

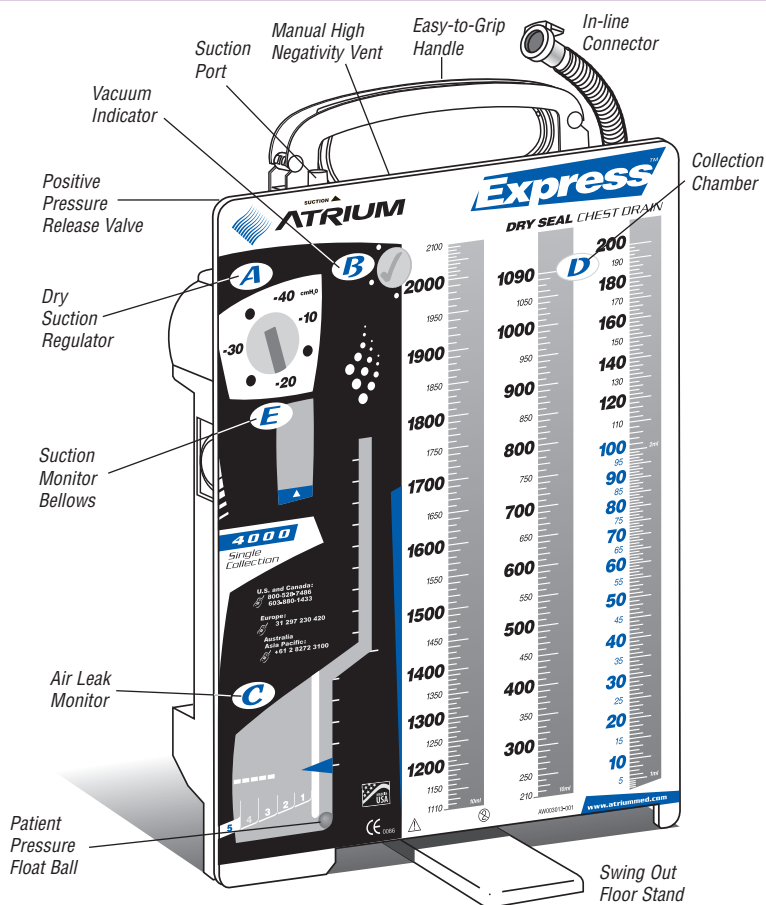
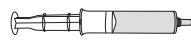


# ATRIUM

# Express™

## DRY SEAL CHEST DRAIN

### Pre-Packaged Water Syringe



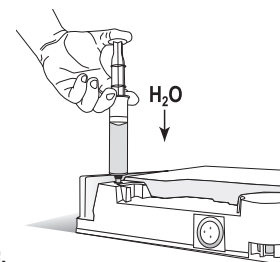
## Set Up

**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.

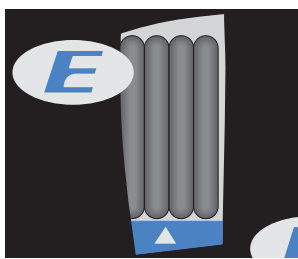
**Step 4**  
**Fill Air Leak Monitor (C) To Fill Line**  
Fill air leak monitor to the fill line by syringe (no needle) with 30ml of sterile water or sterile saline via the needleless injection port located on the back of the drain. For models available with sterile fluid, twist top off syringe and insert tip into needleless luer port. Depress syringe plunger into luer port and squeeze contents into air leak monitor until fluid reaches fill line.



## What To Check During System Operation

### Verifying Suction Operation Via The Suction Monitor Bellows

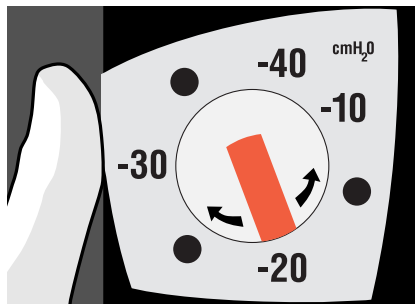
The bellows located in the suction monitor will expand only when suction is operating. The monitor bellows will not expand when suction is not operating or disconnected. The calibrated ▲ mark allows quick and easy confirmation of vacuum operation over a wide range of continuously adjustable suction control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



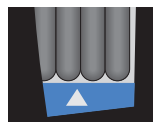
To lower regulator setting from a higher level (-40cmH<sub>2</sub>O) to a lower level (-20cmH<sub>2</sub>O), adjust regulator down to lower setting and then temporarily depress the manual high negativity vent located on top of the drain to reduce excess vacuum.

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

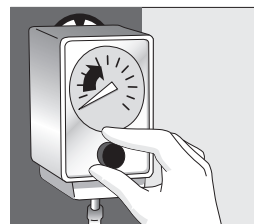
If the bellows is observed to be expanded, but less than the ▲ mark, the vacuum source pressure must be increased to -80mmHg or higher.



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



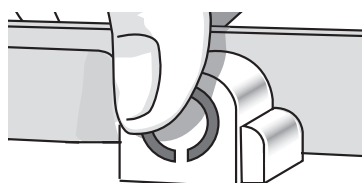
Normal suction operation for -20cmH<sub>2</sub>O or higher.



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

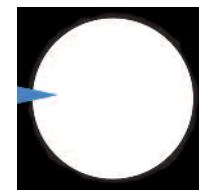
Always place chest drain below the patient's chest in an upright position. To avoid accidental knockover hang the system bedside with the hangers provided.

### 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

Fill the graduated air leak monitor with 30ml sterile water or sterile saline to the fill line 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** Is it required to fill the air leak monitor?

**A** The air leak monitor should be filled for confirmation and detection of air leaks.

**Q** What does it mean when the vacuum indicator ✓ is visible?

**A** The ✓ indicates that there is vacuum present in the system (negative pressure, i.e. -20cmH<sub>2</sub>O).

**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.

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

Europe: +31-297-230-420

Australia

Asia Pacific: +61-2-8272-3100

[www.atriummed.com](http://www.atriummed.com)