



PORTER

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Nitrous Oxide / Oxygen Floor Mounted Outlet Station Installation and Instructions

The Porter Floor Mounted Outlet Station is manufactured of durable, satin-finished aluminum with a color coded faceplate to provide instant gas identification. The station's compact size (less than three inches high) allows for a clean, unobtrusive installation. Features include the **cross+protection** system to prevent unintentional misconnection to the central piping system. The outlet station utilizes a duplex connector which prevents the Nitrous Oxide from being connected unless the Oxygen is connected, and offers resuscitator quick connect compatibility. A qualified plumber can install the outlet station by following the details listed in this brochure.

Model 6300-1



WARNING

Porter Outlet Stations utilize the **cross+protection** system. The copper tubing is diameter indexed; $\frac{3}{8}$ " O.D. for Nitrous Oxide and $\frac{1}{2}$ " for Oxygen. The **cross+protection** system is designed to prevent misconnection of Oxygen and Nitrous Oxide piping. **DO NOT ATTEMPT TO CHANGE THE DIAMETERS!** Tampering with the **cross+protection** system constitutes acceptance of liability by the installer. For your own protection, as well as that of the Doctor and the patients, use $\frac{3}{8}$ " O.D. tubing for all Nitrous Oxide lines and $\frac{1}{2}$ " O.D. tubing for all Oxygen lines.

To assure safe operation and conformation to local fire codes, all Porter Outlet Stations are designed to be used with sedation delivery systems mounted inside walls or flooring and they meet or exceed the guidelines established by the National Fire Protection Association for Nonflammable Medical Gas Systems, NFPA 99. Copies of NFPA 99 or portions thereof may be obtained by writing to:

National Fire Protection Association
Batterymarch Park
Quincy, MA 02269-9904
Or call: 1-800-344-3555



WARNING

Dental workers are exposed to N₂O during administration of N₂O/O₂ conscious sedation analgesia. NIOSH has recommended that exposures should be minimized. Contact NIOSH (1-800-35-NIOSH) to receive NIOSH Publications on *Control of Nitrous Oxide in Dental Operatories*. Exposure can be minimized by effective controls. National Institute for Occupational Safety and Health (NIOSH) publications state that controls, including System Maintenance, Ventilation and Work Practices can effectively reduce N₂O concentrations in dental operations. Your Porter Scavenger System is an important part of the system of controls.

QUICK CONNECTING

You may quick connect to the station when the system pressure is at its normal 50 PSI; the primary check valves seal this pressure. The coupler has a locating latch. Simply insert the coupler into the appropriate check valve and confirm the latch is in place behind the catch feature of the valve. A gentle tug on the coupler will confirm a stable latch position. Internally, within the primary check valve, an o-ring seals against a poppet. The same o-ring seals against the quick connect extensions upon insertion. Slide the latch out of position to remove the connector and the internal poppet will automatically move back into its sealing position.

RESUSCITATOR

Remove the duplex connector so a resuscitator quick connect may be inserted into the Oxygen station position.

MAINTENANCE AND SERVICE

Use Scavenging

Monitor for N₂O in the operator to insure that controls are effective in achieving low levels of ppm (parts per million) exposure. Contact your Porter dealer for details on monitors and testing.

Inspect and maintain the analgesia delivery system to prevent N₂O leaks in all hoses, connections and fittings. Repair all leaks immediately.

MONTHLY CHECK

Leak test the entire system for working pressure leaks. Connect an 8060 series duplex connector and hoses into the Outlet Station. Attach the other end of the hoses to a flowmeter and turn the flow control knobs to the off position and the on/off switch to the off position.

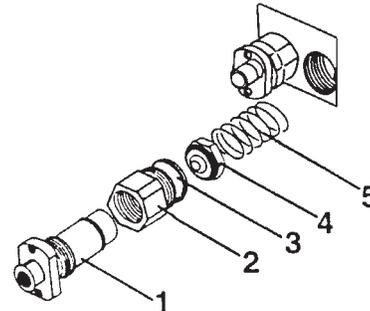
Pressurize the sedation gas supply lines with 50 PSI. Observe any pressure decay after 12 hours. This 50 PSI test with the flowmeter tubing connections in place tests the seal of the duplex connector extended into the o-rings of the outlet station primary check valves. (5 PSI drop allowed.)

SERVICE PRIMARY AND SECONDARY CHECK VALVE ASSEMBLIES

The Oxygen and Nitrous Oxide primary and secondary check valve assemblies may be field disassembled and replaced.

- | | |
|-----------------------------------|--|
| 1) Primary Check Valve Assembly | O ₂ A-2689-000
N ₂ O A-2690-000 |
| 2) Cartridge Body | O ₂ B-2237-000
N ₂ O B-2275-000 |
| 3) O16 O' Ring | PB-102-215 |
| 4) Secondary Check Valve Assembly | A-2699-000 |
| 5) Compression Spring | PB-115-63SS |

PRIMARY CHECK VALVE DISASSEMBLY INSTRUCTIONS



SERVICE PRIMARY CHECK VALVE

May be serviced with station pressurized to 50 PSI.

1. Remove front plate. Mounting screws are behind plate labels.
2. Unscrew the primary check valve assembly. Oxygen right hand threads; Nitrous Oxide left hand threads. **Note: the secondary check valve will move into position and seal the 50 PSI of the station pressure as the primary check valve assembly is removed.**



WARNING

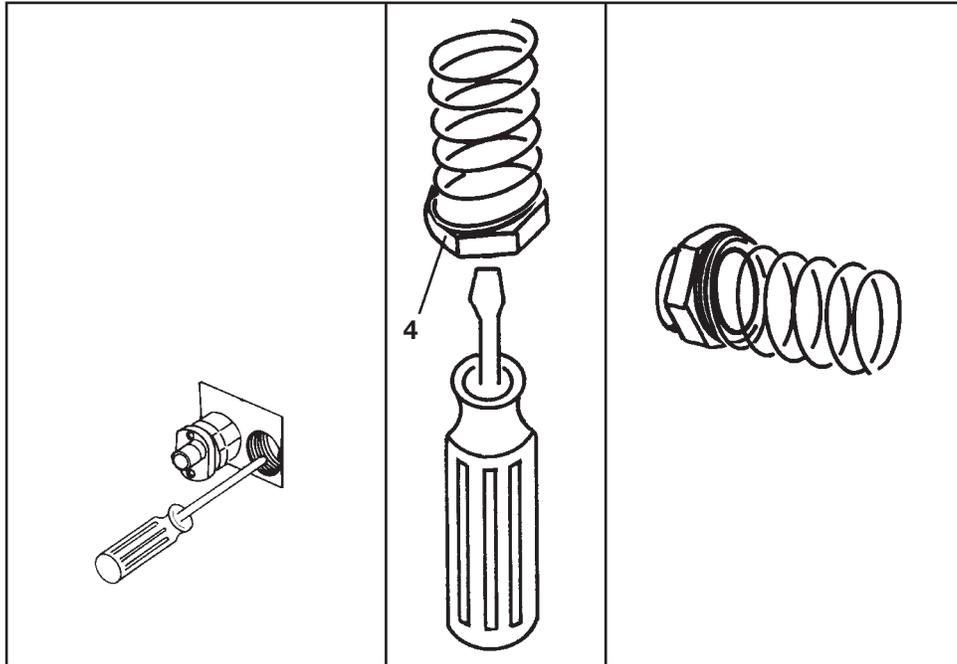
Do not remove the cartridge body while servicing the primary check valve assembly. The secondary check valve cannot seal the 50 PSI pressure if the cartridge body is removed.

3. Replace the entire assembly.
4. Screw the replaced assembly into the cartridge body.
5. Alignment and Adjustment for Front Faceplate Installation – The Oxygen and Nitrous Oxide valve bodies are factory adjusted to allow for the back of the front faceplate to press against the metal surfaces of both valve bodies. If adjustment is needed:

Rotate the Oxygen and Nitrous Oxide valve bodies so they both uniformly contact the back of the front faceplate. Oxygen has right hand threads and Nitrous Oxide has left hand threads.

6. **Leak test the entire system for working pressure leaks per the Monthly Check.**

SECONDARY CHECK VALVE DISASSEMBLY INSTRUCTIONS



SERVICE SECONDARY CHECK VALVE



WARNING

To service the secondary check valve, first turn off pressure. Do not remove the cartridge body until the pressure is bled off. The secondary check valve cannot seal the 50 PSI pressure if the cartridge body is removed.

1. **Turn off pressure at tanks in tank room.**
2. Follow procedure to remove primary check valve assembly.
3. Depress secondary check valve further into station block using a small probe or screw driver to bleed off pressure.
4. Unscrew cartridge body out of the station block.
5. Take a small screw driver or needle nose pliers and insert into holes at the center of secondary check valve. Carefully remove check valve and spring.
6. Replace the O16 o-ring and secondary check valve parts as required and place in position for reassembly.
7. Screw in the cartridge body and tighten.
8. Screw in the primary check valve assembly and align and adjust for front plate installation.
9. **Leak test the entire system for working pressure leaks per the Monthly Check.**