

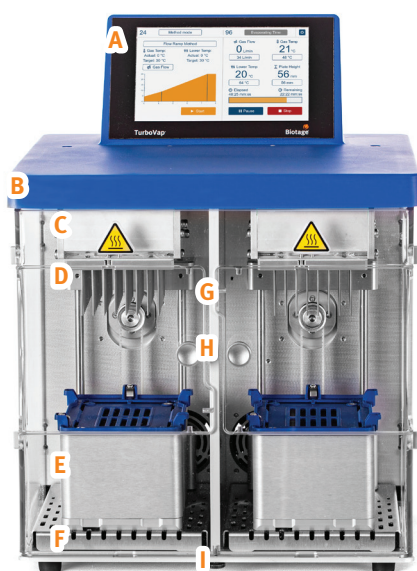
TurboVap® 96 Dual Quick Start Guide

System Maintenance

For instructions regarding Manual mode, Time mode, and software settings see the quick start guide **Set Up and Perform a Run**. For instructions regarding Method mode, see the quick start guide **Set up a Method**. For detailed instructions, see the **TurboVap® 96 Dual User Manual**. Patent pending.

Instrument Overview

There are three different manifolds configurations available for the system; 24, 48, and 96 gas nozzles. The well plate or rack must be compatible with the installed manifold.



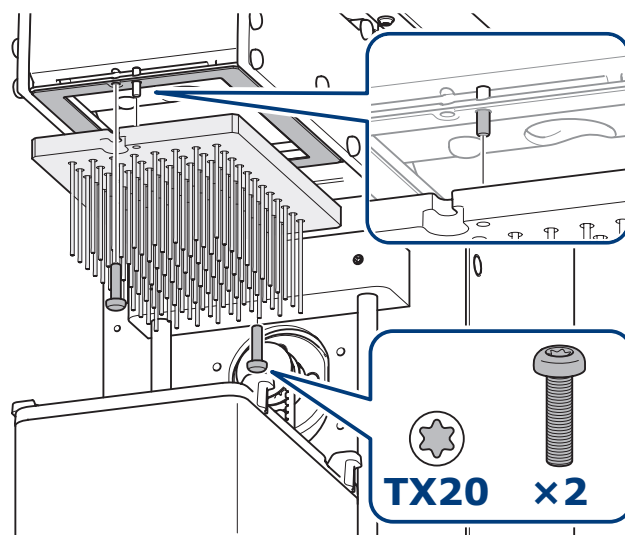
A	Touch screen	F	Lift
B	LED lights	G	Sensor
C	Gas heater	H	Doors
D	Manifold	I	Fume shield set screw
E	Plate heater		

Replace the Manifolds

Warning

- » The nozzles may have come into contact with harmful sample residues. Avoid contact.
- » Always turn off the system, unplug the power cord, and let the system cool down before performing maintenance.

- » Do not touch the inside of the gas heater. Touching may leave residues that can contaminate the following runs.
- » Ensure that the screws are tightened by hand using the Torx T20 key (P/N 411886).



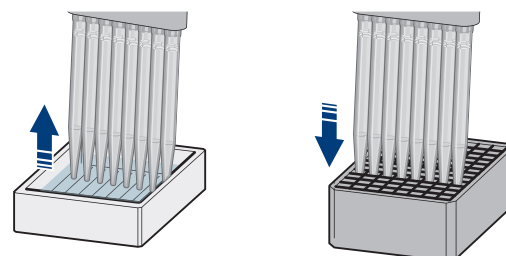
1. Loosen the fume shield set screw and remove the fume shield.
2. Replace the manifold.

Clean the Manifolds

Both methods require a well collection plate, 2 mL or larger, that fits the manifold that is to be cleaned.

After the manifold is cleaned, ensure that the nozzles are dry before initiating an evaporation run. Either wait until they are dry, or do a run with an empty cabinet and unheated gas. (25°C/77°F)

1. Fill the collection plate with an appropriate solvent. The solvent is dictated by analyte solubility:



Clean a Manifold in Place

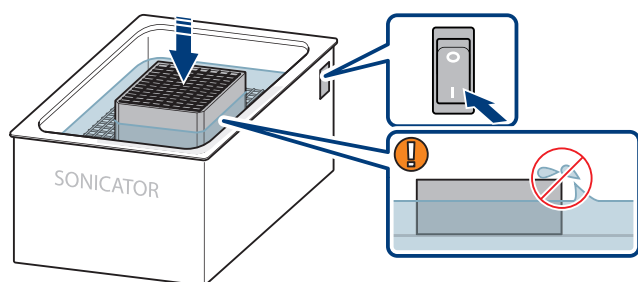
1. Put the collection plate on the plate heater under the manifold.
2. Close the door and use the user interface to lift the collection plate so the nozzles are submerged in the solvent. (Do not start a run.)
3. Keep the nozzles submerged in the solvent for 5-10 minutes.

Note: For polar analytes it is recommended to repeat step 1 to 4 with a high organic solvent combination after the high aq rinse.

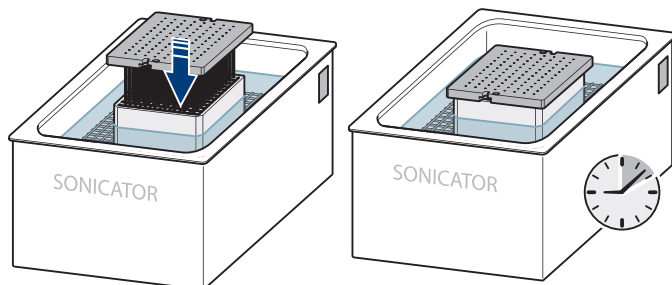
4. Lower the collection plate and remove it.

Clean a Manifold Outside of the Instrument

1. Remove the manifold.
2. Put the collection plate in a sonicator. Ensure that the water level is below the edge of the container. Water in the container will lead to contamination



3. Carefully lower the Manifold into the container and sonicate for 5-10 minutes.



4. Remove the assembly from the sonicator and either put the manifold into storage or attach it to the instrument.

Troubleshooting

Too Slow Evaporation	<ul style="list-style-type: none"> » Ensure that there is no leakage between the manifold and the plate heater by tightening the manifold screws using the supplied Torx T20 key (P/N 411886). » Ensure that the plate heater temperature is not too low. » Ensure that the gas flow is not too low. » Ensure that the gas inlet flow is not leaking.
Uneven Evaporation	<ul style="list-style-type: none"> » Inspect the nozzles for occlusion or debris. » Ensure that there are no bent nozzles. » Ensure that the manifold and the well plate are aligned. If they are misaligned, contact Biotage.
Too Low Recovery of Samples	<ul style="list-style-type: none"> » Ensure that the plate heater temperature is not too high. » Ensure that the gas flow is not too high. » Ensure that the sample is not left too long on the plate heater after the evaporation is completed.
Low or No Gas Flow	<ul style="list-style-type: none"> » Ensure that there are no leaks. » Ensure that the pressure meets the minimum pressure requirement. » Ensure that the provided inlet tube is used. A longer inlet tube may cause the pressure to drop.
Touch Screen Is Not Responding as Expected	<ul style="list-style-type: none"> » Calibrate the touch screen. See Troubleshooting in the User Manual.