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RZR (900, 1000) plate instructions parts #'s (67001-2.5P, 67002-2.5P)

CAUTION – EXTREME DANGER – CAUTION

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

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THESE INSTRUCTIONS APPLY TO NITROUS EXPRESS PRODUCTS ONLY!

FOR SANCTIONED RACE USE ONLY – NOT FOR SALE OR USE IN CALIFORNIA

READ…UNDERSTAND…AND…FOLLOW…these instructions. If there is something you don't understand, STOP! Call the NX tech department for help. 9:00 AM to 5:00 PM CST 940-767-7694. The installation procedures are divided into 5 sections.

Please pay particular attention to each one:

1. Mounting the bottle.
2. Mounting the nitrous plate
3. Plumbing the fuel system.
4. Wiring the system
5. Testing the system

Before starting any installation steps:

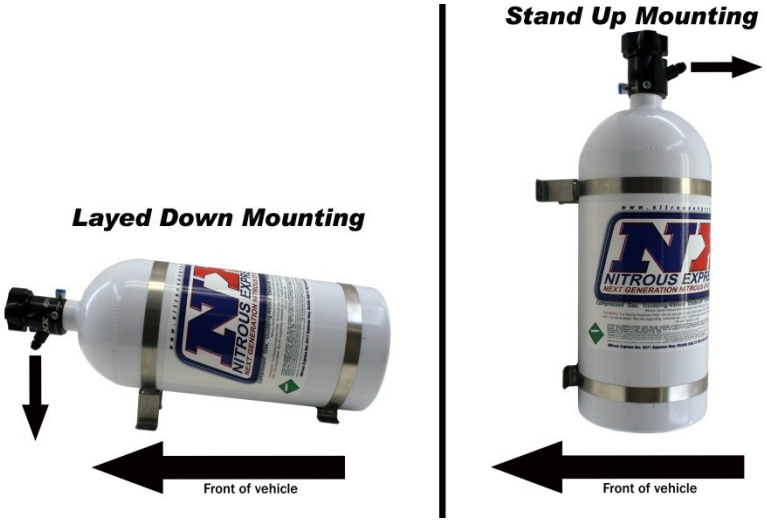
1. Disconnect the negative battery terminal.
2. Never use Teflon tape on any system fittings. Tape debris will cause numerous problems ranging from clogged solenoids to blocked jets. Use the liquid thread sealer furnished with your NX system. A drop is all it takes.
3. Have your nitrous bottle filled by a reliable source, being sure it is filled to the correct

capacity with FILTERED “Nitrous+” 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, on 10 lb. bottles the long bracket should be place approx. 7” above the lower one, on 15lb bottles the upper bracket should be approximately 12” above the lower bracket. Note: Before drilling holes, be sure to check for clearance beneath the mounting surface i.e.: fuel tank, fuel lines, brake lines, etc.

ILLUSTRATION A



MOUNTING THE NITROUS PLATE

Before any modifications are made under the hood, we suggest that you make a diagram of all hoses, wiring, and linkages.

1. Pre-assemble the nitrous plate before you begin. Select the horsepower setting (jetting chart is listed on the last page of these instructions) that you want to start with, insert the proper nitrous jet in the plate jet fitting marked “N20” **(Caution: You must always use a back-up wrench when tightening the lines to the plate fittings, failure to do so could break the fittings and will void the system warranty!!!)** The nitrous solenoid can be identified by the “N2O” marked on the base. The Lightning solenoids are unique and special attention must be paid to the “inlet-outlet port arrangement. The 1/8” NPT side inlet port is the location for the N2O filter fitting, the 1/8” NPT purge port is for the optional purge valve. If no purge valve is used a 1/8” NPT plug is provided to block this port. The 1/8” NPT bottom exit port

connects to the plate via Stainless hard-lines. Repeat this procedure for the fuel solenoid **NOTE: Always check each jet for obstructions before using. BE SURE ALL NUTS ON SOLENOID MAGNETS ARE TIGHT!**

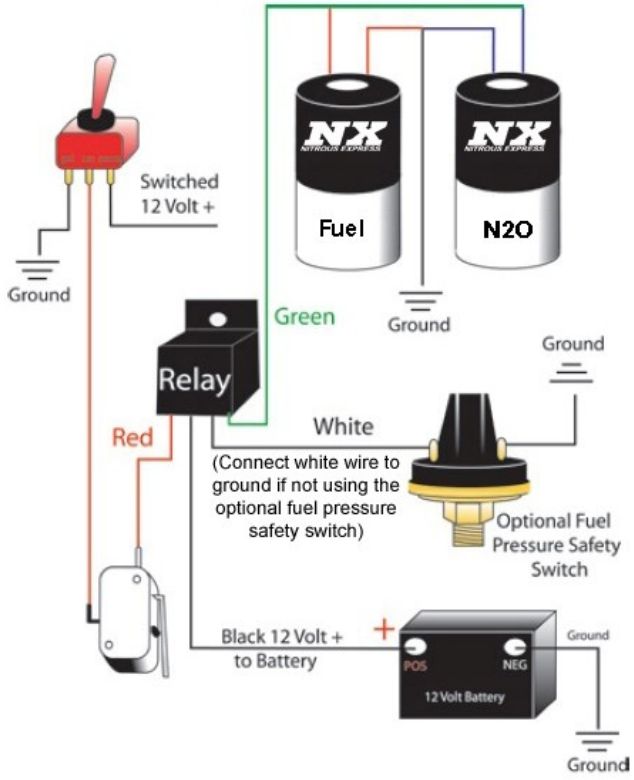
2. Remove the air cleaner.
3. Disconnect the throttle linkage, noting its position.
4. Carefully remove the fuel line, being careful to avoid spilling any raw fuel on hot engine parts.
5. Remove the carburetor; noting all vacuum connections before disconnecting any hoses.
6. Remove the old carburetor studs and install the longer ones furnished with the NX system. Install the new gasket provided. Install the N2O plate, the place the remaining new carb gasket on top of the plate. **Do not re-install the carb yet.**
7. It is now time to route the nitrous supply line.
   Note: Place a piece of tape over the end of the hose to prevent debris from entering the feed line during the routing process. Route the line carefully to prevent the possibility of restricting nitrous flow. If routed under the vehicle, locate and drill a ¾ inch diameter hole in a suitable area near the bottle valve for the feed line. Starting at the bottle nipple (Do not attach line to the bottle yet) route the line to the engine compartment. Following the factory fuel lines in usually the best path ("zip-ties work well here). Note: Keep maximum clearance between all moving parts, suspension components and hot engine components, securing the supply line where possible. Be careful of the feed line being near and "HOT" electrical leads, even a small spark will cause a leak in the steel braided line. Before you attach the nitrous supply line to the nitrous solenoid, purge the line of any foreign matter that may have accidentally entered the line during installation. Do so 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). Immediately after the purging operation connect the main feed line to the N2O solenoid and the nitrous bottle, tighten securely.

PLUMBING THE FUEL SYSTEM

WARNING: THE FUEL RAIL AND/OR FUEL LINES ARE UNDER HIGH PRESSURE. USE EXTREME CAUTION WHEN DISCONNECTING ANY FUEL LINE. QUICKLY COLLECT AND PROPERLY DISPOSE OF ANY EXCESS FUEL SPILLAGE.

1. Locate the "Schroeder" valve on the fuel rail, usually on the passenger side fuel rail. (Some vehicles do not have this fitting on the rail and will require a fuel rail adapter, NX part # 16183) 5
2. After relieving pressure from the fuel rail and cleaning up any spillage; unscrew the "Schroeder" valve and thread in the Ford fuel rail fitting (1/16" NPT-4AN fitting) using NX Thread sealer supplied with the nitrous system.

3. Install one end of the 4AN Stainless braided line to the 4AN fitting on the side of the fuel rail fitting, and connect the other end of the line to the 4AN inlet fitting on the fuel solenoid.



WIRING THE NITROUS SYSTEM

1. Follow wiring diagram (Illustration E) to correctly wire up your nitrous system.
2. After all wiring is complete; reconnect the battery cable.
3. At this point both solenoids should be tested for proper operation. Note: (Be sure the nitrous bottle is off and there is no pressure in the N2O supply line). If you are using a fuel safety pressure switch you must use a jumper wire between the two terminals when testing the solenoids. To test, turn the “arming” toggle switch to the ON position and push the accelerator pedal to achieve wide-open throttle. A clicking sound should be heard as you exceed 80% throttle and the solenoids open. IMPORTANT: Make sure that both of the solenoids are clicking! If no sound is heard or only one of the solenoids is working, check all wire connections and the wiring schematic for proper connections.
4. With all components mounted, feed line and electrical connections completed, connect the nitrous supply line to the bottle and FULLY open the bottle valve and carefully check connections on the nitrous side of the system for leaks and retighten fittings if necessary. With no leaks detected, start the engine and thoroughly check the fuel connections for leaks. Do not attempt to start engine if nitrous has been accidently injected into the intake manifold. Disconnect all of the coil wires and crank the engine several revolutions with the throttle wide open to clear the engine of all nitrous before attempting to start engine.

Note: The nitrous and fuel solenoids are rated only for intermittent duty. Do not engage either solenoid for more than 20 continuous seconds. Solenoids that have "burned or scorched" electromagnets will not be replaced under warranty.

NOTE: On all vehicles equipped with factory rev-limiters should take extreme care not to over-rev the engine. If the rev-limiter is engaged with the N2O system on, serious engine damage could result. An aftermarket RPM window switch (NX PN# 18959) should be used to disengage the N2O system 200 RPM's before the rev-limiter activates.

After a complete check and verification of all components of the system for proper installation and operation it is time to have some fun.

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. Do not start the engine if nitrous has been accidentally injected while the motor was not running! All nitrous must be cleared from the engine before starting; otherwise a violent intake manifold explosion could occur!
7. Start engine and check for any fuel leaks. Correct any leaks before proceeding.
8. The Nitrous System is now ready for normal usage.
9. All NX systems are intended for off road use only and should only be used in that context.

Additional parts recommended for operating your nitrous system satisfactorily:

- Nitrous Pressure gauge (PN 15508) - STRONGLY RECCOMMENDED
- Purge Valve (PN 15603)
- Bottle Jacket (PN 15945 for 10lb bottle or PN 15946 for 15lb bottle)
- Fuel pressure Safety Switch (PN 15718)
- Bottle heater (NX 15940) - STRONGLY RECCOMMENDED
- NHRA legal blow down vent fitting (PN 11709)
- NHRA legal blow down vent tube (PN 11708)
- TPS/RPM Window Switch (PN 18959)

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. 7
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.

Jetting for RZR 900 and 1000 Plate System

Do not use platinum tip, extended tip or any spark plug with multiple ground straps or split ground straps. When in doubt about heat range always go one step colder.

Use this jetting ONLY IF USING A 15005P FUEL PUMP!!!!		
RZR 900 and 1000 plate		
HP	N2O jet	Fuel jet
30	16	14
50	22	19
80	28	24
100	34	30
125	38	34
150	46	48

Use this jetting ONLY IF YOU TIE INTO THE FACTORY FUEL SYSTEM RUNNINGS AT 45-55PSI FUEL PRESSURE!!!!		
RZR 900 and 1000 plate		
HP	N2O jet	Fuel jet
20	12	9
30	16	10
40	22	12

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.