:* The use of aftermarket bolt-on front suspension kits for engine fitment is permitted. Factory strut/shock towers are optional in pre-1978 vehicles using an aftermarket bolt-on front suspension kit.

### **REAR SUSPENSION**

Stock-type, ladder bar, and racing 4-link rear suspension systems are permitted.

### **WHEELIE BARS**

The use of wheelie bars is permitted.

## **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 front engine/motor plate 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.

### **WHEEL BASE**

All entries must maintain a wheelbase of +/- 1inch from OEM specifications.

### **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**

All entries have the choice to either use a 28-inch tall by 10.6-inch wide bias slick or a 275/60/15 or Pro Bracket drag radial tire. Tire tread may not extend outside of the fender.

### **WHEELS**

Aftermarket racing wheels permitted.

## **INTERIOR: 6**

### **UPHOLSTERY**

Interior must maintain a factory appearance. 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**

Any type pedals/linkage is permitted.

## **BODY: 7**

### **BODY**

All Vehicles must retain its original appearance, profiles, and dimensions. Vehicles permitted replacement roof panel. Aftermarket fiberglass and/or carbon fiber replacement panels are limited to hood, roof, front fenders, doors, deck-lids, and bumpers only. All front ends must be of factory dimensions. Any beam tripping devices forward of the bumper are prohibited. (Track tech official will have final say) Complete stock appearing front and rear bumpers are required. A hood must be used: scoop or hood must cover the entire induction system. Forward facing hood scoops/ turbo or supercharger inlets are permitted. Alterations or aerodynamic modifications are prohibited. Any aftermarket/modified front bumper/valence must have prior approval from the NMCA tech department.

### **HOOD SCOOPS**

Forward facing hood scoops are permitted for nitrous assisted entries and may not extend above the roof line. Vehicles that are equipped with an EFI system are not required to run a hood scoop. Carburetors must be completely covered by the hood or hood scoop. Sensors, transducers, vents, wiring, hoses/lines, etc. are prohibited from being inside the hood scoop.

**COWL AREA**

All entries are required to have an OEM cowl area, except 4<sup>th</sup> Gen GM F-body vehicles.

**GRILLE**

All entries are required to have an OEM type grille or Facsimile (painted or decaled) permitted

**FIREWALL**

Stock, factory firewall location 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. No part of midplate may attach or support the firewall.

**FENDER SPLASH PANS**

Fender splash pans may be altered.

**WINDSHIELD & WINDOWS**

All entries are permitted to use Lexan windows.

**FLOOR**

All entries are required to have stock floor pans on both the driver's side and passenger's side of vehicle. Transmission tunnel may be removable and must be made of either .024 inch thick steel or .032 inch thick aluminum. Removable floor panels are prohibited.

**WHEEL WELLS**

All entries all permitted to use steel, aluminum, or carbon fiber wheel tubs.

**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 NMCA official contingency program, all contingency 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 contingencies for that particular event. The NMCA requires that all entries run the following decals:

1. NMCA Windshield Banner: Decal needs to be located on the top of the windshield or just above the windshield located on the body.
2. NMCA Drag Racing Series: Decals (2) must be located on each side of vehicle. Either on the side windows or decals can be located on the body right beside the side windows.
3. Class Sponsor: Decal must be located on the passenger's side lower portion of the windshield.
4. VP Racing Fuels: Official Fuel decals (2) required. Must be located on each side of vehicle. (In a contingency decal manner)
5. Aerospace Winners Circle: Decals (2) must be prominently displayed on each side of vehicle. Failure to do so can result in the winning driver forfeiting his/hers Winner's Trophy & Payout.
6. Class & Competition Numbers: Numbers must be easily visible/legible and located on the front, back, and both side windows.

#### **ELECTRICAL: 8**

##### **BATTERY**

A maximum of two batteries is allowed.

##### **IGNITION**

Any battery operated ignition system and distributor drive system is permitted.

##### **STARTER**

All entries must be self-starting with an on-board starter.

##### **MASTER CUTOFF SWITCH**

An operational master cutoff switch is mandatory.

#### **SUPPORT GROUP: 9**

##### **COMPUTER/DATA RECORDERS**

Computer/data recorders are permitted and must standalone and to be only used for information gathering purposes.

##### **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**

A maximum of one pressurized container (excluding nitrous and fresh air systems) per vehicle is permitted. All pressurized bottles must meet D.O.T. 1800lb minimum specification.

## **TOW VEHICLES**

The use of tow vehicles is permitted.

## **CREW MEMBERS**

Each crew member must have the proper starting line credentials and must wear matching attire.

## **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 NMRA 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 the NMRA 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.