

# INOvent<sup>®</sup> delivery system

FOR NITRIC OXIDE THERAPY

## INOvent application update #1

### High range calibration of the INOvent delivery system gas sensors

When performing a high range calibration of the INOvent delivery system, the gas sample line must be connected to the proper high range calibration gas source with calibration gas flowing. Failure to do so can result in a high range calibration being performed with room air flowing to the sensors. This will result in improper calibration of the INOvent delivery system NO, NO<sub>2</sub>, and O<sub>2</sub> sensors (due to an inappropriately set gain) which will cause fluctuating monitored values and may result in system shutdown.

Please observe the following when performing a high range calibration of the INOvent delivery system:

- The calibration gas must be within the INOvent delivery system specification NO, 40-50 PPM; NO<sub>2</sub>, 10-15 PPM.
- Ensure the gas sample line is connected to the calibration gas source, and gas is flowing, **prior** to beginning the high range calibration procedure.
- Choose high range "xx", where "xx" = O<sub>2</sub>, NO<sub>2</sub>, or NO.
- Wait for the measured reading to stabilize.
- Set "Calibration xx" to the cal gas value and push the control wheel to initiate the high range calibration procedure.
- The INOvent delivery system must not sample 'room air' during the high range calibration procedure as this will cause the improper calibration of the sensor.



INOvent delivery system (secured to optional cart)

- If high range calibration of the INOvent delivery system is inadvertently initiated without connecting the gas sample line to a high range calibration gas source, escape the procedure by pressing any of the buttons on the control panel.

If an INOvent delivery system shutdown occurs immediately after turning the system on, it could be that an improper high range calibration of the NO sensor has been performed. To resolve this situation perform the following:

1. Cycle power to the INOvent delivery system by turning the unit off and on and then immediately select the calibration menu.
2. Perform a low range calibration.
3. Perform a high range calibration of the NO sensor.

If an INOvent delivery system has erratic monitor values, it could be that an improper high range calibration has been performed. To resolve this situation:

- Perform a high range calibration on the sensor affected.

Refer to the *INOvent delivery system Operation and Maintenance Manual—Section 4/Calibration* for instructions regarding calibration.

**If you have questions regarding calibration of the INOvent delivery system, please contact Datex-Ohmeda Technical Support at 1-800-345-2700.**

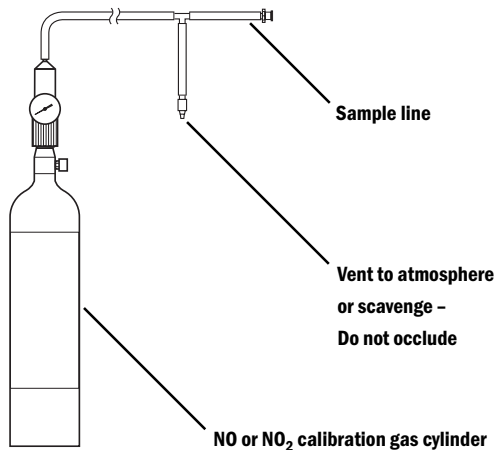
## High range calibration of the INOvent delivery system using non-standard calibration equipment

When performing a high range calibration of the INOvent delivery system using equipment other than the INOcal calibration gas kit (p/n 6002-0000-107) please be aware of the following:

- The calibration gas must be within the INOvent delivery system specification NO, 40-50 PPM; NO<sub>2</sub>, 10-15 PPM.
- Calibration gas must not be sampled directly from a high pressure source. Calibration gases should be drawn from a sample tee (p/n 6002-0000-106). One end of the sample tee must be open to atmosphere. (See figure below)
- The INOvent gas sampling pump draws gases at a nominal rate of 230 mL/min. Forcing an excess amount of gas past the pump can pressurize the monitoring system and may result in a “Monitoring Failure” alarm, an erroneous monitor calibration or possible sensor damage.

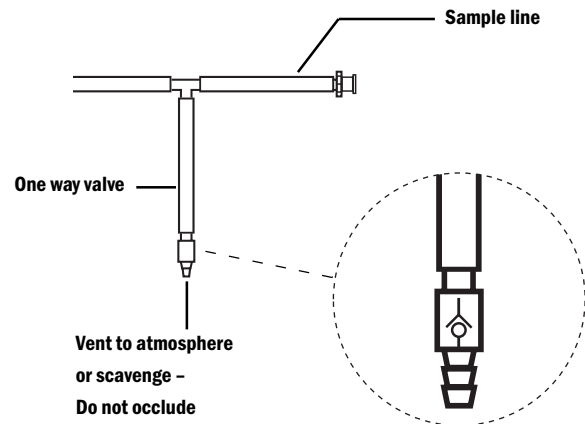
Refer to the *INOvent delivery system Operation and Maintenance Manual—Section 4/Calibration* for instructions regarding calibration. To ensure proper high range calibration of the INOvent delivery system, it is recommended that the INOcal calibration gas kit be used (p/n 6002-0000-107).

**To order, call Datex-Ohmeda Customer Service at 1-800-345-2700 or contact your Datex-Ohmeda Critical Care Specialist.**



## INOcal calibration gas kit sample tubing

When using the sample tubing tee (p/n 6002-0000-106) which is supplied with the INOcal calibration gas kit (p/n 6002-0000-107), ensure that the one way check valve supplied with the tubing is installed and orientated as indicated in the figure below. An incorrectly installed one-way valve can lead to over pressurization of the sampling system and result in an inaccurate sensor calibration.



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