

RENEGADE

CLASS OVERVIEW

Renegade is a heads-up small tire class designed for Ford production vehicles. Ford Small block and Ford big block engines are allowed the use of a single power adder which is restricted in size to maintain class parity.

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 NMRA 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.

<u>ENGINE</u>	<u>POWER ADDER</u>	<u>BASE</u>	<u>CIDBASE WEIGHT</u>
Small Block	Nitrous	370	2700
Small Block	Nitrous	400	2750
Small Block	Nitrous	420	2800
Small Block	Nitrous	440	2850
Small Block	Nitrous	460	2900
Small Block	76mm Turbo (Cast)	440	3050
Small Block	76mm Turbo (Billet)	440	3250
Small Block	Supercharger	440	3100
Big Block	Naturally Aspirated	589	2750
	<small>(big block Ford with standard deck height and conventional head) (over 589 add 100 lbs.)</small>		
Big Block	Naturally Aspirated	589	2850
	<small>(big block Ford with standard deck height and non-conventional head) (over 589 add 100 lbs.)</small>		
Big Block	Naturally Aspirated	589	2950
	<small>(big block Ford with Pro Stock/Symmetrical type cylinder heads) (over 589 add 100 lbs.)</small>		
Big Block	Nitrous	485	3100
Big Block	Nitrous	525	3200
Big Block	Nitrous	565	3300

NOTE:

Maximum CID for all small block boosted entries is 440 inches.

Maximum CID for all small block nitrous entries is 470 inches.

Maximum CID for all Big Block Naturally Aspirated combos is 638 inches.

Maximum CID for big block nitrous entries is 588 inches.

There will be a 2.5lb/per cube weight penalty up to 565 inches assessed to all entries over their CID/Base weight claimed. Combinations over 565 will be assessed 2.0lb/per cube weight penalty. Example: A nitrous 510 cu.in Big Block base weight would be; 3100 (485 base) + 62.5 (25x2.5) = 3160lbs.

All weights will be rounded down to the nearest 5lb. increment.

WEIGHT ADDITIONS/DEDUCTIONS

Add 25lbs for Entries using Meth Injection.

Add 50lbs for Entries using M1 or E85 fuel (Intercooler with M1 fuel prohibited)

Add 75lbs for all centrifugal superchargers utilizing a compressor housing diameter of 9.76 inches or larger.

Add 75lbs for Nitrous entries utilizing Canted Valve heads.

Add 75lbs for N/A combinations with Cast Tunnel Ram/Sheet metal/Dual Carbs.

Deduct 25lbs for N/A BBF combos with NO forward-facing scoop

Deduct 50lbs for any Pushrod Combination 365 cubic inches or smaller.

Deduct 50lbs for Belt driven centrifugal superchargers.

Deduct 50lbs for all nitrous powered entries utilizing a conventional stage, single plate nitrous system (one nitrous jet and one fuel jet).

Deduct 100lbs for Centrifugal supercharged entries using a supercharger with a 3.57" or smaller inducer diameter impeller.

Deduct 100lbs for Boosted entries using a 311c.i. or smaller small block push rod combinations.

Deduct 100lbs for Nitrous entries utilizing a Ford 20 degree non-raised runner cylinder head with factory valve angle.

Deduct 150lbs for N/A combo using M/T 3453 tire (except Pro Stock type cylinder head)

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. 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.

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.

ENGINE COATINGS

The use of engine coatings is permitted.

CRANKSHAFT

Any aftermarket steel crankshafts are permitted.

CONNECTING RODS

Any aftermarket connecting rods are permitted.

PISTONS & PINS

Any aftermarket pistons and pins are permitted.

PISTONS RINGS

Any aftermarket piston rings are permitted.

CAMSHAFT DRIVE SYSTEM

Any camshaft drive system is permitted.

CAMSHAFT

Any camshaft is permitted.

LIFTERS/LASH ADJUSTERS

Any lifters/lash adjusters permitted.

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 +/- 3 degrees. The NMRA reserves the right to check valve angle either on or of the vehicle. Please refer to approved cylinder head list below.

Small Block Ford

- Ford OEM Windsor 289/302/351/5.0 & Cleveland 2 bbl. & 4 bbl.
- Ford OEM 2, 3, and 4V
- Air Flow Research 165, 185, 205, 225
- Brodix ST 5.0, ST 5.0R, Track 1, T1, Track 1X, 11R, T1RR, Head Hunter F
- Canfield 20 Degree 197 cc, PN# 20450
- Dart Pro 1 170, 195, 210, 225
- DSS FH1
- Edelbrock Performer, PN #60329, #60359, #60279, Performer RPM, #60229, #60259, #60269
- Edelbrock Victor Jr. #7716, CNC #7716, #61269, #61309
- Edelbrock Victor., PN #77219, #61299, #77289, #77299, #61099, #77099
- Edelbrock RPM Performer PN#51259XT
- Edelbrock E Street PN#5023
- Edelbrock E Street PN#5025
- Edelbrock GV2 PN#773169*, PN#77319*
- FRPP GT-40, GT-40P, GT-40X, GT-40Y, J302, N351, V351, Z304
- FRPP Z2 Cylinder Head PN# M-6049-Z2
- Holley 5.0, PN# 300-573, 300-574, 300-575, 300-576, 300-577, 300-578, 300-579
- Profiler 222
- RHS 200cc & 215cc
- Trick Flow Specialties "High-Port" Head, Twisted Wedge, Std. & R, 11R, Track Heat
- World Products Roush 180, Roush 200, Windsor Jr. & Windsor Sr.

Big Block Ford

- Ford Factory OEM Iron & OEM Aluminum (2 bbl. & 4 bbl.)
- Ford 429/460 Aftermarket Cobra Jet Cylinder Heads
- Blue Thunder 460 "OEM Cobra Jet Style" Only. THOR & Other Versions Prohibited.
- Blue Thunder FE #CHFE-(LB-LBOE-SB-SBOE)
- Edelbrock Performer RPM 460, Performer RPM 460 CJ, Victor Jr. 460
- Edelbrock FE390-428 (Edelbrock on end) # 60059, # 60069, # 60089, # 60079
- Edelbrock FE390-428 (NHRA on end) # 60057, # 60058, # 60087
- Trick Flow A-460 – PN# TFS-21002, 5441B001, and 5451B001

Note: Stock factory OEM heads are those cylinder heads that are factory production line installed on production vehicles as recognized by NHRA. Boosted entries using cylinder heads with an * must add 100lbs to their original base weight. Nitrous powered entries with an * must add 50lbs to their original base weight.

INTAKE MANIFOLD

Any aftermarket cast intake manifold permitted. Fabricated, sheet metal, billet, and any tunnel ram intake manifold of any type for pushrod engines are prohibited. Modular engines are permitted fabricated and/or sheet metal intake manifolds. Porting is permitted.

NITROUS OXIDE

All entries are permitted to use any conventional single stage plate system, any cross bar single plate system or any conventional single stage fogger system. The use of water injection is permitted with water being the only agent allowed. The use of any other agents in the water injection system is strictly prohibited. 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.

Small Block combinations using a conventional single stage, single plate nitrous system (one nitrous jet and one fuel jet) have unlimited nitrous jet size.

Big Block Chevrolet or Big Block Ford combinations using a conventional single stage, single plate nitrous system (one nitrous jet and one fuel jet) have a maximum nitrous jet size of **.136**.

All entries using a cross bar single plate system (two nitrous jets and two fuel jets) have a maximum nitrous jet size of **.092**. The maximum allowable number of solenoids for any single stage plate system or cross bar system is three (1 nitrous, 1 fuel and 1 redundant purge).

Progressive systems are permitted.

Single Stage Fogger: Any conventional single stage nitrous fogger system permitted. One nitrous/fuel nozzle per cylinder permitted. All entries using a single stage fogger system have a maximum jet size of **.046**. The maximum allowable number of solenoids for any single stage fogger system is five (2 nitrous, 2 fuel and 1 redundant purge). Progressive systems are permitted.

Purge System: Nitrous purge systems are permitted a maximum of 1 solenoid. Progressive systems are permitted to use one inline "safety" solenoid.

Nitrous Lines: All entries are required to have one continuous -6 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 with a maximum inlet outside diameter of 4.75 inches. Centrifugal superchargers that are utilizing a compressor housing of 9.76" or larger please refer to weight adder/deductions section of the rules. Supercharger impeller must be constructed from aluminum. Centrifugal superchargers are permitted to use any gear drive or transmission system, including the Vortech V30 series or Procharger F3B-91 or F3B-94. A direct fresh air source to supercharger inlet is permitted. Twin screw type superchargers are permitted a maximum size of 4.7L. Roots style superchargers are permitted a maximum size of 4.5L.

TURBOCHARGER

Turbochargers are allowed a maximum impeller inducer of 76mm. Compressor wheel/impeller must only be constructed of cast or billet aluminum. Turbine wheels are only allowed to be constructed from Inconel material. Turbocharger air inlet is allowed to have a fresh air source. Turbochargers utilizing a cast aluminum impeller (aka Ultra Street turbo) on the compressor side must have a maximum impeller inducer diameter of 76.6mm and exducer maximum of 116mm. The turbine side is restricted to a major diameter of 96.2mm inducer and 88.3mm exducer. Turbocharger size will be verified by one or both of the following methods:

1. By measuring the housing bore at the leading edge of the impeller wheel. The maximum diameter of the housing bore at the leading edge of the impeller wheel may not exceed 2mm more than the maximum allowable turbocharger size permitted in this class.
2. By measuring the impeller inducer wheel where the leading edge of the inducer wheel meets the housing. The wheel/blade contour from the inducer to the exducer must be continuous without steps.

INTERCOOLING

Air-to-water intercoolers are permitted for supercharged and turbocharged entries only. Only one intercooler is permitted for all boosted applications. Intercooler with M1 fuel prohibited.

METH INJECTION

Meth injection is permitted (with weight adder) with single nozzle located no closer than 12" of intake entry.

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.

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.

CARBURETOR

Maximum carburetor size for all 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, M1, Q1, C-85, and E-85 (VP Racing Fuels C-85 recommended) are the only fuels permitted. Diesel combinations must use VP Racing Fuels Torque Diesel. 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, 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. 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. Clutch assisted/clutch-less manual transmission allowed on N/A combinations. 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.

DRIVELINE

Any drive shaft meeting SFI 43.1 spec is permitted.

REAR END

Any OEM automotive type rear end 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. Rear coil-over shocks are permitted.

FRONT SUSPENSION

Stock, aftermarket or tubular type K-member permitted. K-member must mount in its original location. K-member may be notched for oil pan clearance. Factory strut/shock towers are required. Bolt-on type caster/camber plates are permitted. Factory or aftermarket control arms are permitted.

REAR SUSPENSION

Stock-type, ladder bar, and racing 4-link 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 forward edge (closest to the bumper) of shock/strut tower 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

The Mickey Thompson 3559R or ET Street SS 3453 are the only rear tires permitted. Tire tread may not extend outside of the fender. N/A combinations may use the MT 3754X 275/60-15 Radial Pro, Hoosier 17375DR2 275/60R15 or Hoosier 17317 27560R15.

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. Hood and deck-lid/trunk-lid must be hinged or lift off style. Pro Mod and/or Pro Stock style front ends are prohibited. Alterations or aerodynamic modifications are prohibited. Body must be finished or painted.

HOOD SCOOPS

The use of aftermarket forward facing hood scoops is prohibited. The use of cowl induction style hoods are allowed on any vehicle with a maximum height of 7 inches. Cowl height will be checked from the tallest point of the hood to the fender line. Factory OEM forward facing hood/ram air hood scoops is permitted. Factory scoops must be sealed/blocked off so they are not allowed to source fresh air. Forward facing hood scoop on N/A combinations permitted.

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, unaltered firewall is required. 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

Complete stock floor in stock location is required. Flat area of floor-pan starting at “kickup” for rear end (behind rear 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

OEM Taillights for year of vehicle being used must be intact and operational.

APPEARANCE

All cars in competition must be painted or wrapped. Advertising graphics are permitted on the body. In order to be eligible for the NMRA 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 NMRA requires that all entries run the following decals:

1. NMRA Windshield Banner: Decal needs to be located on the top of the windshield or just above the windshield located on the body.
2. NMRA 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

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.

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

COMPUTER/DATA RECORDERS

The use of data recorders is permitted.

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.

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.