Clinician Inservicing Module

Vacuum Regulators & Setup

Ohio Medical Corporation®

Push-To-Set™ (PTS) Vacuum Regulators
Begin “SPI” Procedure Review (Standardize Set-up, Protection)

- OMC can provide a poster that reminds users of the proper set-up.
- Review the proper set-up:
  - Starting at the regulator, a trap is used as an insurance device to protect the regulator, wall outlet, and pipeline system from being contaminated. The trap is connected directly to the regulator. The recommended 18”L x ¼” diameter tubing for high flow is connected from the trap to the top of the suction canister. Also the proximal patient tubing, recommended at 72”L x ¼” diameter, is connected to the top of the suction canister. Take care that the patient tubing is midline to the patient and does not loop below. Please follow hospital protocol for cleaning of the trap. The patient tubing is NEVER connected directly to the trap or regulator.
  - If a trap is NOT used at your facility, the 18”L x ¼” tubing for high flow is connected from the regulator to the canister and that the proximal 72”L x ¼” patient tubing is connected to the top of the suction canister. The patient tubing is NEVER connected directly to the vacuum regulator as potential infectious material could enter the regulator, wall outlet, and pipeline system.

“SPI” Procedure Review (Inspection):

- Clinicians should inspect for damaged or broken regulators before use to avoid potential patient harm.
- Inspect the regulator to ensure that there are no broken parts or the encasing has not been damaged.
- Inspect that when the unit has been turned “off” that the gauge should read “0”, and when turned “on” that during pressure adjustments that the (Analog) gauge should move freely forward and backwards (Digital Gauge - numbers should increase & decrease freely).
- Inspect that when placed in Intermittent Mode that the regulator cycles “on & off”.
- If broken parts exist, the gauge is not working properly, or the unit is not cycling properly, please take the regulator out-of-service as per your hospital protocols.
Operating the regulator (PTS ADULT Brand):

- **First**, review the parts of the PTS Regulator:
  - Vacuum Gauge: Analog or Digital
  - Mode Selector Switch
  - Suction Control Knob

- **Second**, in the “OFF” position no suction is applied to the patient

- **Third**, turn the Mode Selector Switch to the “I” or Continuous position:
  - Suction is now continuous to the patient and can be adjusted with the Suction Control Knob.
  - Push and rotate the Suction Control Knob until the vacuum gauge indicates the required setting and release knob.
  - By setting the pressure to a specific mmHg, you have now set the maximum pressure.
  - It is normal to see pressure drop on the gauge after releasing the knob, as the system is open. You do not need to reset pressure. You have already effectively set the maximum pressure from previous steps.
  - **Take caution not to over-rotate the knob.** Once you feel resistance while pushing and turning the knob this indicates the device is at maximum pressure. Forcefully turning the knob will damage the regulator.
  - **Note:** The PTS requires only two full turns from zero to reach maximum vacuum pressure. This is equivalent to the full vacuum source pressure from your hospital.

- **Fourth**, if the unit also has Intermittent capabilities, you may turn the Mode Selector Switch to the “IOIO” or Intermittent position:
  - The unit starts the Intermittent cycle in the “ON” position so that suction is being applied.
  - Push the Suction Control Knob. The pressure that was set in “I” or Continuous mode, should register the same in the “IOIO” or Intermittent mode.
  - By setting a specific pressure in the “I” Continuous mode, you have also enabled the same maximum pressure in the “IOIO” or Intermittent mode.
  - If you require a different maximum pressure, move the Selector Switch back to Continuous Mode, follow the already covered procedure to set pressure, and move the Selector switch to Intermittent mode.
  - The PTS regulator should cycle both “on” and “off” in the Intermittent mode position.
Operating the regulator (PTS PEDIATRIC Brand):

- **First**, review the parts of the PTS Regulator:
  - Vacuum Gauge: Analog or Digital
  - Mode Selector Switch
  - Suction Control Knob
- **Second**, in the “OFF” position no suction is applied to the patient
- **Third**, turn the Mode Selector Switch to the “I” or Continuous position:
  - Suction is now continuous to the patient and can be adjusted with the Suction Control Knob.
  - Push and rotate the Suction Control Knob until the vacuum gauge indicates the required setting and release knob.
  - By setting the pressure to a specific mmHg, you have now set the maximum pressure.
  - It is normal to see pressure drop on the gauge after releasing the knob, as the system is open. You do not need to reset pressure. You have already effectively set the maximum pressure from previous steps.
  - **Take caution not to over-rotate the knob. Once you feel resistance while pushing and turning the knob this indicates the device is at maximum pressure. Forcefully turning the knob will damage the regulator. Note: The Pediatric PTS limits the maximum pressure to 130 mmHg, with a back up safety feature limiter of 140 mmHg +/- 5 mmHg. If 140 mmHg is reached, the unit will vibrate. This is normal. Using the Suction Control Knob, dial the pressure back down and reset the pressure as previously instructed.**
- **Fourth**, if the unit also has Intermittent capabilities, you may turn the Mode Selector Switch to the “IOIO” or Intermittent position:
  - The unit starts the Intermittent cycle in the “ON” position so that suction is being applied.
  - Push the Suction Control Knob. The pressure that was set in “I” or Continuous mode, should register the same in the “IOIO” or Intermittent mode.
  - By setting a specific pressure in the “I” Continuous mode, you have also enabled the same maximum pressure in the “IOIO” or Intermittent mode.
  - If you require a different maximum pressure, move the Selector Switch back to Continuous Mode, follow the already covered procedure to set pressure, and move the Selector switch to Intermittent mode.
  - The PTS regulator should cycle both “on” and “off” in the Intermittent mode position.
Operating the regulator (PTS NEONATAL Brand):

- **First**, review the parts of the PTS Regulator:
  - Vacuum Gauge: Analog or Digital
  - Mode Selector Switch
  - Suction Control Knob

- **Second**, in the “OFF” position no suction is applied to the patient

- **Third**, turn the Mode Selector Switch to the “I” or Continuous position:
  - Suction is now continuous to the patient and can be adjusted with the Suction Control Knob.
  - Push and rotate the Suction Control Knob until the vacuum gauge indicates the required setting and release knob.
  - By setting the pressure to a specific mmHg, you have now set the maximum pressure.
  - It is normal to see pressure drop on the gauge after releasing the knob, as the system is open. You do not need to reset pressure. You have already effectively set the maximum pressure from previous steps.
  - **Take caution not to over-rotate the knob.** Once you feel resistance while pushing and turning the knob this indicates the device is at maximum pressure. Forcefully turning the knob will damage the regulator. **Note:** The Neonatal PTS limits the maximum pressure to 100 mmHg, with a back up safety limiter of 110 mmHg +/- 5 mmHg. If 110 mmHg is reached, the unit will vibrate. This is normal. Using the Suction Control Knob, dial the pressure back down and reset the pressure as previously instructed.

- **Fourth**, if the unit also has Intermittent capabilities, you may turn the Mode Selector Switch to the “IOIO” or Intermittent position:
  - The unit starts the Intermittent cycle in the “ON” position so that suction is being applied.
  - Push the Suction Control Knob. The pressure that was set in “I” or Continuous mode, should register the same in the “IOIO” or Intermittent mode.
  - By setting a specific pressure in the “I” Continuous mode, you have also enabled the same maximum pressure in the “IOIO” or Intermittent mode.
  - If you require a different maximum pressure, move the Selector Switch back to Continuous Mode, follow the already covered procedure to set pressure, and move the Selector switch to Intermittent mode.
  - The PTS regulator should cycle both “on” and “off” in the Intermittent mode position.