

# pNeuton

## Pneumatic Ventilation

### Operational Verification Procedure pNeuton Model A

**Thank you for your purchase.** This procedure outlines a validation testing method used to verify proper operation of the **pNeuton A** Ventilator. It must be performed prior to using the ventilator for the first time in a health care facility. If the ventilator fails to pass any of the following tests do not apply the ventilator to a patient. Call Airon Corporation Customer Service at 888-448-1238.

#### Ventilator Setup

The following equipment is needed:

1. **pNeuton** Ventilator with Airon patient breathing circuit (PN 58001, 58006, 58011, 58021 or 58051)
2. Test lung, (1 L rigid wall, Airon Part # 21002 suggested)
3. Spirometer
4. Watch, a timer or stop watch

When ready:

1. Attach breathing circuit to ventilator following instructions in the Operators Manual. Circuit preparation will require the exchange of the exhalation valve divertor to the elbow connector provided.
2. Attach the test lung to the patient side of the breathing circuit.
3. Set the controls as follows:
  - a. Mandatory Breath control to On
  - b. Oxygen % to 65%
  - c. PEEP / CPAP to Off
  - d. Peak Pressure to 50 cm H<sub>2</sub>O
  - e. Tidal volume to 700 ml
  - f. Respiratory Rate to 12bpm
4. Attach Oxygen Input on rear panel of the ventilator to a high pressure oxygen source (55 psi  $\pm$  15 psi) and turn on the oxygen.

NOTE: The ventilator will begin operation at the above settings when the oxygen is turned on. The alarm will sound. You may press the "Reset / Silence" button to silence the alarm.

#### Operational Verification

Verification Step	Acceptable Range	Result
Attach a spirometer to the expiratory valve, After 3 breaths measure the delivered tidal volume.	700 $\pm$ 70 cm ml	Pass / Fail
Count the respiratory rate with a stopwatch. Measure the number of breaths in one minute.	12 $\pm$ 2 breaths per minute	Pass / Fail
Remove the test lung and occlude the patient connection on the circuit. Read the circuit pressure from the pressure gauge on the front on the ventilator.	50 $\pm$ 5 cm H <sub>2</sub> O	Pass / Fail
Remove the occlusion and allow the breathing circuit to remain open. Using a stopwatch, measure the time until the alarm sounds	22 $\pm$ 3 seconds	Pass / Fail

If the ventilator has passed all the above steps, it is ready for clinical use.

Tested by: \_\_\_\_\_ Date: \_\_\_\_\_



**Airon**

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