

T B S E R I E S

indelB

trouble shooting

TB36AM_(DC)_TS_11-12-2018

T B SERIES

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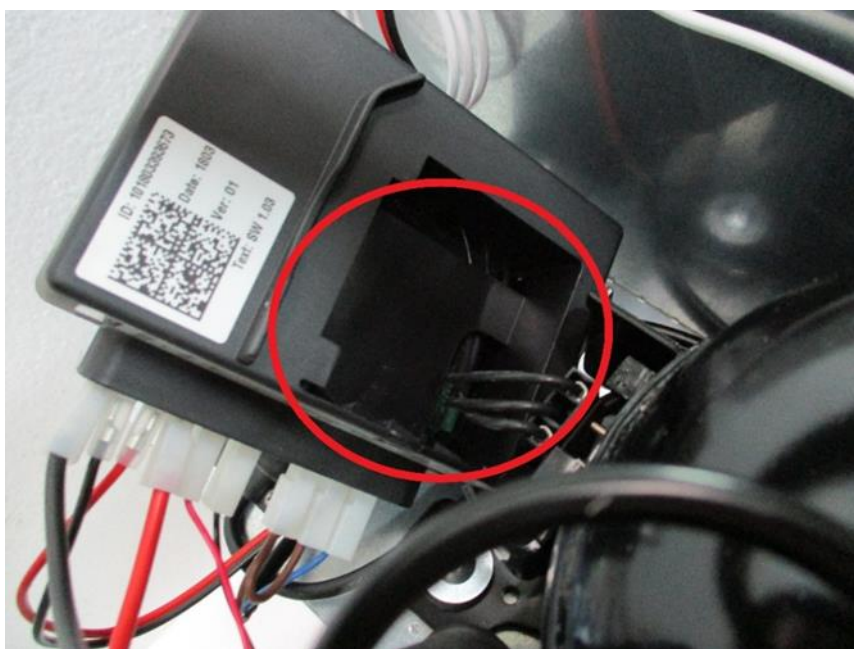
HOW TO DETECT THE TYPE OF FAULT

A. FLASHING ERRORS

This refrigerator is not equipped with display, so you need to unscrew the ECU and control the number of flashes. You may detect errors from the ECU. Each error corresponds to a number of flashes from a led inside the ECU:



Unscrew the bolt fixing the ECU, and move the ECU



Control in the highlighted area to see the number of flashes

Kind of faults:

ERROR CODE	ERROR TYPE
E1	Battery protection cut-out (The voltage is outside the cut-out setting).
E2	Fan over-current cut-out (The fan loads the electronic unit with more than 1A peak)
E3	Motor start error (The rotor is blocked or the differential pressure in the refrigeration system is too high (>5 bar)).
E4	Minimum motor speed error (If the refrigeration system is too heavily loaded, the motor cannot maintain minimum speed 1,850 rpm).
E5	Thermal cut-out of electronic unit (If the refrigeration system has been too heavily loaded, or if the ambient temperature is high, the electronic unit will run too hot).
E8	Tilt (The system shut-down device installed to operate in the event of tilting has cut in)

B. NON-FLASHING ERROR

There are also errors that aren't detected by the ECU:

1. **NO POWER SUPPLY:** Check the connection between the power supply and the battery. Check if the cable's length is correct (see the instruction manual)
2. **FAULTY THERMOSTAT:** You need to disconnect the wire from the C, P and T plug of the ECU, then make a bridge between C and T. If the refrigerator operates the thermostat is faulty and need to be replaced. Otherwise the ECU need to be replaced.
3. **THE MOTOR OPERATES BUT THE REFRIGERATOR DOES NOT COOL:** Check if the evaporator/freezer has not been punctured or damaged by user. Otherwise let check the refrigerator from a service station.

4. THE REFRIGERATOR DOESN'T OPERATE: Disconnect the wire from the C, P and T plug of the ECU, then make a bridge between C and T. If the refrigerator operates there are four possible problems:
- Faulty thermostat;
 - Faulty tilting sensor
 - Faulty circuit of thermostat and tilting sensor
 - Faulty ECU

Follow the steps below:



Disconnect the C, P and T wires from the ECU and make a bridge between C and T

If the appliance operates the problem is caused by the thermostat or the tilting sensor or the circuit, otherwise the ECU is faulty. If the refrigerator doesn't operate:

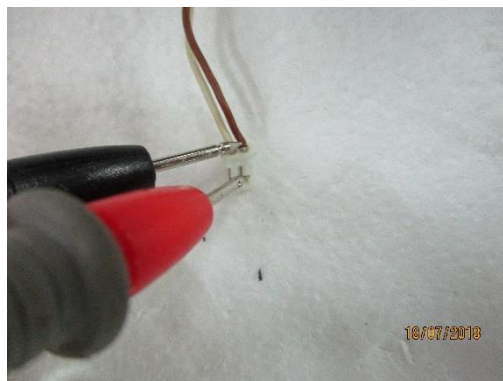


Disconnect the circuit



Test the continuity of the thermostat

If there isn't continuity replace the thermostat, otherwise:



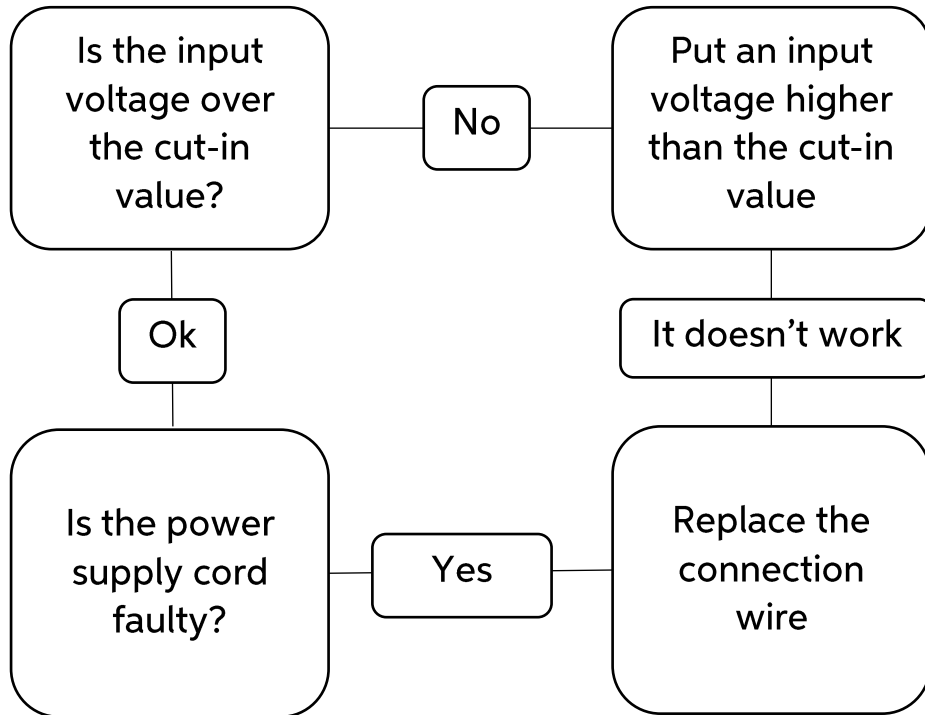
Test the continuity of the tilting sensor

If there isn't continuity replace the tilting sensor, otherwise



Replace the circuit of the thermostat and tilting sensor

- ERROR E1: Battery protection cut-out



- **ERROR E2: Fan over-current cut-out**

This error is caused by an over-current that arrived at the fan. In this case you must replace the fan (see “How to replace the fan”).

- ERROR 3: Motor start error

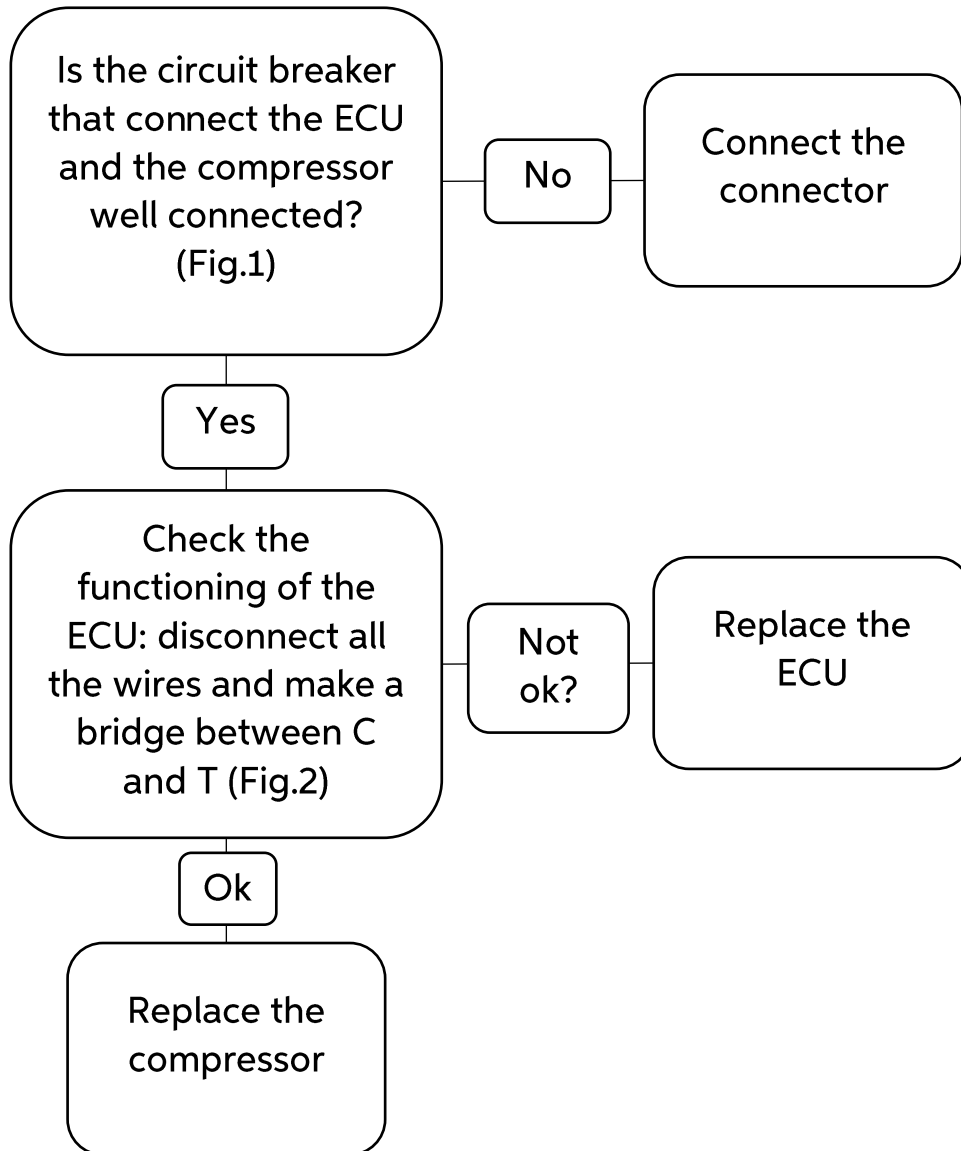
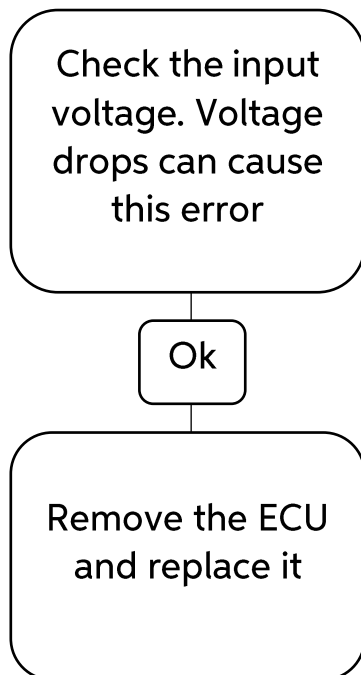


Fig. 1

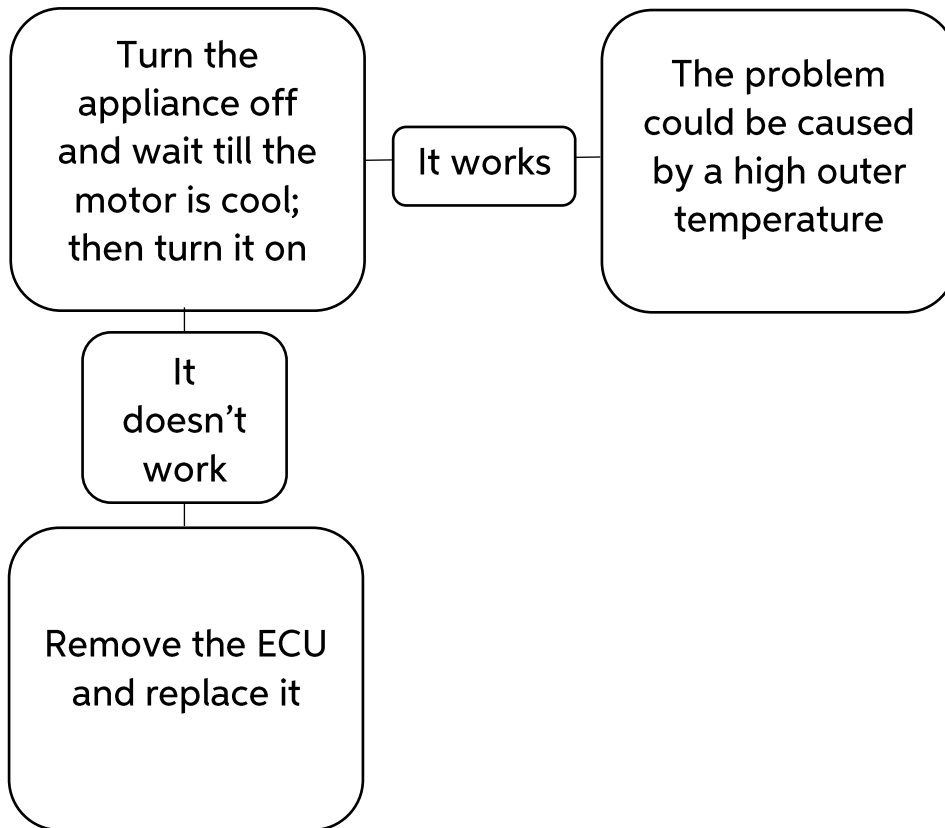


Fig.2

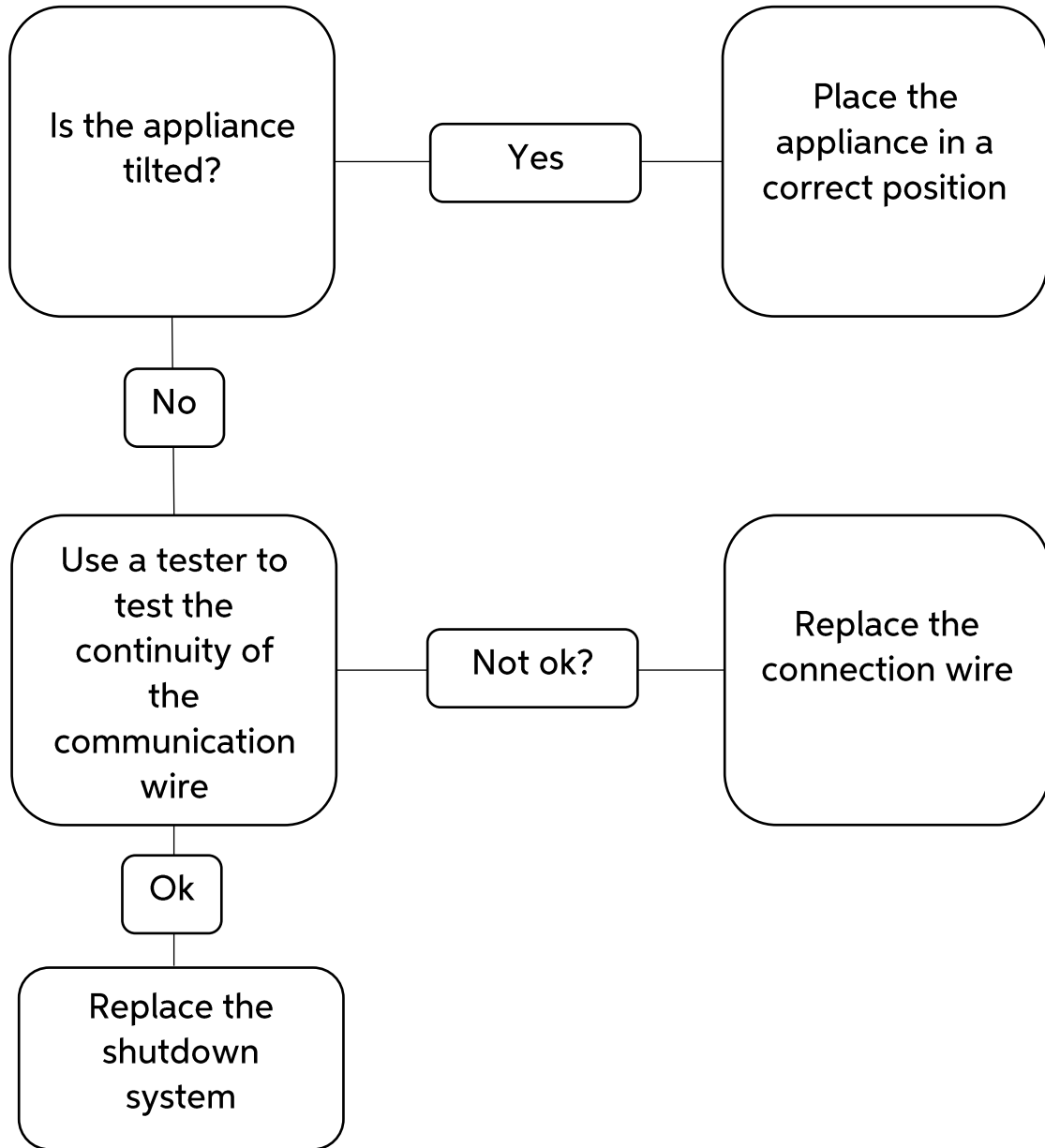
- ERROR E4: Minimum motor speed error



- ERROR E5: Thermal cut-out of electronic unit



- **ERROR E8: Tilt**



HOW TO REPLACE THE THERMOSTAT



1. Unscrew the bolt fixing the thermostat's bulb



2. Remove the thermostat's bulb



3. Remove the thermostat's knob



4. Unscrew the screw nut



5. Use a screwdriver as a lever to remove the thermostat's box (or unscrew the 2 bolts that fix the box; depending on the model of box)



6. Disconnect the wires from the thermostat and pull it to remove the thermostat's bulb; reverse the procedure to replace the thermostat

HOW TO REPLACE THE FAN



1. Cut the 4 cable ties fixing the fan, disconnect the fan's wires from the ECU and replace the fan

HOW TO REPLACE THE ECU



1. Unscrew the bolt fixing the ECU, disconnect the wires from the ECU and replace it

HOW TO REPLACE THE DOOR



1. Unscrew the bolts fixing the door (4 screws) and replace it

HOW TO REPLACE THE TILT SENSOR



1. Unscrew the bolt fixing the tilt sensor



2. Remove the sensor's wires from the ECU and replace the tilt sensor