

**Royal Hospital for Women (RHW)
NEONATAL BUSINESS RULE
COVER SHEET**



Health
South Eastern Sydney
Local Health District

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SUMMARY	To provide information to nurses on the set up of the Getinge Servo-n ventilator.

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Getinge Servo-n ventilator set up

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This Clinical Business Rule is developed to guide safe clinical practice in Newborn Care Centre (NCC) at The Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this Clinical Business Rule. Using this document outside the Royal Hospital for Women or its reproduction in whole or part, is subject to acknowledgement that it is the property of NCC and is valid and applicable for use at the time of publication. NCC is not responsible for consequences that may develop from the use of this document outside NCC.

1. BACKGROUND

The Getinge Servo-n ventilator provides respiratory support to premature and sick neonates. The patient's own diaphragmatic electrical activity is used to trigger cycle on and off at each assisted breath. It also controls the pressure delivered, thus providing truly synchronized and proportional respiratory assistance.

2. RESPONSIBILITIES

Medical and Nursing Staff

3. PROCEDURE

3.1 Equipment

- Getinge SERVO-n ventilator
- Getinge SERVO-n ventilator block
- Grey test tubing (from storage box on ventilator)
- Fisher & Paykel Humidifier base 950
- Fisher & Paykel Neonatal Ventilator Dual heated circuit kit- 950N81
- Getinge expiratory filter (48 hour filter)
- 1L bag of Water for Injection
- Edi catheter
- Edi cable and cassette

For Invasive ventilation

- Getinge Y Flow sensor (disposable)
- Y sensor cable (from storage box on ventilator) and cassette.
- Opaque Pressure line (Paw) (from Fisher & Paykel Neonatal Ventilator Dual heated circuit kit- 950N81)
- Test Lung

For non-invasive ventilation

- Fisher & Paykel snorkel
- Appropriate size hat and mask/prongs

3.2 Clinical Practice

1. Collect equipment.
2. Plug in Getinge ventilator to wall gas and power. Turn on ventilator by pulling the on/off switch, located at the back of the ventilator. (Picture 1)



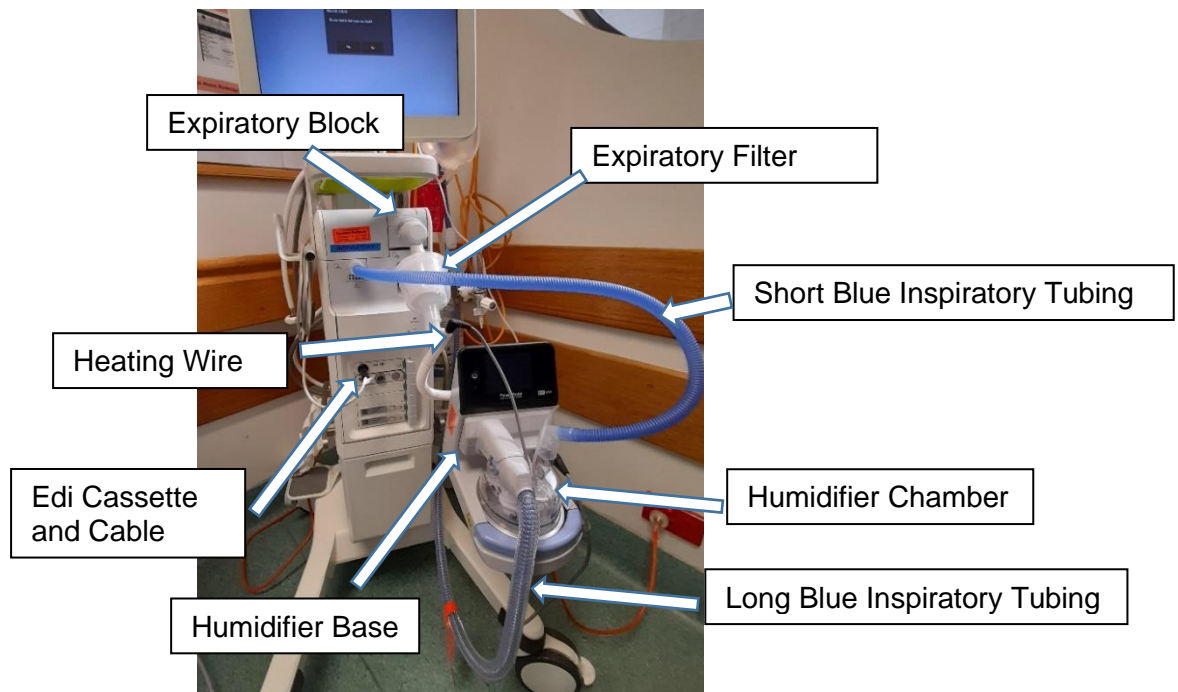
Picture 1

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3. Ensure expiratory block in situ (Picture 2). The block is only changed and sent to CSD if used with infectious patients OR the expiratory filter has not been in place.
4. Attach humidifier chamber to humidifier base.
5. Attach short blue inspiratory tubing to inspiratory inlet port and connect to the humidifier chamber. (Picture 2)
6. Attach long blue inspiratory tubing to the second humidifier port. (Picture 2)
7. Attach white expiratory filter to the expiratory block. (Picture 2)
8. Attach white expiratory tubing to expiratory filter. (Picture 2)
9. Attach heating wire to white tubing. (Picture 2)
10. Ensure Edi cassette plugged in to machine and Edi cable plugged in to Edi cassette (Picture 2)
11. Start the PRE-USE CHECK using the grey the test tube. The process takes approximately 4 minutes.
12. Reconnect the patient circuit.



Picture 2

For Invasive Mode

13. Connect the pressure line (Paw) to the Y sensor cassette (Picture 3)
14. Connect Y sensor cable to Y sensor cassette (Picture 3)
15. Connect Y sensor to expiratory and inspiratory limb (Picture 4)
16. Attach Test lung to Y sensor (Picture 4)
17. Connect pressure line (Paw) to port on expiratory limb (Picture 4)
18. Connect Y sensor cable to Y sensor (Picture 4). Calibration instruction will automatically appear on the screen.
19. Calibrate the Y sensor. If you would like to discontinue Y sensor measuring, you need to disconnect the Y sensor module.
20. Start the PRE-USE CHECK using the grey the test tube. The process takes approximately 4 minutes.
21. Reconnect the patient circuit and Y sensor.
22. Choose patient category on screen - NEONATAL
23. Choose Ventilation type - INVASIVE or NON INVASIVE

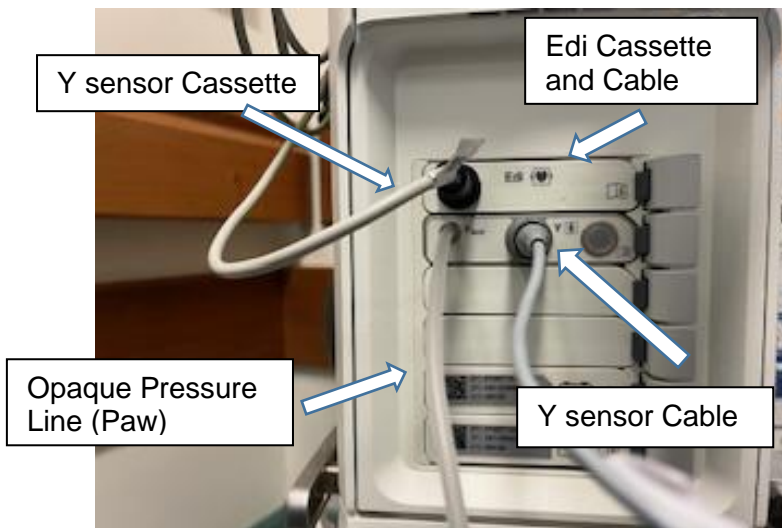
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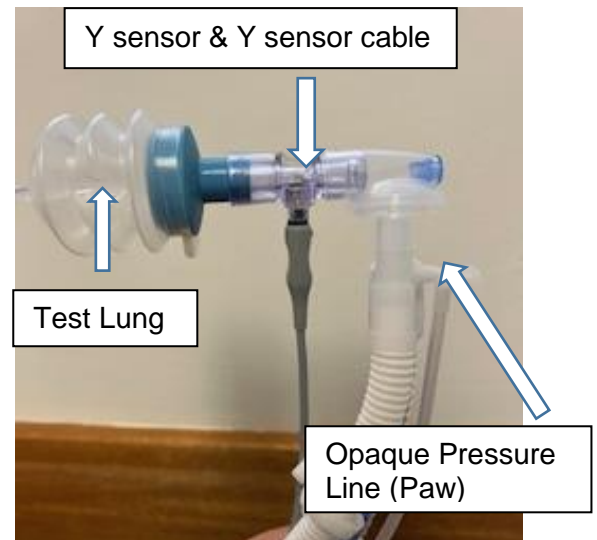
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NOTE:

To change between non-invasive and invasive modes the machine will need to be in 'standby'.



Picture 3



Picture 4

NOTE:

The patient circuit test must be performed with a complete patient circuit, including all accessories (e.g. active humidifier filled with water, filter, CO₂ analyser, Y sensor and nebulizer), that is to be used with the patient. If the patient circuit is changed after the pre-use check is completed, perform a new pre-use check or a patient circuit test.

3.4 Abbreviations

Edi	Electrical Diaphragmatic Index	Paw	Airway Pressure
CSD	Central Sterilising Department	CO ₂	Carbon Dioxide

3.5 References

1. Getinge Gentinge Group (2015) SERVO-n Self-Guided Education Presentations. Getinge. Rastatt (Germany)
2. Getinge Gentinge Group (2015) Neurally Adjusted Ventilatory Assist (NAVA) - Synchrony redefined.
3. Getinge Getinger Group (2013) Ventilation Servo-I for Neonates. Synchrony for those who need it most. Getinge. Solna (Sweden)
4. Servo-n Hands on guide. 2023. <https://getinge.training/wp-content/uploads/2023/02/MCV00096728-REVA-Servo-n-2.1-Training-Hands-On-Guide-for-US.pdf> Accessed 24/03/2024.

4. RELATED BUSINESS RULES AND POLICY DOCUMENTS

- RHW NCC CBR Medical - NAVA (Neurally Adjusted Ventilatory Assist) Clinical Guidelines
- RHW NCC CBR Medical - CPAP - Continuous Positive Airway Pressure Therapy
- RHW NCC CBR Nursing - NAVA Nursing Care for Non-Invasive Ventilation

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- RHW NCC CBR Nursing - NAVA Nursing Care for Invasive Ventilation

5. CULTURAL SUPPORT

- When clinical risks are identified for an Aboriginal family, they may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.
- For a Culturally and Linguistically Diverse CALD family, notify the nominated cross-cultural health worker during Monday to Friday business hours.
- If the family is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

6. IMPLEMENTATION PLAN

This revised CBR will be distributed to all medical, nursing and midwifery staff via @health email. The CBR will be discussed at ward meetings, education and patient quality and safety meetings. Education will occur through in-services, open forum and local ward implementation strategies to address changes to practice. The staff are asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and understood the revised CBR. The CBR will be uploaded to the CBR tab on the intranet and staff are informed how to access.

7. RISK RATING

- Low

8. NATIONAL STANDARDS

- Standard 1 Clinical Governance
- Standard 3 Preventing and Controlling Infections
- Standard 5 Comprehensive Care
- Standard 6 Communicating for Safety
- Standard 8 Recognising and Responding to Acute Deterioration

9. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
05/10/2016	1	A. Ottaway (ACNE), J. Sheils (NE)
24/03/2024 23.4.24	2	E Deibe (ACNE), E Jozsa (CNS), C Walter (CNE) Endorsed RHW Business Rule Governance Committee