USING THE PHABIAN VENTILATOR TO DELIVER VOLUME TARGETED VENTILATION

Thank you to Senior ANNP Phil Parson and Lancashire Teaching Hospital (Royal Preston NICU) for producing the contents of this guide & giving permission to share

If setting-up the ventilator which is not presently in use e.g. for a new admission or ventilator change commence at step 1. Otherwise, if changing to volume guided ventilation from pressure guided ventilation commence from step 8.

1) Ensure the gas lines are secure in the gas ports
2) Ensure the following equipment is gathered (see image):
   a) Flow Sensor
   b) Diaphragm
   c) Expiratory Block

a b c

3) Connect the flow sensor ‘a’ to the flow sensor lead, note due to the orientation of the connector it is only possible to connect in one way:

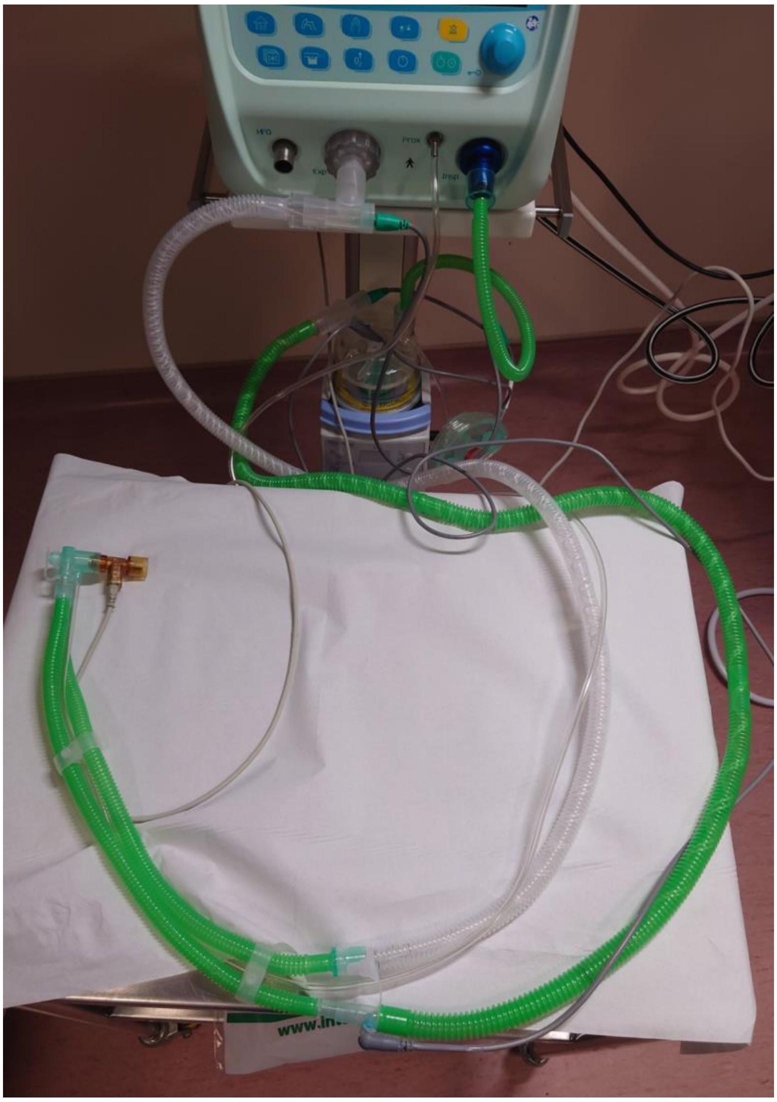
4) Place diaphragm ‘b’, into expiratory block ‘c’, as in the image.
*Note the diaphragm must be orientated the correct way up, as shown in the picture below:

Correct ‘way-up’ diaphragm	Incorrect ‘way-up’ diaphragm
	

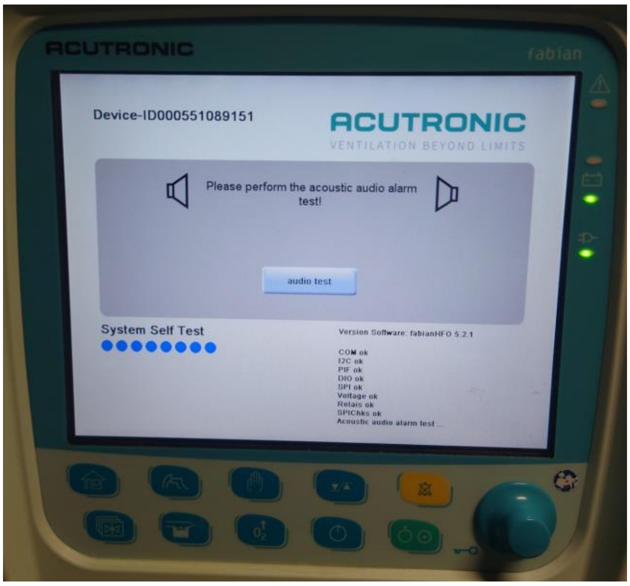
5) Place the expiratory block in the expiratory fixture on the front of the ventilator and twist to lock in position:

Place into expiratory fixture	Twist block to the right to lock in place
	

6) Attach the circuit to the ventilator including the humidity chamber:

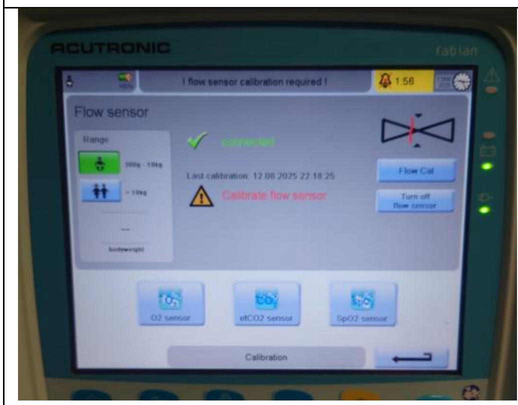


7) Turn on the ventilator and allow self-checks and alarm checks



8) Calibrate the flow sensor

a) Go to the calibration screen

<table>
<tr>
<td>If setting up the vent from new the screen in the image below will appear prior to the main screen as a prompt to calibrate the flow sensor</td>
<td>If starting volume guided ventilation on a baby who has previously been on pressure guided the flow sensor must be re-calibrated; press the icon in the image shown below:</td>
</tr>
<tr>
<td>
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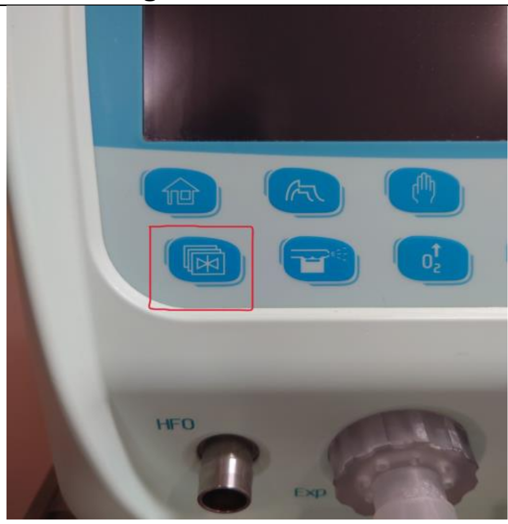
<td>
</td>
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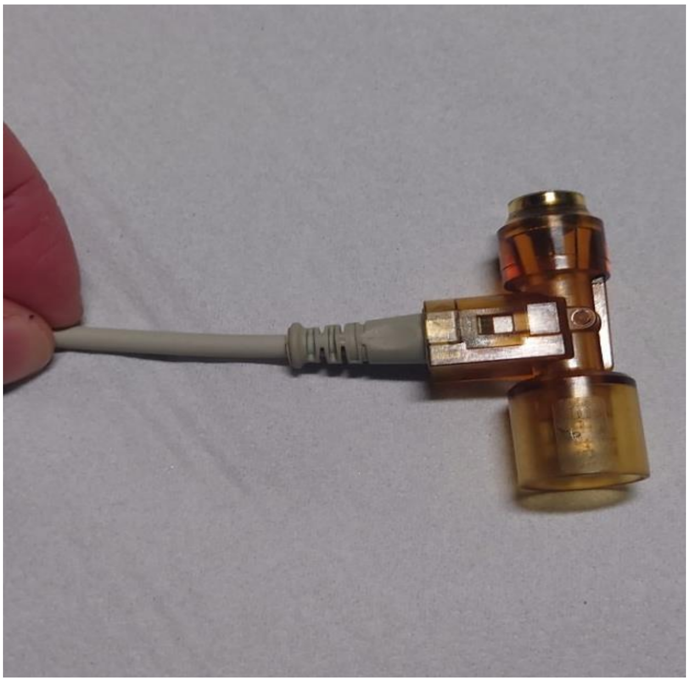
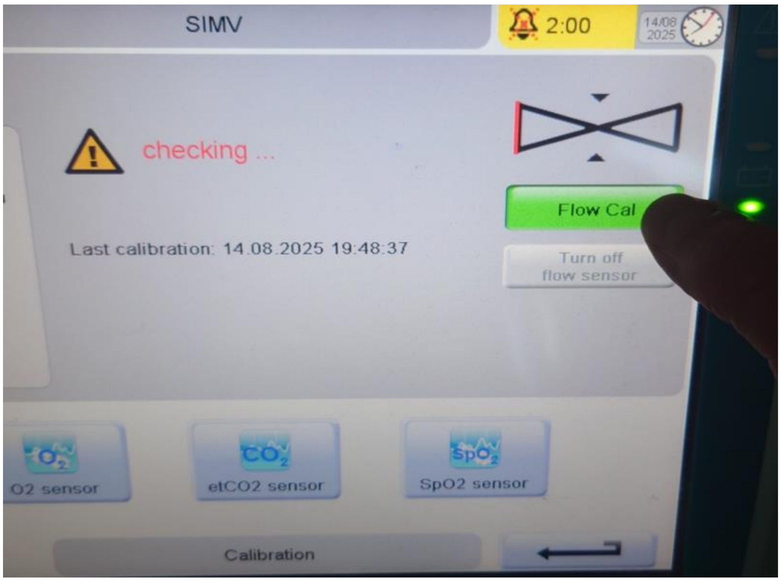
</table>

b) Ensure the flow sensor is disconnected from the vent tubing, is completely still and the ends are unobstructed as in the picture below;



d) Calibrate the flow sensor by pressing the ‘Flow Cal’ option.



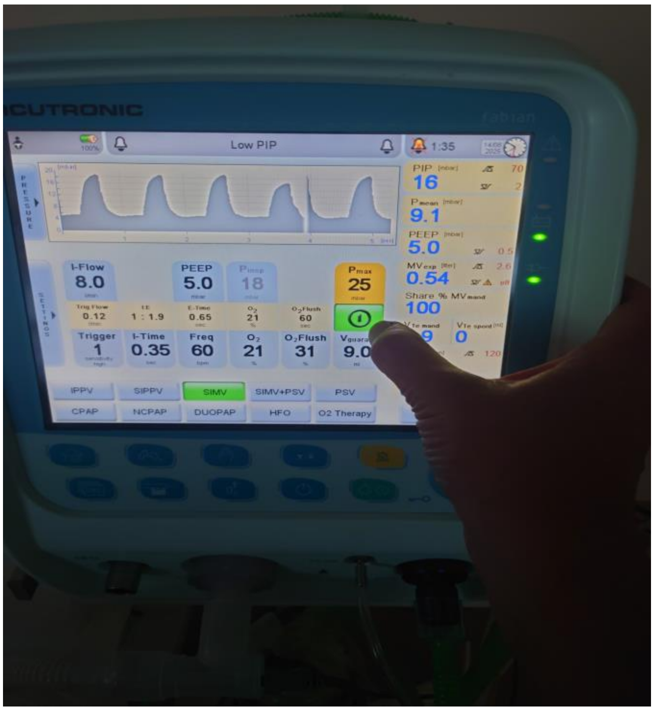
9) Adjust the volume and ‘P-max’ pressure value first, then turn on the volume guided mode. This is to ensure the baby does not receive an inappropriate volume by turning the volume guarantee on first and then adjusting the value. On the Phabian ventilator this needs to be calculated by the practitioner and input as the actual volume to be achieved, not the ‘mL/kg’ value. For example, 2 kg baby x 5mL/kg = 10mL; 10mL is the value needed to be input.

Press the ‘Vgarant’ to make it green, at this point the value can be adjusted by turning the knob as shown in the image below.

10) Select an appropriate ‘Pmax’ pressure value according to the gestation, lung pathology, and disease progression. A good starting point is a Pmax of 25.

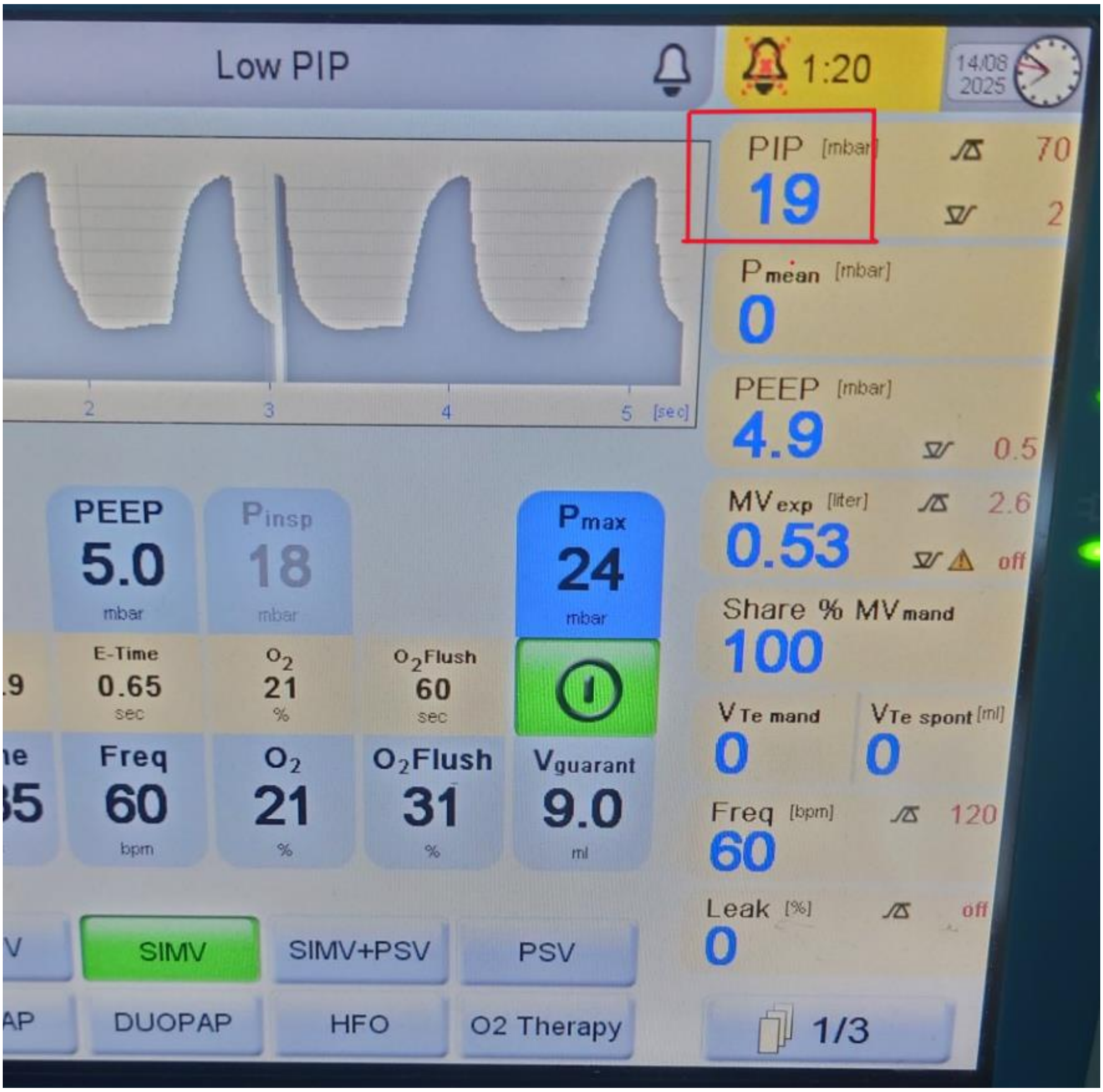
11) Once the calculated value has been input, then switch on the volume guarantee by pressing the ‘on’ button between ‘Pmax’ and ‘Vguarant’. Upon pressing the

button, it should go from pale blue as in the image above, to green as in the image below.



12) After this point it is a good idea to stay by the ventilator for 5 minutes and check the other values are appropriate to deliver volume value which is set. For example, the ventilator is not alarming regularly displaying set volume not delivered. If help is needed to troubleshoot why the volume is not being achieved, please refer to the NWNODN Volume guided ventilation and trouble-shooting guidelines.

If the ventilator is achieving the set volume without issue, note the PIP which is being used by the ventilator to achieve the set volume, (which is the value highlighted in the image below) and reset the Pmax value to 5 above the PIP being used; this is a safety measure.



September 2025