



# Siemens oven HB76A1560 troubleshooting

Troubleshoot defect oven and identify the failing relay

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## INTRODUCTION

Problem: just before/shortly after starting to heat up, the oven causes the house HFI relay to switch off all power to the house.

(I assume 'HFI relay' is another term for of these: GFCI - Ground Fault Circuit Interrupter, ELCB - Earth Leakage Circuit Breaker, RCD - Residual Current Device, RCCB - Residual Current Circuit Breaker)

I called a professional repair man, and after an inspection he concluded that the main PCB had to be replaced, and adviced me that I was better of buying a new oven. So with nothing to loose, I therefore decided to try repairing it myself.



### TOOLS:

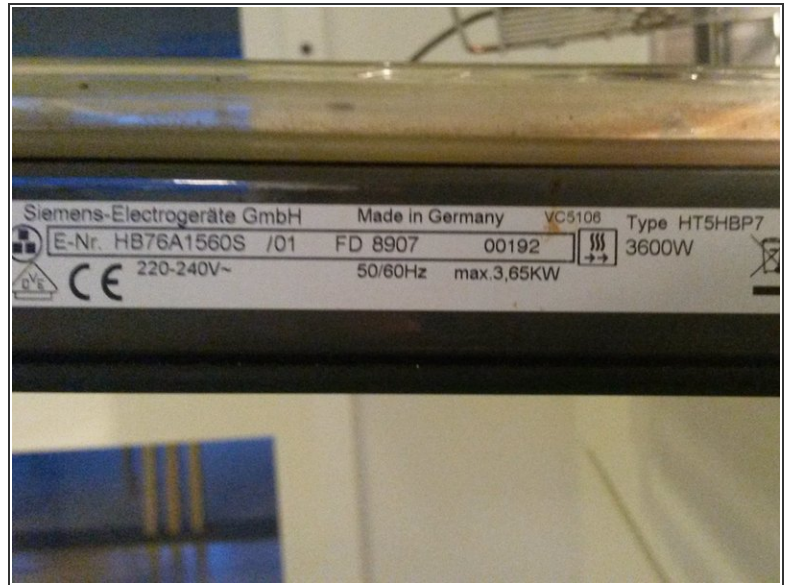
- [Screwdriver](#) (1)
- [Soldering Iron](#) (1)
- [Multimeter](#) (1)



### PARTS:

- [Relay HF3FD/009](#) (1)

## Step 1 — Identify the oven



- This particular model is HB76A1560S, but the guide may apply to other. I believe similar ovens are sold under the brand Bosch.

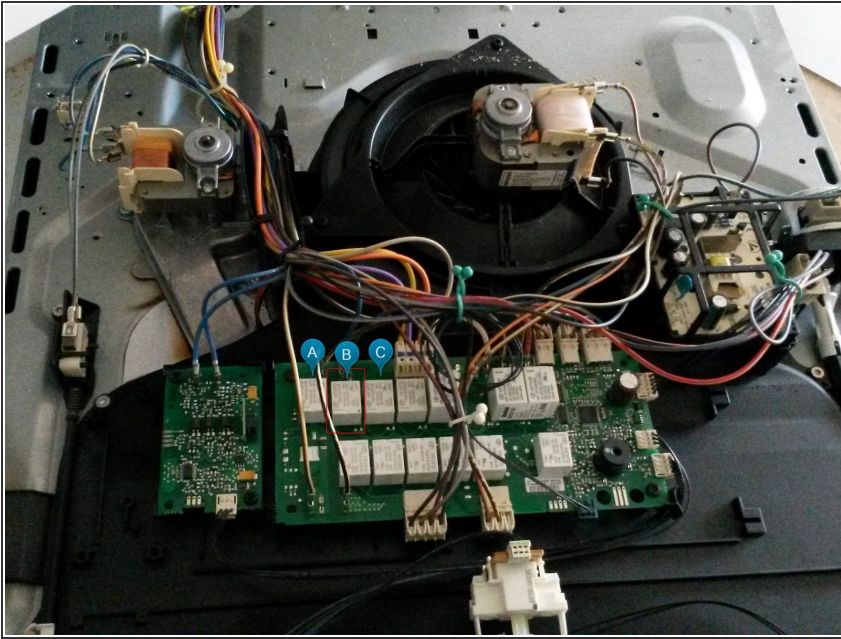
## Step 2 — Run builtin test program



- See guidelines in the attached PDF document
- As per the PDF document: bring the oven into test-mode and start stepping through each menu
- Identify at which test step the problem occurs and the house HFI relay is triggered
- (**Dangerous!**) Remove the backpart, and detach the wires to the heating elements one by one, until the above test step is no longer triggering the HFI relay. Take care to neither cause short circuit nor get yourself electricuted... You probably want to disconnect the oven each time you detach a wire



### Step 3



- Assuming you now know which circuit that is causing the problem: have a look under the toppart. In my case the problem originated from the control PCB
- After probing the PCB with a multimeter, I concluded that the relay marked 'B' must be defect. In fact, that relay was visually damaged. It looked like a spark had burned a hole in its plastic housing
- Order a new relay and solder it in
- Re-run the test program, and verify that the oven is no longer triggering the HFI relay
- I did the repair 2 years ago, and it is still working nicely

To reassemble your device, follow these instructions in reverse order.