

MiniCapt® Mobile

Compressed Gas Sampling Guide

Without measurement there is no control

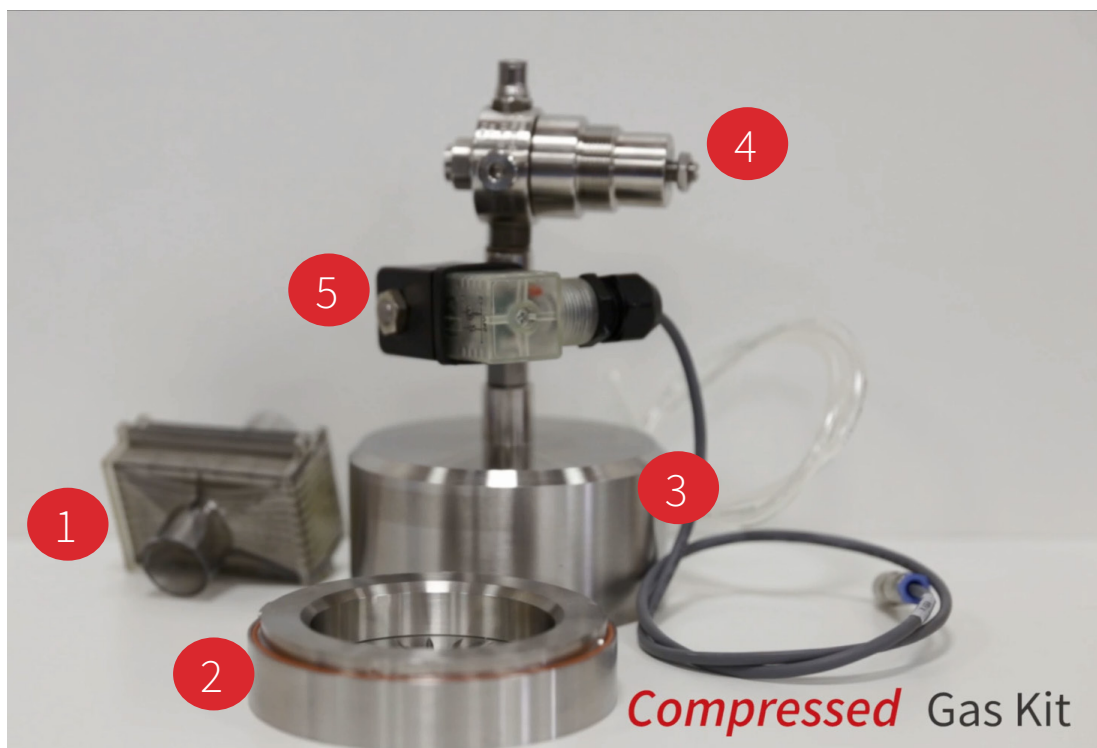


**PARTICLE
MEASURING
SYSTEMS®**

How to Sample Compressed Gas

1. Make sure you have all compressed gas kit components, described below.

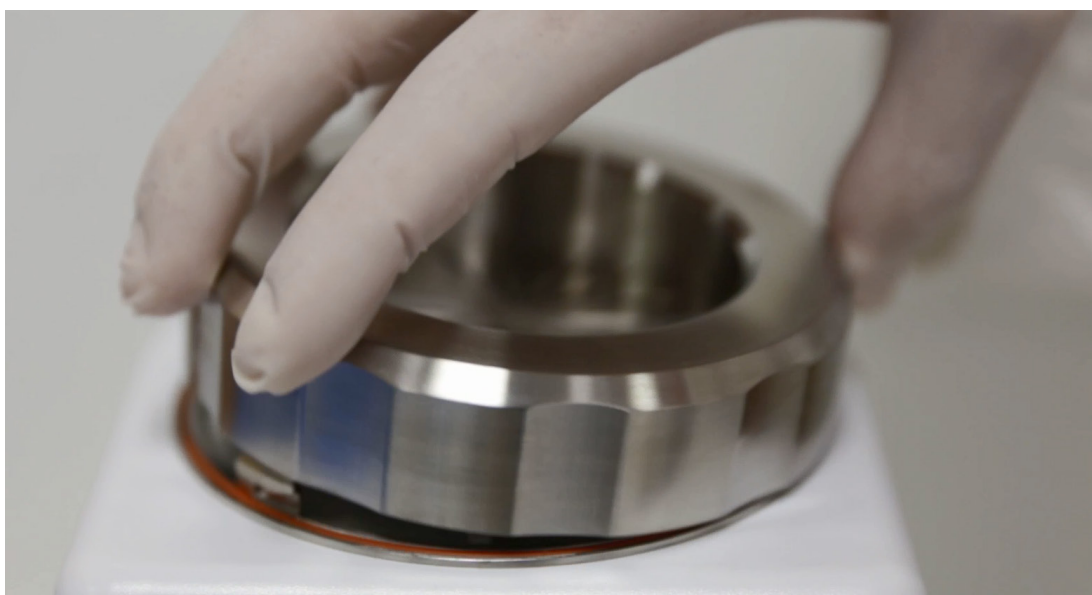
- 1 Hepa filter (a sterilized version, P/N 1000021454, is available from Particle Measuring Systems) **(1)**
- 1 dual connection impactor head **(2)**
- 1 diffusion chamber **(3)**
- 1 pressure regulator **(4)**
- 1 solenoid valve **(5)**



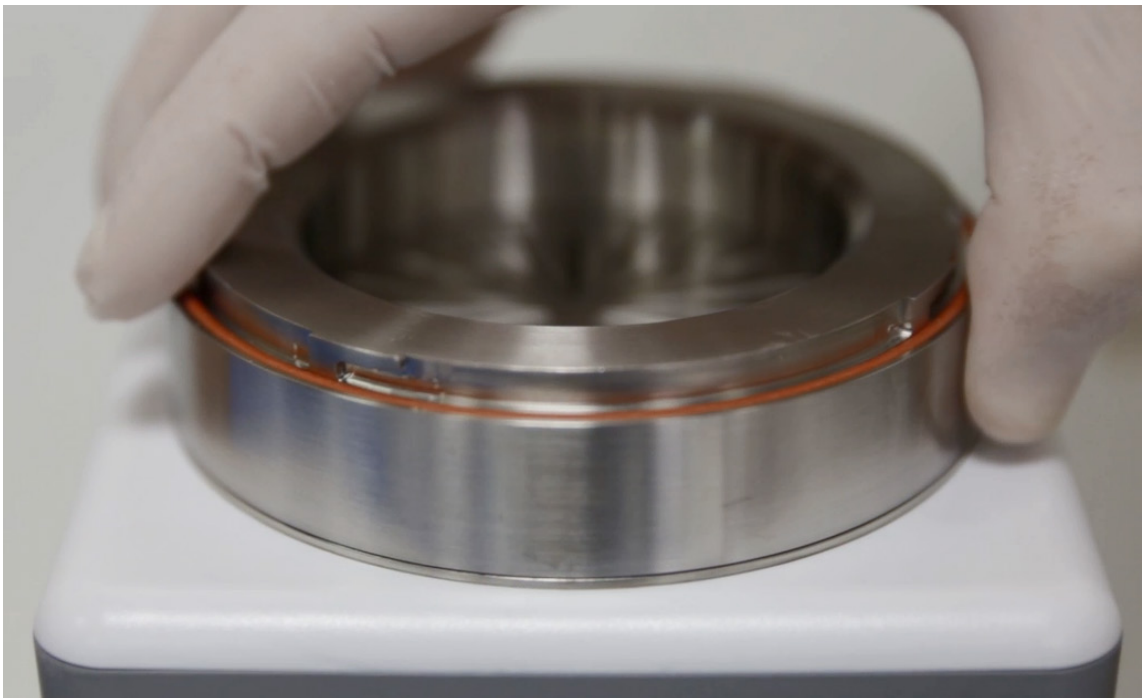
2. Connect the Hepa filter to the diffusion chamber's exhaust port.



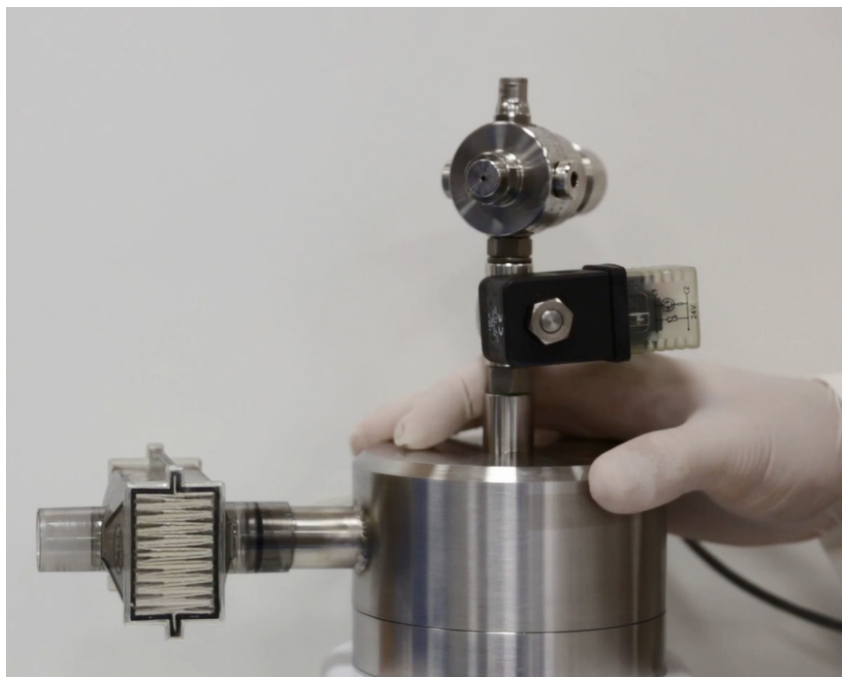
3. Remove the standard sampling impactor head (turn counter-clockwise).



- 4.** Install the dedicated dual connection impactor head (turn clockwise).



- 5.** Install the diffusion chamber on the top of the dual connection impactor head (turn clockwise).



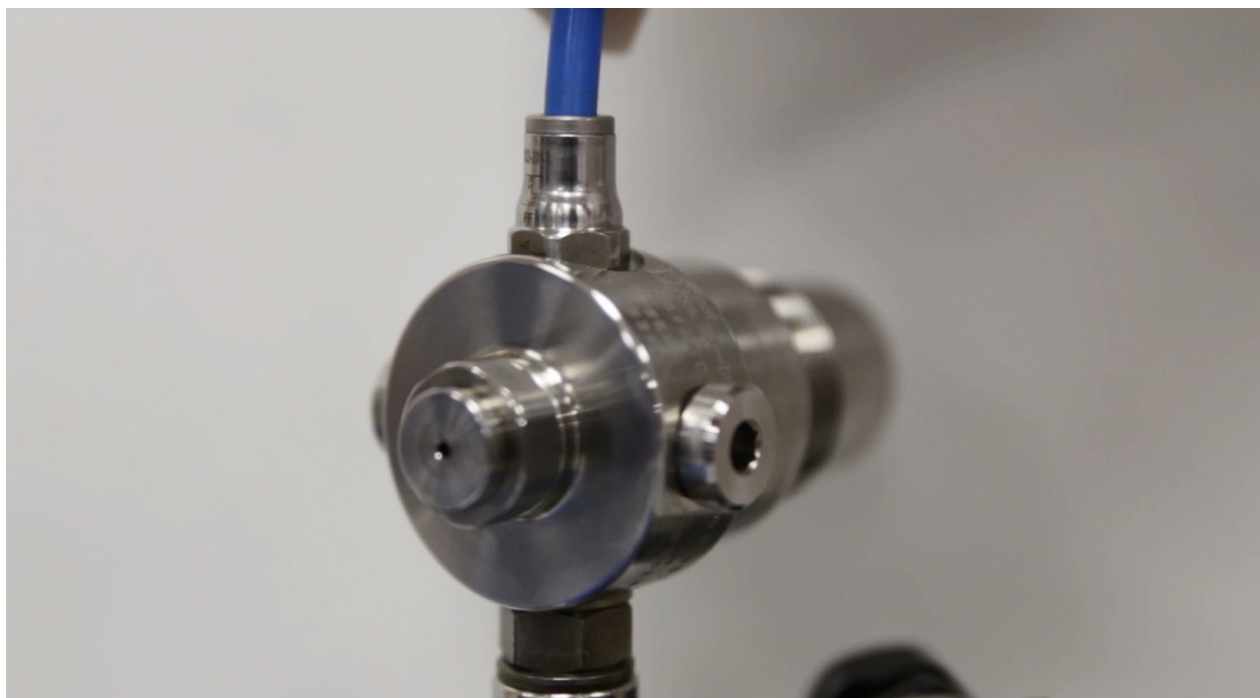
6. Open the connector door, located at the bottom left side of your MiniCapt Mobile Microbial air sampler, and connect the solenoid valve's activation cable. Tighten the banded screw clockwise for a more secure connection.



7. Connect the clear pressure tubing to the pressure sensor port.



8. Connect the compressed gas source to the Minicapt Mobile inlet port and turn on the instrument.





9. Make sure the Compressed Gas Line pressure is appropriate and within the allowed range for the specific Minicapt Mobile model you are using.
- *Minimum and maximum pressure limits are listed in the Minicapt Mobile Microbial Sampler Operations Manual*



10. Navigate to the *Pressure Settings* menu as shown.

1



2



3



4



11. Press the *Pressure Settings* button. The solenoid valve will automatically open, allowing gas to flow through the MiniCapt Mobile Microbial Sampler.

12. Unscrew the locking nut on the pressure regulator (turn counter-clockwise).



- 13.** Use a screw driver or a similar tool to adjust the differential pressure as specified in your *MiniCapt Mobile Operator's Manual, Appendix E*.



- 14.** To aid in your calibration, the MiniCapt mobile screen will show the differential pressure in pascal (Pa) units with different text colors indicating values inside and outside the accepted range. Values displayed in white are within range, while those outside of the accepted range are in red. Continue the adjustment until the value on the screen is white.

-0025

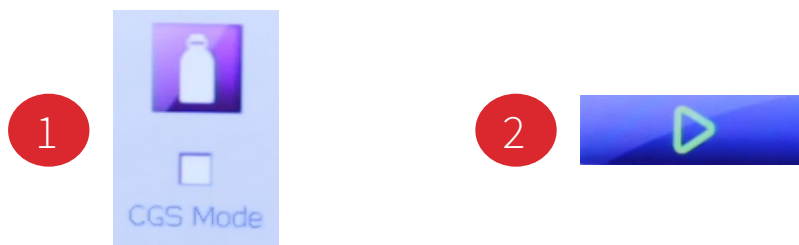
0135

**Note: The displayed values are examples and do not necessarily reflect the required pressure values specific to your MiniCapt Mobile unit. Please refer to Appendix E of your MiniCapt Mobile Operations Manual for your unit's specific optimal range of values.*

- 15.** After the pressure is adjusted, secure the pressure regulator by screwing the locking nut (turn clockwise). See **Step 12** for the locking nut's location.
- 16.** Touch the "X" button on the MiniCapt screen to exit the gas pressure setting process.

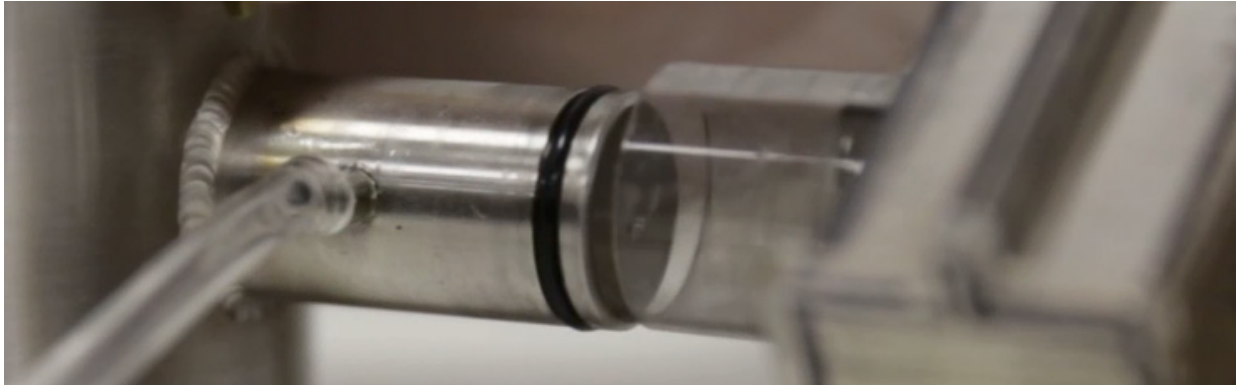


- 17.** If necessary, perform the MiniCapt adjustable plate regulation as described in the operator's manual to correctly set the slit inlet distance from the agar surface and maximize the microbial collection efficiency.
- 18.** Install the agar plate, configure the sample recipe, and run the compressed gas sample by checking the "CGS Mode" check box on the main screen before pressing the "Start" button.

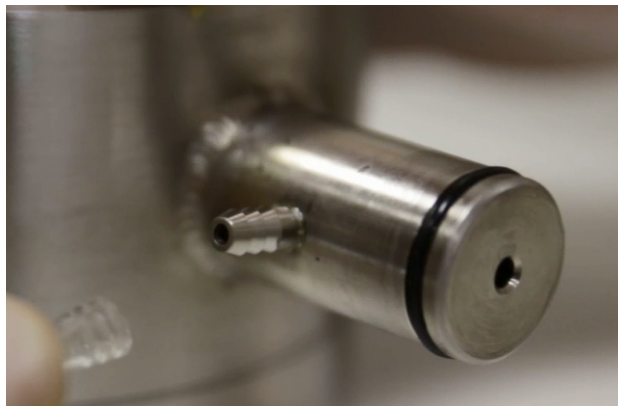


How to Disassemble Your Compressed Gas Kit for Autoclave Sterilization

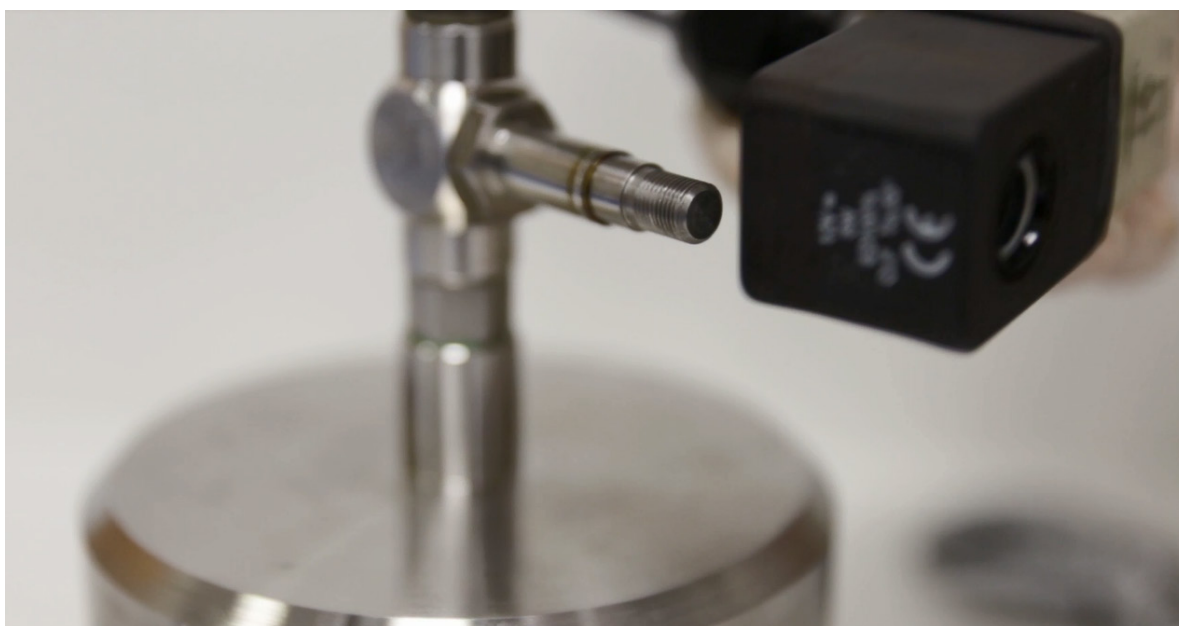
1. Remove the Hepa filter from the diffusion chamber's exhaust port. Pre-sterilized and gamma-irradiated filters (P/N 1000021454) are available from Particle Measuring Systems.



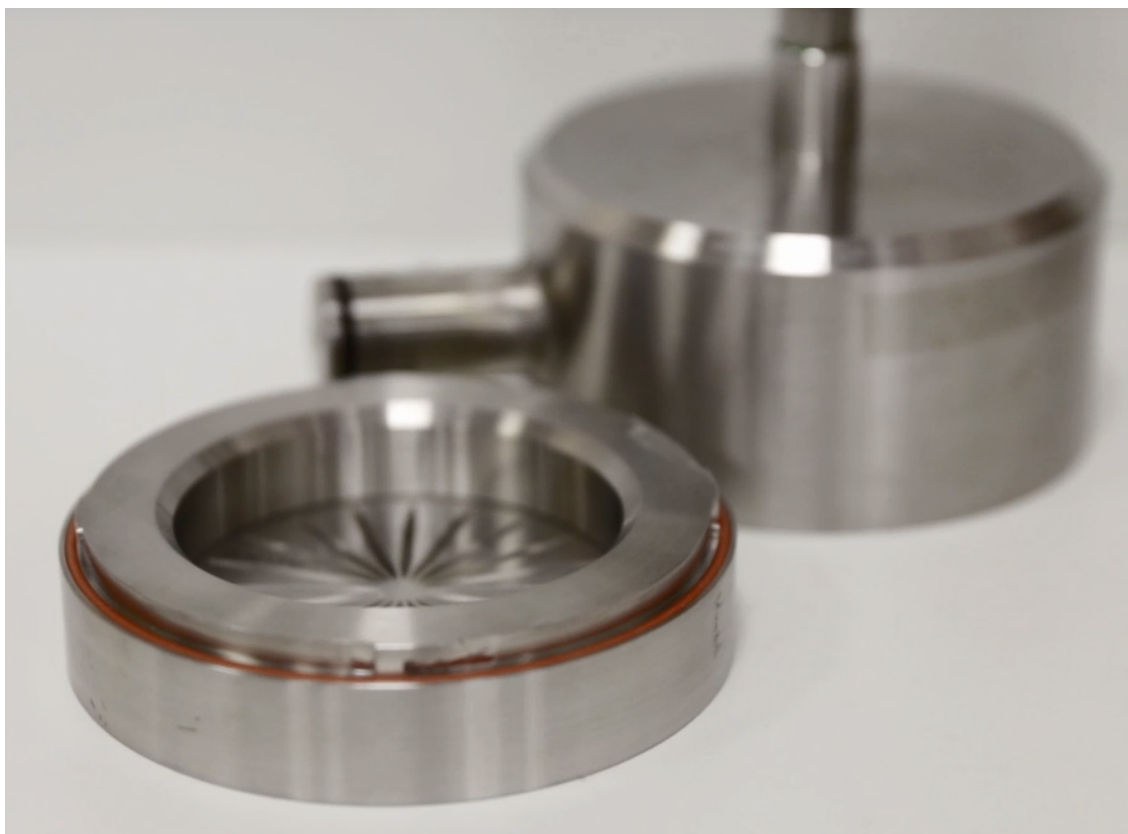
2. Disconnect the pressure control tubing.



3. Remove the solenoid valve actuator by unscrewing the locking nut.



4. Separate the diffusion chamber from the dual connection impactor head before proceeding with the sanitization process.



5. The diffusion chamber and dual connection impactor head are graded for autoclave temperatures. Allow any residual cleaner to evaporate before autoclaving.

Thank you for reading this quick guide! Refer to the MiniCapt Mobile Operations Manual for further information or contact your Particle Measuring Systems representative for any questions and support.