**What To Check During System Operation**

- **Verifying Suction Operation Via The Suction Monitor Bellows**
  The bellows located in the suction monitor will expand only when suction is operating. The monitor bellows will not expand when suction is not operating or disconnected. The calibrated mark allows quick and easy confirmation of suction operation over a wide range of continuously adjustable suction control settings.

- **Changing Suction Pressures**
  Suction regulator is preset to -20cmH₂O and can be adjusted from -10cmH₂O to -40cmH₂O. To change suction setting, adjust rotary suction regulator dial located on the side of the drain. Dial down to lower suction pressure and dial up to increase suction pressure.

- **Increase Vacuum Source When Bellows Is Not Expanded To Mark**
  If the bellows is observed to be expanded, but less than the mark, the vacuum source pressure must be increased to -40mmHg or higher.

- **Manual High Negativity Vent**
  To manually vent the system of high negative pressure, depress the filtered manual vent located on top of the drain until bubbling occurs in the air leak monitor. Do not use vent when suction is not operating or when the patient is on gravity drainage.

- **Automatic High Negativity Relief**
  The Express incorporates an advanced automatic high negativity relief valve. This filtered valve activates automatically to limit system pressure to approximately -30cmH₂O.

- **Placement Of Unit**
  Always place chest drain below the patient’s chest in an upright position. To avoid accidental knockover hang the system bedside with the hangers provided.

- **Vacuum Indicator**
  When vacuum is present in the collection chamber, a symbol will remain visible in the vacuum indicator window. When vacuum is not present (atmospheric pressure) no symbol will appear. All patient tube connections and the vacuum indicator window should be checked regularly for vacuum confirmation.

- **Positive Pressure Relief Protection**
  Atrium’s positive pressure valve, located on top of the drain, opens instantly to release accumulated positive pressure. Do not obstruct the positive pressure valve.

- **Graduated Air Leak Monitor**
  The graduated air leak monitor is pre-filled. If fluid level adjustment is necessary, acquire a luer-lock syringe and add sterile water via the needleless injection port located on the back of the drain. When air bubbles are observed going from right to left, this will confirm a patient air leak. Continuous bubbling will confirm a persistent air leak. Intermittent bubbling will confirm the presence of an intermittent air leak. No bubbling will indicate no air leak is present.

- **Recording Drainage Volume**
  The collection chamber incorporates a writing surface with easy-to-read fluid level graduations. Please refer to individual product inserts for specific model calibrations.

**Frequently Asked Questions**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What should I do if the chest drain gets knocked over?</td>
<td>We recommend that the drain be placed back into the upright position, however it will continue operating if knocked over.</td>
</tr>
<tr>
<td>What should I do if the air leak monitor is not to the fill line?</td>
<td>In the event the pre-filled air leak monitor experiences fluid migration during shipping and handling or evaporation due to long term storage, the air leak monitor may require fluid level adjustment. If necessary, acquire a luer-lock syringe (no needle) and add sterile water or sterile saline to adjust to the proper fill indication via the needleless injection port located on the rear of the air leak monitor.</td>
</tr>
<tr>
<td>When will I see a rise in the air leak monitor column?</td>
<td>A rise in the air leak monitor column will only be seen if there is an increase in negative pressure on the patient side. When changing suction pressure from a higher to lower level, depress the manual high negativity vent to reduce excess vacuum to the lower prescribed level.</td>
</tr>
<tr>
<td>Why is the air leak monitor pre-filled?</td>
<td>The air leak monitor is for diagnostic purposes only and is not required for seal protection or drain operation. The graduated air leak monitor with redundant water seal protection is pre-filled as a convenience for air leak detection.</td>
</tr>
</tbody>
</table>