



WASHING MACHINE SERVICE MANUAL

CAUTION !
BEFORE OFFERING SERVICE,
READ THIS MANUAL CAREFULLY
TO DIAGNOSE TROUBLES CORRECTLY.

MODELS : WD-6011 C (54CM, 600RPM)
WD-8011 C (54CM, 800RPM)
WD-1011 C (54CM, 1000RPM)
WD-6012 C (45CM, 600RPM)
WD-8012 C (45CM, 800RPM)
WD-1012 C (45CM, 1000RPM)



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1-Technical Specifications

1. Product Specification

1.1. Producer		: Arçelik A.Ş. Çayirova/İSTANBUL
1.2. Model		: Micom-Intello Washer
1.3. Dry Load Capacity	(Kg)	: 5 (Standard), 4,5 (Slim)
1.4. Number of Program	(Qty)	: 100

2. Dimensions

2.1. Height	(mm)	: 850
2.2. Width	(mm)	: 595
2.3. Depth	(mm)	: 540 (Standard) ; 450 (Slim)
2.4. Water Inlet Hose Length	(mm)	: 1500
2.5. Water Outlet Hose Length	(mm)	: 1500

3. Packaging

3.1. Material

3.1.1. Outer Package	: Carton Box
3.1.2. Supports	: Polystyrene foam

3.2. Dimensions

3.2.1. Height	(mm)	: 891 (Standard) ; 890 (Slim)
3.2.2. Width	(mm)	: 655
3.2.3. Depth	(mm)	: 590 (Standard) ; 505 (Slim)

4. Weight

4.1. With Package	(Kg)	: 62 (Standard), 59 (Slim)
4.2. Without Package	(Kg)	: 60 (Standard), 57 (Slim)

5. General Technical Specifications

5.1. Voltage / Frequency	(V/Hz)	: 220-230V / 50Hz
5.2. Total Power Consumption	(W)	: 2200 – 2350
5.3. Fuse Current	(A)	: 16A

6. Power Chord

- 6.1. Type : 3*1.5 mm² copper conductor
6.2. Isolation : TS 936 FVV-n cable
6.3. Plug : Earthed, PVC injection
6.4. Length (mm) : 1700

7. MOTOR

- 7.1. Type : Mono phase, UM / AC
7.2. Power consumption (W) : 250 / 300 (wash / rinse)
7.3. Speed (wash) (RPM) : 860
Speed (spin) (RPM) : 9,600 / 12,800 / 16,000
7.4. Isolation : Rotor class F ; Stator class F
7.5. Speed control : Electronic speed control

8. Pump

- 8.1. Power (W) : 34
8.2. Flow Rate (lt/min) : 12-17
8.3. Pumping Height (m) : 1

9. Heater (W) : 1900x1 over heat protected type

**10. Water Inlet (Cold) : Triple valve
(Hot) : Single valve**

11. Body

- 11.1. Material : Steel sheet
11.2. Coating : Acrylic, alkali resistant oven paint

12. Drum

- 12.1. Material : Stainless Steel
12.2. Volume (lit) : 43 (Standard) ; 39 (Slim)
12.3. Washing rate (RPM) : 50 ±2
12.4. Spinning rate (RPM) : 600 / 800 / 1000
12.5. Front cover hole diameter (mm) : 300

13. Tub

- 13.1. Material : %20 Talk reinforced PPTV20
13.2. Volume (lit) : 58 (Standard) ; 53 (Slim)

14. Damping System

- 14.1. Spring (Qty.) : 2
14.2. Frictional damper (Qty) : 2
14.3. Counter weight (Qty) : 2
14.3.1. Material : High density concrete
14.3.2. Weight (Up/Down) (Kg) : 21

15. Control System

- 15.1. Controller : 220/230 V, 50 Hz.
15.1.1. Display Board : 24 LED ; 8 switches
15.1.2. Main Board : Program and motor controls
15.2. Thermostat - NTC : Tn-60C
15.3. Solenoid valve operating pressure : 0.3-10 Bars
15.4. Water pressure sensor : Output-kHz
15.5. Programs (Qty) : 6(White,Color,Syn,Rapid,Hand,Wool)
15.6. Options (Qty) : 4 (Drain,ECO,Rinse plus,Half load)
15.7. Selections (Qty) : 4 (Wash, Rinse, Spin, Temp.)

2-Controller and Washing Machine Models

Micom series washing machines are divided by three variables as follows

- Cabinet size and Dry Load capacity (Standard size-5kg / Slim size-4.5kg)
- Water inlet (Cold only / Hot&Cold)
- Max. Spinning Speed (1000 / 800 / 600)

Different combinations of these three variables leads to twelve (12) different models listed below.

<i>Models</i>	<i>Part No Controller</i>	<i>Controller Codes</i>	<i>Dry Load</i>	<i>Water Inlet</i>	<i>Adjustable Spin Speeds</i>
WD – 1011CH	2805740100	6871EC1041 A	5kg	Hot & Cold	1000/800/400 rpm
WD – 8011CH	2805740200	6871EC1041 B			800/600/400 rpm
WD – 6011CH	2805740300	6871EC1041 C			600/500/400 rpm
WD – 1012CH	2805740400	6871EC1041 D	4,5kg		1000/800/400 rpm
WD – 8012CH	2805740500	6871EC1041 E			800/600/400 rpm
WD – 6012CH	2805740300	6871EC1041 F			600/500/400 rpm
WD – 1011C	2805740700	6871EC1041 G	5kg	Cold only	1000/800/400 rpm
WD – 8011C	2805740800	6871EC1041 H			800/600/400 rpm
WD – 6011C	2805740900	6871EC1041 J			600/500/400 rpm
WD – 1012C	2805741000	6871EC1041 K	4,5kg		1000/800/400 rpm
WD – 8012C	2805741100	6871EC1041 L			800/600/400 rpm
WD – 6012C	2805741200	6871EC1041 M			600/500/400 rpm

Table-1

This Service Manual is related to the all Micom models that are shown in the Table-1.

3-Operation / Set-up the W/M

Placing the Washing Machine:

The transport safety bolts must be removed before any operation of the machine (Figure-1). Bolt heads, marked as “C”, should be turned counter-clockwise direction and loosened with a proper tool. Plastic taps, supplied inside the protective bag and designated as “P”, should be placed to the safety bolt holes according to the direction being showed. **Please keep the safety bolts for future transportation and place them before transporting your machine**

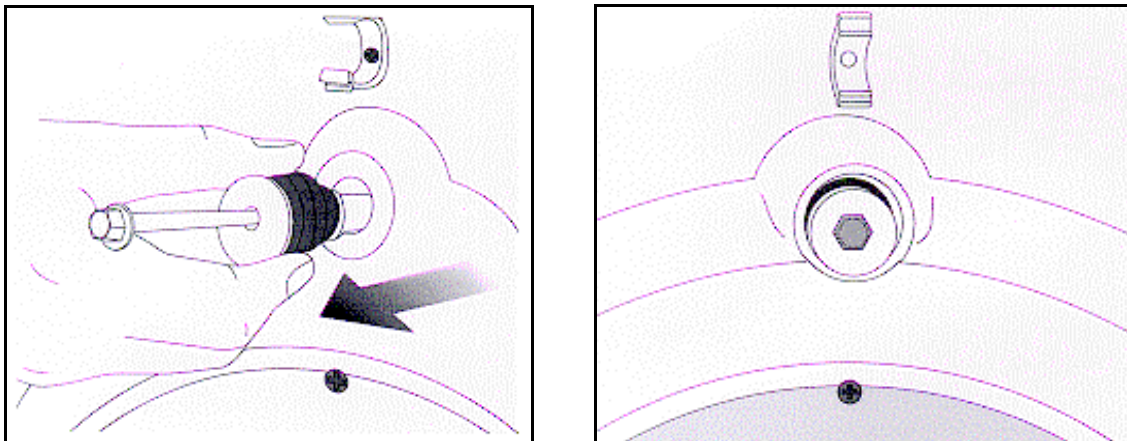


Figure-1

The machine is configured to operate at 220VAC, for this reason if the power supply is 110VAC, a 3000Watt 110/220V transformer should be used. If the fuse current is less than 16Amps a certified electrician should install a 16Amp fuse. Voltage and current requirements are specified on the rating plate on the back cover of the machine.

In order for quiet and stable operation, the machine should be placed properly and levelled on its feet. Your machine comes with two adjustable feet. If the machine is unstable, loosen the plastic counter nut and screw or unscrew the adjustable foot until the machine is levelled perfectly (Figure-2). After positioning, tighten the counter nut for stability.

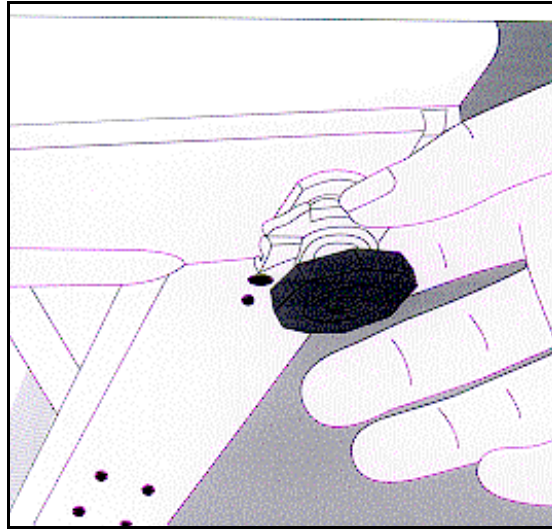


Figure - 2

Your machine comes with water connection hose(s). Find the blue hose supplied by the manufacturer for cold-water connection (the red hose supplied for the hot-water connection). Connect the cold water using the blue hose. For proper operation, the pressure of water should be between 1 and 10 ATM. (1 ATM corresponds to more than 8 litres per minute flow rate at fully open tap.) To prevent water leaks, two rings are mounted the each side of the water inlet hose(s). Place the hose and tighten both ends fully. **In order to prevent any water leak damages, keep the water taps closed when not in use.** Connect the cornered end of the hose to the machine water inlet.

Water drain hose could be placed either at the side of the bathtub, or directly to the drain. The hose should not be bent. **Water drain hose should be secured with the elbow so that it would not fall down on the ground.** The hose should be placed between 40 and 100cm from the ground. Water drain hose could be placed directly to the drain water inlet.

Before any operation of the machine check the followings:

- Is the tap open?
- Is the water outlet hose properly installed?
- Is the machine plugged into the mains outlet?
- Is the front door closed?

In order to open the front door pulls the holder (Figure-3). To run the machine, front door should be closed, program and other options should be selected and Start/Pause button should be pressed.

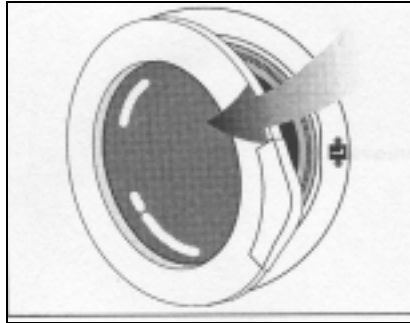


Figure-3

There may be left some dust particles in the machine while production, hence operation for the first time should be empty. One portion powder detergent should be put into the second compartment of the drawer. Program “Rapid” should be selected and cold position of the thermostat should be adjusted and the machine should be run as such.

4-Operation / Grouping the cloths and Loading the W/M

Sort the laundry according to the following groups and wash them separately:

- White and resistant colored fabrics,
- Colored fabrics,
- Delicate fabrics (silk, rayon etc.),
- Wool.

Make sure to empty pockets and remove any belts, buttons, pins, etc. from the clothing. Place the fabrics uniformly inside the machine. Hand knits should be placed inside out in the machine. Make sure that there is no clothing at the side of the door. Close the door by pushing lightly. If the door does not close completely, the machine could not be started at safety measure. Front door is locked until the end of the washing program and it will not be opened about 2 minutes following the end of the program.

Do not attempt to use detergents and bleaching elements that contain chlore and sulphur. The amount of the detergent depends on the dirt level of fabric, the amount of fabric and the softness of the water.

Choose the appropriate detergent specifically used at the full automatic washing machines Suggested amount is given on the detergent cover. If small amount of clothing is placed in the machine and “Half Load” option is selected, put half the amount of detergent required for normal wash.

5-Operation / Starting the W/M

Place your clothes into the machine and close the front door. Select the program after referring to the program selection table. Push the POWER button to turn on the washing machine. Program and Option LEDs are turn on.

-Press the PROGRAM button sequentially following programs are turn on



-Press the OPTION button sequentially following options are turn on



Figure-4

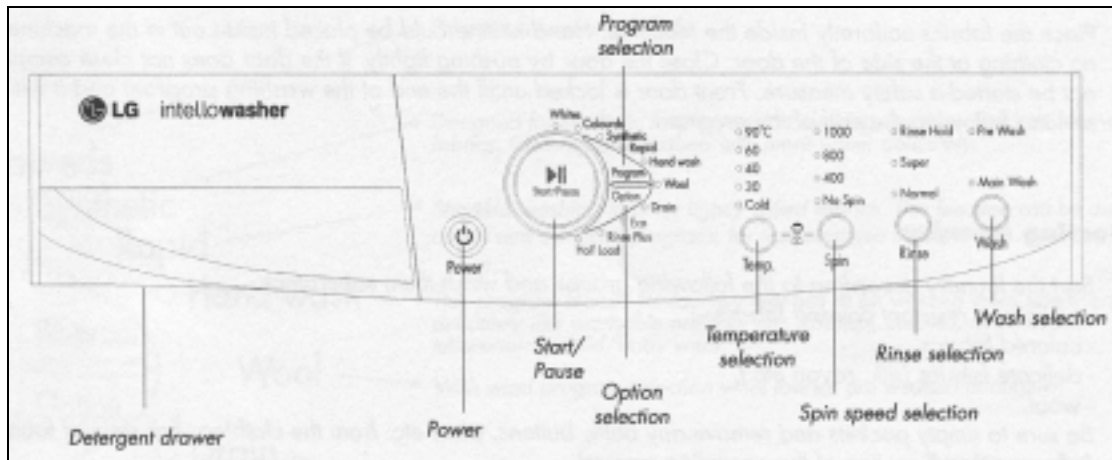
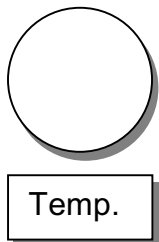


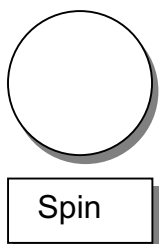
Figure-5: Control Panel

Temperature Selection:



The suitable washing temperature is suggested by the program selection. Using “**Temp.**” button, you can select final temperature up to 90C in Whites, up to 60C in Coloureds and Synthetics, up to 40C in Hand Wash, Rapid and Wool programs. If you don’t want to heating, you can select also Cold wash.

Spin Speed Selection:



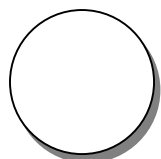
The suitable spinning speeds is suggested by the program selection. Using “**Spin**” button, you can select final spin speed up to 1000rpm in Whites, Coloureds, Synthetics and Rapid, up to 800rpm in Hand Wash and Wool programs.

For 800rpm models, final spin speeds can be selected up to 800rpm in all programs. (800 – 600 – 400 – No Spin)

For 600rpm models, final spin speeds can be selected up to 600rpm in all programs. (600 – 500 – 400 – No Spin)

If you don’t want to spinning at the end of the program, you can select also “**No Spin**”.

Rinse Selection:



Rinse

The machine is set to “**Normal**” rinse function. Using “**Rinse**” button, you can select Normal Rinse, Super Rinse, Normal & Rinse Hold and Super & Rinse Hold.

If you don’t want to apply rinsing, you can select also no rinse by pressing the Rinse button till the rinse LEDs turn off.

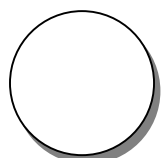
Rinse Hold: If you desire to leave the clothing in the machine with water after wash program you may select the Rinse Hold. This option will prevent them getting wrinkled. To continue the program, press the Rinse button again or select the Drain option to discharge the water.

Super Rinse: This option adds an extra rinse cycle with high water level.

Normal Rinse: Normal rinse cycle made with 3 rinsing steps.



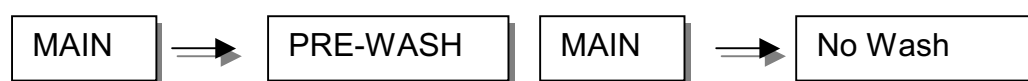
Wash Selection:



Wash

Using this button, you can select MAIN-Wash, MAIN-Wash with PRE-Wash or No Wash. The PRE-Wash option is selectable only in the Whites and Coloureds programs.

If No Wash is selected by pressing the wash button till the LEDs turn off, the program will start with the rinse cycle without washing.



Adjust the washing temperature by pressing “Temp” button to set the desired temperature. When the selection is at “Cold” the wash cycle is completed with the tap water temperature. Half load and rinse hold can be selected if needed. Put powder detergent and the fabric softener to the compartments and close the detergent dispenser.

If the fabric softener is added in the softener compartment, it will be used in the last rinse cycle.

After the selections are completed to start the program push the Start/Pause button. Front door will be locked and the machine will go on. To stop the machine during the program by pressing the Start/Pause button again.

Program Following: The LED of the ongoing program step will blinking after the start of a program. The finished program step LED will turn off. As an example, if the main wash LED is blinking, the machine is on the main wash step. If a Temp LED turns off, the heating is finished.

6-Operation / Options

Drain: The water is discharged by this option. You can use this option in the Rinse Hold step if you want to take out the cloths without spinning.

ECO: This option can be selectable in the Whites, Coloureds and Synthetics programs if the 60C or 90C temperatures are selected. By the way the machine will decrease the temperature and will increase the washing duration. (60C → 40C and 90 → 60C)

Rinse Plus: This option adds an extra rinse cycle.

Half Load: If small amount of clothing is placed in the machine and “Half Load” option can be select, put half the amount of detergent required for normal wash.

Child Lock: During program running, in order to prevent any interruptions by mistakenly pressed button there is a Child-Lock option, as a safety measure. To activate the Child-Lock press the “Temp.” and “Spin” buttons at the same time for three seconds after the washing process has been started. All the program and option LEDs begin to blink for certain amounts of time. The Child-Lock will lock all buttons included Power button. When the program finishes, with an active child-lock the Start/pause button will still blink. To deactivate the Child-Lock you have to press the Temp and Spin buttons at the same time for three seconds again. The blinking LEDs that indicate that the Child-Lock is active will stop blinking.

Buzzer On/Off: If the “Wash” and “Rinse” buttons pressed at the same time buzzer will be off. To turn on the buzzer again press the same buttons at the same time.

7-Operation / Auto-Off and Unloading

Machine stops automatically after the programs are completed and buzzer bips 7 times. After 8 seconds the machine will be automatically turn off. Front door can be opened 1-2 minutes after the end of the program. Turn off the water tap. Unload the machine and leave the front door open to air the machine.

To open the front door pulls the handle gently. If the door is not open, please wait a minute for realings the door lock.

8-Care and Maintenance

To clean the detergent residues, remove the detergent dispenser from its place by pressing on the area marked on siphon. Wash the dispenser with water and also clean the dispenser housing before inserting the dispenser to its place.

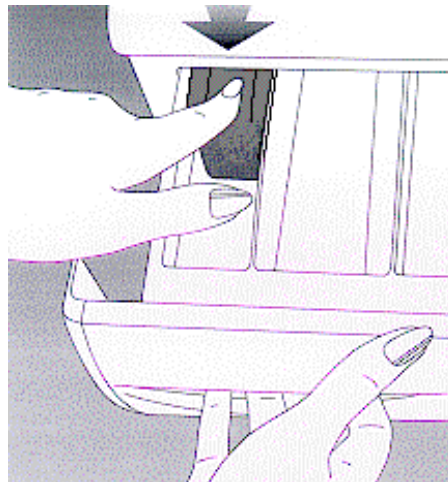


Figure-6

Clean the siphon (colored piece in the dispenser) every 30-40 washes. Pull out the siphon by holding from its edges. To prevent clogging, clean the softener residues thoroughly and make sure that the siphon fits into its place completely before any operation.

Do not leave any metal objects (pins, needles, etc.) inside the drum. These objects may cause rust on the drum surface. Do not clean the drum with scratching elements.

At the end of the water intake connection module there exists a filter. These filters prevent any dirt and objects passing into the machine. It is advisable that these filters should be cleaned every 30-40 washes. To clean these filter, first turn the tap off. Then, disconnect the hose and clean the filter with a thin brush. If the filter is very dirty, you may clean it by pulling out with pliers.

To prevent any leakage, have a technician control the hoses every two years. If the machine is placed at cold ambient temperatures, the water remaining inside the pump and hose should be removed from the filters. Also to prevent freezing, empty the water intake hose by disconnecting from taps.

To prevent objects entering into the pump, your machine comes with a filter system that extends the pump life. It is advisable that you should clean the filter at every 30-40 washes. Before opening the filter door, disconnect the power. Turn the opening of kick plate screws 90° with a help of screwdriver or a coin (figure:7a-b). Place a little pan in front of the filter door to prevent a little amount of water spilling from the machine. Remove the filter by turning it counter-clockwise direction (figure:7c). After cleaning the objects on the filter, place it by turning clockwise and make sure that it is closed firmly. Place the kick plate and secure it by locking the screws. *If the filter does not fit into its place, water will leak out from the filter.*

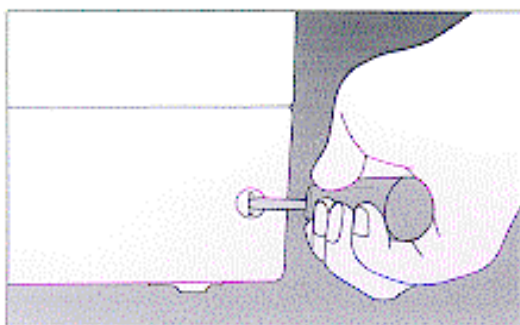


Figure: 7 / a

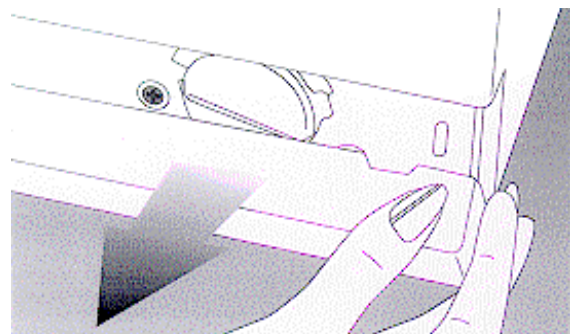


Figure: 7 / b

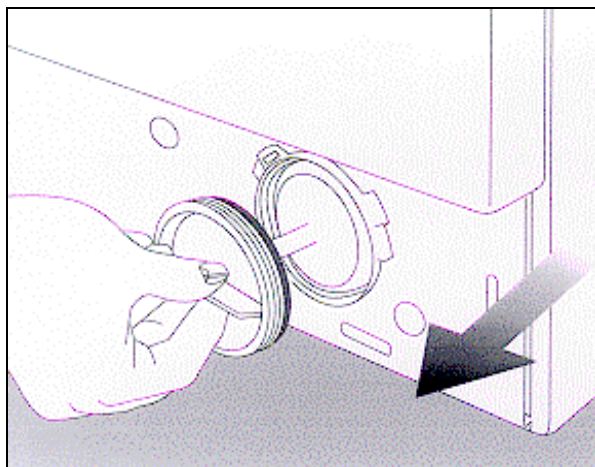


Figure: 7 / c

9-Components

Mechanical Parts:

The tub is made of special plastic material. The tub cover is also made of plastic and is attached to the tub with special fixing clamps. The main motor is attached to the tub with two rubber grommets and a bolt. Placed behind the tub (on the right and the left and one on the top) are three transport security bolt connection slots. One on top and one under the tub, there are two concrete counterweights. The tub group is hooked onto the body from the sides by two springs. There are two horizontal shock absorbers at the bottom. The drum is made of stainless steel.

Dynamic system:

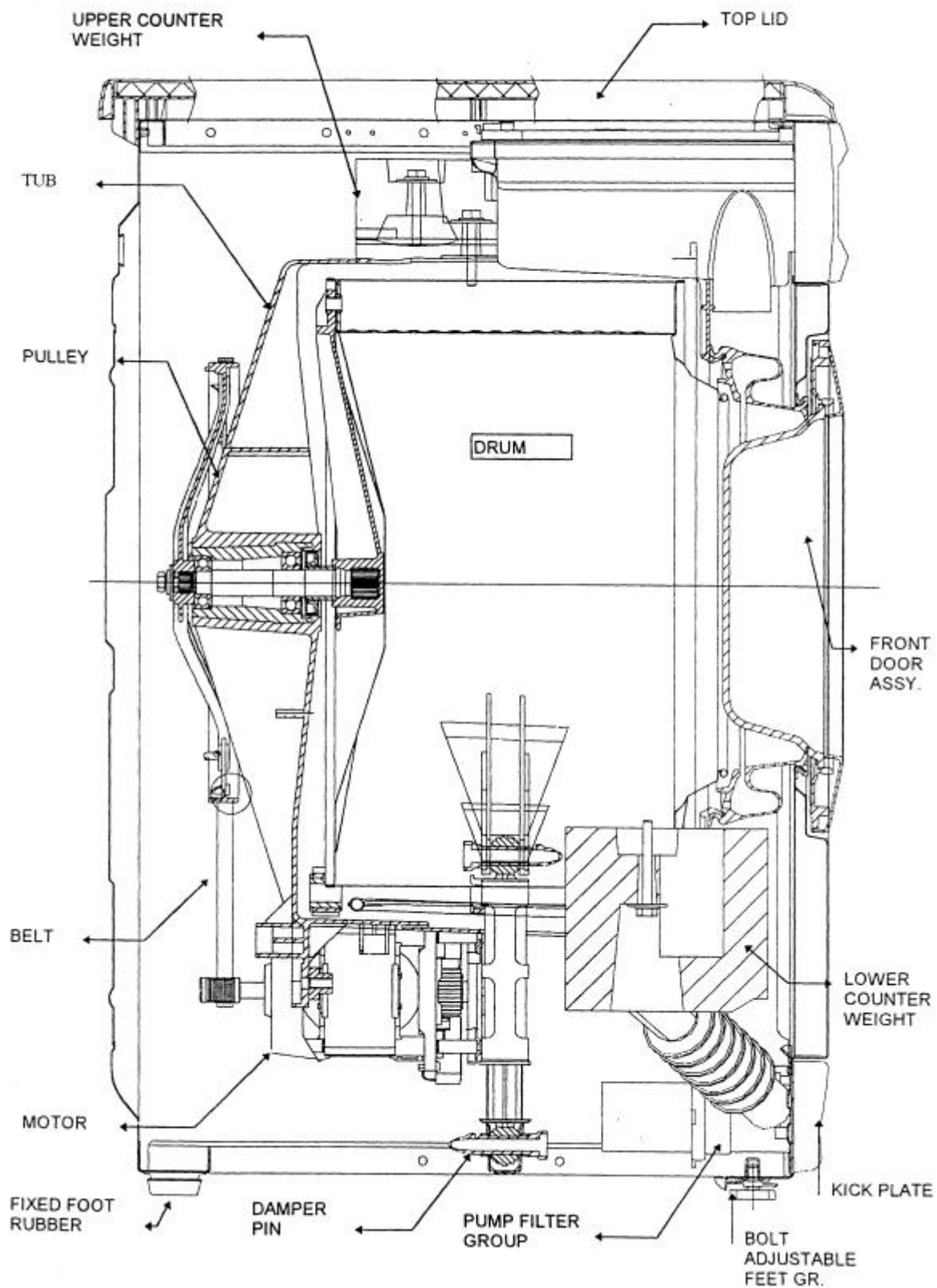
The tub is hooked onto the body with two springs. Besides, the tub is attached to the body from the bottom by two friction type shock absorbers. The duty of the springs and the shock absorbers is to conduct the vibrations caused at the tub to the body in order to damp the motion and noise of the washing machine.

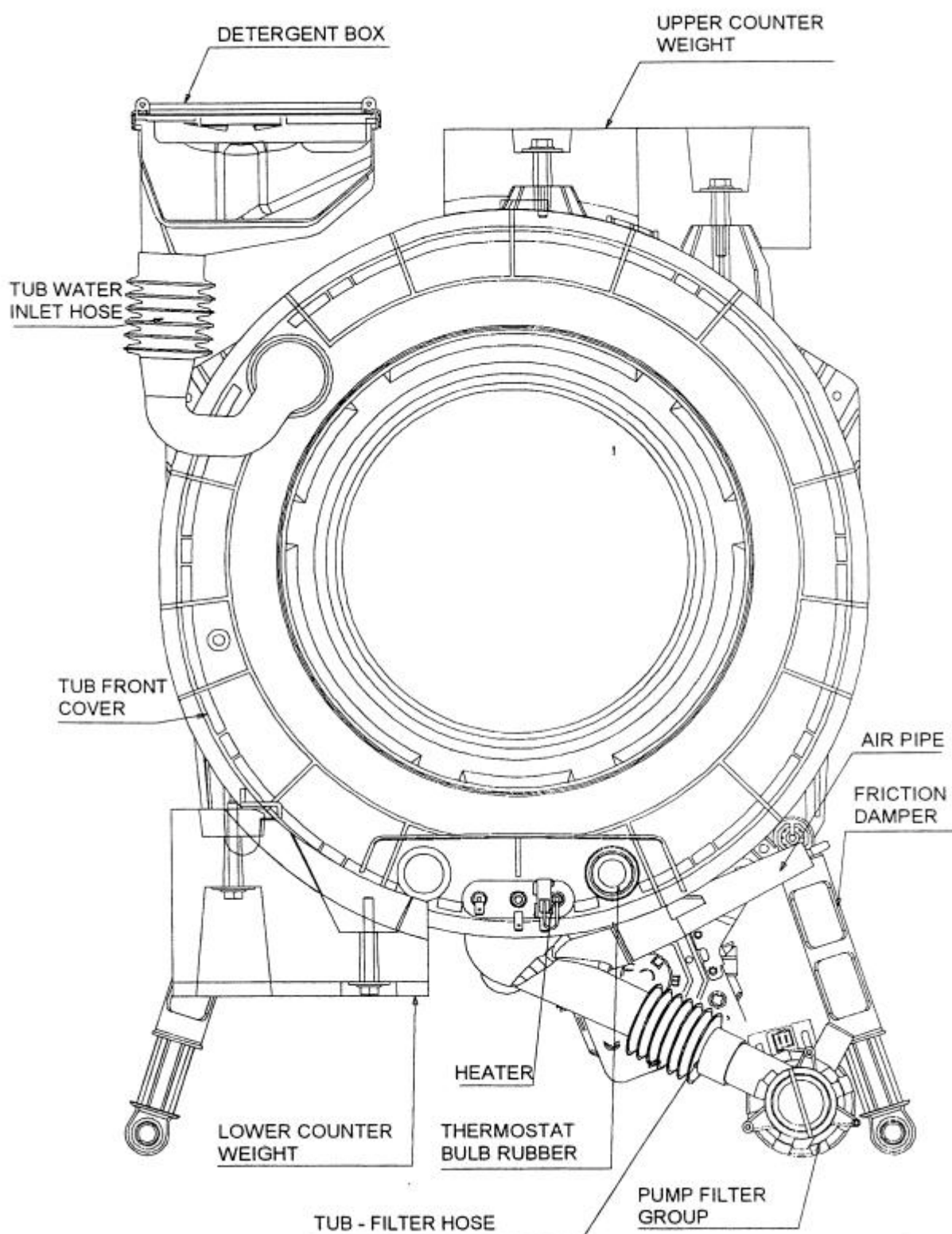
Program Controller Group (PWB):

The module is made up of a circuit that controls the all components of machine according to the selected programs. The all connections are made by coloured sockets to prevent the wrong connections. PWB made by two parts, Main part and Display part. Main part is coated with insulated material to prevent the board from environmental conditions. Display part includes the LEDs and micro switches.

Main motor:

The main motor is a universal series motor. It is controlled by on electronic module. The motor speed is adjusted as the triggering angle of the bridge diode on the module depending on the tachometer signal.





Triple Solenoid valve:

There is a triple solenoid valve to direct the water to the appropriate detergent drawer compartment. Water flow is directed to the pre-wash drawer in Pre-Wash programs by pre-wash valve, water is directed to the main wash detergent drawer in Main-Wash and Rinse programs by main-wash valve. At the final rinse, water is directed to the softener drawer by softener valve. There is a regulator inside the softener valve to reduce the flow rate.

Single Solenoid valve:

There is a single solenoid valve for Hot Water connection for dual inlet models. Hot water flow is directed to the Main-Wash drawer of the detergent drawer. The PWB/controller controls this valve for hot water inlet according to the program and temperature selections.

Pressure Switch Sensor:

The output frequency of the sensor changes by the water level. The valves operate to reach the required water levels. If pre-defined frequency level reaches, the valves close by the PWB/controller.

Heater:

A 1900-watt heater is used. There is a thermo fuse on the heater. If the heater runs without water inside the tub, the thermo fuse cuts off the line to protect the plastic tub damages because of the over heating. The thermo fuse is not reusable, if the thermo fuse cut off the line. Heater is controlled by a relay inside the PWB.

Door lock:

PTC door-lock is used. When the door is closed, the PTC disk is heated up hence the door is locked. After the program is terminated, the PTC is cooled down in max.70 seconds and the door is released. Thus the door is prevented from opening during operation. The machine does not operate when there is a problem with the door lock.

Pump motor:

It is a Mono-phase synchronous motor. Current is conducted from the program apparatus at empty-water phase.

Thermostat:

Controls water-temperature in the tub with a NTC (P/N: 2804980100). The resistance of NTC changes by the temperature. The PWB controls the resistance of NTC and calculates the tub temperature. The heater is worked to reach selected temperature and controlled by PWB. NTC resistance values versus environment temperature are given in the following table.

Temperature	NTC Resistance
0 C	15.6 kOhm
10 C	9.5 kOhm
25 C	4.77 kOhm
60 C	1.2 kOhm
90 C	440 Ohm

10-Disassembling

1- Top lid:

- Two screws that attach the top lid to the body are unscrewed.
- Top lid is pushed to the back and then upward and taken off

2- Back cover:

- Five screws that attach the back cover to the body are unscrewed.
- The cover is layer 90° to the body and let loose of the bottom side snap.

3- Kick plate:

The plastic screws that attach the kick plate to the body are turned 90° left and then disassembled. (Figure-7/a, b)

4- Front panel:

- Front door is opened by handle. (Figure-3)
- The bellow clamp that fixes the bellow to the front panel is taken of using the special pliers (Figure-8).
- The bellow is released from the front panel



Figure-8

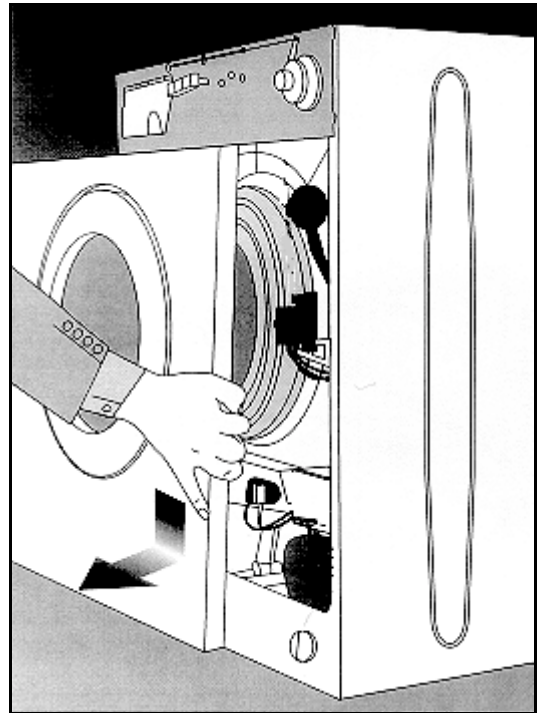
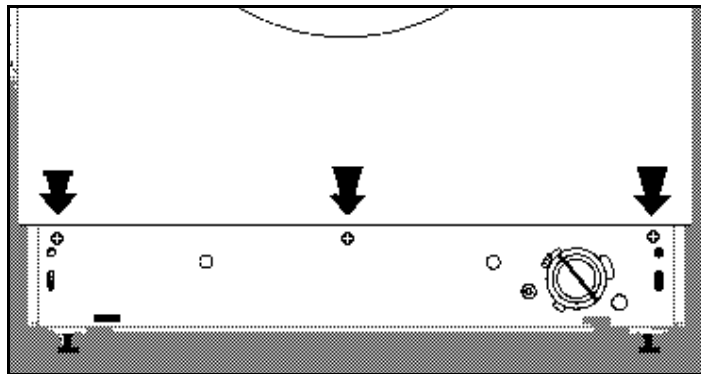


Figure-9

- Two screws that attach the safety lock to the front panel are unscrewed.
- Kick plate is disassembled (Figure-7 a, b).
- The three screws that attach the front panel to the body from the bottom are unscrewed (Figure-9a).
- Front panel is pulled down and released from the fixtures on the body (Figure-9b).

5-Front door:

- Open the front door; two screws (M5*10) that connect the front door to the hinge are unscrewed.

6-Inner cover of front door:

- Front door is disassembled.
- The nine screws that attach inner cover to the front door are unscrewed.
- The two screws that attach hook cover to the front door are unscrewed.
- Remove the inner cover from the front door.

7-Front door glass:

- Front door is disassembled.
- Inner cover and hook cover are disassembled.
- Front door glass is removed from the snaps on the front cover.

8-Lock Hook:

- Front door is disassembled.
- Hook cover is disassembled.
- Lock hook is released from the shaft on the inner cover.

9-Hinge:

- Front door is disassembled
- Two screws that connect the hinge to the front panel are disassembled.

10-Drawer panel:

- Drawer is pulled back from the detergent box.
- The piece shown by the arrow is pressed and the drawer is pulled back (Figure-6).
- Drawer is turned upside down and the holders of drawer panel are released from the drawer.

11-Panel:

- Drawer is removed from the detergent box.
- The screw that attaches the panel to the panel frame is unscrewed (Figure-10).
- Panel is released from the snaps on the panel frame (Figure-11).



Figure-10

12-PWB / Controller:

- Top lid is removed.
- Detergent drawer and panel are removed.
- The sockets that are connected to the controller are removed (Figure-11).
- The five screws that attach the controller to the panel are unscrewed.
- The controller is pulled up from screwed side and released from slots that hold the controller (Figure-11b)

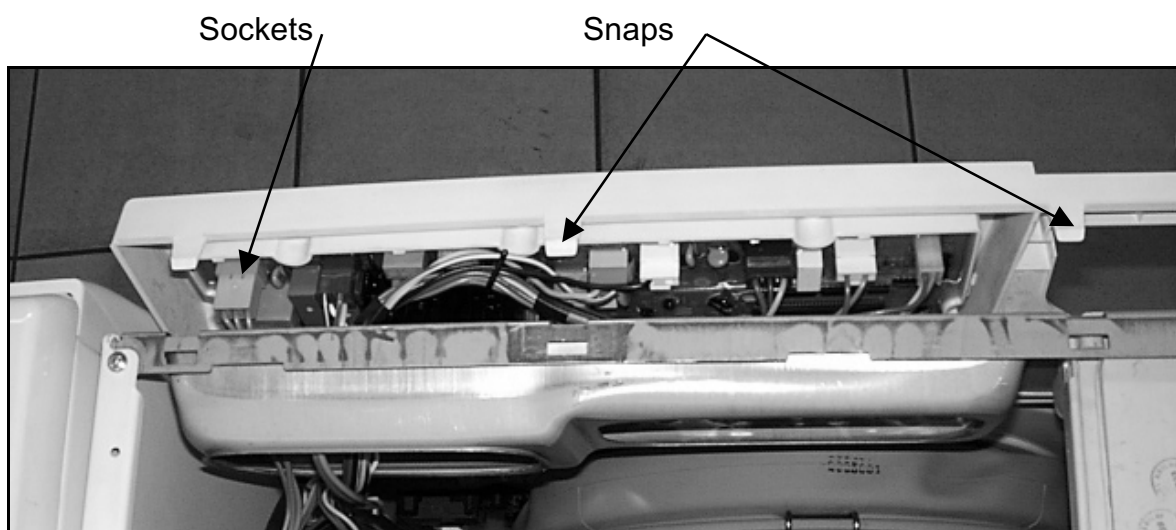


Figure-11a

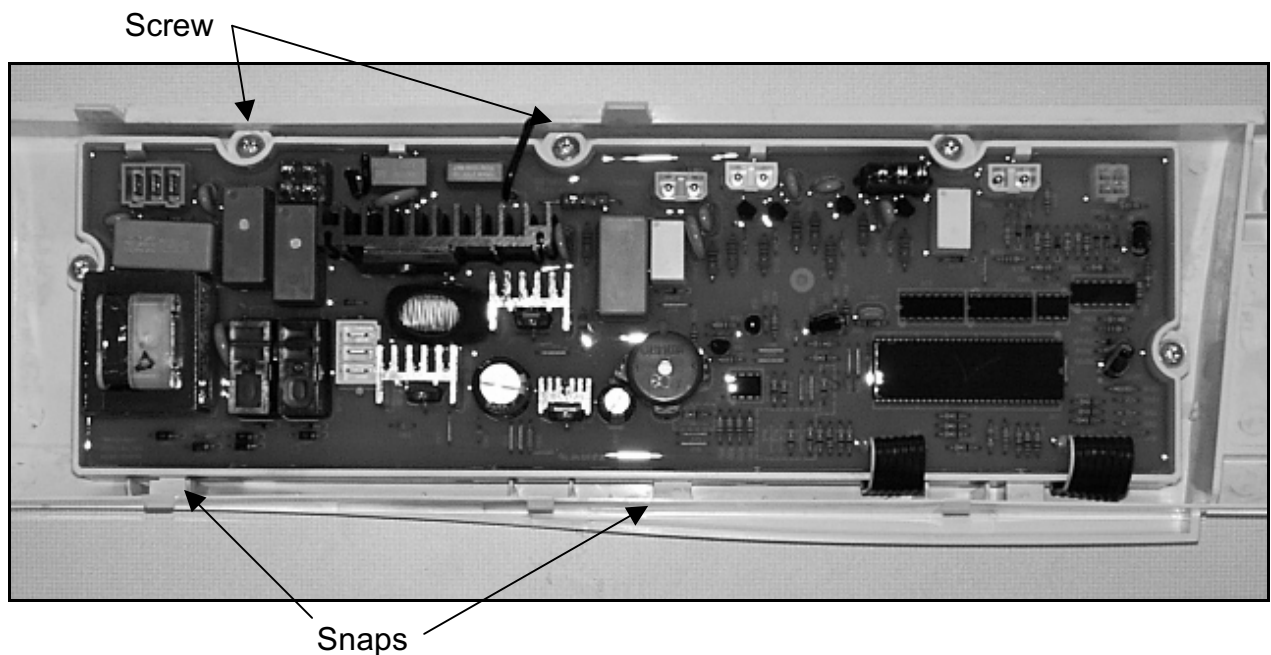


Figure-11b

13-Pressure switches:

- Top lid is disassembled.
- The socket of pressure switch is removed by pressing the socket snap (Figure-12).
- Two screws that attach the pressure switch to the body are unscrewed (Figure-12).

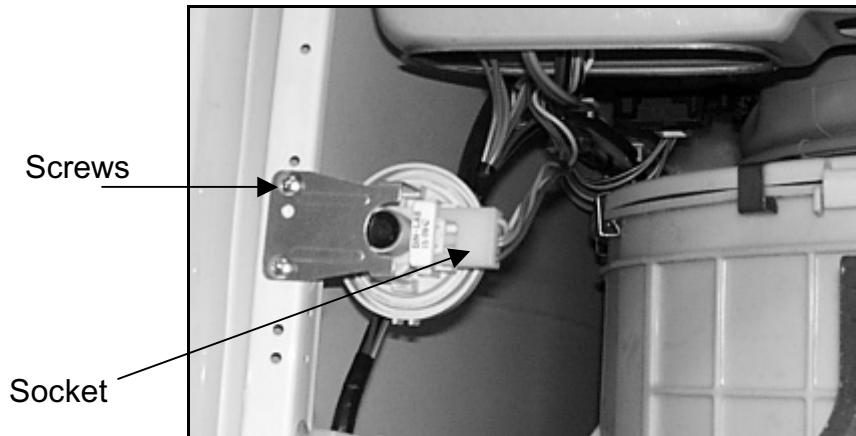


Figure-12

14- Single valve:

- Top lid is disassembled
- Single valve cables are disconnected
- Single valve hose clamp is driven back on the hose
- Hose is removed at the end at the valve
- Valve is turned left after, below the body, the snap that fixes the valve to the body is pushed inside with a screw driver.

15-Triple valve:

- Top lid is disassembled
- Triple valve cables are disconnected
- Two screws that attach the body to the triple valve are unscrewed.
- Triple valve hose clamps are driven back on the hose
- Hoses are removed at the end at the valve

16- Interference Suppressor:

- Top lid is disassembled
- Interference suppressor cables are disconnected.
- Two screws that are placed in the plastic box behind the body that connect the interference suppressor to the terminal group are unscrewed.

17-Door / Safety lock:

- Door is opened (Figure 4).
- Bellow clamp that fixes the bellow to the front panel is removed and bellow is disassembled from the front panel (Figure 8)
- Two screws that attach the door lock to the body are unscrewed.
- Front panel is removed
- The door lock socket is released from the door lock.

18-Heater:

- Front panel is disassembled and Heater cables are disconnected (Figure-13b)
 - Heater M6 bolt is loosened and Heater is released through the tub cover (Figure-13c)
- (When mounting, the heater should be connected to the heater fixture wire in the tub).

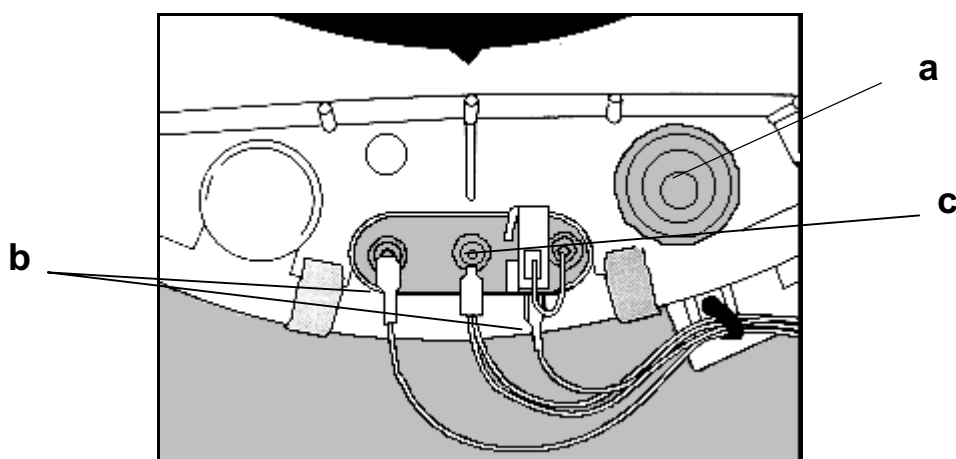


Figure-13

19-Pump:

- Front panel is disassembled.
- Pump cables are disconnected (Figure-14a).
- Tub filter hose is released from the pump.
- Outlet hose is released (Figure-14b/c).
- The screw that attaches the pump to the body is unscrewed (Figure-14d).
- Pump is turned and removed.

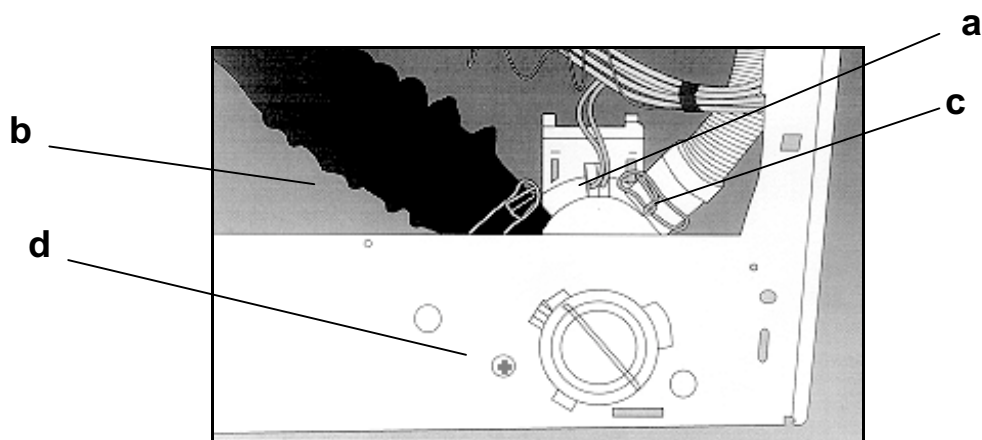


Figure-14

20-Thermostat bulb rubber:

- Front panel is disassembled.
 - Thermostat bulb is released from the tub cover.
 - Thermostat bulb rubber is pulled by hand from the tub cover (Figure-13a).
- (When mounting, thermostat bulb rubber should be fit well into its place in the tub cover)

21-Tub bellow:

- Front panel is disassembled.
 - The clamp that fixes the bellow to the tub cover is loosened
 - The bellow is pulled off by hand
- (When mounting, the bellow holes should match the lower part of the tub cover)

22- Poly-V Belt:

- Back cover is disassembled
- Poly-V belt is pulled off while turning over the pulley (Figure-15)

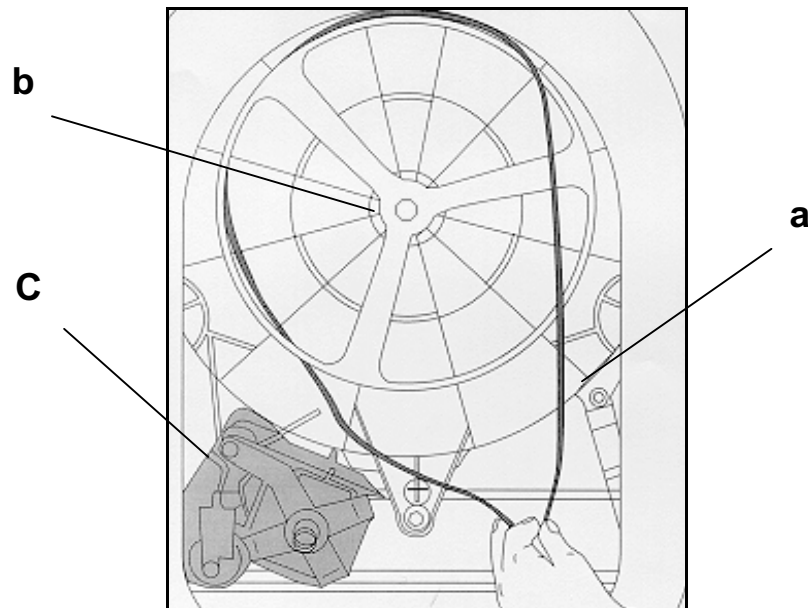


Figure-15

23- Water inlet hose:

- Front panel is disassembled.
- The wire clamp on the detergent box connection is opened and the water inlet hose is released.
- The other end of the water inlet hose is pulled off the tub cover by hand.

24-Pulley:

- Back cover is disassembled and Poly-V belt is removed (Figure-15)
- The bolt that connects the pulley to the tub shaft is unscrewed (Figure-15b)
- Pulley is pulled off from the tub shaft.

25-Motor:

- Back cover is disassembled
- Motor socket is plugged out of the motor
- Poly-V belt is removed (Figure-15)
- The bolt that attaches the motor to the tub is unscrewed (Figure-15c)
- Motor is released from the motor fixture rubber.

26-Power supply cord:

- Terminal group cover is released from the snaps at both sides (Figure-16)
- Cable holder screw is loosened
- Power supply cord earthing screw is unscrewed
- Power supply cord is removed by unscrewing the terminal-end screws.



Figure-16

27-Upper counterweight:

- Top lid is removed.
- Upper counterweight screws are unscrewed and counterweight is pulled off.

28-Lower counterweight:

- Front panel is disassembled.
- Lower counterweight screws are unscrewed and counterweight pulled off.

29-Tub seal:

- Front panel is disassembled.
- Lower counterweight is removed.
- Heater is removed (Figure-13)
- Thermostat bulb is removed (Figure-13)
- Tub cover clamps are released
- Tub cover is pulled off and turned upside down
- Tub seal is removed.

(When mounting, tub seal connection part should match the mounting part on the tub cover)

30-Drum group:

- Front panel is disassembled
- Tub cover is removed
- Back cover is disassembled
- Pulley is disassembled
- Drum is pulled off the tub

31-Shock absorber:

- Back cover is disassembled
- Damper pin at the tub is pulled off pressing on the snaps (Figure-17)
- Damper pin at the body is pulled off (Figure-17)

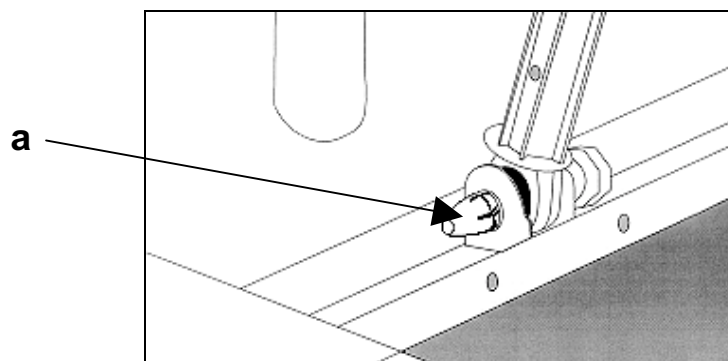


Figure-17

32-Outlet hose:

- Front panel is removed (figure 8,9,10).
- The clamp at the pump entry of the outlet hose is sliced back.
- Outlet hose is pulled off the pump
- The hose is released from the snaps at the back of the body
- Hose is released from the front of the machine.

11-Fault Signals and Diagnoses

1- Error Display Function

- When an Error occurs the display turn on and off at 0.5sec intervals and the buzzer sounds for 7 times.
- During the Error occurs Start/Pause button or Power button makes Error message released. (When you push the Start/Pause button that makes it the Pause, when you push the Power button it became Power Off.)
- If the Error doesn't release, Pressure Sensor Error and Washing Heater Error turn off automatically after 20sec.
- The other Errors turn off automatically after 4min. The Display shows the Error message. Only the Over Flow error doesn't turn off automatically.

	Error Mode	Display	Occurrence Cause	Note
1	Inlet Valve Error	Wash LED turns on and off	. When water supply doesn't reach at 24.8kHz for 8min. . When water doesn't reach at the water level of destination for 25min.	(IE)
2	Drain Pump Error	Rinse LED turns on and off	. When water level doesn't reach empty level for 8min.	(OE)
	Over Flow Error	Rinse and Spin LED turns on and off	. When water level is over 8 th level (over flow level)	(FE)
4	Water Level Sensor Error	Wash, Rinse and Spin LED turns on and off	. Water level sensor is out of order. (open or short circuit)	(PE)
5	Door Error	Wash, Rinse and Temp LED turns on and off	. The controller doesn't sense the Door Lock output signal within 12sec. . When the machine is started with open door error occurs after 12sec.	(DE)
6	Washing Heater Error	Temp LED turns on and off	. When the NTC thermistor of washing heater control is open (-20C) or short circuit (98C). Except the Spin.	(TE)
7	Unbalance Error	Spin LED turns on and off	. When it happen eccentricity on Spin course after distribution course. . When Unbalanced load happens the simplicity Spin on Wash and Rinse course, error doesn't occur and passes the next course	(UE)
8	EEPROM Error	Spin and Temp LED turn on and off	The error is sensed on the Q-Test 1 st mode and occurs only Q-Test mode.	(EE)

2- Test Programs

a) QC Test Mode

- Pressing the Rinse and Spin buttons at the same time, press the Power button. Then buzzer sounds twice and QC test mode starts.
- The Option LED defines the controller type and model according to the LED on.
- When the QC test mode is started the other LED are on.
- Press the Start/Pause button, as the following tests will be start.

[Press the Start/Pause button 4th time after the motor is stopped completely.]

Number of pressing START/PAUSE button	Checking Point
None	All LED turn on (expect OPTION LED)
1 Time	Clockwise spinning (right)
2 Times	Low speed spinning
3 Times	High speed spinning
4 Times	Pre-Wash inlet valve works
5 Times	Main-Wash inlet valve works
6 Times	Main-Wash inlet valve works for Cold only models
	Hot water inlet valve works for Hot&Cold models
7 Times	Softener inlet valve works
8 Times	Counterclockwise spinning (left)
9 Times	Heater is operating for 3sec.
10 Times	Draining pump operation
11 Times	Auto-Off operation

LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)

Option LED in the QC Test mode:

MODEL	SIZE	DRAIN	ECO	RINSE PLUS	HALF LOAD
1000 rpm	5.0 kg	O	O	O	O
800 rpm		O	O	O	*
600 rpm		O	O	*	O
1000 rpm	4.5 kg	*	O	O	O
800 rpm		*	O	O	*
600 rpm		*	O	*	O

* LED is on O LED is off

b) Life/Compulsion Test Mode

- Pressing the Rinse and Spin buttons at the same time, press the Power button. Then buzzer sounds twice and QC test mode starts.
- The Option LED defines the controller type and model according to the LED on.
- Option function cannot be set at the mode of life test and compulsion test.
- Life test and compulsion tests can be selected by pressing the Option button.

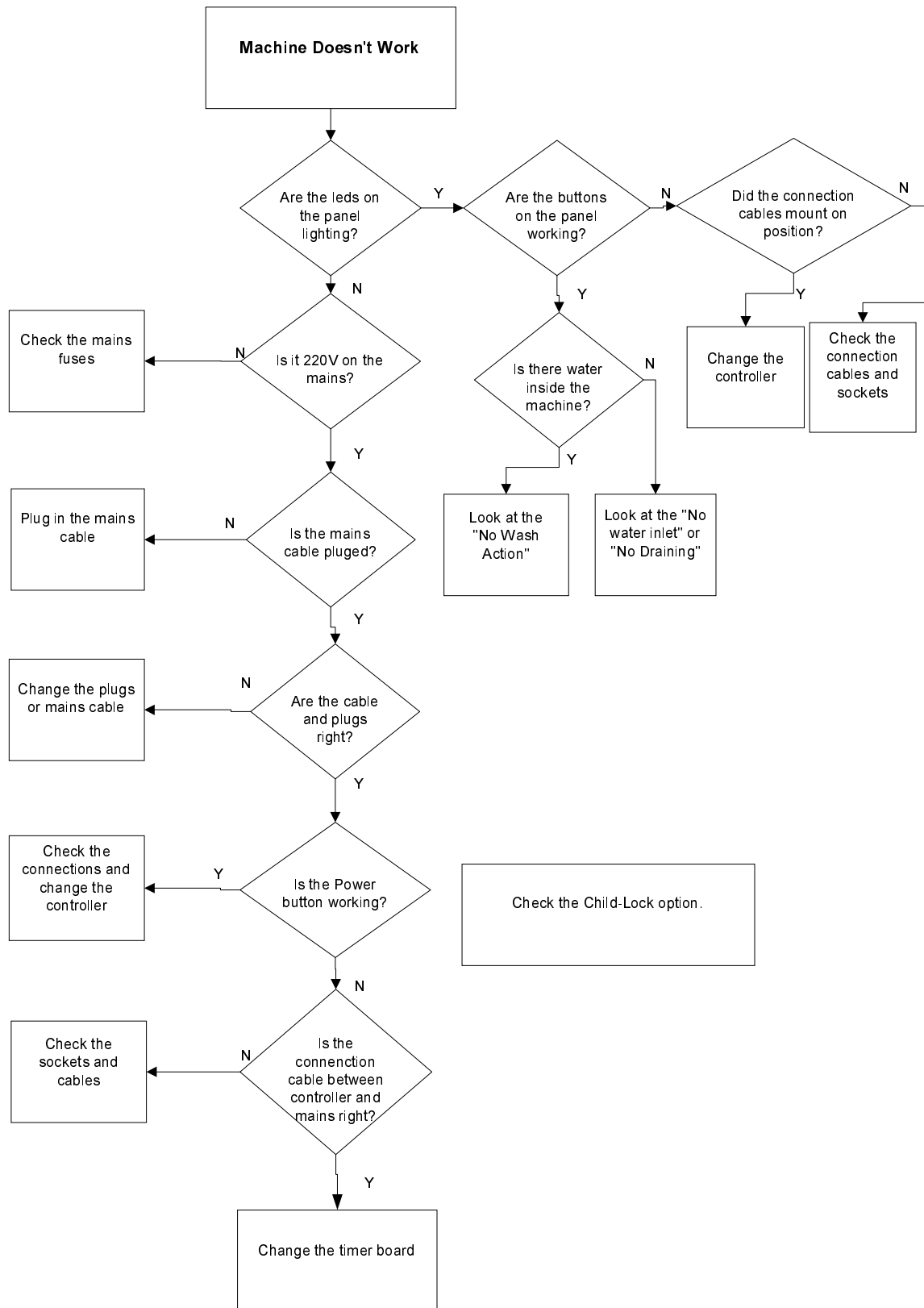
Number of pressing the OPTION button	Test Mode	Operation
None	QC Test Mode	All LED turn on
1 Time	Compulsion mode	All processes are performed regardless of water level. Only washing is repeated when wash is chosen
2 Times	Life test mode	The program chosen is repeated.

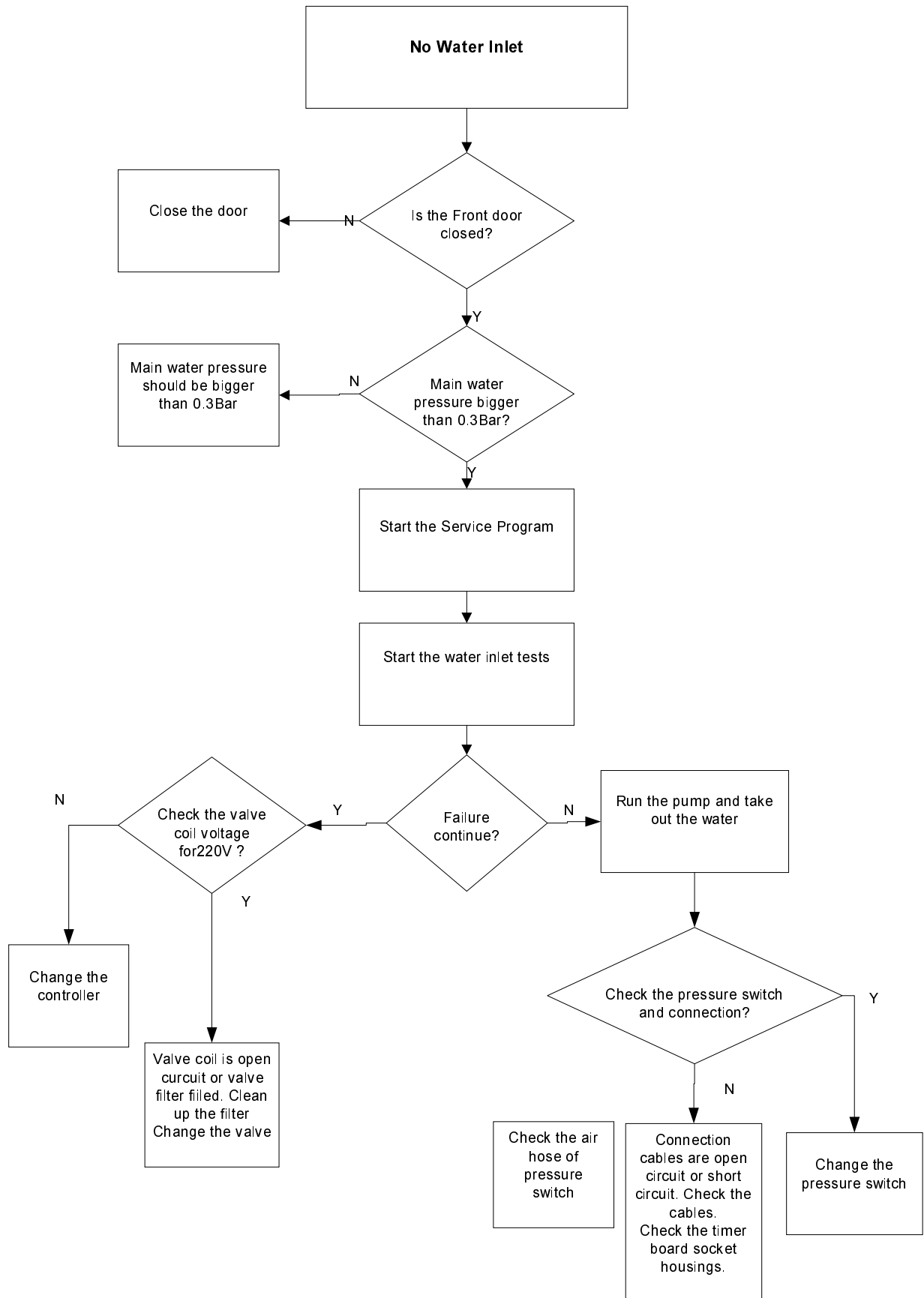
LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)

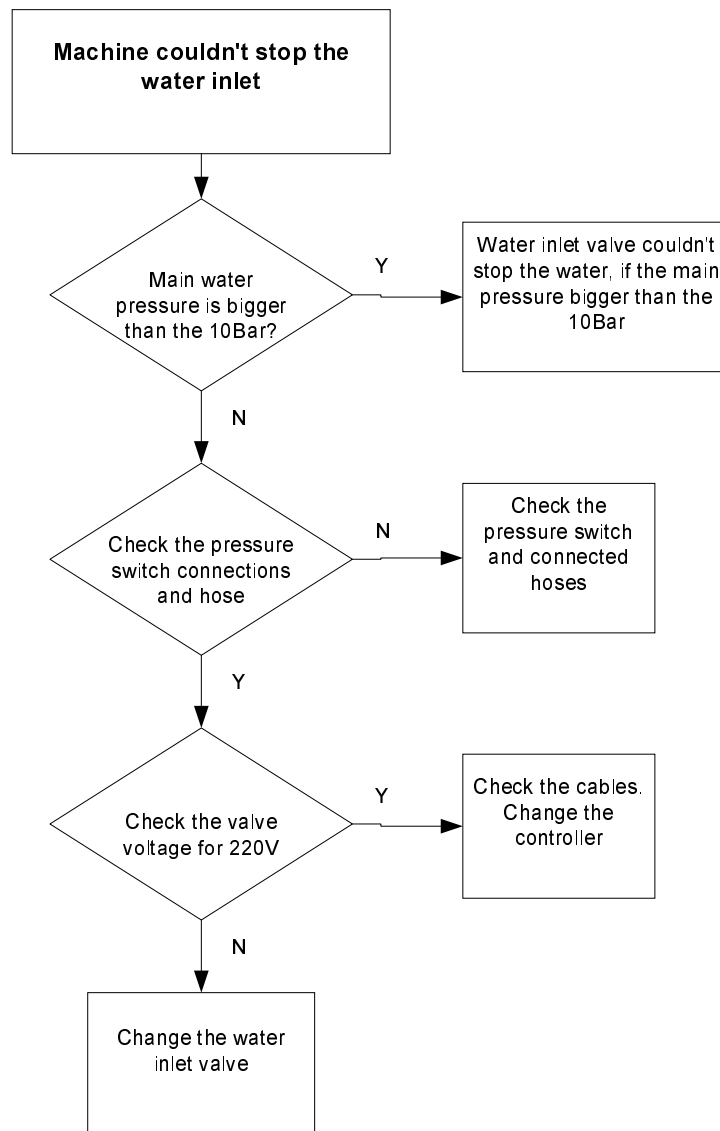
Option LED in Test mode:

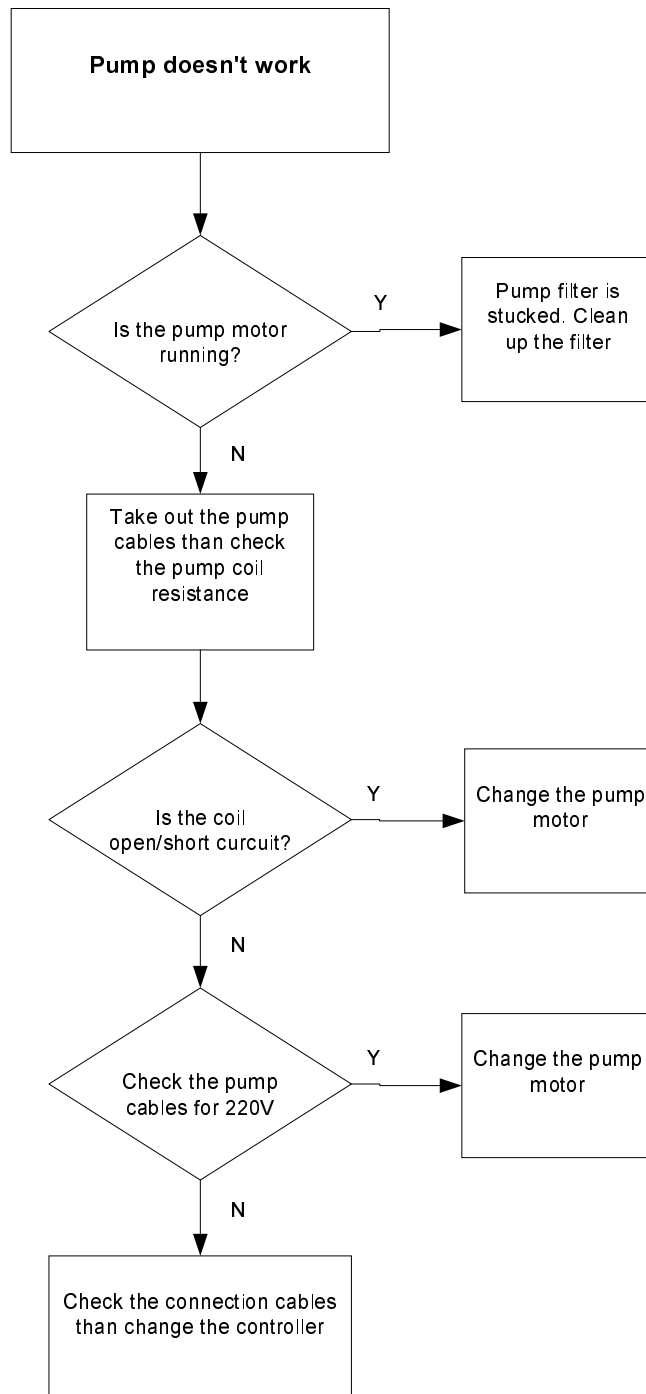
Test Mode	DRAIN	ECO	RINSE PLUS	HALF LOAD
QC Test Mode	Model Option			
800 rpm	*	*	*	*
600 rpm	*	*	*	○

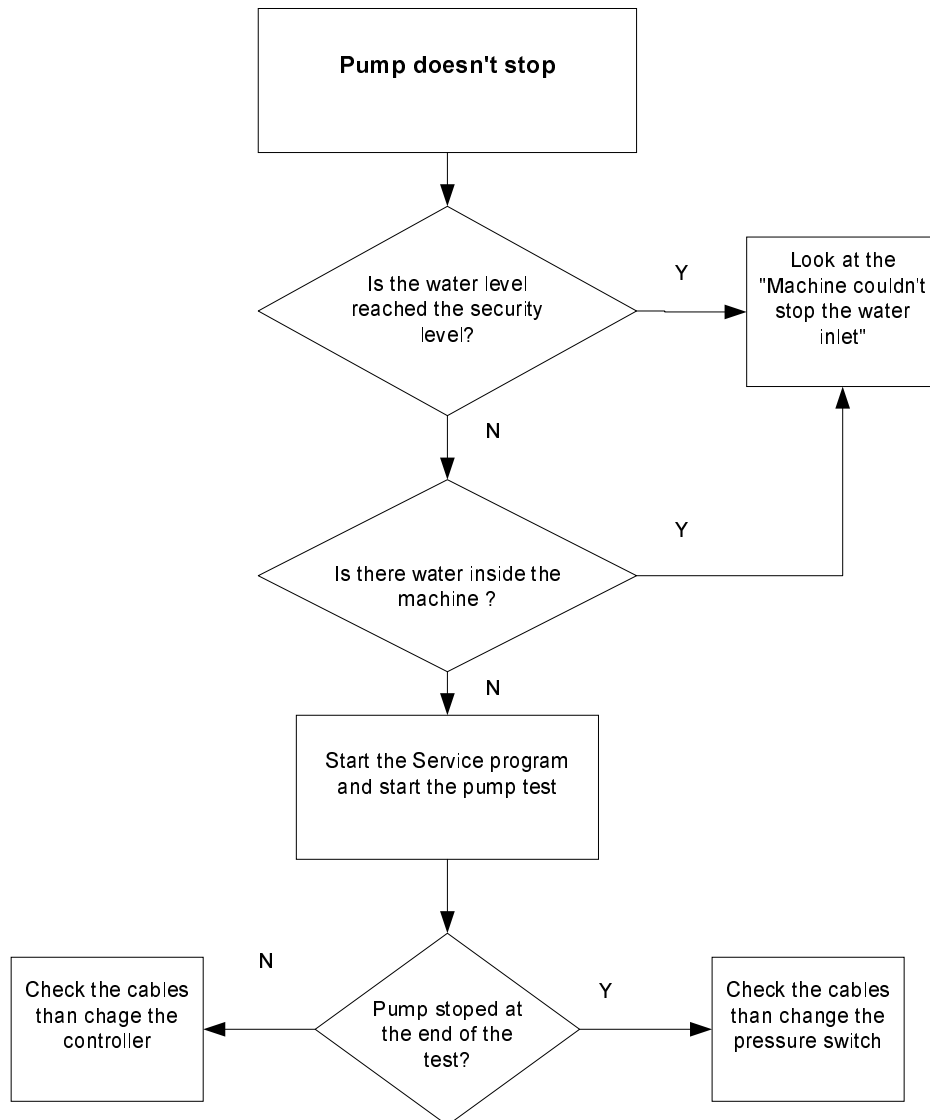
PROBLEM SOLVING SCHEME

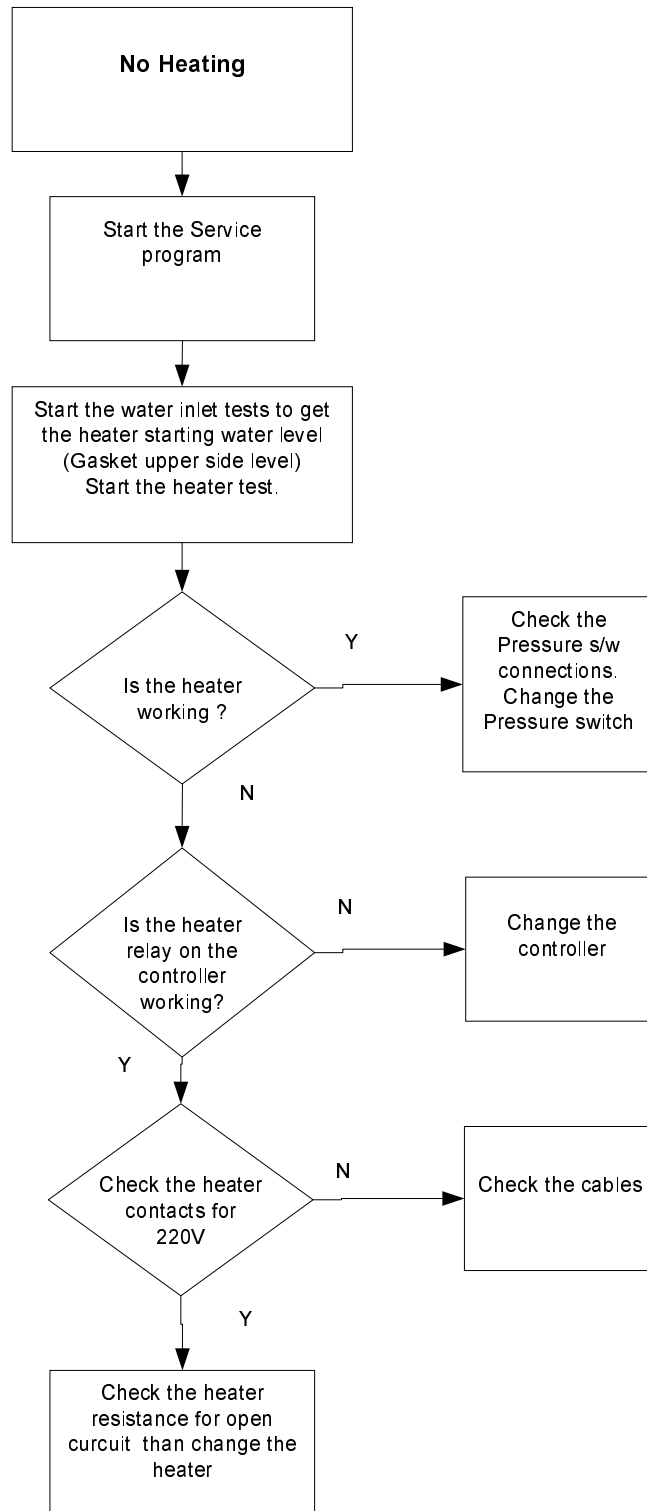


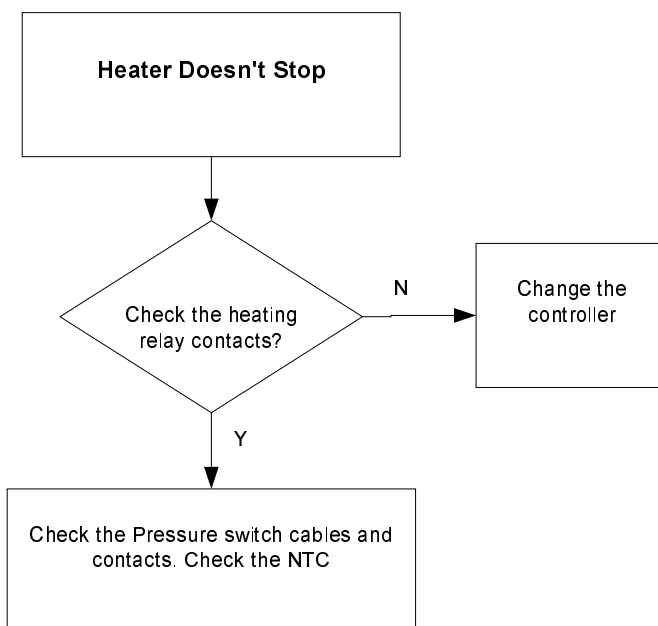
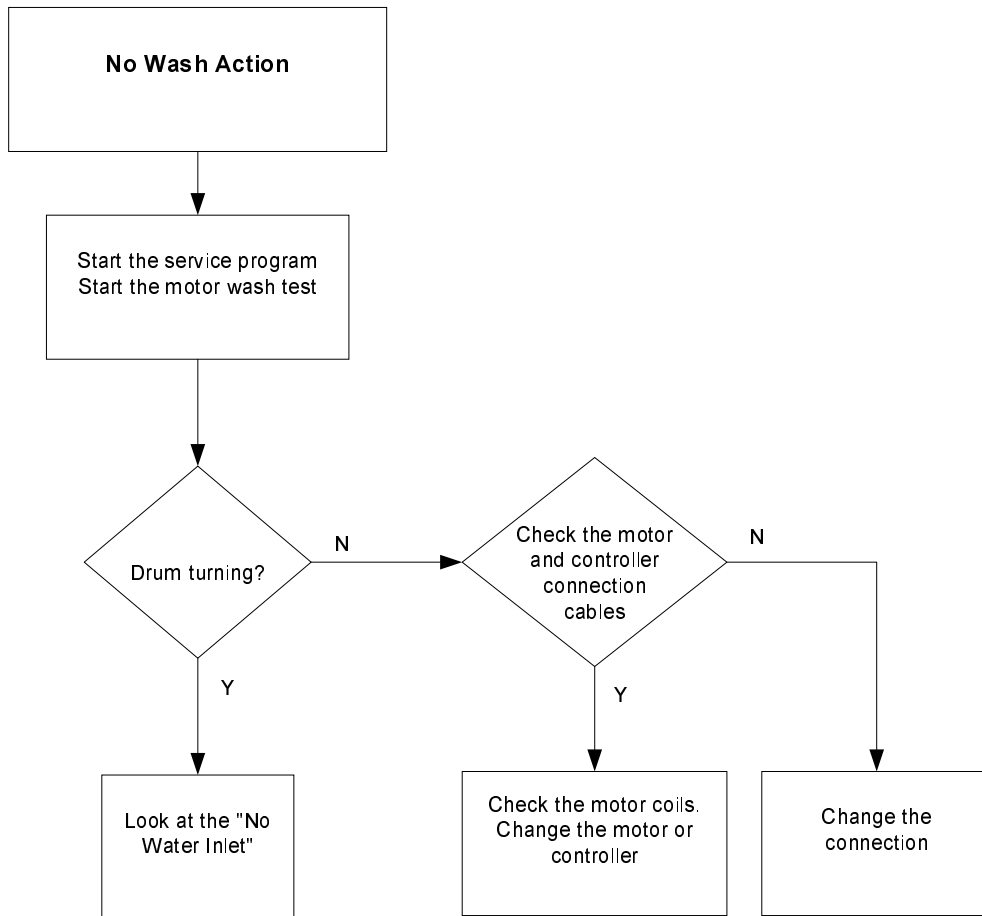


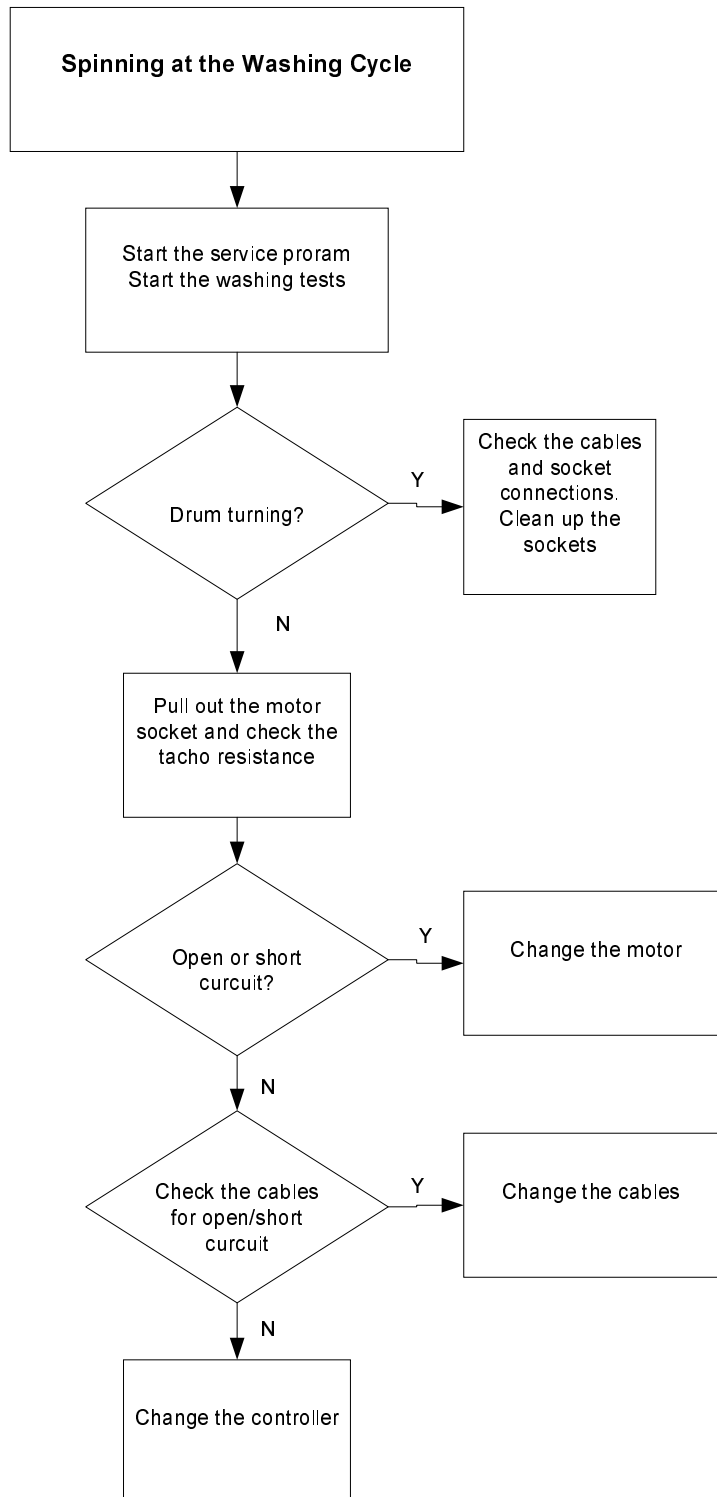


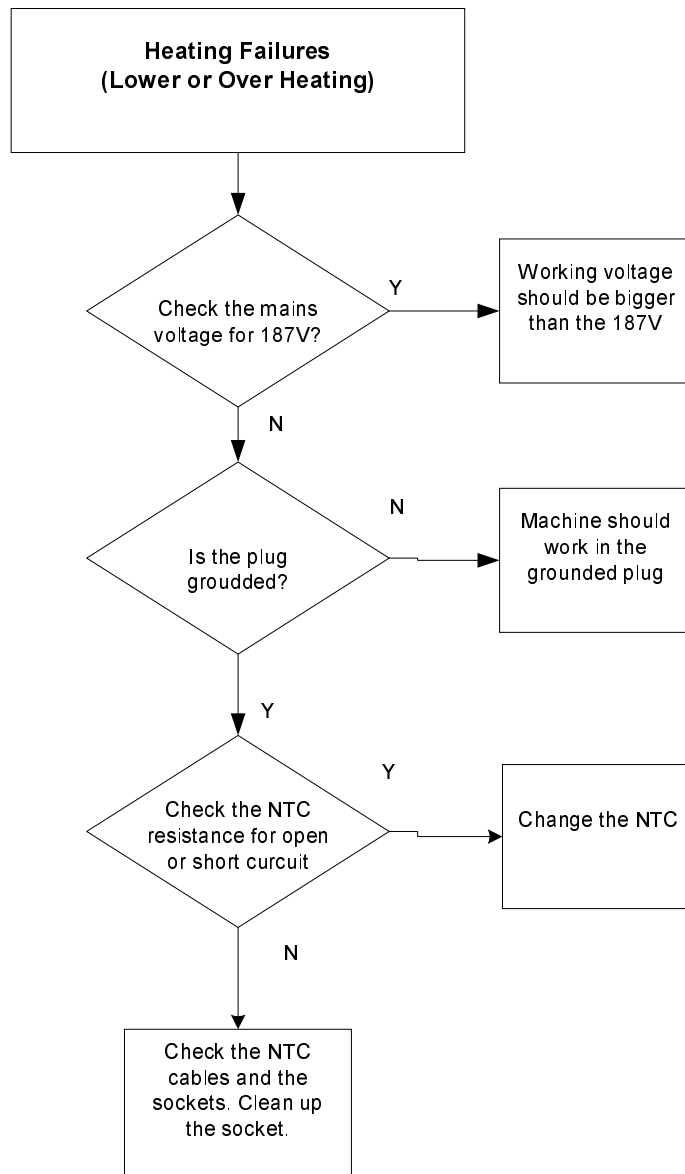


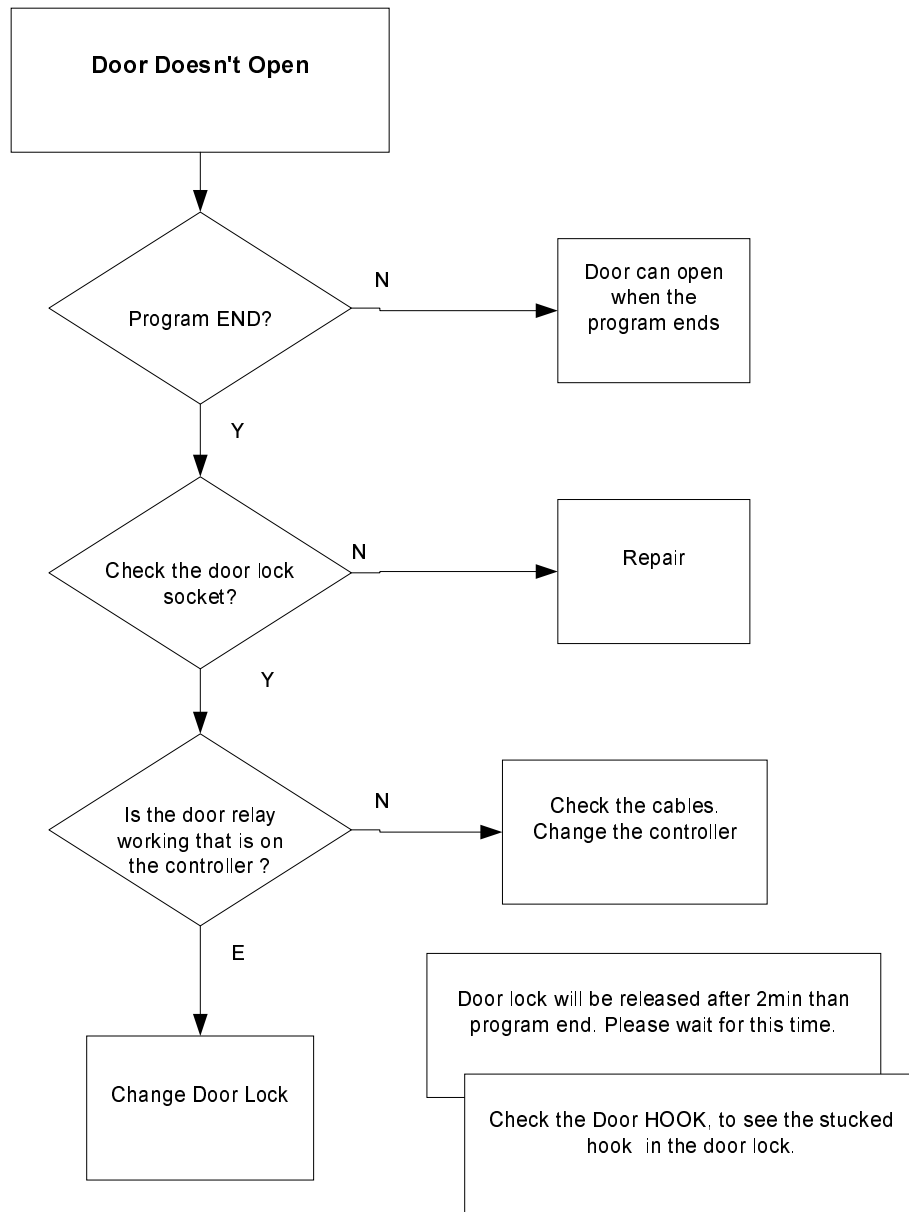




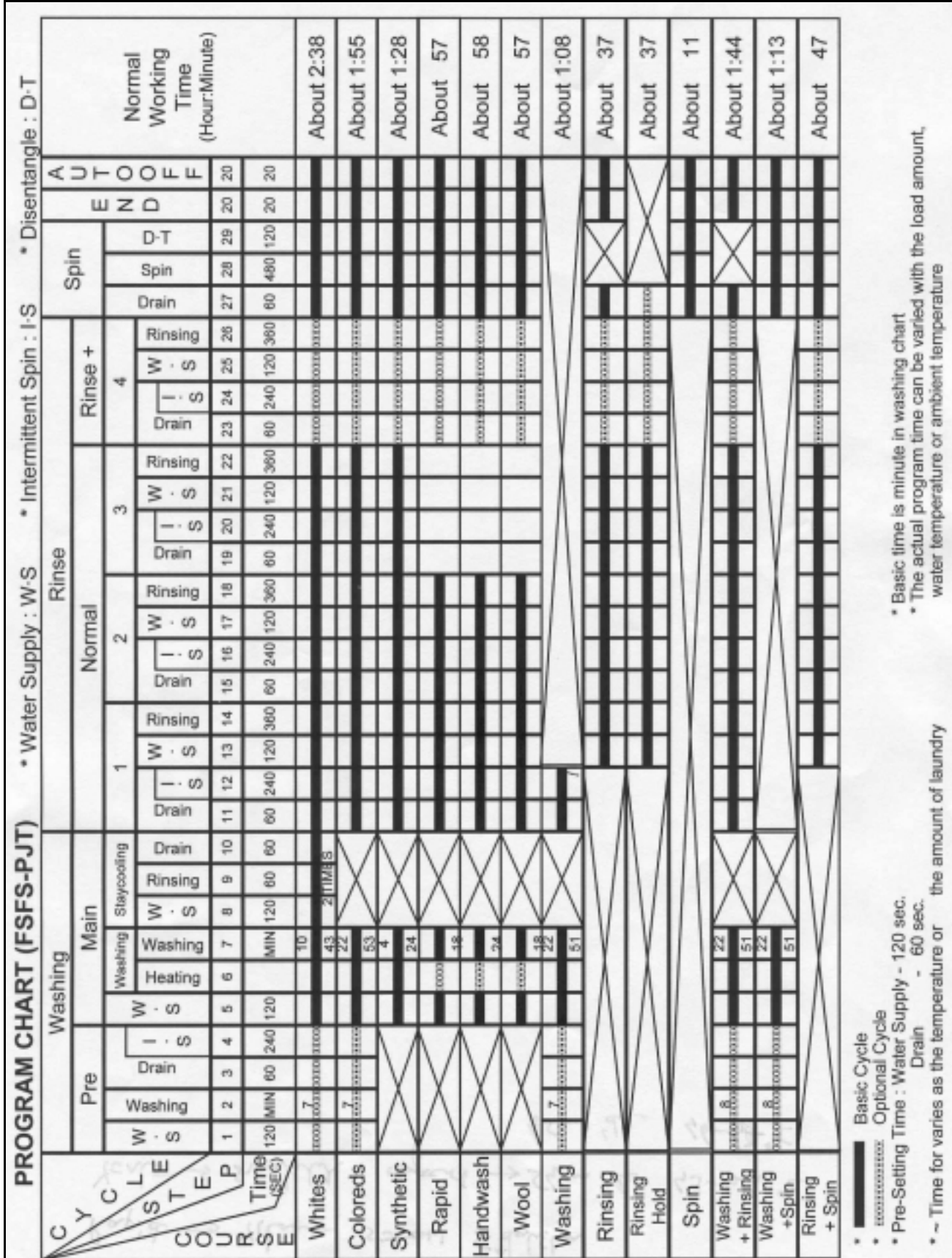




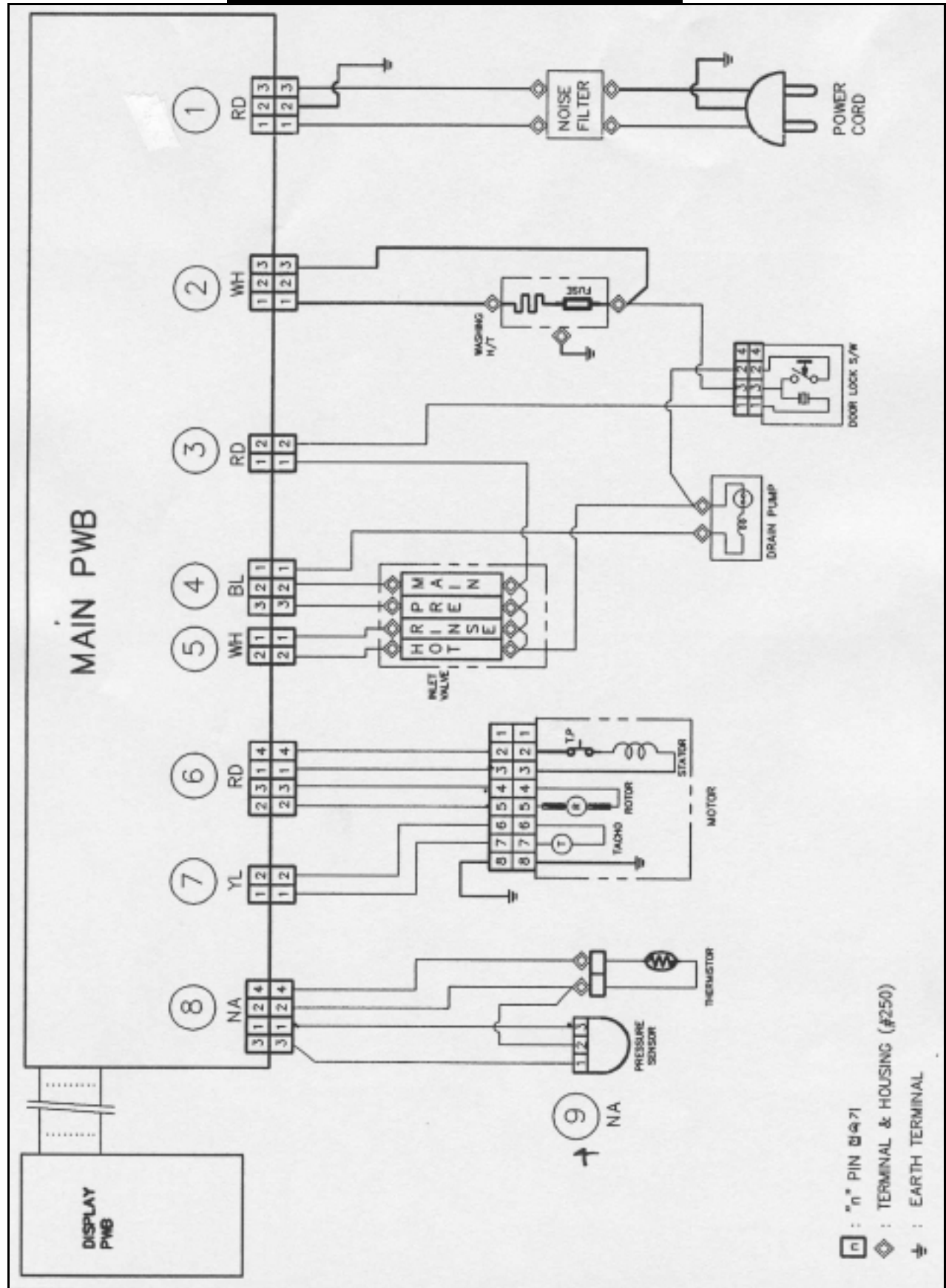




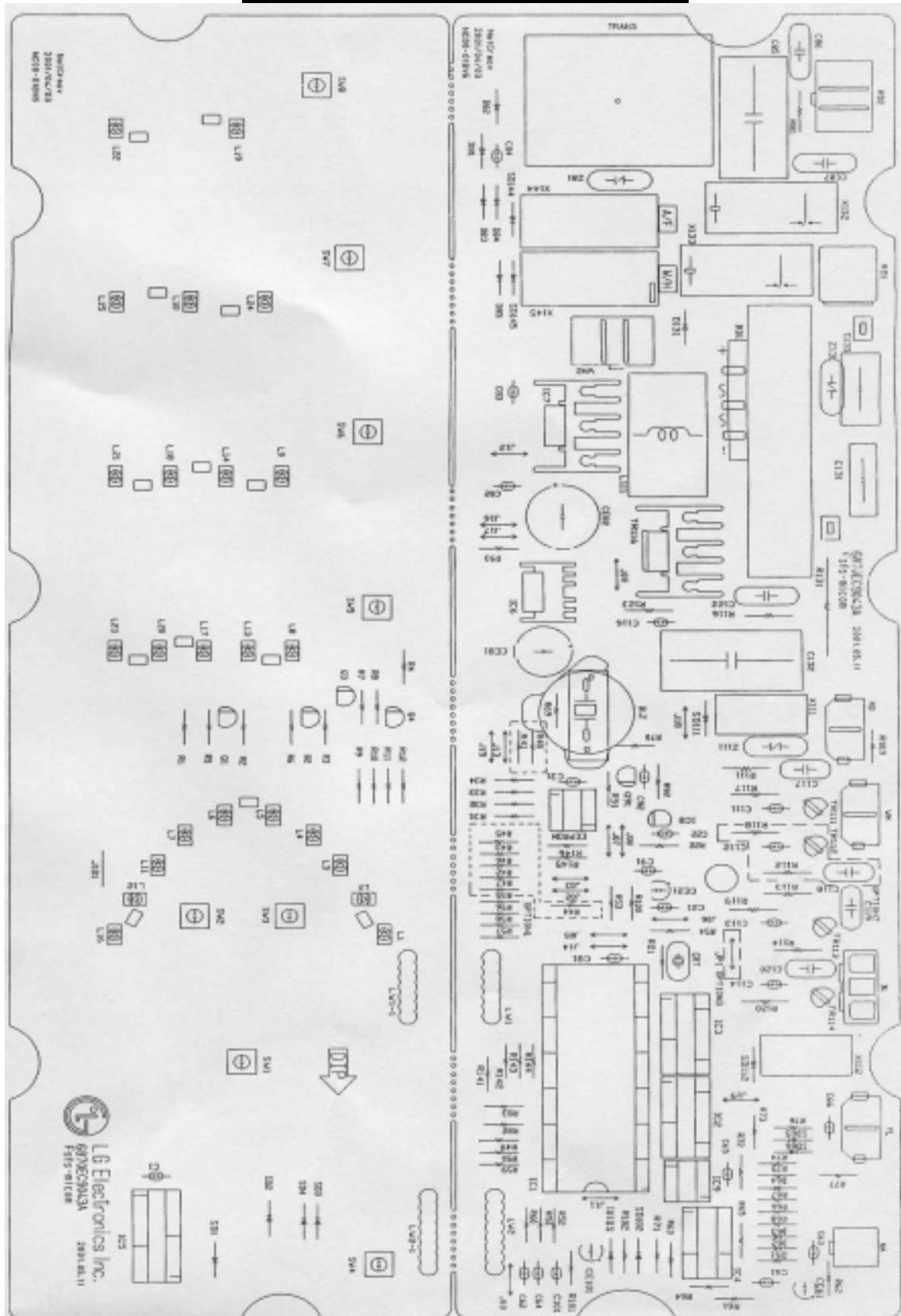
12.1-Program Flowing Chart



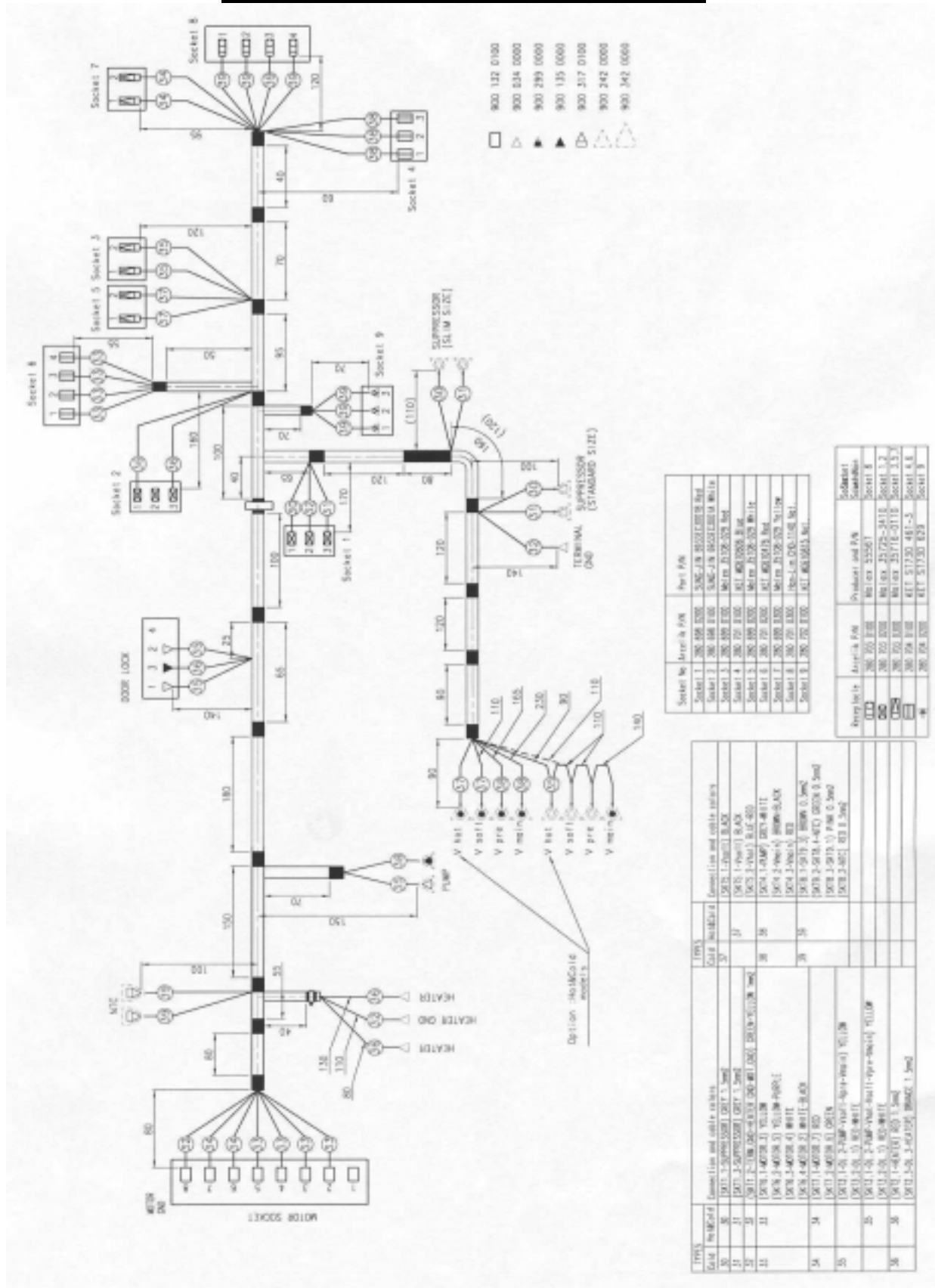
12.2-Electrical Circuit Diagram



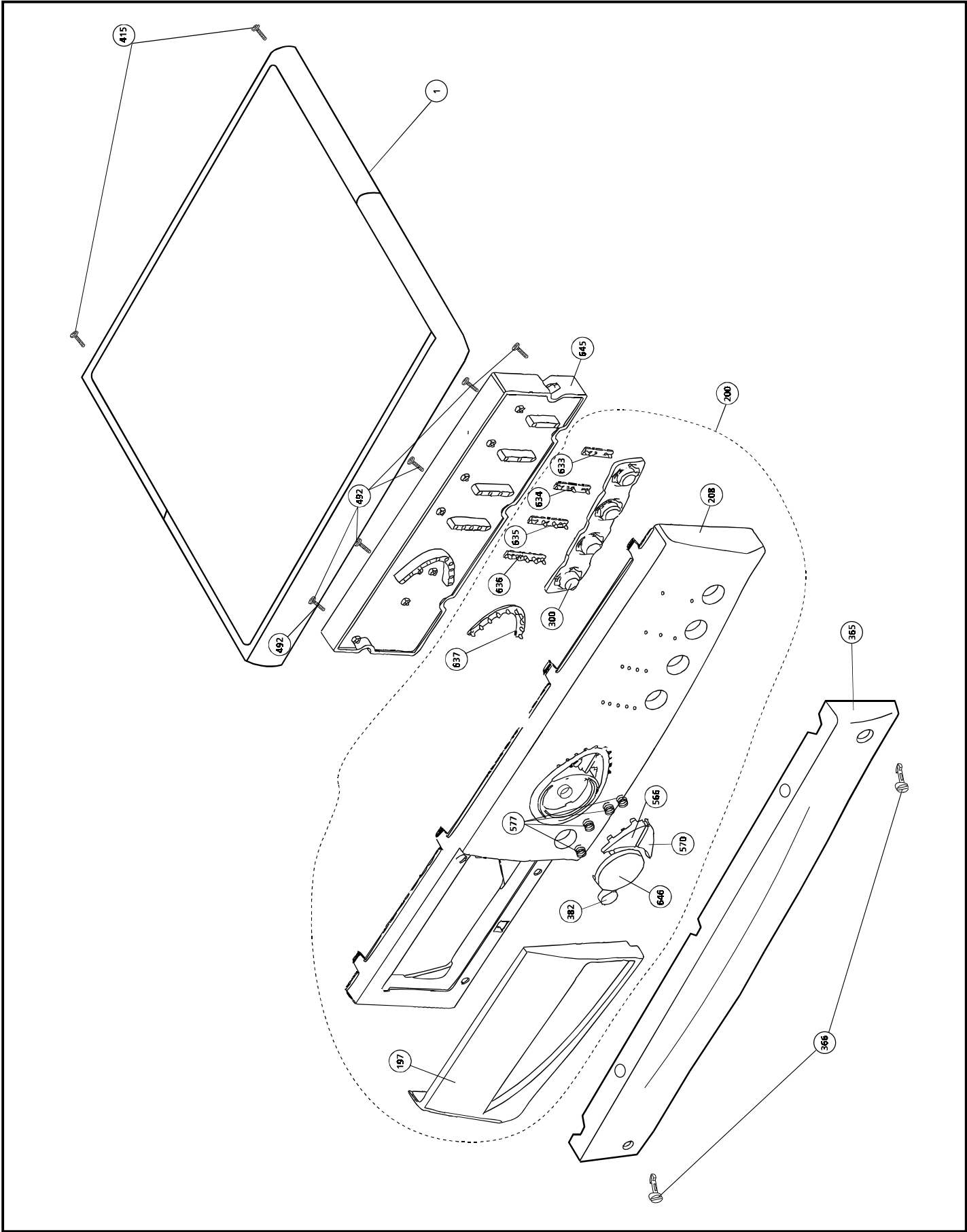
12.3-PWB Controller Scheme

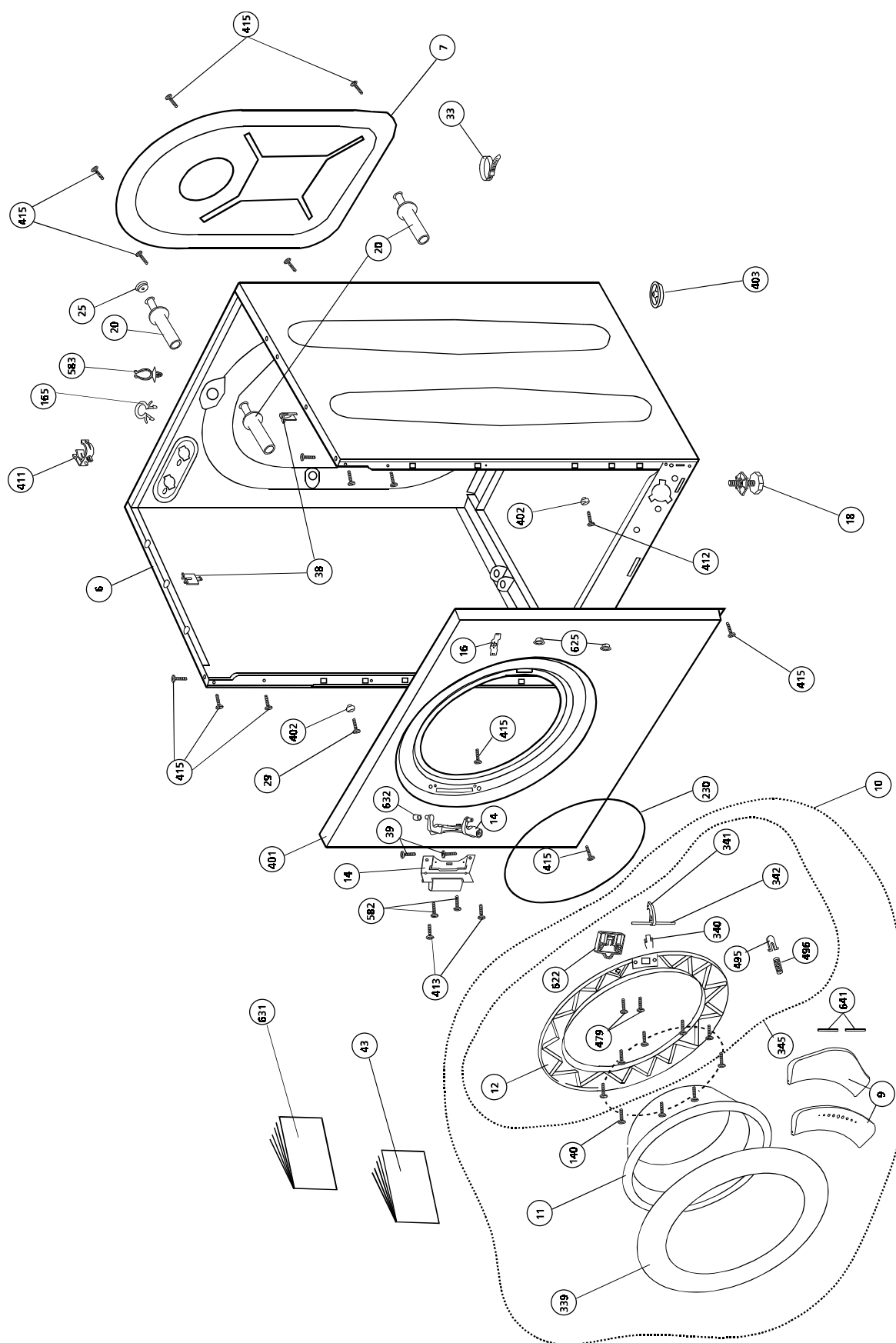


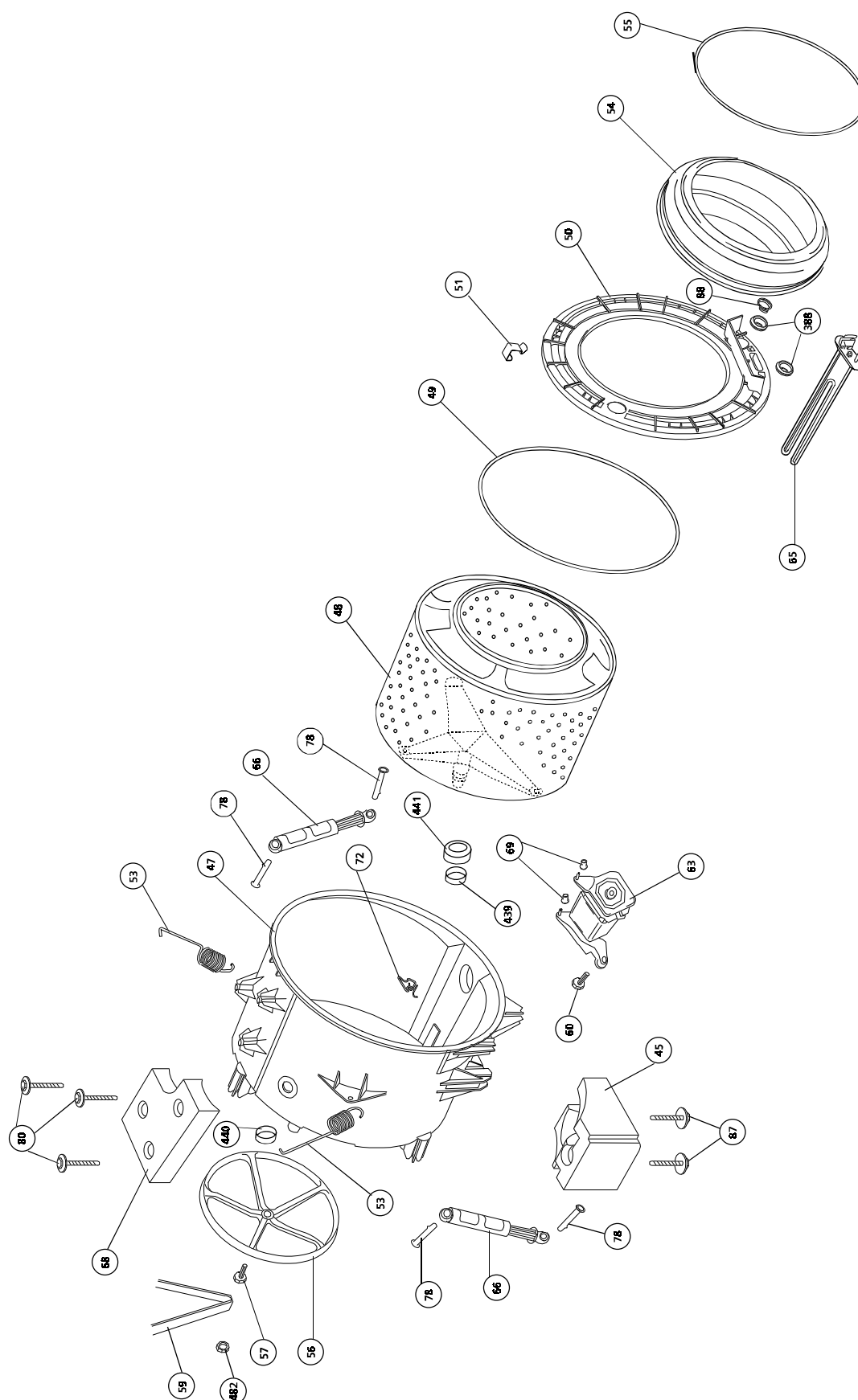
12.4-Cable Connection Diagram

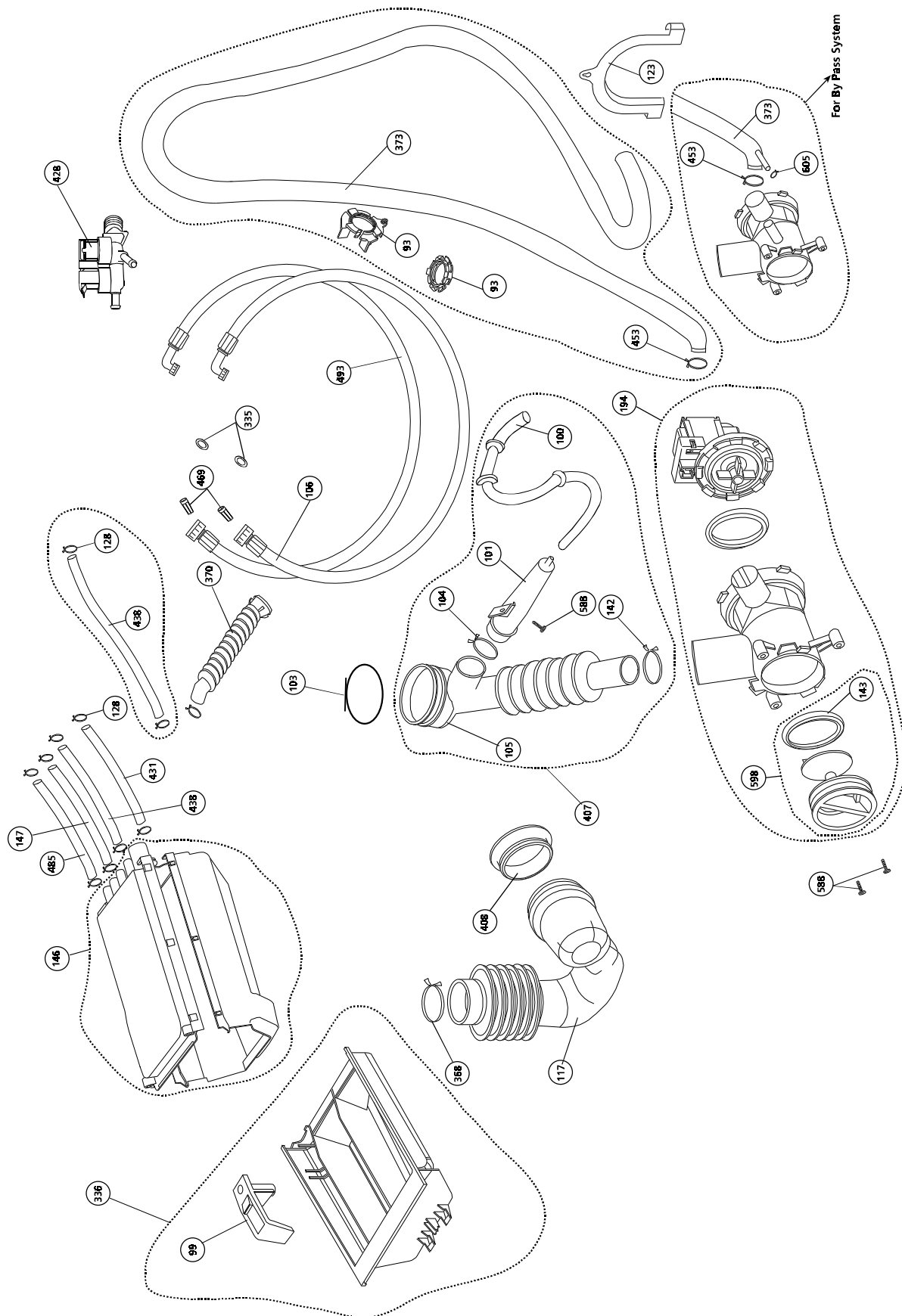


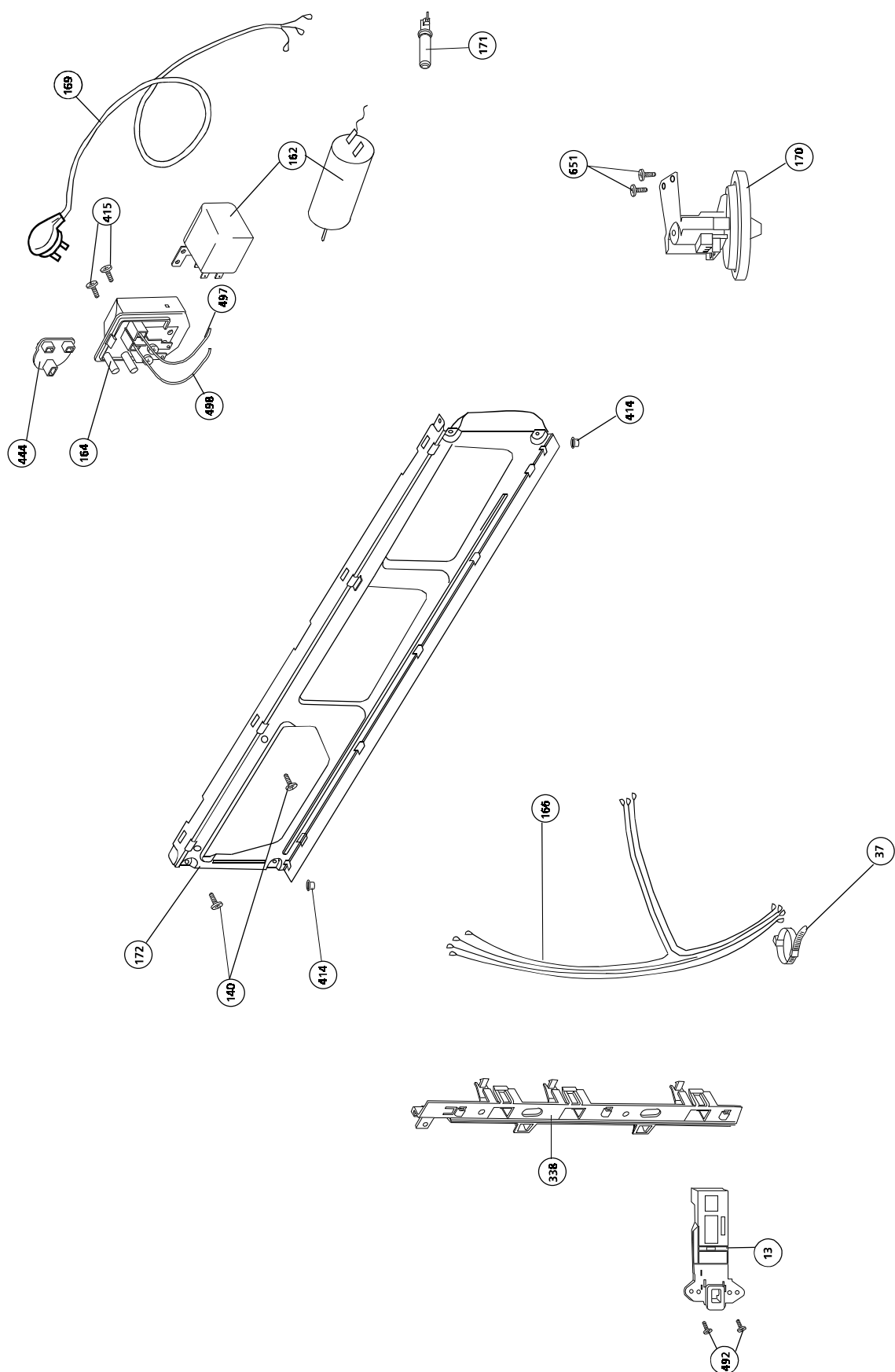
LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)











LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)

SPARE PARTS LIST

REF	PART NO	DESCRIPTION	6011	8011	1011	6012	8012	1012	QTY	PG
1	2811200500	TOP PLATE ASSEMBLY	x	x	x				1	20
1	2811200600	TOP PLATE ASSEMBLY				x	x	x	1	20
6	2810100700	CABINET ASSEMBLY	x	x	x				1	22
6	2810100200	CABINET ASSEMBLY				x	x	x	1	22
7	2800120200	REAR COVER	x	x	x				1	16
7	2802970100	REAR COVER				x	x	x	1	16
9	2805930100	HANDLE	x	x	x	x	x	x	1	14
10	2811300900	FRONT DOOR ASSEMBLY	x	x	x	x	x	x	1	14
11	2804870100	PORTHOLE GLASS	x	x	x	x	x	x	1	12
12	2804930100	INNER COVER	x	x	x	x	x	x	1	6
13	2805310100	SECURITY SWITCH	x	x	x	x	x	x	1	9
14	2805710100	HINGE	x	x	x	x	x	x	1	5
16	2804790100	HINGE SUPPORT	x	x	x	x	x	x	1	1
18	2005600200	ADJUSTABLE FEET ASSEMBLY	x	x	x	x	x	x	2	1
20	2802400300	TRANSPORT SAFETY ASSEMBLY	x	x	x				3	5
20	2802400400	TRANSPORT SAFETY ASSEMBLY				x	x	x	3	4
25	2801540100	REAR COVER CAP	x	x	x	x	x	x	3	1
29	100601520	SCREW (B4.2*13 DIN 7981-H)	x	x	x	x	x	x	1	1
33	9001230200	PLASTIC CLAMP	x	x	x	x	x	x	2	1
38	2801410100	SPRING HOLDER	x	x	x	x	x	x	2	1
39	111201020	BOLT (AM5*10 DIN 7985 4.8-H)	x	x	x	x	x	x	2	1
43	2807080007	USER'S MANUAL	x	x	x	x	x	x	1	5
45	2800750100	COUNTERWEIGHT-LOWER	x	x	x	x	x	x	1	13
47	2804200100	TUB ASSEMBLY (COMPLETE)	x	x	x				1	31
47	2807200100	TUB ASSEMBLY (COMPLETE)				x	x	x	1	30
48	2812700100	DRUM ASSEMBLY (COMPLETE)	x	x	x				1	22
48	2806100200	DRUM ASSEMBLY (COMPLETE)				x	x	x	1	24
49	2801760100	TUB GASKET	x	x	x	x	x	x	1	5
50	2805020100	TUB FRONT CAP	x	x	x	x	x	x	1	8
51	2803610100	TUB CLIPS	x	x	x	x	x	x	12	1
53	2805680100	SUSPENSION SPRING	x	x	x	x	x	x	2	3
54	2804860100	DOOR HOOD-RUBBER	x	x	x	x	x	x	1	16
55	2802580300	DOOR HOOD CLAMP (SPRING)	x	x	x	x	x	x	1	2

LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)

SPARE PARTS LIST

REF	PART NO	DESCRIPTION	6011	8011	1011	6012	8012	1012	QTY	PG
56	2801650100	PULLEY	x	x	x				1	8
56	2802160100	PULLEY				x	x	x	1	8
57	2005390100	PULLEY BOLT (HEX. HEAD)	x	x	x	x	x	x	1	1
59	2005170300	ELASTIC POLY-V BELT	x	x	x	x	x	x	1	10
60	110704220	BOLT (M8*30 Z2 DIN 933 8.8) RD	x	x	x				1	1
60	110707420	BOLT(M8*22 Z2 DIN 933 8)				x	x	x	1	1
63	2802011000	MOTOR (M4) YOÇ/Y19 1000 RPM	x	x	x	x	x	x	1	26
65	2703370500	HEATER	x	x	x	x	x	x	1	17
66	2706770100	SHOCK ABSORBER	x	x	x	x	x	x	2	10
68	2805010100	COUNTERWEIGHT (UPPER)	x	x	x				1	14
68	2800760100	COUNTERWEIGHT (UPPER)				x	x	x	1	11
69	2702950100	MOTOR SUPPORT	x	x	x	x	x	x	2	1
72	2801660101	HEATER SUPPORT	x	x	x	x	x	x	1	1
78	2801430100	SHOCK ABSORBER PIN	x	x	x	x	x	x	4	2
80	2720500100	SPECIAL BOLT	x	x	x	x	x	x	3	1
87	2720500300	SPECIAL BOLT	x	x	x	x	x	x	2	1
88	2201450200	THERMOSTAT RUBBER SEAL	x	x	x	x	x	x	1	1
93	2704480100	HOSE HOLDER	x	x	x	x	x	x	1	1
99	2800820100	SIPHON	x	x	x	x	x	x	1	2
100	2000811100	HOSE	x	x	x	x	x	x	1	4
101	2800830100	PRESSURE TUBE	x	x	x	x	x	x	1	3
103	2007300200	HOSE CLAMP ASSEMBLY	x	x	x	x	x	x	1	2
104	2002372200	HOSE CLAMP	x	x	x	x	x	x	1	1
105	2800870100	TUB-FILTER HOSE	x	x	x	x	x	x	1	8
106	2808700300	WATER INLET HOSE ASSEMBLY	x	x	x	x	x	x	1	4
117	2800880100	TUB INLET HOSE	x	x	x	x	x	x	1	10
123	2002740000	DRAIN HOSE ELBOW	x	x	x	x	x	x	1	1
128	2002370800	HOSE CLAMP (ø 15.88)	x	x	x	x	x	x	6	1
140	9003270100	PT SCREW 4*14	x	x	x	x	x	x	11	1
142	2002372400	HOSE CLAMP	x	x	x	x	x	x	1	1
143	2801070100	SEAL	x	x	x	x	x	x	1	5
146	2817700100	DETERGENT DISPENSER ASSEMBLY	x	x	x	x	x	x	1	13
147	2600941800	HOSE	x	x	x				1	1

LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)

SPARE PARTS LIST

REF	PART NO	DESCRIPTION	6011	8011	1011	6012	8012	1012	QTY	PG
147	2600940400	HOSE				x	x	x	1	1
162	2003720300	INTERFERENCE SUPPRESSOR	x	x	x	x	x	x	1	14
164	2804600200	TERMINAL BOX ASSEMBLY	x	x	x	x	x	x	1	16
166	2817900100	MAIN CABLE HARNESS	x	x	x				1	15
166	2817900300	MAIN CABLE HARNESS				x	x	x	1	15
169	2803300100	AC-INLET CABLE ASSEMBLY	x	x	x	x	x	x	1	13
170	2805890100	PRESSURE SWITCH	x	x	x	x	x	x	1	15
171	2804980100	NTC	x	x	x	x	x	x	1	9
172	2805850100	PANEL SUPPORT	x	x	x	x	x	x	1	1
194	2801100400	PUMP-FILTER ASSEMBLY	x	x	x	x	x	x	1	19
197	2805730003	DETERGENT DRAWER FRONT COVER	x						1	9
197	2805730005	DETERGENT DRAWER FRONT COVER		x					1	9
197	2805730001	DETERGENT DRAWER FRONT COVER			x				1	9
197	2805730004	DETERGENT DRAWER FRONT COVER				x			1	9
197	2805730006	DETERGENT DRAWER FRONT COVER					x		1	9
197	2805730002	DETERGENT DRAWER FRONT COVER						x	1	9
200	2818300003	PANEL ASSEMBLY (COMPLETE)	x						1	16
200	2818300005	PANEL ASSEMBLY (COMPLETE)		x					1	16
200	2818300001	PANEL ASSEMBLY (COMPLETE)			x				1	16
200	2818300004	PANEL ASSEMBLY (COMPLETE)				x			1	16
200	2818300006	PANEL ASSEMBLY (COMPLETE)					x		1	16
200	2818300002	PANEL ASSEMBLY (COMPLETE)						x	1	16
208	2805720002	PANEL BODY	x			x			1	15
208	2805720003	PANEL BODY		x			x		1	15
208	2805720001	PANEL BODY			x			x	1	5
230	2603900300	CABINET BELLOWS CLAMP ASSY	x	x	x	x	x	x	1	2
300	2805790100	FUNCTION BUTTON	x	x	x	x	x	x	1	3
335	2003030000	SEAL	x	x	x	x	x	x	2	1
336	2800800100	DETERGENT DRAWER ASSEMBLY	x	x	x	x	x	x	1	6
338	2800710300	CABLE HARNESS HOLDER	x	x	x	x	x	x	1	4
339	2804920100	OUTER COVER	x	x	x	x	x	x	1	6
340	2804970100	HOOK SPRING	x	x	x	x	x	x	1	1
341	2804950100	LOCK HOOK	x	x	x	x	x	x	1	1

LG (6011C / 8011C / 1011C / 6012C / 8012C / 1012C)

SPARE PARTS LIST

REF	PART NO	DESCRIPTION	6011	8011	1011	6012	8012	1012	QTY	PG
342	2800860300	PIN	x	x	x	x	x	x	1	1
365	2800450300	KICKPLATE COVER	x	x	x	x	x	x	1	7
366	2800460200	KICKPLATE COVER SCREW	x	x	x	x	x	x	2	2
368	2002372600	HOSE CLAMP (ø 49.8)	x	x	x	x	x	x	1	1
370	2800890100	STEAM DISCHARGE HOSE	x	x	x	x	x	x	1	5
373	2810600100	DISCHARGE HOSE ASSEMBLY	x	x	x				1	5
373	2810600200	DISCHARGE HOSE ASSEMBLY				x	x	x	1	5
382	2805810001	ON/OFF BUTTON	x	x	x	x	x	x	1	4
401	2800020600	FRONT PANEL	x	x	x	x	x	x	1	12
402	2801350100	FIXER	x	x	x	x	x	x	2	1
403	2800290100	FIXED FOOT RUBBER	x	x	x	x	x	x	2	1
407	2803200100	HOSE ASSEMBLY	x	x	x	x	x	x	1	8
408	2801450100	HOSE HOLDER	x	x	x	x	x	x	1	1
411	2802370100	DISCHARGE HOSE HOLDER	x	x	x	x	x	x	2	1
412	100601820	SCREW (B4.2*16 DIN 7981-H)	x	x	x	x	x	x	1	1
414	2804670100	FRONT PANEL HOLDER	x	x	x	x	x	x	2	2
415	9003610100	SCREW (B4.2*9.5-TIRTILLI)	x	x	x	x	x	x	19	1
428	2005680200	WATER INLET VALVE	x	x	x	x	x	x	1	17
438	2600941000	HOSE	x	x	x				1	2
438	2600940200	HOSE				x	x	x	1	3
453	2002371700	HOSE CLAMP (ø 28,7)	x	x	x	x	x	x	1	1
469	1800710000	HOSE FILTER	x	x	x	x	x	x	1	6
482	2100620000	PROTECTOR STOPPER	x	x	x	x	x	x	1	1
485	2600941700	HOSE	x	x	x	x	x	x	1	1
492	9003670100	PT SCREW (4,5*12)	x	x	x	x	x	x	7	1
566	2805830001	PROGRAMME KNOB TOP	x	x	x	x	x	x	1	3
570	2805840001	PROGRAMME KNOB BUTTON	x	x	x	x	x	x	1	3
577	2805860100	BUTTON SPRING	x	x	x	x	x	x	4	1
582	9003620200	PT SCREW (4.5*14)	x	x	x	x	x	x	2	1
583	2705870100	SELF LOCKING CABLE HOLDER	x	x	x	x	x	x	4	1
588	9003270400	PT SCREW 4*10	x	x	x	x	x	x	3	1
598	2810900100	FILTER ASSEMBLY	x	x	x	x	x	x	1	5
605	2002370500	HOSE CLAMP	x	x	x	x	x	x	1	1

SPARE PARTS LIST

REF	PART NO	DESCRIPTION	6011	8011	1011	6012	8012	1012	QTY	PG
622	2804960100	HOOK COVER	x	x	x	x	x	x	1	1
625	2805110100	HINGE CAP	x	x	x	x	x	x	2	1
632	2804910100	HINGE BUSHING	x	x	x	x	x	x	2	1
633	2805780100	LED GLASS	x	x	x	x	x	x	1	1
634	2805780200	LED GLASS	x	x	x	x	x	x	1	1
635	2805780300	LED GLASS	x	x	x	x	x	x	1	1
636	2805780400	LED GLASS	x	x	x	x	x	x	1	1
637	2805770100	LED GLASS	x	x	x	x	x	x	1	1
641	2800860200	PIN	x	x	x	x	x	x	2	1
645	2805740900	PROGRAMME CONTROL SET	x						1	36
645	2805740800	PROGRAMME CONTROL SET		x					1	36
645	2805740700	PROGRAMME CONTROL SET			x				1	36
645	2805741200	PROGRAMME CONTROL SET				x			1	36
645	2805741100	PROGRAMME CONTROL SET					x		1	36
645	2805741000	PROGRAMME CONTROL SET						x	1	36
646	2805820001	KNOB COVER	x	x	x	x	x	x	1	4
651	2806970100	SCREW (DIN 7982 ST5.5*9.5)	x	x	x	x	x	x	2	1