



OR Ventilator Tip Sheet for Providers



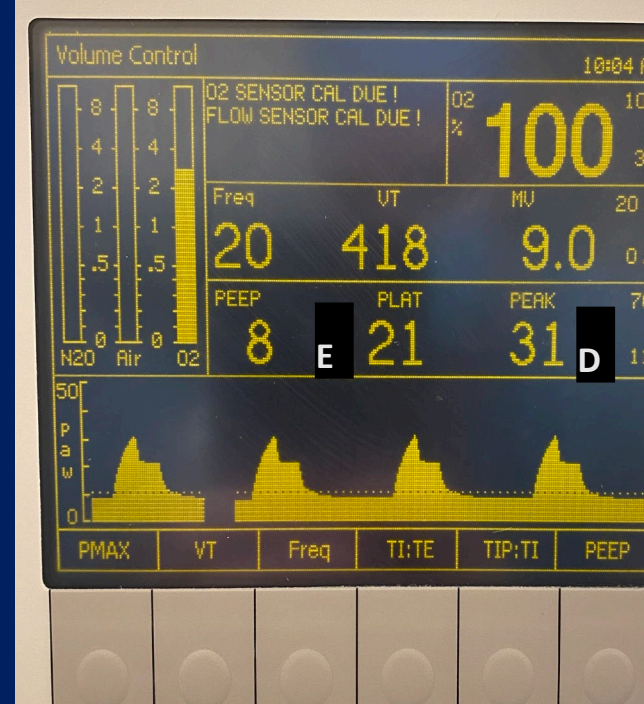
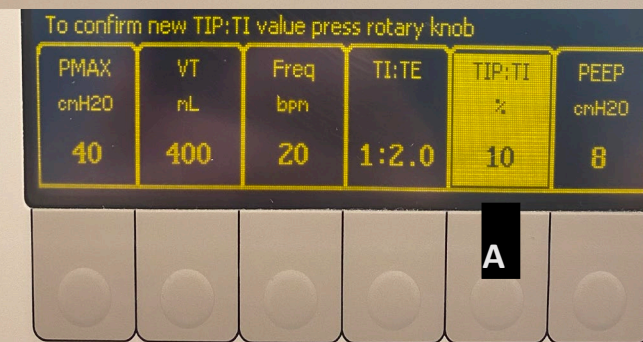
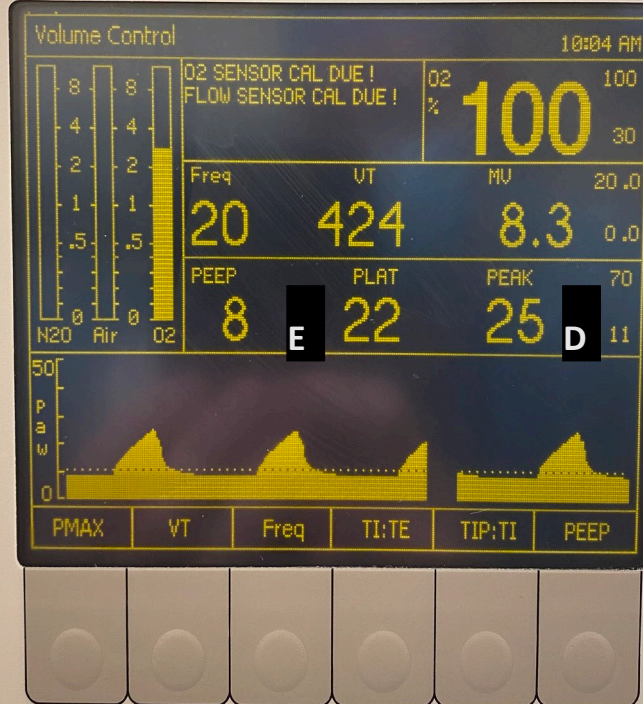
Any questions or concerns?
Call for local assistance and Respiratory Therapy

OR Ventilator Circuit Setup

- ETT
- Inline suction
- HME filter
- Y tubing
- Bacterial/viral filter on expiratory limb
- Anesthesia machine

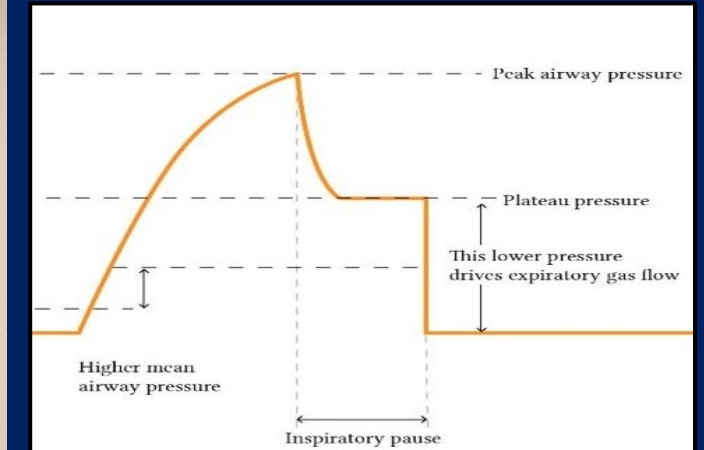
Fresh Gas Flow (FGF)

- In general when FGF greater than MV, there is little to no rebreathing
- As FGF decreased, rebreathing of exhaled gas increases
- Minimum safe FGF replaces consumed oxygen and losses
- Low FGF (< MV) require adequate available CO2 absorbent for replacement, and monitoring of absorbent / rebreathing of CO2
- Low FGF (<MV) preserves circuit humidity but can cause condensation build up
- High FGF (> MV) uses less CO2 absorbent, though decreases humidity and can lead to mucus plugging
- High FGF (> MV) uses more of the oxygen supply



Inspiratory Pause Adjustments and Plateau Pressure

- Initially TIP:TI (Time inspiratory pause: time inspiration) set to 10%: 10% of inspiration maintains pressure
- TIP correlates to plateau pressure -> pressure in alveoli
- TIP:TI can be adjusted to maximum 50% for longer inspiratory pause -> increasing mean airway pressure in alveoli (gas exchange)
- Peak pressure increases with longer inspiratory pause as less time for gas flow through circuit and airways (inspiration)
- Plateau pressure stays roughly the same with longer inspiratory pause as lung compliance is unchanged (gas exchange)



Other Considerations

- Vaporizers should be made inaccessible - do not use inhaled anesthetic as sedative
- Removal of nitrous oxide connections
- Scavenger system connection if removed from OR

Specific Recommendations

- Lung protective ventilation strategy
- Fresh gas flow 2 liters with increase above MV every 4 hours
- TIP:TI to 20% to assess plateau pressure
- Monitor ETCO2 waveform with alarms set for FiO2 and inhaled CO2