

# CASUAL ZEX

GIVE YOUR V-6 MUSTANG AN ADRENA-  
LINE RUSH WITH AN EASY-TO-INSTALL  
ZEX NITROUS SYSTEM



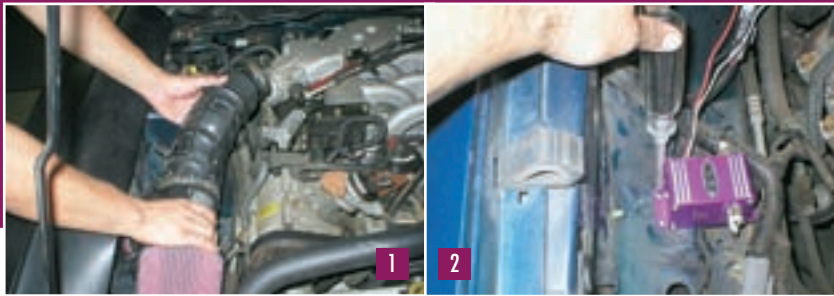
NITROUS OXIDE SYSTEMS ARE NOTHING NEW TO THE WORLD OF HIGH-PERFORMANCE CARS. IN FACT, PROFESSIONAL RACERS AND HOT-RODDERS THROUGHOUT THE WORLD HAVE USED NITROUS OXIDE FOR DECADES. SO, ALTHOUGH IT IS NOT A NEW CONCEPT, MANY MUSTANG ENTHUSIASTS ARE STILL SKEPTICAL OF THE PERFORMANCE AND RELIABILITY THAT A NITROUS OXIDE SYSTEM OFFERS. SOME HAVE HEARD TOO MANY HORROR STORIES ABOUT PEOPLE MELTING PISTONS, SNAPPING RODS AND OTHER SUCH HAVOC.

Nitrous systems seem to have an undeserved bad reputation for doing extensive damage, however, when a nitrous problem is encountered, it is usually the result of improper installation, parts failure, or simply user error. Specifically, greed.

You see, it is so easy to turn up the power rating on a nitrous system (by changing the nitrous and fuel jets) that many people run more nitrous than what is recommended for their engines. After all, everything has a breaking point, and if you squeeze enough nitrous into an engine, something will eventually break. If, on the other hand, a nitrous system is used as directed, you will enjoy the benefits the funny gas can offer.

Nitrous oxide systems have made significant improvements in the search for a safer, smarter, faster weapon. ZEX Nitrous Systems has recently stormed into the Mustang scene, and is producing one of the more technologically advanced, safest and easiest to install nitrous systems currently available. All ZEX kits come standard with many safety features designed to prevent possible engine damage, which makes this an ideal kit for the first-time or the more experienced nitrous-user.

What makes ZEX nitrous kits different than the many others currently available? Part of the equation is the unique features that allow for “plug and play” performance. For instance, all major components are contained and pre-assembled inside the “Nitrous Management Unit,” eliminating unsightly solenoids, reducing the amount of plumbing and wiring required, thereby making for a simpler, cleaner installation.



1



2



3



4



5A



5B



5C

1. Disconnect the black air tube that leads to the throttle body, unplug the mass air meter, and remove the air filter. NOTE: This V-6 is equipped with a C&L Mass Air Induction kit, but removal of a stock air system is similar.

2. A good location for the Nitrous Management Unit is under the air box or cold air kit. This helps keep NMU out of sight for the "sneaky" approach. Mark and drill holes and secure the NMU using the supplied screws. Keep in mind the length restrictions of the nitrous and fuel feed lines should you decide to mount NMU elsewhere.

3. There are only three electrical connections to make for this installation. Connect the black wire to ground for the NMU; connect the white wire to the throttle position sensor output voltage lead (you will need a voltmeter to find the TPS signal wire); and connect the red wire through the firewall of the vehicle into the interior behind the dash (this will later be connected to the arming switch).

4. The ideal nozzle placement is 6-18 inches from the throttle body. Mark and drill a hole into the black rubber air tube that leads to the throttle body. Be sure to remove any drill shavings to avoid getting them into the engine. Use the provided bulkhead fittings and install the nitrous nozzle onto the air tube, making sure to position the nozzle opening towards the throttle body.

5A 5B 5C. Reinstall the air tube, mass air meter and filter. Select the appropriate nitrous jets and install them on the nitrous nozzle (we selected the 55 hp jets to start with). Connect the nitrous and fuel lines to the nitrous nozzle. The NMU and nozzle are labeled with a nitrous and fuel port. Make sure that you don't cross the lines!

6. A good spot to mount the nitrous bottle is in the trunk up against the back of the rear seats. This doesn't sacrifice too much cargo room, and makes for an easy installation. Mark and drill the four holes for the bottle brackets. Secure the bottle brackets inside the trunk with the supplied hardware. If you decide to mount the bottle elsewhere, before drilling any holes, check the underside of the car for clearance around the fuel tank and lines.



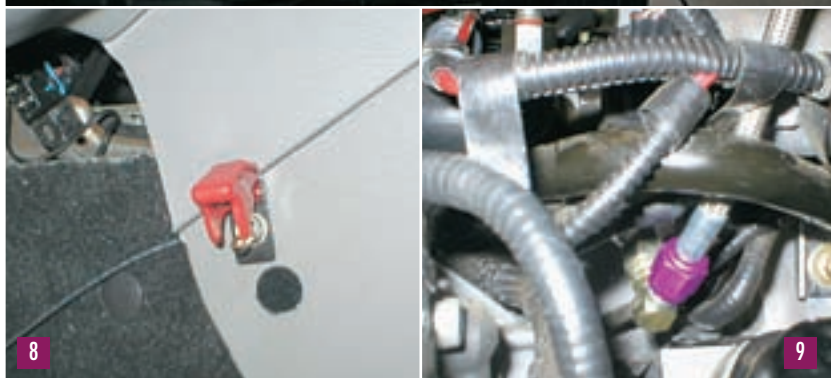
7A 7B. Mustangs have several large holes in the trunk floorboard that make it simple to run the nitrous line through. Remove the rubber plug covering the hole you have selected and cut out the middle portion to act as a grommet, as you will run the main nitrous feed line through this hole and under the car. We used the factory fuel lines and subframe as a guide to route the nitrous line. Use the supplied cable ties to secure the nitrous line to the car. Continue to run the nitrous line towards the front of the car and into the engine compartment. Make sure to keep the nitrous line away from the exhaust, moving suspension parts, or other obstacles. Finish by connecting the nitrous feed line to the NMU.



8. When mounting the arming switch, select a spot where you can easily reach the switch from the driver's seat. A good place is on the driver's side of the center console, as this allows easy access and keeps it out of sight. Mark and drill the hole and mount the arming switch and cover. Next, connect the red wire that leads to the NMU (which was fed through the dash in an earlier step) to the arming switch. Connect the other lead coming from the arming switch and find a suitable 12-volt source under the dash.



9. Connect the fuel supply line directly to the Schrader valve on the fuel rail, located in front of driver side valve cover. ZEX includes several different fittings and adapters to allow for a clean, simple and attractive connection. Route the fuel supply line over the engine compartment and connect to the NMU.



This NMU also acts as the "brain" of the system. It is electronically wired to the vehicle's throttle position sensor to detect wide-open throttle. This allows the NMU to learn the voltage curve of the engine's throttle position sensor and detect wide-open throttle. At this point (WOT), when armed, the NMU precisely and reliably injects the nitrous/fuel mixture into the engine. This TPS sensor activation switch is truly innovative and carries its own patent.

For years, other nitrous systems have been activated by crude push buttons and micro-switches that you had to adapt to your vehicle, and often they would fail. Since the NMU regulates when and how much nitrous/fuel to inject into the engine, it takes the guesswork out of running a nitrous system and makes this a foolproof kit. In addition, the ZEX wet nitrous kit has an advanced "Fuel Shear"

nitrous nozzle which ensures complete atomization of the nitrous/fuel mixture to develop maximum power and eliminate the risk of having the fuel puddle (which

can lead to engine-damaging backfires).

ZEX Nitrous offers two different types of nitrous systems: a wet nitrous kit and a dry nitrous kit. The primary difference



10. Follow the simple instructions provided with the ZEX kit to program the NMU and allow it to “learn” the vehicle’s TPS voltage curve. Once this is done, the system is ready for use and will activate at wide-open throttle. With the ZEX installation complete, double check all of the fittings and connections.

between the two is in how the nitrous mixture is introduced into the engine. The ZEX wet nitrous kit injects a mixture of nitrous and fuel through a single nozzle to fully atomize the nitrous/fuel mixture. The ZEX dry nitrous kit injects only nitrous through a single nozzle, and relies on the factory fuel injectors to supply the increased fuel flow demand. From experience, both types of systems seem to be equally effective and reliable.

So which is best for you? ZEX recommends that all 1986-1997 V-6 and V-8 Mustangs use the dry nitrous systems (these Mustangs were equipped with return-style fuel systems), and the 1998-2004 V-6 and V-8 Mustangs use the wet nitrous systems (these Mustangs have the returnless style fuel system). ZEX offers both their dry and wet systems in two different prescription strengths: 55-65-75 hp rating and 75-100-125 hp rating. All of ZEX’s kits are fully adjustable for different power ratings and come with all the hardware, wiring, connectors, steel braided lines, fittings, brackets, 10-pound bottle, et cetera that’s required to safely and properly install the nitrous kit. The only thing you have to do is get the bottle filled (all kits are shipped with an empty nitrous bottle), ensure that you have at least 91 octane fuel in the tank, and you are ready to squeeze away.

For our installation we used Luis Felix’s 1999 V-6, 5-speed Mustang as the test mule. Although this Mustang is slightly

modified (C&L Mass Air Induction, ASP Power pulley, and dual exhaust) the installation steps and procedures are virtually identical to that of a bone-stock Mustang or Cobra (V-6, 5.0 or 4.6). We thought it might be interesting to see this installation done on a V-6 Mustang because the V-8 Mustangs usually get all of the glory. Many Mustang enthusiasts treat V-6 Mustangs as second-class citizens and don’t give them the respect they deserve. Remember that the majority of the Mustangs sold and on the road today are six-cylinders. This is no mystery considering that the 3.8L Mustangs are more fuel efficient and cheaper to insure than their V-8 counterparts. Besides, that is the beauty of a nitrous kit; it has the potential to bring the V-6 Mustang’s performance level to match or surpass that of a stock Mustang GT. Talk about a sleeper!

Since we did not have access to a chassis dyno to test the ZEX nitrous kit, we were limited to seat-of-the-pants impressions. We can tell you, with confidence, that there is a tremendous improvement in the performance that the ZEX kit offers. The moment the accelerator pedal is pressed down, the little V-6 took on a whole new demeanor. There is a sudden surge of power throughout the entire RPM range that propels the car forward with unmistakable authority. The stock 15-inch tires were no match against the onslaught of the newfound power and

go up in a blaze of smoke. Keep in mind that all of this was achieved with only the “small” 55 hp nitrous power level, and we still have the option of stepping up to the 65 hp or 75 hp power shots that are also included in the kit.

GTR High Performance in Rancho Cucamonga, California, was gracious enough to give us an in-depth look at how to install the ZEX nitrous kit like a pro. GTR High Performance specializes in late-model Mustang performance parts and accessories, and has extensive experience installing nitrous systems along with nearly everything else relating to Mustangs.

Follow along with the experts at GTR High Performance as they install a ZEX Wet nitrous system on Luis Felix’s V-6 Mustang. If you aren’t mechanically inclined or simply aren’t willing to sacrifice several hours of your time to do this work yourself, GTR High Performance can get the job done for you. GTR retails the ZEX Wet Nitrous kits for \$564.99 and the ZEX Dry Nitrous kits for \$509.99. Should you need GTR’s professional assistance, the installation/labor rate is round \$180. ■

#### QUICK FACTS

##### PRODUCT

ZEX Nitrous Oxide System PN# 82021  
(55-75 hp Wet Kit)  
(888) 817-1008; [www.zex.com](http://www.zex.com)

##### INSTALLER

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##### VEHICLE

1999 Mustang V-6 (3.8L), 5-speed, minor bolt-on modifications