

Lower Gas Cooler block replacement process

SandenVendo January 2022

This document presents the main steps for replacing the lower Gas Cooler block of a Sanden Condensing unit CDU-L or CDU-M

References:

Туре	Model
CDU-L	R06A2A R06A2B R06A2C
CDU-M	R04A1A R04A1B R04A1C R04A1D

100% CO2 Condensing units

ECO-FRIENDLY REVOLUTION

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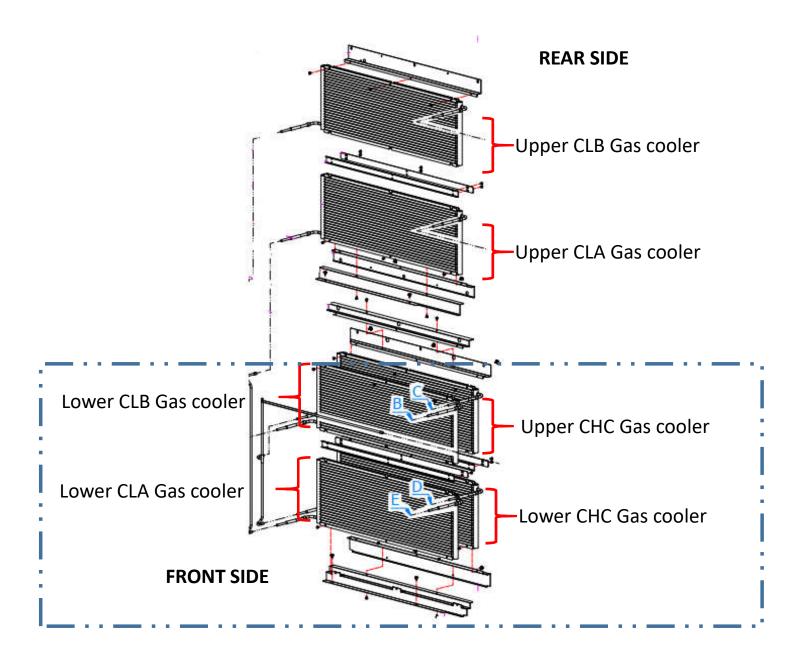














As the various Gas Coolers located at the bottom of the product cannot be individually dismantled on the product, it is necessary to remove and replace the complete block comprising the lower part of the Gas Cooler loop A, the lower part of the Gas Cooler loop B and the Gas Cooler assembly of loop C.



LOWER BLOCK GAS COOLER FRONT SIDE



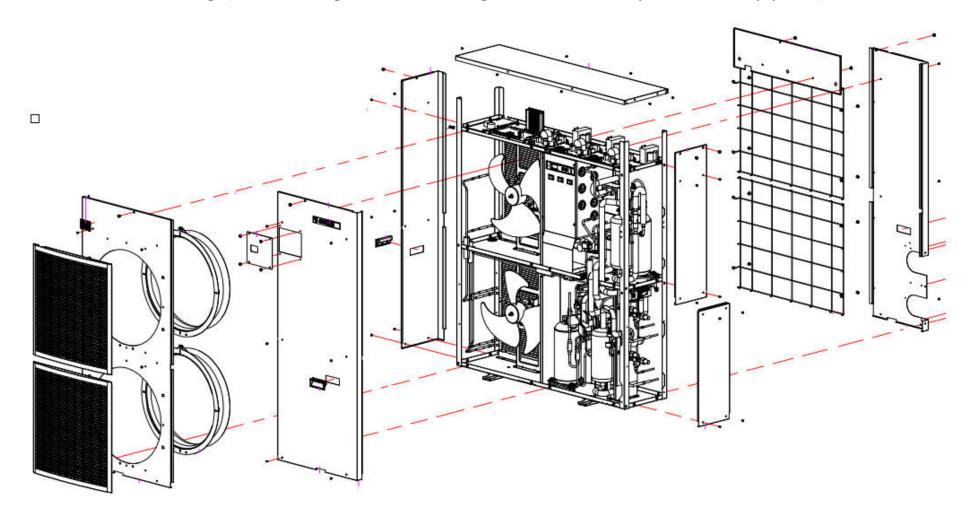
LOWER BLOCK GAS COOLER REAR SIDE



- 1. Turn power off the condensing unit.
- 2. Remove the CDU casing (left side + right side + front right and left + rear panel, and top panel)
- 3. Remove the Gas cooler protection grid (8 bolts)
- 4. Disconnect and Remove the Lower Fan motor. (4 bolts)
- 5. Separate the Gas Cooler block from the CDU bracket by removing the fixing screws
- 6. Empty the refrigerant R744:
 - Loops A and B: first by the suction valves, then by the supply valves.
 - Loop C: gently cut the sealed charge tube on the LP side
- 7. Ensure that there is no remaining pressure on the loop.
- 8. Debraze and remove the failed Gas cooler block.
- 9. Prepare the new Gas Cooler block.
- 10. Brazing with nitrogen flux.
- 11. Leakage test at 80 bar, check brazing (see guide for piping work and start-up)
- 12. Reassembled and reconnect the Lower Fan motor
- 13. Turn on the condensation unit and check that there is no error code.
- 14. Vacuum of the dedicated loop for 3 hours
- 15. Reassembled all the fixing bracket.
- 16. Load R744:
 - Loops A and B: initial loads determined at commissioning
 - Loop C: 380 gr R744 for the B type CDU & 420gr R744 for C and D type CDU
- 17. Restart the entire installation, make sure it is working properly.
- 18. Close the panels



2.Remove the CDU casing (left side + right side + front right and left + rear panel, and top panel)





4. Disconnect & Remove the Lower Fan Motor









5. Separate the Gas Cooler block from the CDU bracket by removing the fixing screws





REAR SIDE FRONT SIDE



6. Empty the refrigerant R744:





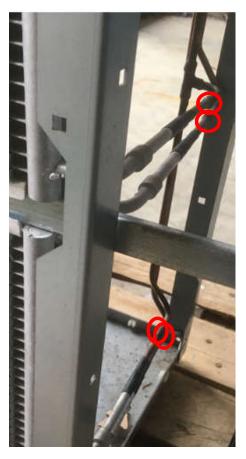
Loop C: gently cut the sealed charge tube on the LP side



Loops A and B: first by the suction valves, then by the supply valves.



8. Debraze the failed Gas cooler block.







FAN SIDE COMPRESSOR SIDE



8. Remove the failed Gas cooler block.





