

Nitrous System Installation Instructions

Read and follow the manufacturer's installation and operation instructions for best service and safety. We're going to provide some additional information here to help you through the specifics.

Looking at your kit, you'll find the bottle, which was shipped to you empty, bottle brackets, fuel and nitrous solenoids, various fuel and nitrous supply lines, a nitrous filter, wiring, a couple switches, and the instructions. Please read those instructions as well as these before you start. Have the bottle purged and filled at any local nitrous refiller.

Only basic hand tools are required. You know, the usual; some sockets, wrenches, drill, wire cutters, zip ties, etc plus some teflon thread sealer (not teflon tape). You'll also need replacement sparkplugs at least one heat range colder.

Start out by disconnecting the battery. Jack the rear end of the car up and support it securely and safely with jack stands. Never work under a car supported only by a jack. Remove the trunk liner and mount the bottle on the passenger side of the trunk with the supplied brackets at the angle shown in the manufacturer's installation instructions. Note, if we have any complaint about commercial nitrous kits its usually the brackets, which tend to break very quickly. Fortunately, several companies make billet bottle brackets to solve that little problem. Remove the bottle and brackets, reinstall the trunk line. Drill holes in the trunk liner to match your bottle bracket holes. Drill a larger hole in the liner to pass the nitrous supply line through. Reinstall the bottle, attach the nitrous supply line and filter to the bottle valve and feed it though the trunk underneath the car. Run the nitrous supply line through the grommet in the trunk floor, under the car, and up into the engine compartment following the fuel lines that lead from the gas tank. Use zip ties to securely fasten the nitrous supply line to the fuel lines. Remove the jacks and let the rear of the car down.

In the engine compartment, remove the sparkplugs and replace them with the colder plugs gapped around 0.045". Mount the solenoids, we prefer to mount them either to the passenger side strut tower or the firewall behind the upper intake manifold. Attach the nitrous supply line to the supply side of the nitrous solenoid. Attach one end of the fuel supply line to the fuel supply side of the fuel solenoid. Attach the other end of the fuel supply line to the fuel rail at the fuel rail service port.

Now, install the nitrous output line to the output side of the nitrous solenoid and the fuel output line to the output side of the fuel solenoid.

We can now remove the air inlet tube at the throttle body in preparation of the nozzle installation. To install the nozzle, drill a hole into the air inlet tube about an inch and a half in front of the clamp and simply slip the nozzle attachment ring into the air inlet tube before the throttle body in accordance with the manufacturer's instructions and align the holes. Install the nozzle facing in the proper direction. Select the proper fuel and nitrous jets from the supplied kit, install them into the proper fittings on the nozzle, then connect the nitrous and fuel output lines to the proper side of the nozzle inlet fittings. That takes care of the nitrous and fuel requirements.

Now, the electrical. We'll use a power source from the fuse panel or power distribution box that is energized only when the car is switched on, so connect the power there. Inside the car, determine the location of the arming switch. Drill a hole and mount it. You'll pull the wire through the grommet on the drivers side, find it by following the hood release cable back into the car. Attach the wire to a straightened coat hanger and pull it into the car. Now wire the arming switch. Now install the full throttle activation switch on the passenger side strut tower and adjust it so that the switch is activated at full throttle position. Attach the wires to it then to the solenoids.

That pretty much covers the installation, but before you do anything, else we need to purge the nitrous supply lines. To do so, disconnect the nitrous supply line at the supply side of the nitrous solenoid. We're going to gradually open the bottle valve to purge the air from the line, but stop and think about this before you do it. Why you ask? Because the nitrous bottle is highly pressurized, so the end of the hose will go whipping around pretty energetically. The expanding nitrous is also very cold, so secure that end of the line and make sure its not touching you or spraying at you or your help. Let the line blow until a white stream escapes and the line turns cold. Now reconnect it. Reconnect the battery.

We can do one last test if you want to, that being a test of the complete system to ensure that everything is working properly. As you might expect, this can be dangerous because what we're gonna do is remove the air inlet tube with the nozzle in it. Point the inlet tube into a bucket, have someone else turn the ignition on, arm the switch, then depress the

throttle cable. At full throttle, the nozzle should vigorously eject both fuel and nitrous at full bottle pressure. Make sure that you use a bucket to catch the fuel and nitrous, and no smoking. Carefully dispose of the fuel and nitrous. If there is no fuel in the bucket, make sure you get the fuel solenoid working before you operate the system.

Now its fun time, time for the first road test. But first, we have to understand that the use of this system really requires smart use on your part. The smartest thing you can do is start with the smallest nozzles and work up in nozzle sizes and horsepower as you test and become more familiar with nitrous use. Hopefully, if you don't know what to look for and how to test, you're asking how. The best thing to do is ask questions to the manufacturer about your system first. Then progress to the actual testing. This testing is done as follows. You must plan where you'll do this testing, the best place is a local drag strip. Of course we don't advocate street testing, but sometimes you gotta do what you gotta do, just be responsible. You'll need to take some basic tools for your testing trips, in particular any and all tools needed to remove the spark plugs. Take along the original plugs you removed from the engine and the remaining jets. Ready for your first use, with engine rpms above 3,000, arm the system and floor the throttle in third and fourth gears for brief periods. Your listening for any unusual noises which may indicate that preignition or detonation is occurring. These are very dangerous and harmful to the engine. You should feel the added power, but if you have started out with the smallest jets in the kit, as advised, don't be surprised if the added push is not what you expected. That's normal with relatively low shots in a heavy Mustang. Immediately pull the car off the road in a safe location and remove each and every spark plug. Yes the engine is hot, you'll appreciate some good mechanics gloves right about now. Look carefully at each plug, they should be normal color, not too dark or too white. If the plugs are much darker than the original plugs you replaced, the system is rich. If the plugs are very white, or spotted, or with parts of the electrodes melted, its very lean. Dark and rich is not harmful, lean is very dangerous. If the plugs show lean, replace the fuel jet with the next highest jet to enrichen the mixture and test again. If the plugs continue to show lean, test the fuel solenoid in a safe manner to ensure that is indeed working. Adjust accordingly. If all is well and you want more power, well that's kinda stupid isn't it, of course you want more power, instal the nitrous and fuel jets for the next increase in power and test again. Keep working up until you reach the limit that you think is safe. Just what is that? With stock 3.8 engine pistons, make 90 horsepower your maximum setting and only then when the plugs read correctly. With better pistons, adequate fuel pump, etc, 125-150 is attainable with proper tuning.

Heres some nitrous system options we recommend:

1. Purge kit
2. Bottle heater and nitrous pressure gage
3. Fuel pressure gage for applications over 100 horsepower