



# Read all Instructions before beginning!!!!

**Caution – EXTREME DANGER – Caution**

**Do not use or mix any other manufacturer's products with any Nitrous Express products.**

**Do not use or mix any Nitrous Express products with any other manufacturer's products.**

**THESE INSTRUCTIONS APPLY TO NITROUS EXPRESS PRODUCTS ONLY!**

**FOR SANCTIONED RACE USE ONLY - NOT FOR SALE OR USE IN CALIFORNIA**

## **DIRECT PORT (NOZZLE SYSTEM) INSTRUCTIONS**

**CAUTION:** An experienced technician familiar with the use and handling of high-pressure cryogenic gases should install this system. If you have any doubt about your skills this system should be taken to a qualified shop for installation. If you have decided to do the install yourself please read and understand all of these instructions before you start. Some of these instructions may or may not apply to your vehicle, if you have any questions please call our tech department 940-767-7694 9:00A.M.-5:00P.M. CST.

Before starting, disconnect the negative terminal on the battery. If you have any questions about your particular vehicle consult a shop manual.

**These instructions are divided into 6 sections:**

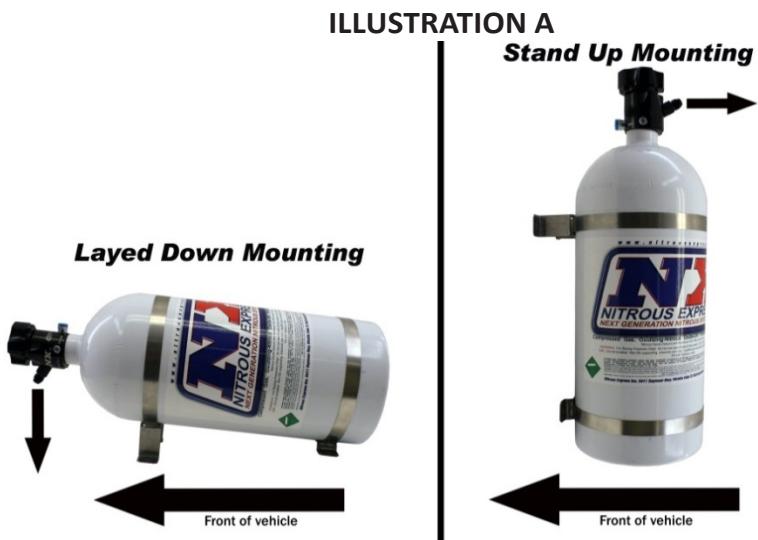
1. Mounting the Bottle & Routing the Supply Line
2. Removing and Drilling the Intake Manifold
3. Plumbing the Hardlines and Mounting the Solenoids
4. Plumbing the Fuel System
5. Wiring the system
6. Safety tips
7. Testing the System
8. Power Tuning Tips

**Before starting any installation steps:**

- 1) Never use Teflon tape on any system fittings. Tape debris will cause numerous problems ranging from clogged solenoids to blocked jets. Use the liquid thread sealer furnished with your NX system (for use on straight thread and NPT fittings, DO NOT USE ON TAPERED "AN" FITTINGS). A drop is all it takes.
- 2) Have your nitrous bottle filled by a reliable source, being sure it is filled to the correct capacity with **FILTERED "NY-TROUS+" nitrous oxide.**

## MOUNTING THE BOTTLE

The nitrous bottle should be mounted in the trunk area or outside of the passenger compartment. If this is not possible or practical a NHRA approved blow down tube and vent fitting (PN's 11708, 11709) must be installed. The positioning of the bottle should be as shown in illustration "A". This will allow the siphon tube to be covered at all times. The mounting brackets should be assembled on the bottle with the short bracket approx. 2" from the bottom. The long bracket should be place approx. 7" above the lower bracket on 10lb bottles. The upper bracket should be approximately 12" above the lower bracket on 15lb bottles. **Note: Before drilling holes to mount the bottle, be sure to check for clearance beneath the mounting surface i.e.: fuel tank, fuel lines, brake lines, etc.**



To route the supply line, drill a  $\frac{3}{4}$ " hole beneath the valve discharge port. Before beginning the routing procedure; place tape over both ends of the line. Now route the line beneath the car being sure to avoid all exhaust, suspension and other moving parts. Following the factory fuel line is usually the safest. Be careful to avoid any positive 12-volt sources, one small spark to the outer braid of the line will destroy it!!! Secure the line carefully, zip ties work best here. Before connecting the line to the bottle, purge the line of all possible debris by carefully blowing compressed air through the line for several seconds. Connect the line to the bottle nipple and tighten securely.

## REMOVING AND DRILLING THE INTAKE MANIFOLD

**Note: NX offers intake plumbing services with a 1 week turnaround time. See [www.NitrousExpress.com/custom-plumbing-form.html](http://www.NitrousExpress.com/custom-plumbing-form.html) for more info.**

Before any modifications are made to the engine compartment, we suggest that you make a diagram of all hoses, wiring, and linkages. Measure your engine, (intake manifold, valve covers, linkages, etc.) for nozzle and plumbing clearances. Now remove the intake manifold - If you have question regarding this step please consult a service manual on your engine type.

**Drilling the Intake Manifold for 90 Degree Nozzles - for Shark, Piranha, SSV and VXL nozzles.**  
*(If you have Annular style nozzle such as the STD or Triple-D, Skip to the next section)*

- 1) Mark the center of each runner approximately 1-1.5 inches from the manifold flange in a location that locates the nozzles in a position that clears the valve covers, linkages, etc. This distance is not critical to overall performance; however, the higher up the runner the nozzle is placed the harder the "Hit" will be when the system is engaged.
- 2) This step is critical to a successful installation. The use of a Bridgeport style mill is suggested. The nozzle mounting hole should be "tilted" back toward the manifold plenum 10-15 degrees to ensure adequate valve

cover clearance. **Measure for nozzle and plumbing clearance before drilling!!** Each hole must be in alignment, front to rear, and top to bottom.

- a) If your system is furnished with Shark Nozzles drill each runner using an "R" (.339") bit. Tap each hole to a uniform depth using a 1/8" NPT tap.
- b) If your system is furnished with Piranha or SSV nozzles drill each runner using a .250" drill bit. Tap each hole to a uniform depth using a 1/16" NPT tap.
- c) If your system is furnished with VXL nozzles drill each runner using an "I" (.272") drill bit. Tap each hole to a uniform depth using a 5/16"-24 tap.

- 3) Deburr the holes inside and out.
- 4) Install the nozzles in the tapped holes using a Teflon based paste sealer. Be sure each nozzle is installed to a uniform depth.
- 5) Using the pictures in Illustration "B" as a guide, map out how you want your NX system to look after it is installed.

**Illustration B**



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#### **Drilling the Intake Manifold for Annular (Straight Thru) Nozzles – STD or Triple D nozzles.**

(If you have 90 degree nozzles refer to the section above)

- 1) Make sure your manifold is designed to work with an annular style nozzle, if it does not have mounting pads cast or machined into the manifold you will have to add nozzle mounting bungs (NX Part #16309). (See Illustration "C")
- 2) Mark the center of each runner approximately 1-1.5 inches from the manifold flange in a location that locates the nozzles in a position that clears the valve covers, linkages, etc. This distance is not critical to overall performance; however, the higher up the runner the nozzle is placed the harder the "Hit" will be when the system is engaged.
- 3) This step is critical to a successful installation. The use of a Bridgeport style mill is suggested. **Measure for nozzle and plumbing clearance before drilling!!** Each hole must be in alignment, front to rear, and top to bottom.
- 4) You can now drill and tap the manifold for the nozzle size that came in your system. (Or weld in bungs if applicable)
  - a) If your system is furnished with STD nozzles or 1/16" Triple D nozzles, drill each runner using a .250" drill bit. Tap each hole to a uniform depth using a 1/16" NPT tap.
  - b) If your system is furnished with 1/8"NPT Triple D nozzles, drill each runner using an "R" (.339") bit. Tap each hole to a uniform depth using a 1/8" NPT tap.
- 5) Deburr the holes inside and out.
- 6) Install the nozzles in the tapped holes using a Teflon based paste sealer. Be sure each nozzle is installed to a uniform depth and the tip of the nozzle is not recessed in the bung. **Note: you will want the nozzle discharge area protruding into the runner/bung to insure the nitrous/fuel discharge area is not disrupted.**

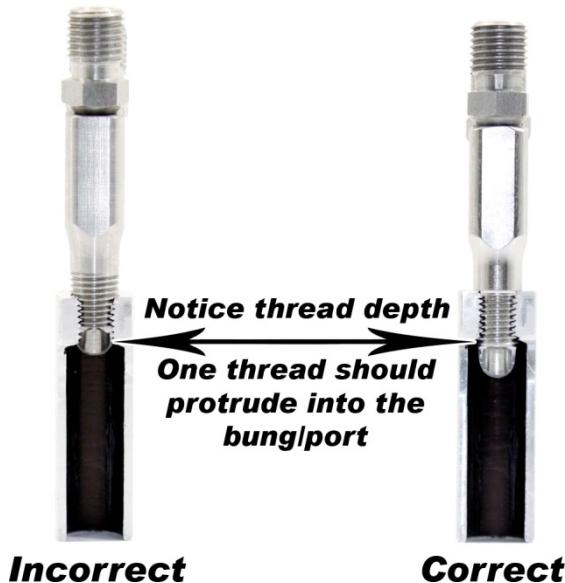
**See Illustration D**

- 7) Using the pictures in Illustration "C" as a guide, map out how you want your NX system to look after it is installed.

Illustration C



Illustration D



## Plumbing the Hardlines and Mounting the Solenoids

- 6) Position the solenoids and distribution blocks on each side of the manifold so as not to interfere with any linkages or other equipment. Cut, bend, install B-nuts, sleeves and flair each 3/16 line to support the solenoids and distribution blocks in the desired location.
- 7) Using the supplied jumper lines and billet distribution "Y" fittings, connect the nitrous solenoids together.
- 8) After all installation on the manifold is complete, flush all lines and orifices using compressed air. Attention to detail here will save you time and money in the long run. Do not shortcut this step!
- 9) Reinstall the intake manifold and carburetor; hook up all vacuum lines, and linkages using the diagram prepared before disassembly. Reconnect the fuel lines and tighten securely.
- 10) Install the nitrous supply line leading from the bottle to the "Y" fitting. **NOTE:** Tape over both ends of the nitrous supply line before beginning.
  - a) Route lines carefully to prevent the possibility of restricting any nitrous flow. If routed under vehicle, locate and drill a 3/4 inch diameter hole in a suitable area near the bottle valve for the main line.
  - b) Starting at the bottle nipple, route the line to the engine compartment. Following the factory fuel lines is usually the best path. **Note: Keep maximum clearance between all moving parts, suspension components and hot engine components, securing the supply line where possible ("Zip-Ties" work best here).** Be especially careful of the feed line being near any "HOT" electrical leads, even a small spark will result in a nitrous leak. If the line is too long, coil the excess near the bottle, if it is too short; try rerouting the line to gain length. If this does not work contact the factory for a custom length supply line.
  - c) After the nitrous supply line is in place, remove the tape from both ends.
  - d) Before attaching the nitrous supply line, purge it of any foreign matter that may have accidentally entered the line during installation; This is done by removing the tape used during installation and blowing

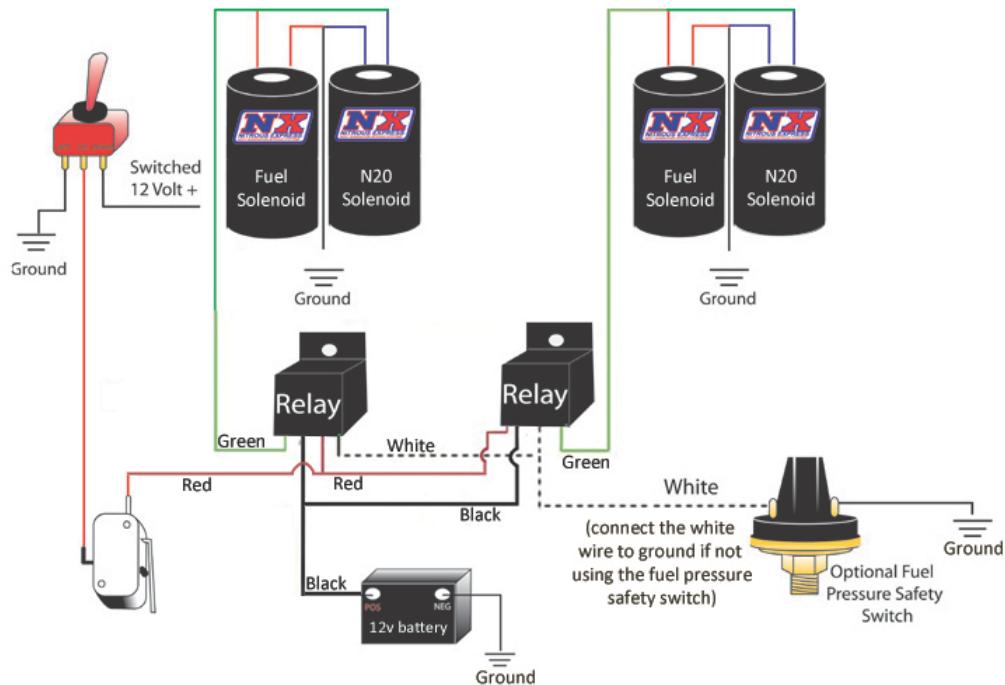
compressed air through the feed line. (Have an assistant hold the end of the hose aimed away from the car and any people. Wearing a glove is recommended).

e) Immediately after the purging operation, connect the main feed line to the N<sub>2</sub>O solenoids and the nitrous bottle, tighten securely.

## PLUMBING THE FUEL SYSTEM

- 1) Your NX system requires a dedicated fuel pressure regulator. If you use a multi stage system a regulator must be used for each stage. Mount the regulator as close to the fuel solenoid as practical.
- 2) The N2O system fuel regulator must be fed by direct pump pressure. Do not connect the nitrous system fuel regulator through the carb regulator.
- 3) All NX systems are designed to be tuned by flowing fuel pressures. This information can be found on the jetting card under "FFP". Using the NX Master Flo-check (PN 15519 or 15529) this pressure can easily be calibrated. These flowing pressures are only a base line tune up and will generally be rich.
- 4) Fine-tune your combination by reading your spark plugs after a full throttle pass. When the tune up for your combination is correct, the spark plug should be almost completely white with little or no color on the porcelain. For the ultimate in reliability and safety, our fuel pressure safety switch should be used. (PN 15708 for low pressure and 15718 for EFI pressures) **Note: A higher fuel pressure will not result in a "safer" system. Too much fuel can cause the same type of engine damage as too little fuel.**
- 5) It is not necessary for you to use a dedicated fuel pump for your nitrous system if the pump flows enough to support your engine and nitrous power. However, if you feel it is necessary to run a dedicated pump you should run a bypass line with a maximum .020 orifice from the fuel pressure regulator, or fuel solenoid bypass port back to the fuel tank to eliminate air from the system and to limit pressure creep.
- 6) All NX systems are calibrated at 1000-PSI bottle pressure. The safe operating range is 900 PSI to 1050 PSI.

## WIRING THE SYSTEM



- 1) Mount the master arming switch within easy reach, and plain sight of the driver.
- 2) The system is furnished with a universal wide open throttle (WOT) switch. This WOT micro-switch is designed to work with the universal mounting bracket. Its maximum capacity is 10 AMPS and should only be used to activate low amp draw accessories or in conjunction with a relay.

- a) Assemble the micro-switch on the mounting bracket using the supplied 3/4" 4-40 bolts and nuts. The switch can be mounted in several different configurations, select the position you require and tighten the bolts. Do not over-tighten; the plastic micro switch can be damaged.
- b) The mounting bracket is made of easily bend-able material and may be formed to any configuration that will allow it to place the WOT switch in a location where it will be activated above 80% throttle.
- c) The activation arm on the micro-switch is extra-long. This allows you to twist, bend, or cut it to aid in the ease of installation.

- 3) The best power source for the nitrous system is the terminal on the back of the alternator labeled "BAT". The next best power source is directly to the "Positive" post on the battery. Do not try to "Splice" into the factory wiring harness for a power supply, this will not have adequate amperage to operate the solenoids. If desired a 60 amp fuse may be installed in this circuit.
- 4) Solder all connections for a permanent trouble free installation.

**NOTE: The nitrous and fuel solenoids are rated only for intermittent duty. Do not engage either solenoid for more than 20 continuous seconds without a 5 minute cooldown period between activation. Solenoids that have "burned or scorched" electro-magnets will not be replaced under warranty.**

## Testing the System

- 1) Re-check all installation procedures to be sure nothing has been omitted.
- 2) Be sure the nitrous bottle has not been opened and the supply line is empty!
- 3) Using the toggle switch "ARM" the system.
- 4) Test solenoid operation by using the system activation switch. Both solenoids should "Click" (The nitrous solenoid should click loud, and the fuel solenoid will click soft). If they do not, re-verify all electrical connections and wiring diagrams.
- 5) Open the nitrous bottle and check all connections for leaks. With the lines disconnected from the solenoids, crack your nitrous bottle open to allow Nitrous pressure into the system. Check for any leaks that may be present, and tend to any that may exist. If the solenoid itself is not sealing, activate the nitrous solenoids a few times in rapid bursts to seat the plunger in the solenoids
- 6) Start engine and check for any fuel leaks. Correct any leaks before proceeding.
- 7) The Nitrous System is now ready for normal usage.
- 8) All NX systems are intended for off road use only and should only be used in that context.
- 9) Choose a suitable testing area, such as your local race track is best. Drive the vehicle to verify all operations are normal and the throttle linkage is operating properly.
- 10) Pre-stage the vehicle, arm the system, and purge the air from the supply line using 3 one-second bursts from the purge valve (PN 15601). Stage and launch the vehicle, shutting off at the 60ft mark. Check all system components to verify proper operation, correct any noted problems before proceeding.
- 11) Repeat the staging procedure, the system should be crisp and responsive, make a full throttle pass and shut the engine off for a spark plug check. Verify each cylinder is getting equal amounts of N2O and fuel. The plugs should have look nearly new, if they are sooty or black the fuel pressure must be reduced for optimum performance.

### Additional parts recommended for operating your nitrous system satisfactorily:

- Nitrous Pressure gauge (PN 15508) - STRONGLY RECOMMENDED
- Purge Valve (PN 15601)
- Bottle Jacket (PN 15945 for 10lb or PN 15946 for 15lb bottles)
- Fuel pressure Safety Switch (PN 15708 for 3-10psi or PN 15718 for 35-100psi)
- Bottle heater (NX 15941) - STRONGLY RECOMMENDED
- NHRA legal blow down vent fitting (PN 11709)
- NHRA legal blow down vent tube (PN 11708)

## SAFETY TIPS

Do not attempt to start engine if nitrous has been accidentally injected while the engine was not running. Disconnect coil wire and turn motor with throttle wide open for several revolutions before attempting to restart. If it is not possible to disable the ignition then the spark plugs must be removed and the engine cleared of all nitrous before attempting to start engine.

1. Never permit oil, grease, or any other readily combustible substances to come into contact with nitrous cylinders, valves, solenoids, hoses and fittings. Oil and certain gases (such as oxygen and nitrous oxide) may combine to produce a flammable condition.
2. Never interchange solenoids or other appliances used for one compressed gas with those used for another.
3. Identify the gas content by the label on the bottle before using. If the bottle is not identified to show the gas contained, return the bottle to the supplier.
4. Do not deface or remove any markings, which are used for content identification.
5. Cylinder valves should be closed except when nitrous is actually being used.
6. Notify supplier of any condition, which might have permitted any foreign matter to enter the valve or bottle.
7. Never drop or violently strike the bottle
8. Keep valves closed on all empty bottles to prevent accidental contamination.

## **POWER TUNING TIPS:**

Nitrous oxide works well with all applications; 4 cycle, 2 cycle, diesel, and rotary engines. Each one has individual tuning characteristics, and these tips apply generally to each one. Nitrous oxide is referred to as "Liquid Supercharging" because it, in effect, does the same thing as a mechanical supercharger, adding more fuel and oxygen into each cylinder, thus producing more power. The biggest enemy of all supercharged, turbo charged and nitrous injected engines is "DETINATION". The use of higher-octane fuel, and or a combination of better fuel and timing retard can control this. Remember detonation is a spark plug, head gasket and engine "KILLER".

1. Your engine should be tuned to its maximum power prior to nitrous usage.
2. The ignition is an integral part of the nitrous system and must be able to ignite the mixture under very high cylinder pressures. The hotter the spark the better!
3. In stock engine applications and street usage the spark plugs should be at least 2 steps colder than stock. Do not use platinum tip, extended tip or any plug with multiple ground straps or split ground straps. When in doubt about heat range always go one step colder. A spark plug that is to "Hot" will cause detonation, burned plugs, poor performance, and engine damage. In competition engines always use the coldest plug available. Never use an extended tip plug in a racing engine.
4. The NX nitrous system is so advanced, (technology, engineering, and workmanship) that huge amounts of timing retard is not usually required. We recommend 2 degrees timing retard for each 50 horsepower boost as a starting point. Your engine may need more or less depending on your combination.
5. Your fuel system is also an integral part of the nitrous system, be sure it is in top shape and all filters are clean.
6. Engine operating temperature should be between 160 and 200 degrees prior to nitrous usage.
7. Never "lug" your engine and hit the nitrous system, use the system at wide-open throttle only, nitrous should not be used below 3000 rpm's. If you do any of the above a serious "Back Fire" could result in engine damage.
8. The better the exhaust system the better the nitrous system will work.
9. Do not attempt to drill or alter the jets, solenoids, or the tubes in the nitrous plate. These items are engineered to their maximum capability. Any modification you can make will decrease power and destroy engine parts.
10. Do not mix or attempt to match any other brand solenoids, plate, or nozzles with this system. Any attempt at this could lead to serious engine damage.
11. All of our systems are designed to operate at 1000 PSI bottle pressure. This is extremely important and cannot be stressed enough. If your bottle pressure is below 1000 PSI the system will run rich and will not produce the advertised horsepower. If the bottle pressure is above 1000 PSI the system will run lean, possibly damaging engine parts. This pressure is easily monitored by using a NX liquid filled pressure gauge (PN 15509). Note: When the ambient temperature is below 97 degrees a bottle warmer is required (PN 15940 or 15941). An NX bottle jacket (PN15945 or 15946) will help stabilize bottle pressure in the winter and summer.

**CAUTION: NEVER USE AN OPEN FLAME TO HEAT A NITROUS BOTTLE. THIS IS A VERY DANGEROUS AND POTENTIALLY FATAL PRACTICE!!!!!!!!!!**

12. A purge valve (PN 15601) is recommended on all NX systems. When the weather begins to get hot a purge valve is worth up to a tenth of a second on a 1/4 mile pass. Note: The correct purging procedure for drag racing is: 1.

Complete the burnout. 2. Light the pre-stage bulb. 3. Push the purge button three times, one second each. 4. Stage immediately, GO FAST.

13. If there is a question about the purity of your nitrous supply, a filter (PN15610 or 15607) should be used when refilling your bottle. Just attach the filter to your bottle when you take it to be refilled. Contaminated nitrous will cause serious damage to the nitrous solenoids and possibly to your engine. This is a lifetime renewable filter.
14. If you have questions about the suitability of your torque converter or gear ratios, call the factory tech line for the inside scoop.
15. Your nitrous bottle should be turned off when not in use (even between runs). An NX remote bottle opener (PN 11107) will make this task much easier.
16. Start with the lowest power setting in your system. Don't try to be the track "Hero" on your first pass. Remember start out small and work your way up, NX systems produce more real horsepower than any other brand on the market today.
17. If the solenoids must be disassembled for cleaning or rebuilding always use the proper wrench (PN 15921). Do not use any clamping devise on the solenoid tower, instant non-warranty, damage will result.
18. If you run an NX system of spraying more than 50hp on 4cyl, 75hp on 6cyl or 100hp on 8cyl you must use a high octane racing type fuel. These are some tips to help you choose and maintain the correct fuel for your application:
  - A. The most important statistic you should look for in the fuel specifications is the "MON" or motor octane number. In most cases the higher the number the more timing you can run and detonation will not be a problem
  - B. Most V-8 or V-12 engines with stock compression will run on "93" unleaded pump gas with up to 150 horsepower boost, most 4 or 6 cylinders with stock compression can use up to 75 horsepower.
  - C. Racing engines with high compression or higher must run racing fuel. The higher the compression, and the higher the boost, the higher the "MON" must be.
  - D. With nitrous usage usually the highest "MON" available is the one that should be used.
  - E. All NX systems are calibrated to use fuel with .730 specific gravity or "SG". If you use a fuel with a lower "SG" you must use a larger fuel jet to compensate for the lighter fuel. If you use a fuel with a higher "SG", a smaller fuel jet will be required. Most unleaded pump gas is .730 SG or above.
  - F. Racing fuel should be stored in an airtight, dark container. Exposure to atmosphere allows very important elements to evaporate, lowering the octane of the fuel. Sunlight oxidizes the lead contained in racing fuel, since this is the most important ingredient used to raise octane it must be protected.
  - G. Never leave the fuel in your car between race days. This allows evaporation of the very important "High end" hydrocarbons and lowers the octane of the fuel.
  - H. Never buy racing fuel from an underground or vented storage tank. Always demand to see where and how the fuel is stored; a sealed drum is the only correct way.
  - I. AV gas or aviation fuel is not compatible with nitrous usage, don't be tempted by the cheap price, instant engine damage will result!
  - J. For a fuel recommendation, contact your NX dealer.
19. All vehicles, including full competition race cars, must have an alternator to provide adequate amperage required by today's racing accessories. Add up all the amps required by your car, you'll be surprised!
20. If you have trouble with your NX system or any related parts, call your dealer first. If you still need help call the factory tech line 940-767-7694 9:00AM-5:00PM CST Mon-Fri. We are the nitrous experts and will give straight answers to your questions.

In conclusion.....

This instruction sheet and power tuning tips are valid only for a NX system. If you have a kit from another manufacturer this information will not help you! A tune up from any other brand of nitrous kit will not work with the NX "Next Generation" technology.

DO NOT LISTEN TO:

- A. YOUR BUDDY!
- B. YOUR BUDDY'S FRIEND!
- C. THE LOCAL NITROUS GURU!
- D. ANY ARTICLE IN ANY MAGAZINE

If you follow the foregoing suggestions, your NX system will operate trouble free and provide years of thrills. ABOVE ALL REMEMBER TO RACE SAFE AND HAVE FUN!

## 4 Cyl Direct Port Jetting

Select the desired flowing fuel pressure, horsepower level and fuel type to determine the nitrous and fuel jet requirements i.e. if you have an 4 cylinder direct port system and you are running 10psi Flowing Fuel Pressure, with gasoline, and want a 100 HP boost you would use a 31 Nitrous and a 26 Fuel jet in each nozzle.

Spark plugs should be at least 2 steps colder than stock gapped no larger than .035. Do not use platinum tip, extended tip or any plug with multiple ground straps or split ground straps. When in doubt about heat range always go one step colder.

Ignition timing should be retarded 2 degrees per 50 hp of nitrous being sprayed.

**Check all jets for obstructions upon installation!!**

### 4 Cylinder Direct Port - 5psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
50	20	20	26	22
100	26	22	29	24
150	31	26	35	27
200	35	31	39	32
250	41	33	42	34

Call 940-767-7694 for settings above 250 HP

### 4 Cylinder Direct Port - 8-10psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
50	20	18	20	19
100	26	20	26	22
150	31	24	31	25
200	35	26	33	27
250	41	28	38	30

Call 940-767-7694 for settings above 250 HP

### 4 Cylinder Direct Port - 40-45psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
50	20	12	18	15
100	26	16	22	17
150	31	18	26	19
200	35	20	28	22
250	41	22	30	24

Call 940-767-7694 for settings above 250 HP

### 4 Cylinder Direct Port - 55-60psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
50	20	N/A	17	12
100	26	14	20	15
150	31	17	25	18
200	35	19	27	21
250	41	20	29	23

Call 940-767-7694 for settings above 250 HP

This jetting chart is for informational purposes only, NX is not responsible for misuse or misapplication.

## 6 Cyl Direct Port Jetting

Select the desired flowing fuel pressure, horsepower level and fuel type to determine the nitrous and fuel jet requirements i.e. if you have an 6 cylinder direct port system and you are running 10psi Flowing Fuel Pressure, with gasoline, and want a 225 HP boost you would use a 31 Nitrous and a 26 Fuel jet in each nozzle.

Spark plugs should be at least 2 steps colder than stock gapped no larger than .035. Do not use platinum tip, extended tip or any plug with multiple ground straps or split ground straps. When in doubt about heat range always go one step colder.

Ignition timing should be retarded 2 degrees per 50 hp of nitrous being sprayed.

**Check all jets for obstructions upon installation!!**

### 6 Cylinder Direct Port - 5psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
75	20	20	26	22
150	26	22	29	24
225	31	26	35	27
300	35	31	39	32
375	41	33	42	34

Call 940-767-7694 for settings above 375 HP

### 6 Cylinder Direct Port - 8-10psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
75	20	18	20	19
150	26	20	26	22
225	31	24	31	25
300	35	26	33	27
375	41	28	38	30

Call 940-767-7694 for settings above 375 HP

### 6 Cylinder Direct Port - 40-45psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
75	20	12	18	15
150	26	16	22	17
225	31	18	26	19
300	35	20	28	22
375	41	22	30	24

Call 940-767-7694 for settings above 375 HP

### 6 Cylinder Direct Port - 55-60psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
75	20	N/A	17	12
150	26	14	20	15
225	31	17	25	18
300	35	19	27	21
375	41	20	29	23

Call 940-767-7694 for settings above 375 HP

This jetting chart is for informational purposes only, NX is not responsible for misuse or misapplication.

## 8 Cyl Direct Port Jetting

Select the desired flowing fuel pressure, horsepower level and fuel type to determine the nitrous and fuel jet requirements i.e. if you have an 8 cylinder direct port system and you are running 10psi Flowing Fuel Pressure, with gasoline, and want a 300 HP boost you would use a 31 Nitrous and a 24 Fuel jet in each nozzle.

Spark plugs should be at least 2 steps colder than stock gapped no larger than .035. Do not use platinum tip, extended tip or any plug with multiple ground straps or split ground straps. When in doubt about heat range always go one step colder.

Ignition timing should be retarded 2 degrees per 50 hp of nitrous being sprayed.

**Check all jets for obstructions upon installation!!**

### 8 Cylinder Direct Port - 5psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
100	20	20	26	22
200	26	22	29	24
300	31	26	35	27
400	35	31	39	32
500	41	33	42	34

Call 940-767-7694 for settings above 500 HP

### 8 Cylinder Direct Port - 8-10psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
100	20	18	20	19
200	26	20	26	22
300	31	24	31	25
400	35	26	33	27
500	41	28	38	30

Call 940-767-7694 for settings above 500 HP

### 8 Cylinder Direct Port - 40-45psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
100	20	12	18	15
200	26	16	22	17
300	31	18	26	19
400	35	20	28	22
500	41	22	30	24

Call 940-767-7694 for settings above 500 HP

### 8 Cylinder Direct Port - 55-60psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
100	20	N/A	17	12
200	26	14	20	15
300	31	17	25	18
400	35	19	27	21
500	41	20	29	23

Call 940-767-7694 for settings above 500 HP

This jetting chart is for informational purposes only, NX is not responsible for misuse or misapplication.

## 10 Cyl Direct Port Jetting

Select the desired flowing fuel pressure, horsepower level and fuel type to determine the nitrous and fuel jet requirements i.e. if you have an 10 cylinder direct port system and you are running 10psi Flowing Fuel Pressure, with gasoline, and want a 250 HP boost you would use a 26 Nitrous and a 20 Fuel jet in each nozzle.

Spark plugs should be at least 2 steps colder than stock gapped no larger than .035. Do not use platinum tip, extended tip or any plug with multiple ground straps or split ground straps. When in doubt about heat range always go one step colder.

Ignition timing should be retarded 2 degrees per 50 hp of nitrous being sprayed.

**Check all jets for obstructions upon installation!!**

### 10 Cylinder Direct Port - 5psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
125	20	20	26	22
250	26	22	29	24
375	31	26	35	27
500	35	31	39	32

Call 940-767-7694 for settings above 500 HP

### 10 Cylinder Direct Port - 8-10psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
125	20	18	20	19
250	26	20	26	22
375	31	24	31	25
500	35	26	33	27

Call 940-767-7694 for settings above 500 HP

### 10 Cylinder Direct Port - 40-45psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
125	20	12	18	15
250	26	16	22	17
375	31	18	26	19
500	35	20	28	22

Call 940-767-7694 for settings above 500 HP

### 10 Cylinder Direct Port - 55-60psi Flowing Fuel Pressure

HP	N20	Gasoline	Alcohol	E85
125	20	N/A	17	12
250	26	14	20	15
375	31	17	25	18
500	35	19	27	21

Call 940-767-7694 for settings above 500 HP

This jetting chart is for informational purposes only, NX is not responsible for misuse or misapplication.

## UNDERSTANDING

# HAZARDS OF NITROUS OXIDE

## IN AUTOMOTIVE AND RACING APPLICATIONS



**USERS OF NITROUS OXIDE  
MUST UNDERSTAND THE  
HAZARDS. NITROUS OXIDE:**

- ! MAY CAUSE OR INTENSIFY FIRE; IT IS AN OXIDIZER.
- ! CONTAINS GAS UNDER PRESSURE, MAY EXPLODE IF EXPOSED TO AN OPEN FLAME.
- ! MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.
- ! MAY CAUSE DROWSINESS OR DIZZINESS.
- ! MAY CAUSE FROSTBITE.



**NEVER INHALE NITROUS  
OXIDE OR NITROUS OXIDE  
MIXTURES EXCEPT UNDER  
MEDICAL SUPERVISION.**

- ! RACING NITROUS OXIDE PRODUCTS CONTAIN SULFUR DIOXIDE.
- ! INHALATION OF RACING NITROUS OXIDE PRODUCTS MAY BE HARMFUL OR FATAL.



**NEVER APPLY AN OPEN  
FLAME TO A NITROUS  
OXIDE CYLINDER**

- ! WHEN FILLING FROM ONE CYLINDER TO ANOTHER.
- ! TO ENHANCE PERFORMANCE WHEN CYLINDERS ARE IN USE.



**FOLLOW REGULATORY  
REQUIREMENTS AND INDUSTRY  
STANDARDS WHEN USING  
NITROUS OXIDE CYLINDERS  
OR WHEN TRANSFERRING  
PRODUCT FROM ONE CYLINDER  
TO ANOTHER (TRANSFILLING)**

- ✓ ONLY COMPETENT, TRAINED PERSONNEL SHOULD TRANSFILL CYLINDERS.
- ! TRANSFILLING CYLINDERS CAN BE DANGEROUS.
- ✓ ONLY FILL NITROUS OXIDE CYLINDERS BY WEIGHT.
- ! DO NOT COOL DOWN RECEIVING CYLINDER.
- ✓ ONLY USE CYLINDERS THAT ARE DEDICATED FOR NITROUS OXIDE SERVICE. DO NOT CHANGE THE CYLINDER SERVICE TO OR FROM A DIFFERENT GAS.



**DO NOT MAKE ALTERATIONS  
TO CYLINDER OR CYLINDER  
COMPONENTS**

- ! DO NOT MODIFY PRESSURE RELIEF DEVICE (PRD).
- ! DO NOT REPLACE, CHANGE, OR MODIFY VALVE.
- ! DO NOT ALTER, REMOVE, OR COVER PRODUCT LABEL.



**FOLLOW SAFE  
PRACTICES FOR THE  
STORAGE AND USE OF  
OXIDIZERS**

- ✓ SECURE ALL CYLINDERS AND CONTAINERS WHEN BEING USED OR STORED.
- ✓ POST NO SMOKING SIGNS IN AREAS WHERE OXIDIZERS ARE STORED OR USED.
- ✓ SEPARATE OXIDIZERS FROM FLAMMABLES WHEN STORING.
- ✓ STORE AND USE IN WELL VENTILATED AREAS THAT ARE FREE OF COMBUSTIBLE MATERIALS.
- ✓ KEEP OIL AND GREASE AWAY FROM CYLINDER AND CYLINDER VALVE.