

Replacing compressor trigger capacitors on Whirlpool Fridge/Freezer control board

This procedure is valid for Whirlpool American-style Fridge/Freezers. These side-by-side fridge-freezers are also sold under various other brand names including Admiral, Hotpoint, Maytag and Smeg. There is no guarantee that this will fix your problem but there's a pretty good chance it will. In which case it will save an ice-bucket load of cash.



Tools

You will need the following tools:

- Medium-sized flat-bladed screwdriver
- Medium-sized cross-headed screwdriver
- 15 - 25 watt soldering iron
- Solder
- Side cutters

Procedure

1. Remove the circuit board

- Disconnect the fridge/freezer from the mains
- Move it so that you can get at the rear and unscrew the 6 screws securing the bottom metal panel at the back. (fig.1)
- Lift the panel and remove it.
- Unscrew the 2 screws at the right securing the white circuit box. (fig.2)
- Gently push the pipes and cables to the left and pull the box out.
- Lever the lid up from the cable entry side. (fig.3)
- Make a careful note of which cables go where as this might not be the same as in the photograph.
- Carefully unplug all the cables taking care not to pull the sockets off the circuit board.
- Undo the screws holding the circuit board and remove the circuit board from the box. (fig.4)

2. Repair the circuit board

- Unsolder and remove the 4 medium-sized capacitors shown. Note that these may be rectangular blue ones. (fig.5)
- Insert the 4 new capacitors and solder them in place.
- Now remove and replace the big capacitor.
- Cut the capacitor wires back close to the board.
- These are the capacitors that normally cause issues. However if you find that this doesn't cure the problem, you can try replacing the other capacitors as well. It is VERY IMPORTANT that the round black one is the correct way around so pay attention when removing the old one. There is a white stripe on the side of the negative (-) wire.

3. Replace the circuit board

- Replace the circuit board in the box.
- Carefully re-connect the cables.
- Replace the lid.
- Slide the circuit box back into position and secure with the 2 screws.
- Replace the back panel making sure it slides over the 2 lugs at the bottom of the frame of the fridge/freezer.
- Replace the 6 screws and secure.
- Replace the fridge/freezer where it belongs and reconnect the mains.
- Cross your fingers.

