

U R 35

indelB

trouble shooting

UR35_(DC)_TS_18-12-2018

U R 3 5

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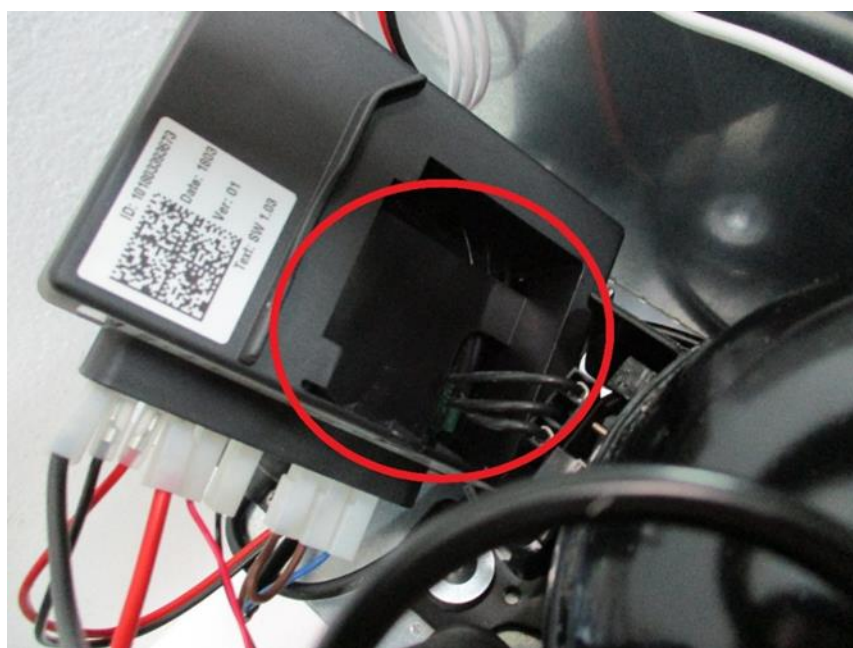
HOW TO DETECT THE TYPE OF FAULT

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).

B. NON-FLASHING ERROR

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

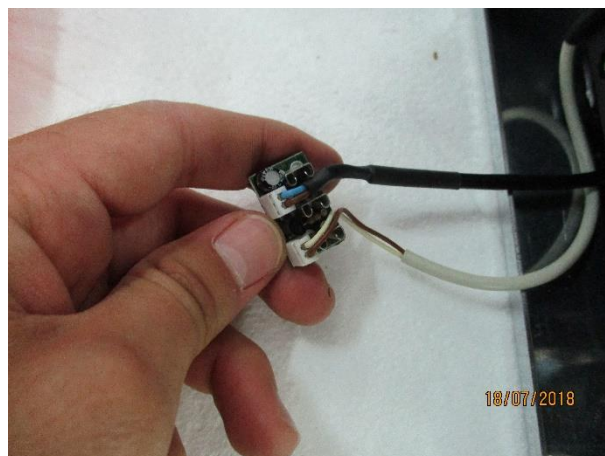
1. **NO POWER SUPPLY:** Check the connection between the power supply and the battery. Check if the cable's length is correct (see the instruction manual)
2. **THE MOTOR OPERATES BUT THE REFRIGERATOR DOES NOT COOL:** Check if the evaporator/freezer has not been punctured or damaged by user. Otherwise let check the refrigerator from a service station.
3. **THE REFRIGERATOR DOESN'T OPERATE:** 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 there are four possible problems:
 - a. Faulty thermostat;
 - b. Faulty tilting sensor
 - c. Faulty circuit of thermostat and tilting sensor
 - d. Faulty ECU

Follow the steps below:

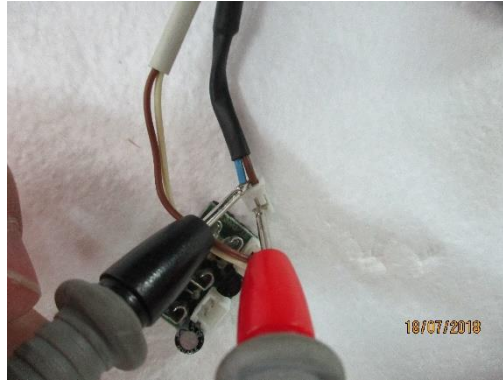


Disconnect the C, P and T wires from the ECU and make a bridge between C and T

If the refrigerator 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:

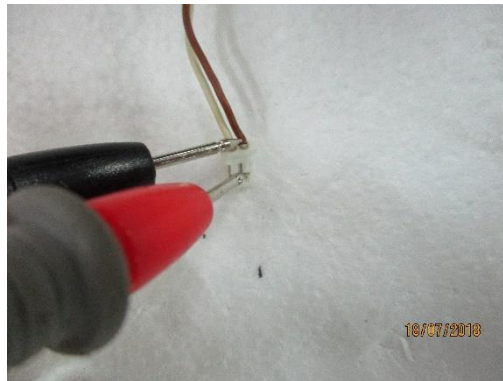


Disconnect the circuit



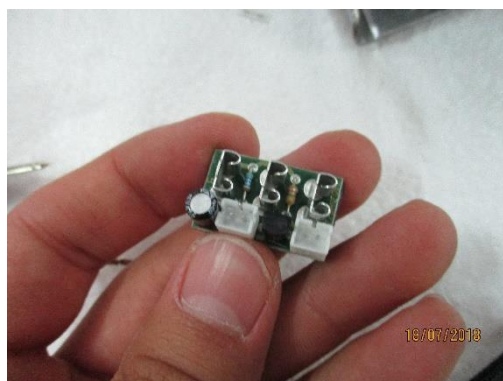
Test the continuity of the thermostat

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



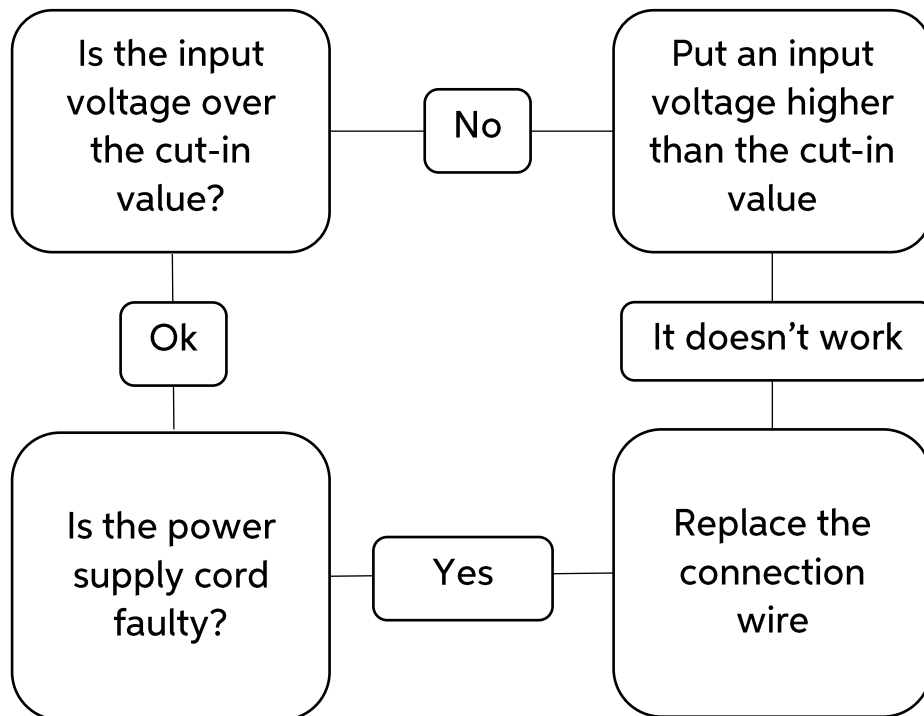
Test the continuity of the tilting sensor

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**

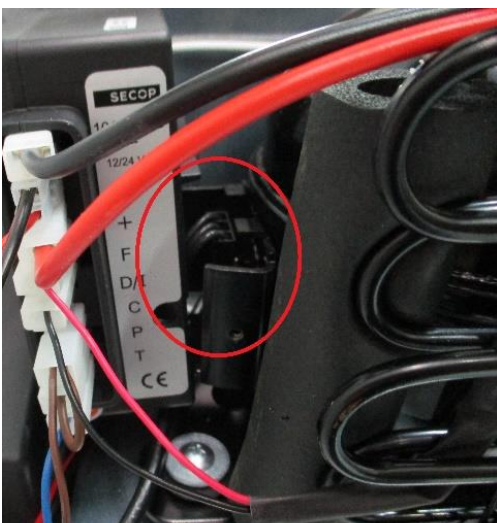
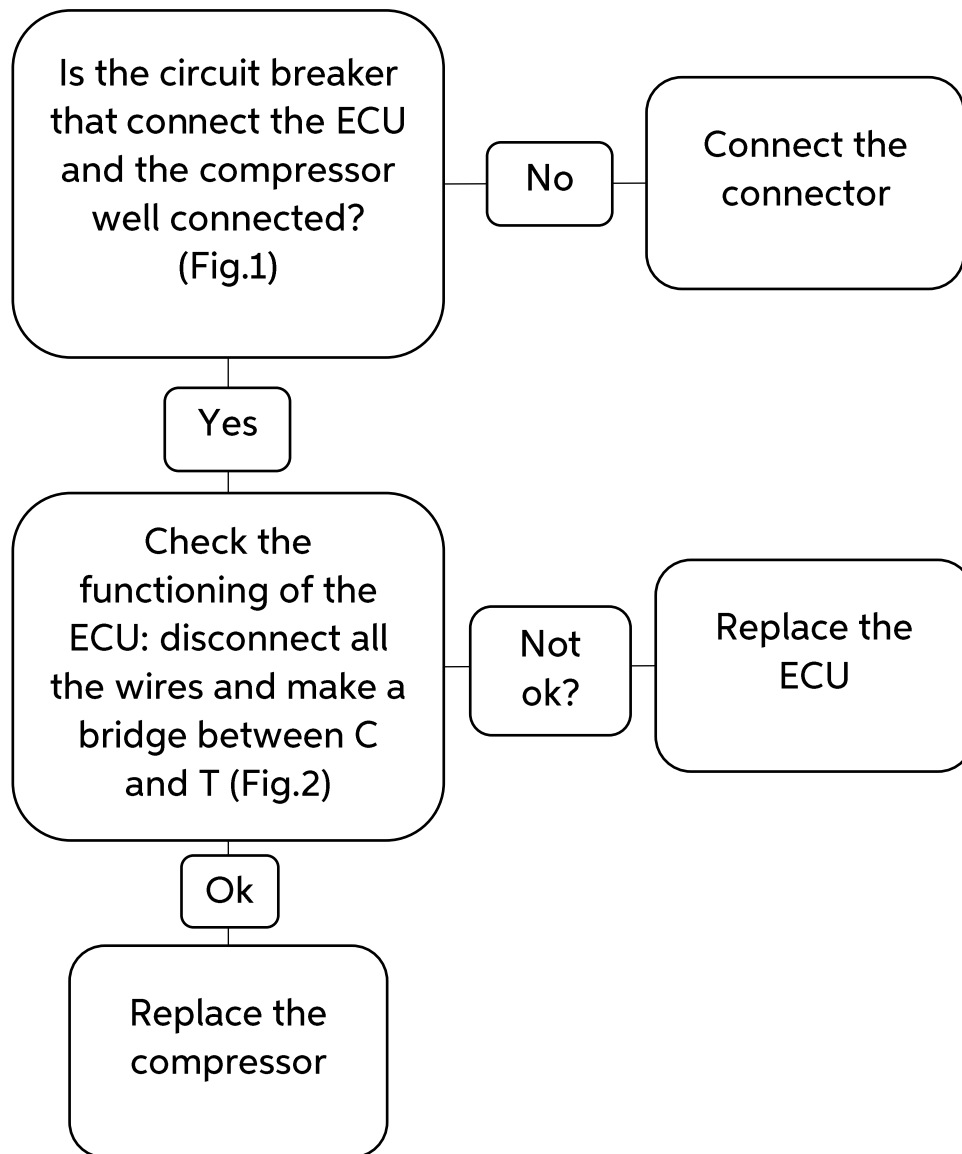
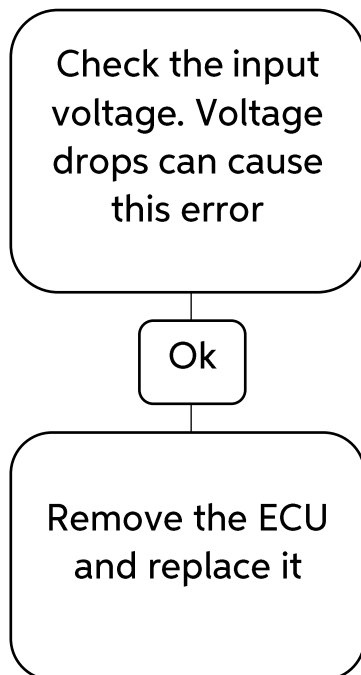


Fig. 1

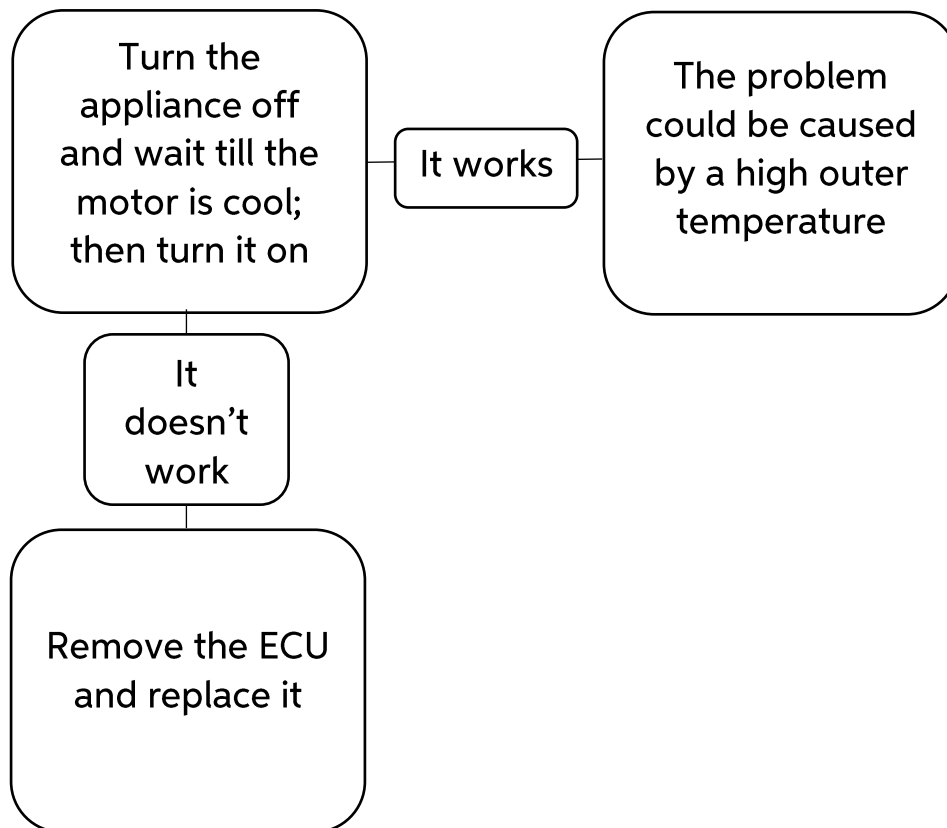


Fig. 2 (Example)

- ERROR E4: Minimum motor speed error



- ERROR E5: Thermal cut-out of electronic unit



HOW TO REPLACE THE THERMOSTAT



1. Remove the thermostat's knob



2. Unscrew the 4 bolts fixing the lid



3. Unscrew the screw nut and remove the lid



4. Disconnect the thermostat wires and cut the cable ties



5. Unscrew the 2 bolts fixing the bulb bracket



6. Pull the thermostat wire to remove the thermostat and reverse the procedure to replace it

HOW TO REPLACE THE FAN



1. Remove the thermostat's knob



2. Unscrew the 4 bolts fixing the lid



3. Unscrew the screw nut and remove the lid



4. Cut the 4 cable ties fixing the fan and reverse the procedure to replace it

HOW TO REPLACE THE ECU



1. Remove the thermostat's knob



2. Unscrew the 4 bolts fixing the lid



3. Unscrew the screw nut and remove the lid



4. Unscrew the bolt fixing the ECU and disconnect all the wires to remove the ECU