

LS OUTLAW 275

CLASS OVERVIEW

This class is a 1/8th mile heads-up small tire class designed for LS powered vehicles. 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 LS Fest Tech Director.

RACING FORMAT

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

POWER ADDER BASE WEIGHT

Nitrous	Unlimited
Supercharger 4.200	2950
Twin Turbo 76mm	3100
Twin Turbo 88mm	3300
Single Turbo 88mm	2900
Single Turbo 106mm	3100
Single Turbo 118mm	3200

Deduct : 150 lbs for 4.025 centrifugal supercharger
250 lbs for 3.700 or smaller centrifugal supercharger

REQUIREMENTS & SPECIFICATIONS

ENGINE: 1

BLOCK

Any GM LS style block permitted

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 GM LS based inline valve heads are permitted. Billet and one-off fabricated heads are prohibited.

INTAKE MANIFOLD

Any aftermarket intake manifold permitted. Fabricated, sheet metal, billet, and any tunnel ram intake manifold are permitted.

NITROUS OXIDE

Any nitrous system allowed. Push systems are permitted. The use of water injection on nitrous assisted power adder combinations is permitted. Water is the only substance that may be used in water injection systems. The use of any agents other than nitrous oxide in the nitrous system is prohibited. Nitrous systems must only use gasoline for the fuel enrichment circuit. Nitrous systems must only be activated by a wide-open throttle switch. Maximum of two 15 pound nitrous bottles are allowed. All nitrous bottles must be stamped as meeting the minimum DOT 1800 pound rating.

CENTRIFUGAL SUPERCHARGER

Supercharger impeller wheel must be constructed of only aluminum. Any other material used in the construction of the supercharger impeller is prohibited. The injection of any substance in the compressor housing/volute air inlet or the discharge side of the supercharger is prohibited.

SINGLE TURBOCHARGER

Accepted single turbochargers with the follow compressor impeller inducer diameter are: 118mm/4.645 inches, 106mm/4.173 inches and 88mm/3.465 inches. Compressor wheel/impeller must only be constructed of cast or billet aluminum. Turbocharger is permitted a fresh air source from either the front bumper or grille area of the vehicle.

TWIN TURBOCHARGERS

Accepted twin turbochargers with the follow compressor impeller inducer diameter are: 76mm/2.992 inches and 88mm/3.465 inches. Compressor wheel/impeller must only be constructed of cast or billet aluminum. Turbocharger is permitted a fresh air source from either the front bumper or grille area of the vehicle.

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

All boosted 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.

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.

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 aftermarket throttle body permitted. Boosted applications are limited to a single throttle body and all other entries are permitted two.

CARBURETOR

Aftermarket carburetors are permitted with a maximum of two carburetors. Split dominators are permitted.

THROTTLE LINKAGE

Throttle control must be operated by the driver's foot

FUEL

Nitrous entries are to use gasoline only. Supercharged and turbocharged combinations are permitted to use gasoline, E fuels or methanol. The use of nitromethane is prohibited.

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 or aftermarket automatic transmission is permitted. Any torque convertor is permitted. Trans-brakes are permitted. Pneumatic, electric, hydraulic, etc. shifters are permitted.

BRAKES, STERRING & 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.

SHOCKS/STRUTS

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

FRONT SUSPENSION

Post 1978 and Newer Vehicles: 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 controls arms are permitted.

Pre-1978 and Older Vehicles: The use of aftermarket bolt-on front suspension kits for engine fitment is permitted. Factory strut/shock towers are allowed to be modified for engine fitment and must maintain an OEM appearance.

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

FRAME

Front frame rails are required. Tubing forward of the strut tower or forward of the control arm mounting point is permitted. Back-halved cars are permitted. Nitrous entries are permitted to have tube chassis/Pro Stock style cars.

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

275 mm radial or 28 x 10.5 non W slick are the only tires permitted for all boosted entries. Nitrous entries are permitted to use any size drag radial or bias-ply slick.

WHEELS

Aftermarket racing wheels permitted.

INTERIOR: 6

UPHOLSTERY

Aftermarket fiberglass or carbon fiber dash is permitted. A removable transmission tunnel is permitted.

STEERING COLUMN/WHEEL

Aftermarket steering columns and steering wheels are permitted.

BODY: 7

BODY

All vehicles must maintain a Factory OEM appearance for year, make and model being used. Lightweight body parts are restricted to the following: hood, fenders, bumpers, doors, and trunk-lid/deck-lid. Hood, trunk-lid/deck-lid, and doors must be hinged or be lift off models.

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.

WINDSHIELD & WINDOWS

OEM glass or NHRA approved Lexan is required.

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.

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**

CRENDENTIALS

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 LS Fest 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 LS Fest West event. 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.