

## Technical Bulletin

Ref: **TB-17007-ENG**

Issue date: February 2022

Product: INOmax DS<sub>IR</sub>® and INOmax DS<sub>IR</sub>® Plus

Priority: Low

Affected parts: 50046 Bunnell Life Pulse Disposable  
Adapters Convenience Pack

Classification: Information for Distribution

Subject: **Addition of Natvar Tubing to Convenience Pack**

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This technical bulletin is written to advise clinicians that a 10 inch (25.4 cm) length of Natvar tubing has been added to the 50046 Bunnell Life Pulse Disposable Adapters Convenience Pack. The new Natvar tubing (PN 80753) is the same material as the tubing in the Life Pulse HFJV Patient Breathing Circuits (PN 938) and can be used with either Bunnell Life Pulse ventilator models (REF: 203 and 204). Due to the new position of the humidifier in the Bunnell Life Pulse 204, additional Natvar tubing has been added to prevent kinking of the dry side tubing when connecting the Injector Module to the Bunnell Life Pulse Gas Out port.

All of the previous warnings, cautions and notes still apply when using this additional piece of tubing:

### WARNING:

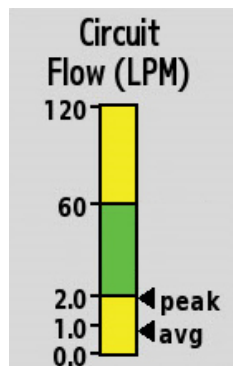
**Do not use the Integrated Pneumatic Backup (250 mL/min) with the Bunnell Life Pulse ventilator because with low servo pressures, flow rates can be below 2 Lpm, resulting in doses greater than 80 ppm.**

### CAUTIONS:

- If set dose is below five ppm and the Servo pressure is 0.14 bar (2.0 psig) or less, this will result in flow rates outside of the specification of the Injector Module and fluctuating NO values may result (See Figure 1).
- When the Bunnell Life Pulse ventilator is in Standby or turned off, water can back up into the Injector Module. Place a one-way valve between the Injector Module and the humidifier chamber to prevent water from backing up into the Injector Module.

### NOTE:

The Bunnell Life Pulse ventilator generates higher pressure in the breathing circuit than conventional ventilators. Ensure all circuit connections are secure and use only parts provided by the device manufacturers to prevent inadvertent disconnection.



**Figure 1** Circuit Flow Graph, Settings Screen – Under Delivery

NOTE: Ensure all circuit connections are secure. Use only parts provided by the device manufacturers to prevent inadvertent disconnection.

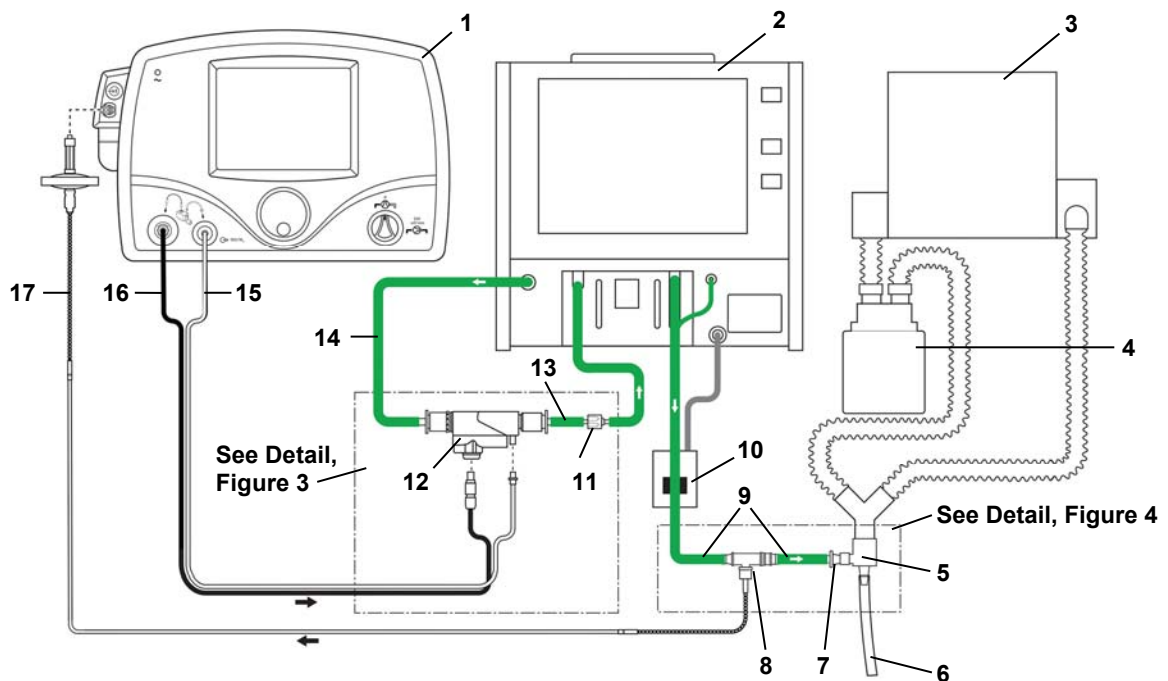
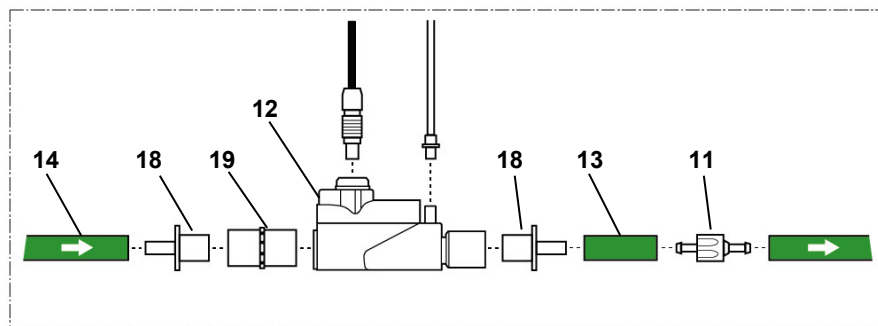


Figure 2 Completed Setup

- |                                 |   |  |
|---------------------------------|---|--|
| 1. INOmax DS <sub>IR</sub> Plus | 9. Life Pulse Patient Breathing Circuit               | 14. New Natvar Tubing (not to exceed 7 inches/17.8 cm) |
| 2. Bunnell Life Pulse           | 10. Patient Box                                       | 15. NO/N <sub>2</sub> Injector Tube                    |
| 3. Conventional Ventilator      | 11. One-Way Valve                                     | 16. Injector Module Electrical Cable                   |
| 4. Humidifier                   | 12. Injector Module                                   | 17. Patient Gas Sample Line with Filter                |
| 5. Life Port Adapter            | 13. New Natvar Tubing (approximately 1.2 inches/3 cm) | 18. 15M X 4.5 mm I.D. Adapter                          |
| 6. Endotracheal Tube            |   | 19. 22M/15F X 22M/15F Adapter                          |
| 7. Tapered Life Port Adapter    |   |  |
| 8. Sample Tee                   |   |  |

**Instructions:**

1. Cut the New Natvar tubing (PN 80753) from the Bunnell Life Pulse Disposable Adapters Convenience Pack into two pieces. One approximately 1.2 inches (3 cm) (13) and the other not to exceed 7 inches (17.8 cm) (tubing leftover) (14).
2. Use the two pieces of tubing, adapters (18, 19) and one-way valve (11) to connect the Injector Module (12) to the Life Pulse HFJV Patient Breathing Circuit (see Figure 3 below).



### Figure 3 Injector Module Connections

3. Cut the green Natvar tubing (9) supplied with the Bunnell Jet breathing circuit between the patient box and the tapered Life Port adapter (7) at the midpoint, about 6 inches (15.2 cm) from the Life Port Adapter (see Figure 4).
4. Connect the tube ends to the Gas Sample Tee (8) (PN 90388).
5. Connect the Patient Gas Sample Line (17) and Filter to the Luer connector on the Gas Sample Tee (8).

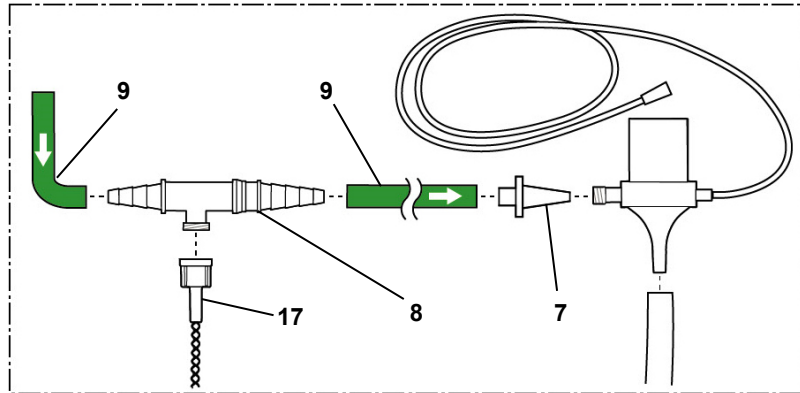


Figure 4 Patient Gas Sample Line Connections

For technical assistance regarding any of the above devices, please contact Technical Support at 1-877-566-9466 (North America) or your specific country manager.

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