

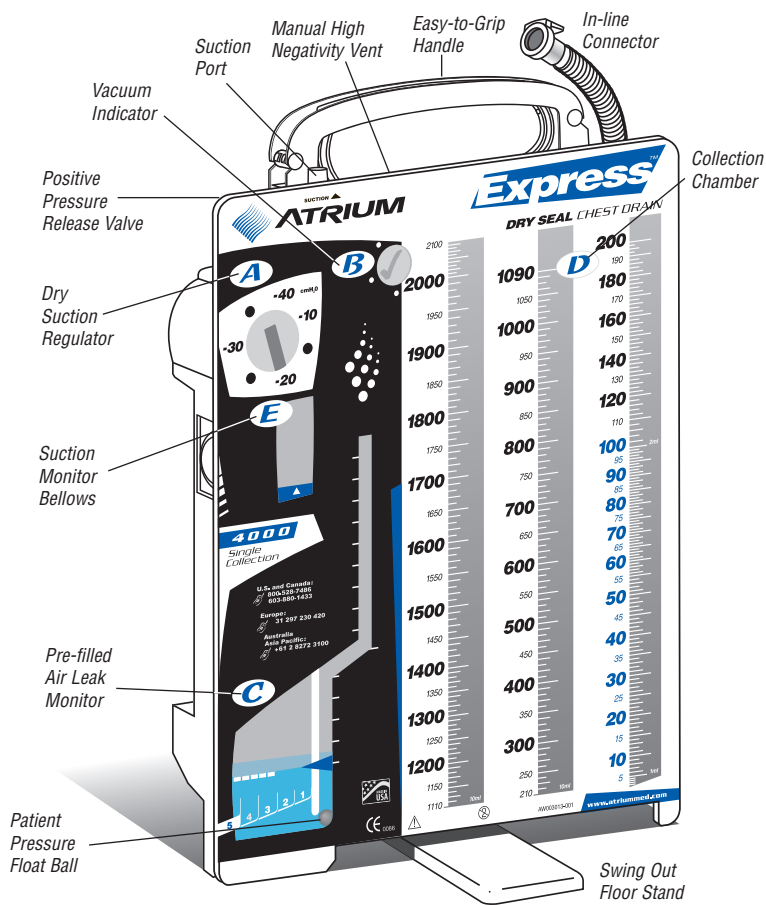


# ATRIUM

# Express™

## DRY SEAL CHEST DRAIN

### Pre-filled Air Leak Monitor



## Set Up

### Step 1

#### Connect Patient Tube To Patient

Connect chest drain to patient prior to initiating suction.

### Step 2

#### Connect Suction To Chest Drain

Attach suction line to suction port on top of chest drain.

### Step 3

#### Turn Suction Source On

Increase suction source vacuum to -80mmHg or higher. Suction regulator is preset to -20cmH<sub>2</sub>O. Adjust as required.

### Step 4

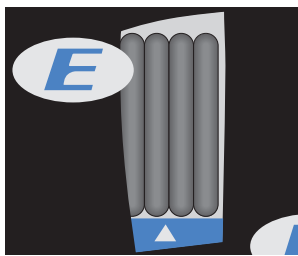
#### Pre-filled Air Leak Monitor

If necessary to adjust the air leak monitor, use luer-lock syringe (no needle) with sterile water or sterile saline via the needleless injection port located on the rear of the air leak monitor. Twist syringe onto needleless luer port and depress contents into air leak monitor until fluid reaches the fill line, do not overfill, then remove the luer-lock syringe.

## What To Check During System Operation

### Verifying Suction Operation Via The Suction Monitor Bellows

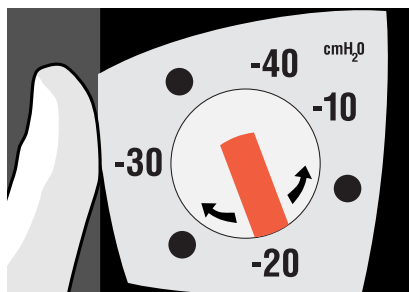
The bellows located in the suction monitor will expand only when suction is operating. The monitor bellows will not expand when suction is not operating or disconnected. The calibrated ▲ mark allows quick and easy confirmation of vacuum operation over a wide range of continuously adjustable suction control settings.



Bellows must be expanded to ▲ mark or beyond for a -20cmH<sub>2</sub>O or higher regulator setting.

### Changing Suction Pressures

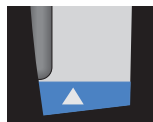
Suction regulator is preset to -20cmH<sub>2</sub>O and can be adjusted from -10cmH<sub>2</sub>O to -40cmH<sub>2</sub>O. To change suction setting, adjust rotary suction regulator dial located on the side of the drain. Dial down to lower suction pressure and dial up to increase suction pressure.



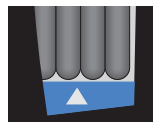
To lower regulator setting from a higher level (-40cmH<sub>2</sub>O) to a lower level (-20cmH<sub>2</sub>O), adjust regulator down to lower setting and then temporarily depress the manual high negativity vent located on top of the drain to reduce excess vacuum.

### Increase Vacuum Source When Bellows Is Not Expanded To ▲ Mark

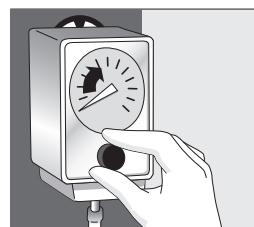
If the bellows is observed to be expanded, but less than the ▲ mark, the vacuum source pressure must be increased to -80mmHg or higher.



Not enough vacuum for -20cmH<sub>2</sub>O or higher suction control setting.



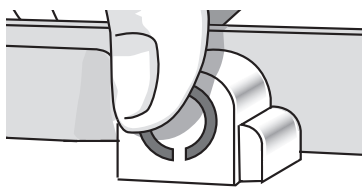
Normal suction operation for -20cmH<sub>2</sub>O or higher.



Increase suction source to -80mmHg 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 manual vent when suction is not operating or when the patient is on gravity drainage.**



Do not use when suction is not operating.

### 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 -50cmH<sub>2</sub>O.

### Placement Of Unit

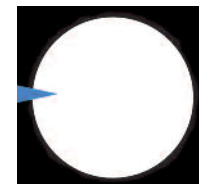
Always place chest drain below the patient's chest in an upright position. To avoid accidental knockover hang the system bedside with the hangers provided.

### 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.



Vacuum is Present



Vacuum is Not Present

### 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

**Q** What should I do if the chest drain gets knocked over?

**A** We recommend that the drain be placed back into the upright position, however it will continue operating if knocked over.

**Q** What should I do if the air leak monitor is not to the fill line?

**A** 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.

**Q** When will I see a rise in the air leak monitor column?

**A** 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.

**Q** Why is the air leak monitor pre-filled?

**A** 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.

**Have a question or need help in a hurry? Call Atrium toll free at 1-800-528-7486.**

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