

MPS Dry Nitrous Kit For Fuel Injected Motorcycles Instructions

The **MPS Dry Nitrous Kit** was designed to easily increase horsepower of their fuel injected motorcycle. By allowing the nitrous to pass the fuel injection sensors in the air box the factory fuel injection can compensate with more fuel for small shots of nitrous. These Dry Nitrous Kits exploit that ability and yield between 20 and 40 horsepower. They are strictly for fuel injected motorcycles. The MPS Dry Nitrous Kit For Fuel Injected Motorcycles is for



use in closed course competition events only and are not for use on any public street or highway
Mounting – To mount the bottle you will need to find a suitable spot. You will need to find a place that the bottle is out of sight, away from heat, secure, and accessible. Nitrous gains pressure with temperature. Nitrous pressures over 1000 lbs or so will cause the nitrous solenoids to not open. Do not mount the bottle near any source of heat. Above the motor, under the tank is not a good spot in other words! The nitrous bottle has a siphon tube already installed inside. When the bottle is mounted this tube must be pointing toward the ground. You can think of the siphon tube as a straw for nitrous. The better job you can do positioning your bottle so the siphon tube can pickup will give you more capacity and better performance. The optimum position is the bottle valve toward the ground with the siphon tube removed. This would ensure liquid nitrous until the bottle is empty. To access the siphon tube you must remove the bottle valve from the bottle. Be sure the bottle is empty before attempting to unscrew the bottle valve. Mount the nitrous nozzle in a ram air tube at the front of the airbox. With the nitrous nozzle in this location the nitrous will pass through the air filter and all appropriate sensors as required. To install the nozzle in the ram air tube, drill a 15/64" hole where you want your nitrous nozzle mounted. Use the 1/16 NPT tap to tap threads for the nozzle in the air box. Screw in the nitrous nozzle till snug, then turn enough to aim it directly at the airbox.

Plumbing – The Nitrous solenoid inlet port is connected directly to the nitrous supply bottle via a #4 AN swivel type fitting. Locate the push in style fitting on the "out" side of the nitrous solenoid. Cut the end of the 1/8" high pressure line provided squarely using a razor blade or plastic tubing cutter. Push the line as far into the fitting as it will go. Pull out to lock the line in place. To remove the line from the fitting, push down on the retaining ring on the fitting and the line. While holding down the retaining ring pull the line out of the fitting. Route the line to the nitrous nozzle following existing wiring whenever possible. Make sure you route this line away from any extreme heat. It will melt! Slide the blue b-nut over the line with the thread facing the nozzle side of the line. Next slide the cone ferrule onto the line with the cone facing the nozzle end of the line. Cut the end of the line to the final length squarely with a razor blade or tubing cutter. Push the end of the line securely into the funnel portion of the #28 jet. Insert the jet into the nitrous nozzle and snug the b-nut then turn it about a 1/2 to 1 full turn to secure the jet and line to the nitrous nozzle.



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Note: To prevent harmful operation of the nitrous when rev limiter is engaged we recommend a MSD RPM P/N 2-15-00-0550 switch. Check with us for proper calibration for your application. You may also need a Tach adapter P/N 1-0271 as well. Wire the red on the rpm switch to ignition switched 12 volt power, the black on the rpm switch to ground, the white on the rpm switch to the tach adapter white, and the tach adapter four greens to the negative side of each coil. Next you will replace the ground lead on the Horn/Nitrous Control with the gray wire on the rpm switch. The gray wire should be the only source of ground for the nitrous solenoid.

Testing The System – First, turn of the nitrous bottle valve. Now turn on the key and arm the nitrous. With your hand on the nitrous solenoid, push the starter button quickly. You should hear and feel the nitrous solenoid open. Next flip the nitrous arm switch to the starter position and push the starter button. This should engage the starter and not activate the nitrous solenoid.

Operation – The nitrous bottle weighs 2.2 lbs. empty and 3.2 lbs.full. Weighing the bottle is the only way to tell if the bottle is full or empty. Pressure is not an indicator of how much nitrous is left in the bottle. We highly recommend dynoing your bike before taking it to the track. Here are a few tips to tuning and operating the system. Never use the nitrous at anything other than full throttle operation. You will need a minimum of 90 octane fuel. Do not use any product that advances the ignition timing more than stock. A Power Commander is recommended to deliver extra fuel at full throttle. Starting as rich is the safest tuning method. Damage can result when the rev limiter is activated while on nitrous. Avoid the rev limiter on nitrous or install the RPM switch to prevent it from happening. Use of the larger included nitrous jets should be done only after the smaller jets are used successfully.

If you have any more questions we have a Frequently Asked Questions page at our web site as well as the telephone tech support. Thank you for your purchase of this MPS product. All products sold by MPS are for use at closed course competition events and not for use on public streets or highways.

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