LCD SERIES MANUAL

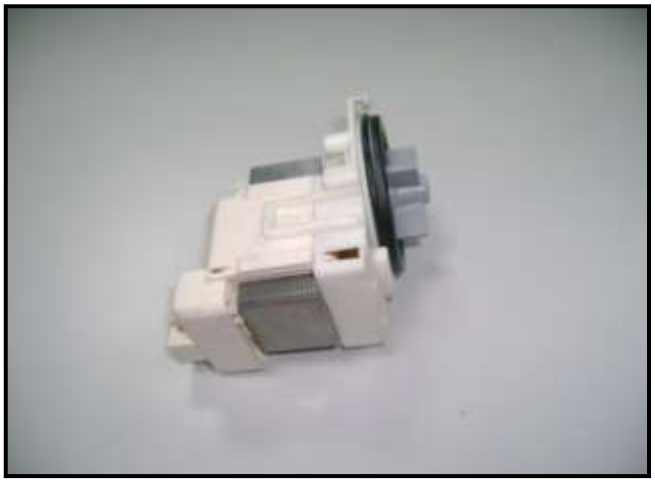
1. ELECTRICAL COMPONENTS

1.1 Circulation Pump

- Brushless DC motors
- 0 – 3400 RPM
- Winding values measured.
- Thermal protection is software controlled.
- Pump output 0 - 80 l / min 0-400 mbar
- Power is 0 -60 watts.

2.2 Drain Pump

Voltage	: 220/240 Volt
Frequency	: 50/60 Hz
Total Power	: 30 W
Flowrate	: 17 – 21 lt/dk
Coil Resistance Coil	: 143 Ω %± 7
Isolation Class	: F
Thermal Protection	: 120 ° C



2.3 Heater Casing Group

2.3.1 Heater

Voltaj	: 220/240 V
Toplam Güç	: 2000 W
Direnç	: 23.95±15 Ω

2.3.2 NTC

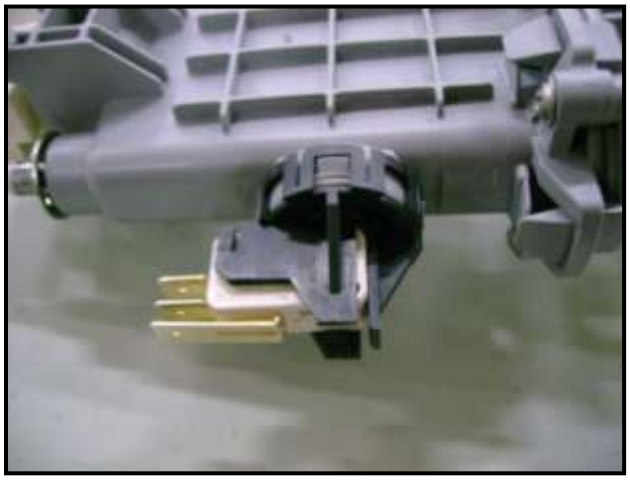
TThermal Protection83±3 ° C

Temperatures;

25°- 5000Ω %±5.0
35°- 3300Ω %±5.5
55°- 1520Ω %±6.5
63°- 1174Ω %±7.5
80°- 670Ω %±8.0
90°- 488Ω %±8.5

2.3.3 Pressure Switch

Voltage : 220/240 V
Frequency : 50/60 Hz (16 A – 3 Kontaklı)



2.3.4 Diverter

Voltage : 220/240 V
Frequency : 50/60 Hz
Power : 8 W
Resistance : 6840±⅕ Ω

2.4 Detergent container

Detergent Compartment:
Main wash compartment : 40 cm³ (25/15)
Prewash compartment : 5 cm³

Aid Rinse Departmant:
Aid rinse cap : 150 cm³
Factory outlet setting position: 3. seviye

Detergent Dispenser Bobbin:

Voltage : 220/240 V
Frequency : 50/60 Hz
Resistance : 1660 ±10 Ω

Detergent Dispanser Rinse Aid Sensor:

:

Voltage : 250 V
Switched Current : 16 (4) A
Current Through Closed Contact: 2,5 max.

2.5 Water Inlet Valve

Voltage : 220/240 Volt
Frequency : 50-60 Hz
Total Power : 6 W
Flowrate : 2,5 lt/dk
Resistance : 3750 ±⁒10 Ω (20 Cº)

Single inlet and single outlet standard single coil selenoid valve. It is assembled to the basement and connect to the airbreak by hose..

2.6 Water Softener

2.6.1 Regeneration Valve;

Voltage : 220/240 V
Frequency : 50/60 Hz
Total Power : 6 W
Resistance : 4130±⁒10 Ω (25 Cº)

Regeneration valve is assembled on the water softener.

2.6.2 Salt Sensör;

Voltage: 250 V
Currency : 16 (4) A

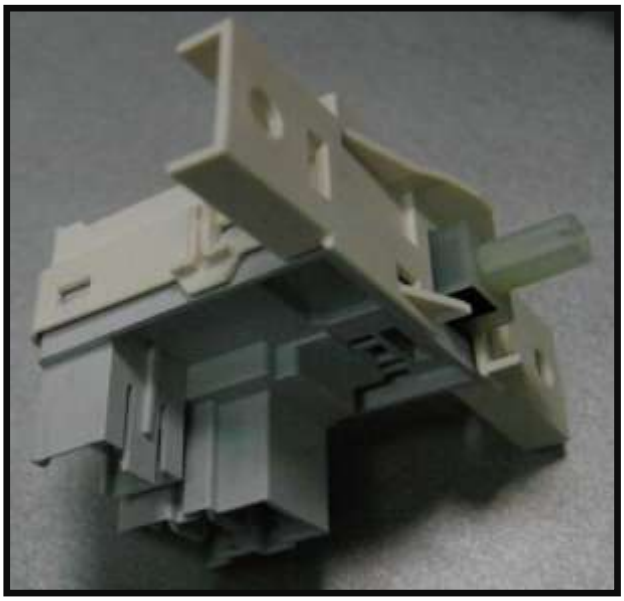
It is assembled to the water softener. It warns if the salt is less than requested quantity

2.7 Door Lock ;

It is a mechanical lock/release system that is closing the door, supplying the connection of electrical parts in the machine and cutting off the connection.

Akım : 16 (4) A

2.8 ON/OFF Button;



Button is assembled in the control panel unit. On / Off (two pole).

Voltage : 250
Currency : 50mA

2.9 Turbo Fan Motor;

Total Power : 15 W
Voltage : 220/240 V
Frequency : 50/60 Hz.
Resistance : 238.6± ٪ 5 Ω
Coil solation Class : H

There is a thermal protector. Shaded pole motor, two pole temperature is between -40 – 150 Cº .

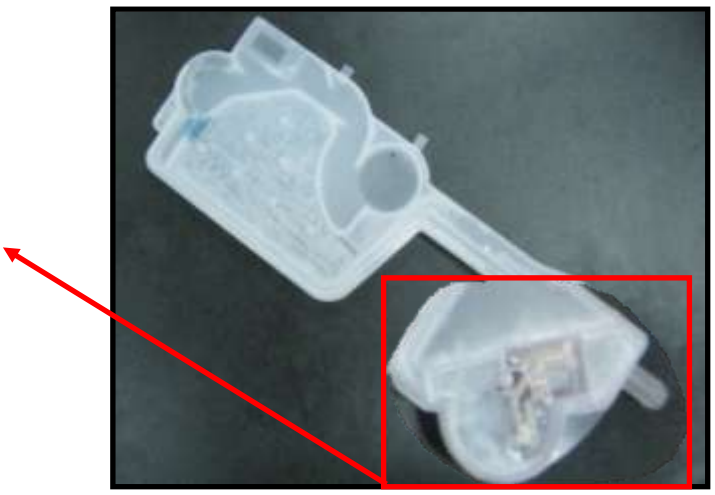
2.10 Parasite Filter;

Voltage : 220/240 V
Frequency : 50/60 Hz
0,1 uF (X1) + 2x0,027uF(Y2) + 1M Ω

It is used to prevent parasites from the main supply. It has been assemblied to basement.

2.11 Flowmeter ;

The amount of water intake is in precise control



2.12 Power Cord;

Type : Euro 3'lü 1 mm2 kesitli, bakır iletkenli
solation : TS 9760 H05VV-F
Plug : TS-IEC 60884–1 topraklı PVC enjeksiyon
Length : 1800 mm

3. PLASTIC COMPONENTS

3.1 Drain Hose; ;

Drain hose maximum height : 110cm
Drain hose minimum height : 50cm
Drain hose maximum length : 400cm

3.2 Water Inlet Hose ;

Hose that is flat edge is assemblied to plug.
Another edge that is turned edge is assemblied to water inlet valve. It must be adjusted for assembly direction.

3.3 Air Break ;

It measure water that comes to inlet dishwasher.
And It gives datas to electronic card.

3.4 SALT CONTAINER;

It decreases hardness of water that comes from main supply.

It includes 2 departments that “salt department” and “recine department” with 2 types that is sensor or without sensor.

3.5 Sump ;

Sump that is reservoir connects water in tube with circulation pump and drain pump and heater casing..

3.6 Spray Arm Support;

It distributes water from divisor to upper and below spray

3.7 L Spray Arm;

It transfers water from spray arm support to upper spray arm

3.8 Upper Spray Arm;

It tranfers water from L spray arm to upper spray arm There are two hole back of the upper spray arm. The holes provides to work upper basket for upper and lower position.

3.9 Upper Spray; ;

It distributes water from upper spray arm to dirty dishes

in the upper basket.

3.10 LOWER SPRAY ARM;

It distributes water from spray arm support to dirty dishes in the lower basket

3.11 WATER RECYCLE TANK

WWater storage benefits from the previous

program.

3.12 OKAM-CROSSBAR MECHANISM GR

The program finally tasted ensure the opening of the machine s lid automatically.
O

3.13 HOSE (SGK MOTOR-VALF)

1-Airbreak allows to drain out excess water in the water tank.

2- Water in the water tank provides for air circulation to enter into the machine.

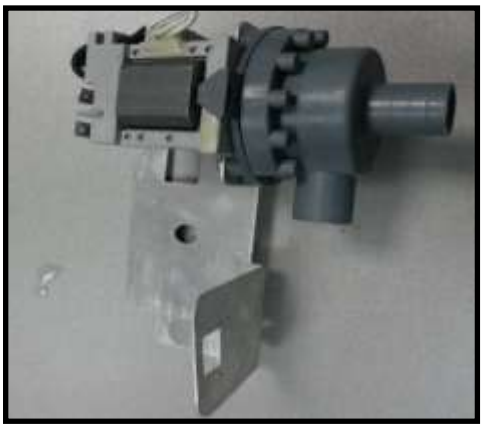
3.14 BI-DIRECTIONAL VALVE

Water recovery tank allows to control the flow of water from the pool.

Resistance value:

1011.6~1236.4 Ω

3.15 Water Pump



The program enables the transmission end to win back the water tank of the water remaining in the pool.

3.16 Plastic Hoses

Provides the connection between the water pump and two-way valve.

3.16 Plastic Hoses

Provides the connection between the water pump and pool.

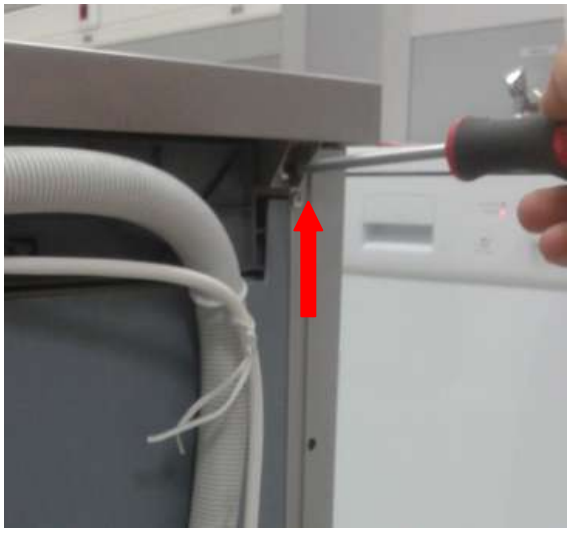
DISASSEMBLY

CAUTION!: REMOVE ELECTRIC PLUG FROM THE SOCKET DURING THE DISASSEMBLY

1) ACCESSIBILITY

1.1) Top Plate

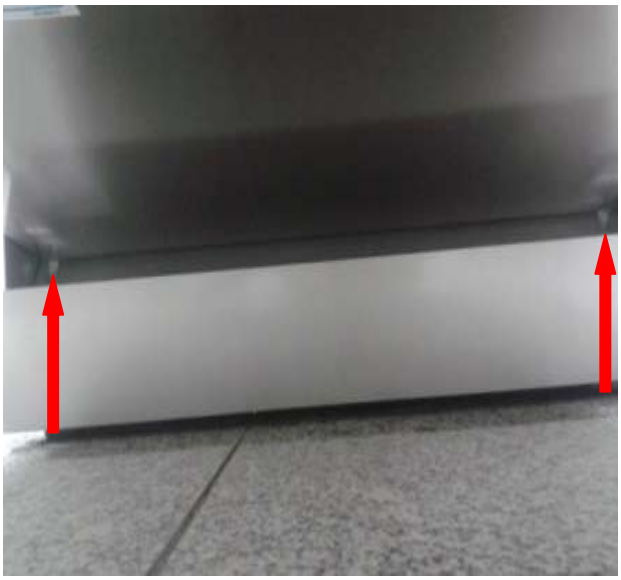
a) Remove two screws that fix the top plate at the back



b) Push the top-plate back and pull it up.

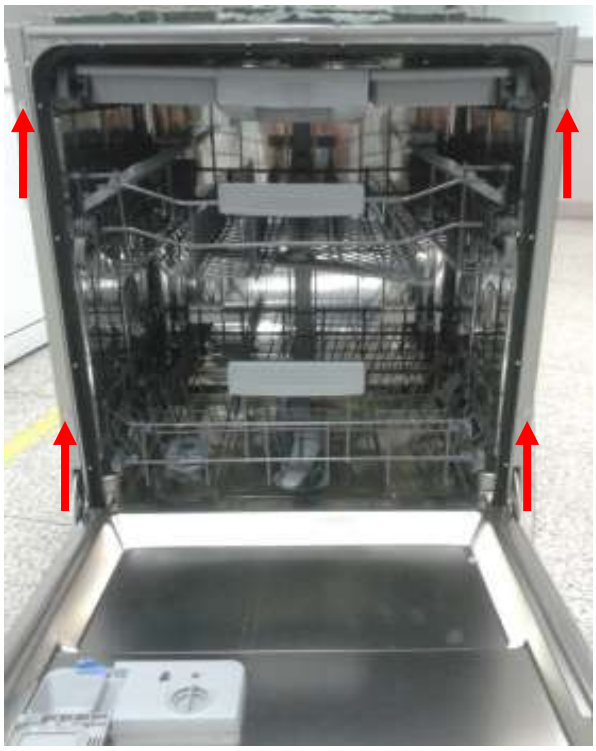
1.2) Plastic Kick plate

a) Remove two screws fixing plastic kick plate



b) Remove the plastic kick plate as it is shown in the picture.

1.3) Side panels



1.4) Front Panel

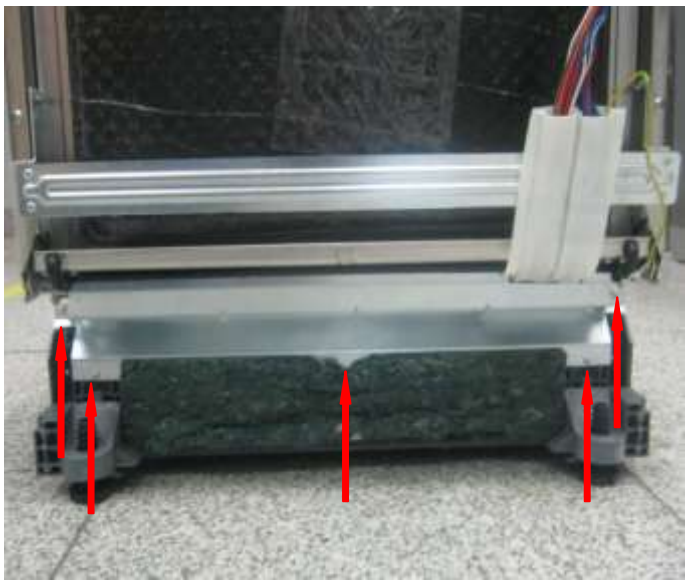
a) Remove six screws that fix the front panel.

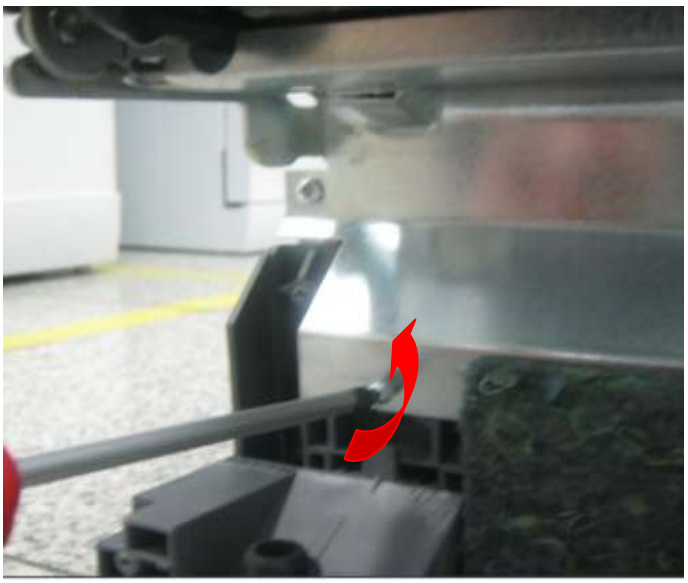
1.5) Kick Plate Sheet Iron

a) Remove top plate, plastic kick plate and side panels.

b) Remove two screws tat fix the kick plate sheet iron.

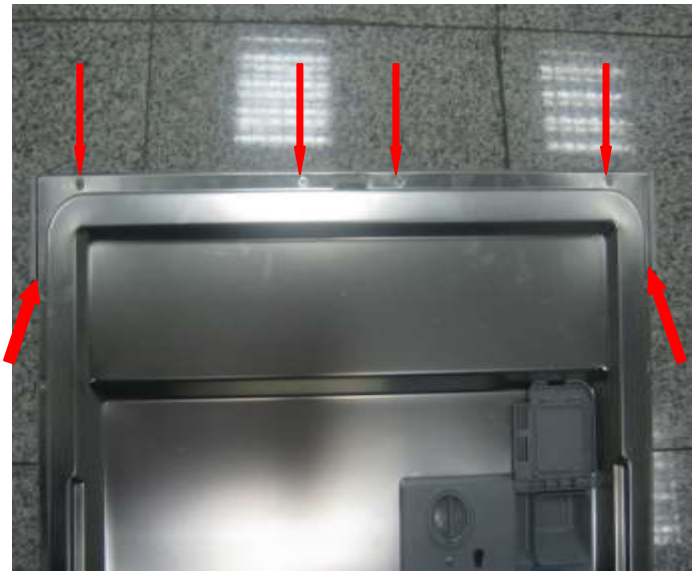
c) Pull it down as shown in the picture.

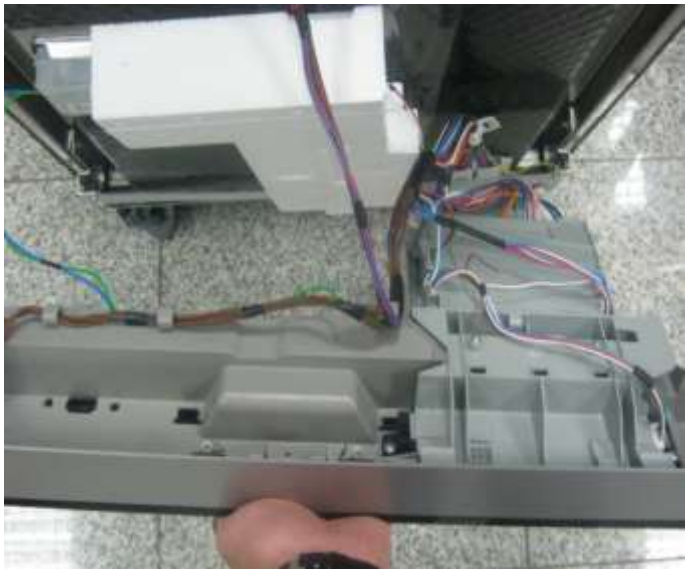




1.6) Control Panel

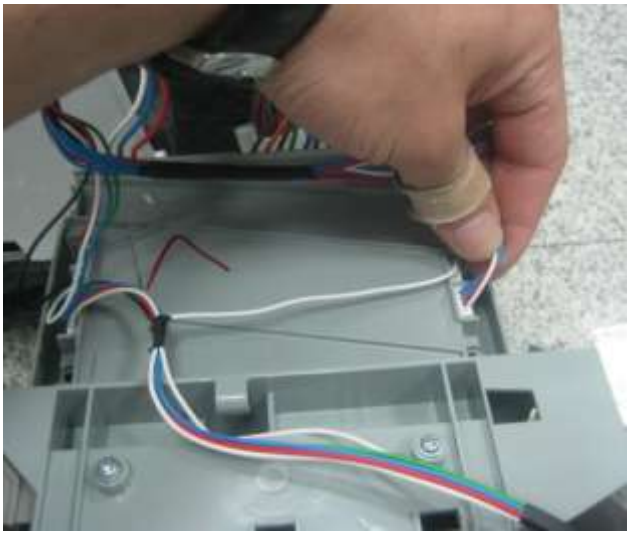
a) Remove six screws that fix control panlel to the door inside sheet iron.

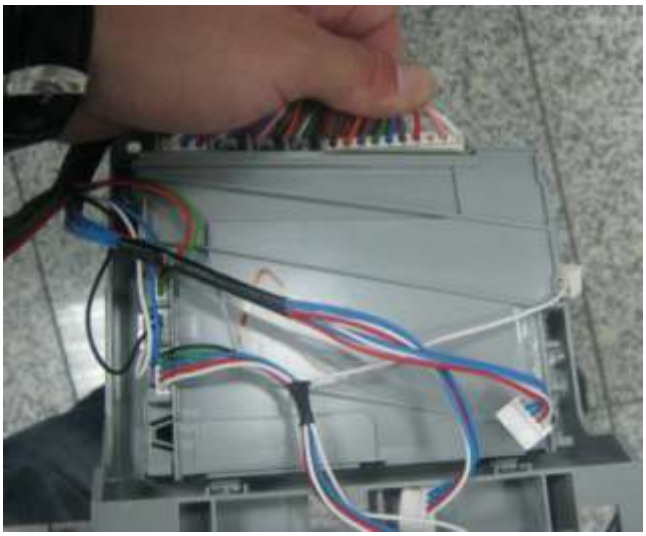




1.7) Electronic Card

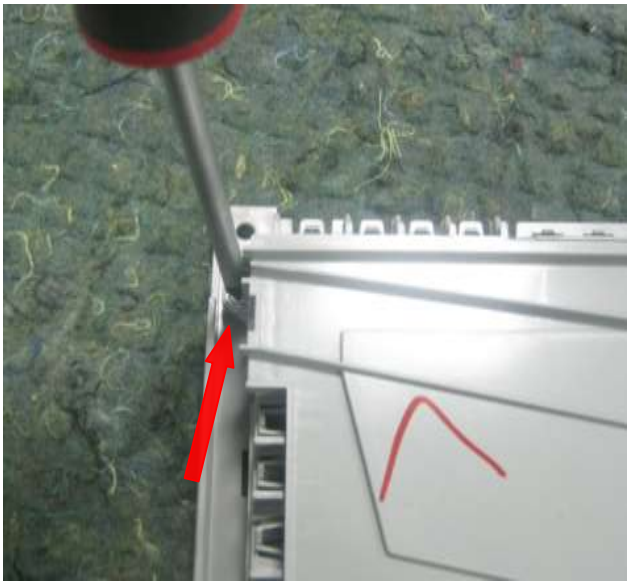
a) Remove the wires that are shown in the picture.

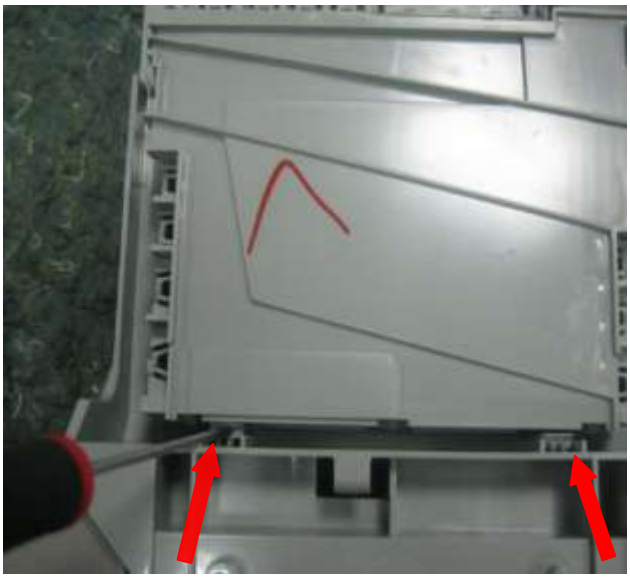




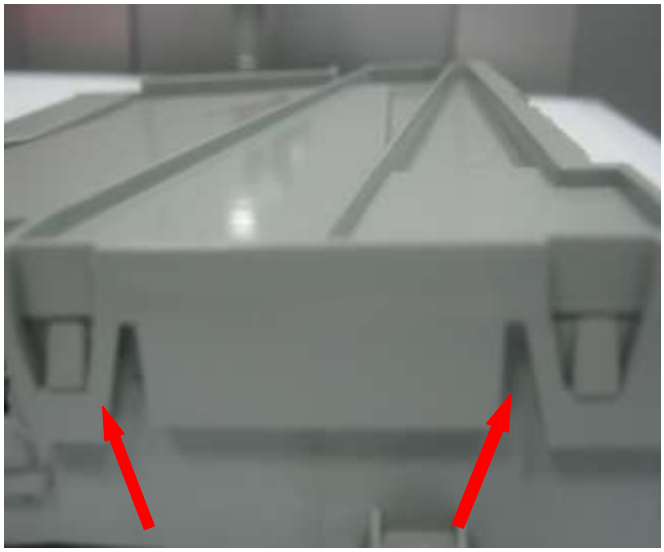
WARNING: WHILE REMOVING WIRES, DO NOT PULL THEM FROM WIRES, PULL FROM THE CONNECTOR.

b) Remove pcb box cover with pulling its plastic hinges.





c) Remove the wire which is between rotary switch and electronic card.



d)Remove the electronic card from pcb box by removing pcb box's plastic hinges.

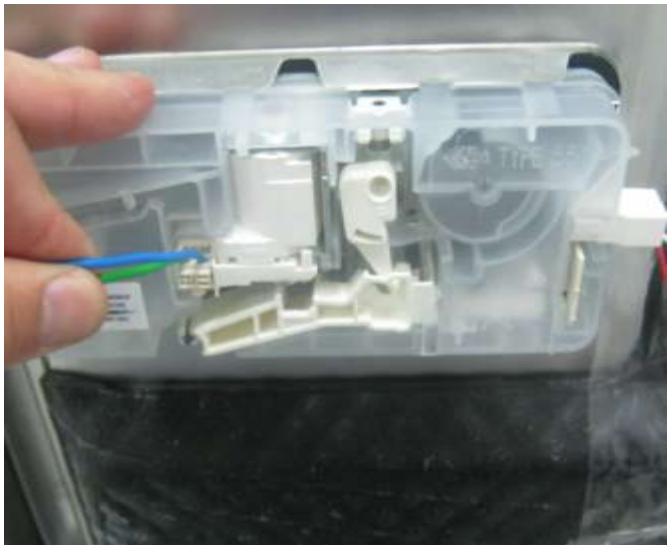
1.8) Lock Group

a) Remove the control panel.

b) The top (2) Remove the screws.

1.9) Dispenser

a) Remove the front panel



b) Remove the wire.
c) Remove dispenser from inside door‘s hinges by using slotted screwdriwer.
d) Push and remove the dispenser .

1.10) Door Inside ve Hinge Cord Group

a)Remove side panels.

b) Remove hinge spring from hinge cord group as it is shown in the picture.

c) Pull the door inside up as it is shown in the picture..

THE INNER COMPONENTS

2.) To Access The Components From Sides

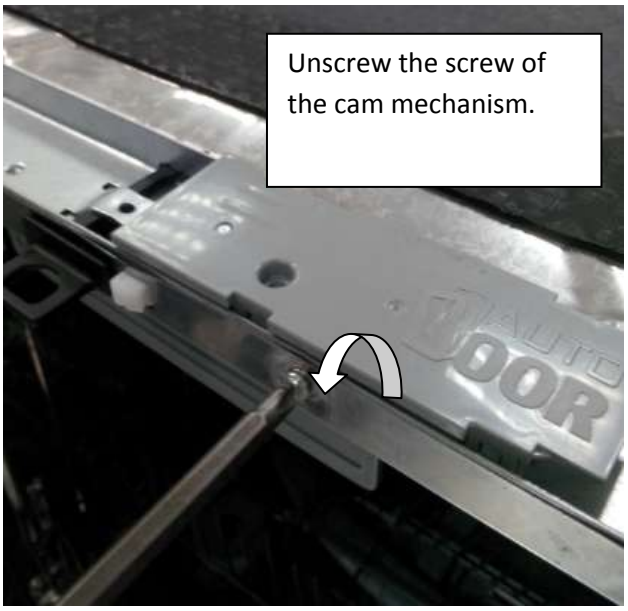
Remove the side panel to reach component which you need

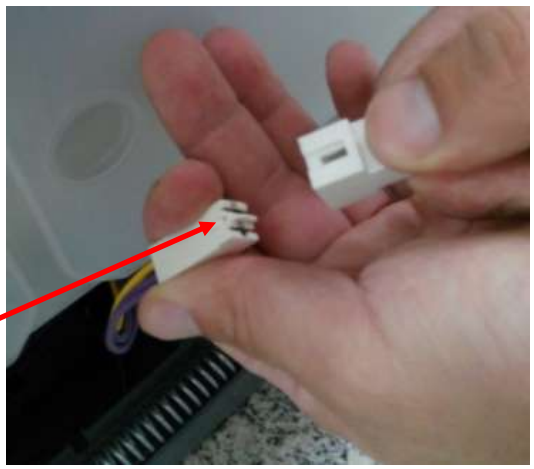
a) Right Sight

b) Left Sight

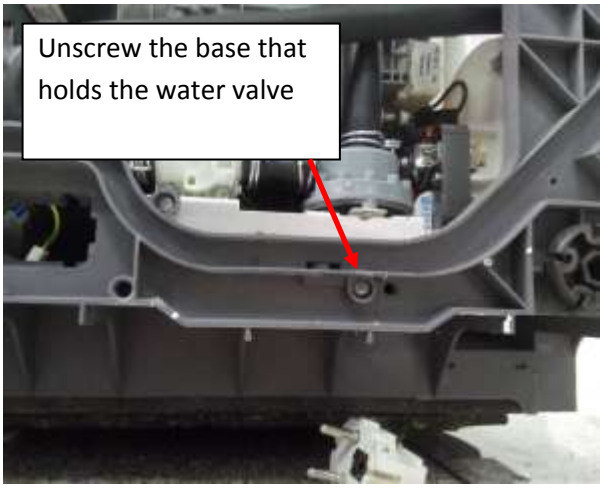
2.1) WATER RECYCLE TANK

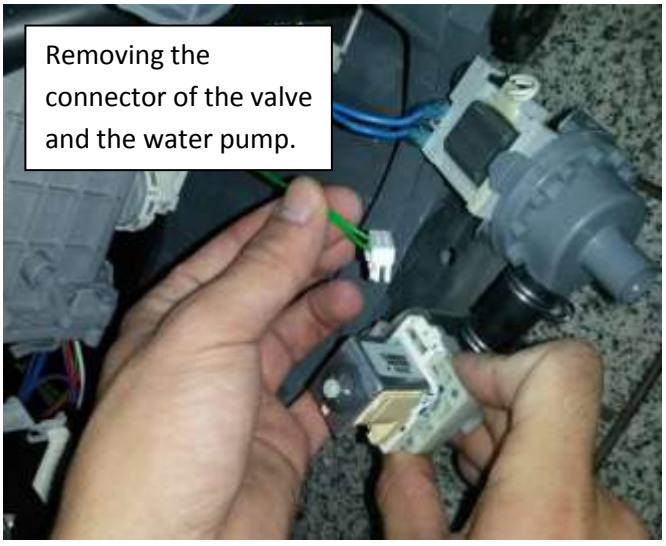
2.2) OKAM-CROSSBAR MECHANISM GR





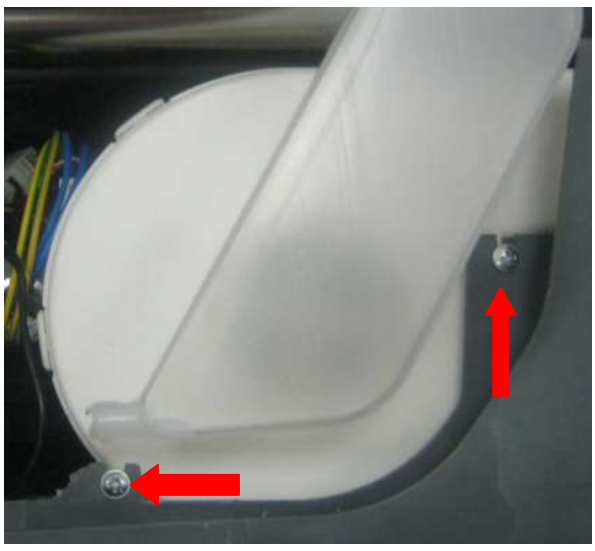
2.3) Water Pump and Two-Way Valve





2.1) TURBO FAN MOTOR GR

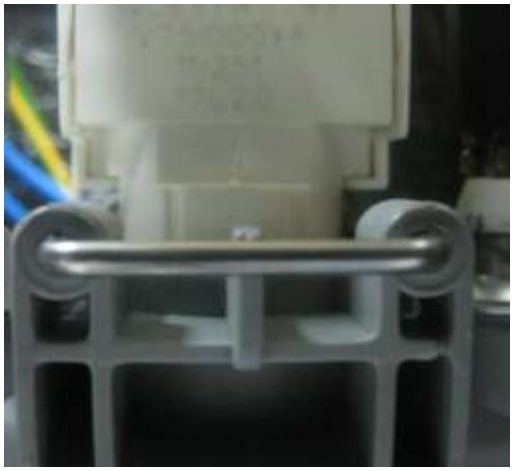
a) Last right sıde panel



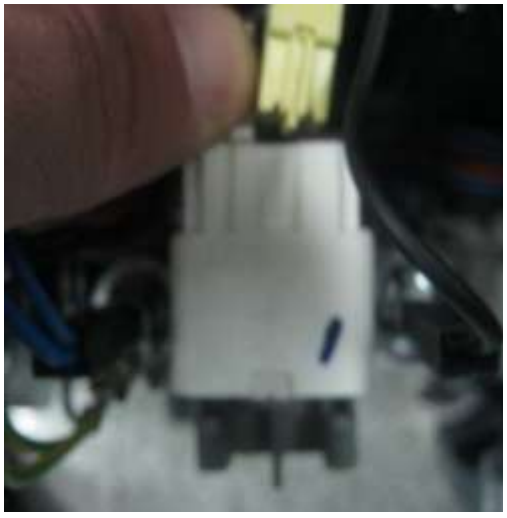
b) Remove the two screws on the bottom of the fan is connected to the base turbo.

c) Remove the turbo fan on the condensing unit

2.2) NTC with Thermal Protector



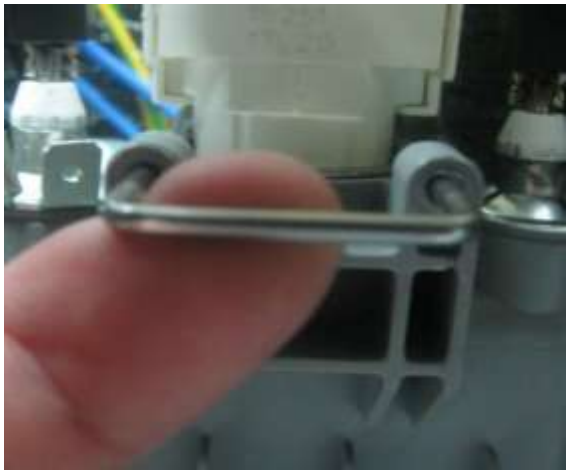
a) Remove turbofan new.NTC will see at the top of the heater group



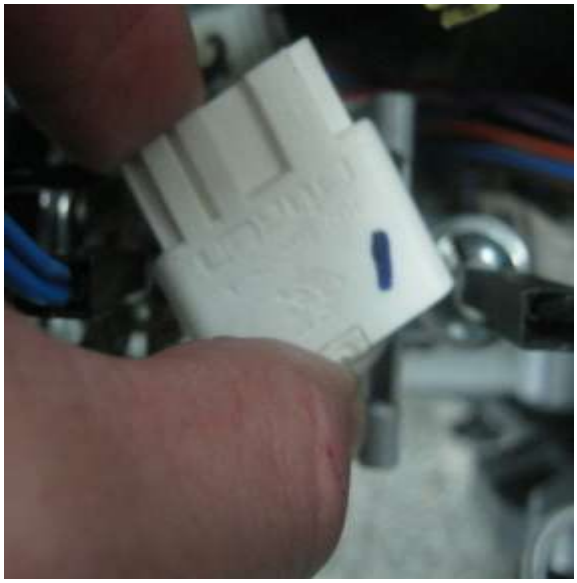
b) Remove the power cord is connected.

(NTC on the left, on the right is the thermal protection cable)

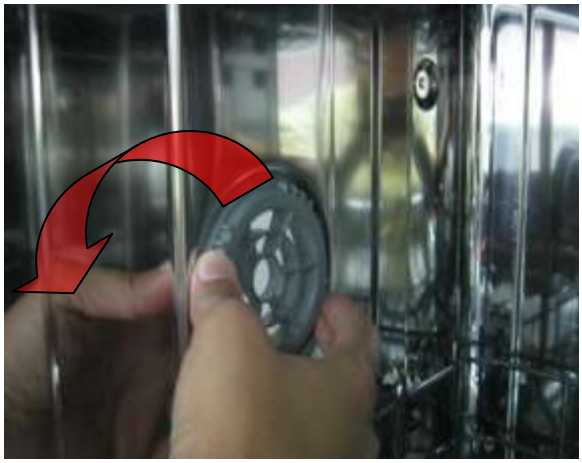
c) Pull yourself under the NTC pin.



d) NTC 't pull it toward you out of the anchorage.



2.3) Air-Break



a) Remove the left side panel of the machine.

b) Open machine's door..

c) Rotate counterclockwise air-break nut and remove it.

d) Remove air –break's connections with salt cap as it is shown in the picture.(Be careful about plastic hinges)

2.3) Hose Connection Plastic

a) Remove left side panel.

b)
By using flat tip screwdriver remove hose connection plastic's hinge from the basement as it shown in the picture.

c) Push the hose connection plastic.

WARNING: IF YOU DO NOT OBEY INSTRUCTIONS WHILE DISASSEMBLY OF THE HOSE CONNECTION PLASTIC IT CAN BE BROKEN

2.4)Supply Cable

a) Remove the plastic hose connecting the lower base.

Remove the bottom cover.

b) Supply cord with noise filter of electrically disconnect.

e) Remove from the place where the supply cable.

3. To Access The Components From in Front Of The Machine

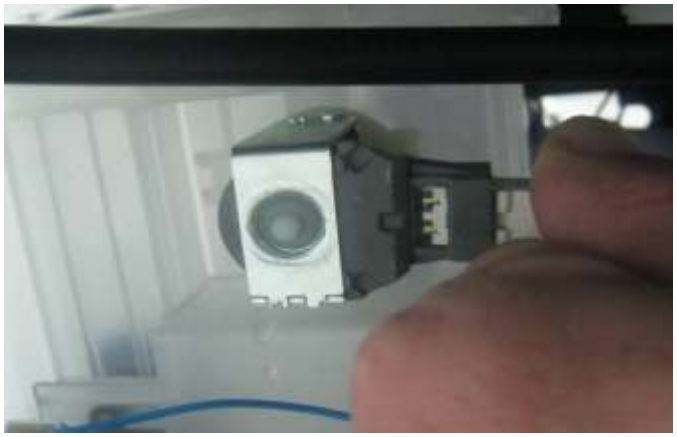
a) Remove Plastic kick plate and .kick plate iron.

3.1) Regeneration Valve

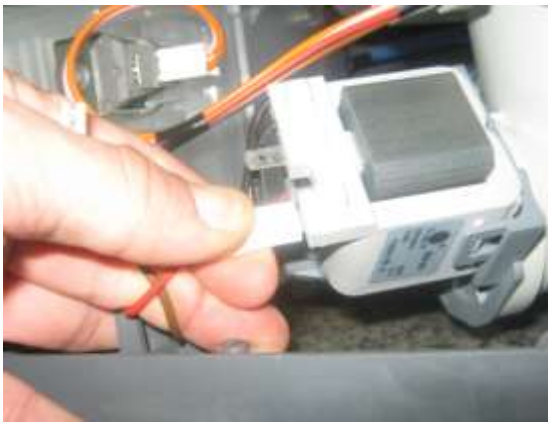
a) Remove plastic kick plate and. Kick plate iron sheet.

b) Remove the wires...

c) To remove regeneration Value rotate counterclockwise and pull it as it is shown in the picture.



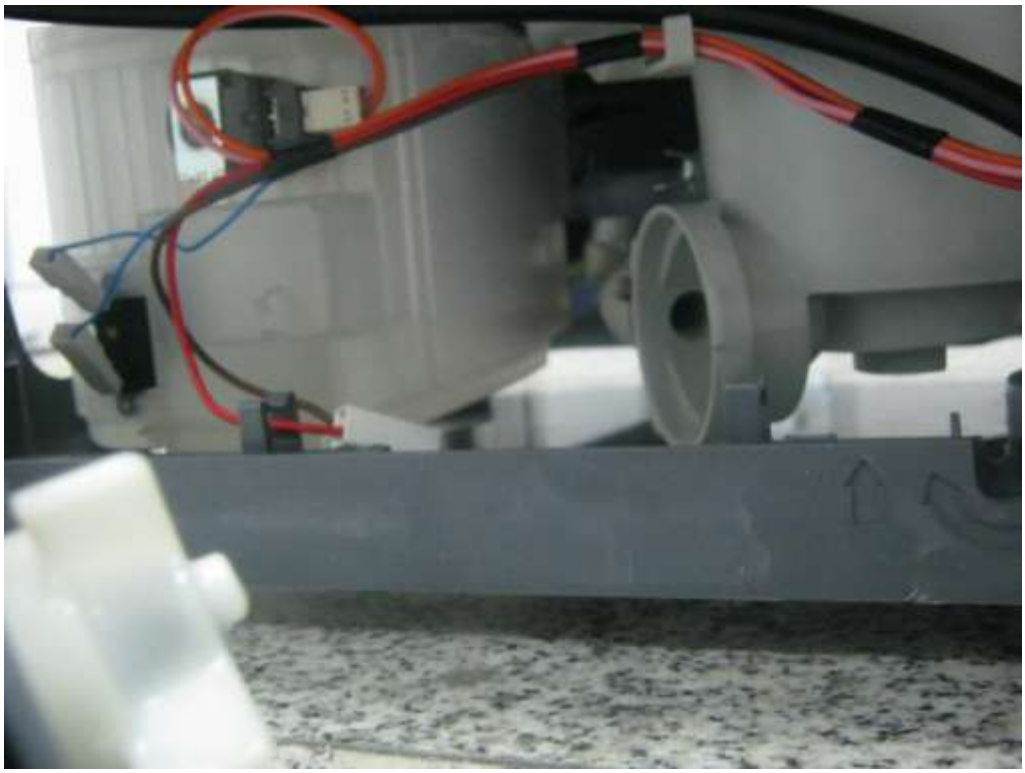
3.2) Drain Pump



a) Remove Plastic kick plate and .kick plate iron sheet.

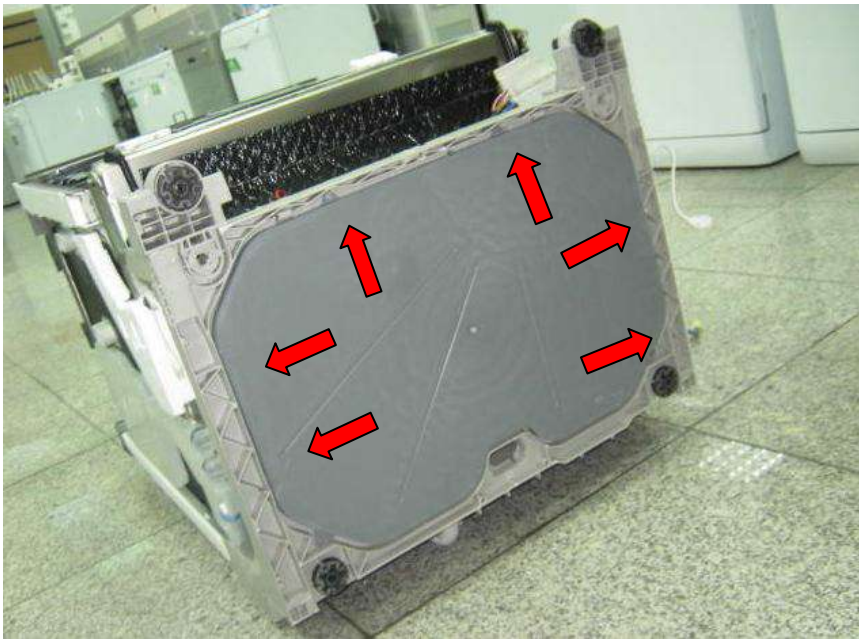
b)Remove the wires...

c)To remove the drain pump that fixes to the sump, rotate it in the direction of counterclockwise and pull



4. To Access The Components from the Lover Cover

a) Lay the appliance on the rear panel..

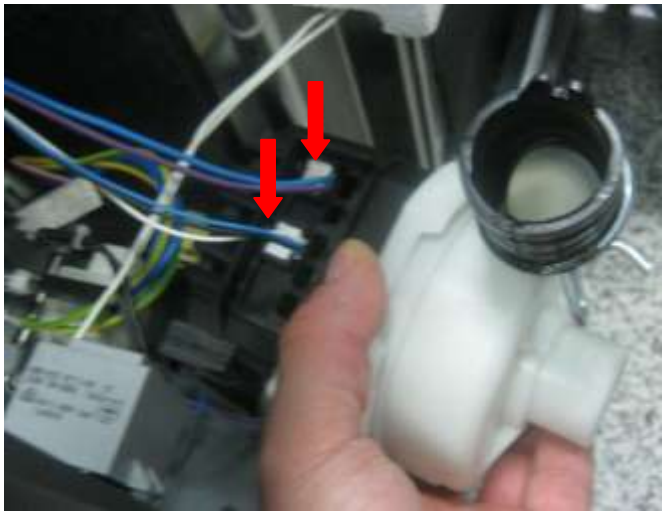


b) Remove lower cover from the places that are shown in the picture.

4.1) Circulation Pump

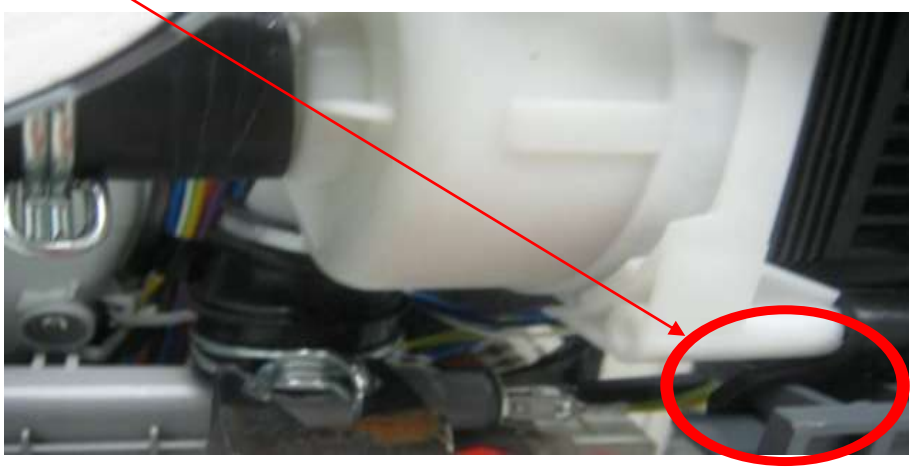
a)Lay the appliance on the rear panel.

b) Remove the electrical connection on the circulation pump.



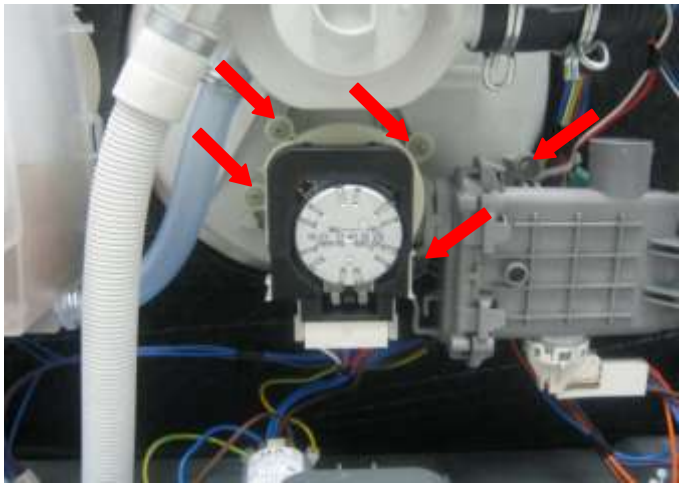
c) Remove 2 clamps that are shown in the picture (Heater casing- circulation pump, sump-Circulation pump)

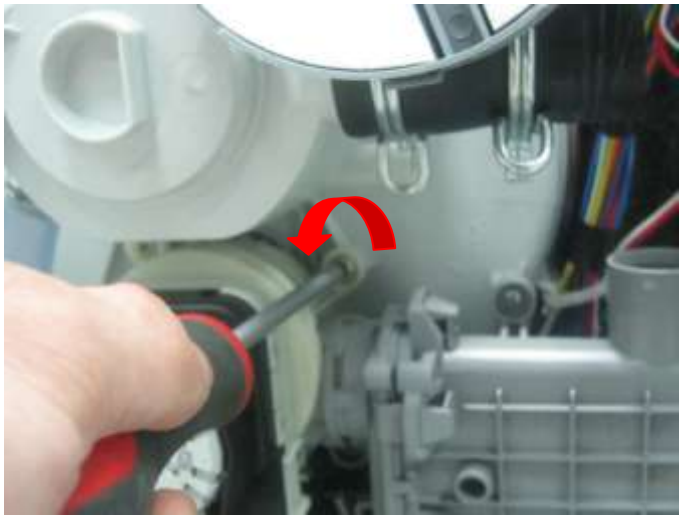
d)Yıkama pompasını alt tabana monte eden askılardan, kurtararak sökün.



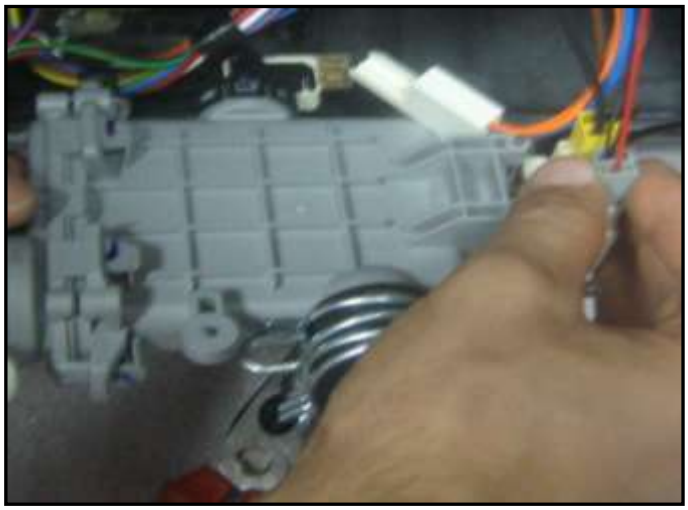
4.2) Isıtıcı (Heater-Casing Grubu)

a)Remove the machine's lower cover.



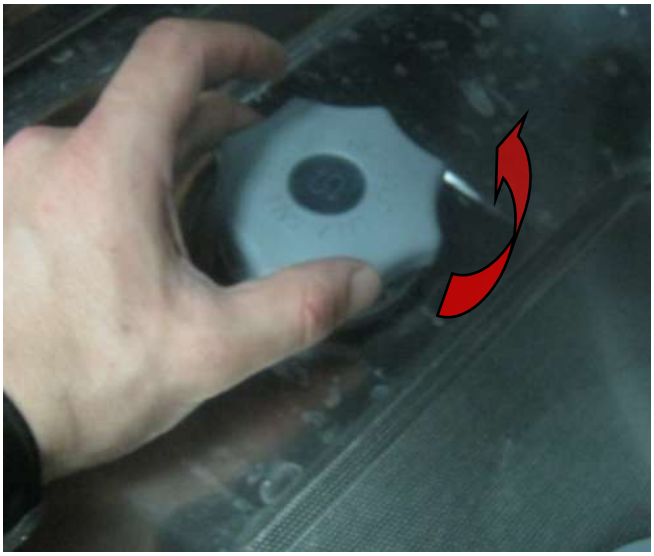


b)Remove five screws that fix heater to sump



c) Remove the electrical connection.

4.3)Water Softener



To remove salt cup cover, rotate it in the direction of counterclockwise.

To remove salt cup nut , rotate it in the direction of counterclockwise .

c) Remove left side panel

d) Detach the connections which are between water softener and air-break.

e) Remove lower cover.

f)Remove the hose that is between sump and salt camp..

4.4) Parazit Filtresi

a)Remove lower cover.

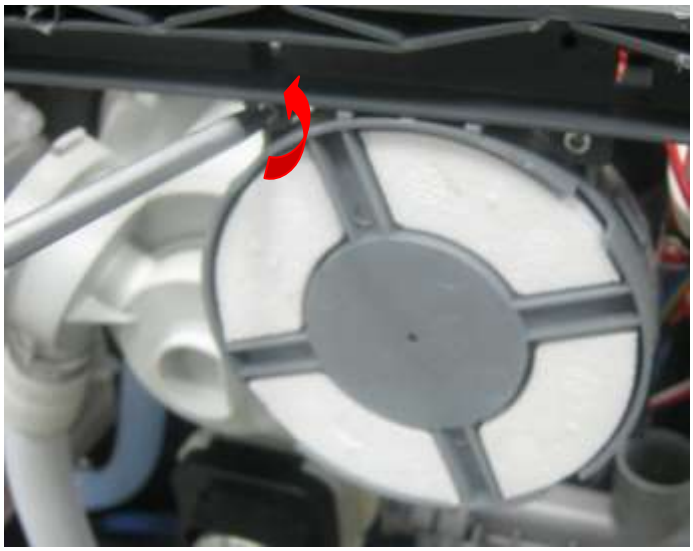
b)Remove one screw fixing parasite filter.

c)Remove the electrical connection of noise filter.

d)Remove the electrical connection of noise filter.

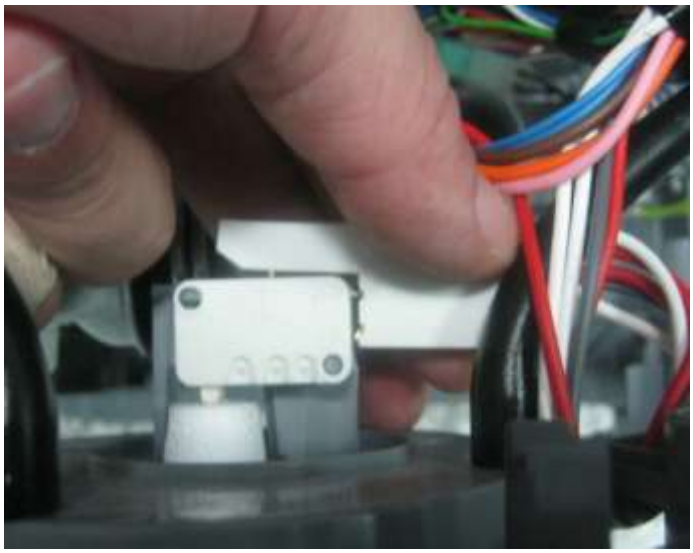
4.5) Floater

a) Lay the bottom of the machine and remove the cover.



b) Floater sub-base screws (2 pcs) Unscrew the anticlockwise

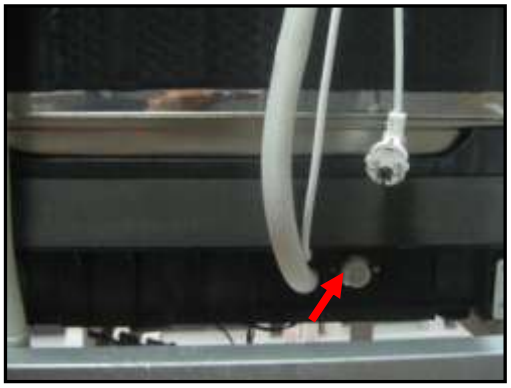
c) Disconnect the overflow hose float.



d) Disconnect the electrical connection.

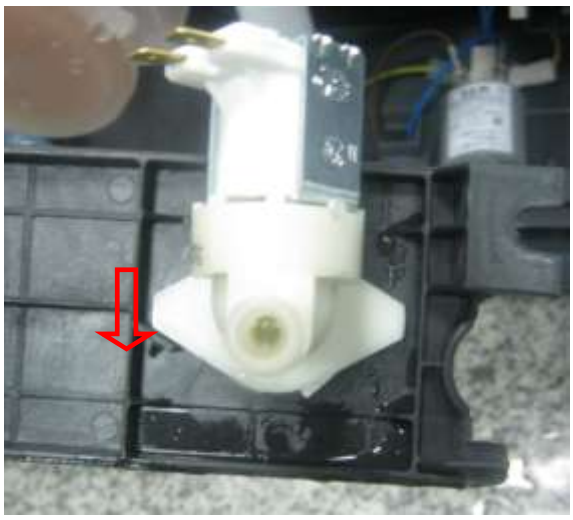
4.6) Water Inlet valve

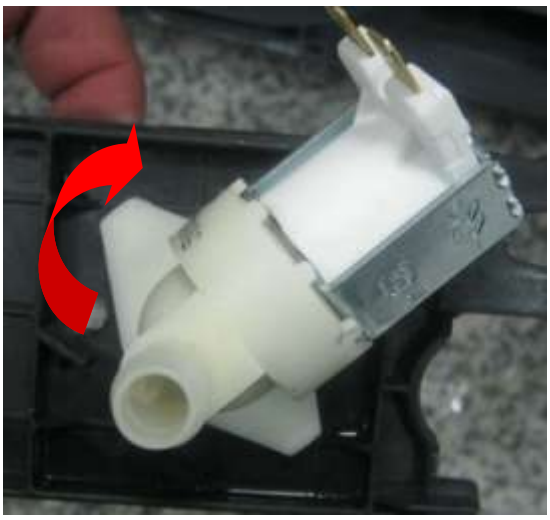
a) Remove lower cover.



b) Electricity connection and water inlet valve connects the air-break disconnect hose.

c) The water inlet valve is connected by pulling back after recovering from the pins clockwise to remove.



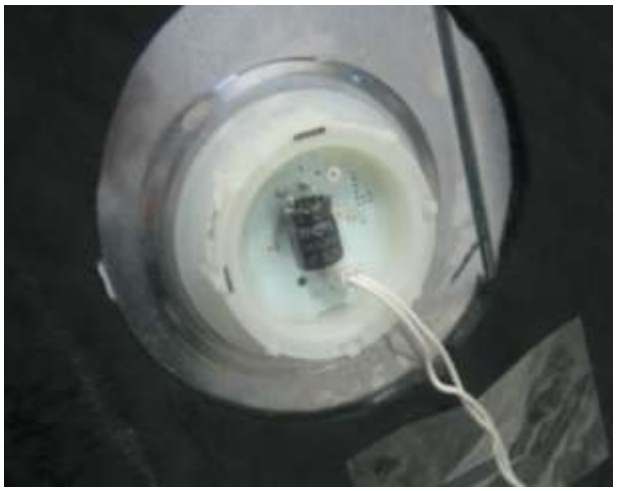


4.7) Draining Hose

a) Remove the hose connection plastic
b) Remove lower cover.
c) Remove the clamp that fixes draining hose to the sump.
d) Remove draining hose..

4.8) Led Modül (OPSİONEL)

a) Remove the right side panel.



b) Remove the electrical connections as in the picture..

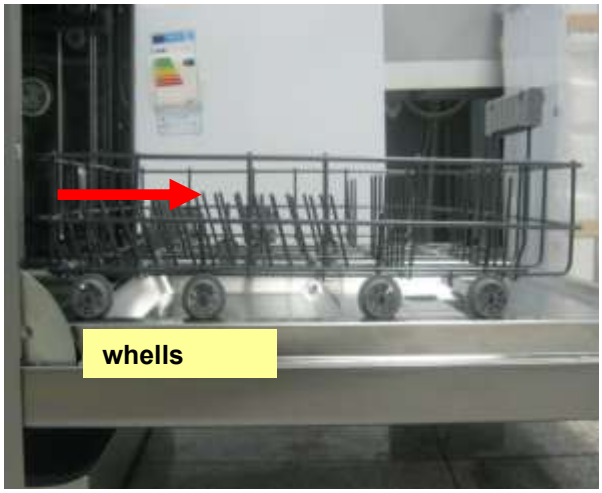
c) LED modules behind the nut by turning it counter-clockwise direction to remove.

5) Basket Group

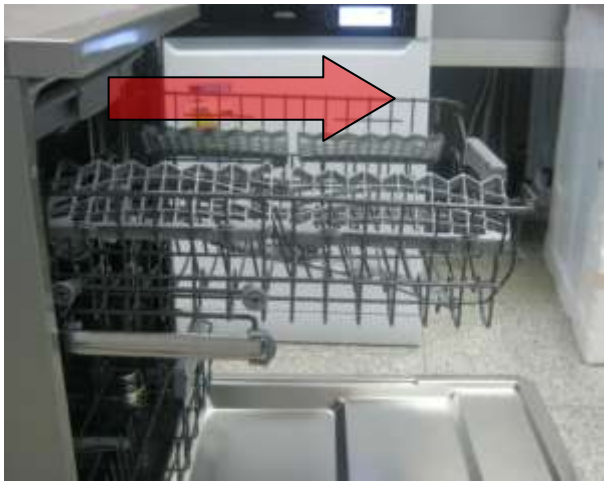
5.1) Lower Basket

a) Open machine’s door.

b) Pull the basket to yourself.



5.2) Upper Basket



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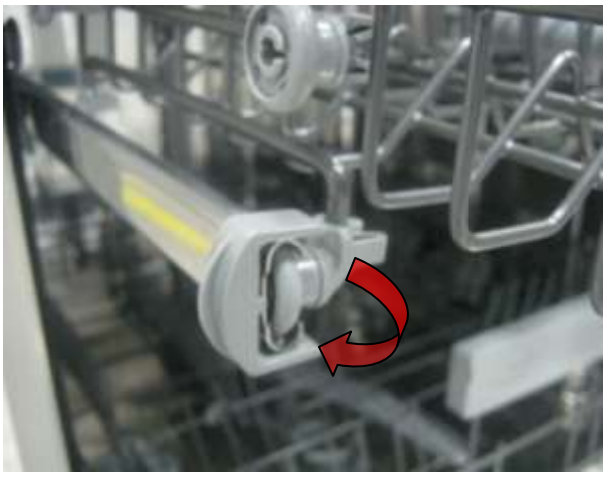


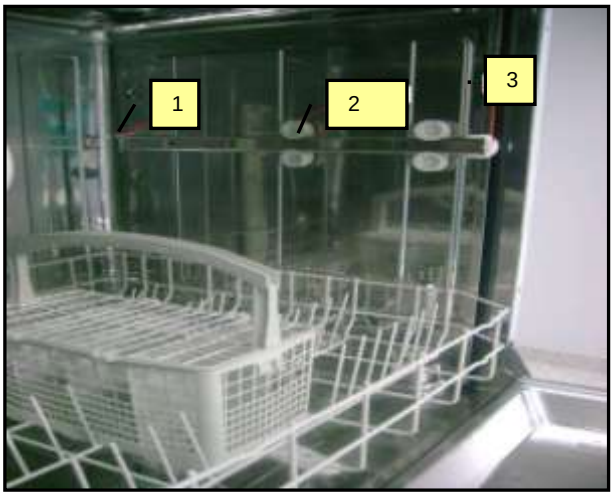
c) The plastic cover on top rail (top rail lock Cart-front) right by turning it to the left to the right and the left.

d) Cart pulling it toward you recover from the rails.

5.3 Third Cart

a) Open the appliance door.

5.3
Cart Rails



1- Upper basket rail stoper rear
2- Upper basket whells
3- Upper basket rail lock front

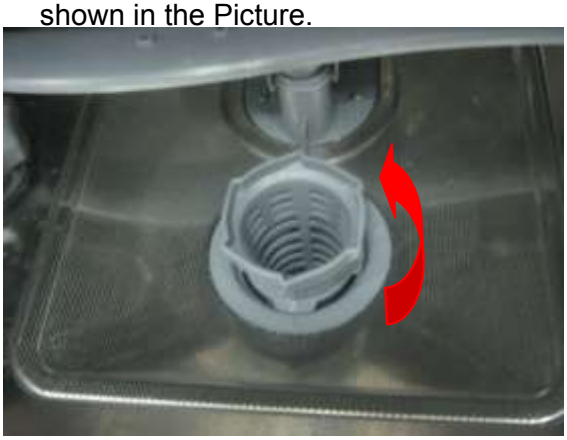
6.) The Components That Are inside the Tub

6.1) Course , Micro and metal filters

a)Open the door.

b)Remove lower basket.

c) To remove microfilter group rotate them in the direction of counterclockwise and pull them up as it is shown in the Picture.

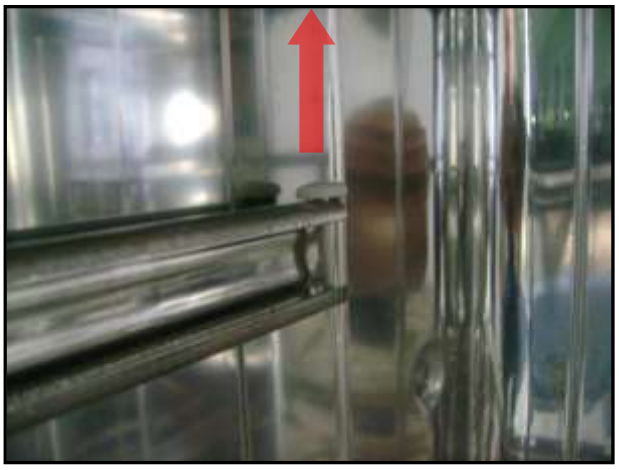


d)To remove microfilter group (course filter and micro filter) pull them as it is shown in the picture.

e)To remove the metal filter pull it up as it shown in the picture

f) To remove the basket rails, open the door and take out baskets.

g To remove basket rails release the rail from upper basket stopper rear..



6.2) Sprinkler System

a)After removing the lower basket , pull the spray arm upwards .gripping it by the central hub.

b)To remove upper spray arm adjustment link pull it trought yourself as it is shown in the picture

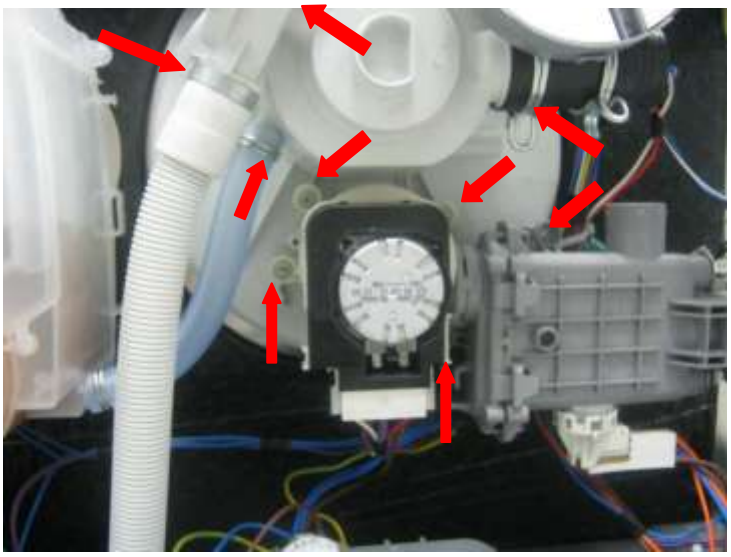
c) To remove upper spray feeding canal turn left it than pull it up as it is shown in the picture.

6.3) Sump

a) Remove any residual water from the sump by suction so that it does not flow into the tub and the pressure switch tubes , then lay the appliance on the rear panel.

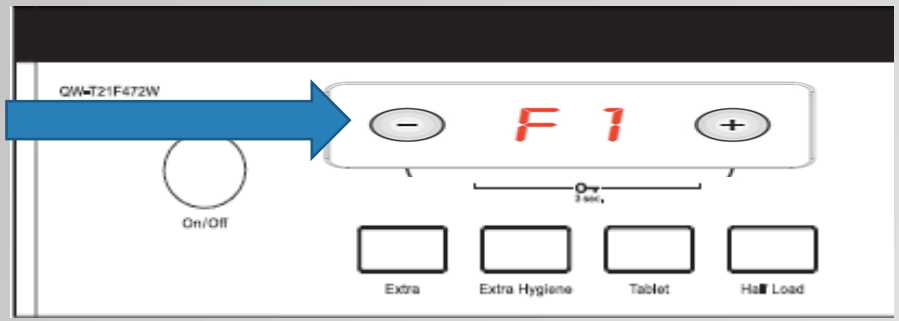
b) Remove lover cover..

c) From inside tub ,remove the basket and lower spray arm .
d) Detach all the hoses (sump – draining hose , circulation pump – sump, sump – water softener)

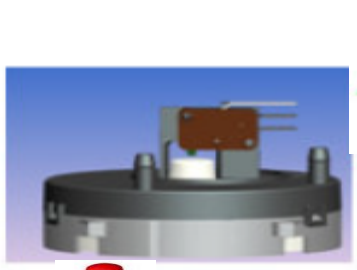


FAILURE CODES

ALARM IS ACTIVE FOR OVERFLOW



POSSIBLE PROBLEMS

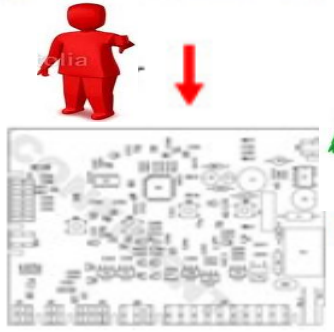


FLOATER

Floater switch can be out of order or have a problem with the cable connection.

TUB

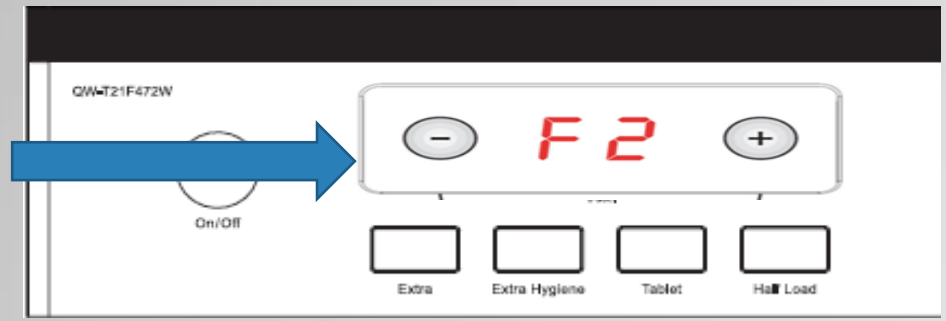
There can be a water leakage from the tub.



ELECTRONIC CARD

Electronic card can be out of order.

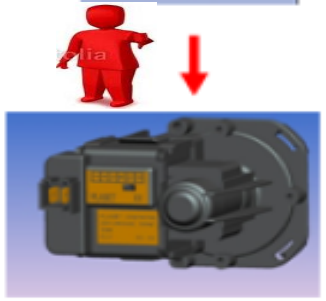
THE WASTE WATER IN THE MACHINE CANNOT BE DISCHARGED



POSSIBLE PROBLEMS

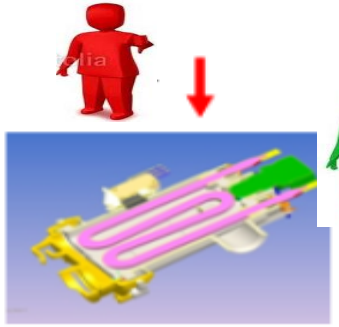
DRAIN HOSE

1- Water outlet hose is clogged.
2-Check of the water outlet hose position



DRAIN PUMP

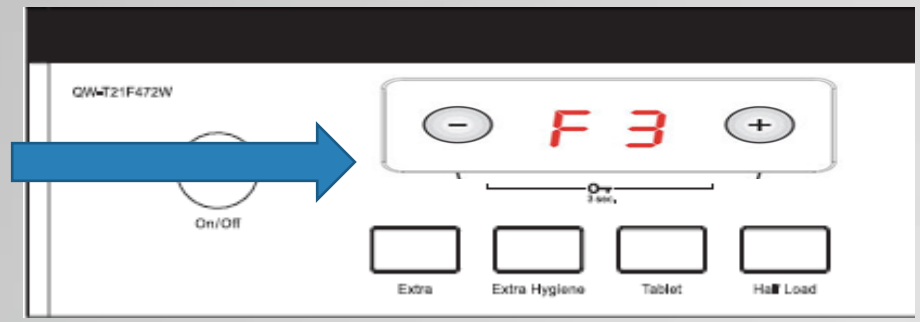
1-Check the drain pump resistance and power values
2-There can be a problem with cable connection of the drain pump.



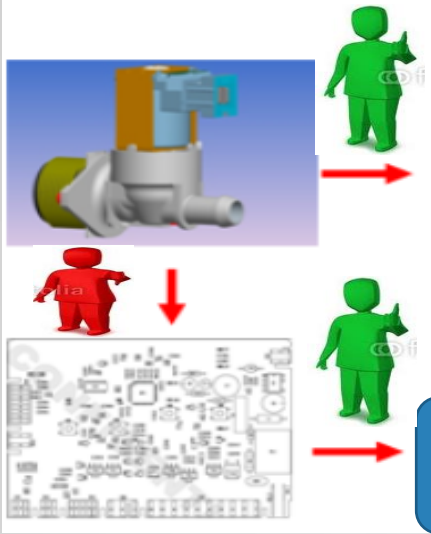
PRESSURE SWITCH

Pressure switch of the heater casing group can have a mechanical or cable connection problem.

ERROR OF CONTINUOUS WATER INPUT



POSSIBLE PROBLEMS



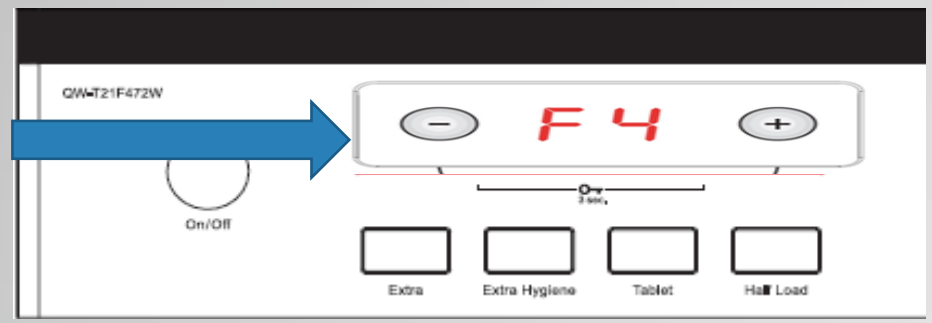
WATER INLET VALVE

Water inlet valve can be out of order or can not be closed.

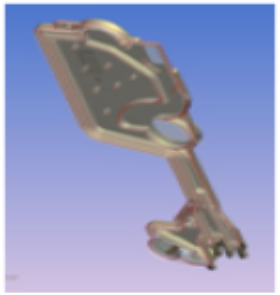
ELECTRONIC CARD

Electronic card can be out of order.

FLOWMETER FAULTY



POSSIBLE PROBLEMS



FLOWMETER

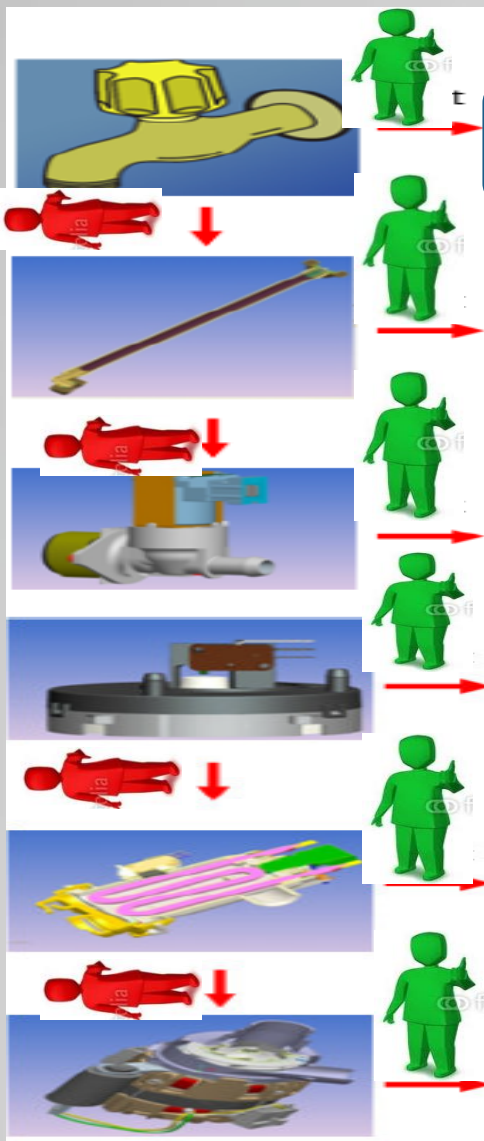
1-Flowmeter can be out of order.
2- Cable connection of flowmeter can be faulty.

ELECTRONIC CARD

Electronic card can be out of order.

INADEQUATE WATER SUPPLY

POSSIBLE PROBLEMS



WATER TAP

Make sure the water input tap is totally open and that there is no water cut.

WATER INLET HOSE

Close the water input tap, separate the water input hose from the tap and clean the filter at the connection end of the hose.

WATER INLET VALVE

1- Water inlet valve filter can be clogged.
2- Water inlet valve can be out of order. There can be a problem with the cable connection of water inlet valve.

FLOATER

Floater switch can be out of order or have a problem with the cable connection.

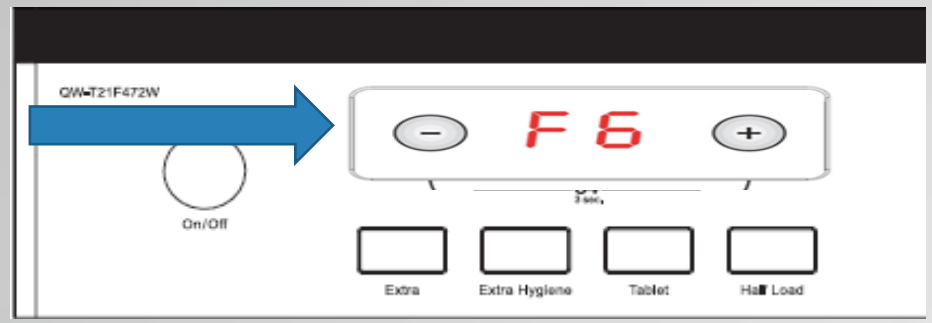
PRESSURE SWITCH

Pressure switch of the heater casing group can have a mechanical or cable connection problem.

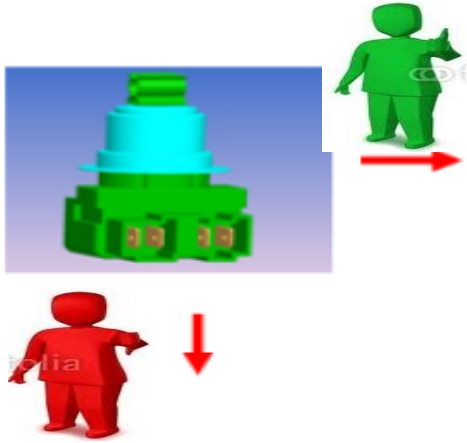
CIRCULATION PUMP

Circulation pump can be out of order or have a problem with the cable connection. External part can be blocked to the circulation pump

NTC FAULTY



POSSIBLE PROBLEMS



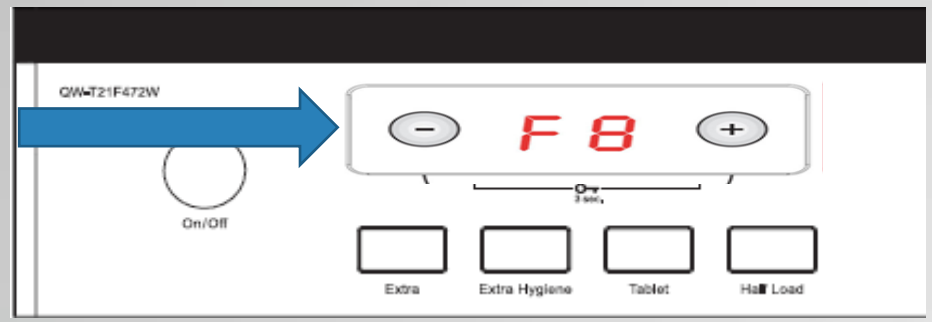
NTC

1- NTC can be out of order.
2- NTC cable connection can be faulty. NTC can be short or open circuit.

ELECTRONIC CARD

Check the power and resistance value of heater casing.
Check the cable connection of the heater casing

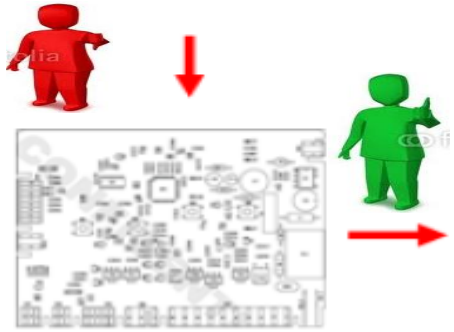
INADEQUATE HEAT



POSSIBLE PROBLEMS

HEATER

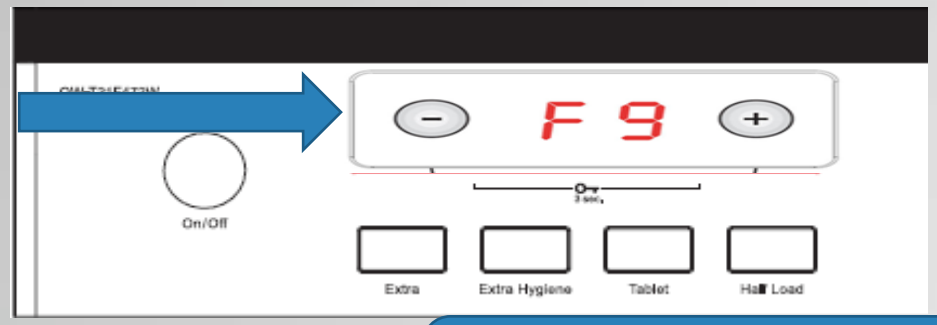
1- Check the power and resistance values
2- Check the cable connection of the heater.



ELECTRONIC CARD

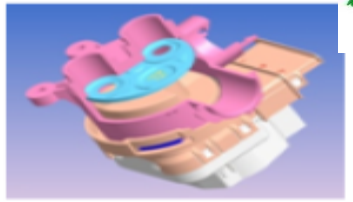
Check the electronic card

DIVERTER POSITION PROBLEM



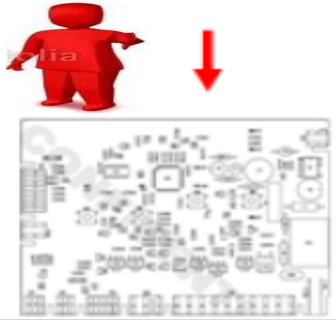
NOTE: JUST FOR T21 MODELS DUE TO T21 WITH DIVERTOR
T13 WITHOUT DIVERTOR

POSSIBLE PROBLEMS



DIVERTER

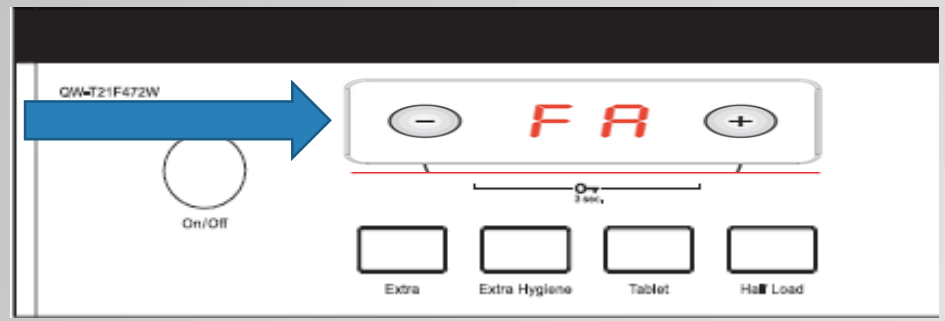
1-Check the values of the resistance of the diverter
2- Check the cable connection of the diverter



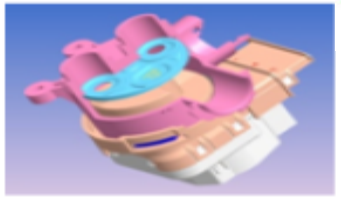
ELECTRONIC CARD

Check the electronic card

TURBIDITY SENSOR FAULTY

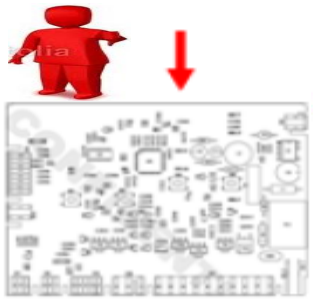


POSSIBLE PROBLEMS



TURBIDITY SENSOR

1- There can be some soil around the turbidity sensor.
2- Check the cable connection of the turbudity sensor



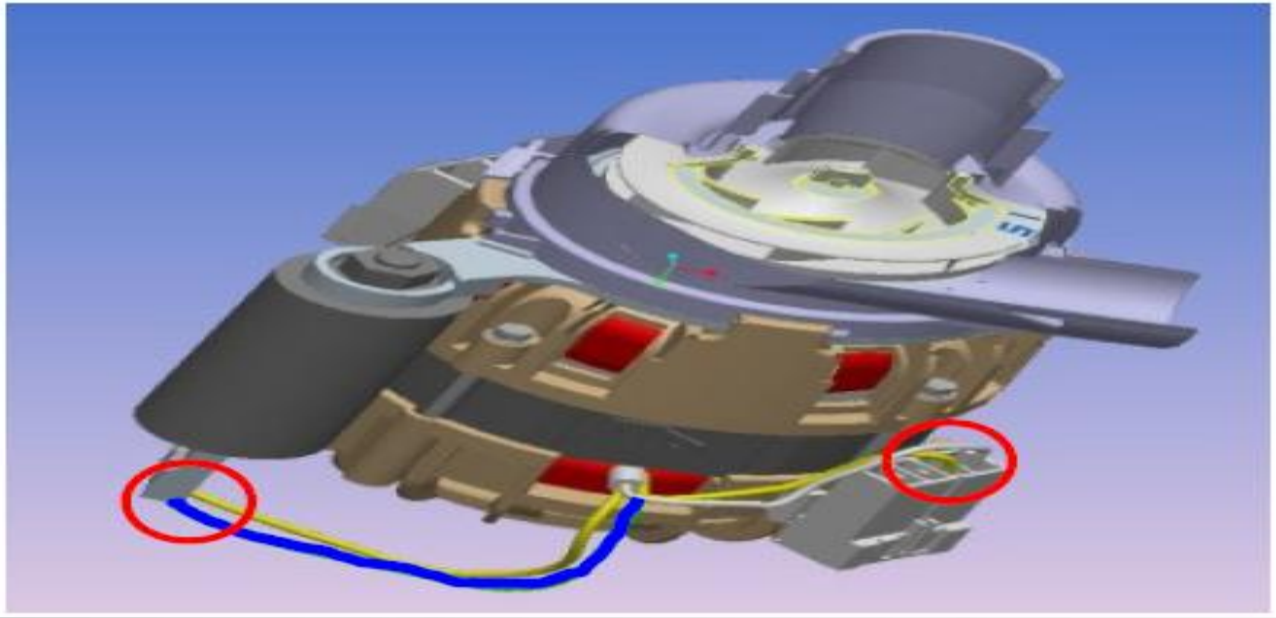
ELECTRONIC CARD

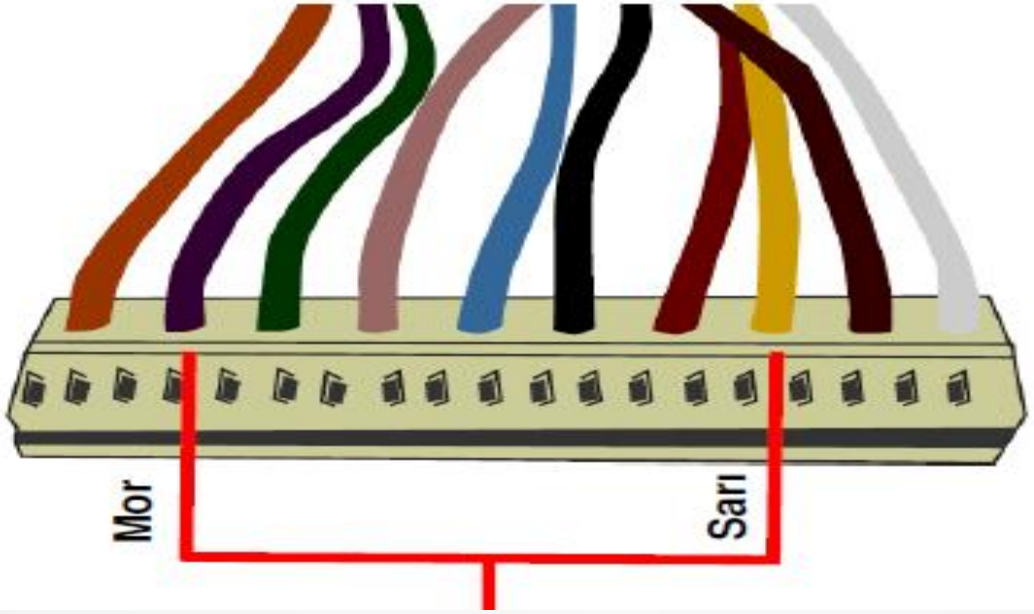
Check the electronic card

MEASURING OF THE ELECTRICAL COMPONENTS

MEASURING OF THE COMPONENTS FROM THE ELECTRONIC CARD

1. CIRCULATION PUMP



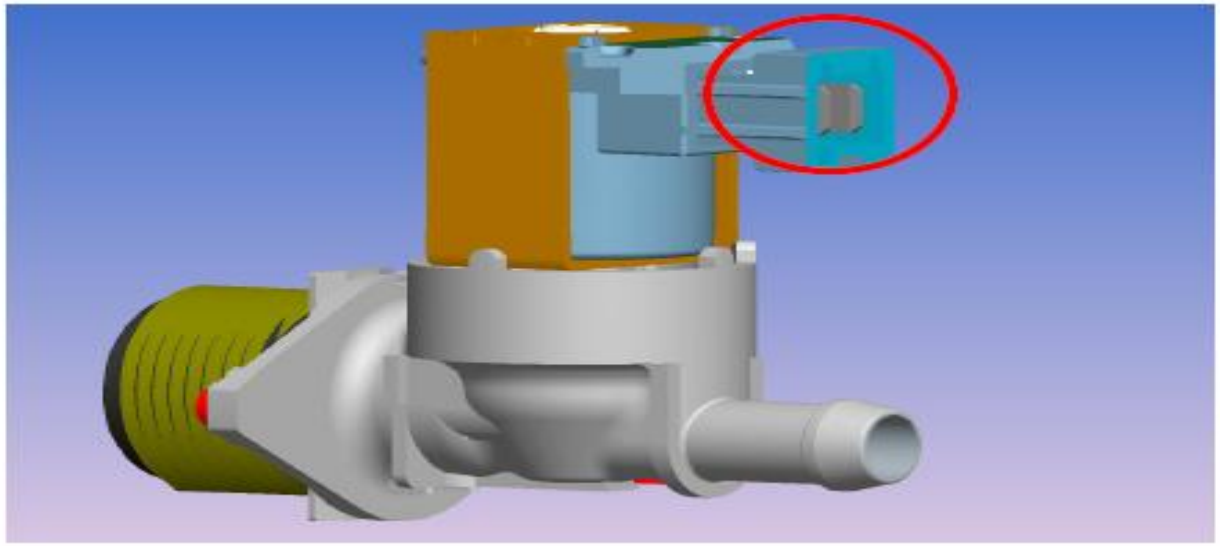


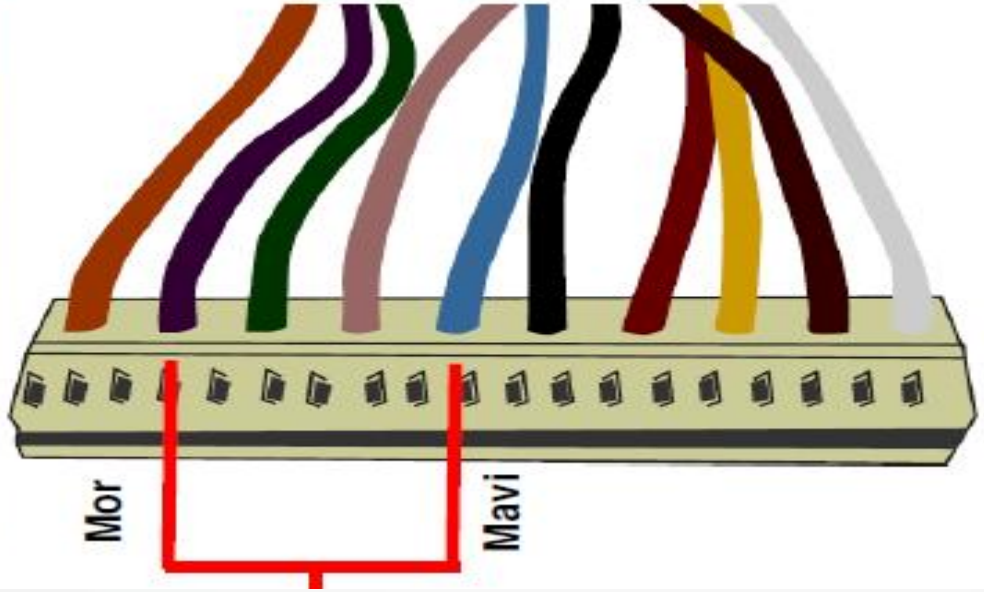
➢ Measurement of the secondary windings and primary windings of the washing pump

➢Probes of the tester should be applied on to the related connectors. (purple and yellow cable)

MEASURING OF THE COMPONENTS FROM THE ELECTRONIC CARD

2. WATER INLET VALVE

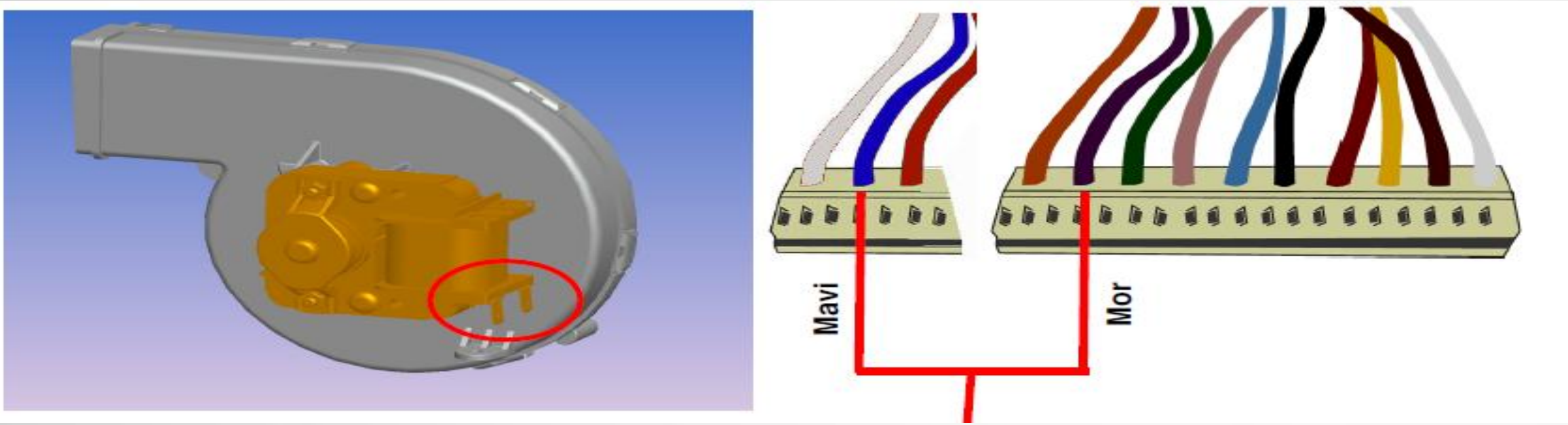




➢Probes of the tester should be applied on to the related connectors. (purple and blue cable)

MEASURING OF THE COMPONENTS FROM THE ELECTRONIC CARD

3. TURBO FAN MOTOR



➢Probes of the tester should be applied on to the related connectors. (blue and purple cable)

VESTEL