Venting Requirements

During normal operation, some of the vial headspace gas is vented to the outside of the Headspace Sampler. If the components of this gas are expected to be toxic or noxious, place the unit within a fume hood or attach a vent system, at atmospheric pressure, to the port on the sampler unit. Use a 1/8-inch Swagelok fitting for the connection. See Figure 4 for the location of the vent line.

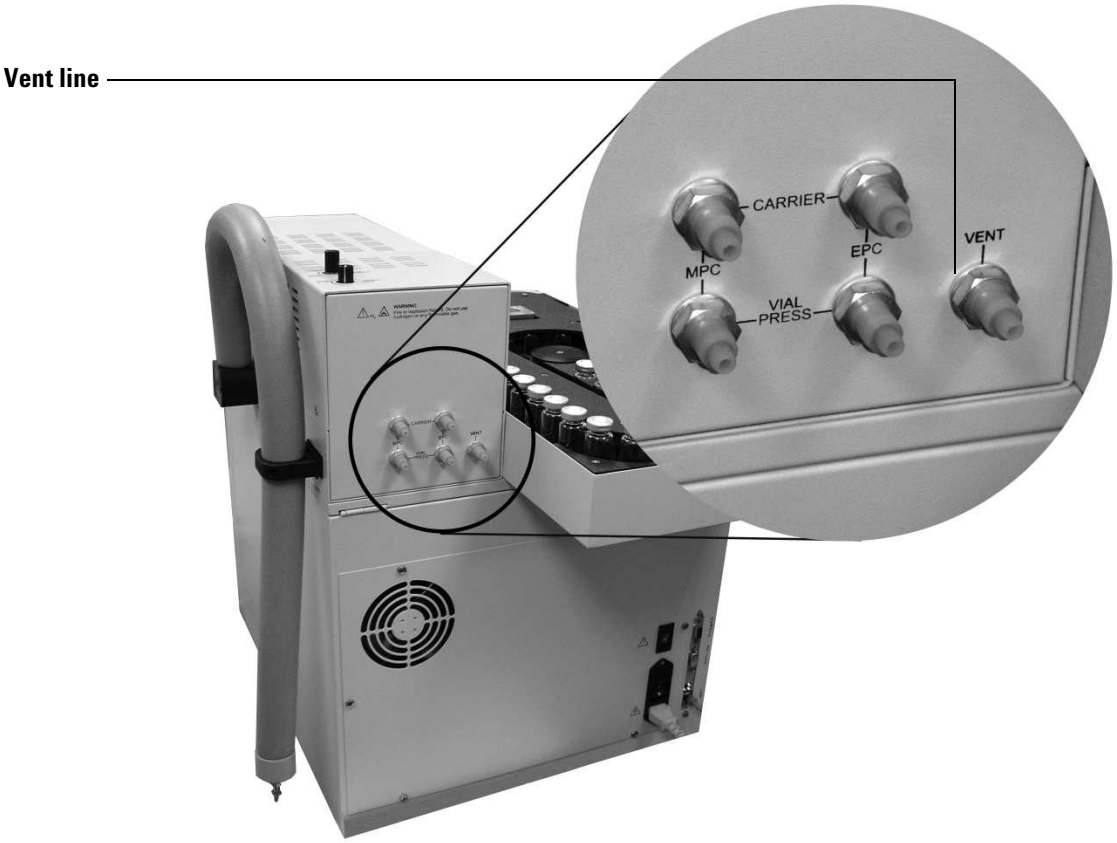


Figure 4 Location of vent line on back of instrument

Set the flow mode on the Headspace Sampler

Choose the flow mode for the carrier gas and vial pressurization gas and set the flow mode toggle switches on the headspace sampler.

1. Open the lid of the Headspace Sampler. Locate the two tabs near the top of the Headspace Sampler on the left and right sides. Push the tabs towards the back of the instrument and lift the lid. Use caution when opening the lid due to its weight. The lid locks in place when fully opened.
2. Set the toggle switches for carrier gas and vial pressurization gas on the underside of the Headspace Sampler lid to the necessary positions. See Figure 9. The factory default setting is MPC.

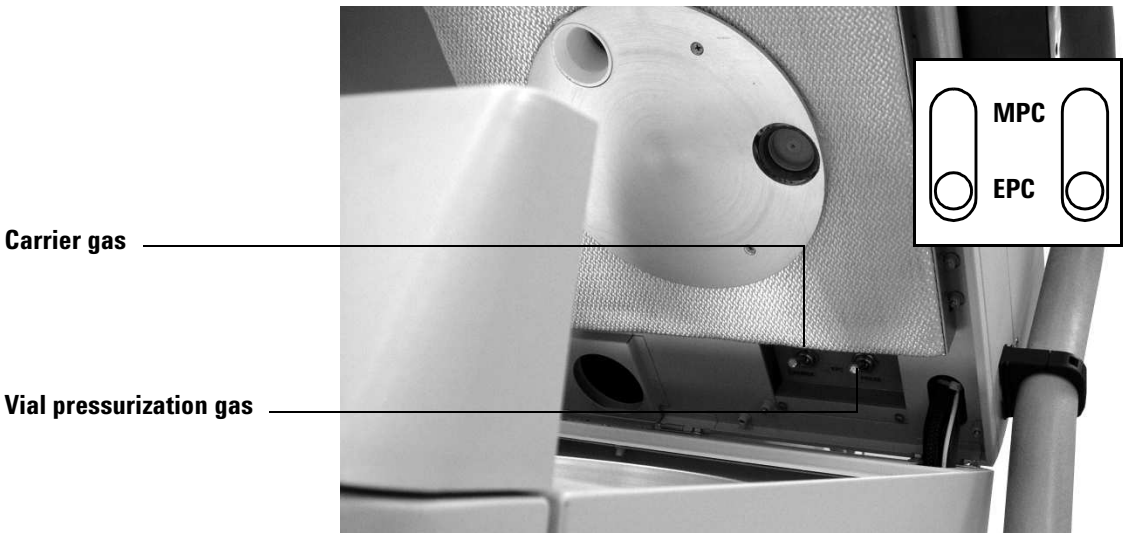


Figure 9 The pressure control toggle switches

Connect on/off valves to the gas input fittings

Install two on/off valves and tubing on the gas input fittings as shown in Figure 10. The figure shows a connection to the MPC input fittings.

- For **EPC**, use the fittings on the **right**
- For **MPC**, use the fittings on the **left**

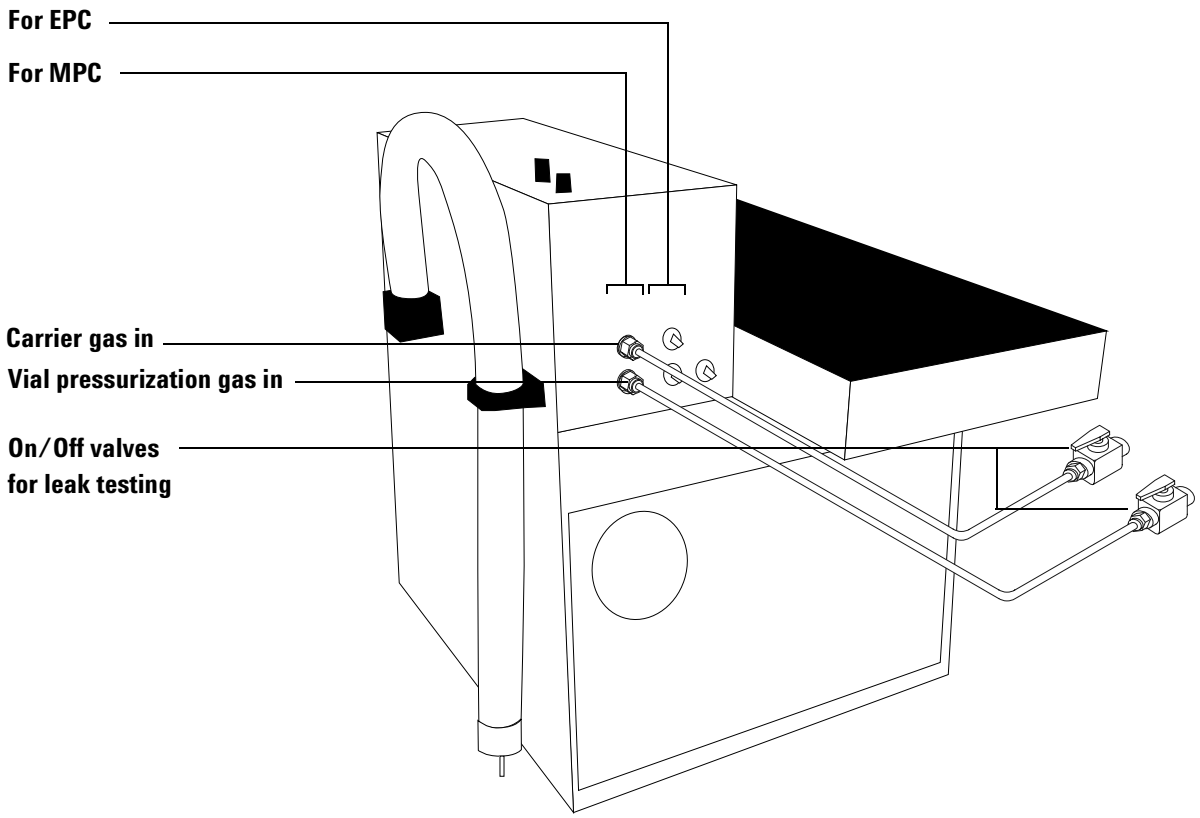


Figure 10 On/Off valves connected

MPC connections

Carrier gas and vial pressurization gas connections

If both the carrier gas and vial pressurization gas are MPC, Install a T-fitting to the on/off valves. Run a line from a pressure-regulated gas source to the T-fitting as shown in Figure 11.

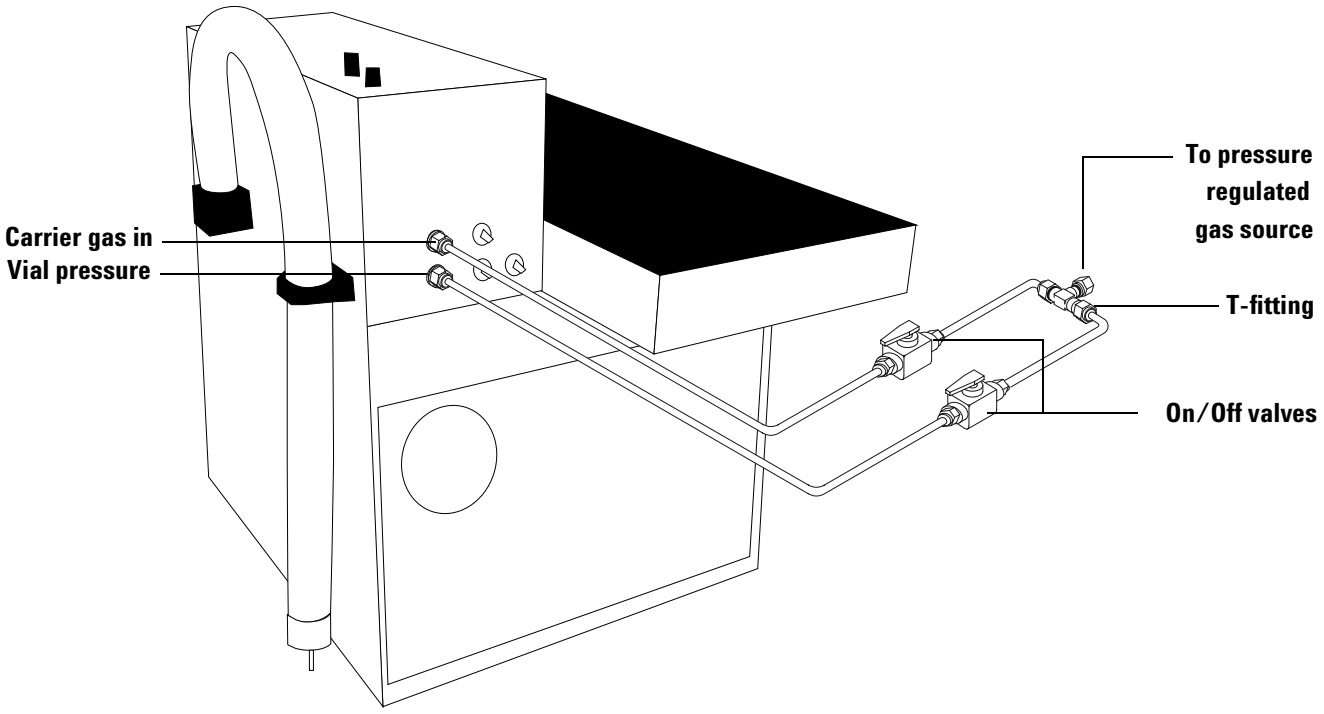


Figure 11 Carrier and vial pressure connections

If only one gas input fitting uses MPC, run a line from a pressure-regulated gas source directly to the on/off valve connected to the MPC gas input fitting.

EPC connections

Connect the vial pressurization gas for an EPC setup

An Auxiliary gas channel in the GC supplies vial pressurization gas. The following steps describe installation for a 6890 GC with EPC control of headspace. The installation procedure is similar for a 6850 GC.

1. If the GC does not have an Auxiliary EPC module, install the G1940A Headspace Interface Kit. Follow the instructions provided with that kit.
2. Install the external sampler interface kit (part no. G1888-60705) into the GC. Follow the procedure for installing onto a back-pressure regulated system.
3. Locate the block on the Auxiliary EPC module that connects the three gas outlet tubes for the auxiliary channels to the pneumatics module.
4. Remove the screw that holds the block to the pneumatics module. Pull the block free of the module and rotate it so that the frits are on top. See Figure 14.

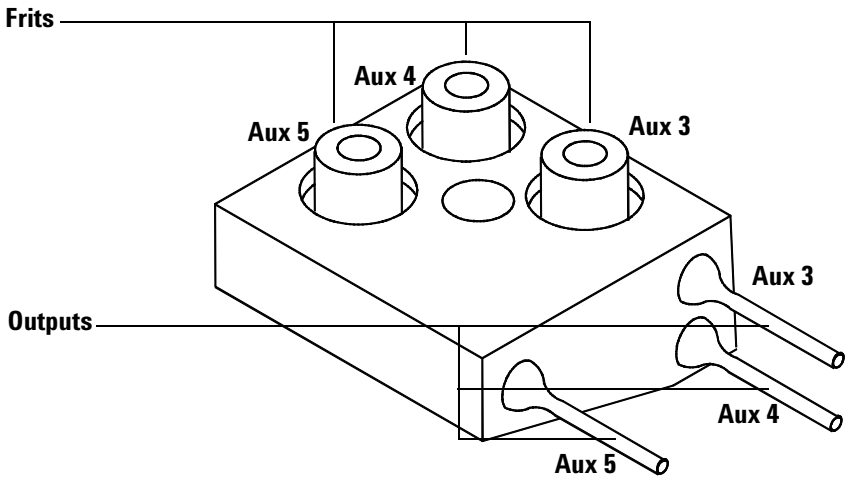


Figure 14 The Auxiliary EPC module gas outlet block

5 Choose a channel for the vial pressurization control. Remove that channel's frit from the block. Remove the O-ring that seals the channel.

6 Place an O-ring on a zero-resistance brass tube frit (part no. G1570-20540). Place the O-ring/frit combination in the block.

7 Reconnect the block to the pneumatics module. Tighten the screw.

8 Use tubing and Swagelok fittings to connect the appropriate Auxiliary module output, the bleed weldment, and the VIAL PRESSURE fitting to the on/off valve on the back of the Headspace Sampler as shown in Figure 15. Do not disturb the brass end on the bleed weldment.

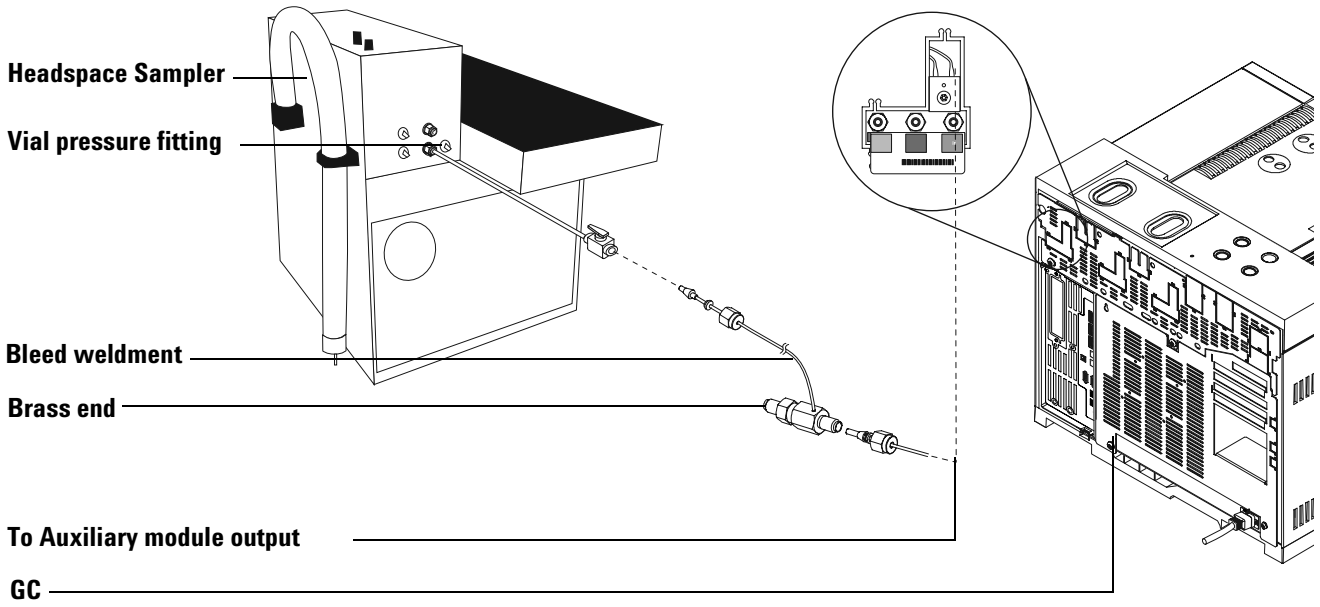


Figure 15 Connecting the Headspace Sampler to the auxiliary module

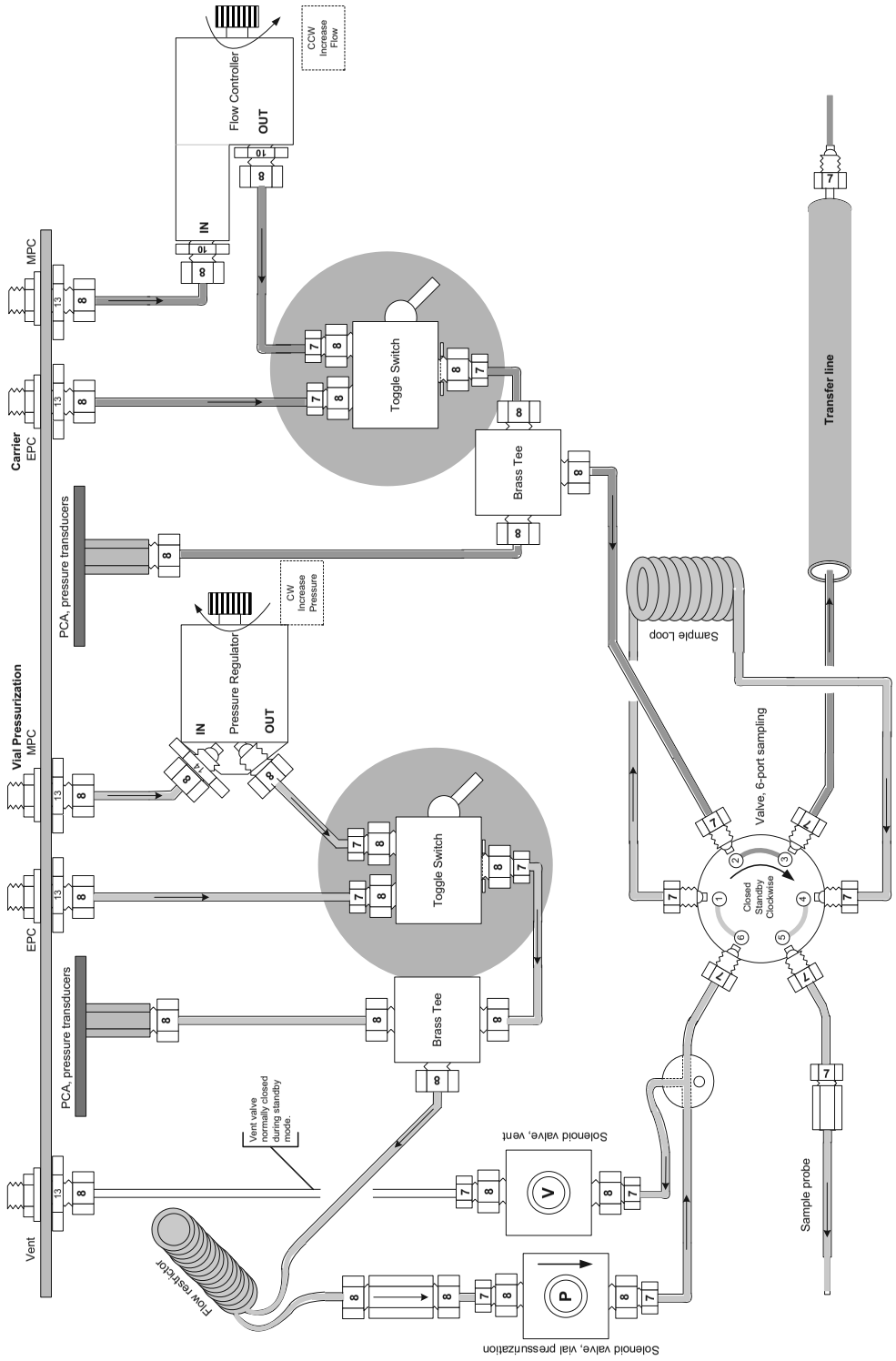


Figure 280 Flow path - standby