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# WASHING MACHINE SERVICE MANUAL

## CAUTION

READ THIS MANUAL CAREFULLY TO DIAGNOSE TROUBLE  
CORRECTLY BEFORE OFFERING SERVICE.

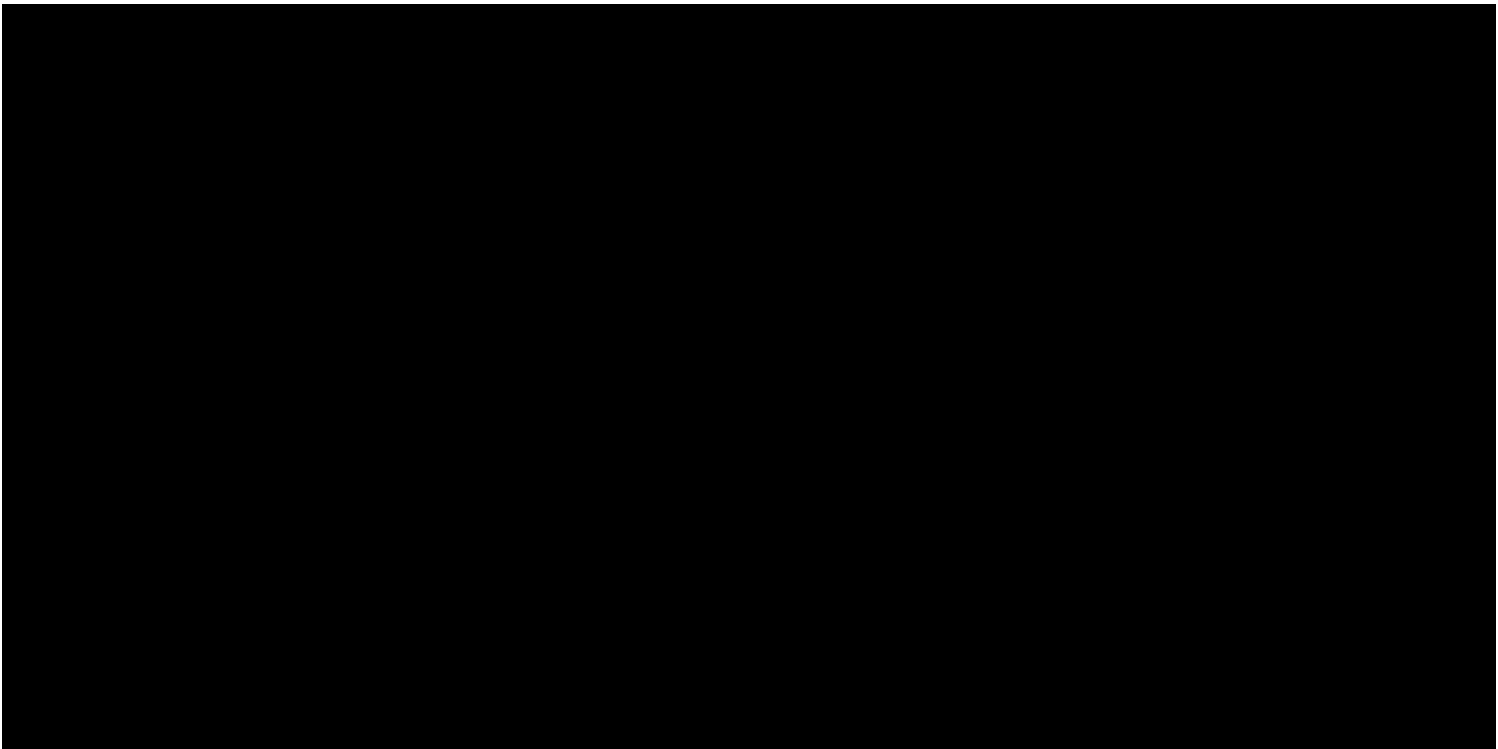
**MODEL : F1\*\*\*ND(1~9)**





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# 1. SPECIFICATION

ITEM		F1***ND(1~9)	
POWER SUPPLY		220-240V~, 50Hz	
PRODUCT WEIGHT		56kg	
ELECTRICITY CONSUMPTION	WASHING	135W	
	SPIN (1400rpm)	530W	
	DRAIN MOTOR	32W	
	WASH HEATER	2000W	
REVOLUTION SPEED	WASH	50rpm	
	SPIN	F10**ND(1~9)	No Spin~1000 rpm
		F12**ND(1~9)	No Spin~1200 rpm
OPERATION WATER PRESSURE		0.3-10kgf/cm <sup>2</sup> (30-1000kPa)	
CONTROL TYPE		Electronic	
WASH CAPACITY		Cotton (Refer to the rating label)	
DIMENSION		600mm(W)x440mm(D)x850mm(H)	
DOOR SWITCH TYPE		Bi-Metal type	
WATER LEVEL		9 steps (by sensor)	
RESERVATION		From 3 hours to 19 hours	
SENSING OF THE LAUNDRY AMOUNT		Available	
FUZZY LOGIC		Available	
DISPLAY OF THE REMAINING TIME		Available	
ERROR DIAGNOSIS		10 items	
POWER AUTO OFF		Available	
CHILD LOCK		Available	
AUTO RESTART		Available	

## 2. FEATURES & TECHNICAL EXPLANATION

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### 2-1. FEATURES



- **Anti Crease function**

With the alternate rotation of the drum, creasing in the laundry is minimized.



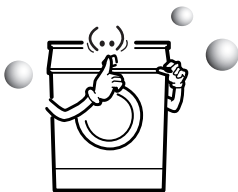
- **More economical by Fuzzy Logic System**

FUZZY Logic System detects the amount of load and water temperature, and then determines the optimum water level and washing time to minimize energy and water consumption.



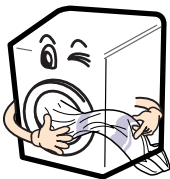
- **Child-Lock**

The Child-Lock system has been developed to prevent children from pressing any button (except Power button) to change the programme during operation.



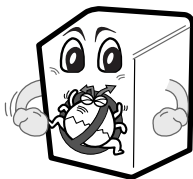
- **Low noise speed control system**

By sensing the amount of load and balance, this system automatically distributes load evenly to minimize the spinning noise level.



- **Direct Drive System**

The advanced Brushless DC motor rotates the drum directly without a belt and a pulley.



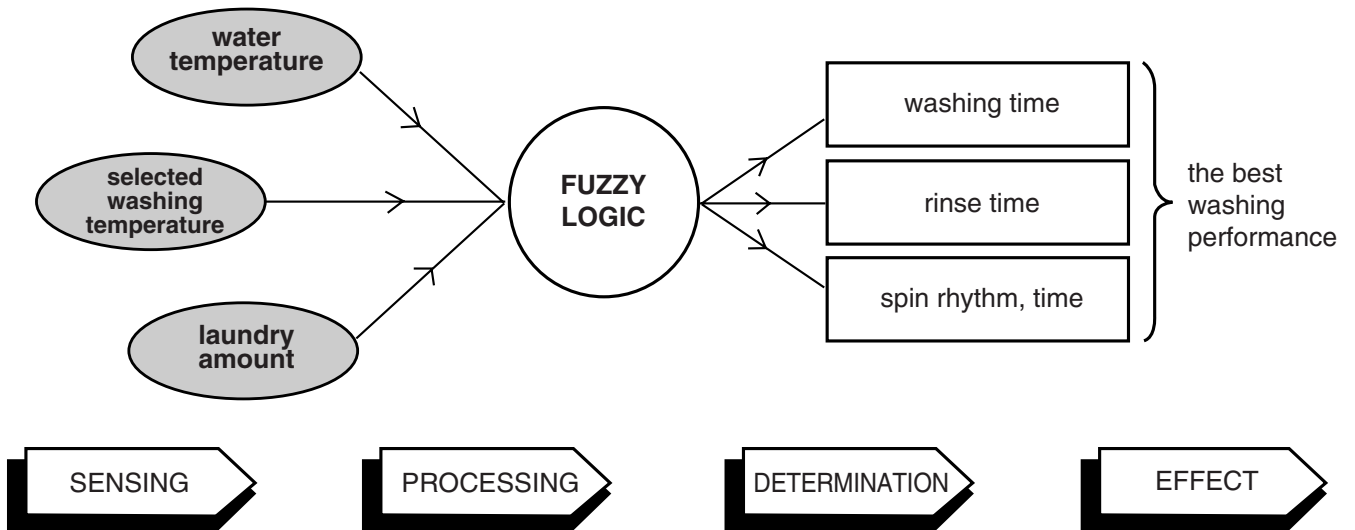
- **Built-in heater**

Internal heater automatically heats the water to the best temperature on selected cycles.

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## 2-2. DETERMINE WASHING TIME BY FUZZY LOGIC

To get the best washing performance optimal time is determined by sensing of water temperature, selected washing temperature and laundry amount.



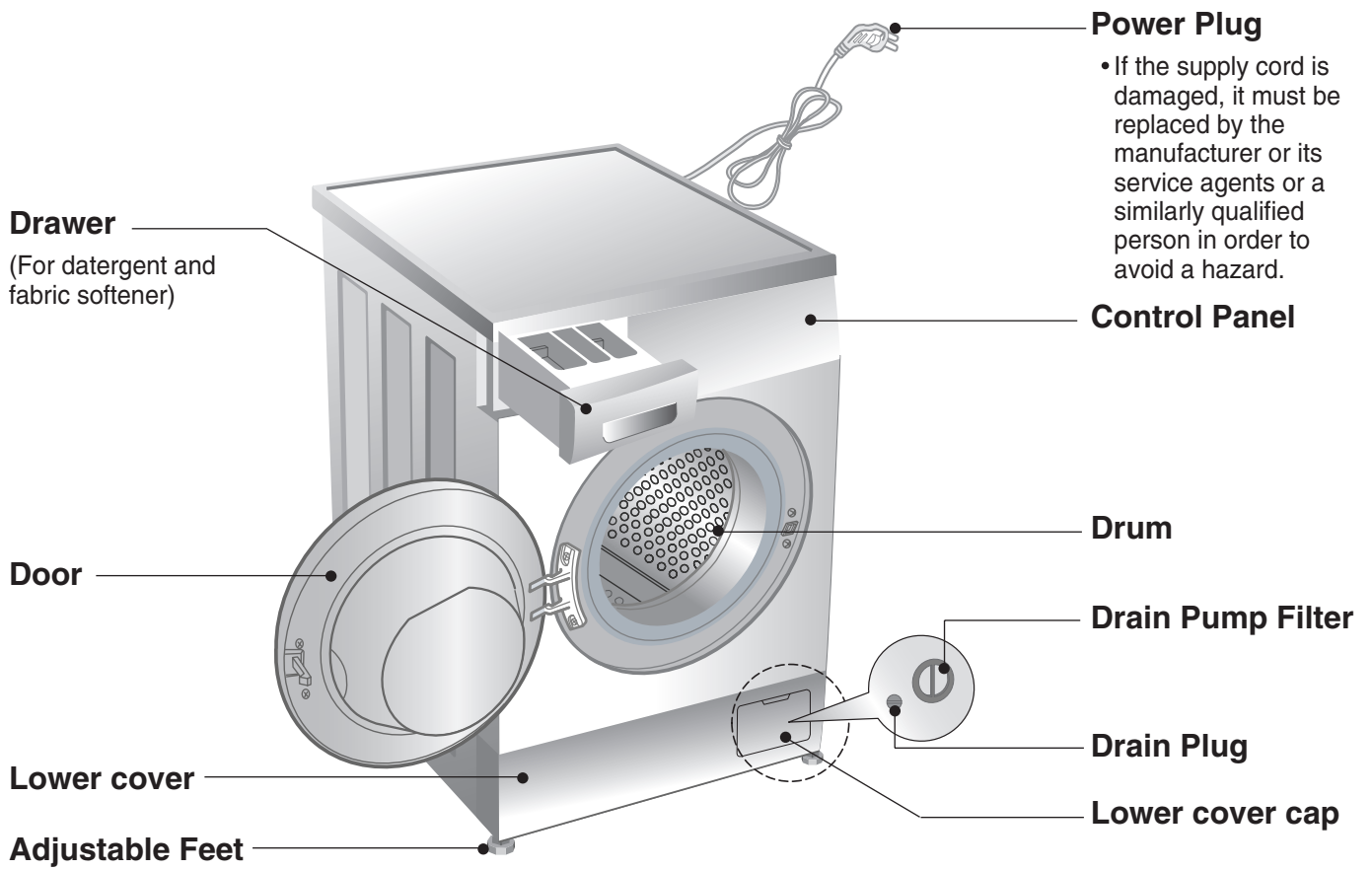
## 2-3. WATER LEVEL CONTROL

- This model adopts a pressure sensor which can sense the water level in the tub.
- When the water level reaches to the preset level the water supply is stopped, then the washing program proceeds.
- Spinning does not proceed until the water in the tub reduces a certain level.

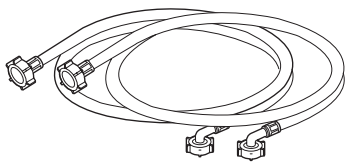
## 2-4. THE DOOR CAN NOT BE OPENED

- While program is operating.
- While **Door Lock** light turns on.

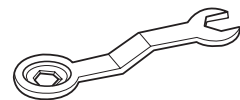
# 3. PARTS IDENTIFICATION



## ■ ACCESSORIES



Inlet hose(1EA) \* Option : Hot / Cold(2EA)



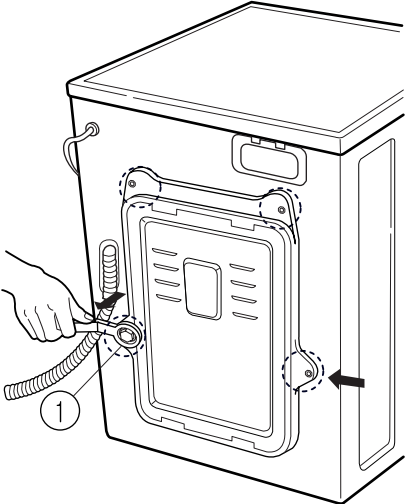
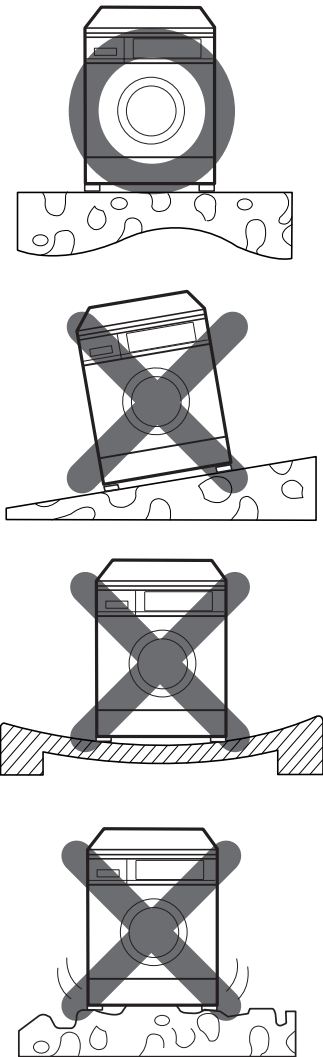
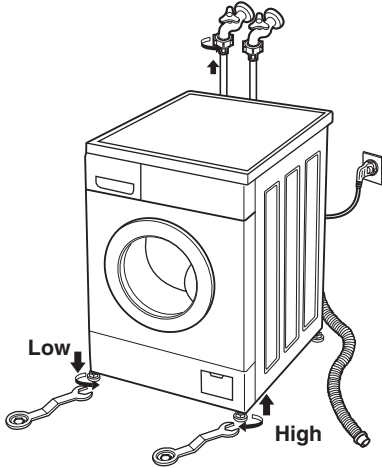
Spanner

# 4. INSTALLATION

- 1 Before servicing ask the customer what the trouble is.
- 2 Check the adjustments. (Power supply :220-240V~, Removal of transit bolts etc..)
- 3 Check the troubles referring to the troubleshooting.
- 4 Decide service steps referring to disassembly instructions.
- 5 Then, service and repair.
- 6 After servicing, operate the appliance to see whether it works O·Kor NOT.

## ■ STANDARD INSTALLATION

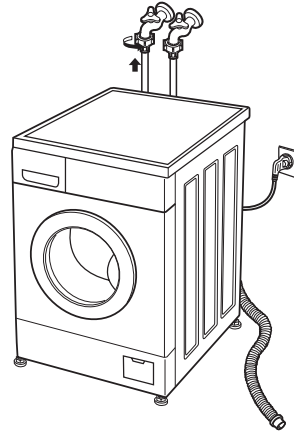
The appliance should be installed as follows.

REMOVE THE TRANSIT BOLTS	INSTALL THE APPLIANCE ON FLAT AND FIRM SURFACE	ADJUST THE HORIZONTAL
<ul style="list-style-type: none"> <li>• Remove the transit bolts (4EA: ①) with supplied wrench.</li> <li>• Keep the transit bolts and wrench for future use.</li> <li>• Insert the 4 caps provided into the hole.</li> </ul> 		<ul style="list-style-type: none"> <li>• Turn the adjustable feet to set the appliance horizontally.</li> </ul>  <ul style="list-style-type: none"> <li>• The appliance goes up by rotating the feet clockwise.</li> <li>• The appliance comes down by rotating the feet counter-clockwise.</li> </ul>

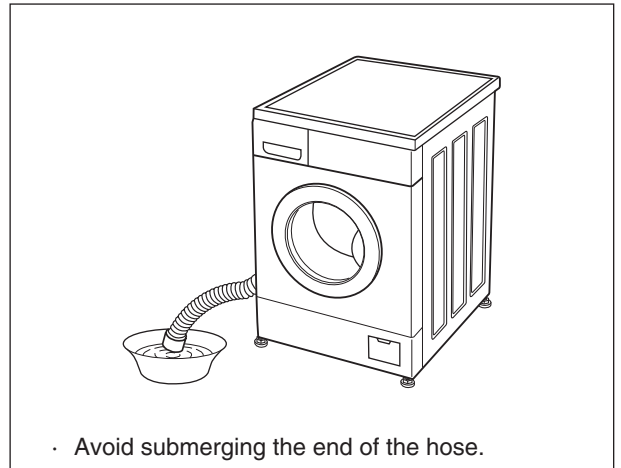
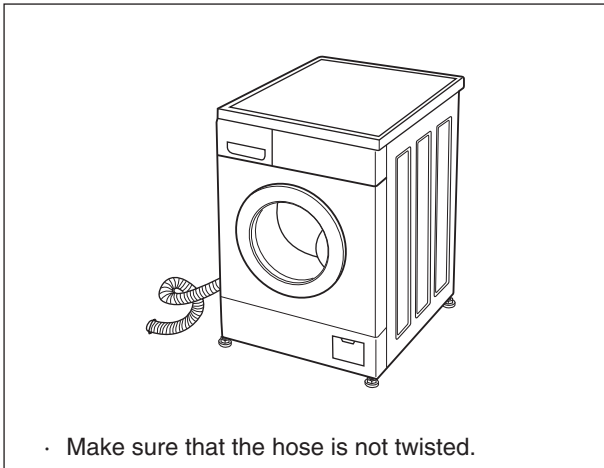


## ■ HOW TO CONNECT INLET HOSE

- Check that the rubber is the inside of valve connector.
- Connect inlet hoses firmly to prevent leak.

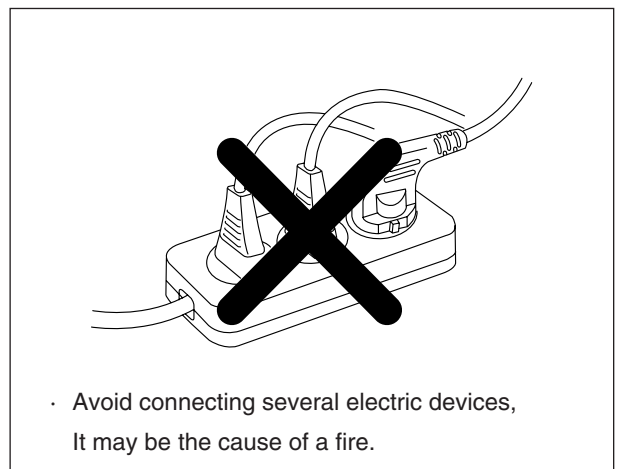
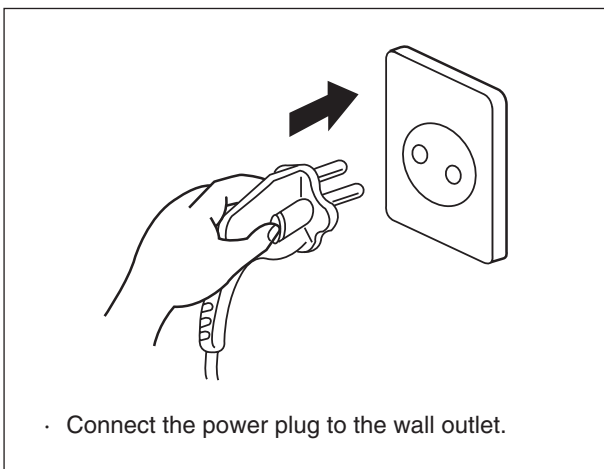


## ■ CONNECT DRAIN HOSE

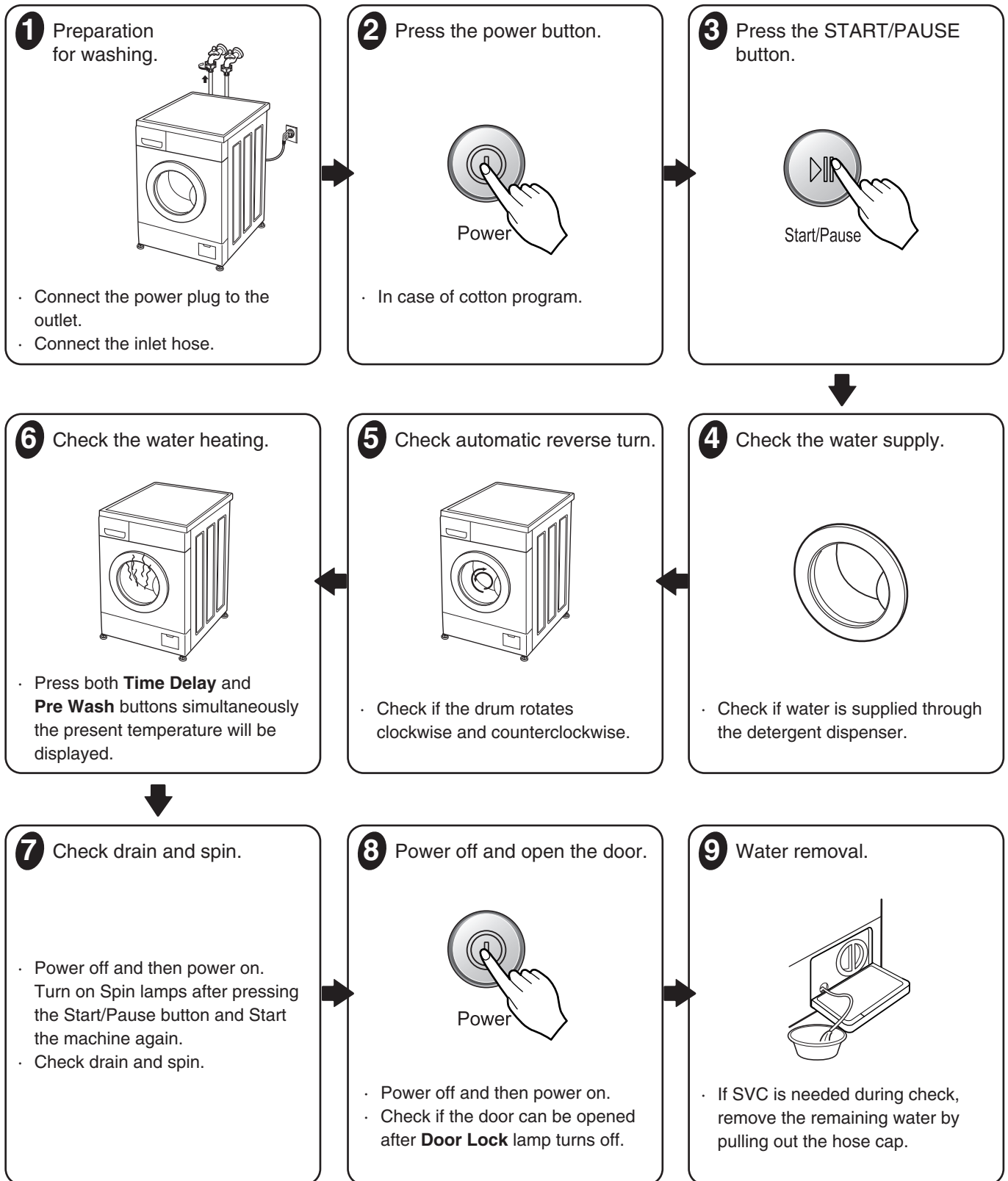


※ The drain hose should be placed under 100cm from the floor.

## ■ CONNECT POWER PLUG



## 7 TEST OPERATION



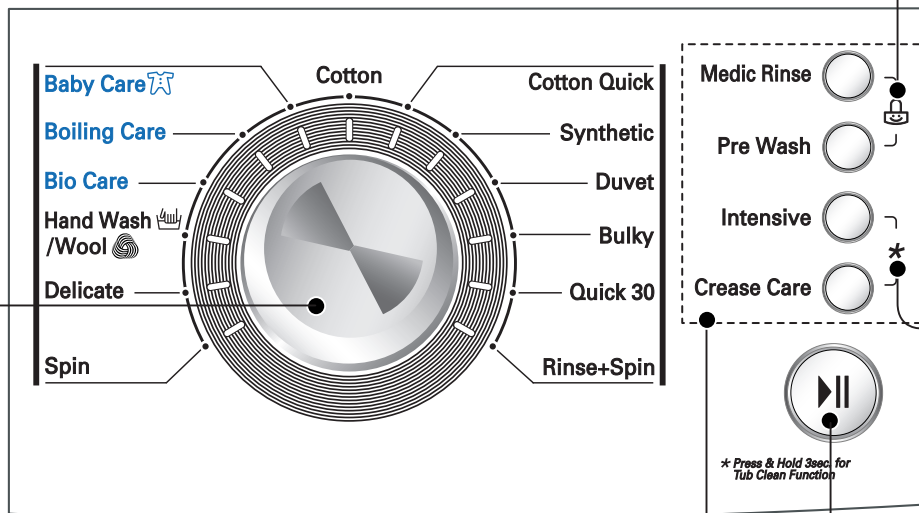
# 5. OPERATION

## LED display

- Display the estimated remaining time (Hour : Minute) to finish.
- In case of abnormal operation, error indications are displayed.  
( *IE, OE, UE, dE, tE, FE, PE, CE, LE, PF* )
- See troubleshooting guide.

## Wash program selector

- 13 programs can be set depending on the type of the laundry.
- If the power button is pressed, all lamps are on
- By turning the dial, [Cotton - Cotton Quick - Synthetic - Duvet - Bulky - Quick 30 - Rinse+Spin - Spin - Delicate - Hand Wash/Wool - Bio Care - Boiling Care - Baby Care] can be selected.  
(The opposite is possible)



## Start/Pause button

- Use the button to start or pause wash cycle.
- The power turns off automatically 4 minutes after the pause button is pressed.

## Spin Button

- By pressing the Spin Button the spin speed can be chosen
- F10\*\*ND(1~9)  
⇨ Rinse Hold/No spin/400/800/1000
- F12\*\*ND(1~9)  
⇨ Rinse Hold/No spin/400/800/1200

\* **QC Test Mode**

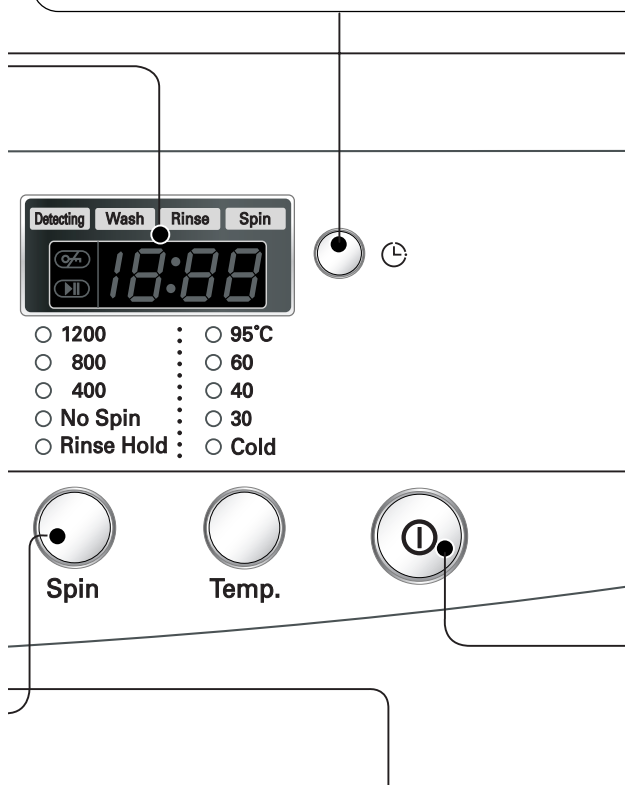
- Press **Temp.** and **Spin** and **Power** buttons simultaneously

\* **Water level frequency buttons**

- Press **Intensive** and **Crease Care** simultaneously

### Time Delay & Beep ON/OFF

- Press the button when reservation washing is needed.
- When the button is pressed, [ 3:00 ] is displayed, maximum delay of [ 19:00 ] hours can be set.
- Each press advances time delay by the hour.
- Use [Power] button to cancel [Time Delay]
- [Time Delay] means the time required from the present to the completion of washing.
- The Beep on/off function can be set by pressing and holding the Time Delay button (About 3 seconds).  
The Beep on/off function can be set at any time and it is automatically cancelled in the event of a power cut.  
The Beep on/off function also works when power is off.



### Child -Lock

- **Child Lock** system can be set and canceled by pressing and holding both **Medic Rinse** button and **Pre Wash** button simultaneously more than 3 seconds.

### Tub Clean

- Tub Clean course can be set by pressing and holding Intensive and Crease Care button simultaneously.
- Tub Clean is special cycle to clean the inside of the washer.

### Power button

- Press the button to turn power on and off.
- Press the button to cancel the time delay.

### Option

- **Medic Rinse** : Function that offers more purity in rinse operation by maintaining the optimum temperature for elimination of remnant detergent. It can be selected in all courses with the exception of Quick 30. Hand Wash/Wool, Delicate course.
- **Intensive** : • If the laundry is heavily soiled "Intensive" option is effective.  
• By selecting the Intensive option, the wash time may be extended, depending on the program selected.
- **Pre Wash** : If the laundry is heavily soiled, "Pre Wash" course is effective.  
Pre Wash is available in Cotton and Synthetic Program.
- **Crease Care** : If you want to prevent crease, select this button with spin

### Wash program selector

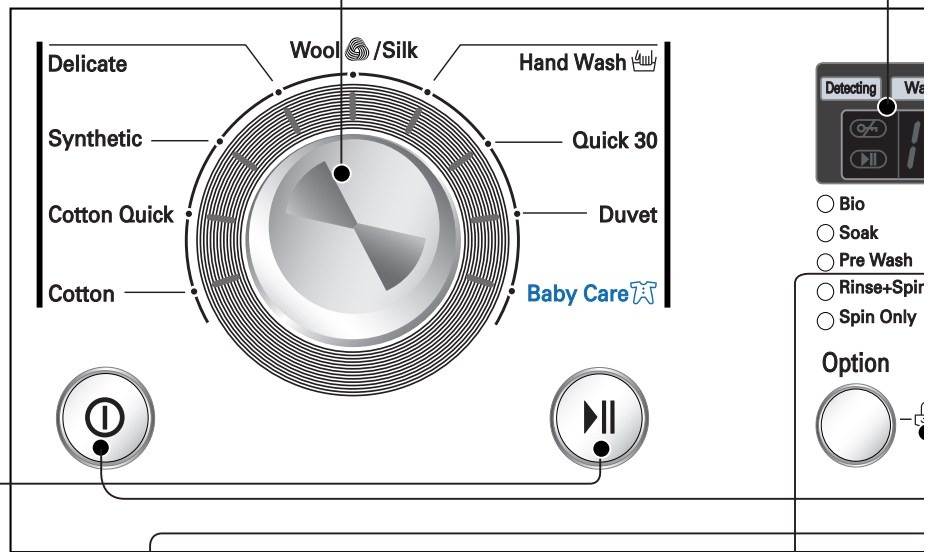
- 9 program can be set depending on the type of the laundry.
- If the power button is pressed, Cotton program is automatically set.
- By turning the dial, [Cotton - Cotton Quick - Synthetic - Delicate - Wool/Silk - Hand Wash - Quick 30 - Duvet - Baby Care] can be selected. (The opposite is possible)

### LED display

- Display the estimated remaining time (Hour : Minute) to finish.
- In case of abnormal operation, error indications are displayed. (IE, OE, UE, dE, tE, FE, PE, CE, LE, PF)
- See troubleshooting guide.

### Start/Pause button

- Use the button to start or pause wash cycle.
- The power turns off automatically 4 minutes after the pause button is pressed.



### Intensive

- If the laundry is heavily soiled "Intensive" option is effective.
- By selecting the Intensive option, the wash time may be extended, depending on the program selected.
- This option is not available with Quick 30 program

### Rinse

- By pressing the Rinse button, the Rinse type can be selected.

### Spin Button

- By pressing the Spin Button the spin speed can be chosen
- F10\*\*ND(1~9)  
⇒ No Spin/400/600/800/1000
- F12\*\*ND(1~9)  
⇒ No Spin/400/800/1000/1200

**\* QC Test Mode**

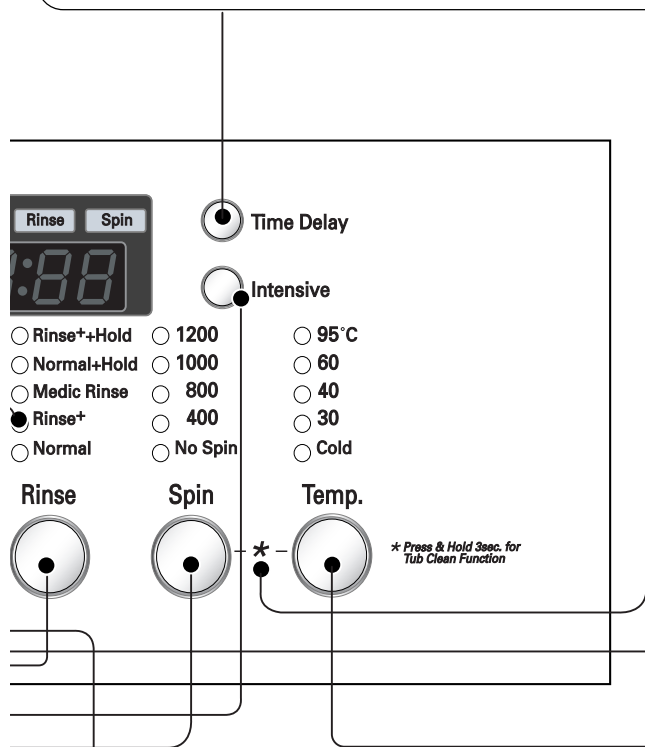
- Press **Option** and **Spin** and **Power** buttons simultaneously

**\* Water level frequency buttons**

- Press **Time Delay** and **Temp.** simultaneously

### Time Delay & Beep ON/OFF

- Press the button when delayed washing is needed.
- When the button is pressed, [ 3:00 ] is displayed, maximum delay of [ 19:00 ] hours can be set.
- Each press advances time delay by the hour.
- Use [Power] button to cancel [Time Delay]
- [Time Delay] means the time required from the present to the completion of washing.
- The Beep on/off function can be set by pressing and holding the Time Delay button (About 3 seconds).  
The Beep on/off function can be set at any time and it is automatically cancelled in the event of a power cut.  
The Beep on/off function also works when power is off.



### Tub Clean

- Tub Clean course can be set by pressing and holding Option and Rinse button simultaneously.
- Tub Clean is special cycle to clean the inside of the washer.

### Child -Lock

- **Child Lock** system can be set and canceled by pressing and holding both **Option** button and **Rinse** button simultaneously more than 3 seconds.

### Power button

- Press the button to turn power on and off.
- Press the button to cancel the delay finish.

### Water temperature selector

- Press the button to select water temperature.
- 95°C is selected for Cotton and Baby Care only.
- By pressing the button while operating the washer, the present temperature is displayed.



# 7. TROUBLESHOOTING

## 7-1. BEFORE PERFORMING SERVICE

- Be careful of electric shock or disconnecting the parts while trouble shooting.
- Voltage of each terminal in 220-240V~ and DC while applying an electric current.

## 7-2. QC TEST MODE.

- ① Refer to the page 10~13.
- ② Press Power with above two buttons pressed and then buzzer will sound.
- ③ Press the Start/Pause button as follows.  
[Press the Start/Pause button more 4 times until stop spinning]

Pressing number of [Start/Pause] button	Checking Point	Display Status
None	All lamps turn on	
1 time	Clockwise spin (right)	Motor rpm (About 47)
2 times	Low speed Spin	Motor rpm (About 590~650)
3 times	High speed Spin	Motor rpm (About 950~1050) : F10**ND(1~9)
		Motor rpm (About 1100~1250) : F12**ND(1~9)
4 times	Inlet valve for pre-wash operation	Water level frequency (225~265)
5 times	Inlet valve for main-wash operation	Water level frequency (225~265)
	Hot inlet valve in case of hot water fill	
6 times	Inlet valve for main-wash operation	Water level frequency (225~265)
7 times	Counterclockwise spin (left)	Motor rpm (About 47)
8 times	A Heater is in operation for 3 sec.	Water Temperature
9 times	Draining pump operation	Water level frequency
10 times	Auto off operation	

## 7-3. HOW TO KNOW THE WATER LEVEL FREQUENCY

\* Refer to the page 10~13.













• The digits means water level frequency (10<sup>-1</sup>kHz)

ex) 241 : Water level frequency = 241 X 10<sup>-1</sup> kHz  
= 24.1kHz



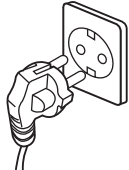
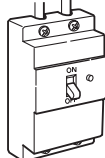





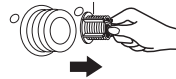
## 7-4. ERROR DISPLAY






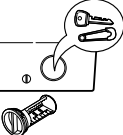
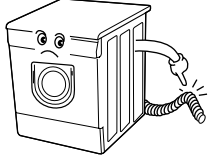
- If you press the [Start/Pause] button when an error is displayed, any error except S/W ERROR will disappear and the machine will change into pause status.
- In case of *PE*, *LE*, *DE*, if the error is not resolved within 15 sec. In case of other errors, if the error is not resolved within 4 min. Power will be turned off automatically and the error only will be blinked. But in the case of *FE*, power will not be turned off.

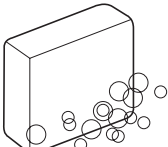
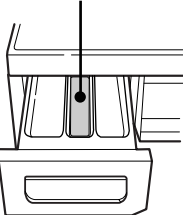
	ERROR	SYMPTOM	CAUSE
1	WATER INLET ERROR		<ul style="list-style-type: none"> <li>○ Water has not reached to the pre-set level within 4 min. since inlet valve operated, or water has not reached to the normal level within 25 min.</li> </ul>
2	IMBALANCE ERROR		<ul style="list-style-type: none"> <li>○ The appliance is tilted.</li> <li>○ Laundry is gathered to one side.</li> <li>○ Non distributable things are put into the drum.</li> </ul>
3	DRAIN ERROR		<ul style="list-style-type: none"> <li>○ Water has not drained enough within 8 min.</li> </ul>
4	OVERFLOW ERROR		<ul style="list-style-type: none"> <li>○ Water is automatically being pumped out because too much water is in the tub.</li> </ul>
5	SENSOR PRESSURE S/W ERROR		<ul style="list-style-type: none"> <li>○ The sensor pressure switch is out of order.</li> </ul>
6	DOOR OPEN ERROR		<ul style="list-style-type: none"> <li>○ The [Start/Pause] button is pressed with the door open.</li> <li>○ The door switch is out of order.</li> </ul>
7	HEATING ERROR		<ul style="list-style-type: none"> <li>○ The thermistor is out of order.</li> </ul>
8	CURRENT ERROR		<ul style="list-style-type: none"> <li>○ PWB ASSEMBLY (Main) is out of order  <ul style="list-style-type: none"> <li>☞ Replace the PWB assembly (Main)</li> </ul> </li> <li>○ Winding in the MOTOR is short-circuited.  <ul style="list-style-type: none"> <li>☞ Replace the MOTOR</li> </ul> </li> </ul>
9	LOCK ERROR		<ul style="list-style-type: none"> <li>○ The Connector (3-pin, male, white) in the wire harness is not connected to the Connector (3-pin, female, white) of MOTOR.  <ul style="list-style-type: none"> <li>☞ Reconnect or repair the connector</li> </ul> </li> <li>○ The electric contact between the connectors [3-pin, male, white in the wire harness and 6-pin, female, white in the PWB ASSEMBLY (Main)] is bad or unstable.  <ul style="list-style-type: none"> <li>☞ Reconnect or repair the contact in the connector</li> </ul> </li> <li>○ The wire harness between the MOTOR and PWB ASSEMBLY (Main) is cut (open circuited).</li> <li>○ The hall sensor is out of order/defective.</li> </ul>
10	POWER FAILURE		<ul style="list-style-type: none"> <li>○ The washer experienced a power failure.</li> </ul>

# 8. ERROR DIAGNOSIS AND CHECK LIST

## 8-1. DIAGNOSIS AND ANSWER FOR ABNORMAL OPERATION

SYMPTOM	GUIDE FOR SERVICE CALL
<p>NO POWER</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p>Is the power plug connected firmly to 220-240V~ outlet?</p> <p style="text-align: center;"><b>YES</b></p> <p>Power failure? or Breaker opened? Is the outlet controlled by a switch.</p> <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">Visit to check</p> </div> <div style="width: 30%; text-align: center;">   </div> </div>
<p>Water inlet trouble</p> 	<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p>Is <b>IE</b> displayed?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the tap opened?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the tap frozen?</p> <p style="text-align: center;"><b>NO</b></p> <p>Is the water supply shut-off?</p> <p style="text-align: center;"><b>NO</b></p> <p>Is filter in the inlet valve clogged with foreign material?</p> <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">Visit to check</p> </div> <div style="width: 30%; text-align: center;">     <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>Clean the filter of inlet valve</b></p>  </div> </div> </div>

SYMPTOM	GUIDE FOR SERVICE CALL
<p>◦ DOOR DOES NOT OPEN</p> <p>Refer to 7-4 ERROR DISPLAY</p> 	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>Did you press the <b>Start/Pause</b> button when the door is open?</p> <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">Visit to check</p> <p style="text-align: center;"><b>Check if the door switch is O.K</b></p> </div> <div style="width: 35%; text-align: right;"> <p><b>YES</b></p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Close the door.</p>  </div>  </div> </div>
<p>◦ Drain Trouble</p> 	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>Is <b>dE</b> displayed?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the debris filter clogged with foreign material such as pins, coins, etc.?</p> <p style="text-align: center;"><b>NO</b></p> <p>Is the drain hose frozen with water, kinked or crushed?</p> <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">Visit to check.</p> </div> <div style="width: 35%; text-align: right;">  <div style="margin-top: 20px;"> <p><b>YES</b></p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Clean up the filter.</p>  </div>  </div> </div> </div>

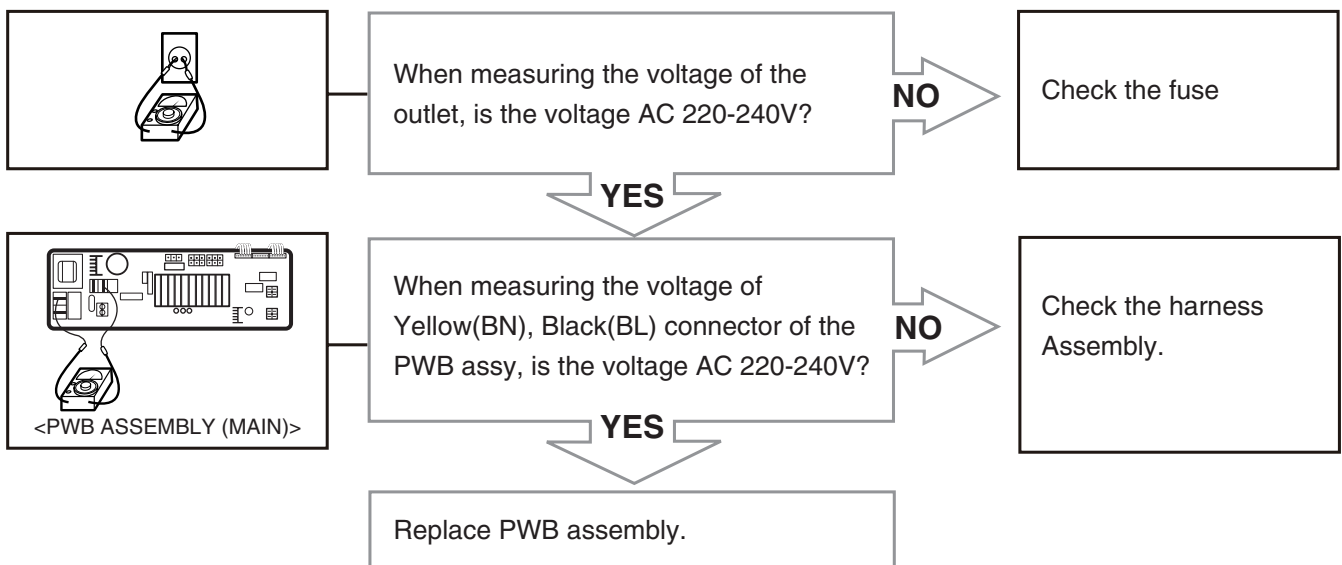
SYMPTOM	GUIDE FOR SERVICE CALL
<p>◦ Suds overflow from the appliance. (In this condition, wash and spin do not operate normally)</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p>Is low-sudsing detergent for the drum washing machine used?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the proper amount of detergent used as recommended?</p> <p style="text-align: center;"><b>YES</b></p> <p>Recommend to reduce the amount of detergent.</p> <ul style="list-style-type: none"> <li>* This appliance has the automatic suds sensing function which operates under much suds condition for good rinse and preventing overflow.</li> <li>* When much suds are sensed, the suds removing function such as drain, water input, and pause will operate without rotating the drum.</li> </ul> </div> <div style="width: 30%; text-align: center;">  <p><b>LOW SUDSING DETERGENT</b></p> </div> </div>
<p>◦ No effect of softener</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p>Is softener put in the correct compartment of drawer?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the drawer closed during wash?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the softener cap clogged?</p> <p style="text-align: center;"><b>YES</b></p> <p>Explain how to use softener</p> <p><b>Clean the compartment for softener</b></p> </div> <div style="width: 30%; text-align: center;"> <p>Compartment for softener</p>  </div> </div>
<div style="display: flex; flex-direction: column; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 10px; background-color: #ccc;">FE</div> <div style="border: 1px solid black; padding: 2px 10px; background-color: #ccc;">PE</div> <div style="border: 1px solid black; padding: 2px 10px; background-color: #ccc;">LE</div> </div>	<p style="text-align: center; border: 1px solid black; border-radius: 15px; padding: 10px;">Visit to check.</p>

## 8-2. FAULT DIAGNOSIS AND TROUBLESHOOTING

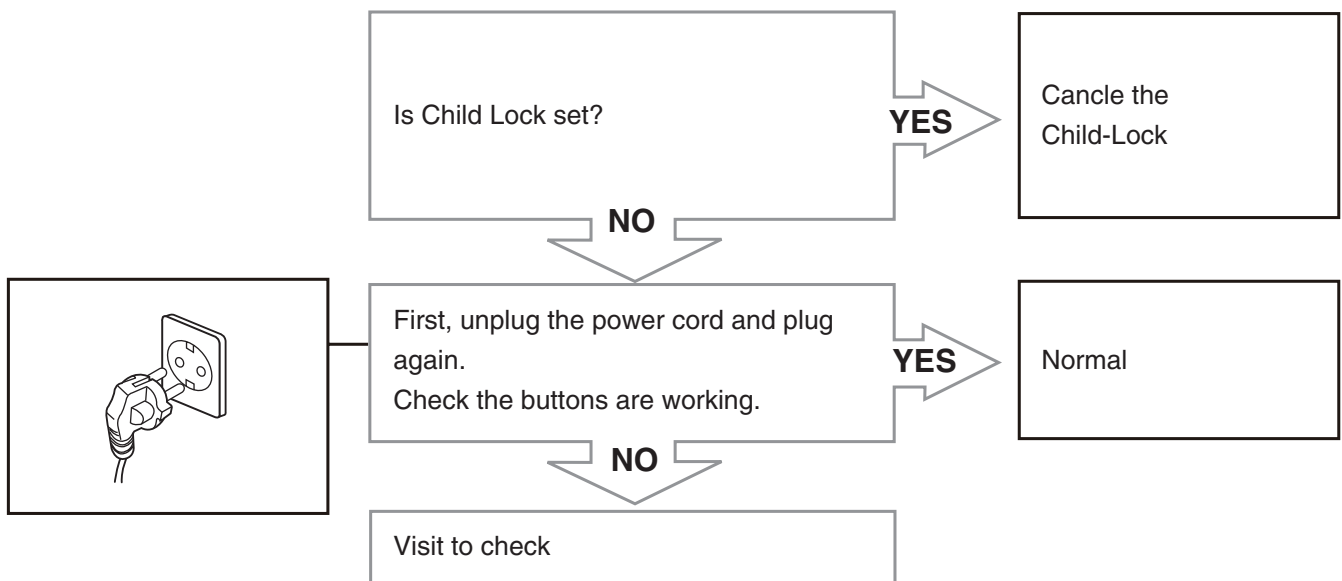
### CAUTION

1. Be careful of electric shock or disconnecting the parts while troubleshooting.
2. First of all, check the connection of each part terminal with wiring diagram.
3. If you replace the PWB assembly (Main), put in the connectors correctly.

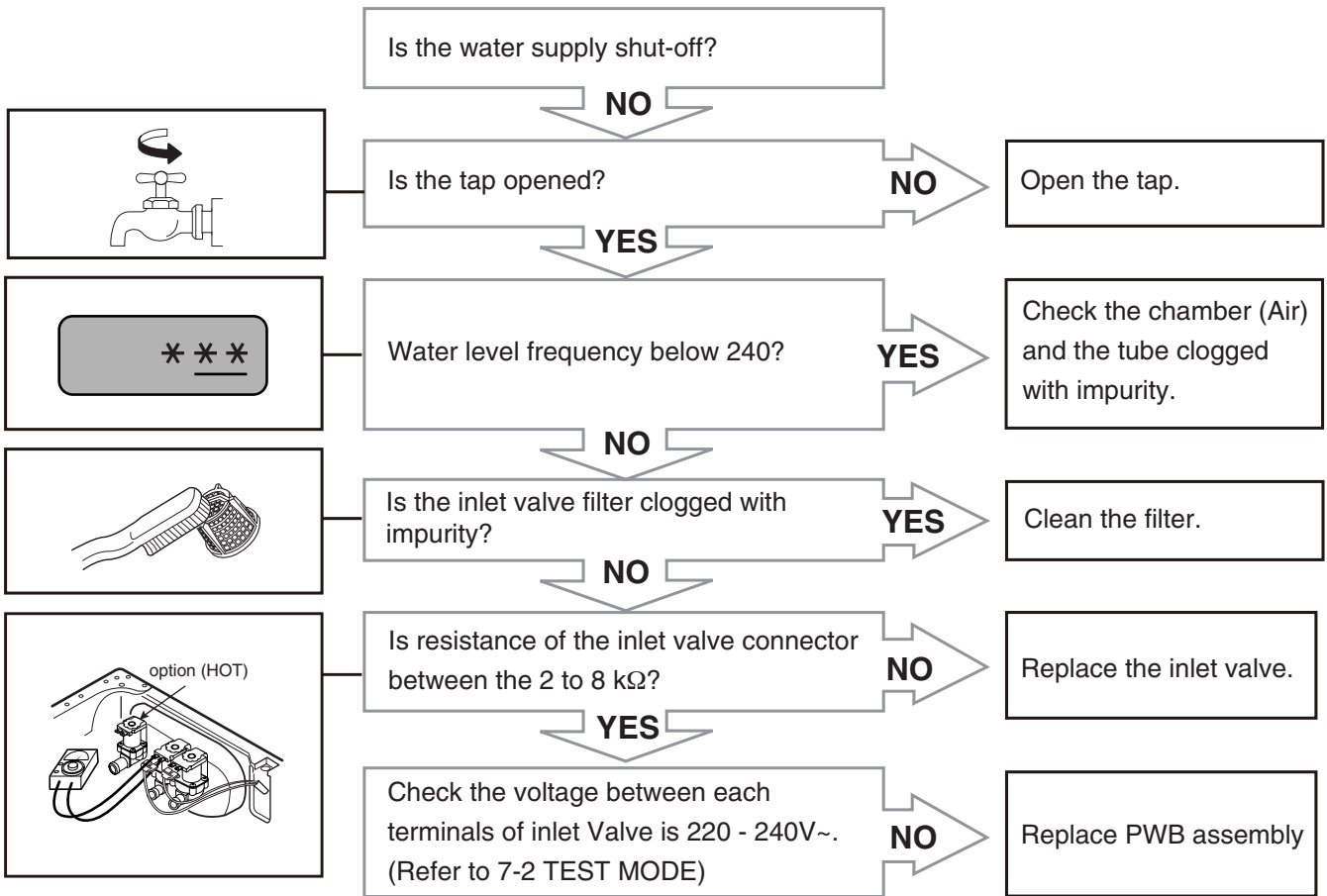
### NO POWER



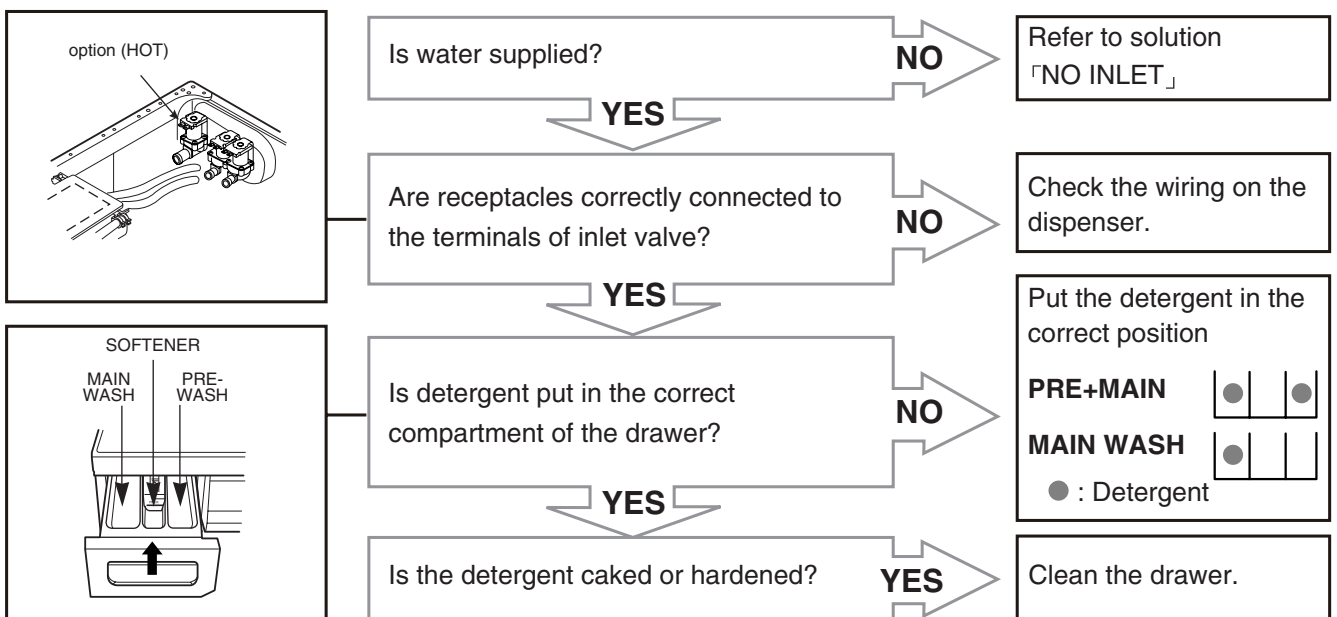
### ALL BUTTONS ARE INOPERABLE



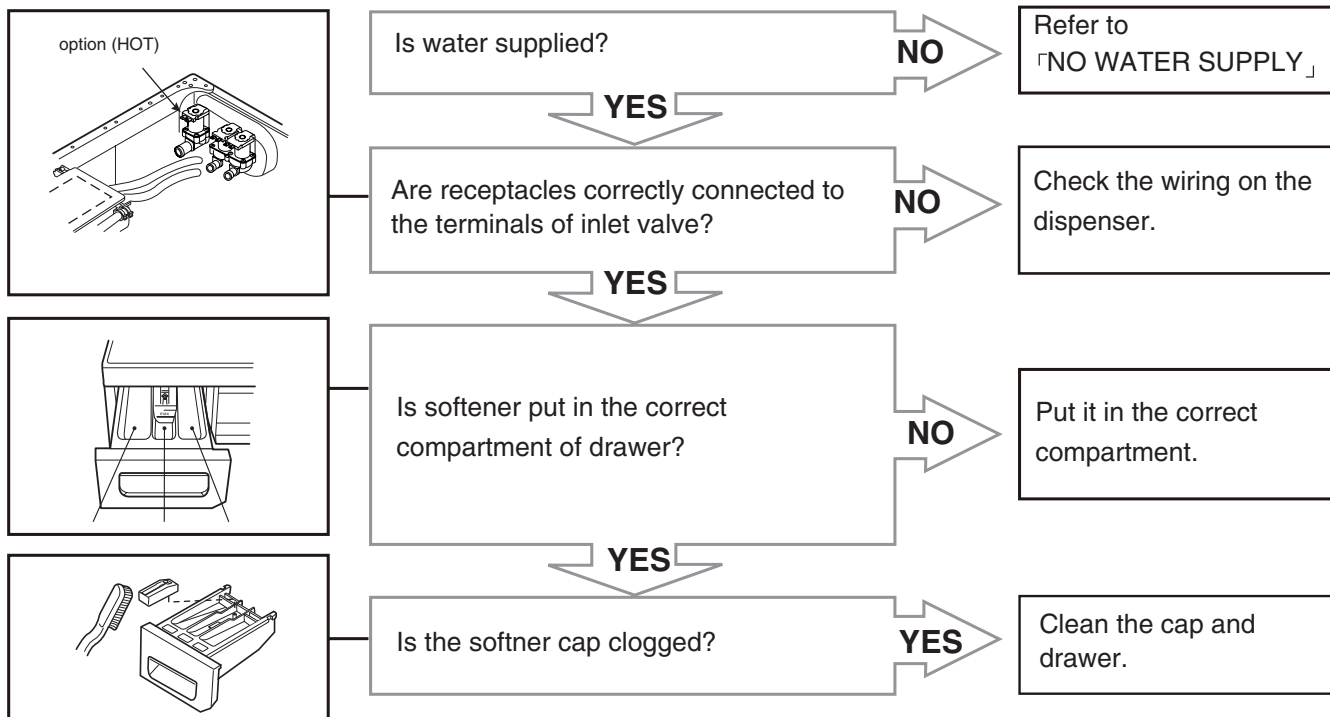
## NO WATER SUPPLY



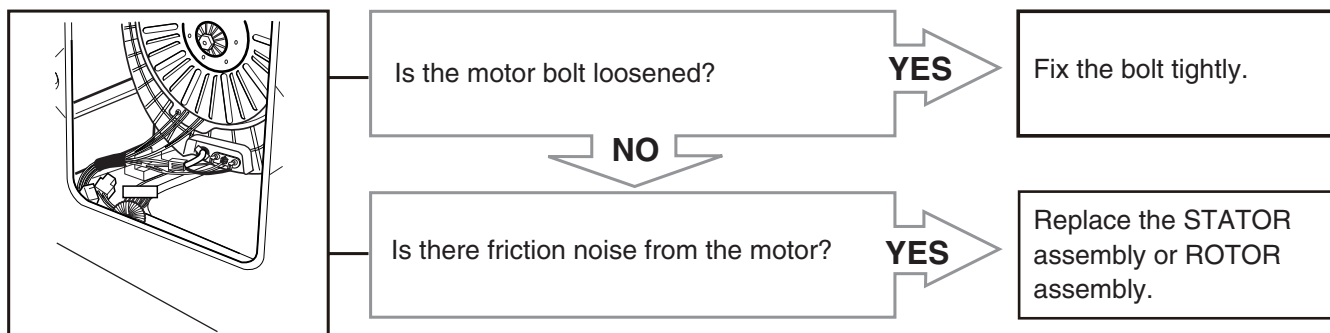
## DETERGENT DOES NOT FLOW IN



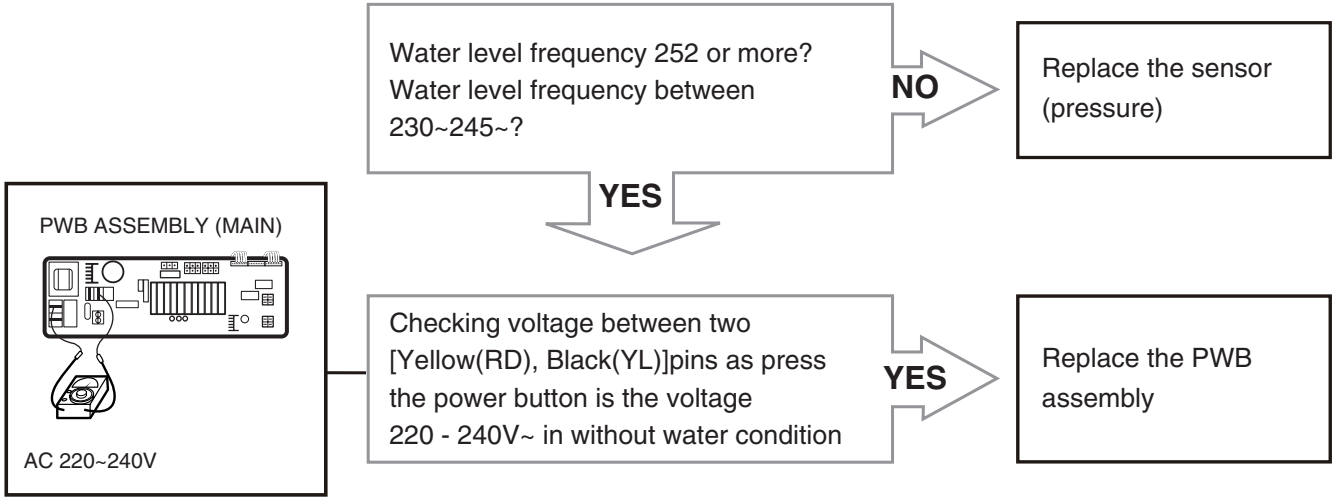
## SOFTENER DOES NOT FLOW IN



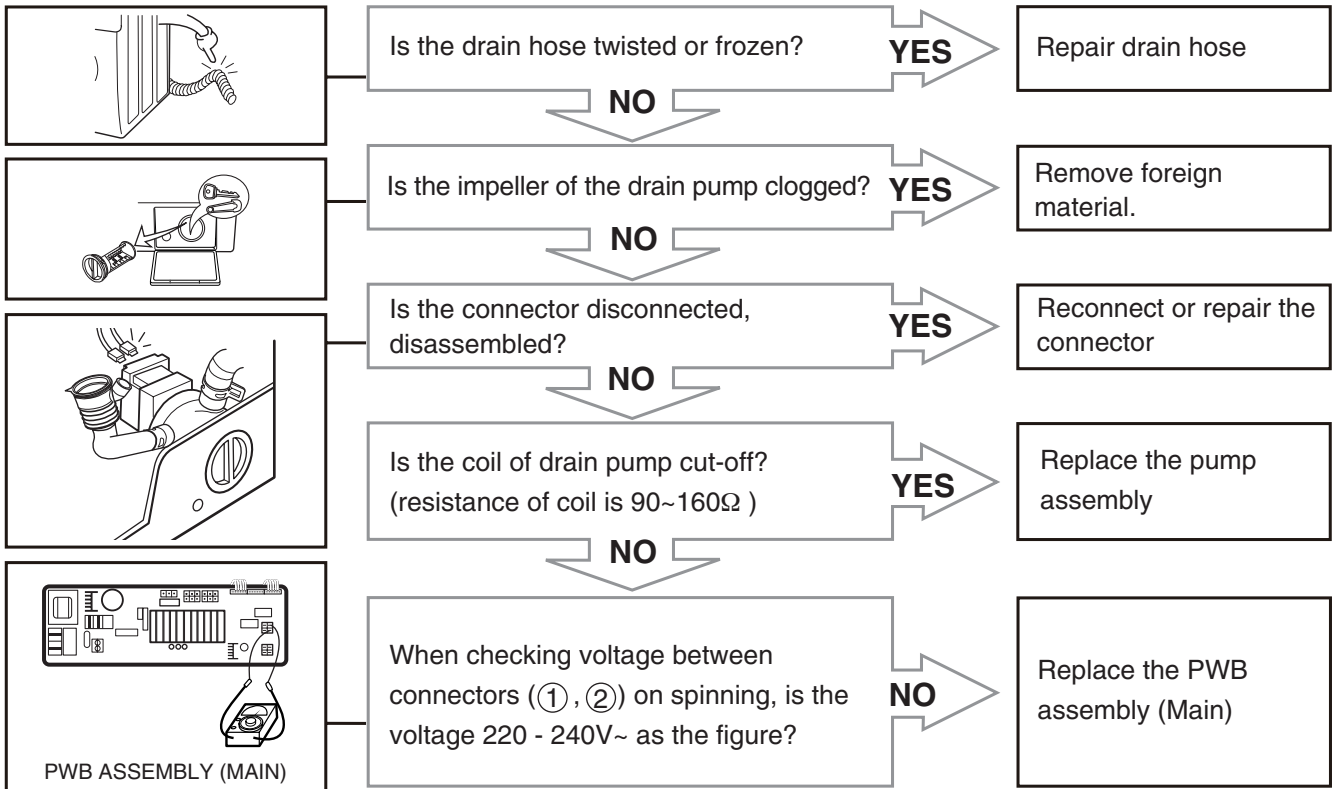
## ABNORMAL SOUND



## HEATING WITHOUT WATER

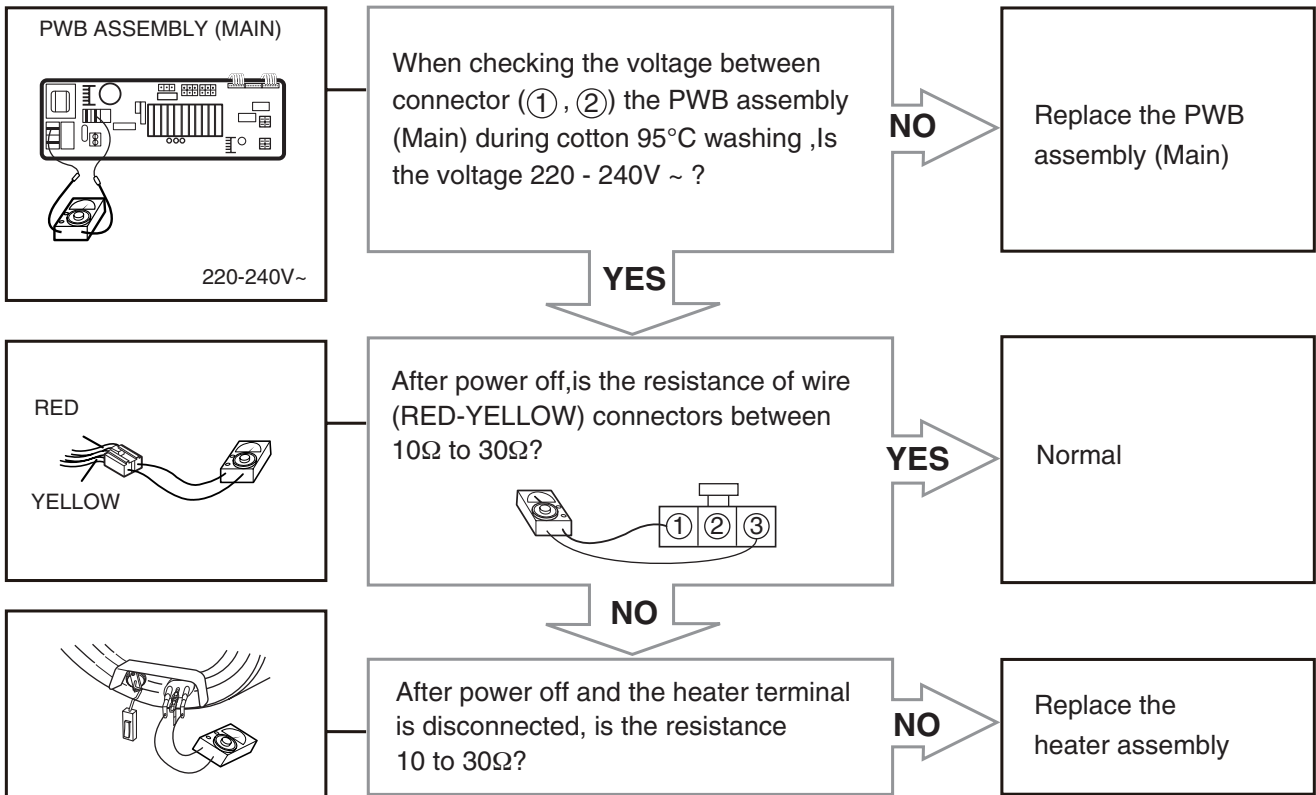


## DRAIN MALFUNCTIONING

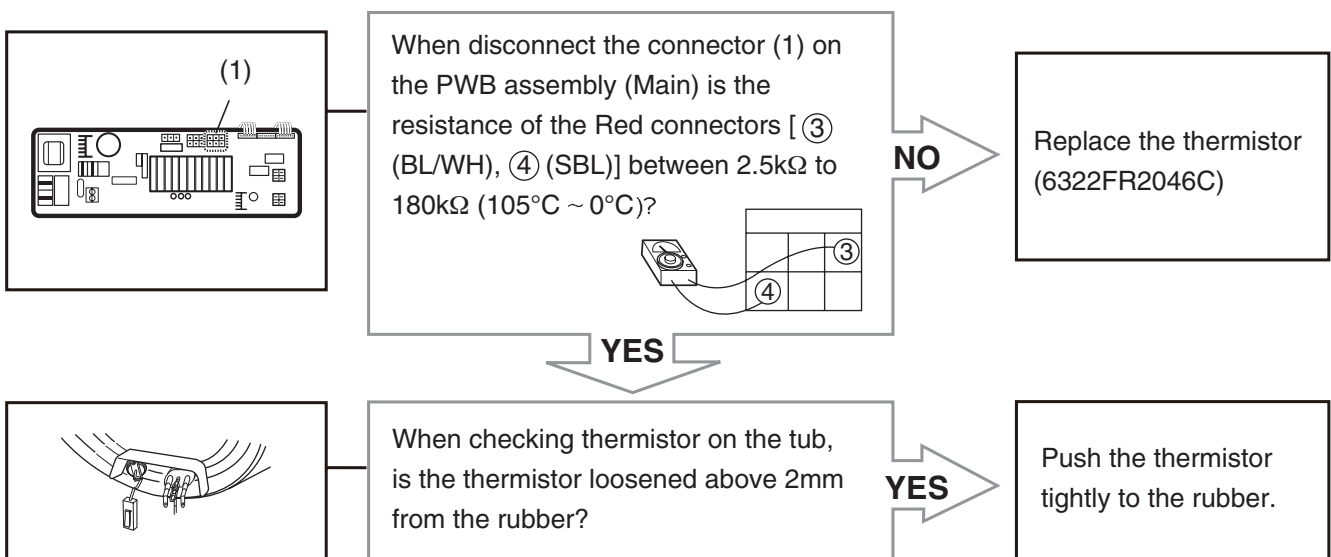




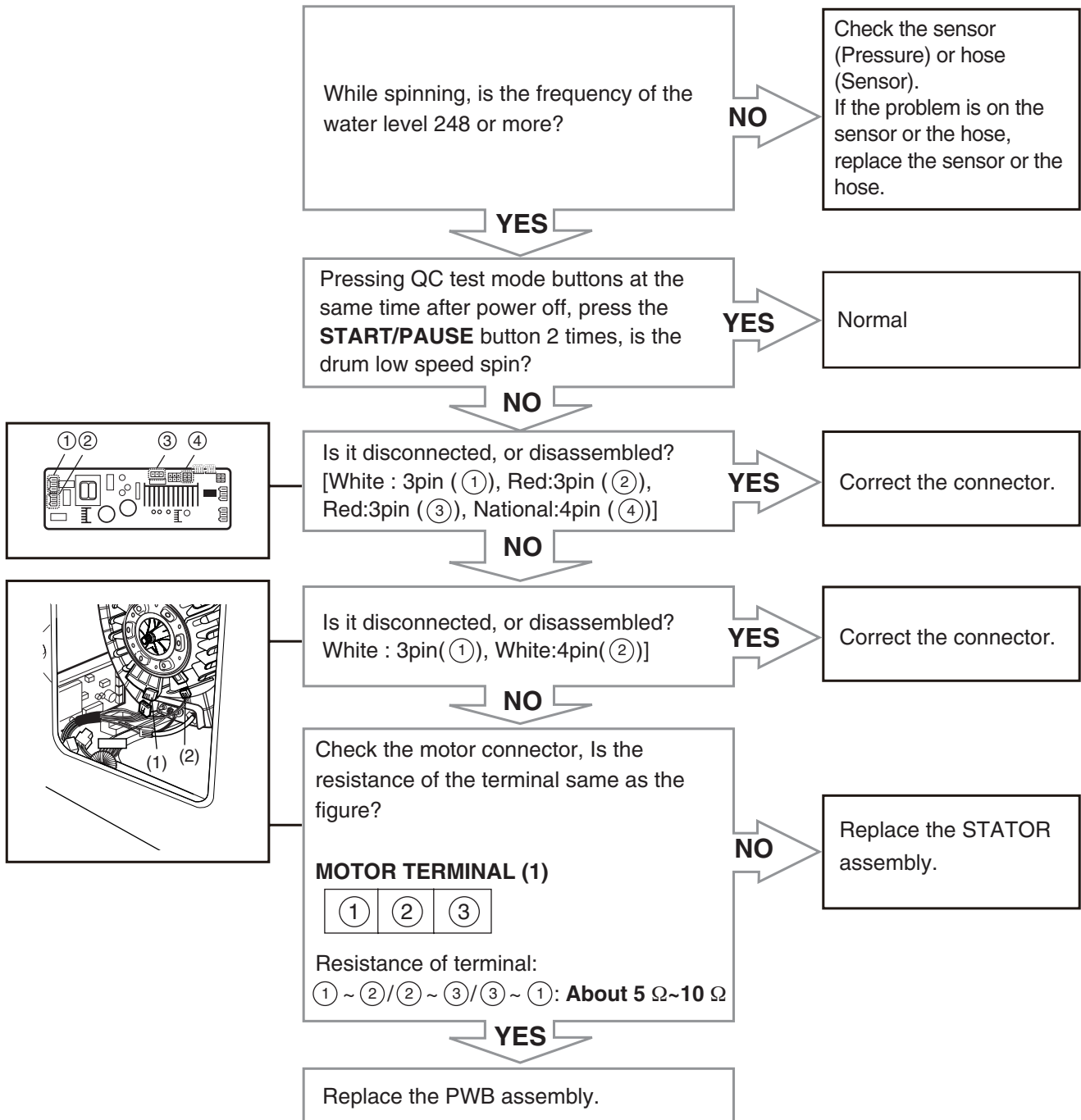
## WASH HEATER TROUBLE



## HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE



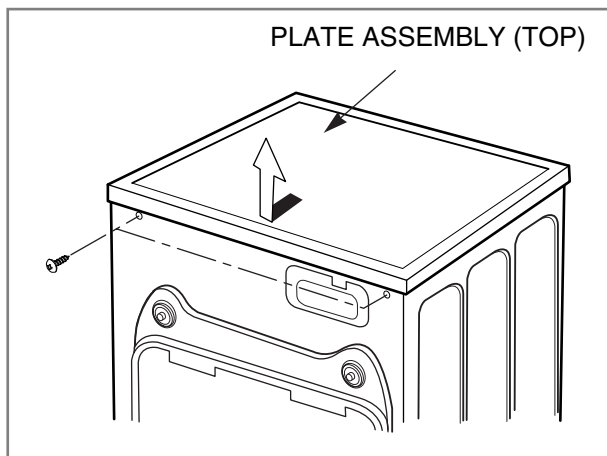
## SPIN TROUBLE



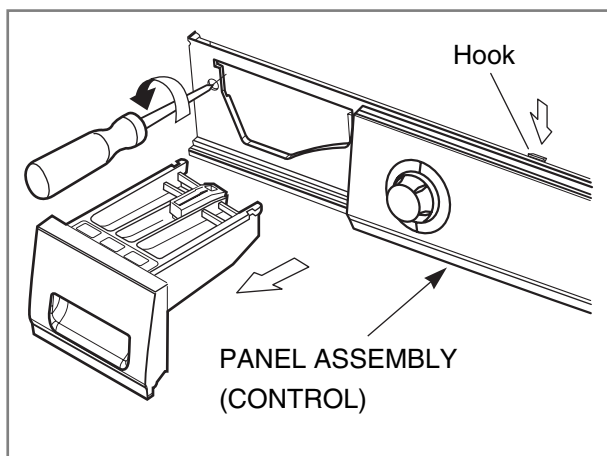
## 9. DISASSEMBLY INSTRUCTIONS

\* Be sure to unplug the machine out of the outlet before disassembling and repairing the parts.

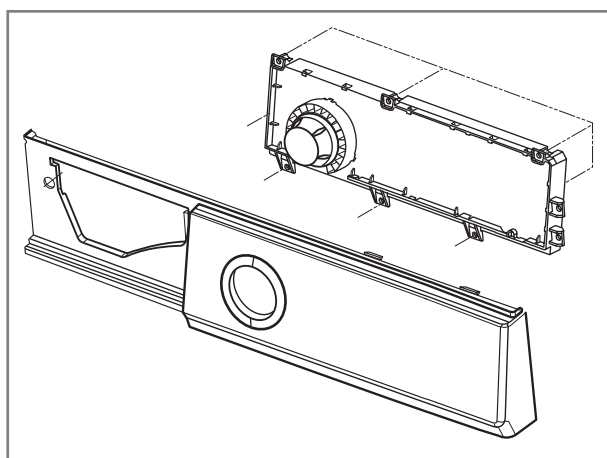
### CONTROL PANEL



- ① Unscrew 2 screws on the back of the top plate.
- ② Pull the top plate backward and upward as shown.

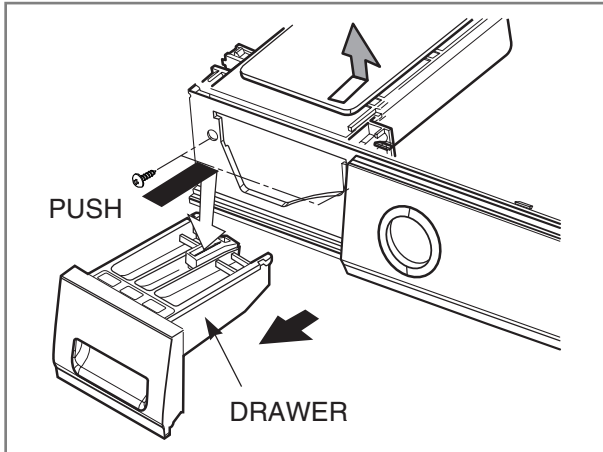


- ① Disconnect the PWB assembly connector from Main lead wire assembly.
- ② Pull out the drawer and unscrew 2 screws.
- ③ Push upper hooks down on the top and pull the control panel.

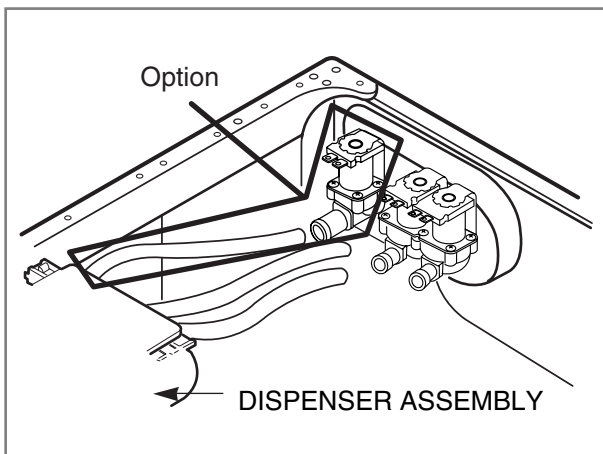


- ① Disconnect the PWB assembly (Main & Display) from control panel by unscrewing 7 screws.

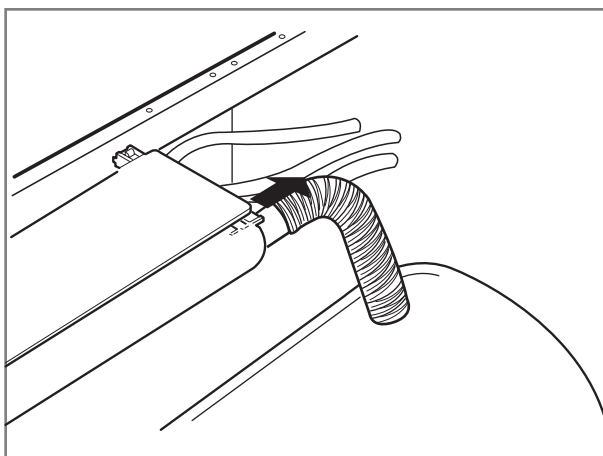
## DISPENSER ASSEMBLY



- ① Disassemble the top plate assembly.
- ② Pull out the drawer to arrow direction.
- ③ Unscrew 2 screws.

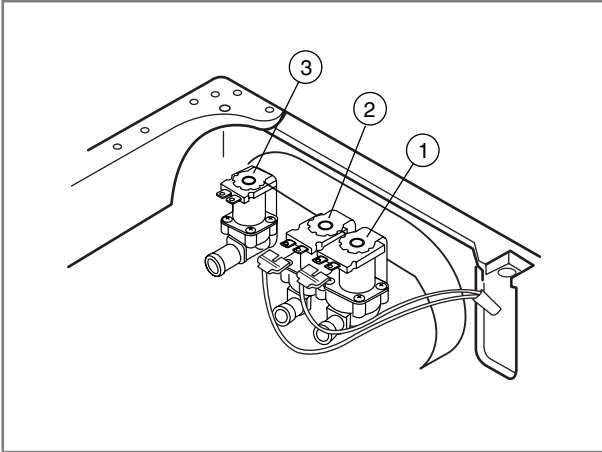


- ① The hose clamps and the hose are disassembled.



- ① The ventilation bellows and the water inlet bellows are disassembled on the tub.

## INLET VALVE



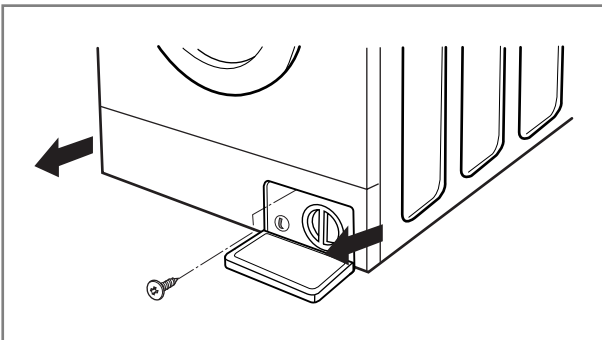
① Disconnect the wiring receptacle.

② Unscrew 2 screws from the back.

※ When reconnecting the connector

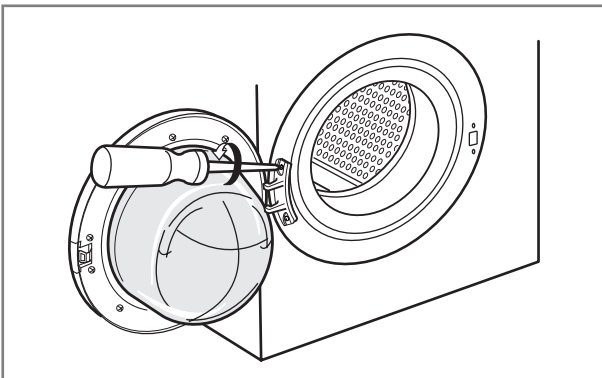
VALVE #1 (MAIN)	White / Black - Black
VALVE #2 (PRE)	Gray / White - Black
VALVE #3 (HOT)	Blue / Red - Black

## LOWER COVER



■ Open the lower cover cap by using coin and pull out the lower cover to the arrow direction after a screw is unscrewed.

## DOOR

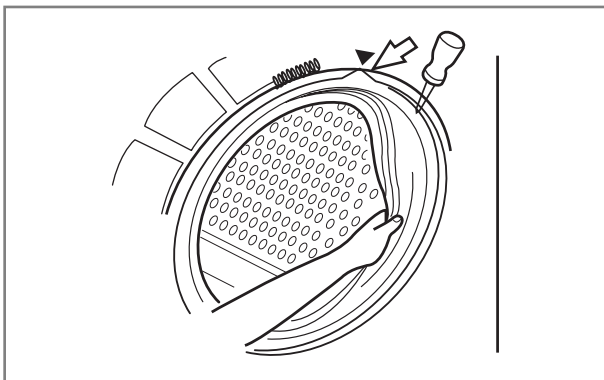
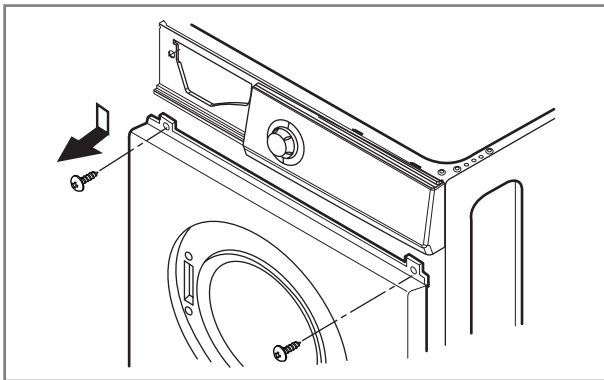
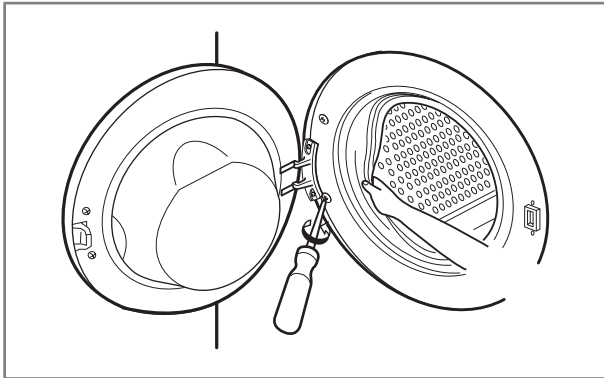


① Open the door completely.

② Remove the two screws from the hinge.

※ When removing the door assembly, it is necessary to hold the bracket that is inner of the cabinet cover.

## GASKET ASSEMBLY



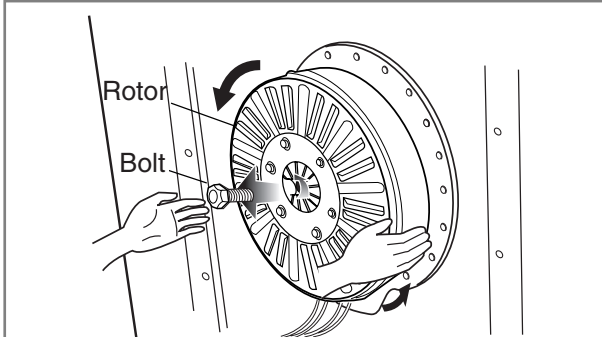
- ① Take apart the cabinet gasket clamp.
- ② Unscrew 2 screws from the cabinet cover.
- ③ Open the lower cover cap and unscrew 1 screw inside.
- ④ Take apart the lower cover.

- ① Disassemble the control panel. (page 18)
- ② Unscrew all the screws on the upper and lower sides of the cabinet cover.

- ① Take apart the tub gasket clamp.
- ② Make sure that the drain hole of the gasket is put beneath when reassembling the gasket.

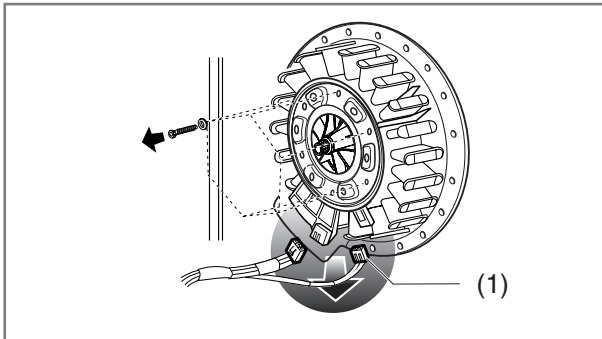
※ Refer to the arrow mark on the tub cover.

## ROTOR ASSEMBLY, STATOR ASSEMBLY, FRICTION DAMPER ASSEMBLY



(ROTOR ASSEMBLY)

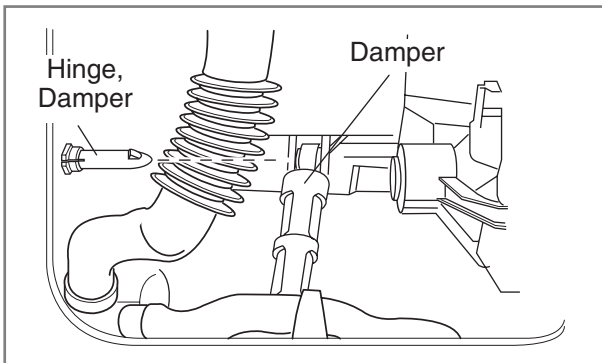
- ① Remove the BACK COVER.
- ② Unscrew the bolt to pull out the ROTOR assembly.



(STATOR ASSEMBLY)

- ① Disconnect the wiring connector.
- ② Unscrew 6 bolts from the STATOR.
- ③ Remove the STATOR.

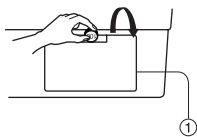
\* Note : Hook of connector (1) is on the backside



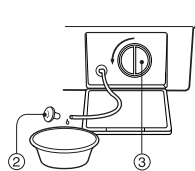
(DAMPER)

- ① Pull out the hinge, pressing its snap.
- ② Do not use the pulled-out hinge again. It may be taken off during operation.

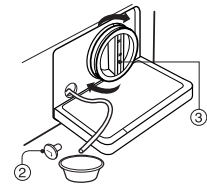
### ■ Clean the drain pump filter



Open the lower cover cap ( ① ) by using a coin. Turn the drain plug ( ② ) to pull out the hose.

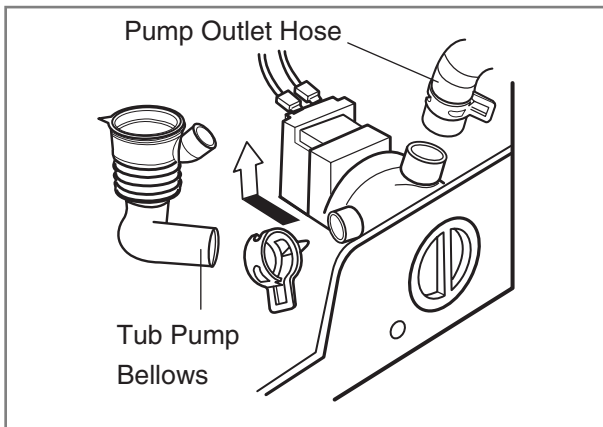


Unplug the drain plug ( ② ) , then the water flows out, At this time use a vessel to prevent water from flowing on the floor. If the water does not flow any more, turn the pump filter ( ③ ) open to the left.



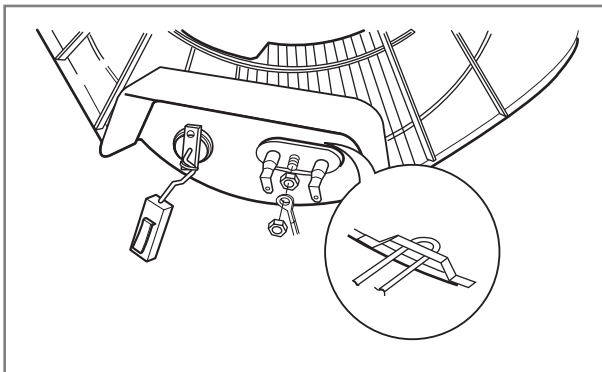
Take out any foreign material from the pump filter ( ③ ). After cleaning, turn the pump filter ( ③ ) clockwise and insert the drain plug ( ② ) to the original place. close the lower cover cap.

## PUMP



- ① Remove pump outlet hose.
- ② Remove tub pump bellows.
- ③ Remove cap (Remaining Hose.)
- ④ Disconnect the wiring.
- ⑤ Unscrew 2 screws.
- ⑥ Remove the pump.

## HEATER

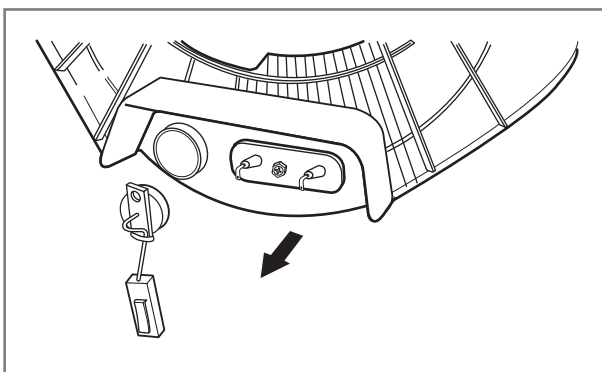


- ① Loosen the M6 heater nut to pull out the heater.

### CAUTION

When mounting the heater, be sure to insert the heater into the heater clip on the bottom of the tub.

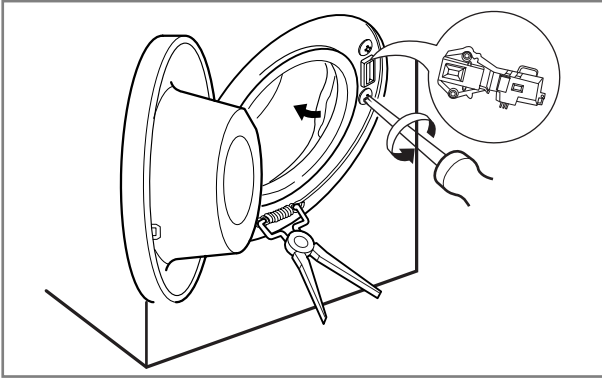
## THERMISTOR



- ① Pull it out by holding the thermistor bracket.
  - \* If it is pulled by the wire, it may be broken.
- ② When mounting the thermistor again, make sure that it is got back tight to the bushing.

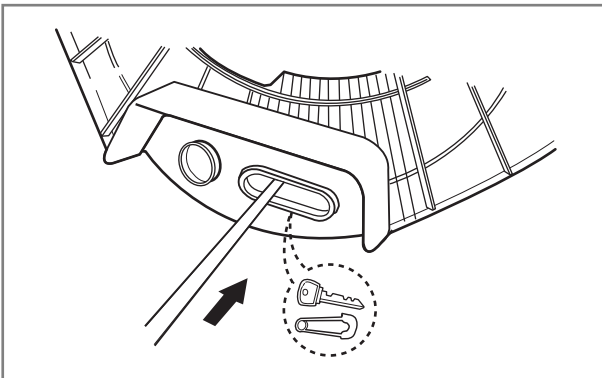


### SWITCH ASSEMBLY, DOOR LOCK



- ① Take apart the cabinet cover clamp and release the gasket.
- ② Unscrew 2 screws holding the door lock.
- ③ Disconnect the door lock from the wiring connector.

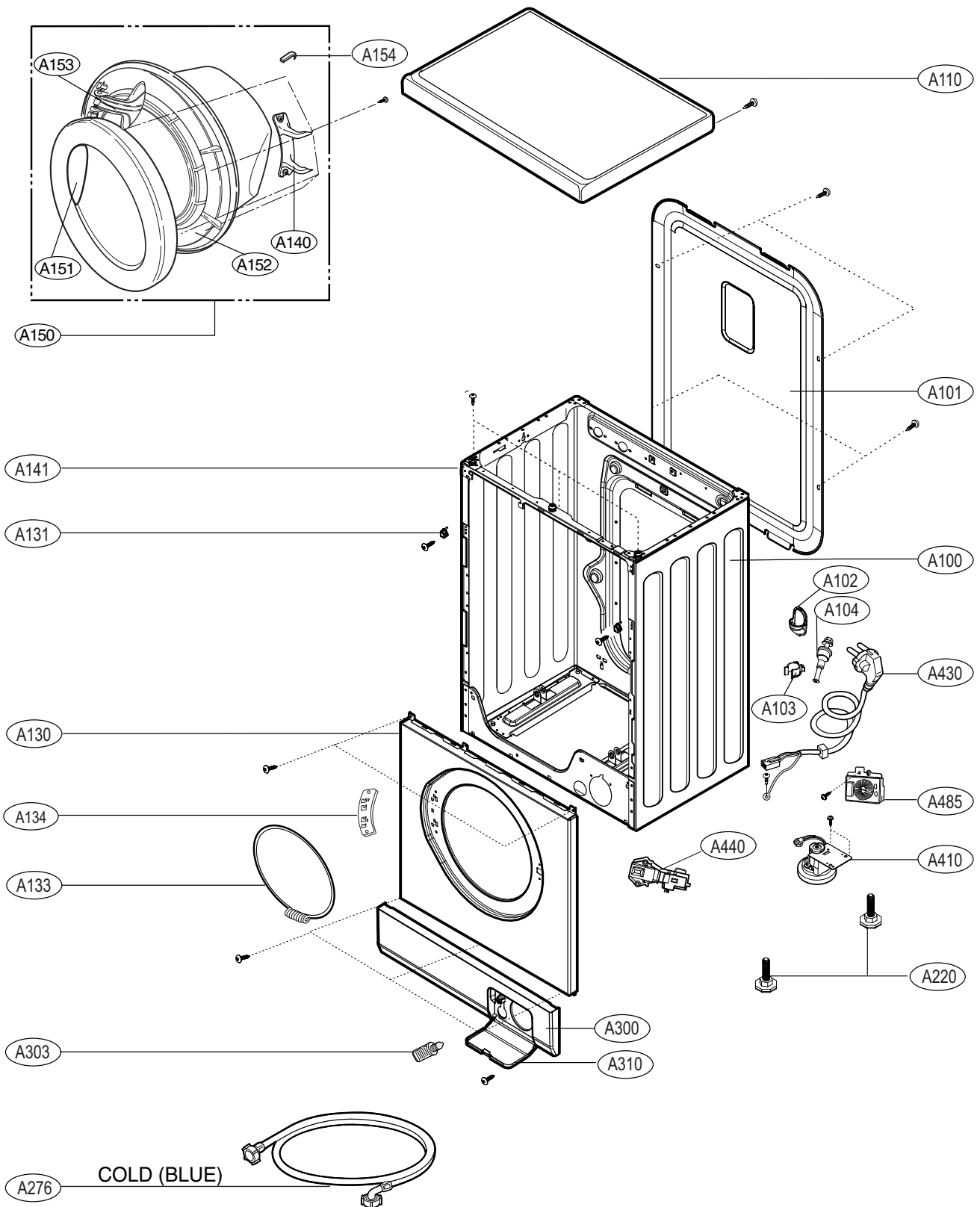
### WHEN FOREIGN MATERIAL IS STUCK BETWEEN DRUM AND TUB



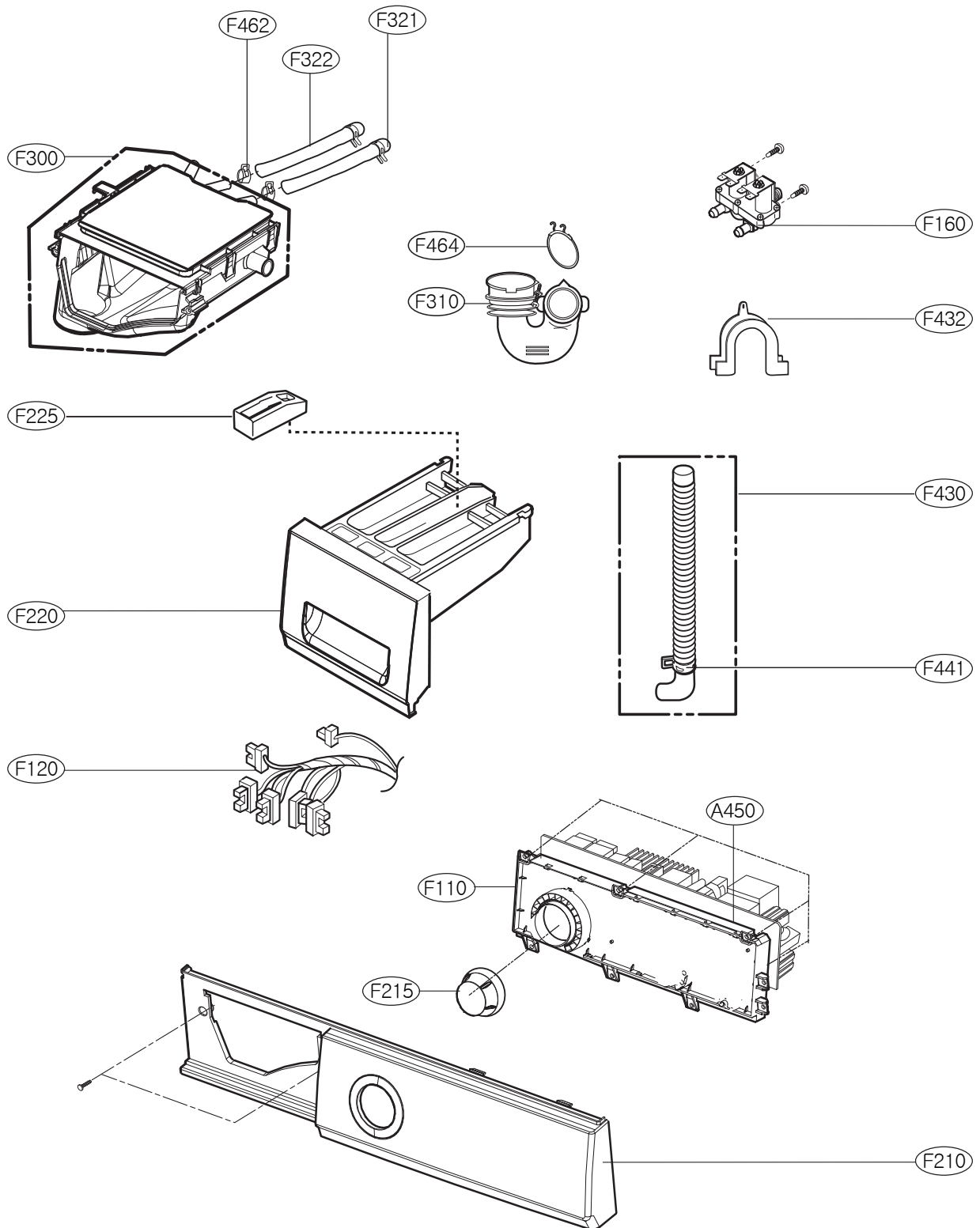
- ① Remove the heater.
- ② Remove the foreign material (wire, coin and others) by inserting a long bar through the hole.

# 10. EXPLODED VIEW

## 10-1. THE EXPLODED VIEW OF CABINET ASSEMBLY



# 10-2 THE EXPLODED VIEW OF CONTROL PANEL & DISPENSER ASSEMBLY



# 10-3 THE EXPLODED VIEW OF DRUM & TUB ASSEMBLY

