

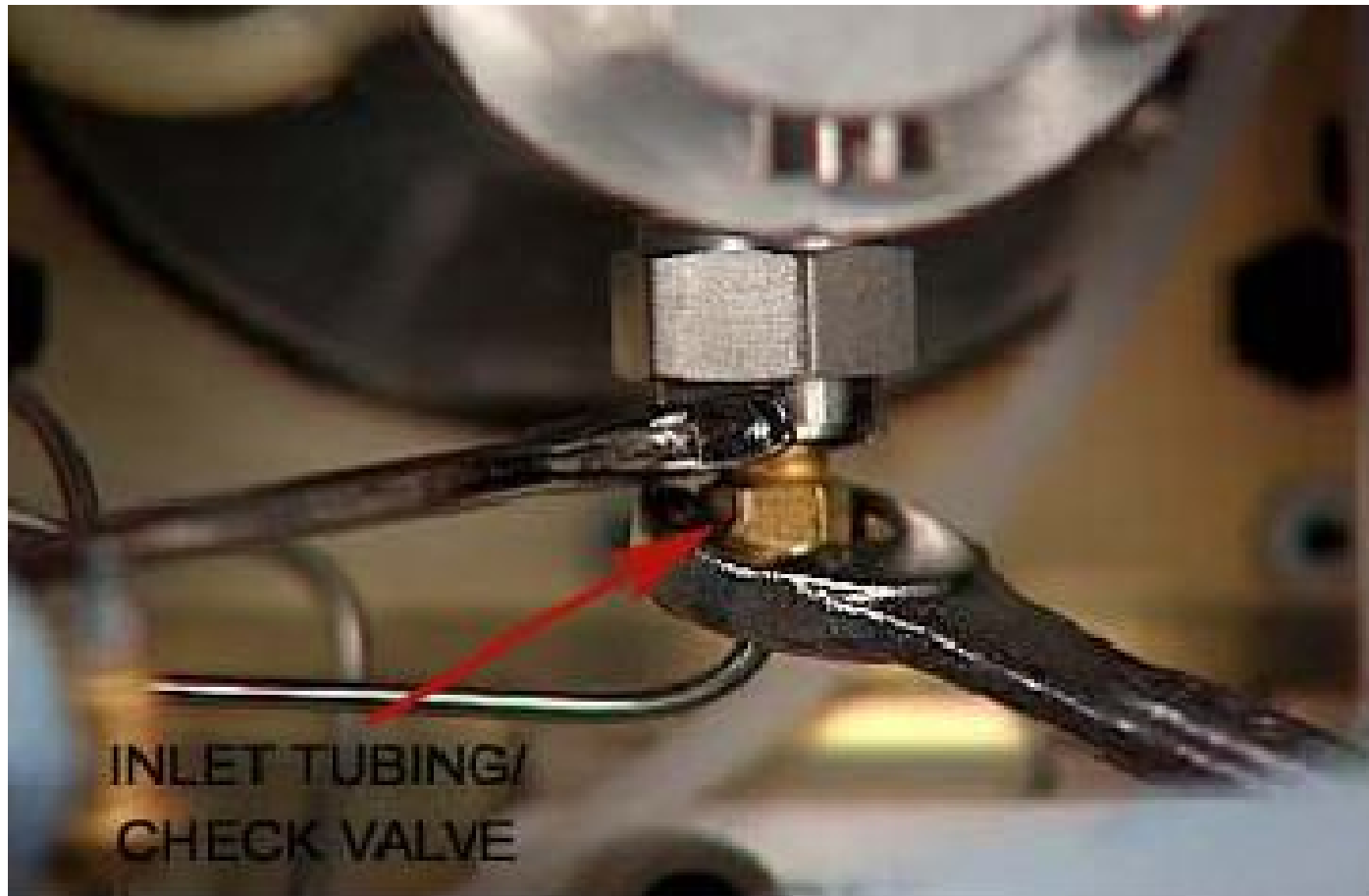
Chapter Two

Replacing a Check Valve

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

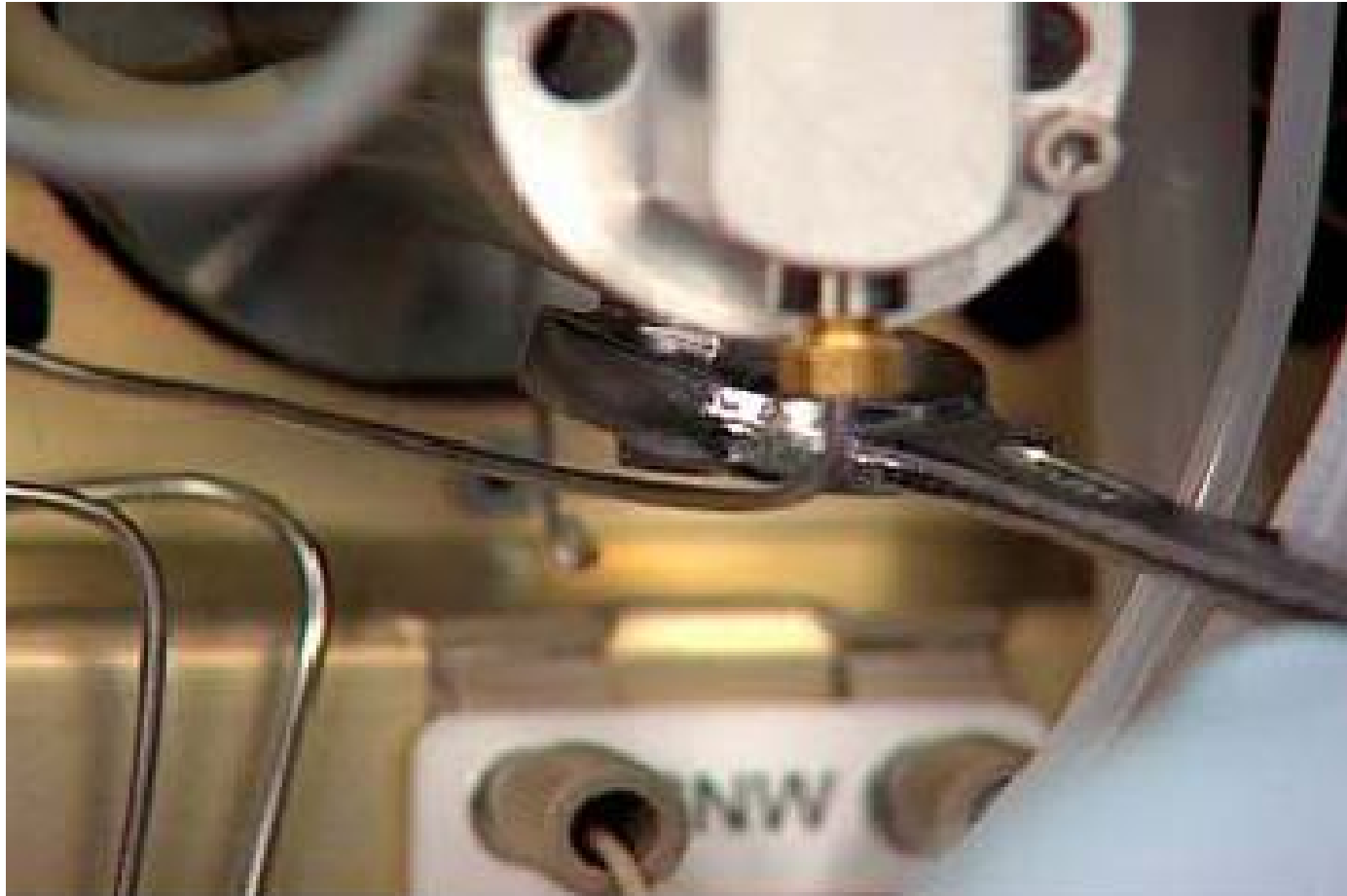
- Replacing the check valve.
- Priming the pump.
- Performing the static decay test.

Removing the Check Valve



Removing Inlet Tubing

Replacing the Check Valve



Removing Check Valve

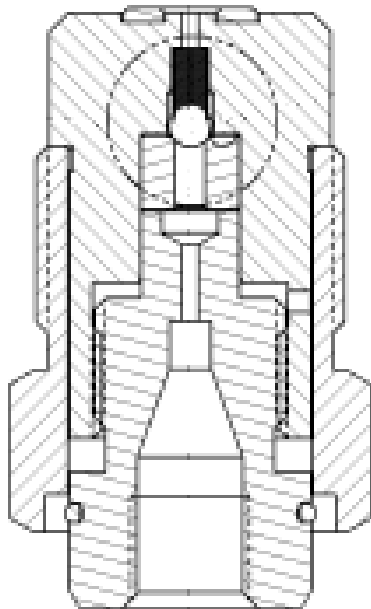
Parts Required



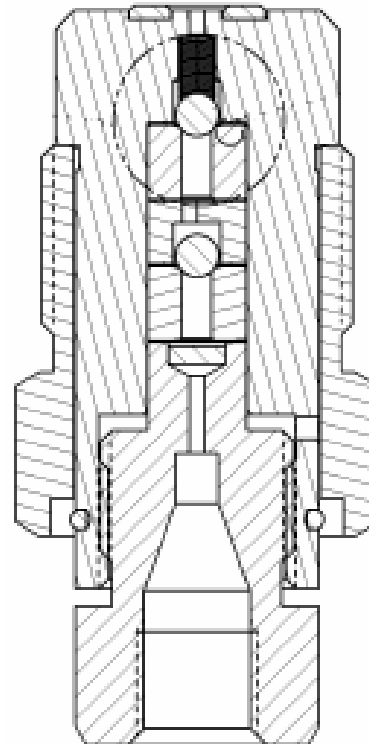
Part Number	Description
700002596	Primary Check Valve
700002968	Accumulator Check Valve

Check Valve Comparisons

Primary
without filter assembly
700002596



Accumulator
with dual ball and seat
700002968

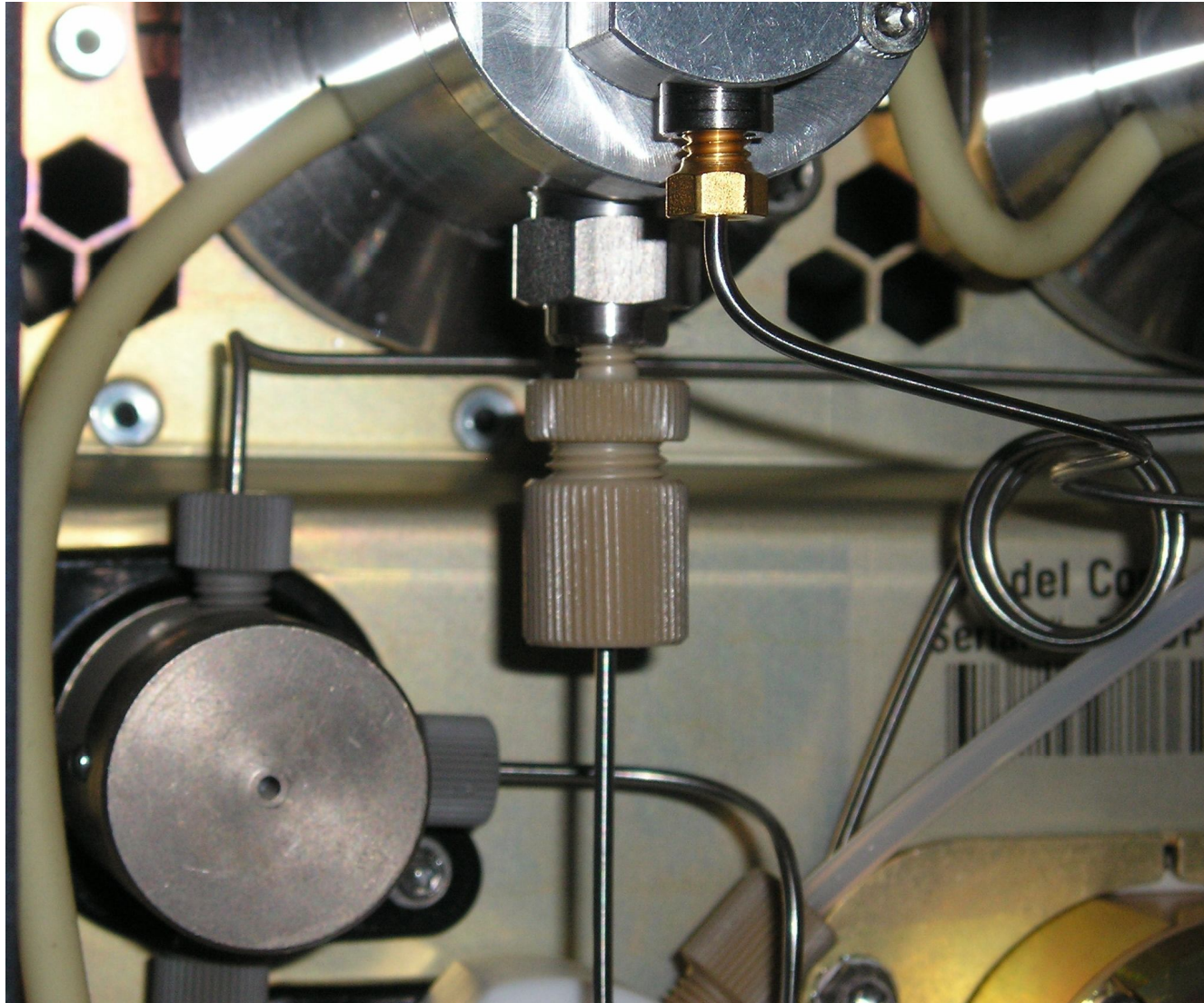


Installing Check Valve

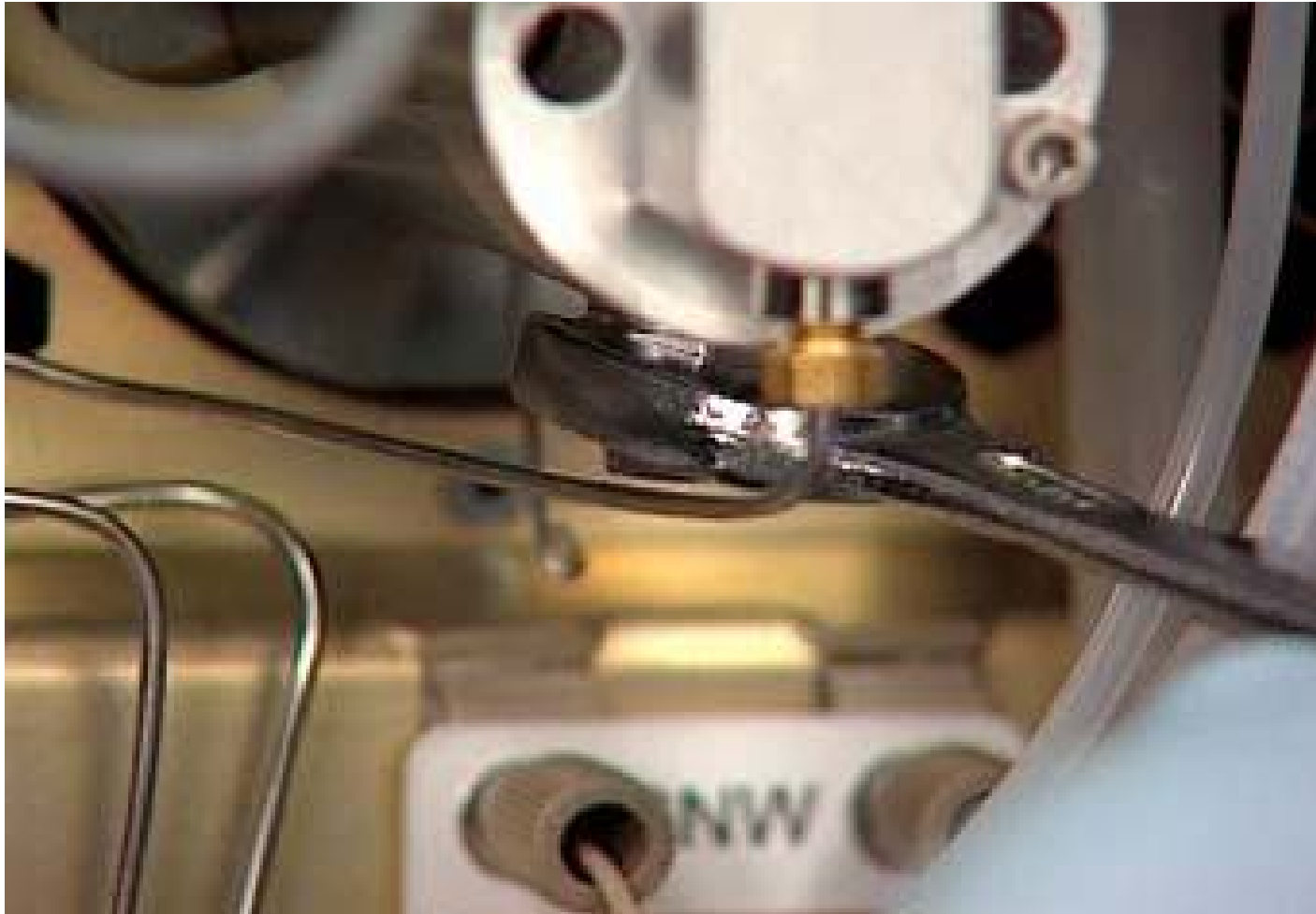
- Install check valve:
 - Finger tight + $\frac{1}{8}$ turn
- Tighten compression screw
 - Finger tight + $\frac{1}{4}$ turn
 - $\frac{3}{4}$ turn for new tubing



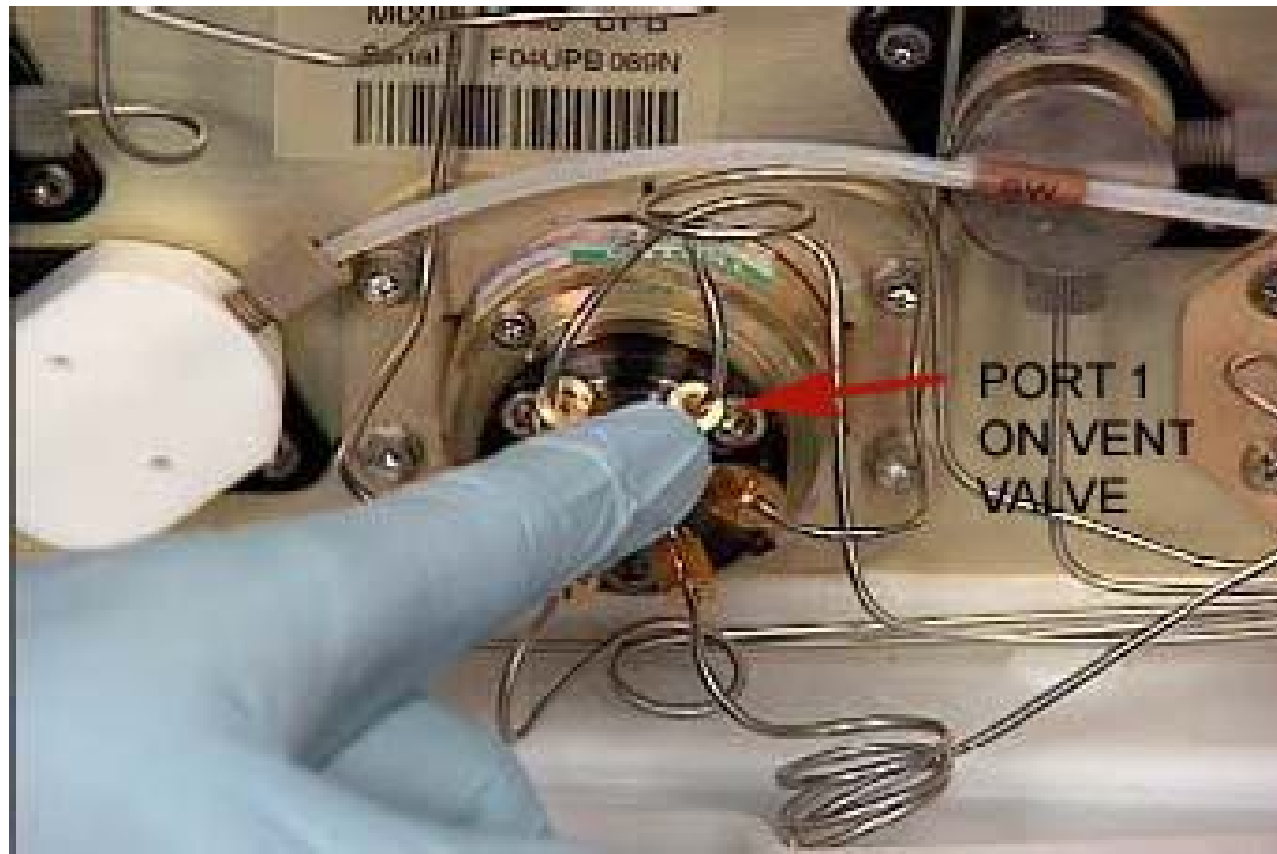
Primary Filter Assembly



Replacing the Accumulator Check Valve

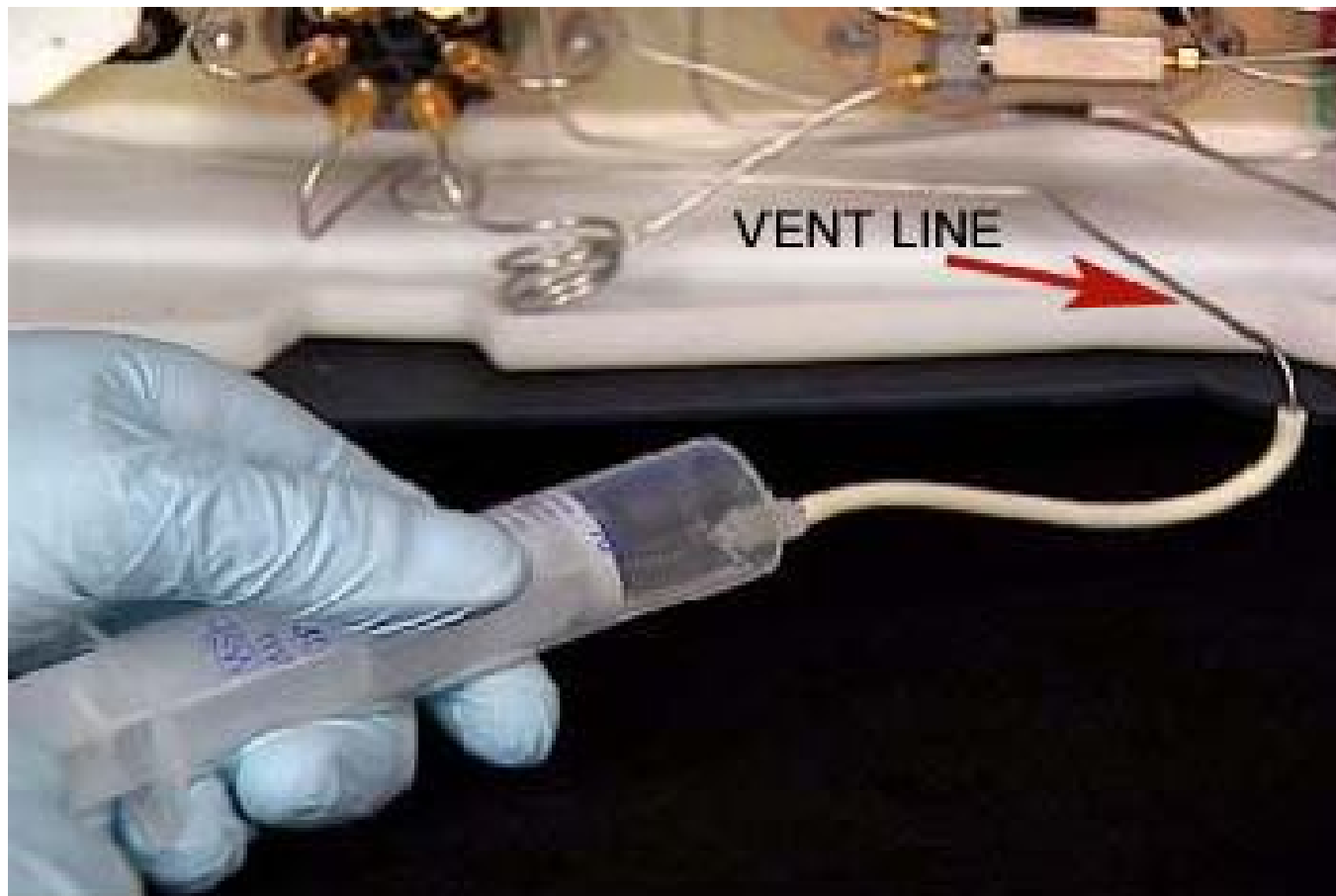


Priming the Pump



Port 1 on Vent Valve

Priming the Pump



Solvent Vent Line

Prime Solvent Lines

The screenshot displays the ACQUITY UPLC Console for System ACQUITY_UPLC3 on Node CORE-EMPOWER-27. The Binary Solvent Manager (BSM) is active, showing a menu with options: Set flow..., Stop flow, Prime A/B solvents..., Prime seal wash, and Reset BSM. The BSM Pumped Volume is 0.790 L. The Degasser pressure is 0.46 psi[a] and the Vent Valve is set to System. The BSM Flow Rate is 0.000 mL/min. The BSM Composition A is 100.005%.

The Prime A/B Solvents dialog box is open, showing the Solvent Line(s) to Prime section. Solvent A is unchecked, and Solvent B is checked. The Time is set to 2.0 min. The Start button is highlighted by a mouse cursor.

Prime A/B Solvents

Solvent Line(s) to Prime

☐ A

☒ B

Time: min

Start Close

Priming the Seal Wash and Pump

The screenshot displays the ACQUITY UPLC Console for System ACQUITY 2 on Node EMPCLIENT - [Binary Solvent Manager]. The interface includes a sidebar with system components, a main control panel, and a performance section.

Control Panel:

- Set flow...
- Stop flow
- Prime A/B solvents...
- ☒ Prime seal wash
- Reset BSM

Performance Section:

- BSM Pumped Volume: 24.530 L
- pressure (psi, 1 min):

Minimum	Maximum	Delta
1314	1322	8

System Status:

- Degasser: 0.49 psi[a]
- Vent Valve: System

Plots:

- BSM System Pressure (psi vs Minutes)
- BSM Primary A (psi vs Minutes)
- BSM Accumulator A (psi vs Minutes)
- BSM Primary B (psi vs Minutes)
- BSM Accumulator B (psi vs Minutes)

Prime Seal Wash Dialog Box:

Prime Seal Wash

? Start priming seal wash?

Yes No

Priming the Seal Wash and Pump

