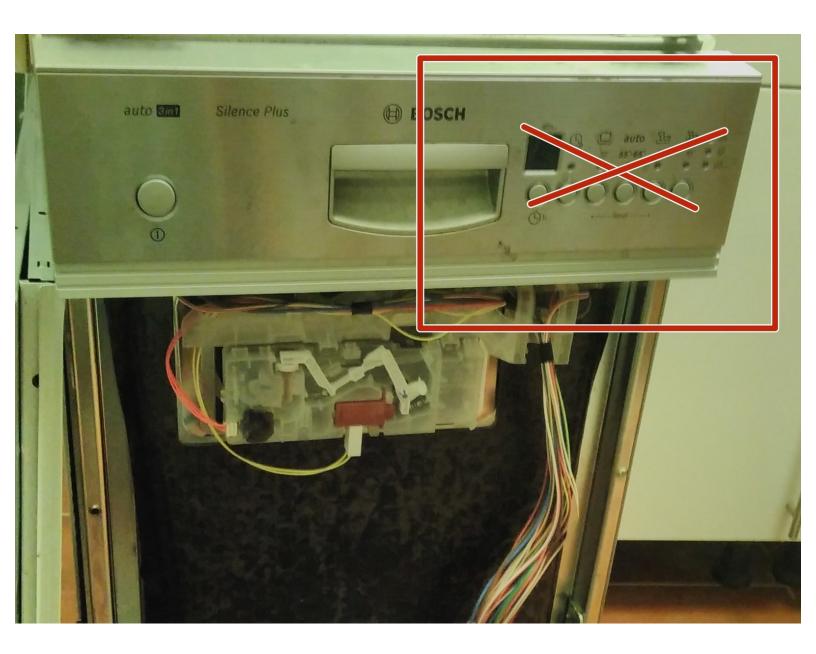


# Bosch Dishwasher Dishwasher SRI45T45EU-18 - Control Module Repair

Repair of the control module (replacement of 4 ...

Written By: Robert



#### INTRODUCTION

## Repair of the control module (replacement of 4 components).

Symptom: Total failure of dishwasher (no function of LEDs or buttons)

Cause: Voltage converter LNK304GN is defective,

Consequence: protection resistor (100 or 10 Ohm) also blown. Possibly 2 capacitors, 1 varistor

defective

Solution: Replacement of all (possibly) damaged components by unsoldering / soldering

Material price: € 3.50

**Result**: Then fully functional again.

Dishwasher name: Bosch <u>SRI45T45EU</u>/18, "Silence Plus", 45cm width

Name of control module: <u>STM451-EU</u> / 00643257] (€ 106.70 would cost for a new one - so get on

with the repairs!)

Name of the board: AKO 704226

My **Sources** for this Guide:

• Youtube: [1] Testen des LNK304GN, [2] defekter LNK304GN in Waschmaschine

• Forum: [1] zu AKO704226 (franz.), [2] polnisches Forum

### **TOOLS:**

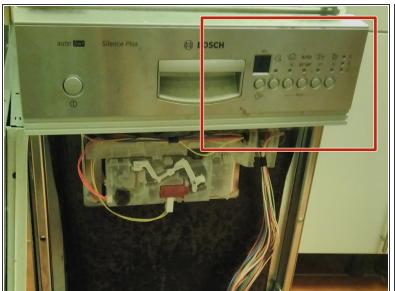
- New Item (1)
- New Item (1)



### PARTS:

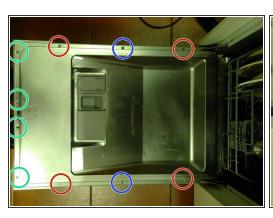
- New Item (1)
- Spannungsregler LNK304GN (1)
- New Item (1)
- New Item (1)
- New Item (1)

#### Step 1 — Repairing the Control Module on a Bosch Dishwasher (LNK304, Wid, Kond)





- Symptoms of a faulty control module: No function during the wash cycle (no display, no noise, no reaction to pressing a button or switching it on and off).
- Repair carried out here: replacement of 5 components on the control module (costs: € 3.50); entire control module can also be bought <u>here</u> for € 100) - see step no. 5 + 6.
- The control module is located directly under the control panel (see picture)

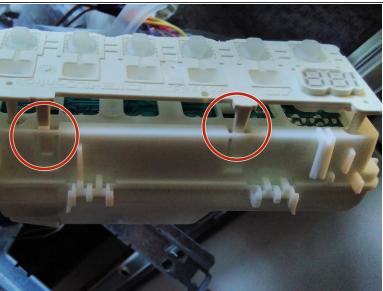






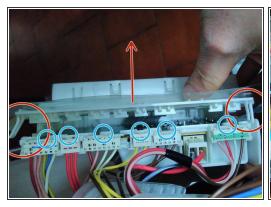
- IMPORTANT ---> Disconnect the dishwasher from power before attempting the rest of the steps!
   <--- IMPORTANT</li>
- To be able to remove the front plate and control panel, first loosen all of the screws below.
  - 2x marked in blue: long screws that grip directly into the wooden panel of the cover.
  - 4x marked in red: short screws that hold a metal frame on which the cover is fixed.
  - 4x marked in green: short screws that hold the cover of the control element.
- Cabinet panel can be removed as in picture no. 2 (Be careful that the bezel does not fall off when loosening the screws!)
- Now you can remove the control panel.



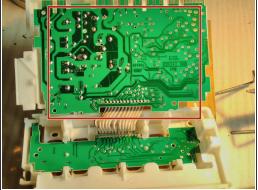


 The switch module can be removed by carefully loosening several clips - note the markings on the pictures, and carefully pry open with a screwdriver.

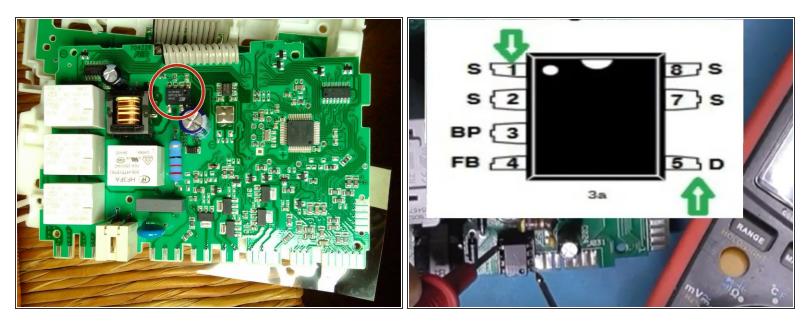
#### Step 4







- Remove all plugs from the control module, bending the clips slightly to the side (blue markings)
- Open the cover, bend the clips slightly to the side (red marking) and open in the direction of the arrow (Image 1 + 2)
- Fig. 3: AKO 704226 board can be removed from the control module (framed), LED + switch module can also be removed for easier soldering (flat cable remains connected).



- What needs to be replaced on the control module to fix the error?
- 1st component LNK304GN = cause of error!
- Whether the component is defective can be checked in the installed state with resistance measurement between source and drain: R (S-D), see Picture No. 2
  - Defective, when(S-D) < 100 Ohm</li>
  - Normal when R(S-D) > 10 MOhm (depending on the polarity)
- Spare part e.g. from <u>here</u>, 1.08\$; is referred to as "power integrations LNK304GN-TL PMIC AC / DC converter, offline switch holder, converter amplifier, flyback SMD-8B
- Desolder all 7 pins (these are only soldered from the top of the board. However, I carefully cut off the pins with scissors / pinchers, removed the IC and then soldered the pin residues one at a time). Solder new component LNK304GN.







- Change other components that may also be defective due to a chain reaction (these are all primary components for converting the mains voltage):
- Protective resistor: R = 100 Ohm, 3W [2. Circle from above]. Spare part e.g. from <a href="here">here</a>, 0.26\$ (some people report it should be a 10 Ohm resistor it seems also to work. I am not sure.)
  - IMPORTANT: the resistance must be fire-proof / flameproof check on the data sheet!
  - Reason: the resistor acts as a fuse and should burn in the event of short circuits / defects
     without flame formation and protect the rest of the circuit.
- Capacitor C = 10μF, 400V, electrolytic capacitor, [top circle] (note polarity, neg. Electrode with marked on component and board)
- Foil capacitor Kemet X2 46K MKP, 0.1 μF, 10%, 10 mm (was not necessary for me) Spare part e.g. from here, 0.86\$
- Disk varistor TDK S10K275, 430 V [bottom circle]; Spare part e.g. from here, 0.53\$
- Image 3: After assembly, the switching module and the dishwasher work perfectly again!

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