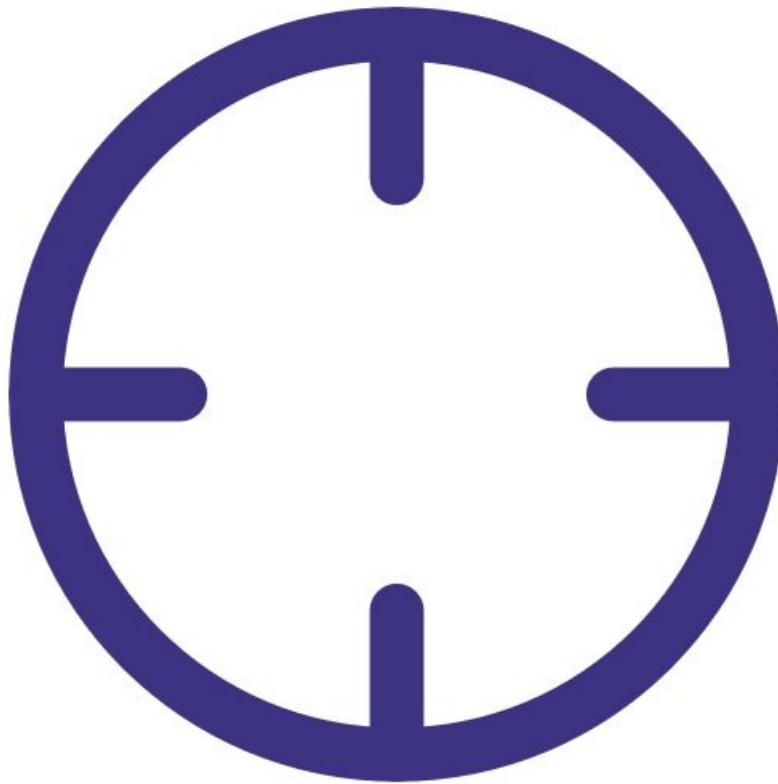




Check flow of MFC and MFM

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INTRODUCTION

To ensure the accurate operation of the AirCal 1000, we recommend you periodically check the flow rates of the mass flow controller (MFC) and zero air mass flow meter (MFM) between yearly calibrations.



TOOLS:

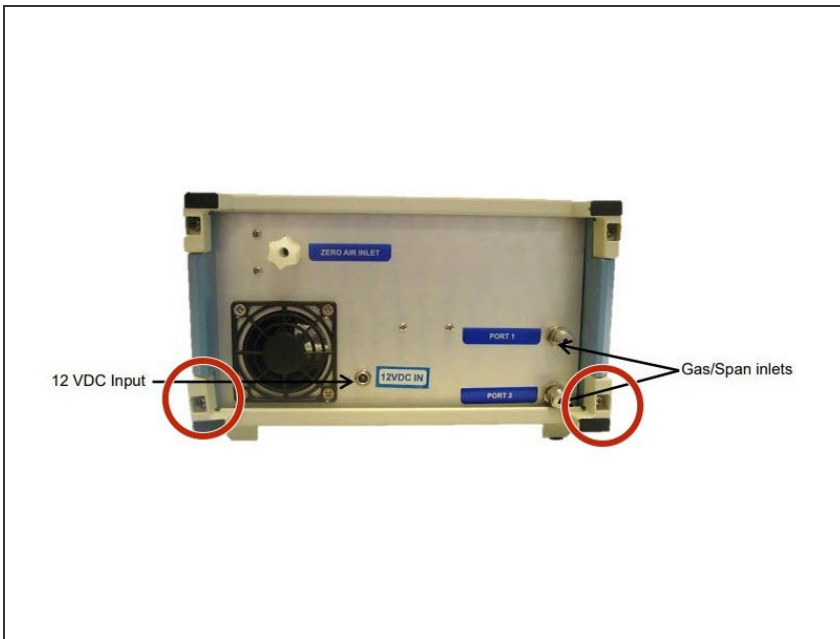
- [Small Phillips head screwdriver](#) (1)



PARTS:

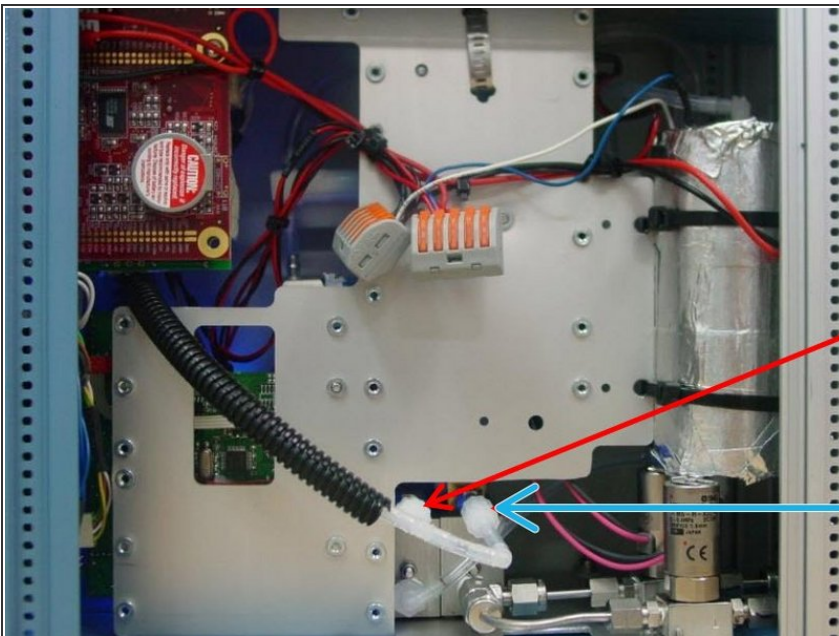
- [Flowmeter - TSI 4140](#) (1)

Step 1 — Remove bottom plate



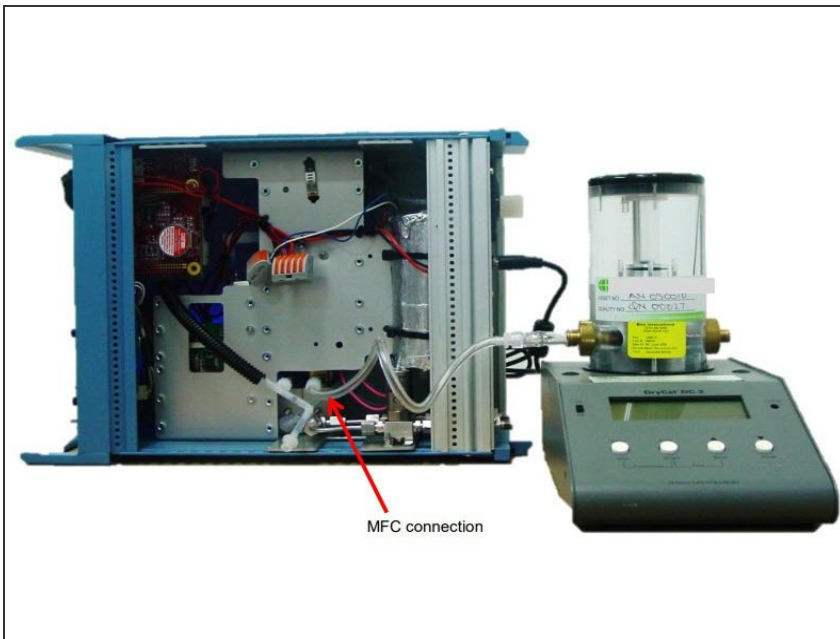
- Unscrew the 2 bottom screws at the back of the AirCal 1000. The bottom plate should slide out easily.

Step 2 — Place calibrator on side



- Place the AirCal 1000 on its side so the MFC and MFM outlets are visible.
 - MFC outlet.
 - MFM outlet.

Step 3 — Check flow rates



- Unscrew the luer fitting of the MFC outlet and connect it to a flowmeter.
- Perform a span check to measure the flow rate of the MFC.
- Compare the flow measurement on the flowmeter with the measurement recorded on the AirCal 1000.
- Reconnect the luer fitting securely.
- Use the same process to perform a zero air check on the MFM outlet.

i The MFC flow rate should be between 5-45 ml/min-1, depending on the dilution ratio. The MFM flow rate should be 2-2.5 LPM. If a flow rate has changed by more than 2%, you should get the AirCal 1000 re-calibrated.

For further support, contact [Technical Support](#).