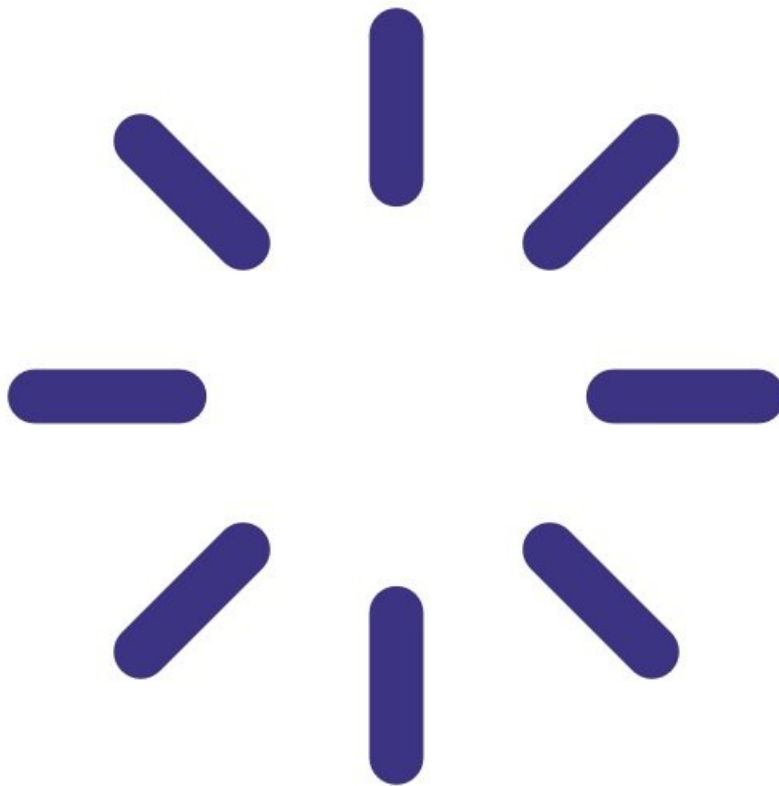




# Clean compressor cassette

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## INTRODUCTION

Dirt and debris can accumulate in the compressor cassette, affecting air flow through the cassette and leading to overheating of the compressor and reduced efficiency of the thermal management system.

Keeping the compressor clean is an important part of thermal management system maintenance.

Monitors installed in environments with high amounts of airborne dirt and dust need more frequent cleaning.

To understand how often you should perform this service activity, [click here](#).



### TOOLS:

- [Light brush](#) (1)
  - [Cloth](#) (1)
-

## Step 1 — Enter service mode

Calibration and Service ▾ Instrument ▾ Sales & Support Demo AQY (AQY Demo-001) ▾

Normal operation

Calibration

History

Manual Entry >

Manual service mode Start

Calibration parameters

	NO2 ppb	Ox ppb	O3 ppb	O3 raw ppb	PM2.5 raw µg/m <sup>3</sup>	PM2.5 µg/m <sup>3</sup>	TEMP °C	RH %
Gain	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Offset	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0
a	1.100		2.550					
b			1.870					

Real time measurements

Time	NO2 ppb	Ox ppb	O3 ppb	O3 raw ppb	PM2.5 raw µg/m <sup>3</sup>	PM2.5 µg/m <sup>3</sup>	TEMP °C	RH %
11:42 a.m.	2.9	29.6	24.2	23.7	1.7	1.1	15.74	86.1
11:41 a.m.	2.8	29.2	24.0	23.5	1.6	1.0	15.63	86.1
11:40 a.m.	3.1	29.7	24.2	23.8	1.9	1.2	15.60	86.1
11:39 a.m.	3.6	30.2	24.1	23.7	1.5	1.0	15.55	87.1
11:38 a.m.	4.7	30.4	23.4	23.0	1.3	0.8	15.48	87.1

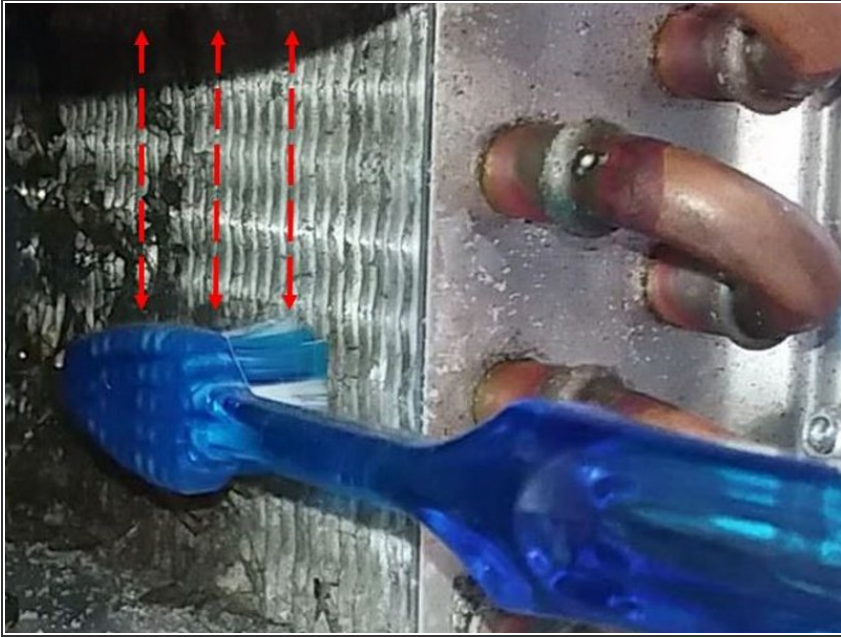
- [Enter service mode](#) so any fluctuations in the data caused from this activity can be excluded from air quality reports.

## Step 2 — Clean tank and wires



- Use a damp cloth to wipe the compressor tank and copper lines.

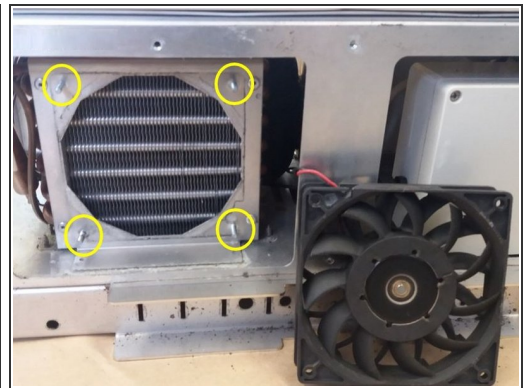
### Step 3 — Clean condenser fins



- Use a small long handled brush to gently clean the condenser fins from top to bottom in short downward strokes parallel to the fins.

**⚠ Don't brush against the fins as this can cause the fins to bend out of shape.**

### Step 4 — Clean fan



- Inspect the cooling fan at the back of the cassette.
- If the fan is dirty take the corner nuts off and carefully remove the fan.
  - ⓘ Make a note of the position and orientation of the fan when you remove it.
- Carefully clean the blades of the fan with a damp cloth.
- Put the clean fan back in, making sure it's in the same position and orientation.

## Step 5 — Record in journal

Instrument ▾ Air Quality Monitor (AQM65 04082015-437) ▾

All journal types ▾

User entry | Cloud user · John Wagner

1. Site Inspection:	No new local emission sources Instrument in good condition No obstructions to monitoring equipment	2. Instrument inspection: Cooling fan operational PM and gas inlet secure Instrument has been running at stable
3. Equipment:	Aeroqual Gas dilution calibrator: Aircal 1000 Aeroqual Ozone calibrator: AQM O3Cal Aeroqual Flow meter: AQM R7	4 Gas cylinders: CO 1000 ppm in Air (expiry March) SO2 20 ppm in Air (expiry December) NO2 20 ppm in Air (expiry November)
4. Flow rate check:	Expected flow rate = 0.450 ml per min, Measured flow rate = 0.452 ml per min Main inlet flow rate OK, individual module flow rates were not measured.	5. Open door and change gas inlet filter
6. Zero calibration	All modules passed zero calibration, all modules were stable and all offsets were within acceptable limits.	
7. Span Calibration	CO @ 10.00 ppm Module response was 8.95 ppm gain adjustment to 1.15 pass SO2 @ 0.2 ppm Module response was 0.210 ppm gain adjustment to 0.92 pass NO2 @ 0.2 ppm Module response was 0.090 ppm gain adjustment to 2.10 pass (module may need replacing soon contact Aeroqual)	
8 Pack up.	Next scheduled calibration 3 months from now. June 2017.	

- [Record this service activity in the monitor's journal.](#)
- [Exit service mode.](#)

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