WAECO CoolMatic CR Fridges

Compressor servicing and fault finding

- Model Range
- Data Plate
- Troubleshooting
- Standard Spare Parts
- Guides for repair



WARNING!

please note: when working on the fridge you must isolate and disconnect the supply





Model Range

CRP-040

Removable compressor (1.5 m)

12v/24v

No internal light

30° constant incline MAX

AC power via rectifier (EPS-35/MPS-35), optional extra

Changeable décor panel





CRP-040 shown

CR-xx (50, 65, 80, 110, 140)

12v/24v

AC (Only CR-140)

Internal Light

30° constant incline MAX

AC power via rectifier (EPS-35/MPS-35), optional extra

Changeable décor panel



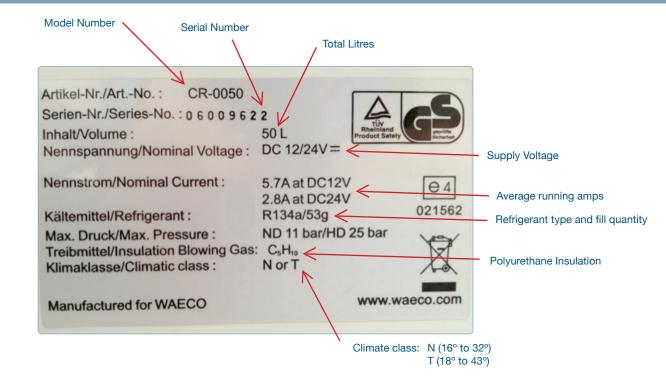
CR-80 shown

Data Plate

The data plate is located on the inside roof.



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Troubleshooting

Fault	Possible Cause	Solution
Compressor is running but not cooling	The compressor may have lost its gas	Place your hand on top of the compressor, if you find the compressor to be running hot to the touch, this could mean that the compressor has lost its gas. Contact Dometic for service exchange in warranty. Out of warranty you can contact a local refrigerator engineer who is F Gas approved.
Compressor is shutting down and RED LED flashes 1	Supply voltage issue	Check the voltage at the electronic module terminals. The voltage must be above 11.7v for a 12v and 24.2v for a 24v to start. Voltage measurements at the battery are meaningless. The refrigerator can only read what it is actually receiving after deducting the losses in your wiring, socket and plugs. Also, the reading is meaningless unless the fridge is running, voltage drop cannot be seen without a load. Refer to the manual for cable chart
RED LED flashes 2	Excessive fan current	The fan is loading the electronics with more than 1amp. Clean or exchange fan
RED LED flashes 3	The compressor shudders or doesn't start	The module could be faulty. Please exchange the module in the first instance. If this doesn't work the rotor is jammed, leave the unit upright and allow to cool. If this does not work please contact Dometic
RED LED flashes 4	Speed too low	If the cooling system is overloaded with oil or refrigerant the compressor speed cannot be maintained. Leave the unit upright and allow to cool. If this does not work please contact Dometic
RED LED flashes 5	Overheating of electronic unit	There is a temp sensor in the electronic module. If the unit has been badly installed or the ambient temp is too high (45°c) the unit will shut down unit the temp has reduced.
The compressor runs constantly	Faulty thermostat	Remove the thermostat and replace
Compressor runs but the light does not work inside	The supply has been reversed	Older models will have a dropper located next to the module at the rear, this will need to be removed and replaced. Newer units the dropper was built into the bulb inside.
Compressor is not running but the green light is on	Possible thermostat or module fault	Locate the compressor and bridge out the C & T terminals (see below). If the compressor starts the thermostat is faulty otherwise the module is at fault.
The door doesn't open	The bottom lock is damaged	Sometimes in transit the fridge is dropped which bends the door lock up. You can loosen the lock and place 2 metal washers under plastic. See guide
Fridge defrosts over night	Ambient temp too low	The fridge has a climate class of N (16° to 32°) and T (18°c to 43°c). We've seen problems in vehicles when the ambient temp drops below 16°c the fridge doesn't switch back on. The ambient temp must be increased.







Electronic module DC only 4441000010



Electronic module AC/DC (CR-140) 4441000039



DC Fan 4441200002



Thermostat CR range 13-00-KPF1E (CRP040 4441100019)



LED bulb 444160008



Light voltage regulator SP-065PCBASB



Repair Guides

Replacing the electronic module

Please note: when working on the fridge you must isolate and disconnect the supply!

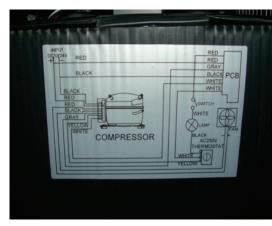


- Locate the module at the rear.
- Isolate the supply.
 Remove the other female crimps.
 Make a note of the wiring.



3 Remove the screw which is in between. The module will hinge away from the compressor. Pull off the 3 pin plug

The CR range has a wiring diagram on the side of the fridge case.



Changing the Decor Panel - Repair Guide



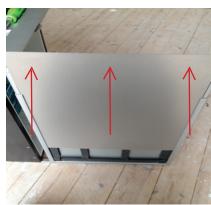
1. Remove the seal from the top of the door



2. Locate and unscrew the four screws across the top



3. Pull the handle up and out. The section is in a T shape



4. Pull the standard décor panel out and replace with your desired panel

5. Reverse steps 4 to 1







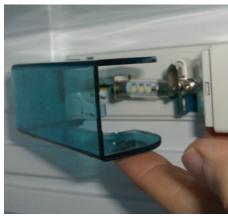
Changing the Thermostat - Repair Guide



1. Locate the thermostat housing inside the fridge and remove the light button



2. Remove the front screw



3. Remove the LED cover



4. Loosen the rear screw, this doesn't have to be removed



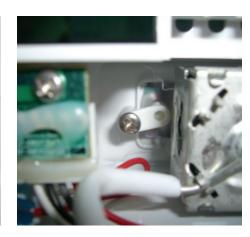
5. Pull the thermostat housing forward. It should now come away from the wall



6. Disconnect the black plug



7. Carefully remove the thermostat capillary probe



8. Loose the screws either side of the thermostat



9. Remove the thermostat control knob

10. Reverse steps to replace. Please note that the thermostat probe must not be cut and must go into the pipe in the wall of the insulation not the insulation!







Fixing the bottom lock - Repair Guide

Customer can complain that there unable to open the fridge door without lifting the door. This can sometimes be due to installation or damaged in transit. Remove the fridge from the housing and disconnect the power. Locate the bottom door lock.



You can adjust the bottom lock with the silver screw marked to the left.



If adjusting the screw doesn't work please loosen the outer screws and place a thin washer on both sides between the housing and lock plate.

Testing the compressor windings - Repair Guide



- 1. Remove the electronic module
- 2. Use your voltage meter to check the resistance between the pins. All three pins should read around 2 ohms at 25°.

Pins	Ω Reading @ 25°
A-B	2
A-C	2
B-C	2

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