

Table 12: Techniques for detecting and quantitating auto-PEEP

End-expiratory occlusion technique: Manual expiratory circuit occlusion*

Following inspiration, turn ventilator rate control to zero so that the next inspiration will not occur

At the moment when the next inspiration should occur, occlude the expiratory line for 1-3 sec, reading total PEEP from ventilator's pressure manometer

Return ventilator rate control to previous setting

End-expiratory occlusion technique: Use of ventilator's expiratory hold function*

Following inspiration, depress expiratory hold button

Keep button depressed throughout exhalation

Read total PEEP level on ventilator's pressure manometer 1-3 sec after end-expiratory occlusion begins

End-expiratory occlusion technique: Use of Braschi valve*

Place Braschi valve in inspiratory circuit between ventilator and patient wye

Remove valve cap during exhalation, so that next inspiration is vented to room

Read total PEEP on ventilator's pressure manometer 1-3 sec after onset of ventilator's inspiratory cycle

Measurement of esophageal (pleural) pressure

Read pressure from esophageal balloon at end-expiration

Table 12, continued:

Stepwise addition of external PEEP

Add 2-3 cm H₂O increments of external PEEP while monitoring peak and static inspiratory pressures

If peak and static pressures do not change, external PEEP remains below auto-PEEP level

If peak and/or static inspiratory pressure increases on addition of external PEEP, auto-PEEP level has been exceeded

*measurement not possible if patient is actively attempting to breathe