



NITRO Vs. THE WORLD CLASS RULES

As Of: 2/7/2023

- All NHRA Safety Rules Apply • 1/4 Mile Race • Heads Up • Pro Tree • 16 car field, (if 32 or more cars, we will run a 32 car field)
- + *Engine Diaper or Catch Pan is REQUIRED!*

Class Designation: NVW

General Safety: All vehicles must conform with general NHRA safety rules.

Engine Containment Device: Engine diaper or catch pan device to capture oil and debris in event of engine failure is mandatory. Where the exhaust header passes directly under the oil pan, a two piece diaper may be utilized. Vehicles using OEM manual transmission cases must also have such a device for the transmission, to capture oil and debris in event of transmission failure. If a catch pan device is used, the catch pan must employ a minimum of 2 inch high lips on all sides. Lips must be coved or curved inward, so as to contain oil in the pan. Catch pan must cover the entire area below the engine/transmission. In all cases, lips must be adequate enough to contain oil in the catch pan. Should a competitor spill excessive oil from the catch pan and debris onto the track, he or she may be disqualified from further competition at the sole and absolute discretion of the event director until catch pan is upgraded, regardless of height of pan lips or pan design.

Chassis: : All cars must retain complete stock chassis, floorboard, firewall, and frame rails. Frame rails may be modified in front of the strut tower. Notching of chassis for clearance is permitted. Aftermarket "K" members are permitted. All cars can remove spare tire wheel well and cover with sheet metal.

Ground Clearance: A minimum of 3 inches from the front of the vehicle to 12 inches behind the 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). Catch pan or diaper must not interfere with timing equipment and must adhere to ground clearance requirements.

Wheelbase: Must be within 3" of the factory wheelbase.

Suspension: Front - Upper mounting point for strut assemblies must be in the factory location. Adjustable caster/camber pillow-ball mounts are permitted. Lower control arm may be strengthened provided factory mounting points to the chassis are maintained. Lower mounting point for strut assembly may be modified for improved caster or camber. Strut tower braces, lower tie bars, sway bars, and limit straps are permitted. Traction bars/devices permitted; must be bolt on ONLY.

Suspension: Rear- Aftermarket lower control arms, strut tower braces, lower tie bars, sway bars, and limit straps are permitted. Rear suspension must maintain minimum shock travel of 1 inch. All rear suspensions must use at least one working shock absorber per wheel. Suspension modifications limited to bolt-on items only. All OEM suspension mounts/attachment points must be utilized.

Lights: Headlights and brake lights are required (one headlight may be removed for induction).

Windows: OEM glass or lexan windows are permitted. If you are using aftermarket doors or lexan windows, then a steel frame around the lexan window or a window latch is required

Driveline: Aftermarket axles, ring and pinions, final drive, spools, and differentials are permitted. Other OEM or aftermarket center sections and rear-ends may be replaced only if its a direct bolt in. IRS suspension cars may convert to a straight axle only if it is a direct bolt in.

Transmission/Shifter: Manual or Auto transmissions are permitted. Aftermarket bell housings are permitted. Air shifters are prohibited on all transmissions. - Any style automatic transmission is permitted. Trans-Brakes are permitted. - Aftermarket stock-style clutch-assisted manual transmissions with H-Pattern shifter permitted. Strain gauges are permitted. Automated, timer type, pneumatic, electric, electronic, hydraulic, etc. shifting mechanism prohibited; each individual shift must be a function of the driver and controlled manually. DRIVER MUST PULL THE LEVER. Any type of clutch permitted. Sequential transmissions permitted.

Clutch: Clutch must be manually operated by driver's foot. - RWD Cars: Adjustable or Slipper Style clutch prohibited
- FWD & AWD Cars: Any style clutch is permitted

Fuel: All fuels cannot exceed .799 specific gravity. Fuels will be checked with a digital specific gravity tester. Fuel System: Electric or mechanical fuel pumps are permitted. Aftermarket fuel cells are permitted and may be mounted anywhere in vehicle. All cars must be equipped with a drain valve located on the return side of the fuel rail or regulator to facilitate the removal of fuel samples for fuel check purposes. *No Fuel Rules for Nitro Fuel Cars.

Engine: OEM or Aftermarket blocks are permitted. 4-cylinder cars that came OEM as FWD or AWD must have engine mounted in transverse location.

Turbocharger: All turbochargers must be used as they are sold and be available to the public. T4 flange size only, no welding, or adapters permitted to meet this specification. V-band inlets are limited to 3.0" diameter (ID) inlet flange. Any inconsistent modifications to compressor or turbine wheel, blades, hubs, cover, or housing, beyond accepted commercially available manufacturing process, is PROHIBITED. Reducers PROHIBITED. Inducer blade tip measurement will take place at the leading edge (must capture .200 of blade tip) where the tip meets the compressor housing and must extend to the final exducer measurement without steps. Exducer tip may extend a maximum of 2mm larger than the exducer where it meets the backplate of the center cartridge. Reducers PROHIBITED. No reduction or milling permitted on the compressor or turbine retention nuts. Map groove will not exceed .250 of an inch and must be maintained throughout the entire circumference of the groove. Adjustable map groove rings prohibited. No aftermarket modifications to the compressor cover will be allowed. Any turbocharger entry may be asked to remove the compressor and/or turbine cover for tech inspection. Turbine wheels are only allowed to be constructed from high nickel alloy material. The turbine wheel will be required to have a hub diameter of 20% of the turbine wheel. IE...85MM/3.346" turbine will be required to have a minimum hub diameter of 17mm/.669"

Nitrous Oxide: Any entry with any nitrous equipment IE: Bottles, lines, nozzles, etc. will incur the nitrous weight penalty. If you are claiming turbocharged entry without nitrous ALL related nitrous items must be removed from the vehicle.

Intercooling: 4-cylinder and 6-cylinder cars must run air intercoolers only. 2-rotor cars may run liquid intercoolers. Water injection is permitted. Methanol injection is permitted.

Tires: All tires are checked by sidewall designation.

See size restrictions below:

FWD: Maximum size slick or DOT bias ply tire is 25.0" x 9.5"

AWD: Maximum size slick or DOT bias ply tire is 28.0" x 11.5"W

RWD: Radials are limited to a 275/60/15 tire.

Slicks or DOT bias ply tires are limited to a 28.0" x 11.5W"

Tow Vehicles: Permitted. Vehicles must get to scales under their own power. If a vehicle is disabled and cannot get to the scales under its own power, the vehicle's crewmember(s) must stop at the scales first to notify the tech officials. A tech official will then escort the crewmember(s) in the retrieval of the vehicle.

Credentials: All competitors must have a competition number and membership number. Valid NHRA competition license mandatory for driver of any vehicle running 9.99 or quicker. All drivers running 10.00 seconds or slower must have a valid state- or government-issued driver's license beyond a learner's-permit level or valid NHRA competition license. See NHRA General Regulations 10:4.

All rules subject to change. CMRPRODUCTIONS.COM

ENGINE	DRIVELINE	TRANS	TURBOCHARGER	NITROUS OXIDE	CAR & DRIVER MIN. WEIGHT
4-Cylinder	FWD	Manual Auto DCT	Compressor: Ind. 64.9mm Exd.: 88.9mm Max Turbine: Ind. 75.9mm Exd. 66.9mm	Nitrous Prohibited	2400lbs.
4-Cylinder	FWD	Manual Auto DCT	Compressor: Ind. 64.9mm Exd.: 88.9mm Max Turbine: Ind. 78.9mm Exd. 69.9mm	Nitrous Prohibited	2600lbs.
4-Cylinder	FWD	Manual	Compressor: Ind. 68.49mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	2700lbs.
4-Cylinder	FWD	Manual	Compressor: Ind. 73.9mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	2800lbs.
4-Cylinder	AWD	Manual	Compressor: Ind. 64.9mm Exd.: 88.9mm Max Turbine: Ind. 78.9mm Exd. 69.9mm	Nitrous Prohibited	2750lbs.
4-Cylinder	AWD	Auto DCT	Compressor: Ind. 68.49mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous OK	2700lbs.
4-Cylinder	AWD	Auto DCT	Compressor: Ind. 73.9mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous OK	2900lbs.
4-Cylinder (VW, EVO, Mazda, Subaru Only)	AWD	Manual Auto DCT	Compressor: Ind. 73.9mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	2750lbs.
4-Cylinder	RWD	Manual	Compressor: Ind. 64.9mm Exd.: 88.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	2700lbs.
4-Cylinder	RWD	Manual	Compressor: Ind. 68.49mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	2800lbs.

***SOHC Cars: Deduct 200lbs.**

***Automatic Cars without a trans-brake: Deduct 100lbs.**

***Mazda & Subaru FWD Configurations: Deduct 200lbs + Volkswagen FWD Configurations: Deduct 300lbs**

***EVO 4-10 Chassis: Deduct 300lbs**

***RWD Cars with clutchless/sequential transmission: Add 150lbs.**

***Nitrous Add 100lbs.**

ENGINE	DRIVELINE	TRANS	TURBOCHARGER	NITROUS OXIDE	CAR & DRIVER MIN. WEIGHT
5 or 6 Cylinder	FWD	Manual Auto DCT	Compressor: Ind. 73.9mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	2500lbs.
5 or 6 Cylinder	AWD	Manual Auto DCT	Compressor: Ind. 68.49mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	3000lbs.
5 or 6 Cylinder	AWD	Manual Auto DCT	Compressor: Ind. 73.9mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	3200lbs.
6 Cylinder	RWD	Manual	Compressor: Ind. 68.49mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	3400lbs.
6 Cylinder	RWD	Auto DCT	Compressor: Ind. 68.49mm Exd.: 102.9mm Max Turbine: Ind. 90.9mm Exd. 86.9mm	Nitrous Prohibited	3500lbs.

***VW Engines: Deduct 100lbs**

***Automatic Cars without a trans-brake: Deduct 100lbs.**

***RWD Cars with an Automatic Transmission and 3.2/3.4 stroker engine: Add 250lbs.**

***RWD Cars with clutchless/sequential transmission: Add 150lbs.**

***RWD & AWD Cars utilizing XONA ROTA X3C/X4C Turbos: Deduct 250lbs.**

ENGINE	DRIVELINE	TRANS	TURBOCHARGER	NITROUS OXIDE	CAR & DRIVER MIN. WEIGHT
2-Rotor	RWD	Manual Auto DCT	76.9mm - Single	Nitrous Prohibited	2900lbs.
2- Rotor	RWD	Manual Auto DCT	80.9mm - Single	Nitrous Prohibited	3100lbs.

***RWD Cars with Clutchless/Sequential transmission: ADD 150lbs.**

ENGINE	DRIVELINE	TRANS	POWER ADDER	NITROUS OXIDE	CAR & DRIVER MIN. WEIGHT
4-Cylinder	FWD	Manual Auto DCT	NITRO	Nitrous Prohibited	1700lbs.
6-Cylinder	FWD	Manual Auto DCT	NITRO	Nitrous Prohibited	1800lbs.

***No Fuel Rules**

ENGINE	DRIVELINE	TRANS	SUPERCHARGER	NITROUS OXIDE	CAR & DRIVER MIN. WEIGHT
4-Cylinder	FWD	Manual	Roots, Twin Screw, Centrifugal	Nitrous Allowed	2000lbs.
6-Cylinder	FWD	Manual	Roots, Twin Screw, Centrifugal	Nitrous Allowed	2200lbs

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