



Mallinckrodt[™]
Pharmaceuticals

Technical Bulletin

Ref: **TB-14001**

Issue date: **January 2014**

Product: INOmax DS_{IR}[®]

Priority: Low

Affected Parts: Ventilator Testing

Classification: Information for Distribution

Subject: **Ventilator Validation Testing**

This technical bulletin is written to advise clinicians that the following ventilators have been validated for use with the INOmax DS_{IR} using the configuration shown below:

- Neonatal, pediatric/adult ventilator
 - Hamilton C1
- Transport ventilator
 - Hamilton T1

Proper use of these products depends on careful reading and understanding of labeling and instructions. Please refer to the INOmax DS_{IR} operation manual for guidance. Also refer to the specific ventilator or breathing device operation manual or instructions for use.

Warnings:

- **The INOmax DS_{IR} subtracts gas from the breathing circuit via the gas sampling system at 230 mL per minute; this can affect the sensitivity of a flow triggered synchronized breath mode of some ventilators. The trigger sensitivity of the ventilator should be checked after connecting the INOmax DS_{IR} to the breathing circuit.**
- **Patient disconnect and high-pressure alarms are required for the ventilator.**

Cautions:

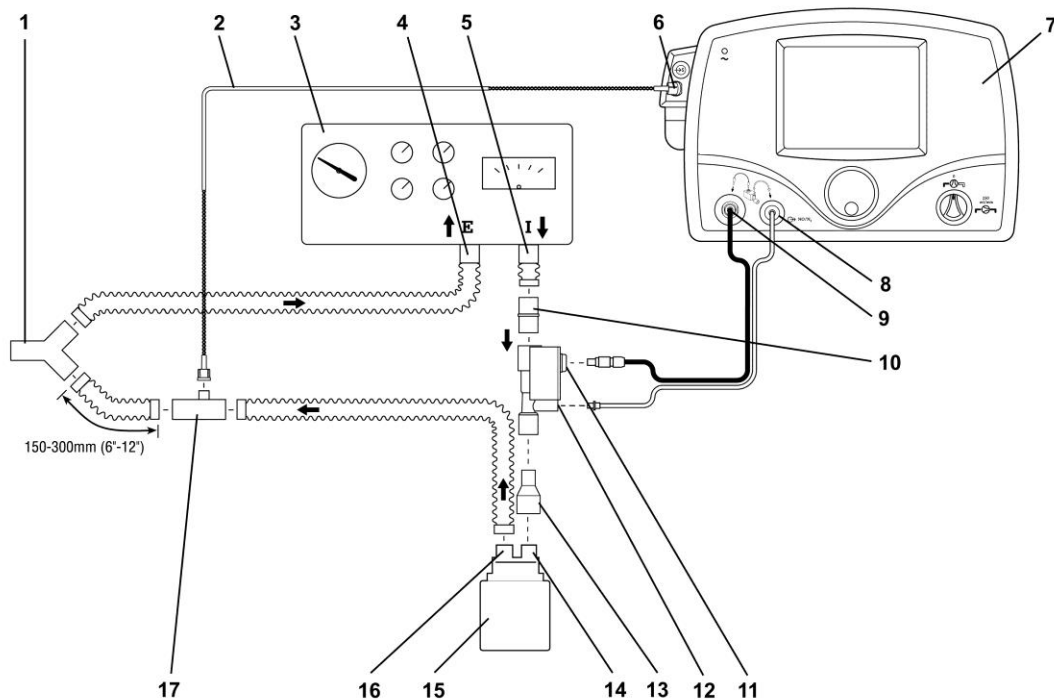
- Insert the injector module on the dry side of the breathing circuit prior to the humidifier (this will ensure correct flow measurement).
- Avoid medications interfering with the gas monitoring system; administer any aerosolized medications distal to the sampling tee.
- Note the airflow direction arrow on the injector module: the flow out of the breathing device must pass through the injector module in the direction of the arrow on the module.

Note: Connections to various ventilators as well as their corresponding disposable circuits are unique to each manufacturer. Please refer to the specific ventilator or breathing device operation manual or instructions for use for guidance.

The following diagram is for connecting the INOmax DS_{IR} into the breathing circuit:

The Hamilton C1 and T1 ventilators utilize the standard ICU ventilator circuit diagram.

Note: Hamilton coaxial breathing circuits REF: 260087 and REF: 260094 cannot be used with the INOmax DS_{IR}. The injector module and patient gas sample line cannot be appropriately placed into these circuit types. Use a standard circle breathing circuit (see figure below).



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|--|--|
| 1. Patient Wye | 10. 22M/15F X 22M/15F Adapter |
| 2. Patient Gas Sample Line with Nafion | 11. Injector Module Electrical Cable Connection |
| 3. Ventilator | 12. Injector Module NO/N ₂ Injector Tube Connection |
| 4. Ventilator Expiratory Port | 13. 22F X 15M Adapter |
| 5. Ventilator Inspiratory Port | 14. Humidifier Inlet |
| 6. Patient Gas Sample Line Input Connection | 15. Humidifier |
| 7. INOmax DS _{IR} | 16. Humidifier Outlet |
| 8. NO/N ₂ Injector Tube Front Panel Connection | 17. Gas Sample Tee |
| 9. Injector Module Electrical Cable Front Panel Connection | |

For technical assistance regarding the INOmax DS_{IR}, please contact technical support at 1-877-566-9466 (North America) or your specific country manager.

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