

How to prime the ICS-900 pump using Chromeleon 7.2 software

Air can collect in the heads of your pump and cause erratic pressures, noisy baselines, and/or pump under pressure errors. This is especially true for aqueous eluents. All pumps have a prime (purge) mode that will clear the air from the heads. During prime eluent (mobile phase) flows at a high flow rate through the heads into a waste container. The high flow rate is designed to flush out bubbles or to wet the pump if it is dry.



ICS-900 Pump Heads

Priming can be performed automatically via the Chromeleon control panel prime button (Figure 3) and/or manually with a syringe.

Automated priming increases the pump flow rate to 3 ml/min to remove residual air bubbles in the pump. Automated priming should be performed when the ICS-900 has been idle for more than 4 hours, the baseline is noisy, and/or pressure changes are greater than 3%.

Manual priming with a syringe should be completed if the eluent reservoir has run dry, or eluent is being changed. Always follow a manual prime with an automated prime.

Procedure

Note: During prime the flow rate increases to approximately 3 ml/min. If the Chromeleon ICS-900 front panel indicates a flow rate less than 3 ml/min adjust the flow to 3 ml/min. The pump pressure should be zero during priming.

For manual priming (Figure 2) attach a syringe to the secondary pump head waste line, open the prime port and pull the syringe plunger until the syringe fills with liquid.

For automated priming, open the waste valve on the secondary pump head by turning the knob one-quarter to one-half turn counterclockwise. (Figure 1). Open the Chromeleon instrument panel and select the Prime button to begin priming (Figure 3)

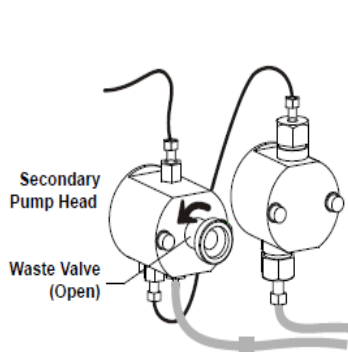


Figure 1

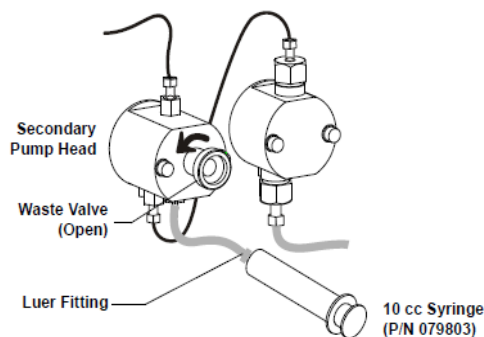
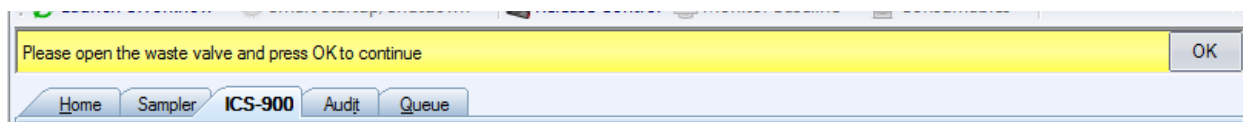


Figure 2



Figure 3

You will see the reminder message appear in Chromeleon to open your prime valve, select OK.



After prime starts you will hear the pump running and may see bubbles exiting the clear waste line coming out of the bottom of the secondary pump head. After 5 minutes, or until no air bubbles are present in the waste line, select OFF to stop priming.

Close the waste valve and reset your IC flow, and eluent concentration to your normal starting conditions.