

August 2003

Information Sheet M010: BioTector Vacuum Sampler Service.

Recommended checklist for 6th month maintenance on the BioTector Vacuum Sampler.  
Special models / applications may require additional service items.

Replace the single pole 24v plug in relay for the Vacuum Pump. The relay type is OMRON G2R-1-SN.

Clean the vacuum sampler chamber and the conductivity probe.

Confirm that the PFA tubes in the vacuum sampler are clean and free from dirt.

Replace the 8mm EMPP 562 tube in the pinch valve in the vacuum sampler, any Y connectors in the system and any damaged tube clips (One Y connector is included in each service kit).

Confirm the valves in the vacuum sampler are working correctly.

Check the vacuum generated by the vacuum pump; the vacuum measured at the pump should be greater than 750mbar.

If the vacuum generated is less than 750mbar, the pump head may have to be cleaned or serviced. The PTFE coated diaphragm should be replaced if it is worn. If Kalrez valves are in good condition, then most of the compression -set marks on the valves can be removed by placing the valves in boiling water for 5 minutes. Allow the valves a further 10 minutes to cool before using them in the pump. If the valves are not in good condition, they should be replaced.

Check the vacuum generated by the vacuum sampler; the vacuum measured at the inlet of the vacuum sampler chamber should be greater than 740mbar.

Confirm that the conductivity probe is operating correctly.

Measure the time taken for the sample to fill the chamber, and confirm that it has not changed since the vacuum sampler was commissioned.