

8. How to Fix Pump Errors and Problems

8-1. Less Flow Rate, Less Pump Pressure or Unstable Pump Pressure

There are a few possibilities to resolve these problems. Please try A to C as follows:

A. Remove Air from Pump Heads and Check Valves

If the pressure is unstable or lower than normal for the set flow rate, a small trapped air bubble in one of the pump heads or the check valves could be the cause of this problem. To remove the air bubble, please follow these steps:

- 1) Stop the pump.
- 2) Disconnect the pump inlet tubing at the outlet of the degasser.

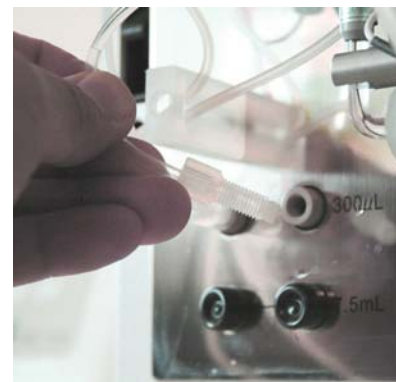


Fig. 10

- 3) Run the pump.
- 4) Open the pump drain valve and aspirate mobile phase slowly by using a syringe from the drain port so that the pump inlet tubing gets a half an inch of an air segment in the pump inlet tubing.
- 5) Connect the pump inlet tubing back to the degasser. (see Fig. 11)

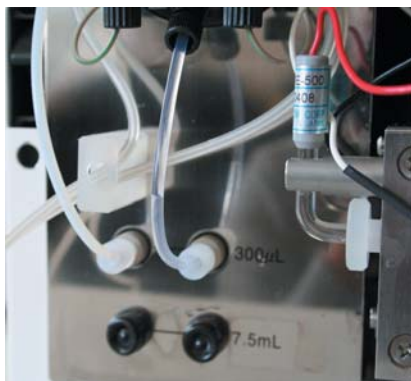


Fig. 11



Fig. 12

- 6) Aspirate the air you have inserted into the tubing along with mobile phase into the syringe. (see Fig. 12)
- 7) Close the drain valve.
- 8) Wait for a few minutes and see if the pump pressure goes back to the previous level and is stable.

If the problem does not get resolved, repeat these steps a few times and the pressure should become normal.