* Machine washes poorly
* Machine does not heat water
* Programme takes too long.

E1

0
0
0
0
1

* NTC short circuit
or
* NTC open loop
error

Is there E1 error?

Yes

Is KN2 socket on the control card attached?

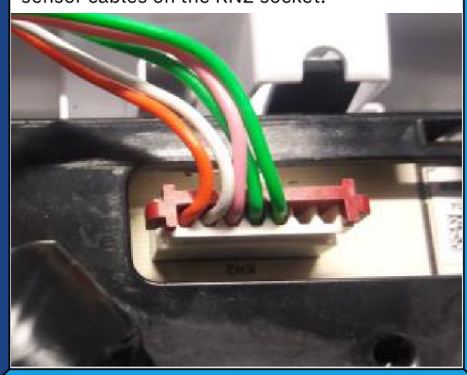
No

Attach the KN2 socket. (Picture E1-1)

Yes

Take out the KN2 socket and measure the resistance between the 3rd (green) and 4th (green) pins (Picture E1-2)

PICTURE E1-1: There are NTC and Level sensor cables on the KN2 socket.



PICTURE E1-2: The socket connected to KN2 connector is removed and NTC resistance is measured

PICTURE E1-3: The NTC socket on the heater is removed and NTC resistance is measured

The measured value is NTC resistance value. Does it show approx. 5k OHM under 25°C temperature? (Picture E1-3) (There should not be open loop / short circuit)

Yes

Replace the control board.

No

Open the rear cover of the machine. After removing the NTC socket on the heater, measure the NTC value directly over the NTC. (Picture E1-4)

Important Note:
In washing machine NTC open loop/short circuit and Heater open circuit cases, that is, if there is E1, E2 or E3 error, machine performs cold washing and ends the programme without the heater activated.

Does it show approx. 5k OHM under 25°C temperature? (There should not be open loop / short circuit

Yes

As the value measured on the control board socket is wrong, cabling is erroneous; check it. There should not be loose or erroneous cable and socket.

No

Replace NTC. Re-attach the removed sockets into their places

INFORMATION: NTC resistance decreases as its temperature rises. For example, it shows a resistance of 9500 Ohm under 10 C 1700 Ohm under 50 C. These values are not erroneous.

PICTURE E1-4: NTC resistance to be measured is approx. 5k Ohm at 25 degrees