

# Monitoring Instructions - Aisys CS<sup>2</sup> Anaesthesia Machine as an ICU Ventilator

(Record monitoring parameters on the bedside ICU chart)

<sup>1</sup> Task	Continuously	Hourly	Q 4 hours	Q 8 hours	Q 24 hours
Alarms (including FiCO <sub>2</sub> )	X				
Soda lime <sup>1</sup> (if present)				X	
Monitoring parameters <ul style="list-style-type: none"> <li>• FiO<sub>2</sub><sup>2</sup></li> <li>• FiCO<sub>2</sub> / EtCO<sub>2</sub><sup>3</sup></li> <li>• Insp Pressure</li> <li>• Tidal volume</li> <li>• Expiratory flow<sup>4</sup></li> </ul> (does expiratory flow reach zero?)		X X X X			X
Inspect for humidity / secretions <ul style="list-style-type: none"> <li>• Filters</li> <li>• Circuit</li> <li>• Water trap<sup>5</sup></li> </ul>		X X			X
Change distal HMEF (blue)					X
Change exp limb filter (yellow)					X
Change closed suction					X
Change circuit <sup>6</sup>					
Perform self-test <sup>7</sup>					

<sup>1</sup> A change in the colour of the soda lime from white to pink indicates the point of near exhaustion. Absorbent should be changed when either two thirds of the canister has changed colour or there is an increase in inspired CO<sub>2</sub>

<sup>2</sup> FiO<sub>2</sub> is dialled into the machine. However, if FGF is low, the measured FiO<sub>2</sub> in the circuit may fall. If this occurs, increase the FGF by 0.5l/min and recheck FiO<sub>2</sub> after 5 minutes

<sup>3</sup> Initial FGF should be 6-8l/min. If the patient's MV is high, FiCO<sub>2</sub> may increase (should be <0.5). FGF should be increased by 1l/min and the FiCO<sub>2</sub> rechecked after 15 mins. If >10l/min FGF is required, soda lime should be added to the circle if not present and FGF reduced to 6l/min. Soda lime must be used with all neuro-critical care patients to assist with tight PaCO<sub>2</sub> control

<sup>4</sup> The expiratory flow curve spirometry should be checked daily by the medical team. If the flow does not fall to zero, this may be due to increased resistance in the circuit from occluded filters (other causes include bronchoconstriction, reduced exp time)

<sup>5</sup> The water vapour condenser should be visually inspected daily and drained if needed

<sup>6</sup> The circle should not require replacement more frequently than every 7 days. It should be inspected hourly and excessive moisture drained using manual disconnection (for further information please refer to Aisys CS<sup>2</sup> SOP)

<sup>7</sup> A full-test of the machine should be carried out before use. It will need to be performed within the next 49 days otherwise the machine will re-boot.

