NOVUS SERIES MANUAL

INDEX PAGE

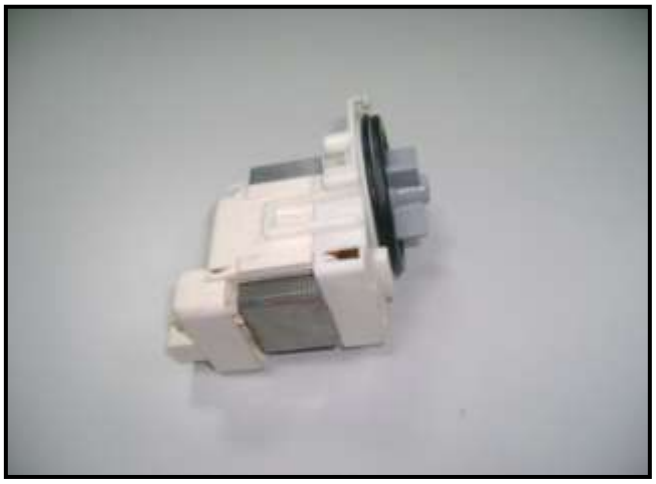
1. ELECTRICAL COMPONENTS

1.1 Circulation Pump

Voltage	: 220/240 V :
Frequency	50/60 Hz
Total Power	: 88 W
Coil Isolation Class	: F
Main Coil	: 95%± 7 Ω :
Sub Coil	126%± 7 Ω :
Thermal Protector	109 °C
Pump Outlet Pressure	: 300 mbar :
Pump Flowrate	60 lt/dk

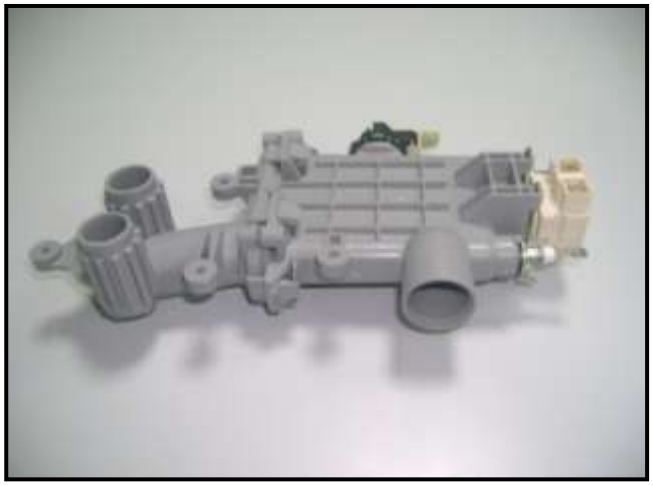
Single direction, single phase, asynchronous and two pole. It turns opposite clock direction. It is assembled to the basement with rubber hangers.

1.2 Drain Pump



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

1.3 Heater Casing Group



1.3.1 Heater

Voltage	: 220/240 V
Total Power	: 2000 W
Resistance	: 23.95±15 Ω

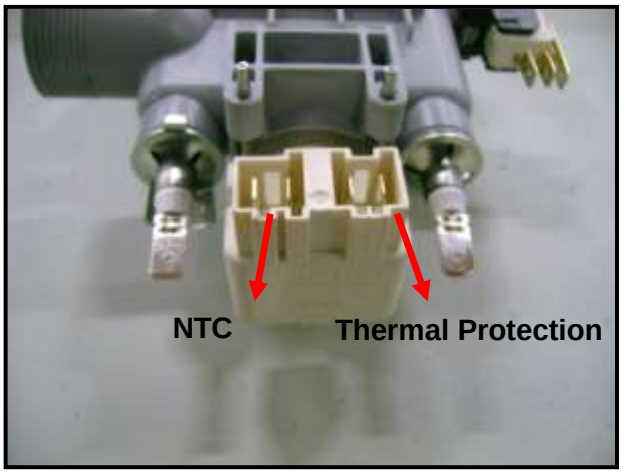
It is used to heat the washing water.
Heater is not active during the drying process.
It is assembled to the sump and located to the circulation pump.

1.3.2 NTC

Thermal Protection 83±3 ° C

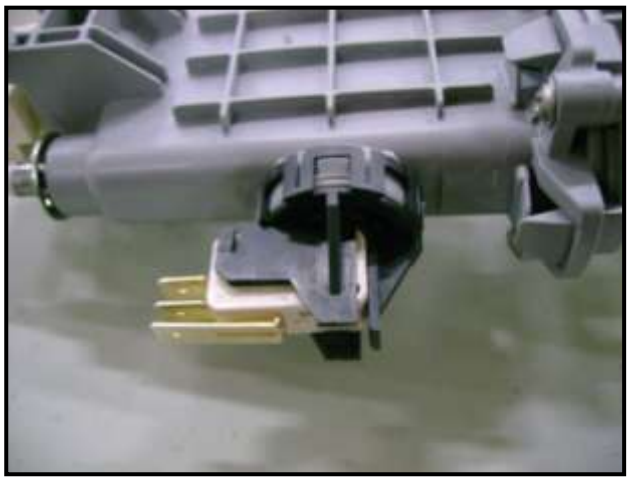
Temperatures;

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



1.3.3 Pressure Switch

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



1.3.4 Diverter

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

NOTICE: T21 models includes diverter .

1.4 Detergent Dispenser

Detergant 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 : 1 A max.
Current Through Closed Contact: 2,5 max.

1.5 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 C°)

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

1.6 Water Softener

1.6.1 Regeneration Valve;

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

Regeneration valve is assembled on the water softener.

1.6.2 Salt Sensör ;

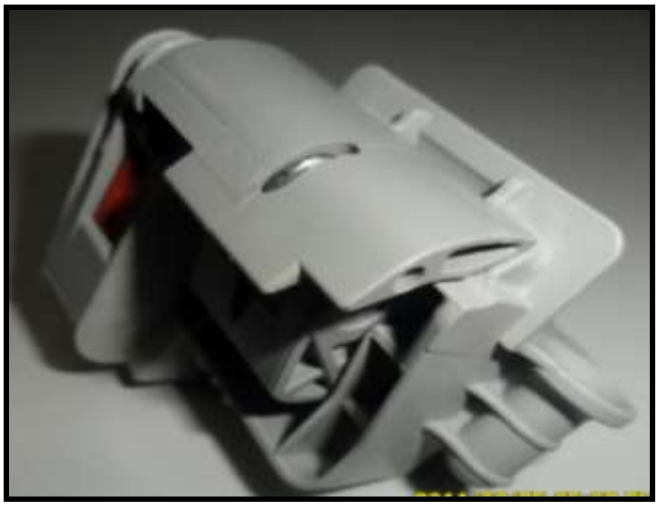
Voltage : 250 V
Currency : 16 (4) A

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

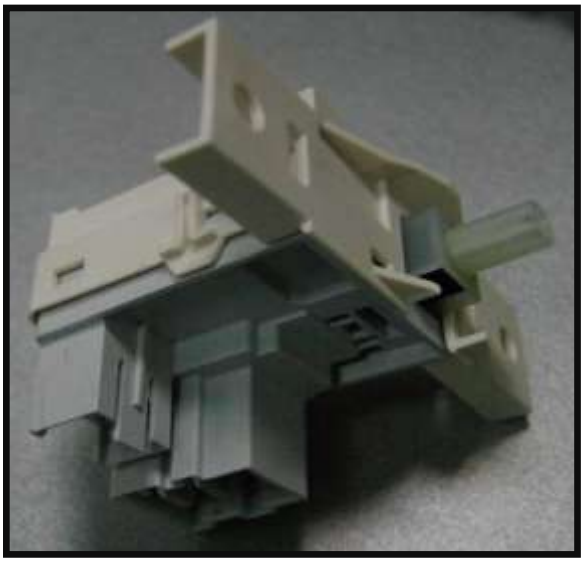
1.7 Door Lock;

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.

Currency : 16 (4) A



1.8 ON/OFF Button (Hemera series) ;



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

Voltaj : 250 V
Akım : 50mA

1.9 Button (On / Off Switch) ;

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

Voltage : 250 V
Currency : 50mA

1.10 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 .
It is applied only model with 8 programmes.

1.11 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.

1.12 Flowmeter ;

The amount of water intake is in precise control

1.13 Power Cord;

Type : Euro 3'lü 1 mm2 , copper conducting
solation : TS 9760 H05VV-F
Plug : TS-IEC 60884–1 PVC injected
Length :1800 mm

2. PLASTIC COMPONENTS

2.1 Drain Hose;

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

2.2 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.

2.3 Air Break ;

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

2.4 Water Softener ;

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.

2.5 Sump

Sump that is reservoir connects water in tube with

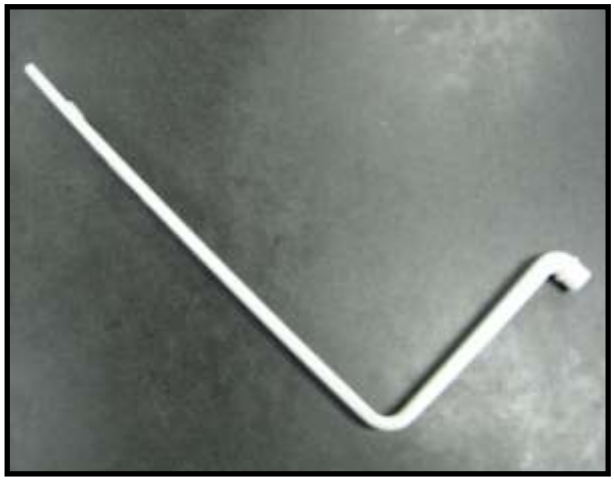
circulation pump and drain pump and heater casing..

2.6 Spray Arm Support

It distributes water from divisor to upper and below spray

2.7 L Spray Arm;

It transfers water from spray arm support to upper spray arm



2.8 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.

2.9 Upper Spray;

It distributes water from upper spray arm to dirty dishes in the upper basket.

2.10 Lower Spray Arm;

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

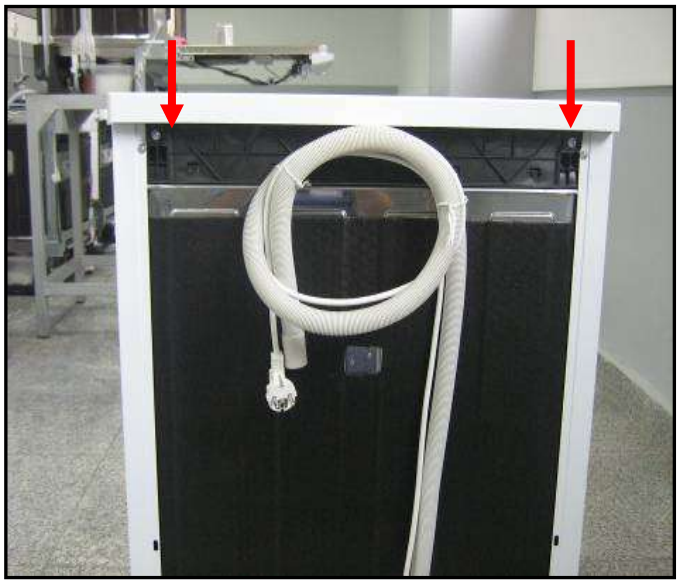
DISASSEMBLY

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

Before removing side panels ;

a) Firstly remove the top plate.

b) Than remove plastic kick plate.

1.4) Front Panel

a) Remove six screws that fix the front panel.

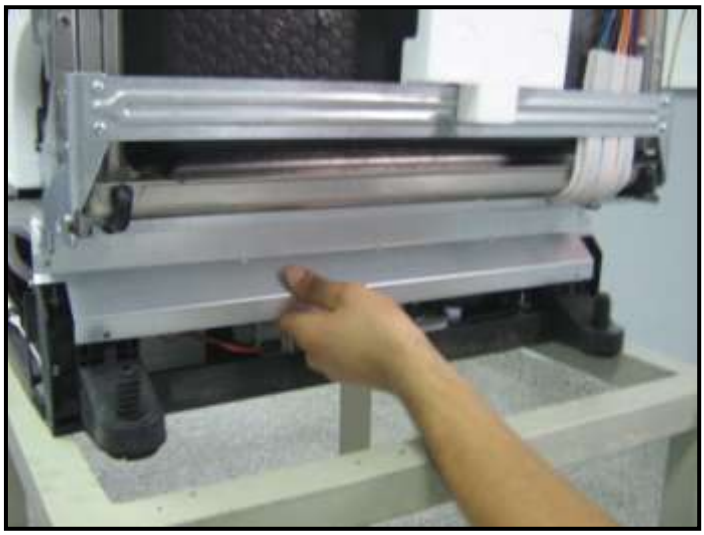
b) Pull down the front panel as it shown in the Picture.

1.5) Kick Plate Sheet Iron

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

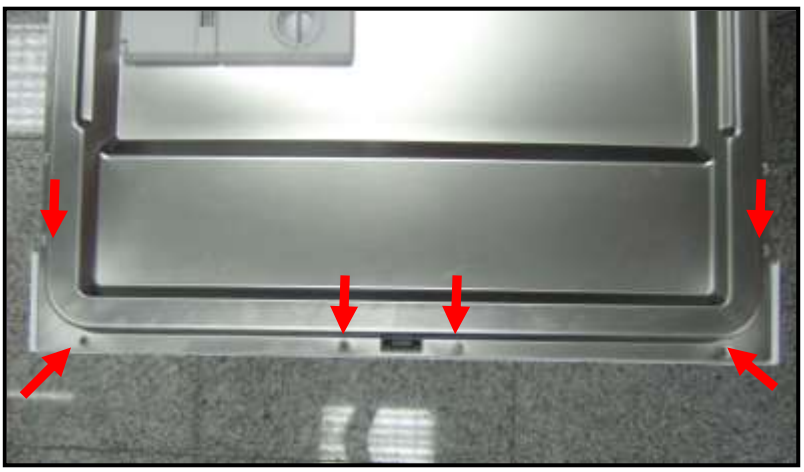
b) Remove two screws tat fix the kick plate sheet iron.

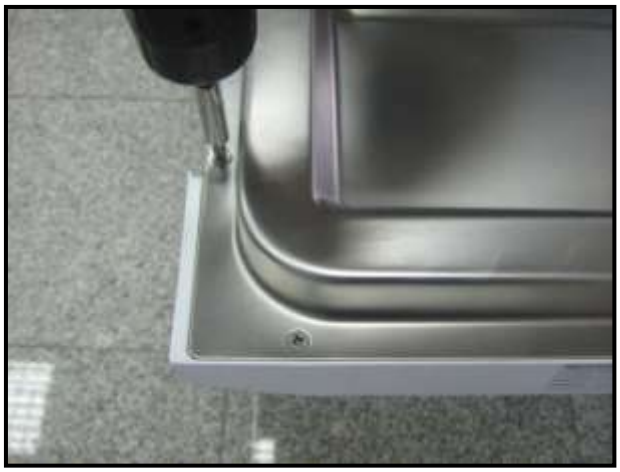
c) Pull it down as shown in the picture.



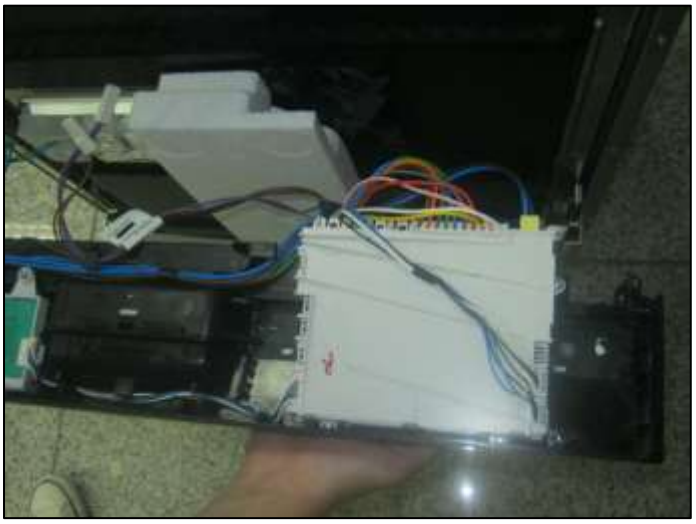
1.6 Control Panel

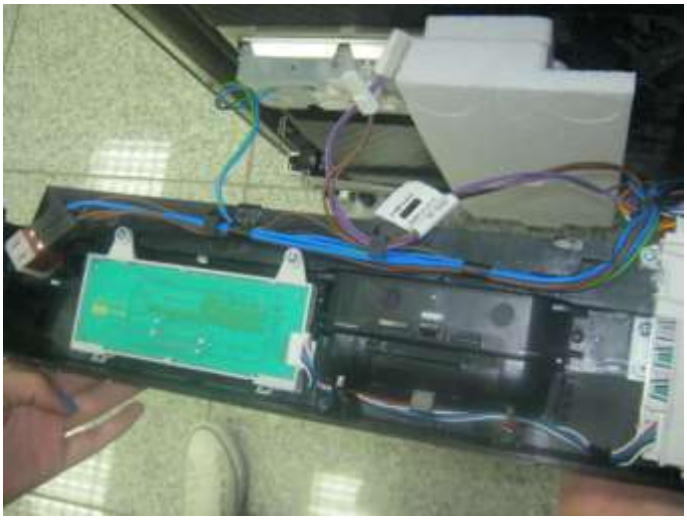
a) Remove six screws that fix control panlel to the door inside sheet iron.





Claros series;





Hemera series;

1.7) Electronic Card

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

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

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

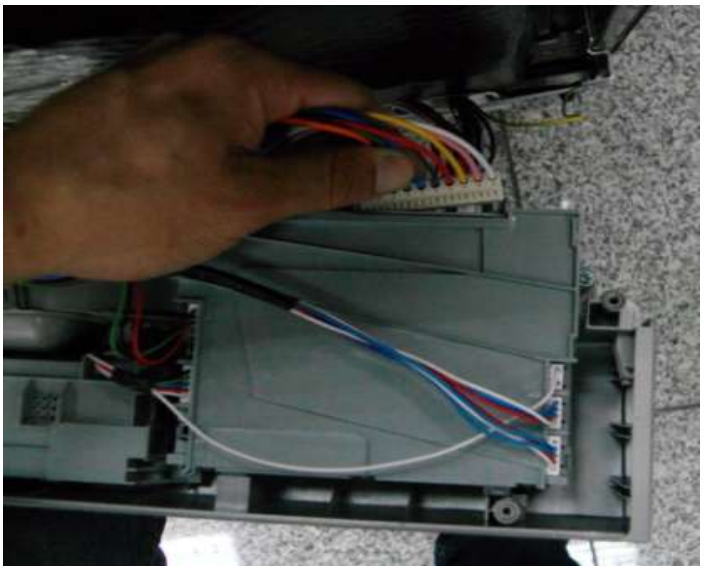
c) Remove the wire which is between rotary switch and electronic card.

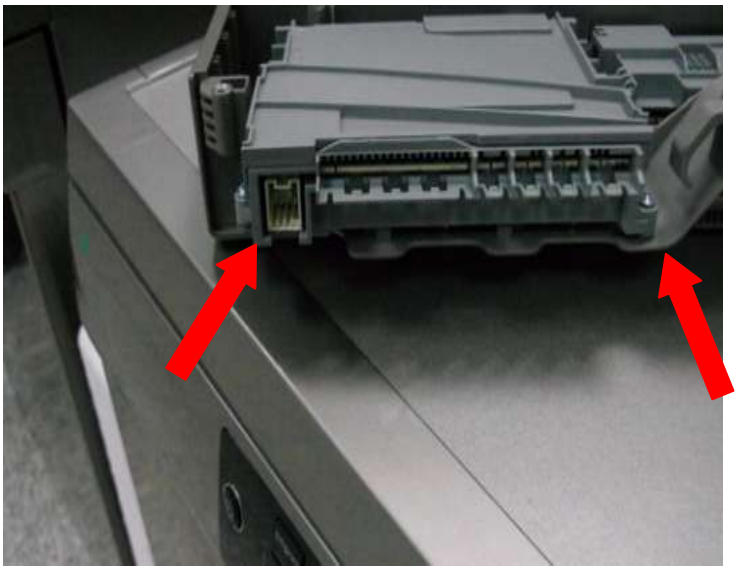
d) Remove the electronic card from pcb box by removing pcb box's plastic hinges.

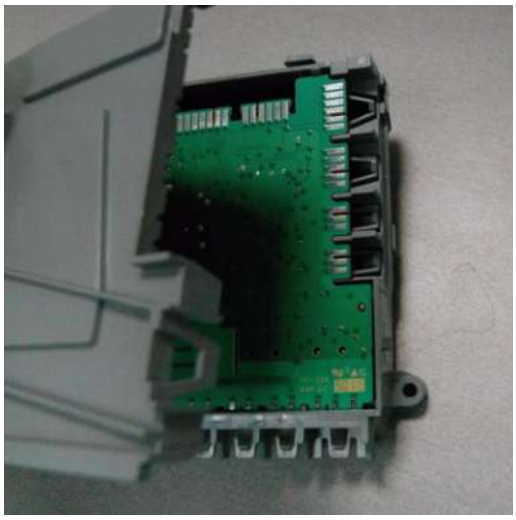
e) Remove the connection cable between display and electronic card.

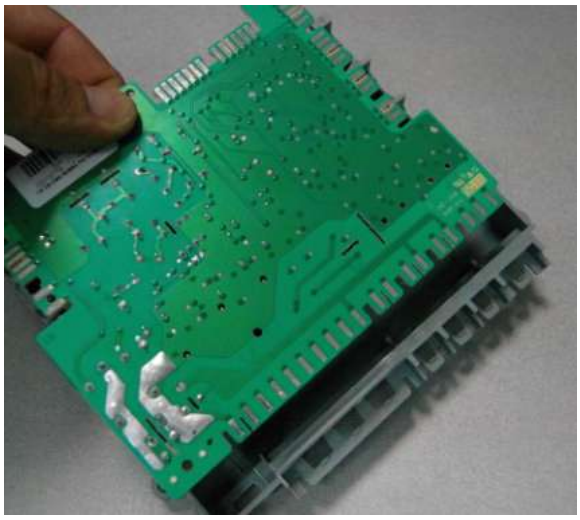
Remove the electronic card PCB box from the connection tab.

Hemera series;









1.8) Door Lock Group

a) Remove control panel group.

b) Remove two screws that fix the door lock group..

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 .

WARNING: USE WORK GOVERS OTHERWISE INSIDE DOOR SHEET IRON CAN CUT YOUR HANDS

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

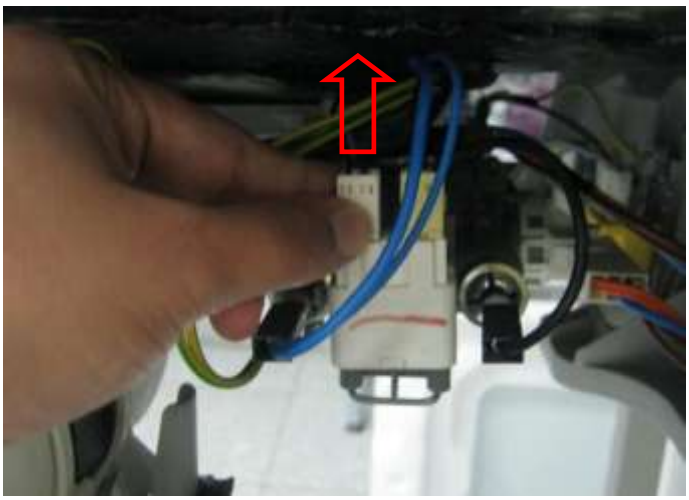
a) Right Sight

b) Left Sight

2.1) NTC with Thermal Protector

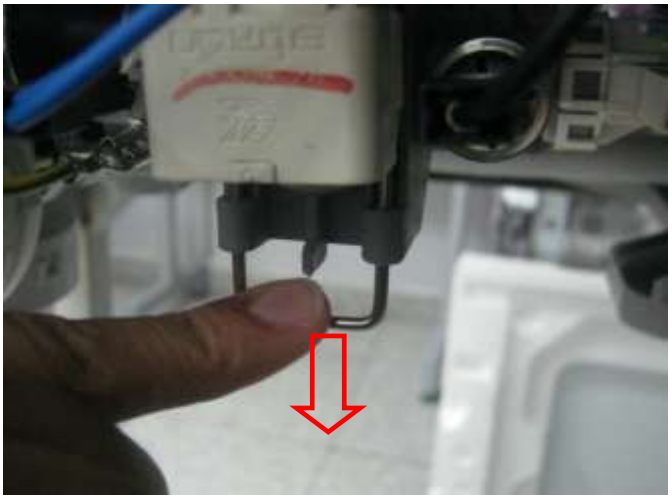
a) Remove right side panel.

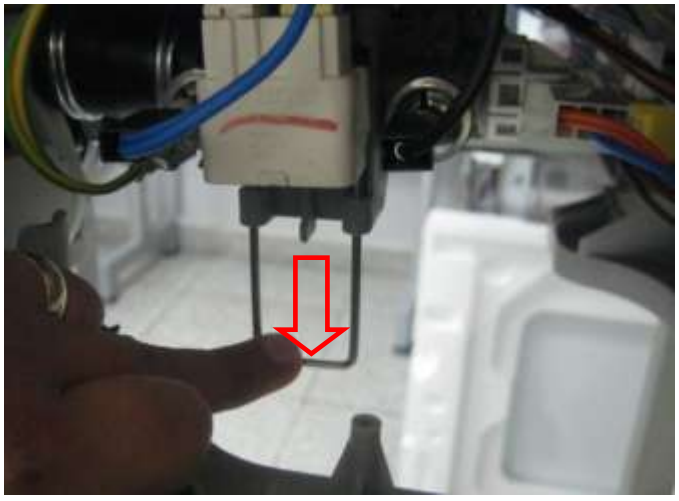
NTC is assemblied on the heater casing



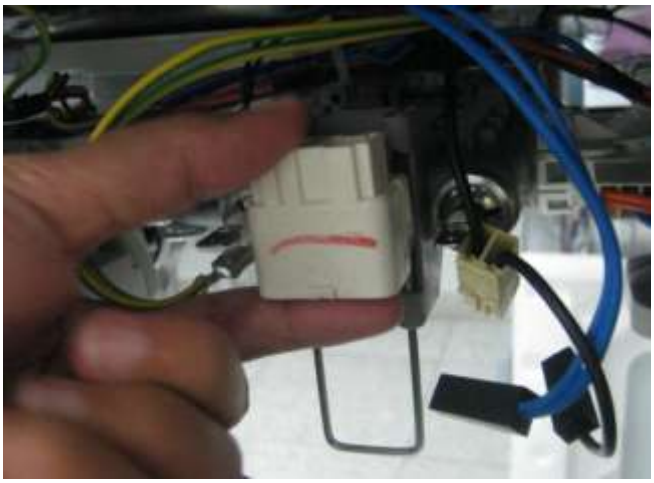
b) Remove the wires as it is shown in the Picture...

c) Pull the pim down as it is shown in the picture.





d) Remove the NTC as it is shown in the picture.



2.2) 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) Power Cord

a) Remove hose connection plastic.

b) Remove the lower cover

c) Remove the wires that is between power cord and parasite filter

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

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

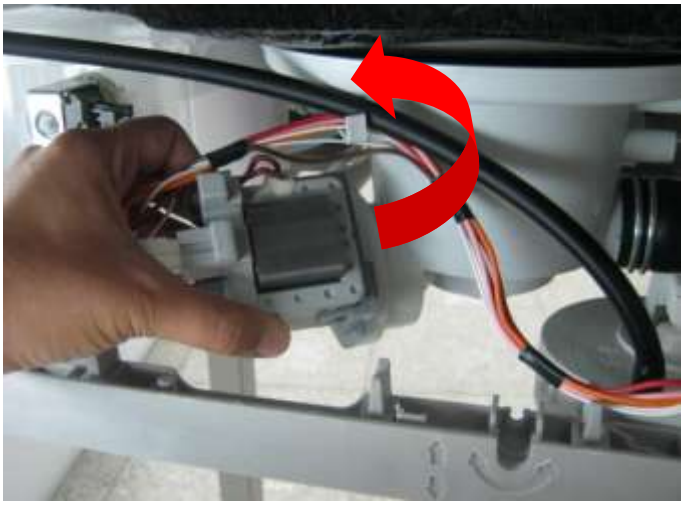
3.1) Regeneration Valve

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 .

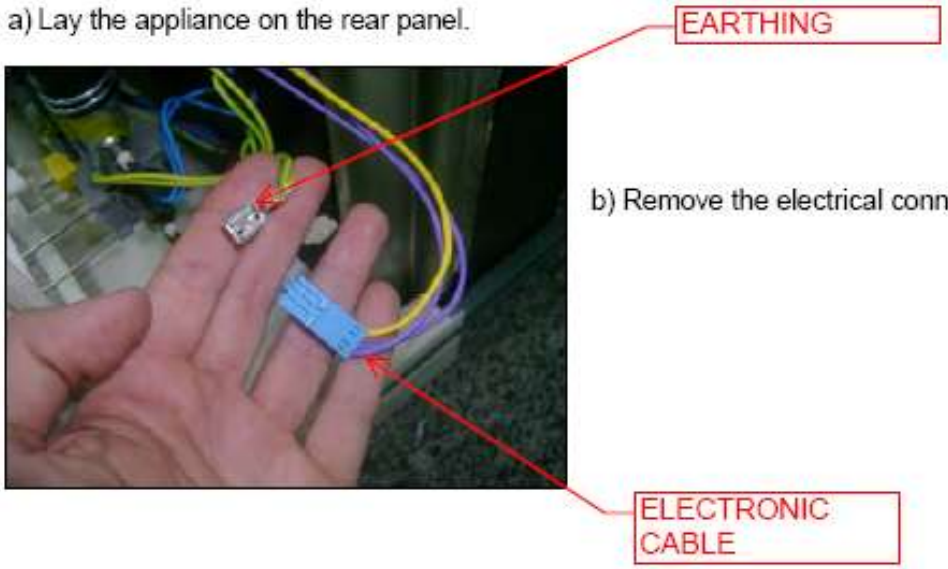
4. To Access The Components from the Lover Cover

a) Lay the appliance on the rear panel..

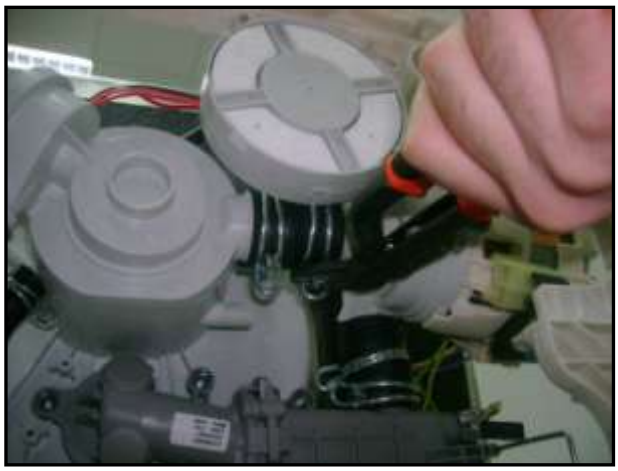
b)Remove lower cover from the places that are shown in the picture.

4.1) Circulation Pump

a) Lay the appliance on the rear panel.

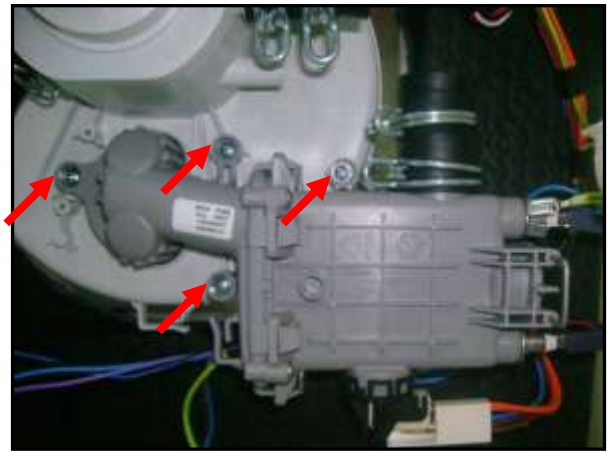


b) Remove the electrical connection on the circulation pump.

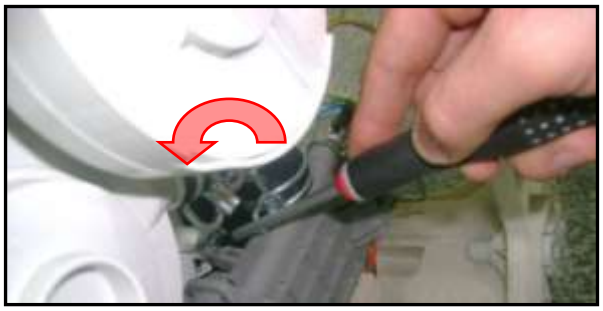


c) Remove 2 clamps that are shown in the picture (Heater casing-circulation pump, sump-Circulation pump)

4.2) Heater Casing Group Without Diverter (without T13 and T21)

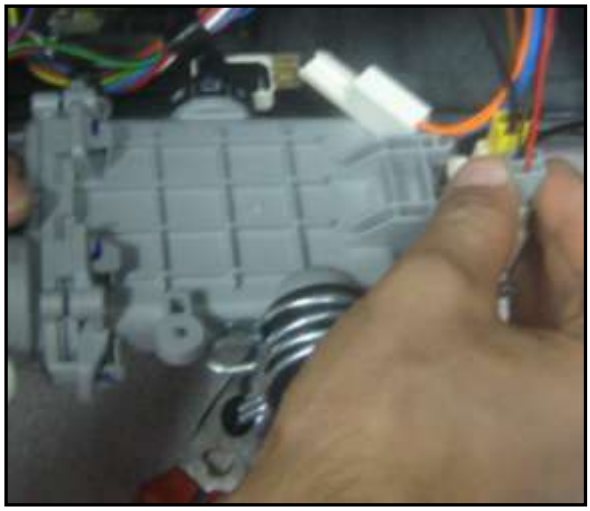


a)Remove the machines lover cover.



b)Remove four screws that fix heater to the sump.

c) Remove clamp that are shown in the Picture . (Heater casing – circulation pump ,)



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

4.2.1) Heater Casing Group with divertor

a) Remove the machine's lower cover.

b) Remove five screws that fix heater to sump

c) Remove the clamp that are shown in the picture.(Heater Casing-Circulation Pump)

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

4.3) Water Softener

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

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

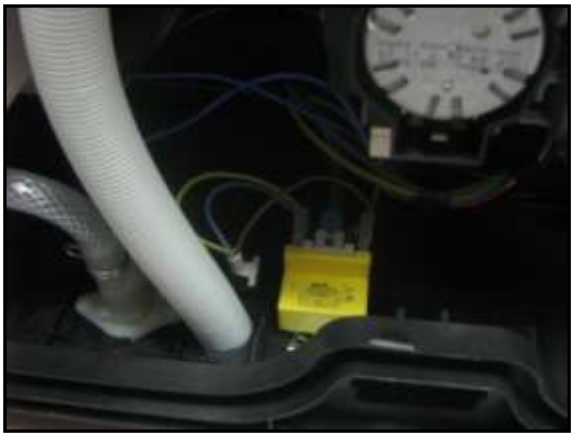
c) Remove left side panel

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

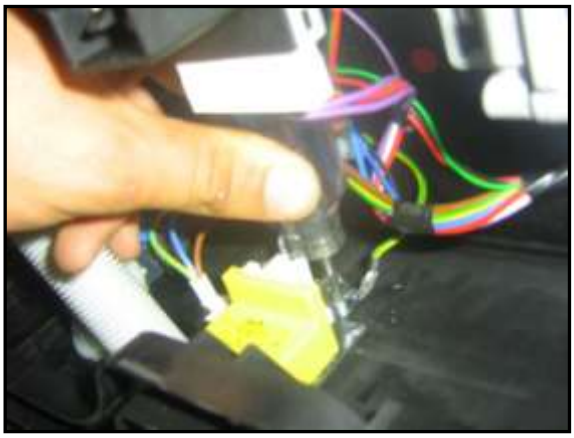
e) Remove lower cover.

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

4 .4) Parasite Filter;



a) Remove lower cover.



b) Remove one screw fixing parasite filter.

c)Remove electical connection..

d) Pull parasite filter as shown in the picture

4.5) Floater

a) Remove lower cover.

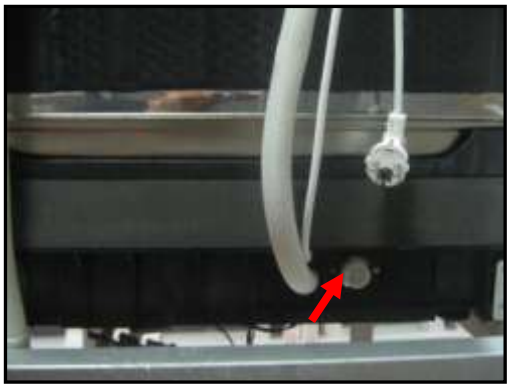
b) Remove two screws that fix floater as it is shown in the picture.

c) Remove the two floater hoses .

d)Remove the wire that is connected to the floater..

4.6) Water Inlet valve

a) Remove lower cover.



b) Remove the wire that is connected to the water inlet valve. .

c) Remove the clamp that connects water inlet valve and air –break as it is shown in the picture.

d)To remove water inlet valve pull it back as it is shown in the direction of Picture then release water inlet valve from the pins that is connected to and rotate it in the direction of counterclockwise

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..

5) Basket Group

5.1) Lower Basket

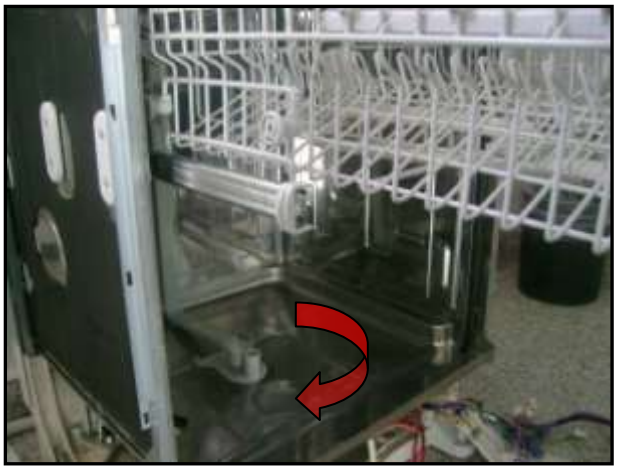
a) Open machine's door.

b) Pull the basket to yourself.

5.2) Upper Basket

a) Open machine's door.

b) Pull the basket to yourself.

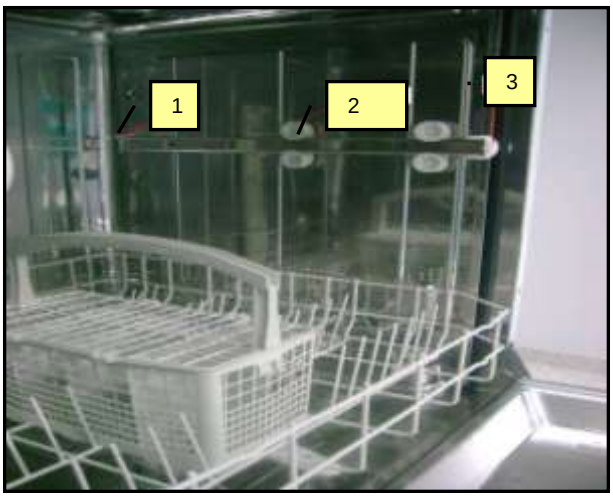


c) Open Upper basket rail lock front.

d) Pull the basket to yourself and remove it..

5.3) Basket Rails

1- Upper basket rail stoper rear
2- Upper baket wheels
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.

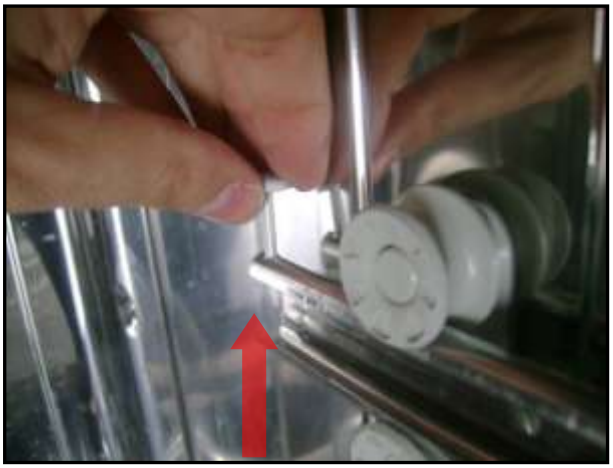
b)Remove lower basket.

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.

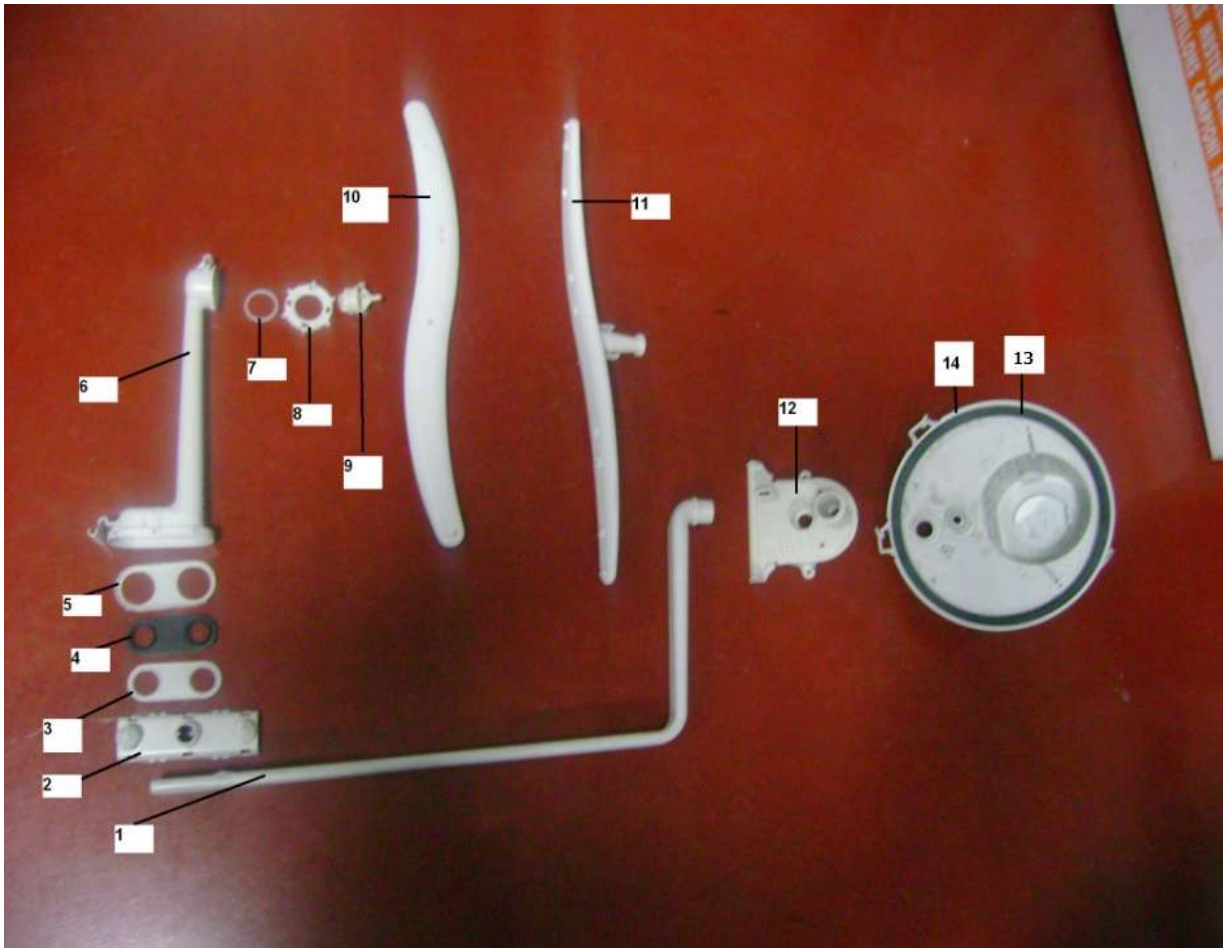
e)To remove the metal filter pull it up as it shown in the picture

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



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

6.2) Spray Arm System



1 Upper spray arm feding canal

2 Upper spray arm adjustment link

3 Upper spray arm adaptor flange

4 Upper spray arm adaptor gasket

5 Upper spray arm adaptor cover

6 Upper spray arm

7 Upper spray arm nut plastic

8 Upper spray arm nut

9 Upper spray arm shaft

10 Upper spray arm

11 Lower sparay arm

12 Spray arm support

13 Sump seal

14 Sump

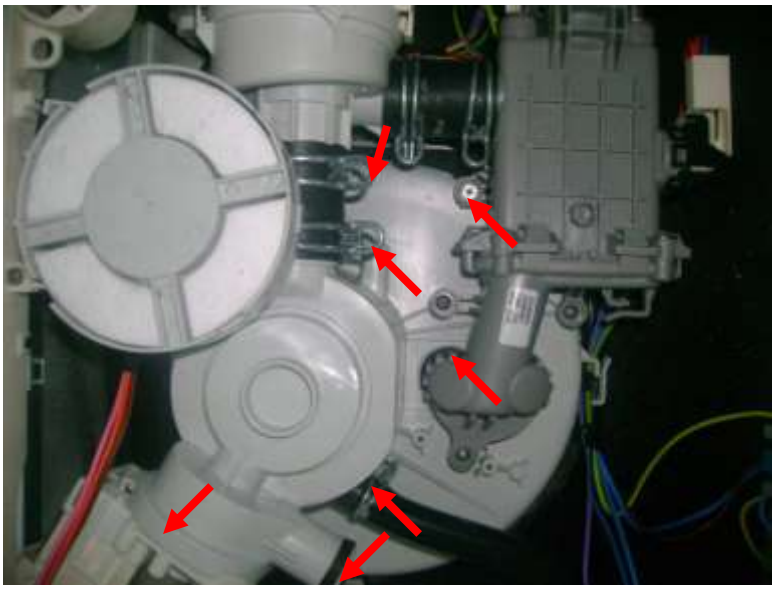
a)After removing the lower basket , pull the spray arm upwards .gripping it by the central hub.

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)



e) From inside tub ,remove the basket and lower spray arm .
f) Remove the microfilter group and metal filter .
g) Remove the four screws that secure the tumb to the tub
h) Remove the two screws which secure the spray arm support to the sump.
i) Detach the drain pump and pull the sump out ,taking care not to damage the tub seal.

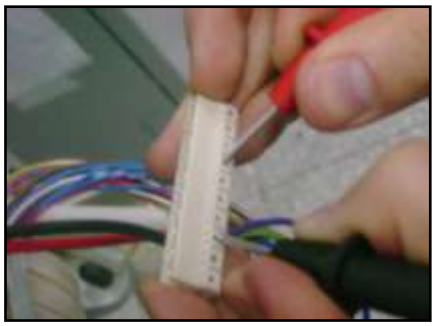
REPAIR TECHNIQUES

COMPONENTS AND RESISTANCE VALUES

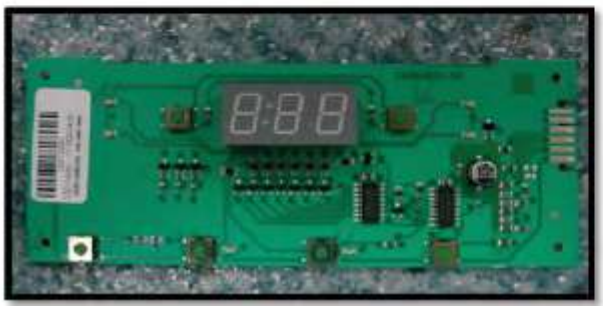
COMPONENTS	REAL VALUES	NOTES
ON / OFF BUTTON	0 Ω on component	ON/OFF button is pressed
DOOR SWITCH (KAPI KİLİDİ)	CN2.9 – CN2.2 0 Ω	Door is close
PRESSURE SWITCH	CN2.10 – CN2.2 0 Ω ∞ Ω	FULL FILL WATER NO WATER
DRAIN PUMP	CN2.2 – CN2.4 143 Ω % ± 7 (PLASET)	/ 210 % ± 7 (HANYU)
WATER INLET VALVE	CN2.6 – CN 2.9 3750 Ω ± %10(20Cº)	
REGENERATION VALVE	CN2.10 – CN2.7 4130 Ω ± %10(25 Cº)	
HEATER	23.95±15 Ω	MEASURE JUST ON THE COMPONENT
DETERGENT DISPENSER	4450 ±10 Ω ± %10 (25 C º)	MEASURE JUST ON THE COMPONENT
CIRCULATION PUMP	CN2.3 – CN2.9 95 ±%7 Ω 126 ±% 7 Ω	Primary winding Secondary winding (FROM THE COMPONENT)
SET NTC SENSOR	CN 3.2 25°- 5000Ω %±5.0 CN 3.1 35°- 3300Ω %±5.5 55°- 1520Ω %±6.5 63°- 1174Ω %±7.5 80°- 670Ω %±8.0 90°- 488Ω %±8.5	
FLOATER (MICROSWITCH)	CN2.1 – CN 2.5 0 Ω CN2.1 – CN 2.4 ∞ Ω	MICROSWITICH IS INACT VE (NO WATER) MIKROSWITCH IS ACTIVE (THERE IS WATER)

MEASURING THE COMPONENTS FROM THE ELECTRONICAL CARD

You might measure the components either connentors of electronic card or directly on the component. Measuring from the connectors of electronic card gives definite results to define the repair. If you know the specialities and values of tester, you can easily determine the repair.



In order to reach the connections of the electronic card; dismantle the control panel and probes of the tester should be applied on to the related connectors of the electronical card; control the values according to the resistance value table.

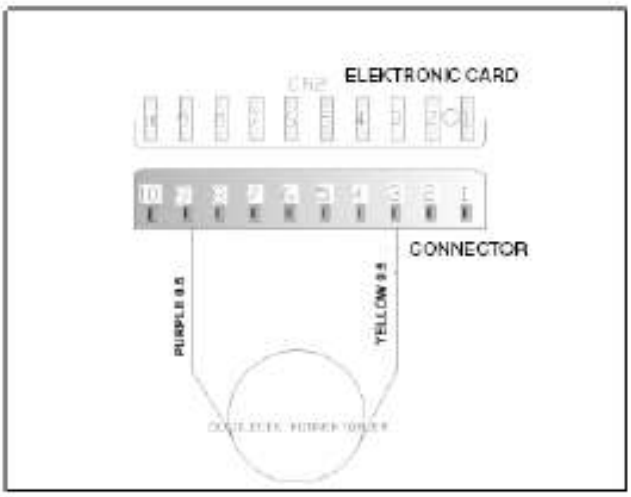


Precaution: Always remove the plug from the power socket before touching internal components.

Washing Pump:

From the Electronical Card:

You can only measure the primary winding value from the electronical card. Resistance value of the primary winding must be 95 on the connectors CN2.3 – CN2.9.



Above sketch show the connectors of the washing pump on the electronical card. Probes of the tester should be applied on to the related connectors.

From the component:

Measurement of the primary windings of the washing pump

Measurement of the secondary windings of the washing pump (white cable – blue cable)

Probes of the tester should be applied on to the related connectors as shown on the pictures.

VALUES OF PUMP COILS

NIDEC WASHING PUMP

MAIN COIL: 95 Ω ±7

SUB COIL: 125 Ω ±7

WELLING WASHING PUMP

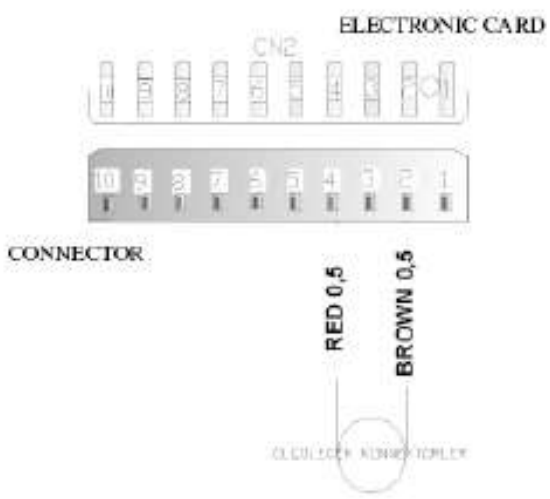
MAIN COIL: 120 Ω ± 7

SUB COIL: 116 Ω ± 7

Drain Pump:

From the Electronical Card:

143 ± 7 on the connectors CN2.2 – CN2.4



Above sketch show the connectors of the drain pump on the electronical card. Probes of the tester should be applied on to the related connectors.

From the component :

Probes of the tester should be applied on to the related connectors as shown on the pictures

VALUES OF PUMP COILS

HANYU DRAIN PUMP

143 Ω ± 7

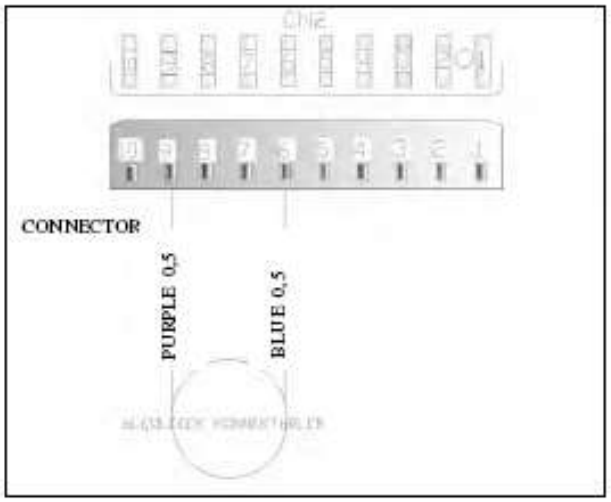
HANNING DRAIN PUMP

210 Ω ± 6

Water inlet valve:

From the Electronical Card:

3750 ± 10 Ω (20 C°) on the connectors CN2.6 – CN 2.9



Above sketch show the connectors of the water inlet valve on the electronical card. Probes of the tester should be applied on to the related connectors.

From the component:

Probes of the tester should be applied on to the related connectors as shown on the pictures.

WATER INLET VALVES (OPTIONAL)

3750 Ω ± 10

(20 °)

Heater Casing:

It can't be measured from the electronical card.

From the component:

23.95 ±15 Ω

Probes of the tester should be applied on to the related connectors as shown on the pictures.

Detergent Dispenser:

It can't be measured from the electronical card.

1660 ± 10 (25 C º)

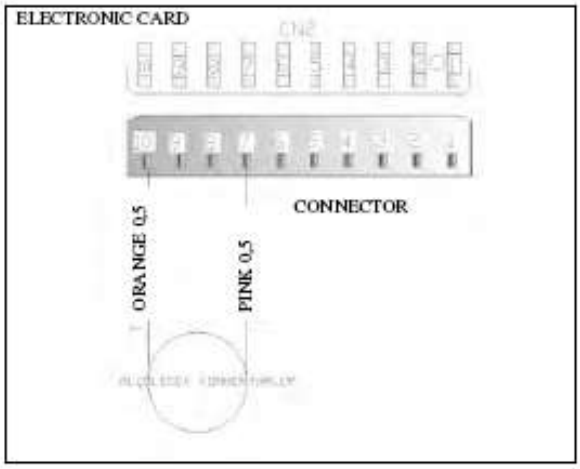
From the component:

Probes of the tester should be applied on to the related connectors as shown on the pictures

Regenaration Valve:

From the Electronical Card:

4130 ± 10 (25 C º) on the connectors CN2.10 – CN2.7



Above sketch show the connectors of the regeneration valve on the electronical card. Probes of the tester should be applied on to the related connectors.

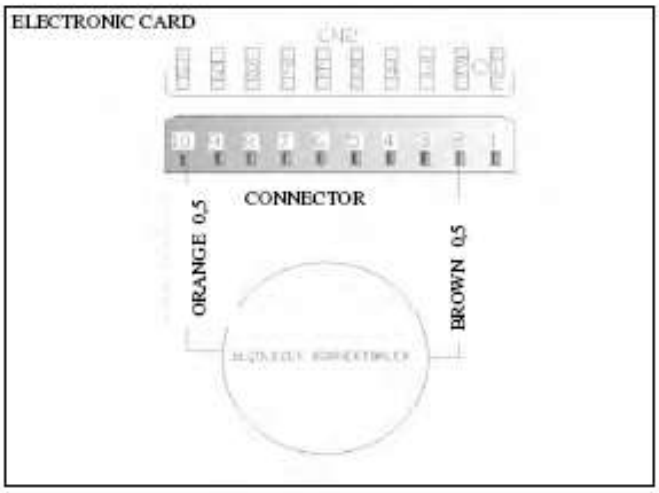
From the component:

Probes of the tester should be applied on to the related connectors as shown on the pictures.

Pressure Switch:

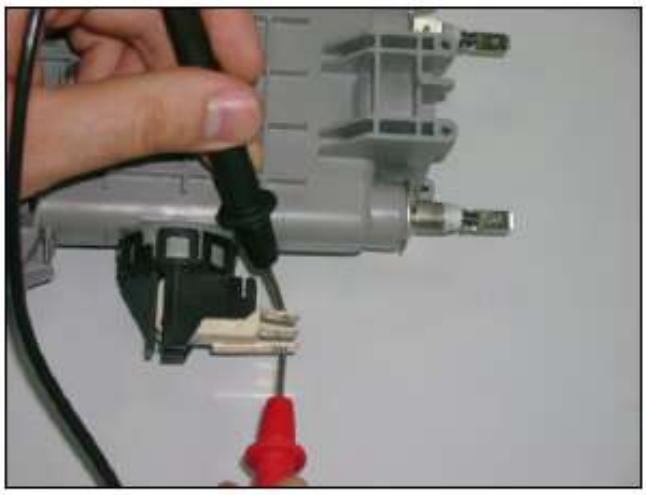
From the Electronical Card:

CN2.10 – CN2.2 0 Ω There is water (Full) **Ω There is not water (Empty)**



Above sketch show the connectors of the pressure switch on the electronical card. Probes of the tester should be applied on to the related connectors.

From the component:

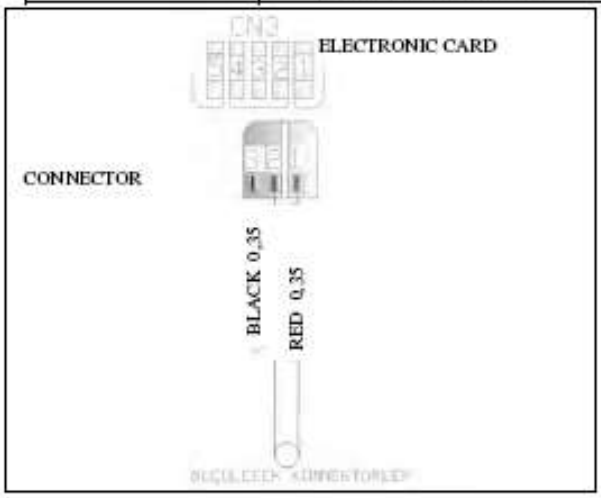


Probes of the tester should be applied on to the related connectors as shown on the pictures.

NTC sensor:

From the Electronical Card:

CN 3.1 - CN 3.2	25°-5000Ω-%±5.0
	35°-3300Ω-%±5.5
	55°-1520Ω-%±6.5
	63°-1174Ω-%±7.5
	80°- 670Ω -%±8.0
	90°- 488Ω -%±8.5



Above sketch show the connectors of NTC sensor on the electronical card. Probes of the tester should be applied on to the related connectors.

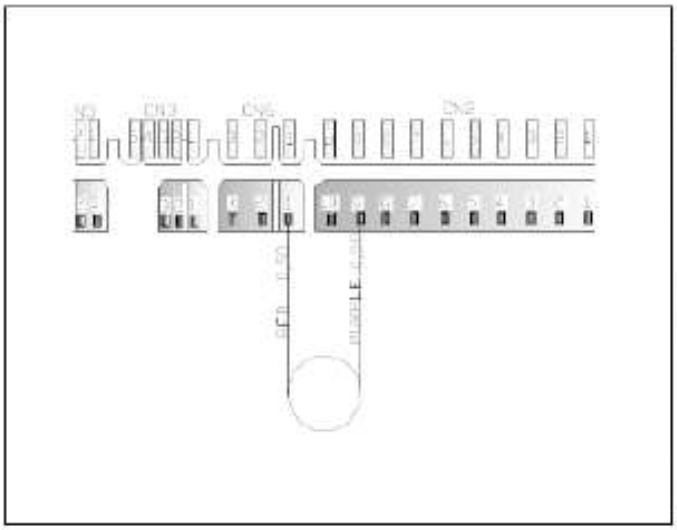
From the component:

Probes of the tester should be applied on to the related connectors as shown on the pictures.

Diverter:

From the Electronical Card:

6840 Ω-%±5.0 on the connectors CN6.1 – CN 2.9



Sketch above show the connectors of the diverter on the electronical card. Probes of the tester should be applied on to the related connectors.

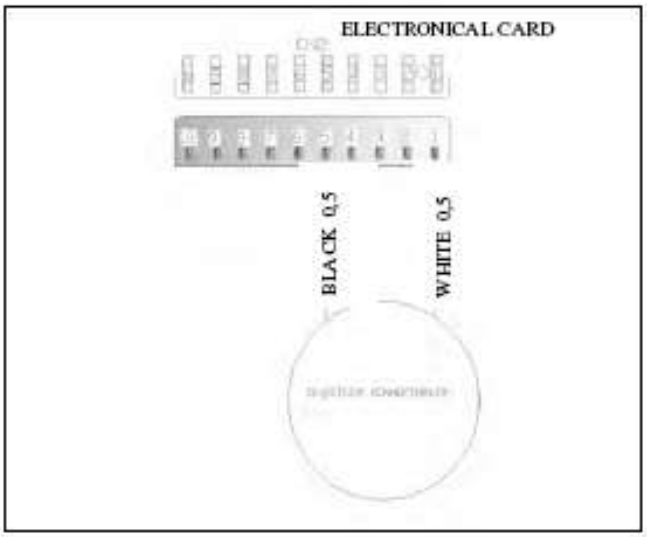
From the component:

Probes of the tester should be applied on to the related connectors as shown on the pictures.

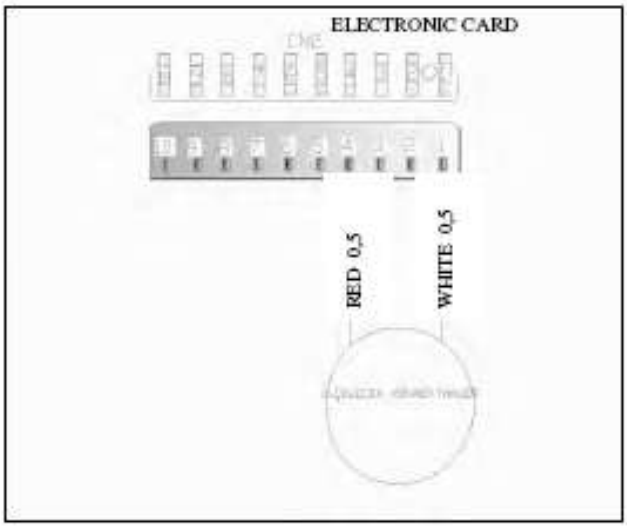
FLOATER:

From the Electronical Card:

CN2.1 – CN 2.5	0 Ω (Position1)	MİCROSWITCH IS INACTIVE (NO WATER)
CN2.1–CN2.4	∞ Ω (Position2)	MİCROSWITCH IS ACTIVE (WATER)



Position 1: You can check the floater by controlling the specified value intervals.

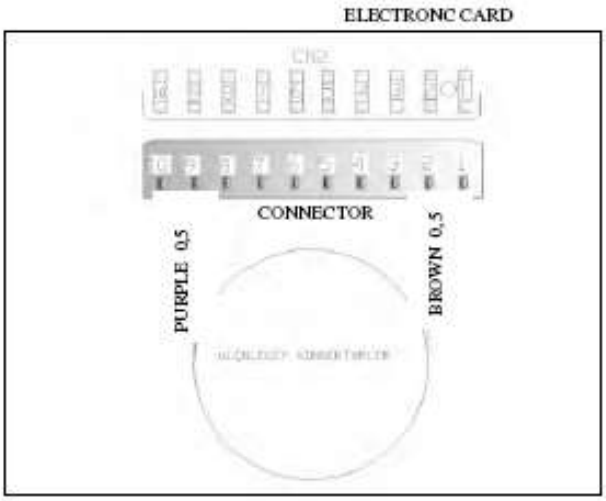


Position 2: If failure code is occured related with the floater within control the above values; you can figure out whether leakage occurs or not.

Door Switch :

From the Electronical Card:

0 Ω on the connectors CN2.9 – CN2.2 (Door is close)



Above sketch show the connectors of the door switch on the electronical card.

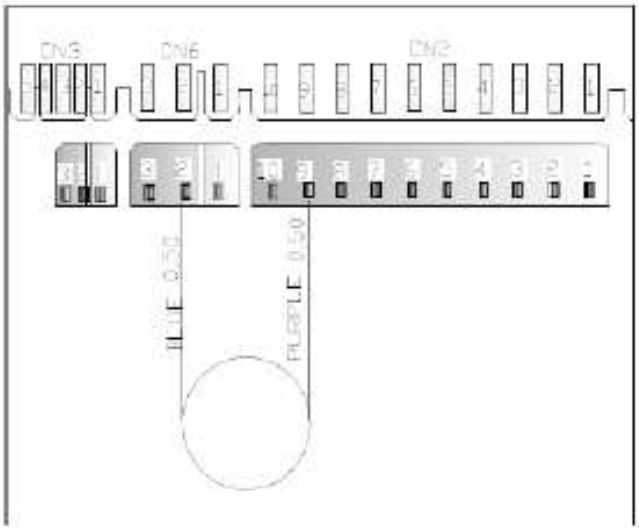
From the component:

Probes of the tester should be applied on to the related connectors as shown on the pictures.

Fan Motor:

From the Electronical Card:

238.6 Ω ± % 5 on the connectors CN 6.2 – CN 2.9



Above sketch shows the connectors of the fan motor on tke electronical card.

From the component :

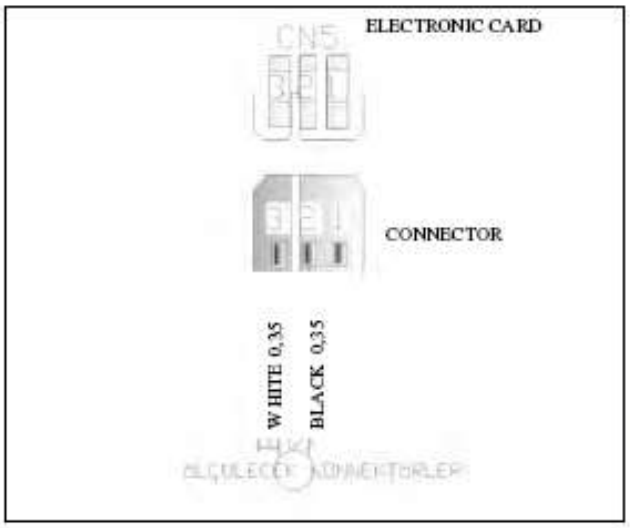
Probes of the tester should be applied on to the related

connectors as shown on the pictures.

Rinse Aid Sensor:

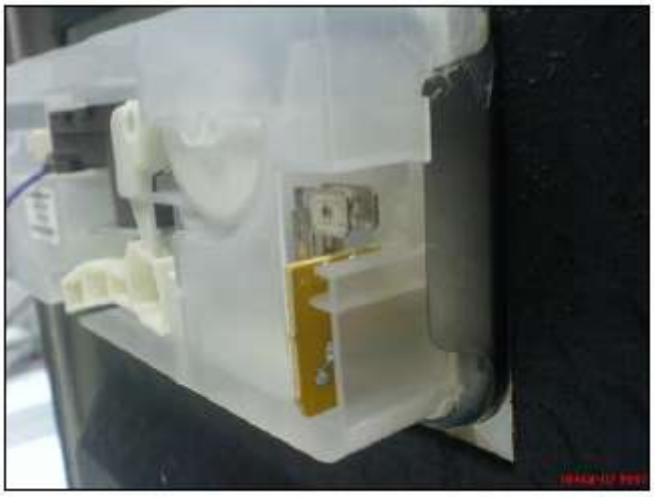
From the Electronical Card:

CN 5.2 – CN 5.3	0 Ω	There isn't any rinse aid
	∞ Ω	There is rinse aid



Above sketch shows the connectors of the rinse aid sensor on tke electronical card.

From the component :

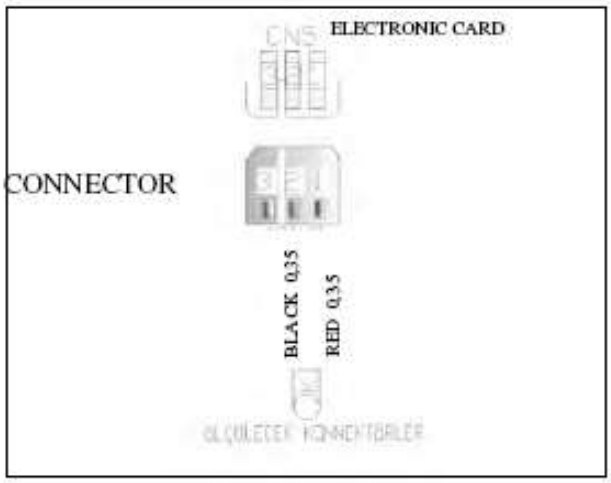


Probes of the tester should be applied on to the related connectors as shown on the pictures.

Salt Sensor:

From the Electronical Card:

CN5.1 – CN5.2 0 Ω NO SALT ∞ Ω THERE IS SALT



Sketch above show the connectors of the salt sensor on the electronical card. Probes of the tester should be applied on to the related connectors.

From the component :

Salt sensor can also be measured from the water softener when the salt sensor assemblied on the water softener.

Probes of the tester should be applied on to the related connectors as shown on the pictures.

On/Off Button:

It can't be measured from the electronical card

From the component:

0 Ω	**When the buton is pressed**

FAILURE CODES AND WHAT TO DO IN CASE OF FAILURE

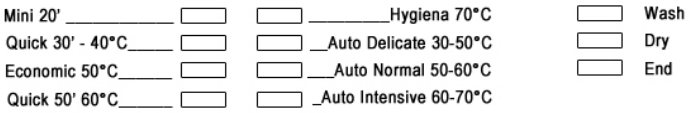
ERROR CODE			ERROR DESCRIPTION	CONTROL
Wash	Dry	End		
			Inadequate water supply	• Make sure the water input tap is totally open and that there is no water cut. • Close the water input tap, separate the water input hose from the tap and clean the filter at the connection end of the hose. • Restart your machine, contact the service if the error resumes.
			Error of continuous water input	• Close the tap. • Contact the service.
			The waste water in the machine cannot be discharged.	• Water discharge hose is clogged. • The filters of your machine might be clogged. • Power off-on your machine and activate the program cancellation command. • If the error continues, contact the service.
			Intended water temperature could not be reached faulty heater and heater sensor	Contact the service.
			Alarm is active against water overflow	• Power off your machine and close the tap. • Contact the service.
			Faulty electronic card	Contact the service.

FAILURE CODES AND WHAT TO DO IN CASE OF FAILURE

ERROR CODE	ERROR DESCRIPTION	CONTROL
F5	Inadequate water supply	• Make sure the water input tap is totally open and that there is no water cut. • Close the water input tap, separate the water input hose from the tap and clean the filter at the connection end of the hose. • Restart your machine, contact the service if the error resumes.
F3	Error of continuous water input	• Close the tap. • Contact the service.
F2	The waste water in the machine cannot be discharged.	• Water discharge hose is clogged. • The filters of your machine might be clogged. • Power off-on your machine and activate the program cancellation command. • If the error continues, contact the service.
F8	Heater error	Contact the service.
F1	Alarm is active against water overflow	• Power off your machine and close the tap. • Contact the service.
FE	Faulty electronic card	Contact the service.
F7	Overheating error (temperature in the machine is too high)	Contact the service.
F9	Divisor position error	Contact the service.
F6	Faulty heater sensor	Contact the service.

SERVICE TEST

Only service can execute this procedure.



- Power OFF; pressure S/P button.
- Power ON and continue to pressure S/P button at least for 6".
- When "Service test" is recognized all leds blink for 2" (in T23 also "SP" is visualized on the display) and Service test starts.

During the first 6" of test, if a failure code is stored in memory, its codification is shown. Also at the end of the test if an error occurs its error code is visualized.
In model T23 during the service test, "SP" is shown.

Step		**Time**	**Tested Load**
0 SP	Show code	6''	Before start, the code of last error is visualized (see bolow)
1 SP	Drain	6''	Drain pump.
2 SP	Fill (3l/2,5l)*	~ 1'	Flo meter ; Inlet Valve;
3 SP	Fill + Wash (0,5/1lt)**		Flow meter; Inlet Valve; Pressure Switch;
4 SP	Turb.Sensor	30''	Measure of turbidity sensor (only T21)
5 SP	Wash	1'	Circulation pump; Regeneration Valve; detergent dispenser.
6 SP	Wash + Heat ***	5'	Heater (PSW); NTC; diverter (position).
7/8 SP	Reg. Valve + Turbo Fan	1'	Regeneration Valve + Turbo Fan (Turbo Fan only T21
9 SP	Drain	20''	Drain pump; pressure switch.
10 SP	End	_	Code error or end led.

* 3lt in T11, T12, T13; 2,5lt in T21.
** 0,5lt in T11, T12, T13; 1lt in T21.

*** In service test the unsuccessful heating failure routine works with reduced time of recognize (first measure at 2'20", second measure t 4'20")

If during the service test, the door is opened, start/pause led blinks (in T12,T13,T21 also "SP" is shown).
If during the service test, the start/pause button is pressed, the program corresponding at the knob position starts.

Service Failure Codes

Coding service failure for T11:

Coding failure for T11:

N°	Name	S/P	Wash	Dry	End
1	Door open	Blink	-	-	-
2	Delay before Door closing	-	-	-	-
3	Overflow	-	-	-	-
	Leakage	-	-	Blink	Blink
4	Drain time out	-	Blink	-	Blink
5	Re-Fill time out	-	Blink	-	-
6	Presence Flow meter impulses	-	-	-	Blink
7	Absence Flow meter imp. With Full	-	-	-	-
	Absence Flow meter imp. With Empty	-	Blink	-	-
8	NTC ca/cc	-	Blink	Blink	-
9	Overheating	-	Blink	Blink	-
10	Unsuccessful heating*	-	Blink	Blink	-
11	CK Parameters	-	Blink	Blink	Blink

Note: T11 will also include the "coding service failure for T12,T13,T21".

Coding service failure for T12,T13,T21:

Name	DISPLAY	Notes
Overflow	F0	In the normal work this failure is not visualized.
Leakage	F1	
Draining time out	F2	
Presence of Flow meter impulses	F3	
Absence of Flow meter	F4	In the normal work this failure is not visualized.
Empty Level	F5	
Re-Fill time out	F5	
NTC ca/cc	F6	
Overheating	F7	
Unsuccessful heating	F8	
Diverter opened	F9	
Turbidity Sensor	FA	In the normal work this failure is not visualized.
Parameter set salt incorrect	SE	In the normal work this failure is not visualized.
CK Parameter	FE	

Note: T12,T13 & T21 will also include the "coding service failure for T11".