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Talon Plate System (P# 67015-5.0)

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

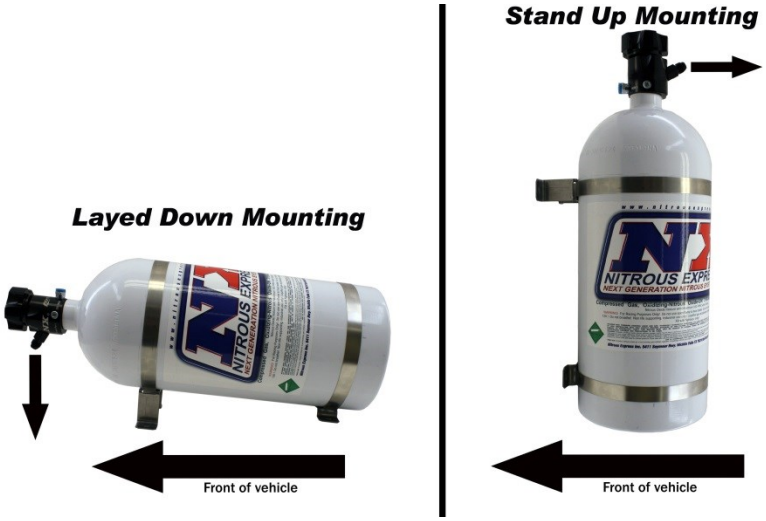
Before starting any installation steps:

1. 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.
2. Have your nitrous bottle filled by a reliable source, being sure it is filled to the correct capacity with FILTERED "Nitrous+" nitrous oxide.
3. Remove the battery cover in the drivers rear wheel well.

MOUNTING THE BOTTLE

The nitrous bottle should be mounted in the rear storage 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. 1" from the bottom, on 5lb bottle. 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, we suggest that you make a diagram of all hoses, wiring, and linkages.

1. Remove the Air Box cover and remove the air cleaner. Loosen the hose clamps attaching the Rubber air cleaner boots to the throttle body. (see illustration A)

2. Remove the factory plastic spacer between the rubber intake boots and the throttle body. Remove foam gasket from the plastic spacer and install the gasket onto the nitrous plate. Install the nitrous plate (with integrated solenoids) where the factory plastic spacer was on top of the throttle body. (see illustrations B)





3. Torque down the nitrous plate to the factory torque specs, and reinstall the Air Box once completed.
4. Select the horsepower setting that you want to start with, (please see jetting chart on the last page of these instructions) insert the proper nitrous jet in the fitting marked “N2O”. Insert proper fuel jet in the fitting marked “Fuel” (CAUTION: You must always use a back-up wrench when tightening the nitrous or fuel fittings, otherwise the jet fitting may break. Failure to use a back-up wrench will void the system warranty!!!!!)
5. Connect the main feed line to the plate’s “NITROUS” fitting. The nitrous fitting can be identified by the “N2O” marked on the top of the plate. Connect the fuel supply line to the plate’s “FUEL” fitting; (the fuel fitting will be marked “FUEL”). **NOTE: Always check each jet for obstructions before using. BE SURE ALL NUTS ON SOLENOID MAGNETS ARE TIGHT!**
6. 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. Make sure the smaller 3an end connects to the plate and the larger 4an end connects to the bottle. Route the line from the engine compartment to the bottle. 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 using the nitrous system, 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 reconnect 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 Fuel line.
2. After locating the fuel line relieve the pressure, clean up and spillage. **Carefully cut the fuel line, being careful to avoid spilling any raw fuel on hot engine parts.**
3. **Pull back and cut the foam coating on the fuel line, as seen in illustration A below. Be careful not to cut/puncture the fuel line.**
4. **Once you remove some of the foam coating on the fuel line, apply your hose clamp fittings to either side of the fuel line, as seen in illustration B below.**
5. **Once you have your hose clamp fittings on the line, you will need to insert you Fuel-T, part # 15235. The two barb fitting sides of the "T" will fit a tight into your fuel line, so you may need to use some lubrication to insert them. (We recommend using WD-40). See illustration C for reference.**

ILLUSTRATION A

ILLUSTRATION B

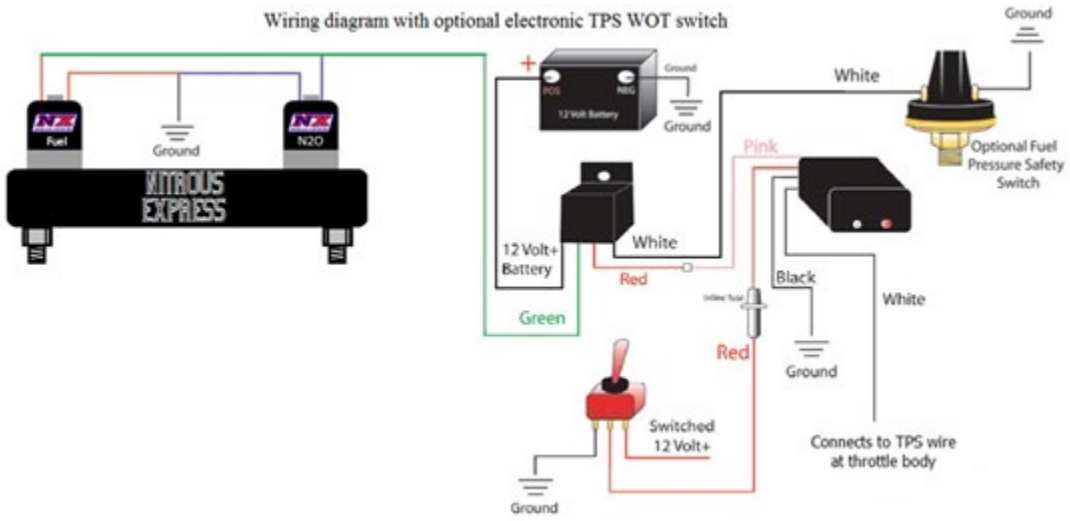
ILLUSTRATION C

6. 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 3AN fuel inlet fitting on the NX plate.

WIRING THE NITROUS SYSTEM

1. Mount the Master Arming Switch in a location that is within easy reach of and in plain sight of the driver.
2. Using 18-ga. wire and connectors supplied in the switch kit, connect a key switched HOT lead (12 VDC POSITIVE) to the “Power” terminal of the Master Arming Switch (this is the terminal on the opposite side of the gold terminal). (Use 5 amp inline fuse if desired). This power source must be controlled by the ignition switch.
3. Connect an 18-ga, grounded wire to the Ground terminal of the Master Arming Switch (this is the gold terminal on the master arming switch).

4. Connect an 18-ga. Grounded wire to the black wire of the TPS Wide Open Throttle Module.
5. Connect the white wire of the TPS Wide Open Throttle Module to the TPS wire of the throttle body.
6. Connect an 18-ga. wire from the center terminal “ACC” of the Master Arming Switch to the red wire of the TPS Wide Open Throttle Module
7. Connect the pink wire of the TPS Wide Open Throttle Module to the “Red” wire on the supplied heavy duty relay. (See wiring diagram).
8. Attach the white wire of the relay to ground. If using an optional fuel safety switch connect the switch between the white wire.
9. Using 12-ga. Wire, connect the “Black” wire of the heavy duty relay to the positive + post on the vehicle battery. (If desired a 40 amp fuse may be installed near the battery)
10. Using 12-ga. Wire, attach one wire from each of the solenoids to the “Green” wire on the relay. Note: These coils are direct current and it does not matter which wire is positive or negative. Now attach the two remaining solenoid wires to a good ground.
11. Reconnect the battery cable.



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)

SAFETY TIPS

We recommend using high octane gas when spraying nitrous, engine timing must be retarded when spraying the nitrous as well.

There are multiple aftermarket tuners available that can change the timing, shift schedule, and etc.

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.

Talon Plate Jetting

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.

CHECK ALL JETS FOR OBSTRUCTIONS UPON INSTALLATION!!!!!!!!

Talon Plate Jetting

HP	N20	Gasoline	E85	Flowing fuel pressure
25	22	12	N/A	45-50psi
35	27	14	N/A	45-50psi
40	30	15	N/A	45-50psi
			N/A	

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.