

PMV in-line

Teal PMV (PMV 007) for ventilated patients

- Need 22 mm adapter to connect to vent circuit
- This PMV can still be used after the vent is DC'd (unless there is a need for a new one)

Purple PMV (PMV 2001) for non-ventilated patients

CONTRAINDICATIONS:

- Unconscious/comatose
- Severely medically unstable
- Unable to tolerate cuff deflation
- Inflated cuff
- Bivona foam filled cuff (absolute contraindication)
- Severe airway obstruction
 - o It can prevent an adequate exhalation
- Thick/copious secretions
- Severely reduced lung elasticity
 - o Can cause air trapping
- Aspiration
- Laryngectomy

INDICATIONS:

- Vent dependent
- Quadriplegic
- COPD
- Mild tracheal stenosis
- Mild tracheomalacia
- Vocal cord paralysis
 - o Without significant airway obstruction
- Non-obstructive laryngeal tumors
- Patient's with sleep apnea
- Patient's unable to tolerate the plug
 - o Emotionally and/or physically
- Neuromuscular disease
- Bronchopulmonary dysplasia
- Amyotrophic lateral sclerosis
- Head trauma

BENEFITS:

- Restores access to voice and ability to communicate
- Restores subglottic pressure
 - o May improve swallowing and reduce aspiration
- May improve core strength/trunk control
- May improve cough and reduce suctioning needs
- Improve gas exchange
- May facilitate lung recruitment and decrease risk of atelectasis
- May expedite weaning and decannulation

CRITERIA PRIOR TO PLACEMENT:

- Awake, alert and attempting to communicate
- Patient airway
 - o Trach size
 - May tolerate PMV on a smaller size trach vs. a larger size
 - Cuffed vs. cuffless
 - o Number of intubations
 - Are they deemed a 'difficult airway'?
- Medically stable
- Able to tolerate cuff deflation
- Reasonably able to manage oral secretions
- Ventilated patient guidelines:
 - o $\text{FIO}_2 < 50\%$
 - o $\text{PEEP} < 10$
 - o $\text{PIP} < 40$
- Other things to consider:
 - o Pain management
 - o Anxiety management
 - o Good body alignment
 - o Education
 - o Discuss plan with team

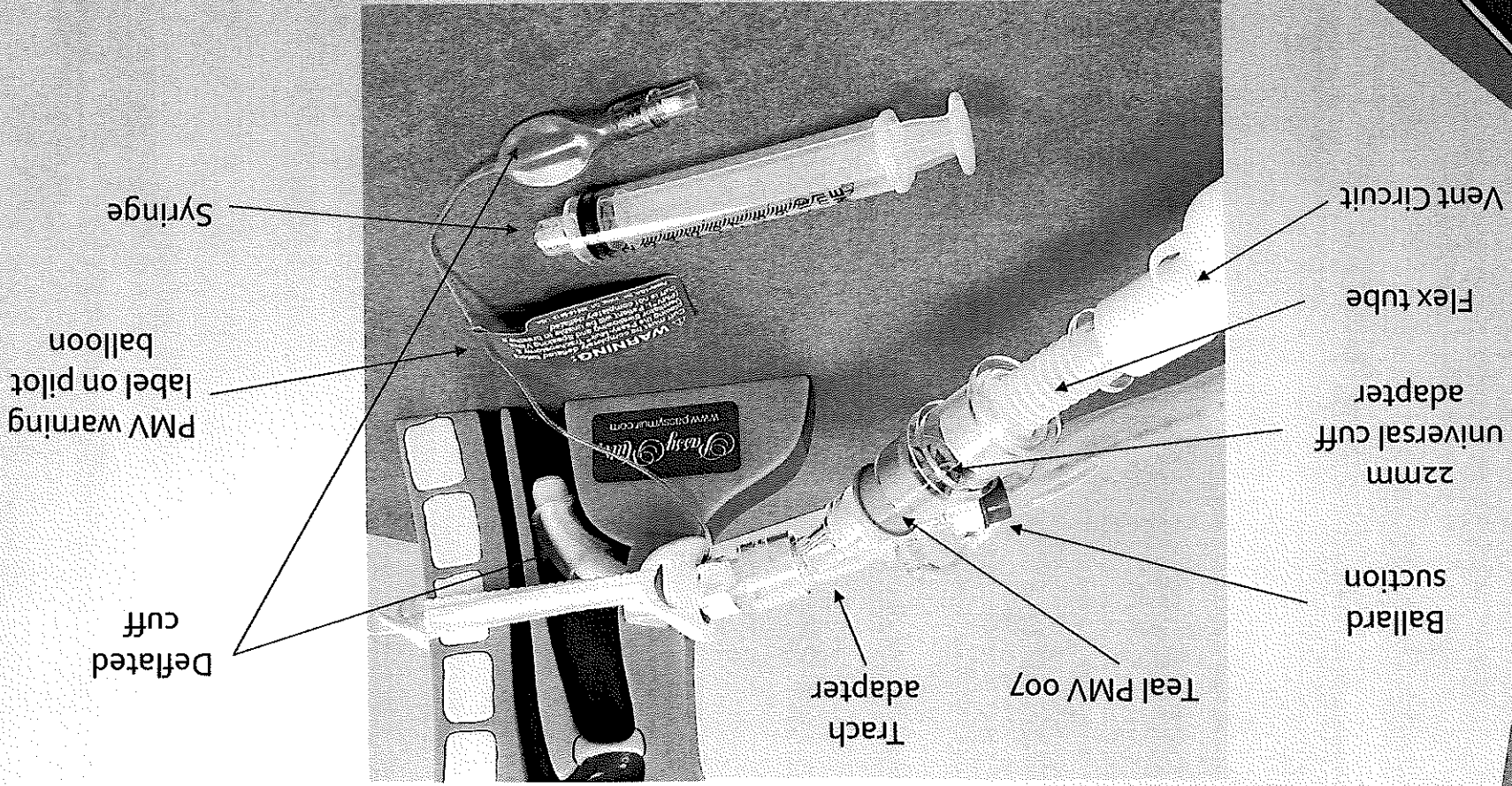
IN-LINE VENT PROCEDURE WITH PMV

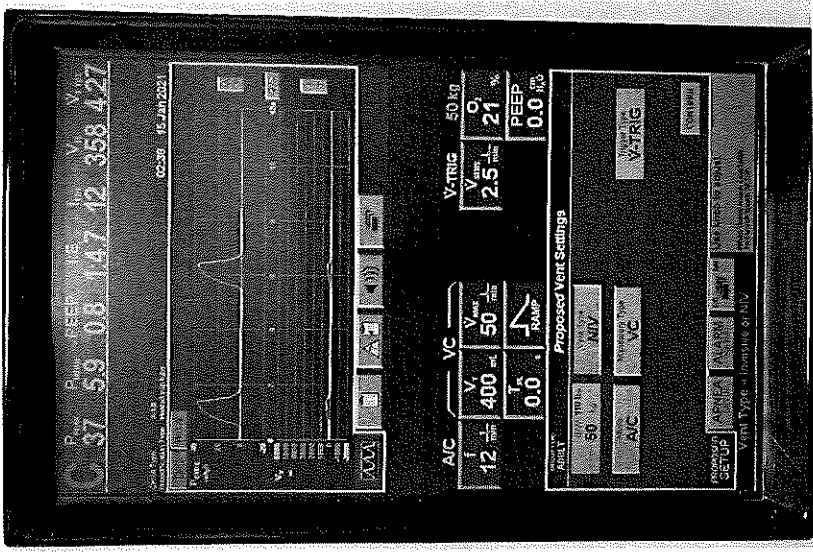
- Confirm PMV order
- Materials: teal PMV, 22mm adapter, flex tubing, syringe, yankauer
- Assess patient's tolerance to cuff deflation
- Suction orally and via trach
- Note the Vt and PIP
- Change the vent to NIV and turn PEEP to 0
- Deflate cuff slowly, may need additional suctioning
- Place PMV in-line
 - o Attach flex tubing to the top of the vent circuit
 - o After the flex tubing, attach the 22mm adapter
 - o Then place the PMV on the opposite side of the 22mm adapter, which will connect to the inline suction ballard
- Observe tolerance. Monitor ventilator parameters. Make adjustments to vent to maintain adequate Vt and PIP
 - o Monitor: O2, vital signs, breath sounds, color, WOB, patient responsiveness, back pressure
- Alarms can be adjusted
 - o Don't turn off
- Chart in the PMV/Plug intervention afterwards as to how patient tolerated

VENT APPLICATION:

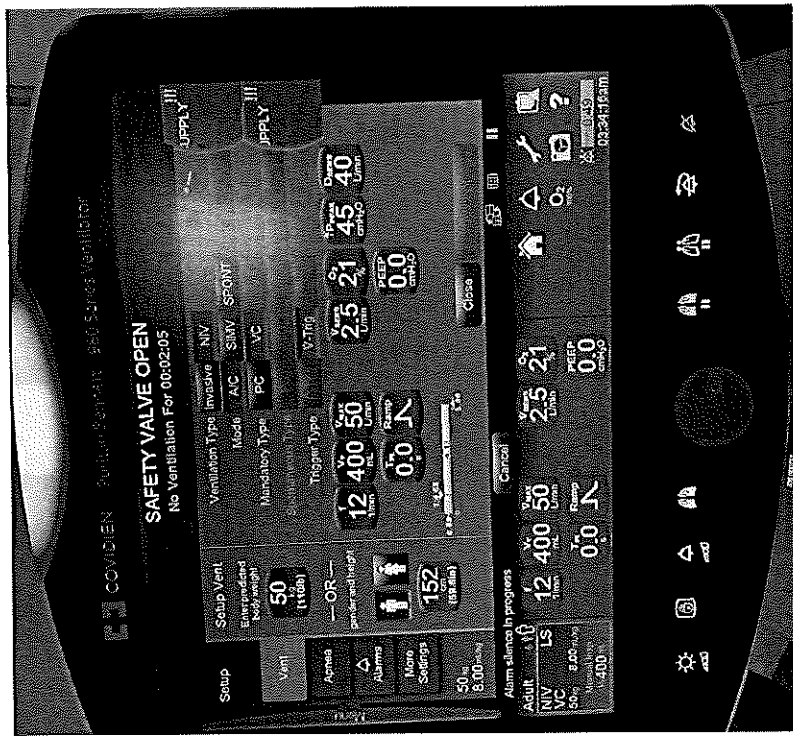
- Monitor Vt and PIP
- May need frequent oral care and suctioning
- Increase Vt in increments of 50-100 to achieve pre-PMV PIP
- If in PS or SIMV mode, set Ti SPONT to 1 second
- If in PC mode, may need to decrease PC in small increments for valve tolerance
- Encourage patient to:
 - Synchronize with the ventilator
 - Voice on exhalation
 - Voice slowly
 - Attempt to cough/clear secretions

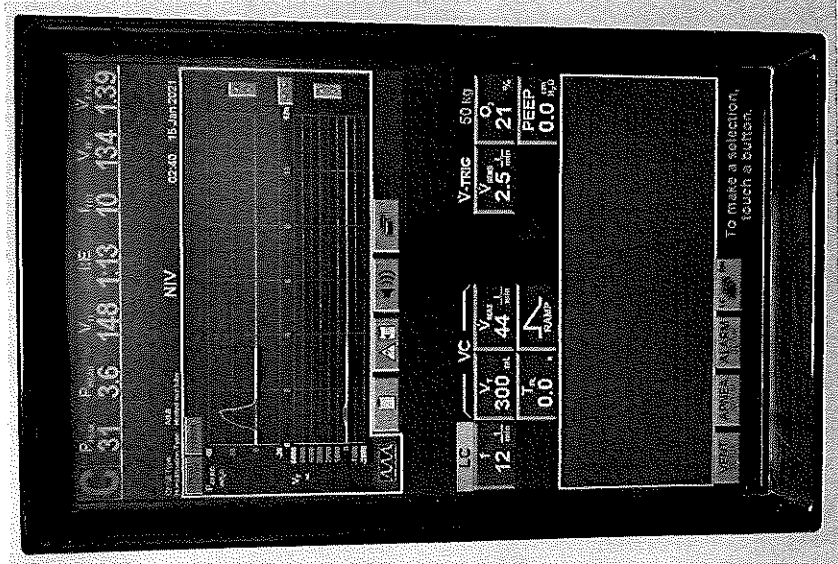
Gaylord Hospital in-line PMV setup





'NIV' is found under the 'vent type' option

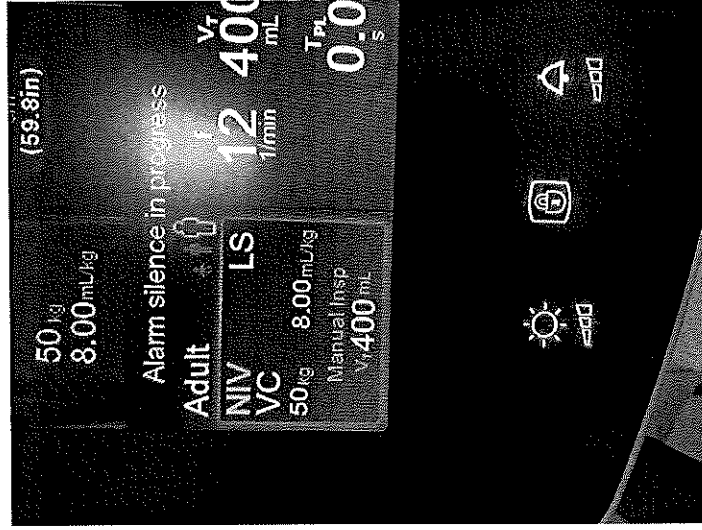




(PB 840): Confirm that it is in 'NIV' at the top of the screen

and

'LC' (Leak compensation) is above the frequency



(PB 980): Confirm that it is in 'NIV' at the bottom left hand corner of the screen across from 'LS' (Leak Sync)