

Nitrous Express “Next Generation” Nitrous Pump

Caution: Nitrous Oxide is a high pressure cryogenic gas, improper handling or careless transfer procedures could result in serious injury or death. If you do not completely understand these instructions or have a question contact a professional for help.

Warning

- Nitrous oxide is a high pressure cryogenic gas, contact with the skin will cause severe freeze burns!
- Always use eye and skin protection when handling nitrous oxide!
- Liquefied gas accelerates combustion, keep oil and grease away!
- Do not over fill any nitrous vessel beyond it’s labeled capacity, catastrophic bottle failure could result!
- Never heat any nitrous container with an open flame!
- Never breathe nitrous oxide, it is a non-life supporting gas and serious injury or death could result!
- A nitrous bottle restraint, or containment device, should always be used when bottle filling is in progress.
- All nitrous pressure vessels use a 3000PSI emergency pressure relief disc, do not exceed this pressure when refilling or pressure disc failure will result in rapid high pressure nitrous discharge and total bottle charge loss!
- Always attach a nitrous pipe-away vent hose, this should exhaust the emergency pressure relief port to safe area!
- Do not refill any nitrous bottle that does not have a current Hydrostatic Test Date stamped in the bottle crown. All Aluminum and Composite bottles must be tested every five years.

1. Mounting the pump

If you have purchased the pump with the optional digital scale proceed to step 2. The nitrous pump may be operated either mounted in a rigid fashion or it may be used unmounted.

2. Connecting the air supply lines

Use only filtered regulated air! Refer to the diagram on back and connect the air supply line to the air inlet port on the pump body. The pump will deliver its maximum performance at 100 psi. and 15 cfm. of air.

3. Connecting the Nitrous lines

First, you must verify if your nitrous supply bottle has an internal siphon or dip tube. The bottle will be marked by either the word “SIPHON”, or “DIP TUBE” painted on the side of the bottle or a metal tag will be visible on the neck of the bottle with the word “SIPHON”, or “DIP TUBE” on it. If the bottle is equipped with an internal siphon tube, the bottle must be used in the “upright” position. If it does not have an internal siphon, then the bottle must be inverted using the optional bottle stand (PN15930). Connect the main supply bottle to the inlet side of the pump (the end with the filter attached) using the D-6 supply line (only) included in your pump station. Using the remaining D-6 line, connect the outlet side of the pump to the bottle being filled.

4. Filling the Nitrous bottle

Place the bottle to be filled on a suitable scale (any accurate scale will work), note the total bottle weight. Using the information supplied on the bottle label, calculate the amount of nitrous to be transferred. **Note:** (It is not necessary to cool or chill the bottle being filled). After verifying that all the high pressure hoses are properly connected open the valve on the main supply bottle and check for leaks. You may hear nitrous as it enters the line and fills the pump, this is normal. If you have purchased the economizer valve option, open it first and then open the bottle being filled, this will allow the nitrous to begin transferring into the bottle being refilled. If you did not purchase the optional economizer valve, simply open the bottle that is being refilled. Push and hold the activation button to start pumping. Observe the weight of the bottle as it fills with Nitrous. **Caution: Do not over fill any nitrous bottle, a dangerous over pressure condition that could cause serious bodily injury or death could result.** When the proper weight is achieved, as indicated by the bottle label, turn pump off by releasing the pump activation switch. Turn off the valve on the supply line and the bottle valve. **Caution: Do not place your hand over the N2O discharge port on the economizer valve, contact with nitrous oxide will result in severe freeze burns** (see illustration for the location of this port). If you are not using the economizer valve option, carefully disconnect the bottle being filled. **Avoid being sprayed by the gaseous nitrous. Any contact with the skin will result in freeze burns.**

