



# Electrolux

**ELECTROLUX HOME PRODUCTS PTY LTD**

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**WESTINGHOUSE**

## ***SERVICE MANUAL DOMESTIC HOUSEHOLD DISHWASHERS***

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**MODEL:   WSF67251S**  
**PNC:       942001295 00**

**MODEL:   WSF67381S**  
**PNC:       942001293 00**

**MODEL:   WSU67381S**  
**PNC:       942001294 00**

# SERVICE TEST



## WSF67251S, WSF67381S & WSU67381S

**NOTE:** Only the Service Technician can execute this procedure.

### Accessing Service Test:

- Press and hold the Start/Pause button with the Dishwasher turned OFF.
- Power the machine ON while continuing to hold Start/Pause button in for at least six seconds (6)
- The Service Test starts automatically displaying “SP 01”.
- Release the Start/Pause button.
- All LED's blink for approximately 2 seconds (LED test).
- If a failure code has occurred, it is stored within the PCB's memory and displayed in the first 6 seconds of the Service test. Up to 3 codes are stored in memory. Failure codes would have a prefix number of 1, 2, and 3 with 1 being the latest code and so on.
- If an error occurs during the Service Test, the error code displays at its completion.

Step	Displayed	Time	Tested Load
0	Last 3 Fault Codes	6 sec	Up to 3 codes are displayed during this time
SP01	Drain	6 sec	Drain pump.
SP02	Fill	~1 min	Flow meter; Inlet Valve;
SP03	Fill+ Wash		Flow meter; Inlet Valve; Pressure Switch;
SP04	<i>Turbidity Sensor*</i>	30 sec	<i>Measurement sensor of water turbidity (*if fitted)</i>
SP05	Wash	1 min	Circulation pump; Regeneration Valve; Detergent Dispenser.
SP06	Wash+ Heat*	5 min	Heater (PSW); NTC; Diverter (position).
SP07 / SP08	<i>Regeneration Valve* / Turbo Fan</i>	1 min	*Regeneration Valve (N/A) + Turbo Fan (Turbo Fan only WSF & WSU67381S)
9	Drain	20 sec	Drain pump; Pressure Switch.
10	End	-	Code Error or End LED

\* During the Service Test an unsuccessful heating failure test (F8) works with reduced time to diagnose (first measurement at 2min20sec and the second measurement at 4min20sec)

### **NOTE:**

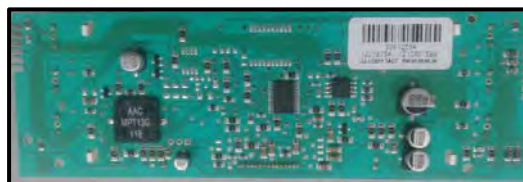
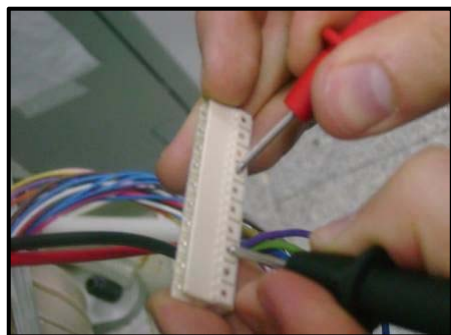
- a. If you open the door during a Service Test, the Start/Pause led blinks and “SP” displays on the LED panel.
- b. If you press the Start/Pause button during a Service Test, the first wash program starts.

# SERVICE FAULT CODES

TYPE OF ALARM	DISPLAY	DISPLAYED TO THE USER	DESCRIPTION OF THE ALARM CONDITON	MACHINE STATUS	POSSIBLE CAUSE
F0	F0	NO	During 5"; Floater sensing switch ON	1) Washing program restarts	1) Water leakage from body
F1	F1	YES	More than 5"; Floater sensing switch ON	1) Stop all devices 2) Stop Program flow 3) Drain empty + 30" 4) Visualize the failure code	1) Water leakage from body 2) Floater sensing switch can be broken
F2	F2	YES	During 180"; Drain pump ON + Circulation pump ON + Pressure sensing switch ON (full level position)	1) Stop all devices 2) Stop Program flow 3) Drain empty + 30" 4) Visualize the failure code	1) Pressure switch is activated continuously 2) Drain pipe is blocked 3) Drain pump is broken
F3	F3	YES	When the triac valve is OFF and flow meter gives some impulses (more than 500cl)	1) Drain all water 2) Water inlet valve works 12secOFF/12sec ON (try to load again correct amount of water inside the machine) if failure persists; 3) Drain all water 4) Water inlet valve works 12secOFF/12sec ON (try to load again correct amount of water inside the machine) if failure persists; 5) Visualize the failure code	1) Water inlet valve is broken 2) Electronic card is broken
F4	F4	NO	flow meter does not give any impulses	During filling water step; 1) Water inlet valve works 50 seconds 2) Water inlet valve and circulation pump work 60 seconds 3) Program works and finishes without showing failure code	1) Flow meter is broken 2) Flow meter cable could be off 3) Electronic card is broken
F5	F5	YES	After start circulation pump; Pressure sensing switch OFF	1) Water inlet valve and circulation pump work 100 seconds if failure persists; 2) Stop all devices 3) Stop Program flow 4) Drain empty + 30" 5) Visualize the failure code	1) Tap could be closed 2) Circulation pump can be broken 3) Pressure switch can be broken 4) Floater switch can be broken
F6	F6	YES	1) NTC value is open circuit (0Ω) 2) NTC value is short circuit (1Ω)	1) Stop all devices 2) Stop Program flow 3) Drain empty + 30" 4) Visualize the failure code	1) NTC is broken 2) Electronic card can be broken
F7	F7	YES	When electronic card detects Water temperature $\geq 77^{\circ}\text{C}$	1) Stop all devices 2) Stop Program flow 3) Drain empty + 30" 4) Visualize the failure code	1) NTC is broken 2) Electronic card can be broken
F8	F8	YES	During the heating phases, after the first 420", if water temperature increases less than 2°C or if it is less than 0°. The first valid value to check is read after 120" from the beginning of the heating step.	1) Program works and finishes 2) At the end of the program, 3) Visualized the failure code	1) NTC is broken 2) Electronic card can be broken 3) Heater can be broken
F9	F9	YES	During 30"; Diverter does not give any impulses	1) Stop all devices 2) Stop Program flow 3) Drain empty + 30" 4) Visualize the failure code	1) Diverter is broken 2) Diverter cable could be off 3) Diverter connector is assembled opposite
FE	FE	YES	While the program is running When software parameter Check sum is uncorrected	1) Stop all devices 2) Stop Program flow 3) Drain empty + 30" 4) Visualize the failure code	1) Main supply voltage of the location can be surged or burst
FA	FA	NO	Turbidity does not give any impulses (only auto programs)	Program works and finishes without showing failure code	1) Turbidity is broken 2) Turbidity cable could be off

# INDIVIDUAL COMPONENTS AND THEIR RESISTANCE VALUES

You can measure the components either on the PCB connectors or directly from the component. Measuring from the connectors of the PCB gives definitive results to define the repair suited. Using the Component Resistance Values from the table below, you can determine the failed component.



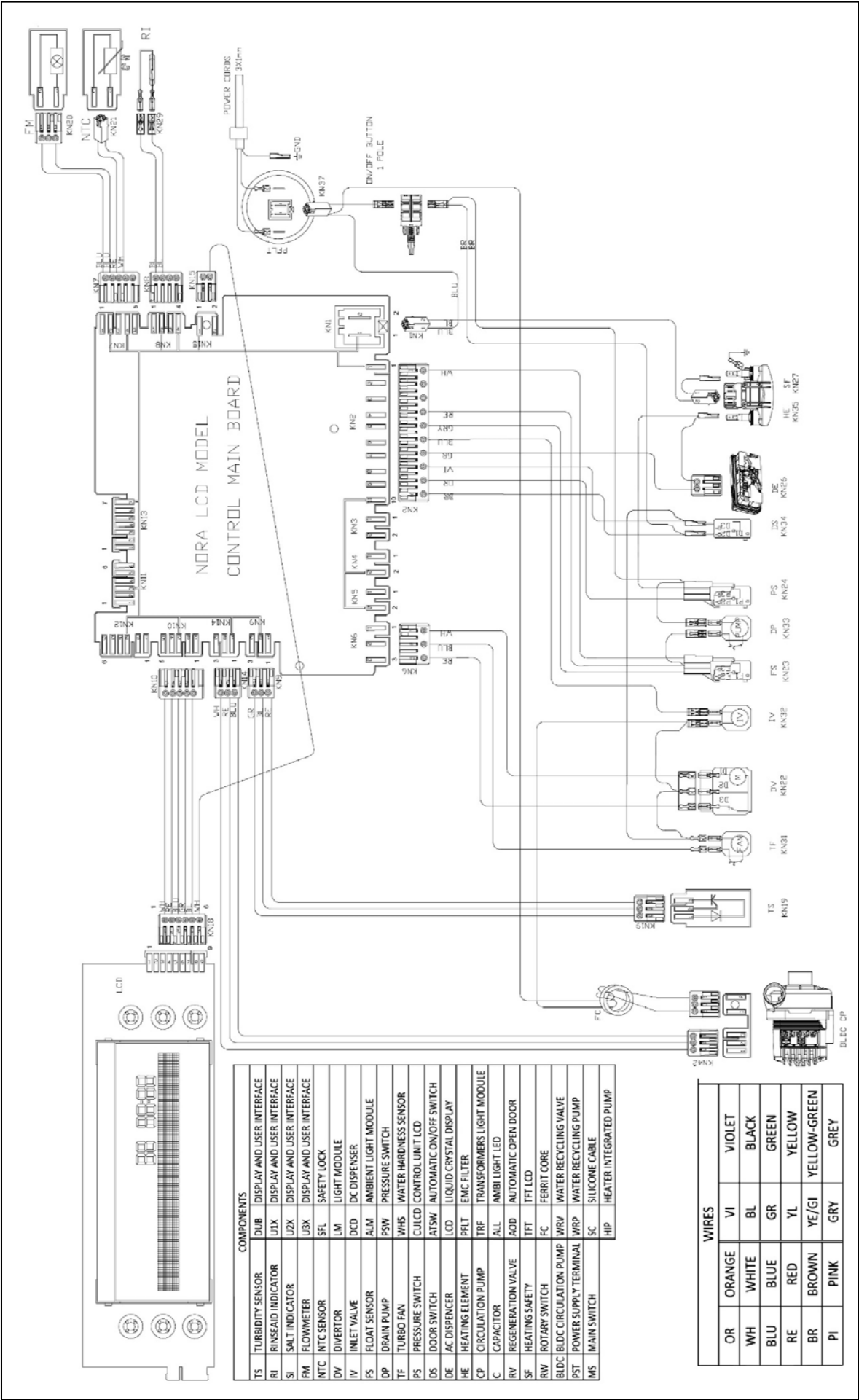
COMPONENTS	REAL VALUES	NOTES
ON/OFF Button	0 $\Omega$ on component	- On/Off Button Is Pressed
Door Switch	KN2.9 – KN2.2 0 $\Omega$	- Door Is Closed
Pressure Switch	KN2.10 – KN2.2 0 $\Omega$ $\infty$ $\Omega$	- There is Water in Sump - There is no Water in Sump
Drain Pump	KN2.2 – KN2.4 143 $\Omega \pm 10$ $\Omega$ (Hanyu) 210 $\Omega \pm 12.6$ $\Omega$ (Hanning)	
Water Inlet Valve	KN2.6 – KN 2.9 3750 $\Omega \pm 375$ $\Omega$ (20°C )	
Diverter	KN6.1– KN 2.9 6840 $\Omega \pm 342$ $\Omega$	
Turbo Fan Motor	KN6.2– KN 2.9 238.6 $\Omega \pm 11.9$ $\Omega$	
Heater	23.95 $\Omega \pm 15$ $\Omega$	- Measured Just on the Component
Detergent Dispenser	4450 $\Omega \pm 10$ $\Omega$ (25 °C)	- Measured Just on the Component
Recirculation Wash Pump	KN2.3 – KN2.9 95 $\Omega \pm 6.65$ $\Omega$ 126 $\Omega \pm 8.8$ $\Omega$	- Primary Winding (on PCB Connector) - Secondary Winding (Just on the Component)
NTC Sensor ( Relative to water temperature °C )	KN 7.3-KN 7.4 25°C – 5000 $\Omega \pm 250$ $\Omega$ 35°C – 3300 $\Omega \pm 181.5$ $\Omega$ 55°C – 1520 $\Omega \pm 98.8$ $\Omega$ 63°C – 1174 $\Omega \pm 88.0$ $\Omega$ 80°C – 670 $\Omega \pm 53.5$ $\Omega$ 90°C – 488 $\Omega \pm 41.5$ $\Omega$	
Float Switch	KN2.1 – KN 2.5 0 $\Omega$ KN2.1 – KN 2.4 $\infty$ $\Omega$	- Micro Switch Is Inactive (No Water Present) - Micro Switch Is Active (There is Water Present)

**LEGEND: KN = Connector, (e.g. KN2.1 = Connector 2, Position 1)**

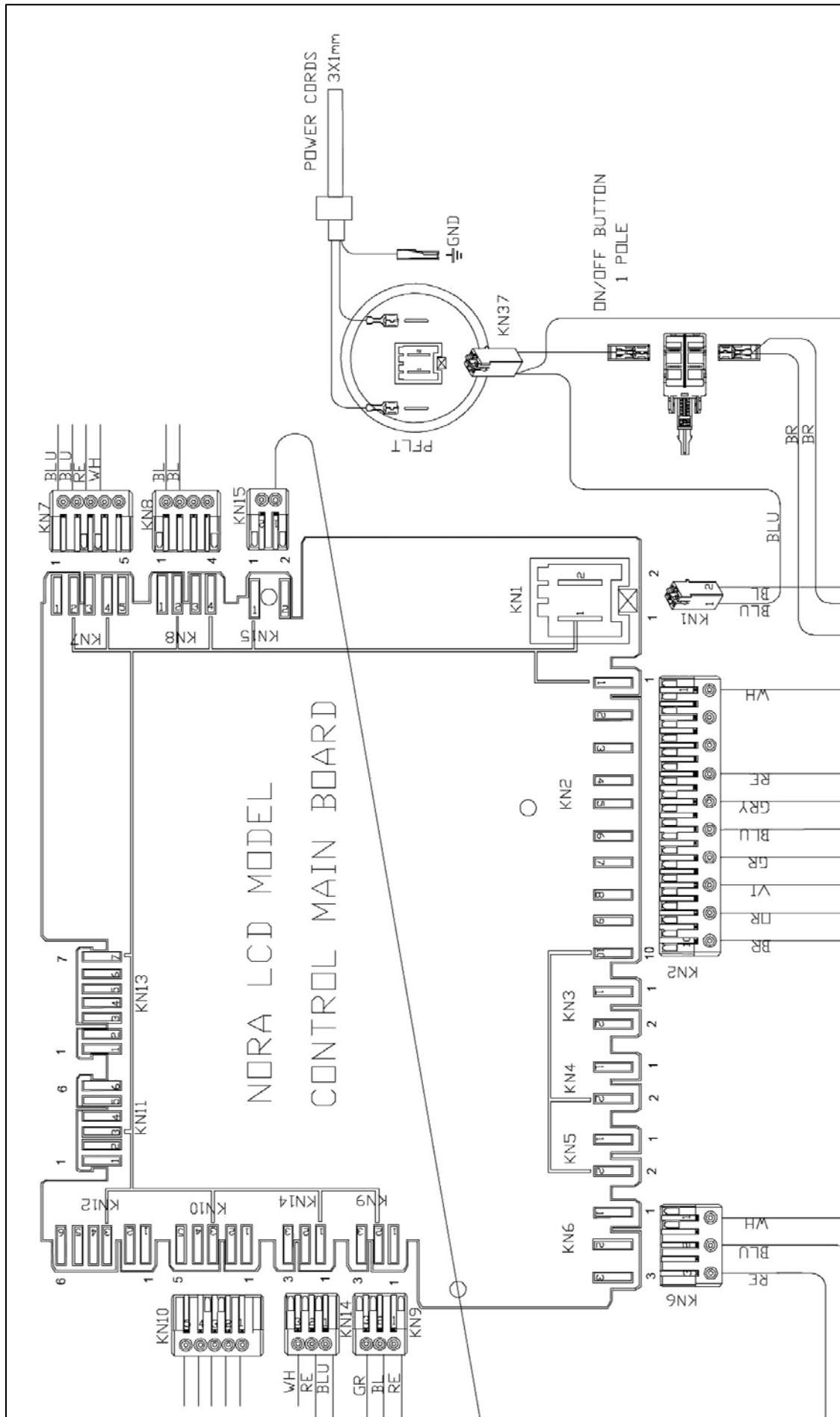
# NOTE PAGE

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WIRING DIAGRAM



# PCB CONNECTIONS



# 1.ELECTRICAL COMPONENTS, TERMS AND ABBREVIATIONS

ABBREVIATION	COMPONENT
FM	FLOWMETER
SET	NTC SENSOR
IV	INLET VALVE
FS	FLOAT SWITCH
DP	DRAIN PUMP
PS	PRESSURE SWITCH
DS	DOOR SWITCH
DE	DISPENSER
HE	HEATER
CP	WASH MOTOR
C	CAPACITOR
RV	REGENERATION VALVE
SF	THERMAL OVERLOAD

## 1.1 Wash Pump

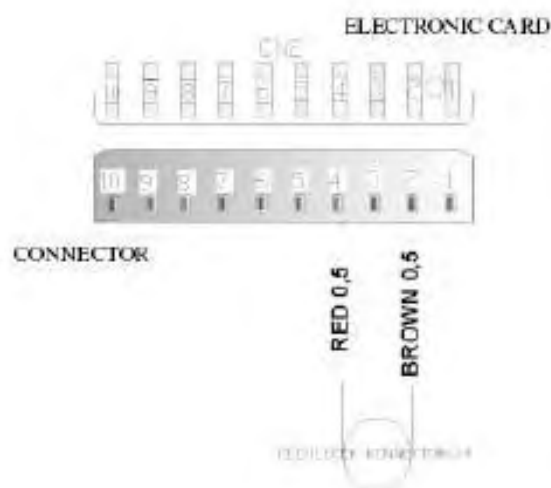
95  $\Omega \pm 6.65 \Omega$  from the Main P.C.B. Connector KN2.3 – KN2 (Primary Winding)

126  $\Omega \pm 8.8 \Omega$  from the component (Secondary Winding)

## 1.2 Drain Pump:

143  $\Omega \pm 10 \Omega$  from the Main P.C.B. Connectors KN2.2 – KN2.4 (Hanyu)

210  $\Omega \pm 12.6 \Omega$  (Hanning)



The above sketch shows the connectors of the drain pump and on the electronic card. Apply the probes of the tester onto the relative connectors as shown.

## From the component:



Apply the probes of the tester onto the relative connectors as shown.



## Values of Alternative Pump Coils



HANYU DRAIN PUMP



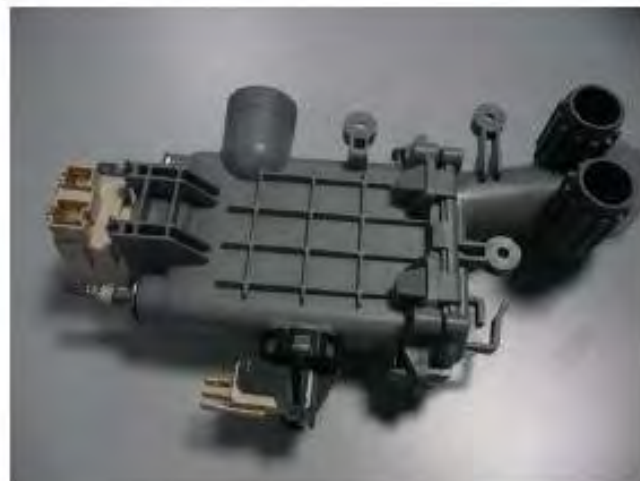
HANNING DRAIN PUMP

### 1.3 Heater Casing

Can't be measured from the Main P.C.B. Connectors:

**From the component**

$23.95\Omega \pm 15\Omega$



Apply the probes of the tester onto the relative connectors as shown.

## 1.4 Detergent Dispenser

Can't be measured from the Main P.C.B. Connectors:

### From the component

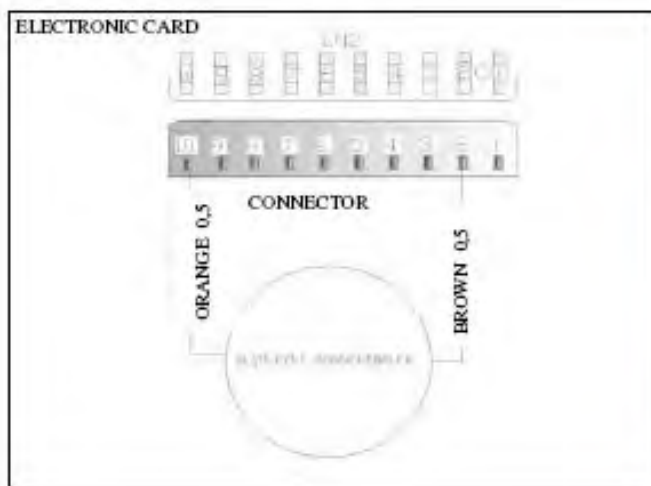
$1660\Omega \pm 10\Omega$  (25 C °)



## 1.5 Pressure Switch

### From the Main P.C.B. Connector

KN2.10 – KN2.2  $0\Omega$  there is water (Full)  $\infty\Omega$  there is not water (Empty)



The above sketch shows the connectors of the pressure switch on the Main P.C.B. Apply the probes of the tester onto the relative connectors as shown.

### From the component



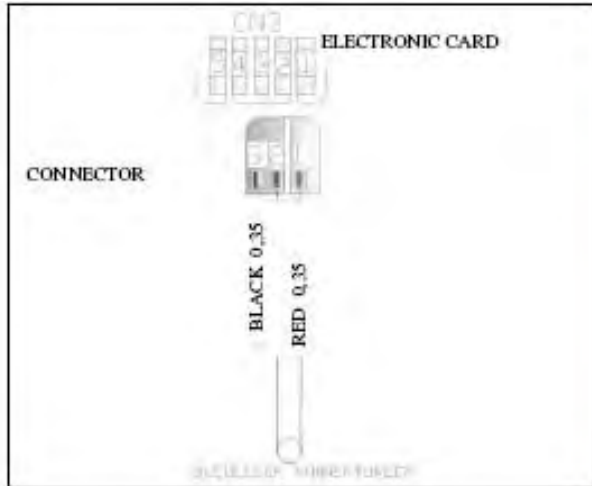
Apply the probes of the tester onto the relative connectors as shown.

## 1.6 NTC Sensor

### From the Main P.C.B. Connector:

(Relative to water temperature °C)

KN 7.3-KN 7.4	25°C – 5000 $\Omega$ $\pm$ 250 $\Omega$
	35°C – 3300 $\Omega$ $\pm$ 181.5 $\Omega$
	55°C – 1520 $\Omega$ $\pm$ 98.8 $\Omega$
	63°C – 1174 $\Omega$ $\pm$ 88.0 $\Omega$
	80°C – 670 $\Omega$ $\pm$ 53.5 $\Omega$
	90°C – 488 $\Omega$ $\pm$ 41.5 $\Omega$



The above sketch shows the connectors of the NTC sensor on the Main P.C.B. Apply the probes of the tester onto the relative connectors as shown.



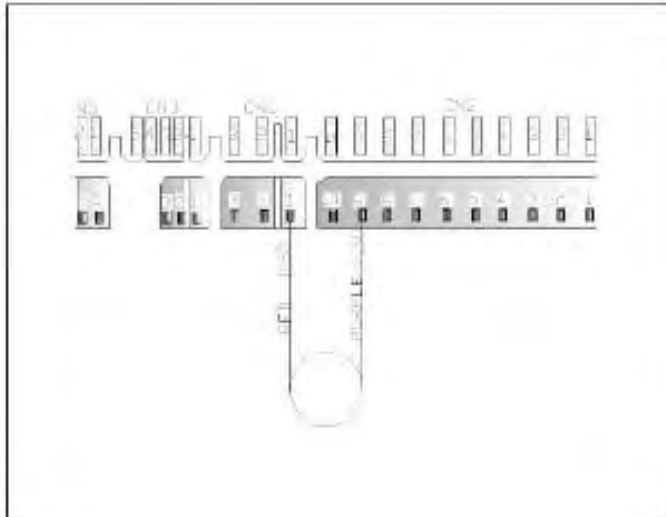
### From the component

Apply the probes of the tester onto the relative connectors as shown.

## 1.7 Diverter

### From the Main P.C.B. Connector:

6840  $\Omega$   $\pm$  342  $\Omega$  on the connectors KN6.1 – KN 2.9



The above sketch shows the connectors of the diverter on the Main P.C.B.

### From the component



Apply the probes of the tester onto the relative connectors as shown.

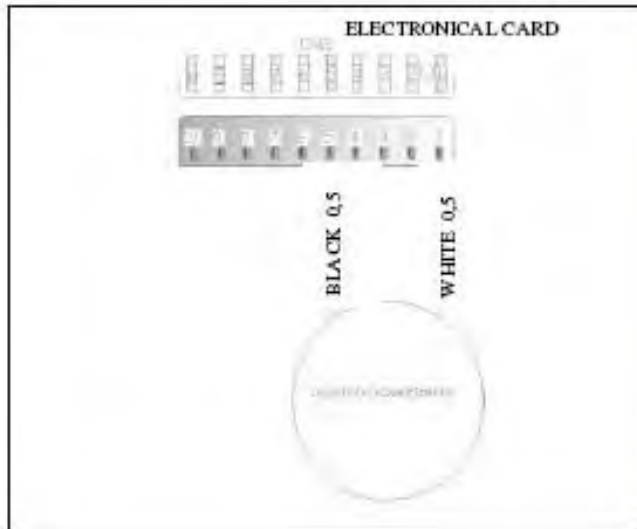
## 1.8 Float Switch

### From the Main P.C.B. Connector:

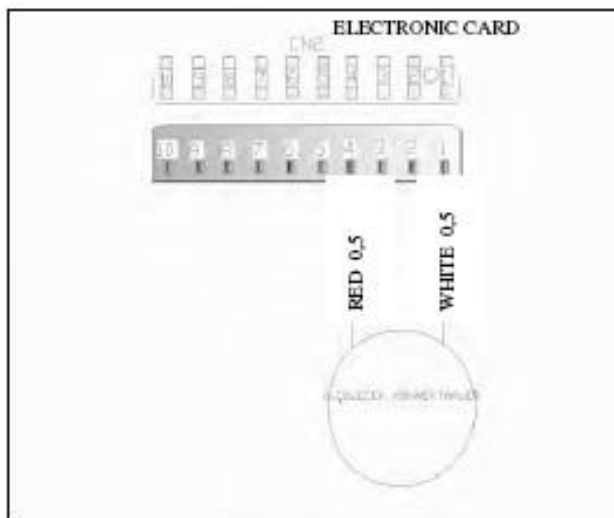
0  $\Omega$  (Position 1) on the connectors KN2.1 – KN2.5 Microswitch Inactive (No Water)

$\infty$   $\Omega$  (Position 2) on the connectors KN2.1 – KN2.4 Microswitch Active (Water)

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



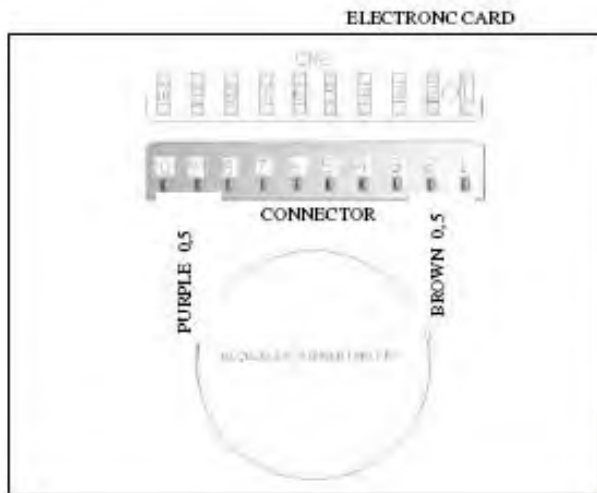
**Position 2:** If failure code has occurred related with the floater within control the above values; you can figure out whether leakage occurs or not.



## 1.9 Door Switch

### From the Main P.C.B. Connector:

0Ω on the connectors KN2.9 – KN2.2 (Door is closed)



The above sketch shows the connectors of the door switch on the Main P.C.B. Apply the probes of the tester onto the relative connectors as shown.

### From the component

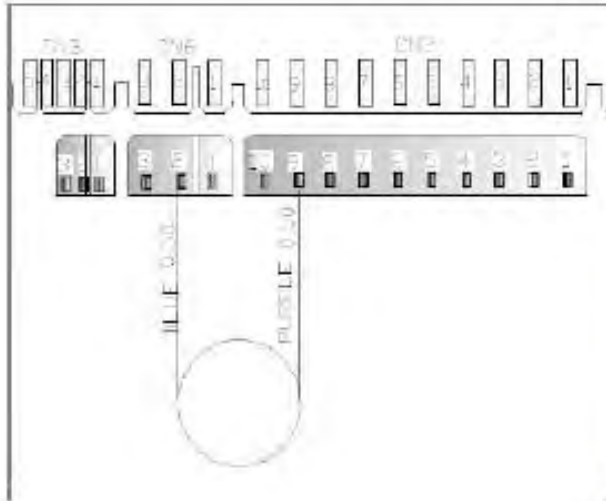


Apply the probes of the tester onto the relative connectors as shown.

### 1.10 Fan Motor

#### From the Main P.C.B. Connector:

238.6 $\Omega$   $\pm$  11.9  $\Omega$  on the connectors KN 6.2 – KN 2.9



The above sketch shows the connectors of the fan motor on the Main P.C.B. Apply the probes of the tester onto the relative connectors as shown.

#### From the component

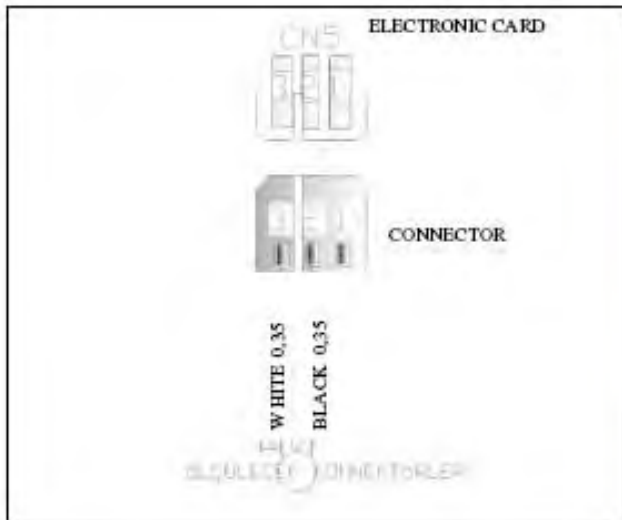


Apply the probes of the tester onto the relative connectors as shown.



### 1.11 Rinse Aid Sensor

From the main P.C.B. connector:



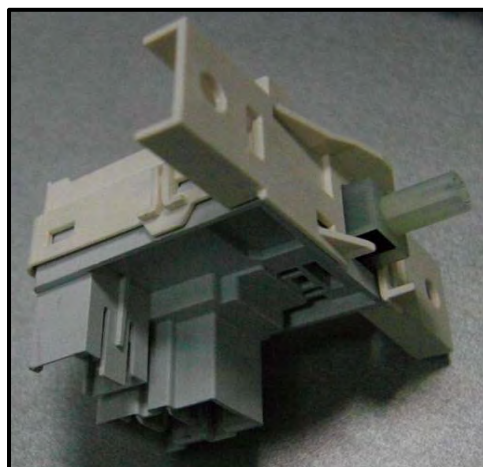
The above sketch shows the connectors of the fan motor on the Main P.C.B. Apply the probes of the tester onto the relative connectors as shown.

**From the component**



### 1.12 ON/OFF Button

This component can't be measured from the Main P.C.B. (PCB)



**From the component**

0  $\Omega$  when button is pressed



## 2. ELECTRICAL COMPONENT SPECIFICATIONS

### 2.1 Circulation Pump

Brushless DC motors

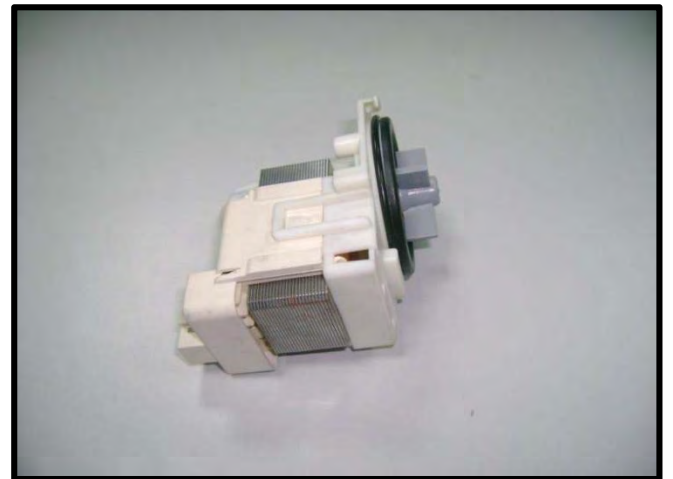
- 0 – 3400 RPM range
- Winding value is immeasurable.
- Thermal protection software controlled.
- Pump output 0 - 80 l / min 0-400 mbar
- Power is from 0 - 60 watts.

Electronic card-controlled variable-speed motor. Clockwise rotation in the opposite direction, mounted on rubber hangers to the base.



### 2.2 Drain Pump

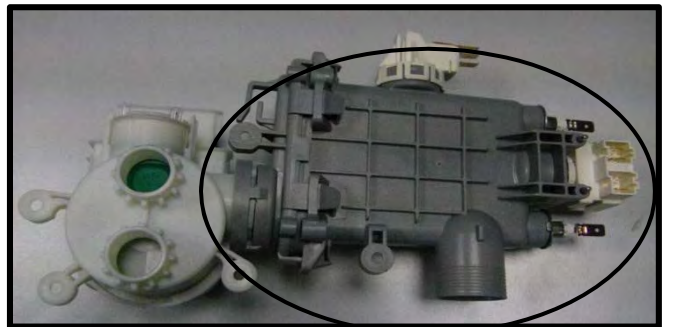
Voltage : 220/240 Volt  
 Frequency : 50/60 Hz  
 Total Power : 30 W  
 Flowrate : 17 – 21 lt/min  
 Coil Resistance :  $143\Omega \pm 10\Omega$   
 Coil Isolation Class : F  
 Thermal Protection :  $120^{\circ}\text{C}$



### 2.3 Heater Casing Group

#### 2.3.1 Heater

Voltage : 220/240V  
 Total Power : 2000 W  
 Resistance :  $23.95 \pm 15\Omega$   
 Used for heating the wash water.  
 The heater is not active in the drying process.  
 The inlet is mounted and placed on the leading edge of the wash pump.



#### 2.3.2 NTC

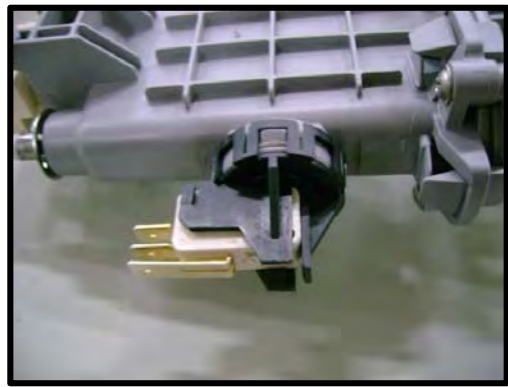
Thermal Protection:  $83 \pm 3^{\circ}\text{C}$   
 Relative Temperatures:  

25°C - 5000Ω	$\pm 250\Omega$
35°C - 3300Ω	$\pm 181.5\Omega$
55°C - 1520Ω	$\pm 98.8\Omega$
63°C - 1174Ω	$\pm 88\Omega$
80°C - 670Ω	$\pm 53.5\Omega$
90°C - 488Ω	$\pm 41.5\Omega$



### 2.3.3 Pressure Switch

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



### 2.3.4 Diverter

Voltage : 220/240 Volt  
Frequency : 50/60 Hz  
Power : 8 W  
Resistance :  $6840 \pm 5 \Omega$



## 2.4 Detergent Dispenser

### 2.4.1 Detergent Compartment:

Main wash compartment :  $40\text{cm}^3$  (25/15)  
Prewash compartment :  $5\text{cm}^3$

### 2.4.2 Detergent Dispenser Bobbin:

Voltage : 220/240 Volt  
Frequency : 50/60 Hz  
Resistance :  $4450 \pm 10 \Omega$

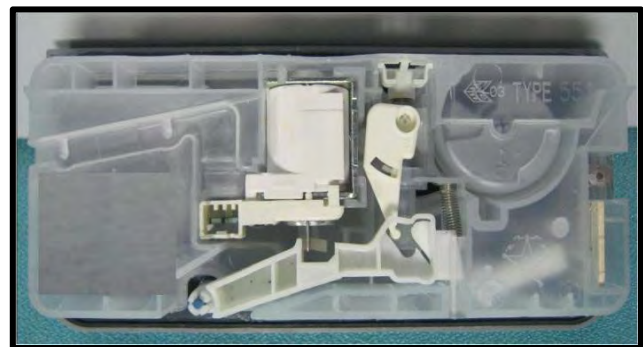


### 2.4.3 Rinse Aid Compartment:

Aid rinse cap :  $150\text{cm}^3$   
Factory outlet setting position : Level 3

### 2.4.4 Dispenser Rinse Aid Sensor:

Voltage : 250 V  
Switched Current : 16 (4) A  
Current through closed contact: 2.5 max.



## 2.5 Hose Inlet Valve Safety

Voltage : 220/240 Volt  
Frequency : 50-60 Hz  
Total Power : 8W  
Flowrate : 3.5 lt/min  
Resistance :  $1960 \pm 196 \Omega$  (20°C)  
Single inlet and single outlet standard single coil solenoid valve. Assembled to the basement and connect to the air break by hose.



## 2.6 Door Lock

Is a mechanical lock/release system that holds the door closed. It supplies connection of electrical parts in the machine and cutting off the connection when door opens.

Current : 16 (4) A

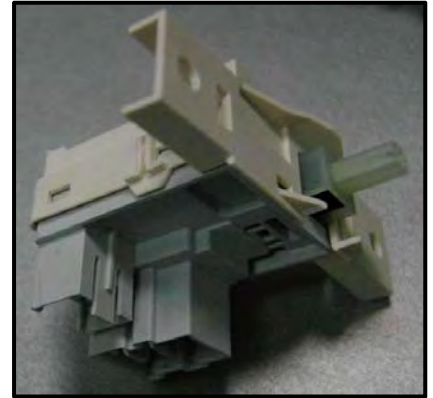


## 2.7 ON/OFF Button

Assembled in the control panel unit ON/OFF (two pole)

Voltage : 250V

Current : 50mA



## 2.8 Fan Motor (where fitted)

Total Power : 15 W

Voltage : 220/240 V

Frequency : 50/60 Hz

Resistance :  $238.6 \pm 12 \Omega$

Coil solation Class: H

There is a thermal protector. Shaded pole motor 2 pole temperature is between:  $-40^{\circ}\text{C} - 150^{\circ}\text{C}$



## 2.9 EMC Filter

Voltage : 220/240V

Frequency : 50/60 Hz

$0.1 \mu\text{f}$  (X1) +  $2 \times 0.027 \mu\text{f}$  (Y2) +  $1\text{M} \Omega$

To prevent electrical interference from the main supply.

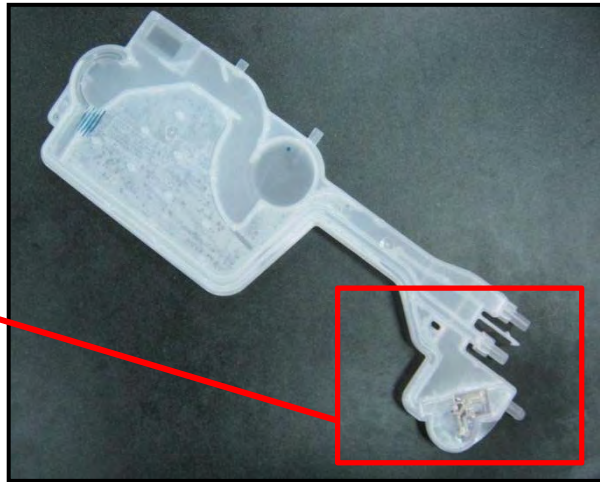
Assembled to basement.





## 2.10 Flowmeter

Located at the base of the Air Break, it measures the amount of water input to the machine with precise control.



## 2.11 Power Cord

Type : AU 3 x 1 mm<sup>2</sup> copper conductors  
Isolation : TS 9760 H05VV-F  
Plug : TS-IEC 60884-1, grounded PVC  
Length : 1800mm



### 3. PLASTIC COMPONENTS

#### 3.1 Drain Hose

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



#### 3.2 Hose Inlet Valve Safety

Fitting that has a straight cuff with safety inlet solenoid assembled to tap outlet.  
Fitting with 90° cuff assembles to water inlet valve and adjust to suit assembly direction.



#### 3.3 Air Break

Measures water that comes into the dishwasher and gives data to electronic card



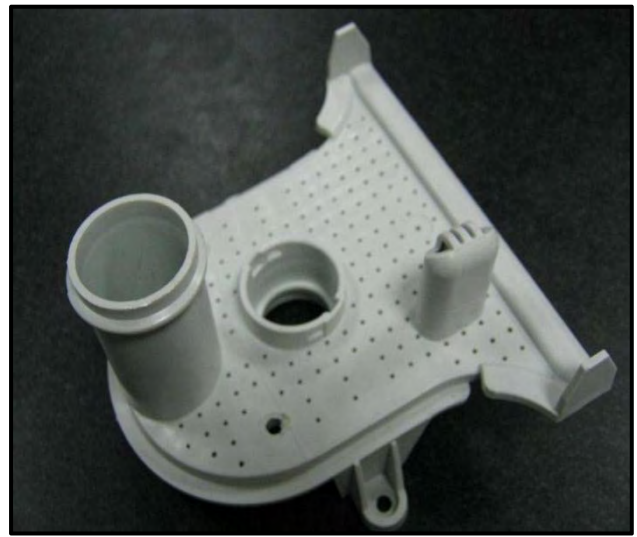
#### 3.4 SUMP

Sump a reservoir that connects water in tub, circulation pump, drain pump and heater casing.



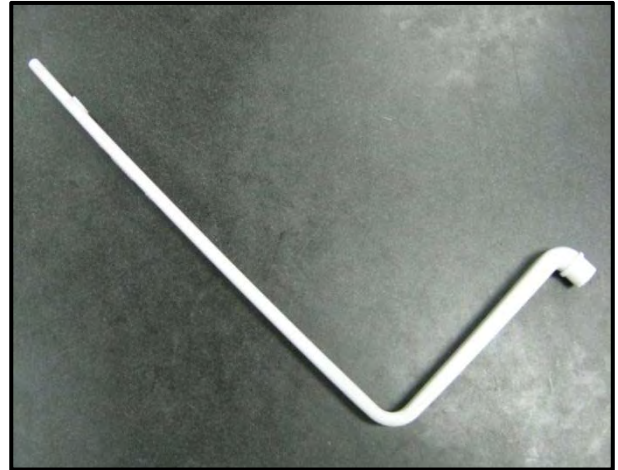
### 3.5 SUPPORT SPRAY ARM LOWER

It distributes water from diverter to upper and lower spray arms.



### 3.6 TUBE FEED SPRAY ARM UPPER

It transfers water from support spray arm lower to spray arm upper.



### 3.7 CHANNEL UPPER SPRAY ARM FEED

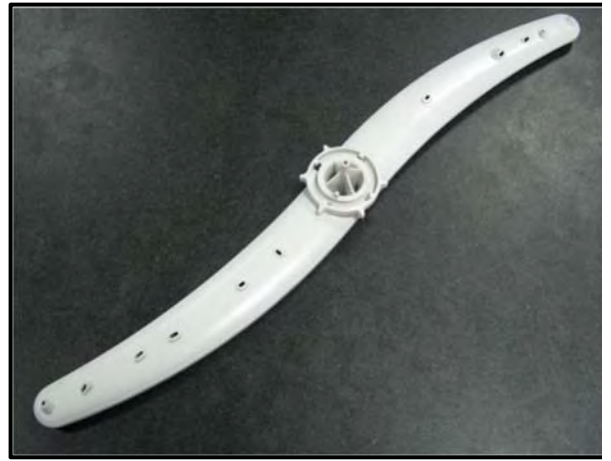
It transfers water from support spray arm lower to spray arm upper.

There are two holes at the back of the spray arm upper. These holes provide water to pass through when the upper basket is in the upper or lower positions



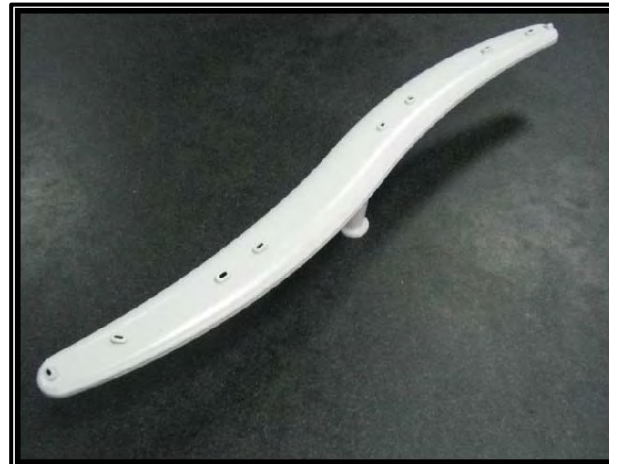
### **3.8 SPRAY ARM BASKET TOP COMPLETE**

It distributes water from the channel upper spray arm feed onto dirty dishes in the upper basket.



### **3.9 LOWER SPRAY ARM**

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





## 4. DISASSEMBLY

### CAUTION!

REMOVE ELECTRIC PLUG FROM THE SOCKET BEFORE DISASSEMBLY

#### 4.1 Work Top

- a) Remove two screws that fix the worktop at the rear of the machine



- b) Push the top-plate back and lift it up

#### 4.2 Plastic Kick plate

- a) Open door and remove two screws fixing plastic kick plate  
b) Remove the plastic kick plate as shown in the picture

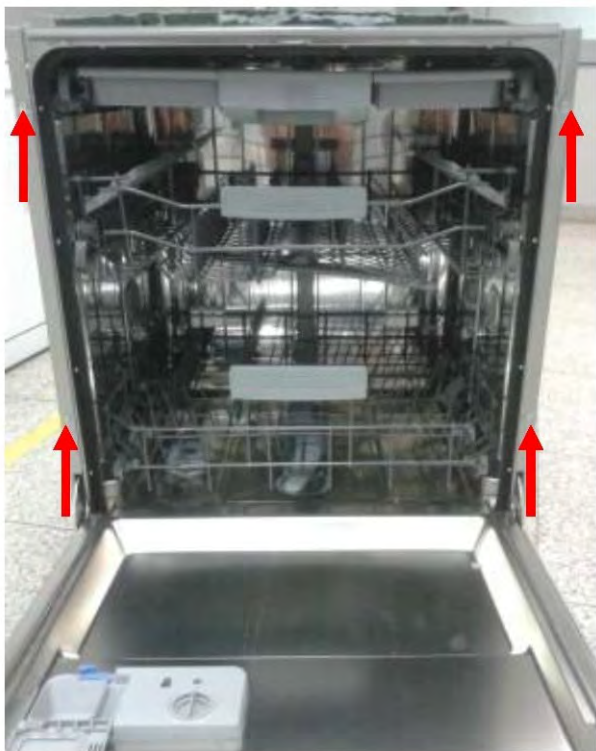




### 4.3 Side Panels

Before the side panels can be removed:

- a) Remove the worktop
- b) Remove plastic kick panel



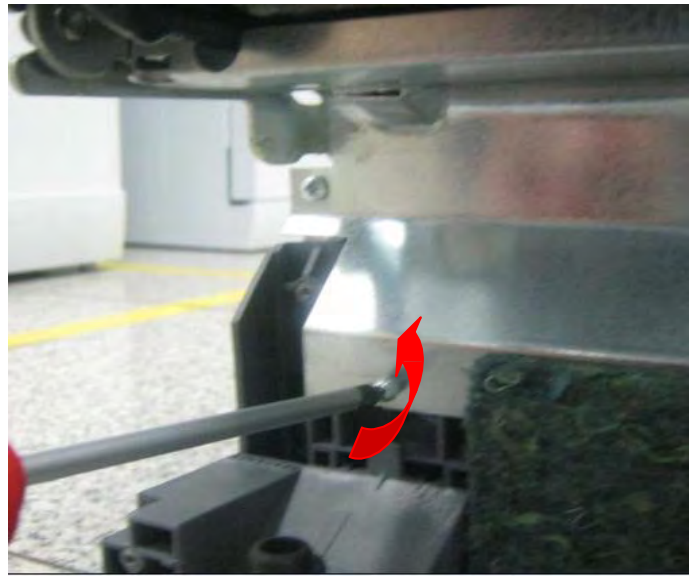
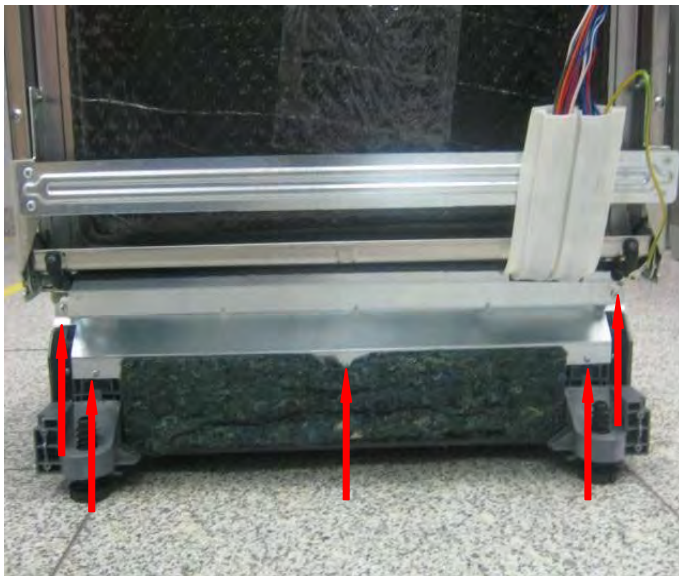
#### 4.4 Front Panel

- a) Remove six screws that fix the front panel.
- b) Pull down the front panel as it shown in the Picture



#### 4.5 Kick Plate (Sheet Metal)

- a) Remove top plate, plastic kick plate and side panels
- b) Remove two screws that fix the kick plate sheet iron
- c) Pull it down as shown in the picture





## 4.6 Panel Control

a) Remove six screws that fix panel control to the inner door

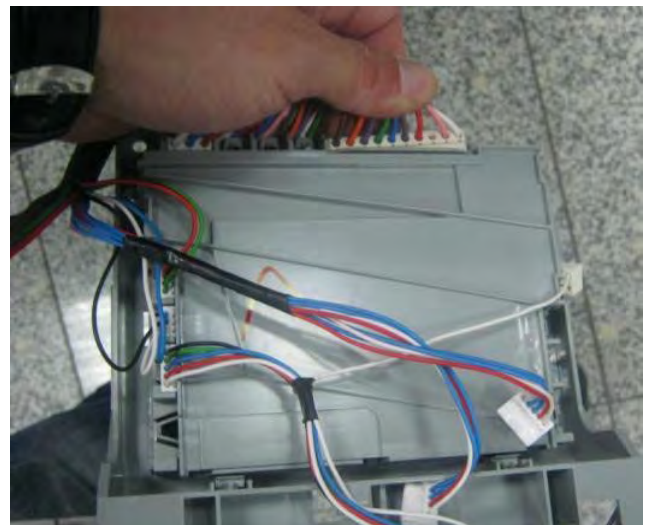
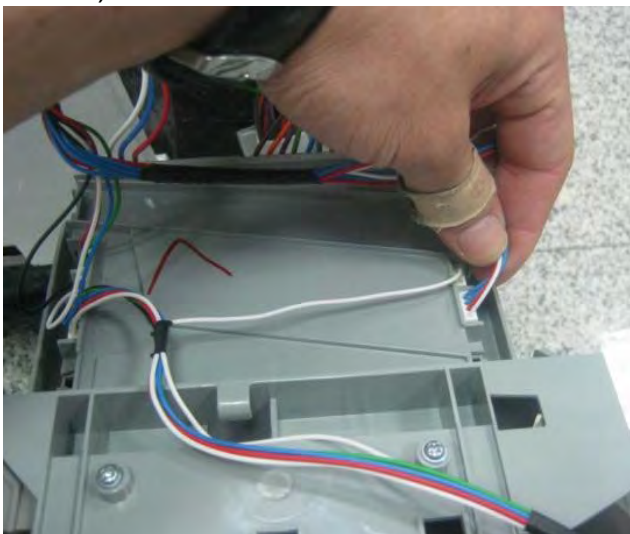


b) Flip panel control assembly down



## 4.7 Electronic Card

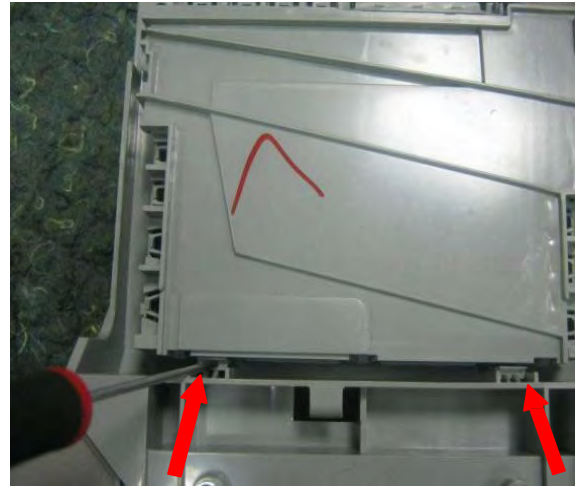
a) Remove the wires that as shown in the picture



## **WARNING:**

**WHEN REMOVING WIRES PULL FROM THE CONNECTOR, DO NOT PULL FROM WIRES**

b) Remove PCB box cover with pulling its plastic hinges



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



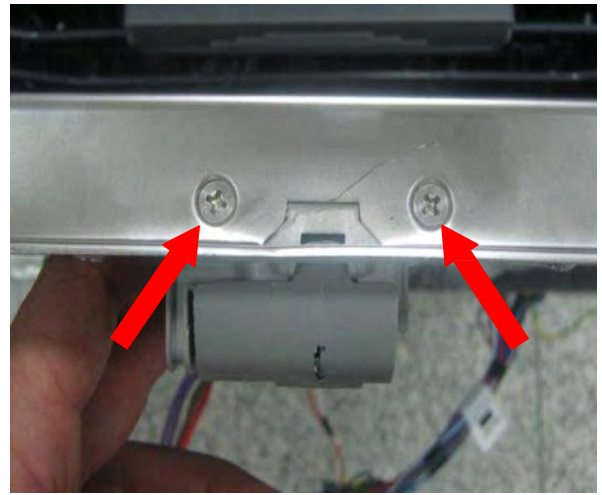
d) Remove the PCB from PCB box by removing PCB box's plastic hinges





#### 4.8 Door Lock Group

- a) Remove control panel group
- b) Remove two screws that fix the door lock group.



#### 4.9 Dispenser

- a) Remove the panel door front
- b) Remove the wire



- c) Remove dispenser from inside door's hinges by using slotted screw driver



- d) Push out and remove the dispenser

## **WARNING:**

**TAKE CARE AND USE WORK COVERS, PANEL INNER DOOR IS SHARP AND CAN CUT YOUR HANDS**

### **4.10 Door Inner and Hinge Cord Group**

- a) Remove side panels
- b) Remove hinge spring from hinge cord group as shown in the picture



- c) Open the door inner and lift off locator as shown in the picture





## 5. ACCESSING INNER COMPONENTS

### 5.1 Basket Lower

- a) Open dishwasher door.



- b) Pull the basket out toward yourself.

### 5.2 Basket Upper

- a) Open dishwasher door.



- b) Pull the basket toward yourself.

- c) The plastic stop on basket rails swivels from left to right securing the basket upper.

### 5.3 Tray Cutlery Upper (if fitted)

- a) Pull the basket toward yourself

- b) The front plastic stop on the rails swivels left to right securing the tray cutlery upper.



## 5.4 Filters

- a) Open dishwasher door
- b) Remove basket lower
- c) To remove micro filter group rotate them in the direction of anticlockwise and pull them assembly out as shown in the picture

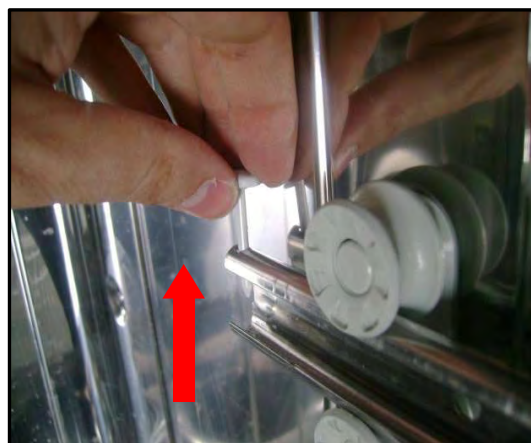
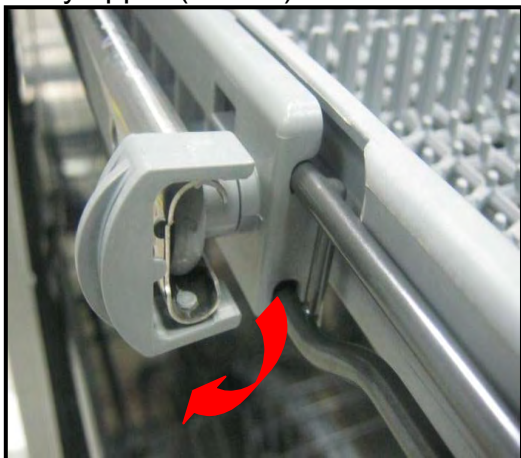


- d) To remove the metal filter pull it up as it shown in the picture



## 5.5 Basket Rails

- a) To remove the basket rails, open the door and take out baskets
- b) Pull the basket toward yourself
- c) The front plastic stop on the rails swivels left to right securing the basket upper and tray cutlery upper (if fitted)

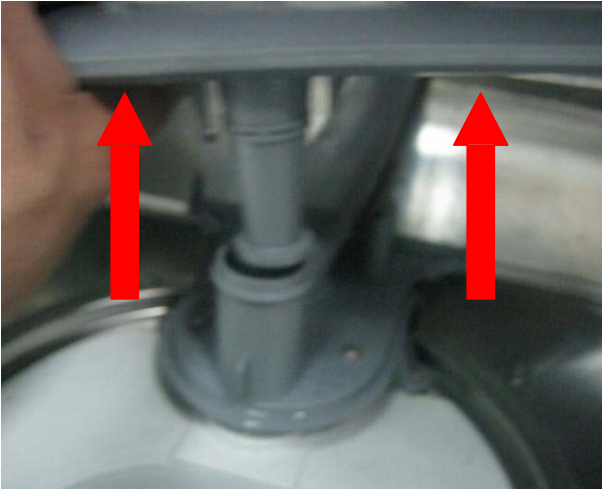


- d) To remove basket rails release the rail from upper basket stopper rear



## 5.6 Spray Arms

- a) After removing the lower basket, gripping the lower spray arm centrally pull the spray arm firmly upwards.

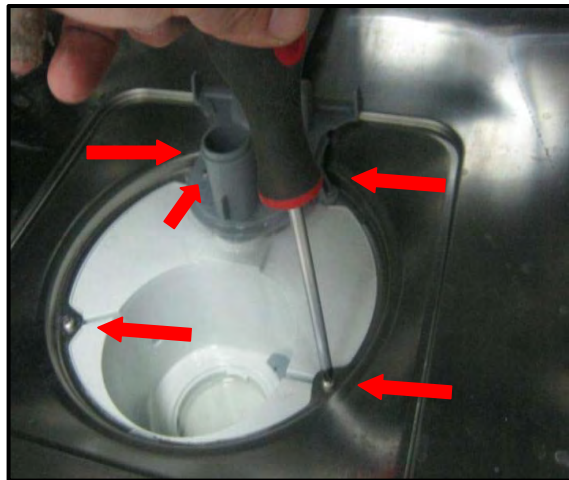
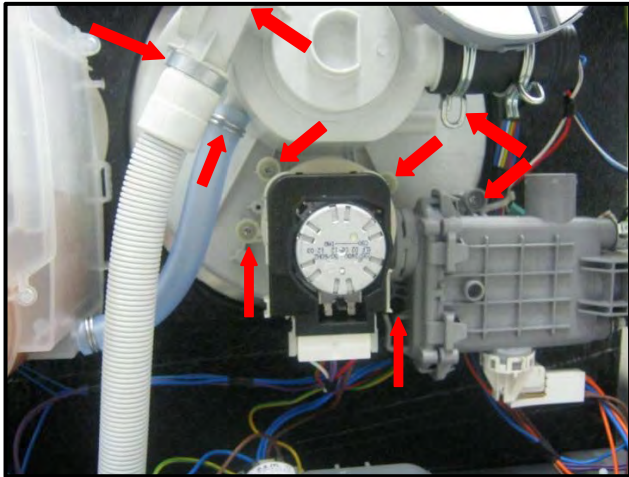


- b) To remove upper spray arm feed pipe, part the bracket at the rear of the tub to release the feed pipe upper spray arm.
- c) To remove upper spray arm feed pipe, turn to the left it than pull it up as shown in the picture.



## 5.7 Sump

- a) Remove any residual water from the sump with a sponge so that it does not flow into the tub and the pressure switch tubes.
- b) From inside tub remove the basket and lower spray arm
- c) Remove the micro filter group and metal filter
- d) Then lay the appliance on the rear panel
- e) Remove lower cover
- f) Detach all the hoses (sump-draining hose, circulation pump–sump, sump–water softener).
- g) Remove the two screws that secure the spray arm support to the sump
- h) Remove the four screws that secure the sump to the tub
- i) Detach the drain pump.
- j) Pull the sump out taking care not to damage the sump seal.



## 5.8 Access Components from Sides

- a) Remove the side panel to reach components that you need to access



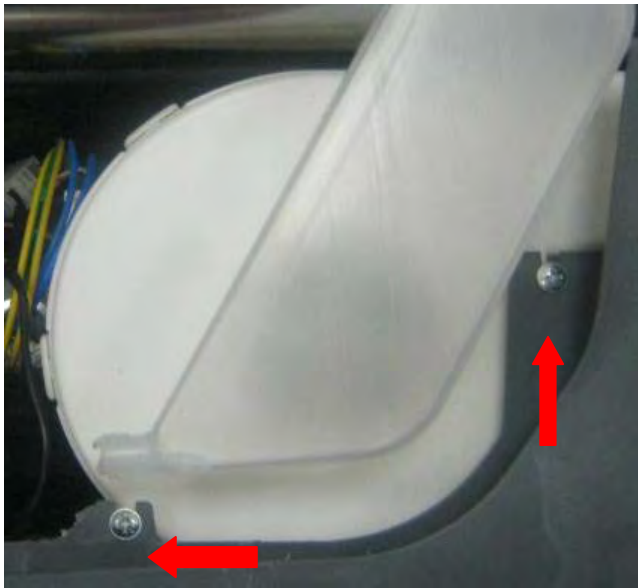
**RIGHT SIDE**



**LEFT SIDE**

## 5.9 Motor Fan

- a) Remove right side panel
- b) Remove the two screws that connects the fan housing to the base



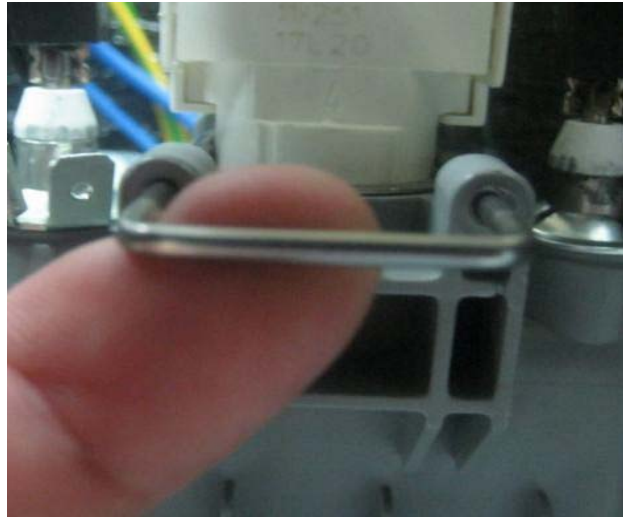
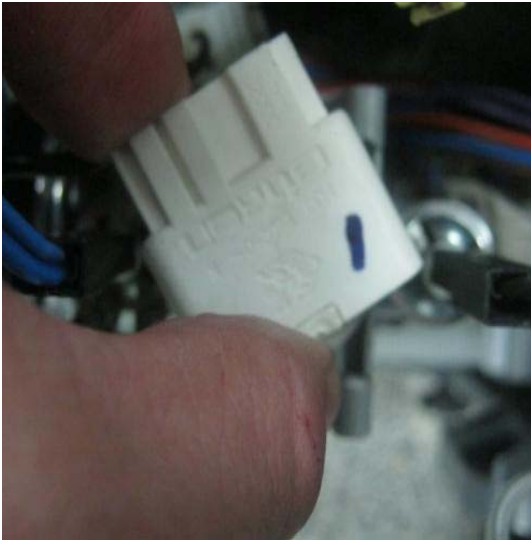
- c) Remove the turbo fan on the condensing unit





### 5.10 NTC with Thermal Protector

- a) Remove turbofan. NTC is at the end of the heater group
- b) Remove the power connector that is connected.(NTC on the left, on the right is the thermal protection cable)
- c) Pull and remove NTC locking pin



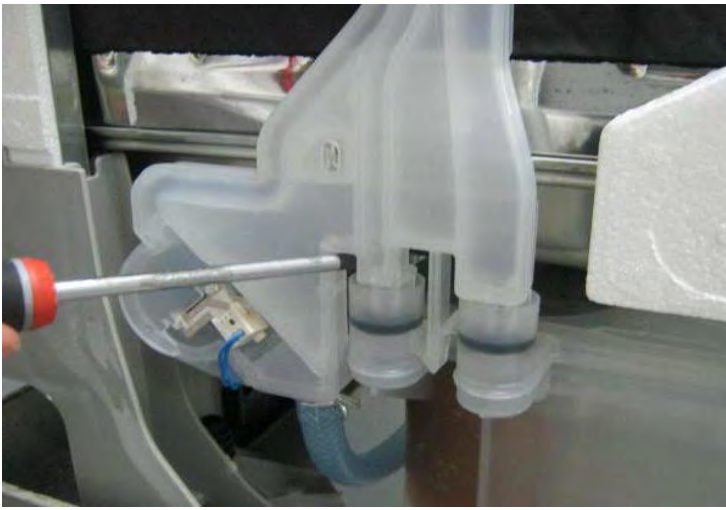
- d) Pull NTC out from heater assembly to unclip off of the element

### 5.11 Air Break

- a) Remove the left side panel of the machine
- b) Open machine's door
- c) From inside the machine, rotate air break nut counter clockwise and remove it



- d) Remove air brake connectors with salt cap as it is shown in picture  
Take care, plastic components



### 5.12 Cover Valve Inlet

- a) Remove left side panel
- b) Using the tip of a flat screwdriver, remove cover valve inlet from the basement as shown in the picture
- c) Unclip the valve inlet from the cover



### **WARNING:**

**IF YOU DO NOT OBEY INSTRUCTIONS WHILE DISASSEMBLY OF THE COVER INLET VALVE IT CAN BREAK**

### 5.13 Supply Cable

- a) Remove the cover valve inlet from the lower base
- b) Remove the tray spillage
- c) Disconnect supply cord from EMC filter





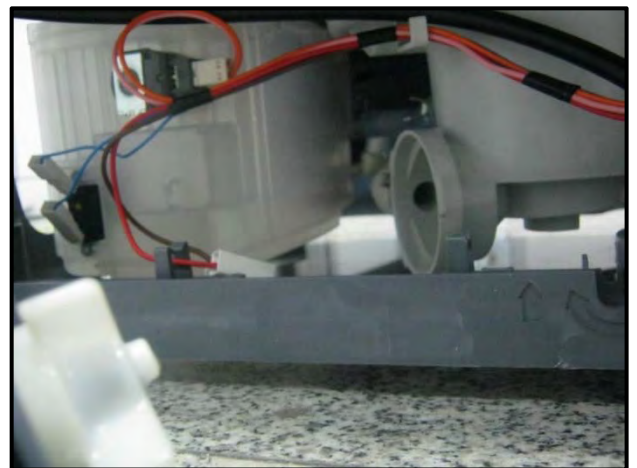
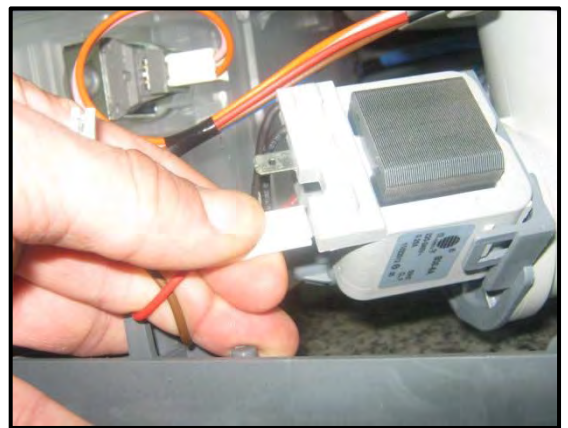
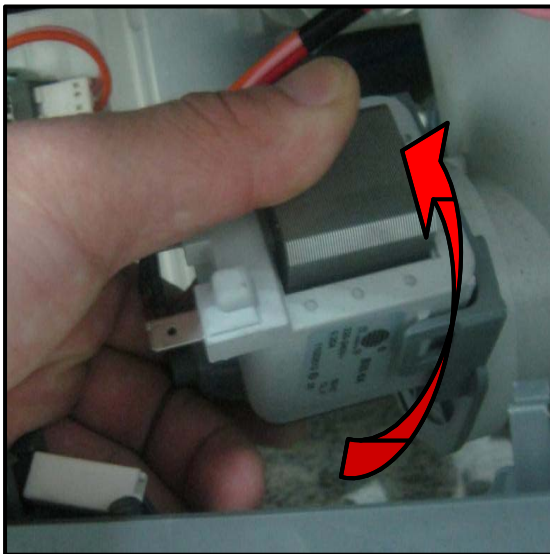
## 6. ACCESSING COMPONENTS FROM THE FRONT OF MACHINE

- a) Remove plastic kick plate and .metal kick plate.



### 6.1 Drain Pump

- a) Remove plastic kick plate and metal kick plate
- b) Remove the wires
- c) Rotate drain pump anticlockwise to remove from the sum



## 7. ACCESSING COMPONENTS THROUGH THE BASE

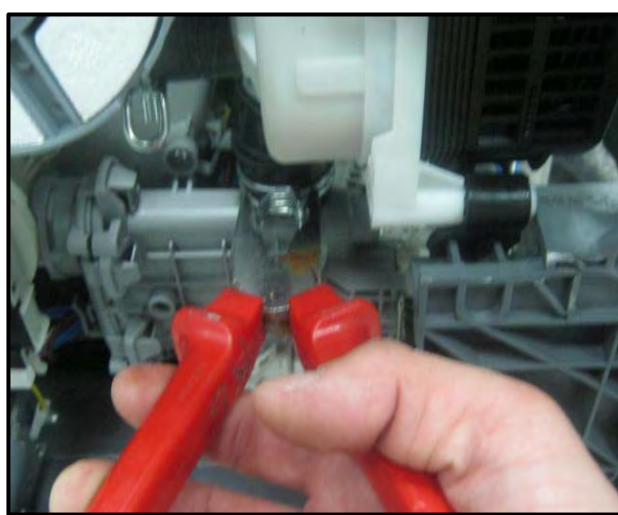
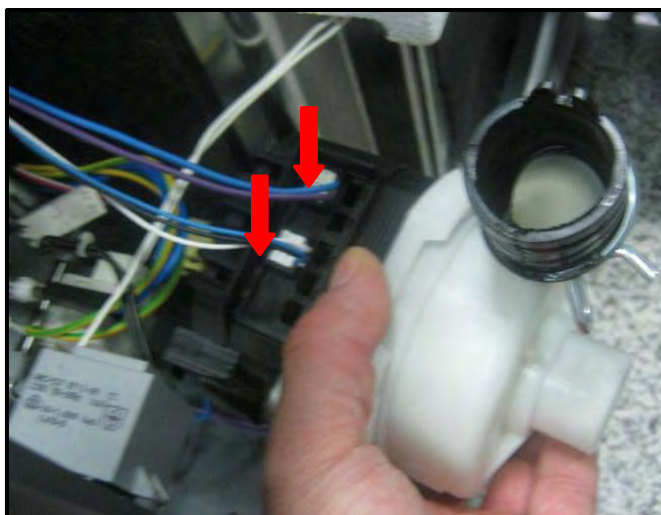
### 7.1 Tray Spillage Removal

- a) Lay the appliance on its left hand side
- b) Unclip tray spillage as indicated in the picture



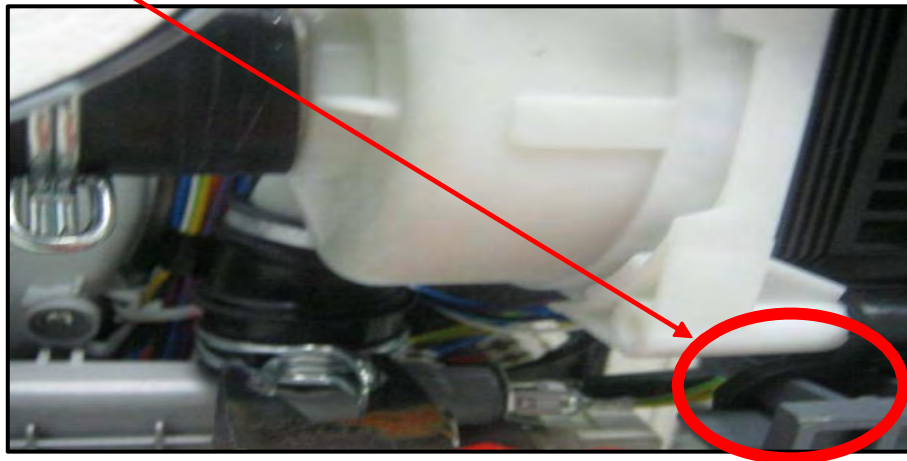
### 7.2 Circulation Pump

- a) Lay the appliance on the rear panel
- b) Unclip tray spillage (as above)
- c) Remove the electrical connection on the circulation pump
- d) Remove 2 clamps that are shown in the picture (Heater casing- circulation pump, sump-Circulation pump)



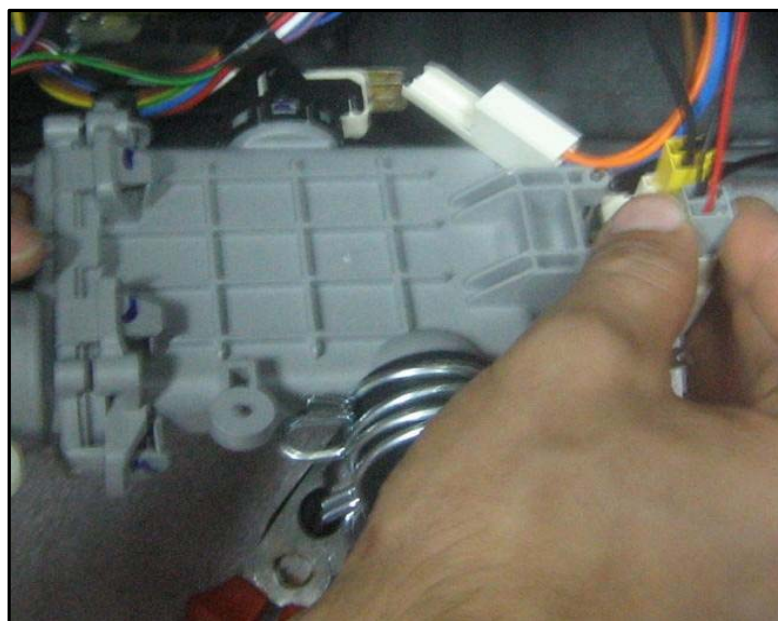


e) Remove circulation pump from its locations in the base

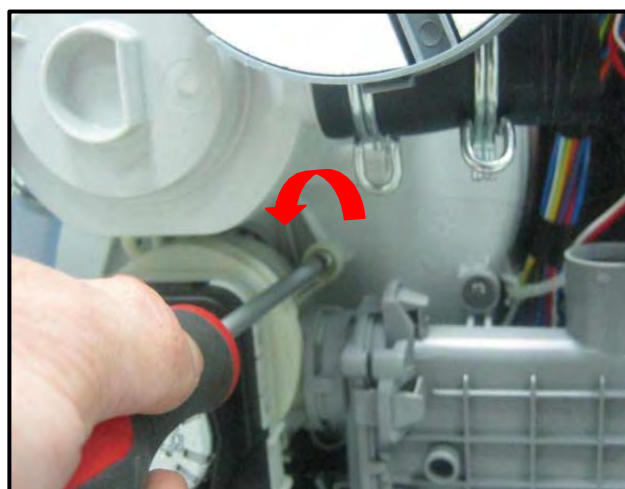
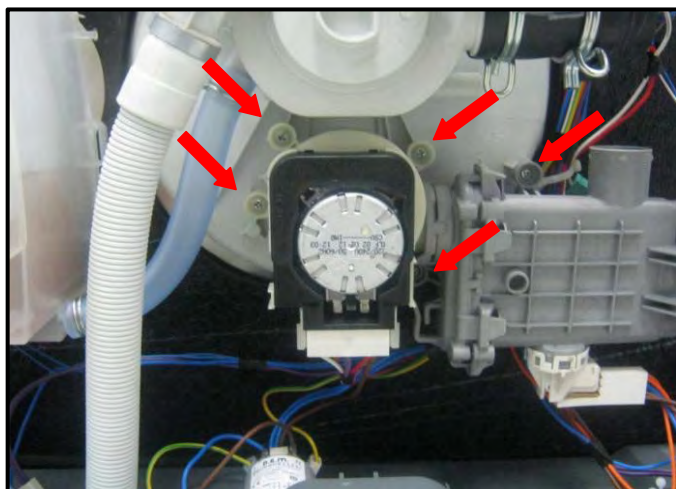


### 7.3 Heater-Group

- a) Unclip tray spillage
- b) Remove electrical connections

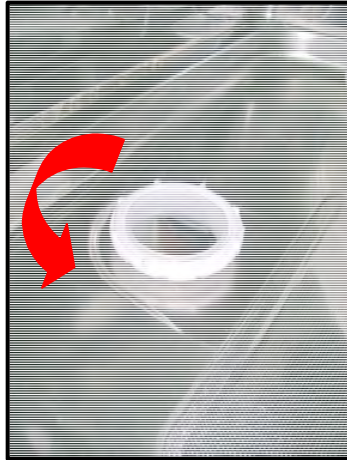


c) Remove five (5) screws which fix heater group to sump



## 7.4 Water Softener N/A

- To remove water softener cap, rotate it anticlockwise
- To remove water softener nut, rotate it anticlockwise
- Remove left side panel
- Unclip tray spillage
- Remove electrical connectors between water softener and air-break
- remove the hose connectors between sump and water softener



## 7.5 EMC Filter

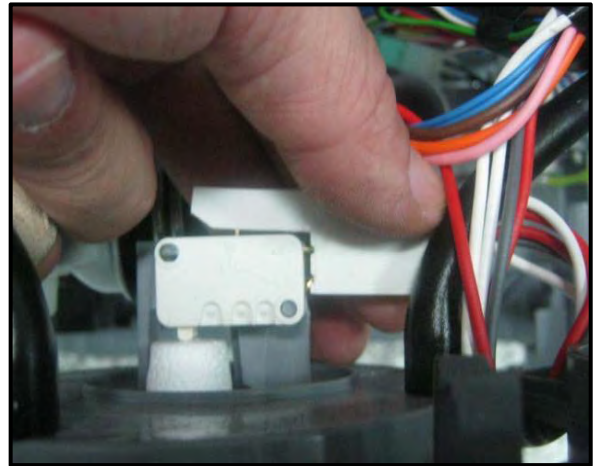
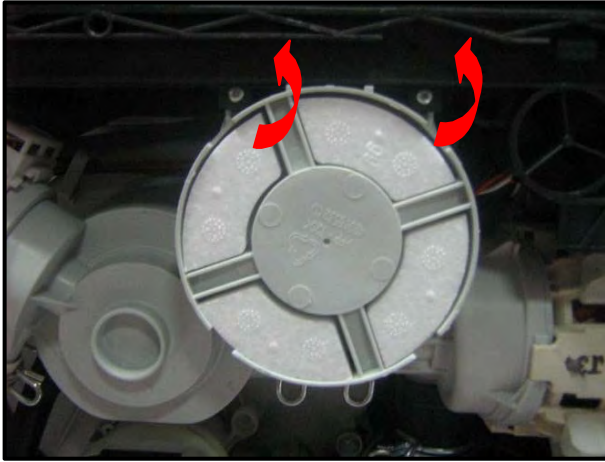
- Unclip the tray spillage
- Remove one screw fixing EMC filter



- Remove the electrical connectors to EMC filter

## 7.6 Float Switch

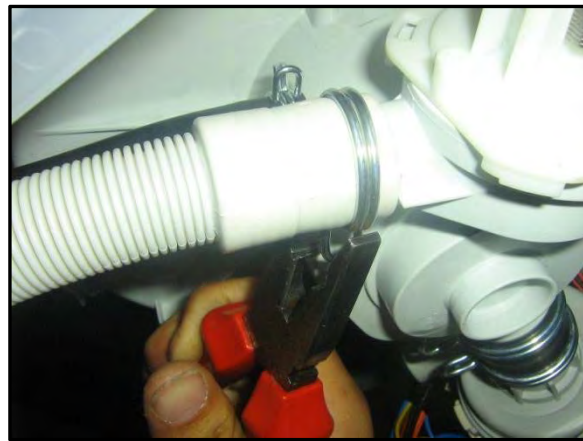
- a) Remove plastic kick plate and metal kick plate
- b) From the front, remove excess water in spill tray with sponge



- c) Lay the appliance on its left hand side
- d) Unclip tray spillage
- e) Remove screws (2 pcs)

## 7.7 Drain Hose

- a) Remove the hose connection
- b) Unclip tray spillage
- c) Remove the clamp that fixes drain the sump
- d) Remove draining hose.



plastic  
hose to