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# WASHING MACHINE SERVICE MANUAL

## **▲ CAUTION**

READ THIS MANUAL CAREFULLY TO DIAGNOSE  
PROBLEMS CORRECTLY BEFORE SERVICING THE UNIT.

**MODEL: WM1812CW/WM1814CW/WD-90286BD**



**LG Electronics Inc.**

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# 1. SPECIFICATIONS

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ITEM		WM1812CW/WM1814CW	WD-90286BD
COLOR		BLUE WHITE	TITANIUM
POWER SUPPLY		AC 120 V, 60 Hz	AC 127V, 60Hz
PRODUCT WEIGHT		173 lbs. (78.5 kg)	
ELECTRIC POWER CONSUMPTION	WASHING	280 W	
	DRAIN MOTOR	80 W	
	WASH HEATER	–	
REVOLUTION SPEED	WASH	46 rpm	
	SPIN	0-900 rpm	
CYCLES		5	
WASH/RINSE TEMPERATURES		5	
SPIN SPEEDS		5	
OPTIONS		Prewash, Quick Cycle, Extra Rinse, Rinse+Spin, Delay Wash	
CUSTOM PROGRAM		–	
WATER CIRCULATION		–	
OPERATIONAL WATER PRESSURE		4.5–116 psi (800 kPa)	
CONTROL TYPE		Electronic	
WASH CAPACITY		2.96 cu. ft (3.42 cu. ft. IEC)	
DIMENSIONS		27" (W) X 30 <sup>1</sup> / <sub>32</sub> " (D) X 38 <sup>11</sup> / <sub>16</sub> " (H), 50 <sup>13</sup> / <sub>16</sub> " (D, door open)	
DELAY WASH		up to 9 hours	
DOOR SWITCH TYPE		PTC + Solenoid	
WATER LEVEL		9 steps (by sensor)	
LAUNDRY LOAD SENSING		Incorporated	
ERROR DIAGNOSIS		Incorporated	
AUTO POWER OFF		Incorporated	
CHILD LOCK		Incorporated	

## 2. FEATURES & TECHNICAL EXPLANATION

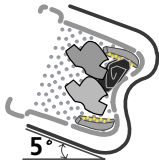
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### 2-1. FEATURES



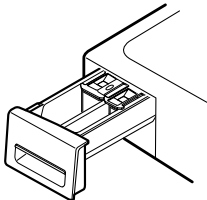
- **Direct Drive System**

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



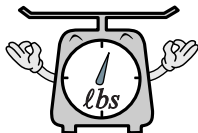
- **Tilted Drum and Large Door Opening**

Tilted drum and large opening make it possible to load and unload clothing more easily.



- **Time-Released Dispenser**

Detergent, fabric softener and bleach are dispensed separately at the right time during wash cycle.



- **Automatic Wash Load Detection**

Automatically detects the load and optimizes the washing time.



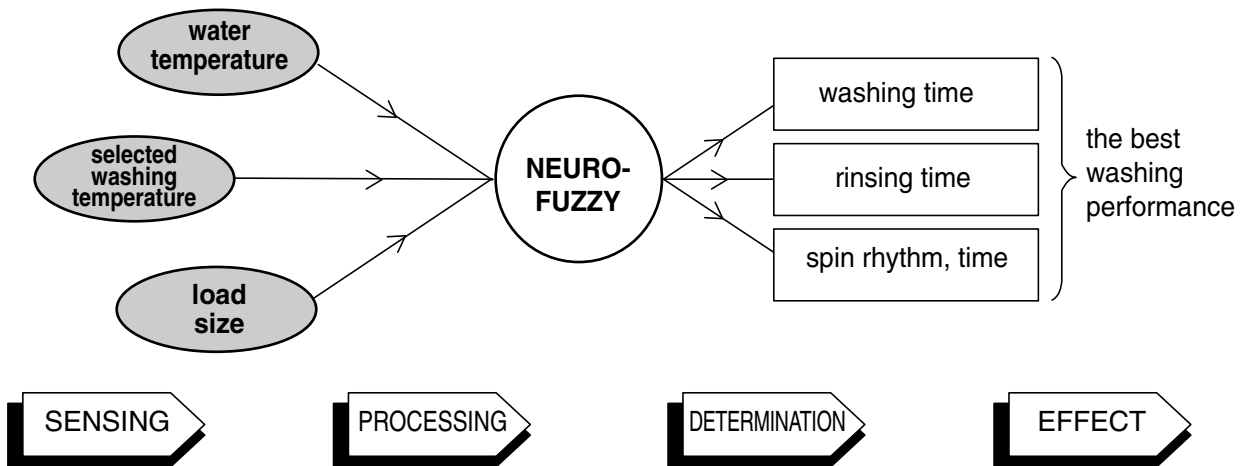
- **Child Lock**

The Child lock prevents children from pressing any button to change the settings during operation.

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## 2-2. NEURO FUZZY WASHING TIME OPTIMIZATION

To get the best washing performance, optimal time is determined by the water temperature, the selected washing temperature, and the size of the load.



## 2-3. WATER LEVEL CONTROL

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

## 2-4. DOOR CONTROL

- The door can be opened by pulling the door handle whenever washer is not in operation.
- When the cycle is completed, the DOOR LOCKED light will turn off.
- If a power failure has occurred while in operation, the door will unlock after 5 minutes.
- Clicking sounds can be heard when the door is locked/unlocked.

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## 2-5. THE DOOR CAN NOT BE OPENED

- While program is operating
- When a power failed and power plug is taken out in operation
- While Door Lock lights turn on.
- While the motor is in the process of inertial rotating, through the operation is paused.

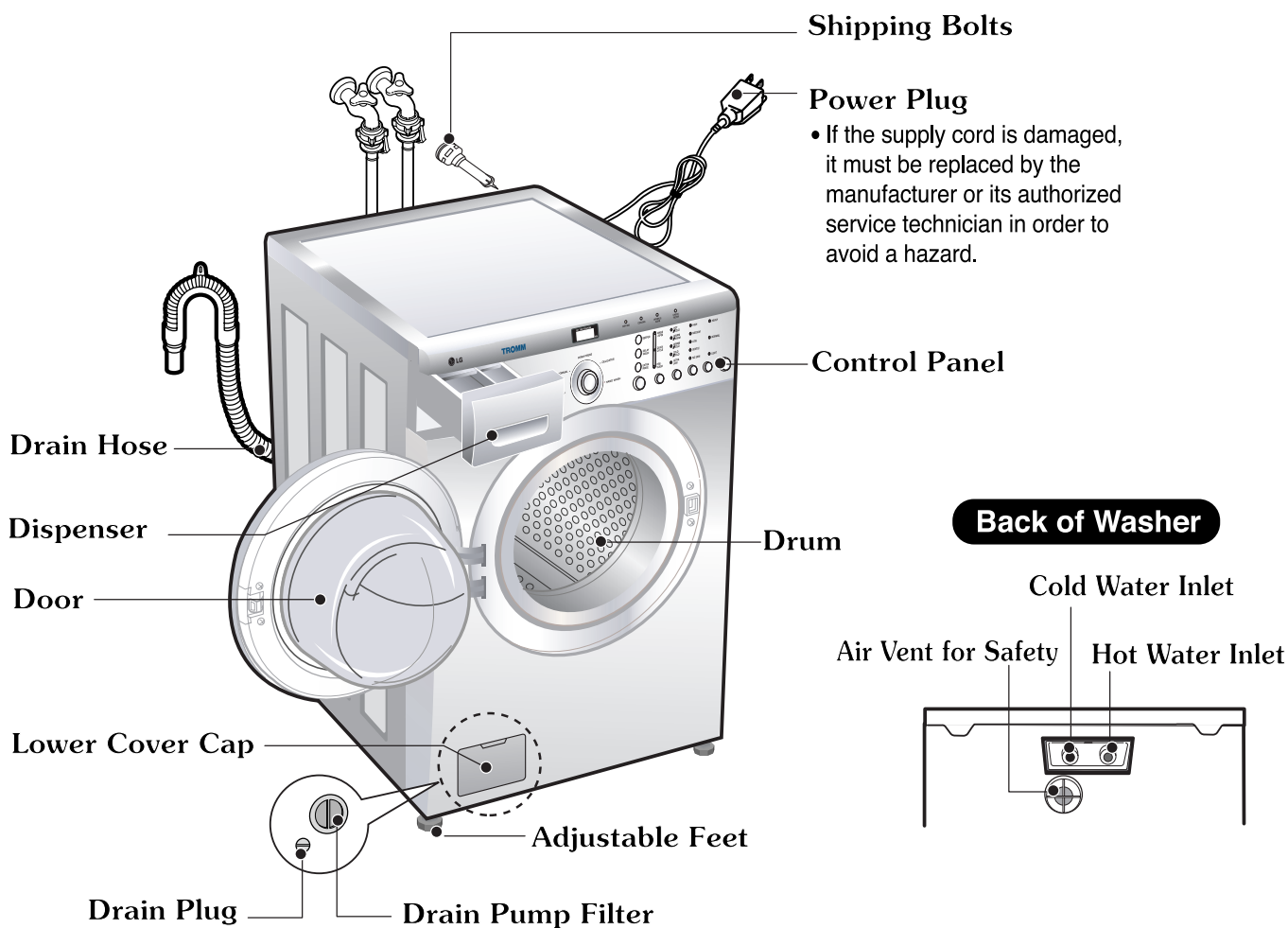
## 2-6. DOOR LOCKED LAMP LIGHTS

- When the frequency of water level is lower than 22.9 kHz  
(It can be canceled when the frequency is more than 23.8 kHz)
- When the temperature inside the tub is higher than 45 °C and water level is not 25.5 kHz  
(It can be canceled when the water level is 25.5 kHz or the temperature inside the tub is lower than 40 °C)

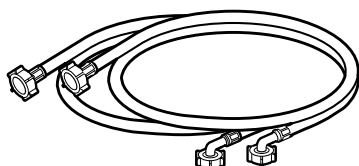
## 2-7. CHILD LOCK

- Use this option to prevent unwanted use of the washer. Press and hold OPTION button for 3 seconds to lock/unlock control.
- When Child lock is set, “ ” blinks and all buttons are disabled except the Power  button. You can lock the washer while it is operating.

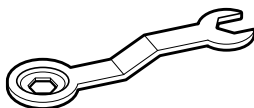
### 3. PARTS IDENTIFICATION



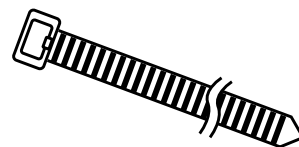
### ■ ACCESSORIES



Hot/Cold (1 each)  
Hose



Wrench



Tie strap  
to secure drain hose to standpipe,  
inlet hose, or laundry tub

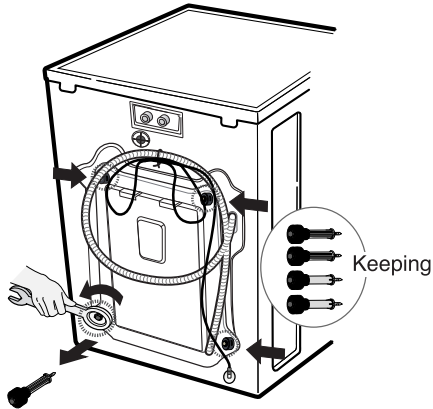
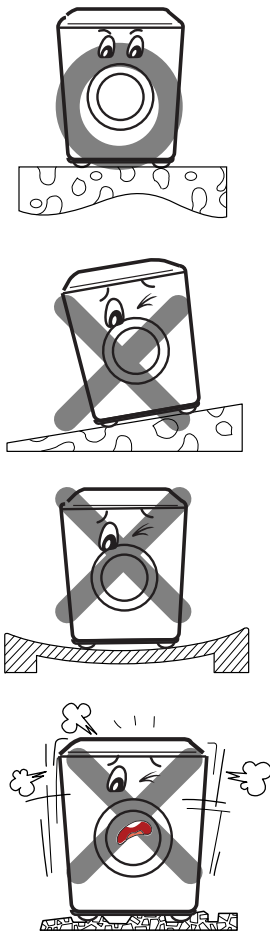
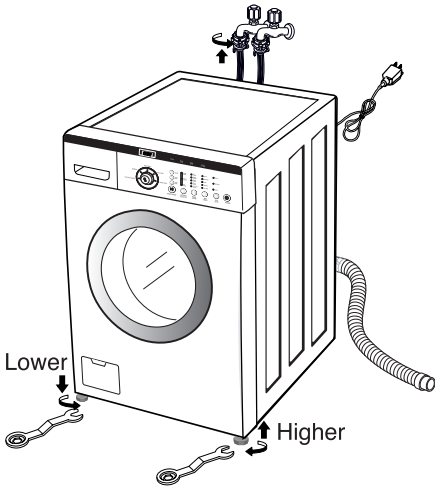


## 4. INSTALLATION & TEST

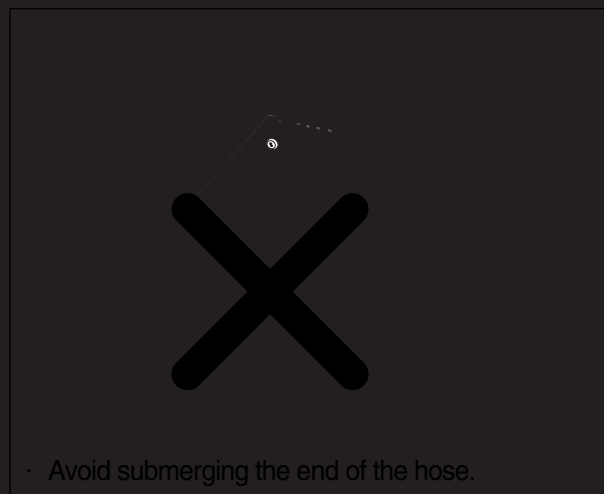
- ❶ Before servicing, ask the customer what the trouble is.
- ❷ Check the setup (power supply is 120 V AC, remove the transit bolts....).
- ❸ Check with the troubleshooting guide.
- ❹ Plan your service method by referring to the disassembly instructions.
- ❺ Service the unit.
- ❻ After servicing, operate the appliance to see whether it functions correctly.

### ■ STANDARD INSTALLATION

The appliance should be installed as follows:

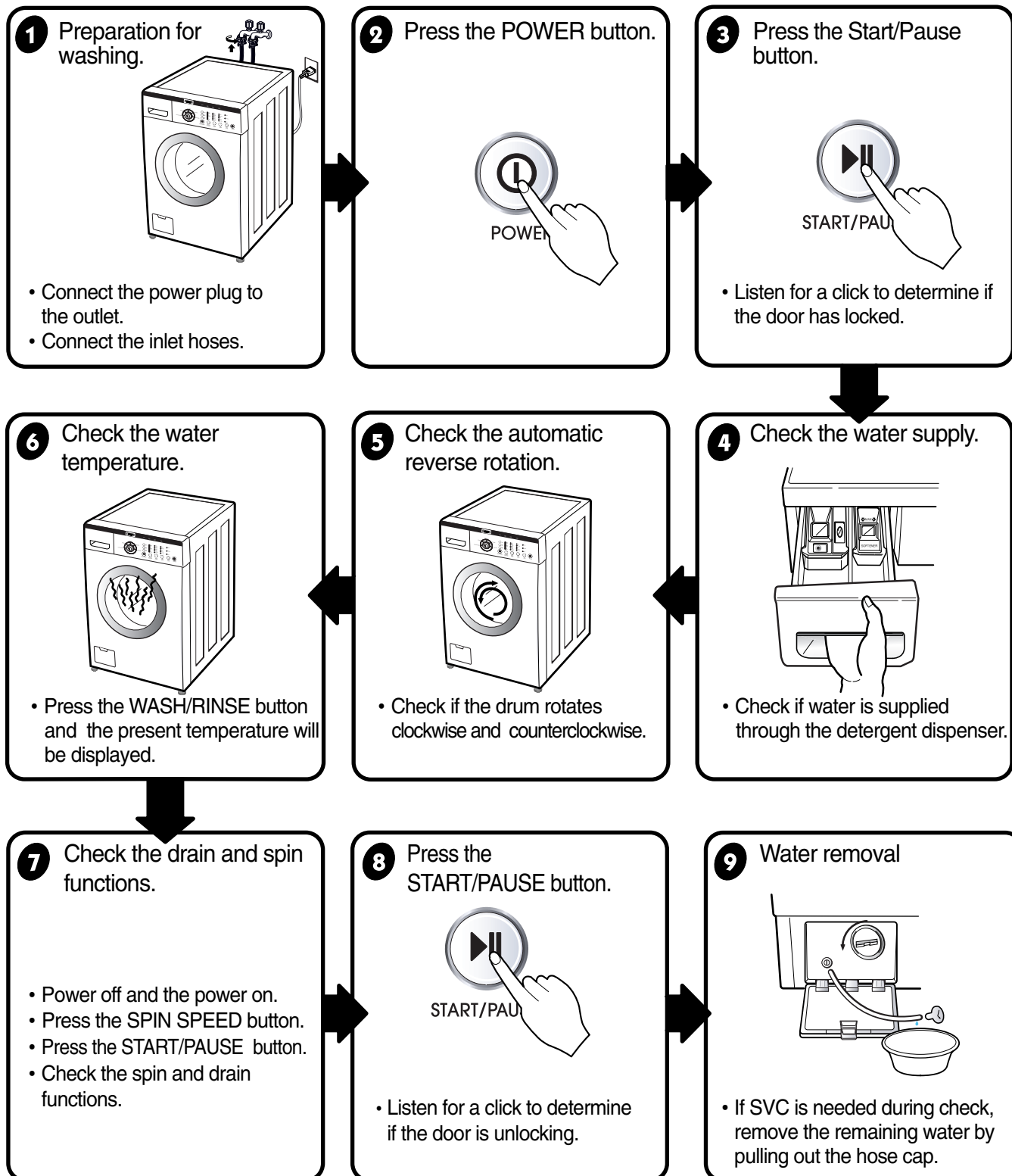
REMOVE THE SHIPPING BOLTS	INSTALL THE APPLIANCE ON A FLAT AND FIRM SURFACE	ADJUST THE LEVELING
<ul style="list-style-type: none"> <li>Remove the 4 shipping bolts with the supplied wrench.</li> <li>※ Do first lower side to remove easily.</li> <li>Keep the shipping bolts and spanner for future use.</li> <li>Insert the 4 caps (provided) into the hole.</li> </ul> 		<ul style="list-style-type: none"> <li>Turn the leveling feet to adjust the appliance.</li> </ul>  <ul style="list-style-type: none"> <li>Turn clockwise to raise; counterclockwise to lower.</li> </ul>

- Make sure that the hose is not twisted.



- Avoid submerging the end of the hose.

## 7 TEST OPERATION



## 5. OPERATION


### EST. TIME REMAINING

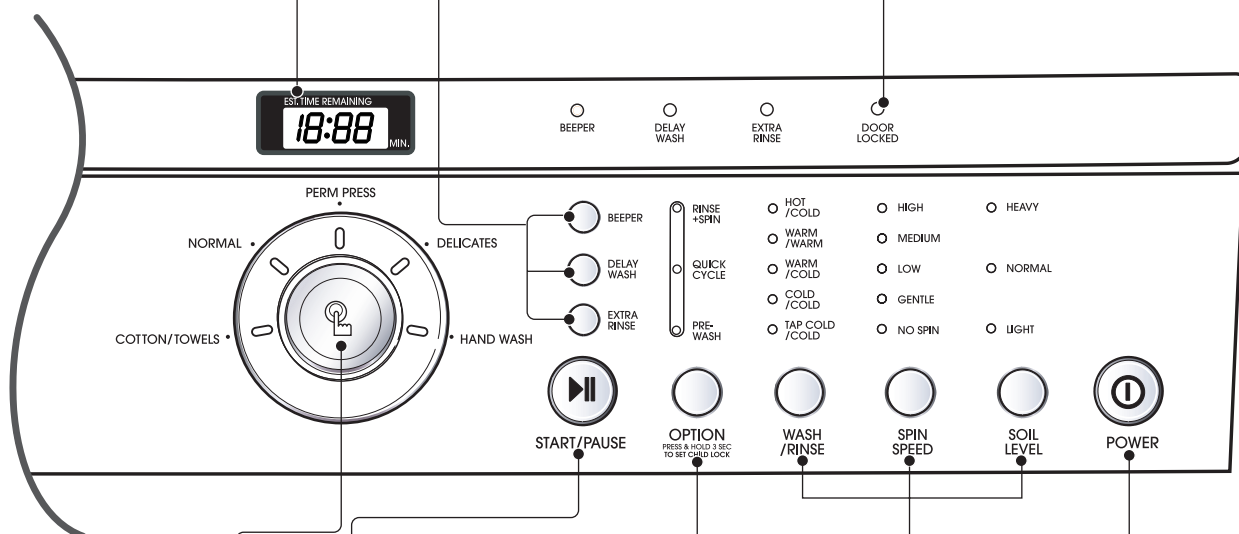
- This display shows:
  - a) the estimated time remaining in the cycle when operation.
  - b) an error code when an error has been detected.

### BEEPER, DELAY WASH, EXTRA RINSE button

- Use the Beeper button to turn the Beeper **On/Off**.
- Delay Wash allows the start of any cycle to be delayed for 1~9 hours.
- Extra Rinse provides an additional rinse.

### DOOR LOCKED lamp

- Light whenever the door of the washer is locked.
- The door can be unlocked by pressing the **Start/Pause**  button to stop the washer.



### CYCLE SELECTOR

- Press the **Cycle selector** to select cycle designed for different types of fabric and soil levels.

### OPTION button

- Prewash : Use this option for loads that need pretreatment. It adds 16 minutes prewash and drain.
- Quick Cycle : The Quick offers a quick cycle time.
- Rinse+Spin : Use this option to rinse and then spin.

### POWER button

- Use this button to turn power **On/Off**.

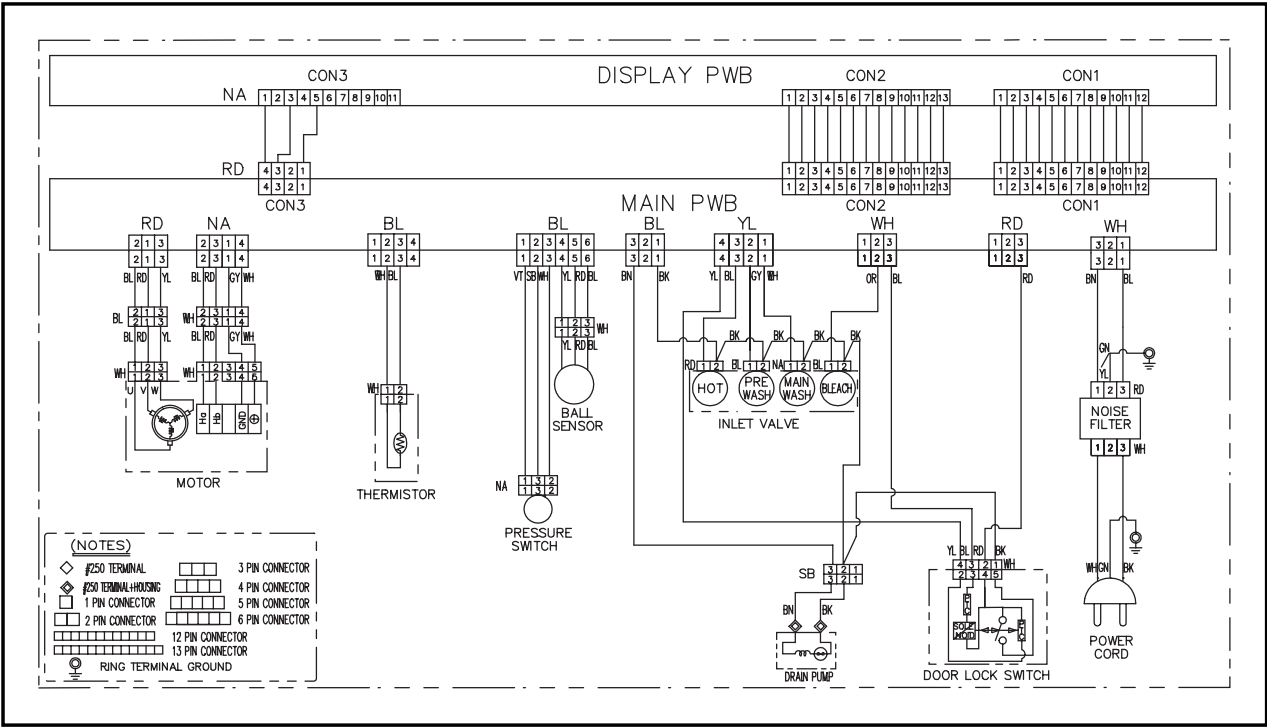
### START/PAUSE button

- Use this button to **start/stop** the washer.

### WASH,RINSE temp., SPIN SPEED, SOIL LEVEL button

- Select a water temperature based on the type of load you are washing.
- To change the spin speed, press the Spin Speed button repeatedly to cycle through available options.
- To change the soil level, press the Soil Level button repeatedly until the desired setting is on.

# 6. WIRING DIAGRAM/PROGRAM CHART



PROGRAM CHART

\* Water Supply: W-S      \* Intermittent Spin: I-S      \* Disentangle: D-T

CYCLE STEP Time (SEC)	Wash										Rinse										Spin			A U T O O F F  Time (Minutes)																												
	Pre				Main						Normal					Extra or Stain					Extra & Stain																															
	W I S	Wash	Drain	I S	W I S	Wash		Cool-down		W I S	Rinse	Drain	1		2		3		3			Drain	Spin		D I T																											
						Heat	Wash	W I S	Rinse				Drain	I S	W I S	Rinse	Drain	I S	W I S	Rinse	Drain					I S	W I S	Rinse																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	20	20																						
	60	★	60	300	60		★	60	60	60	60	360	60	240	60	360	60	240	60	300	60	240	60	300	60	240	60	360 ~ 660	60 ~ 180	20	20																					
Cotton /Towels		8					13																								58																					
Normal		8					20																								57																					
Perm Press		8					19																								55																					
Delicates		8					18																								34																					
Hand Wash							14																								34																					
Drain+Spin																																																				12
Wash + Rinse		8					19																									45																				
Rinse + Spin																																																				29

Basic Cycle  
Optional Cycle  
Pre-Setting Time : Water Supply - 60 sec.  
Drain - 60 sec.

\* Wash time is in minutes.  
\*\* The total working time will vary with the load size, water temperature and ambient temperature.



# 7. TROUBLESHOOTING


## 7-1. BEFORE PERFORMING SERVICE

- Be careful of electric shock when disconnecting parts while troubleshooting.
- The voltage of each terminal is 120 V AC and DC when the unit is plugged in.

## 7-2. QC TEST MODE.

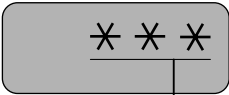
The washer must be empty and the controls must be in the off state.

1. Press the SPIN SPEED and SOIL LEVEL buttons simultaneously.
2. Press the Power  button, while the above condition. Then buzzer will sound twice.
3. Press the Start/Pause  button repeatedly to cycle through the test modes.

Number of times the Start/Pause button is pressed	Check Point	Display Status
None	Turns on all lamps and locks the door.	
1 time	Tumble clockwise.	rpm (40~50)
2 times	Low speed Spin.	rpm
3 times	High speed Spin.	rpm
4 times	Inlet valve for prewash turns on.	Water level frequency (25~65)
5 times	Inlet valve for main wash turns on.	Water level frequency (25~65)
6 times	Inlet valve for hot water turns on.	Water level frequency (25~65)
7 times	Inlet valve for bleach turns on.	Water level frequency (25~65)
8 times	Tumble counterclockwise.	rpm (40~50)
9 times	Water temperature (Thermistor)	Water temperature [°C]
10 times	Drain pump turns on.	Water level frequency (25~65)
11 times	Power off and unlock the door.	Turn off all lamps.

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

\* Press the SPIN SPEED and SOIL LEVEL button simultaneously.
















● The digits indicate the water level frequency ( x.1 kHz ).

So, for example a display indicating 241: a Water level frequency of 241 x.1 kHz  
= 24.1 kHz

## 7-4. ERROR DISPLAY

- If you press the START/PAUSE button when an error is displayed, any error except 『PE』 will disappear and the machine will go into the pause status.
- In case of 『PE』, 『UE』, 『dE』 if the error is not resolved within 20 sec., or the in case of other errors, if the error is not resolved within 4 min., power will be turned off automatically and the error code will blink. But in the case of 『FE』, power will not be turned off.

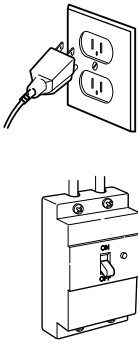


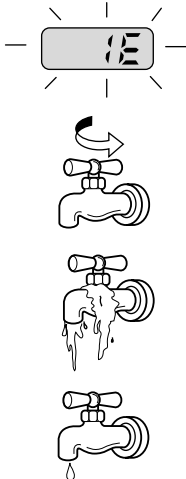
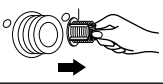
	ERROR	SYMPTOM	CAUSE
1	WATER INLET ERROR		<ul style="list-style-type: none"> <li>• Correct water level (246) is not reached within 8 minutes after water is supplied or it does not reach the preset water level within 25 minutes.</li> </ul>
2	IMBALANCE ERROR		<ul style="list-style-type: none"> <li>• The load is too small.</li> <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>• Not fully drained within 10 minutes.</li> </ul>
4	OVER FLOW ERROR		<ul style="list-style-type: none"> <li>• Water is overflowing (water level frequency is over 213). ※ If  is displayed, the drain pump will operate to drain the water automatically.</li> </ul>
5	PRESSURE SENSOR ERROR		<ul style="list-style-type: none"> <li>• The SENSOR SWITCH ASSEMBLY is out of order.</li> </ul>
6	DOOR OPEN ERROR		<ul style="list-style-type: none"> <li>• Door not all the way closed.</li> <li>• Loose electrical connections at Door switch and PWB Assembly.</li> <li>• The DOOR SWITCH ASSEMBLY is out of order.</li> </ul>
7	THERMISTOR ERROR		<ul style="list-style-type: none"> <li>• The THERMISTOR is out order.</li> </ul>


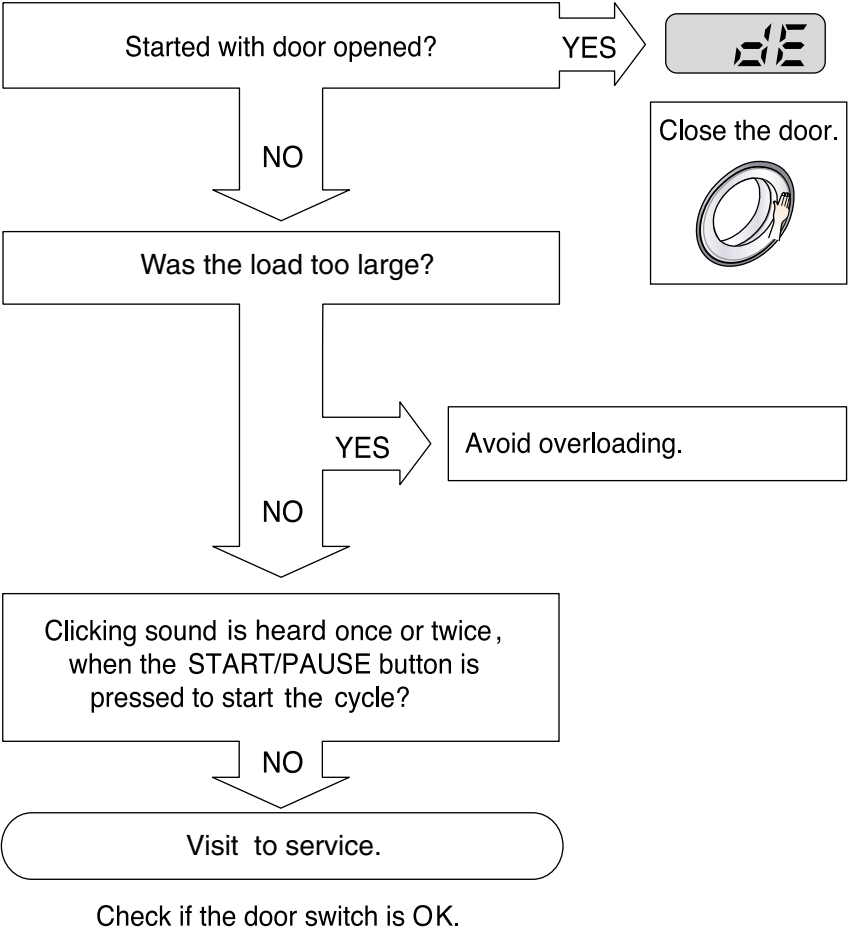

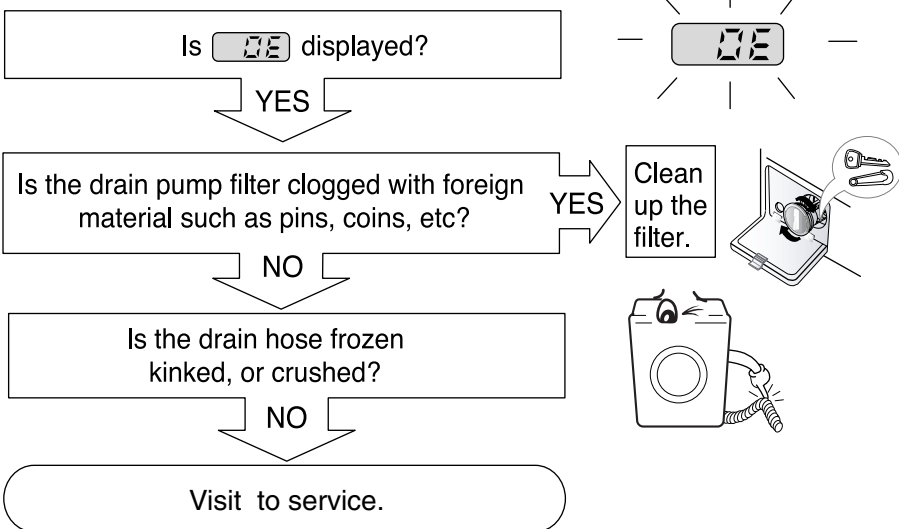
	ERROR	SYMPTOM	CAUSE
8	OVER CURRENT ERROR		<ul style="list-style-type: none"> <li>• MAIN PWB ASSEMBLY is out of order.</li> <li>• Winding in the STATOR ASSEMBLY is short-circuited.</li> </ul>
9	LOCKED MOTOR ERROR		<ul style="list-style-type: none"> <li>• The connector (3-pin, male, white) in the MOTOR HARNESS is not connected to the connector (3-pin, female, white) of STATOR ASSEMBLY.</li> <li>• The electric contact between the connectors (3-pin, male, white) in the MOTOR HARNESS and 4-pin, female, white connector in the MAIN PWB ASSEMBLY is bad or unstable.</li> <li>• The MOTOR HARNESS between the STATOR ASSEMBLY and MAIN PWB ASSEMBLY is cut (open circuited).</li> <li>• The hall sensor is out of order/defective.</li> </ul>
10	BALL SENSOR ERROR		<ul style="list-style-type: none"> <li>• Loose Ball Sensor Connector.</li> <li>• Ball Sensor is out of order.</li> </ul> <p>※ Displayed only when the START/PAUSE button is first pressed in the QC Test Mode.</p>
11	EEPROM ERROR		<ul style="list-style-type: none"> <li>• EEPROM is out of order.</li> </ul> <p>※ Displayed only when the START/PAUSE button is first pressed in the QC Test Mode.</p>
12	POWER FAILURE		<ul style="list-style-type: none"> <li>• The washer experienced a power failure.</li> </ul>

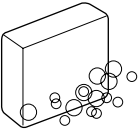
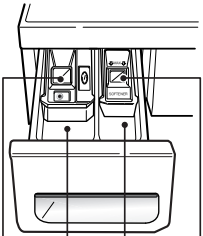
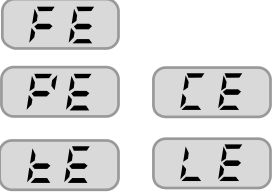


## 8. ERROR DIAGNOSIS AND CHECK LIST

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

SYMPTOM	GUIDE FOR SERVICE CALL
<p>No power</p>	<div data-bbox="565 539 1120 909"> <p>Is the power plug connected firmly to 120 V AC outlet?</p> <p>YES</p> <p>Power failure? or Breaker opened? Is the outlet controlled by a switch?</p> <p>NO</p> <p>Visit to service.</p> </div> <div data-bbox="1203 546 1341 887">  </div>
<p>Water inlet trouble</p> <div data-bbox="261 1111 423 1173">  </div>	<div data-bbox="565 1014 1120 1832"> <p>Is  displayed?</p> <p>YES</p> <p>Is the tap opened?</p> <p>YES</p> <p>Is the tap frozen?</p> <p>NO</p> <p>Is the water supply shut-off?</p> <p>NO</p> <p>Is filter in the inlet valve clogged with foreign material?</p> <p>YES</p> <p>NO</p> <p>Visit to service.</p> </div> <div data-bbox="1179 1025 1365 1503">  </div> <div data-bbox="1195 1518 1422 1720"> <p>Clean the filter of inlet valve</p>  </div>

SYMPTOM	GUIDE FOR SERVICE CALL
<p>Door error</p> 	 <pre> graph TD     Q1[Started with door opened?] -- YES --&gt; A1[dE display and 'Close the door.' instruction with door icon]     Q1 -- NO --&gt; Q2[Was the load too large?]     Q2 -- YES --&gt; A2[Avoid overloading.]     Q2 -- NO --&gt; Q3[Clicking sound is heard once or twice, when the START/PAUSE button is pressed to start the cycle?]     Q3 -- NO --&gt; A3[Visit to service.]     A3 --&gt; A4[Check if the door switch is OK.] </pre>
<p>Drain trouble</p> 	 <pre> graph TD     Q1[Is dE displayed?] -- YES --&gt; Q2[Is the drain pump filter clogged with foreign material such as pins, coins, etc?]     Q2 -- YES --&gt; A1[Clean up the filter.]     Q2 -- NO --&gt; Q3[Is the drain hose frozen kinked, or crushed?]     Q3 -- NO --&gt; A2[Visit to service.] </pre>

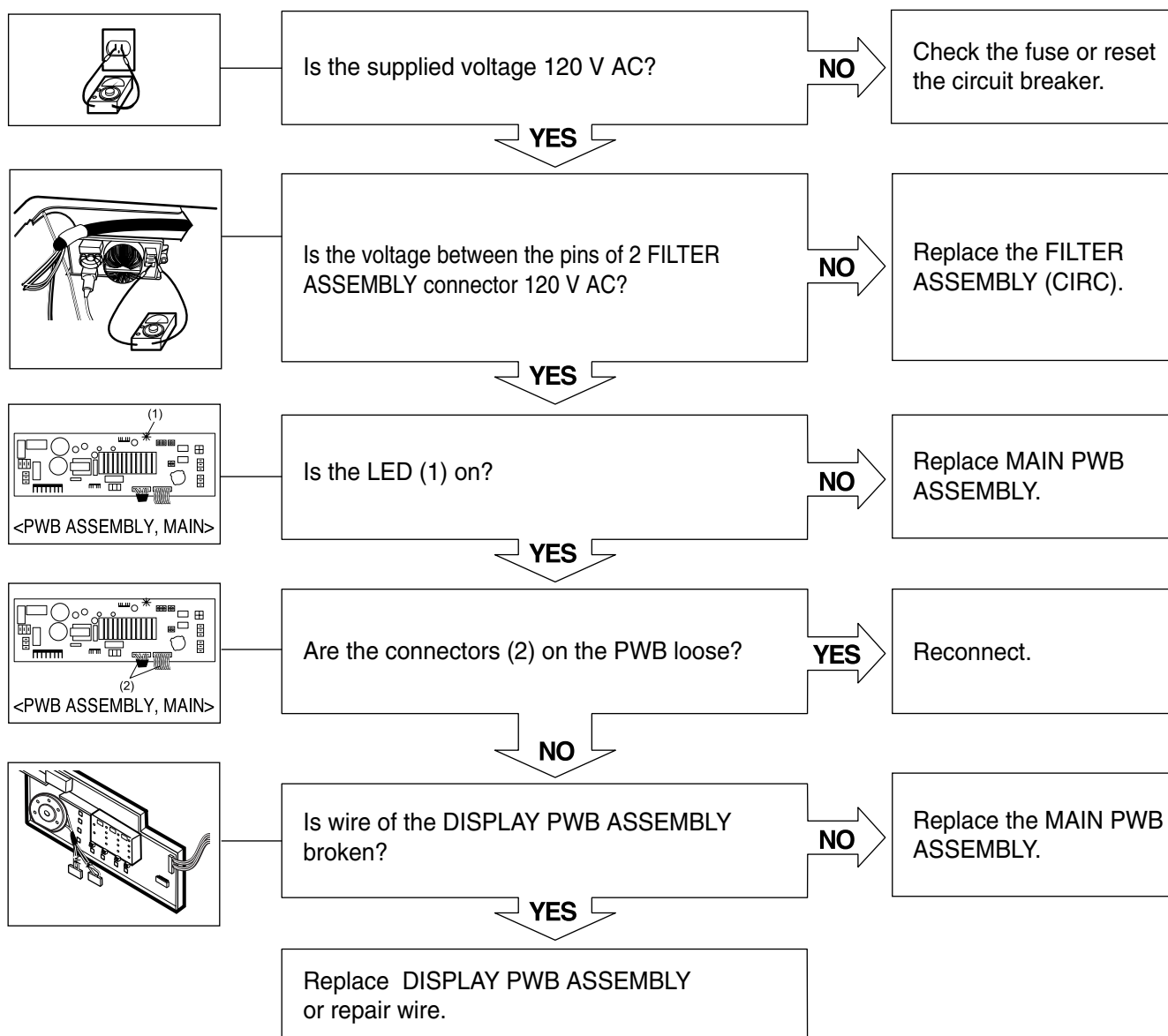
SYMPTOM	GUIDE FOR SERVICE CALL
<p>Suds overflow from the appliance. (In this condition, wash and spin do not operate normally)</p>	<div data-bbox="586 394 1146 495">Is a low-sudsing detergent used?</div> <div data-bbox="797 495 935 539">YES</div> <div data-bbox="586 551 1146 651">Is the proper amount of detergent used as recommended?</div> <div data-bbox="797 651 935 696">YES</div> <div data-bbox="586 696 1146 797">Recommend to reduce the amount of detergent.</div> <div data-bbox="630 819 1354 976"> <ul style="list-style-type: none"> <li>* This appliance has an automatic suds sensing function which prevents overflow.</li> <li>* When excessive suds are sensed, the suds removing implementations such as drain, water input, pause will operate, without rotating the drum.</li> </ul> </div> <div data-bbox="1214 409 1401 573">  <p>LOW-SUDSING</p> </div>
<p>Liquid laundry products do not flow in.</p>	<div data-bbox="586 1070 1146 1171">Is liquid laundry product put in the correct compartment of the dispenser?</div> <div data-bbox="797 1171 935 1339">YES</div> <div data-bbox="586 1350 1146 1417">Is the cap clogged?</div> <div data-bbox="797 1417 935 1462">YES</div> <div data-bbox="586 1462 1146 1541">Explain proper use of liquid laundry products.</div> <div data-bbox="618 1552 911 1585">Clean the compartment.</div> <div data-bbox="1179 1149 1414 1503">  <p>(1) Liquid chlorine Bleach Compartment (2) Liquid fabric Softener Compartment (3) Prewash Compartment (4) Main Wash Compartment</p> </div>
	<div data-bbox="586 1686 1146 1753">Visit to service.</div>

## 8-2. FAULT DIAGNOSIS AND TROUBLESHOOTING

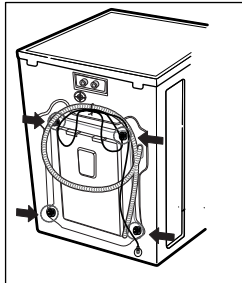
### CAUTION

1. Be careful of electric shock if disconnecting parts while troubleshooting.
2. First of all, check the connection of each electrical terminal with the wiring diagram.
3. If you replace the MAIN PWB ASSEMBLY, reinsert the connectors correctly.

### NO POWER



## VIBRATION & NOISE IN SPIN



Have all the transit bolts and base packing been removed?

**NO**

Remove the transit bolts and Base packing.

**YES**

Is the washer installed on a solidly constructed floor?

**NO**

Move the washer or reinforce the floor.

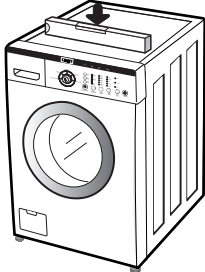
**YES**



Base Packing

Check if the washer is perfectly level as follows:

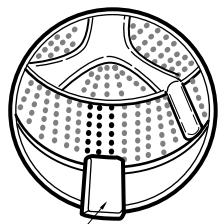
Level



Check the leveling of the washer with a Level and check that the washer is stable.

Put an unbalance part (rubber) inside of drum and start QC test mode and run in high spin (Refer to section 7-2).

When the machine is spinning in high speed, verify that it is stable.

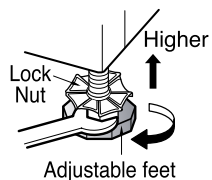


Unbalance Part

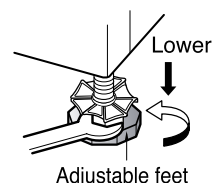
If you do not have the unbalance part, put 4.5 to 6.5 lbs (2 to 3 kg) of clothing. Once loaded, press power, Rinse+Spin and the start/pause button in sequence.

When the machine is spinning in high speed, verify that it is stable.

**YES**



If it is not stable, adjust feet accordingly. After the washer is level, tighten the lock nuts up against of the base of the washer. All lock nuts must be tightened.

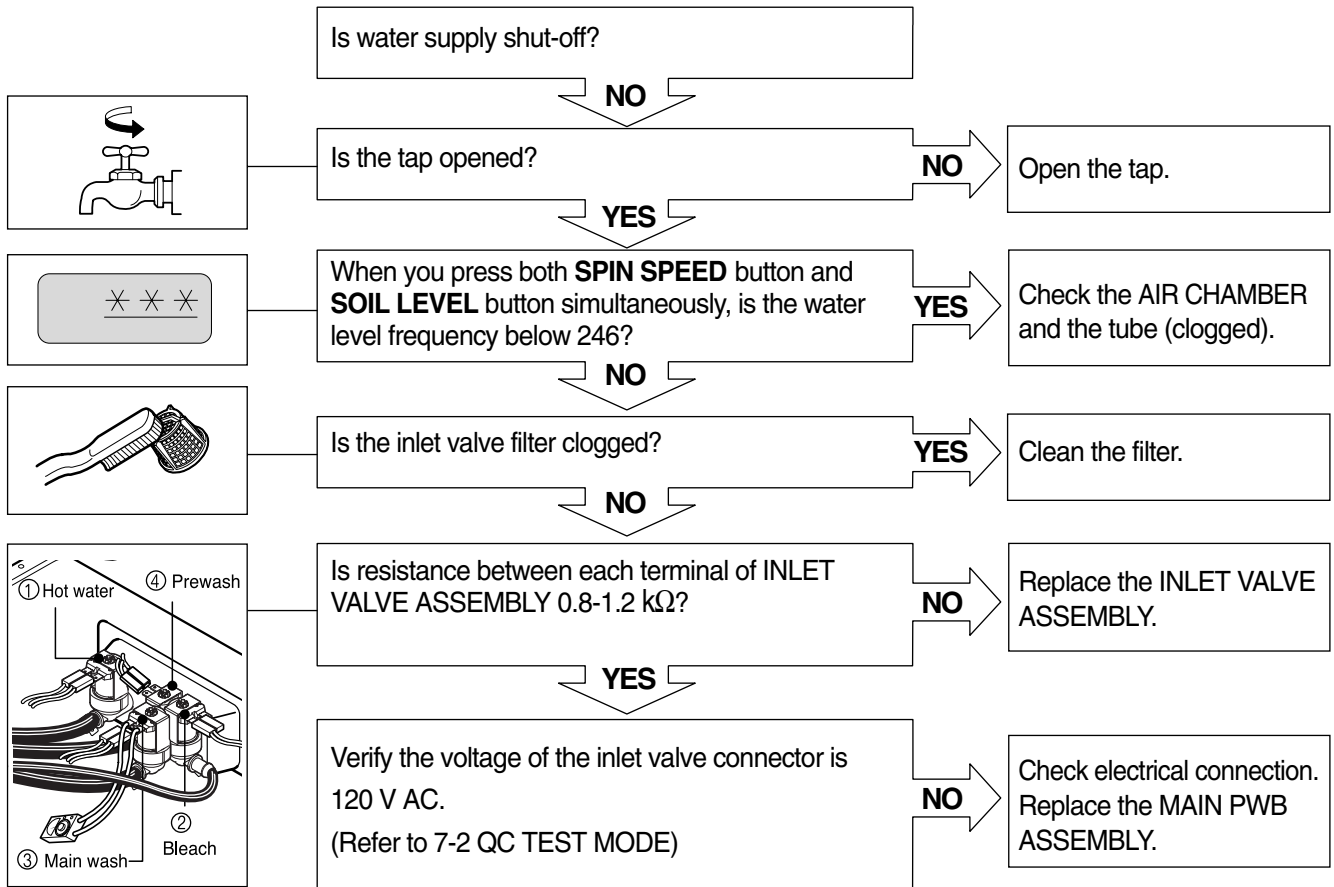


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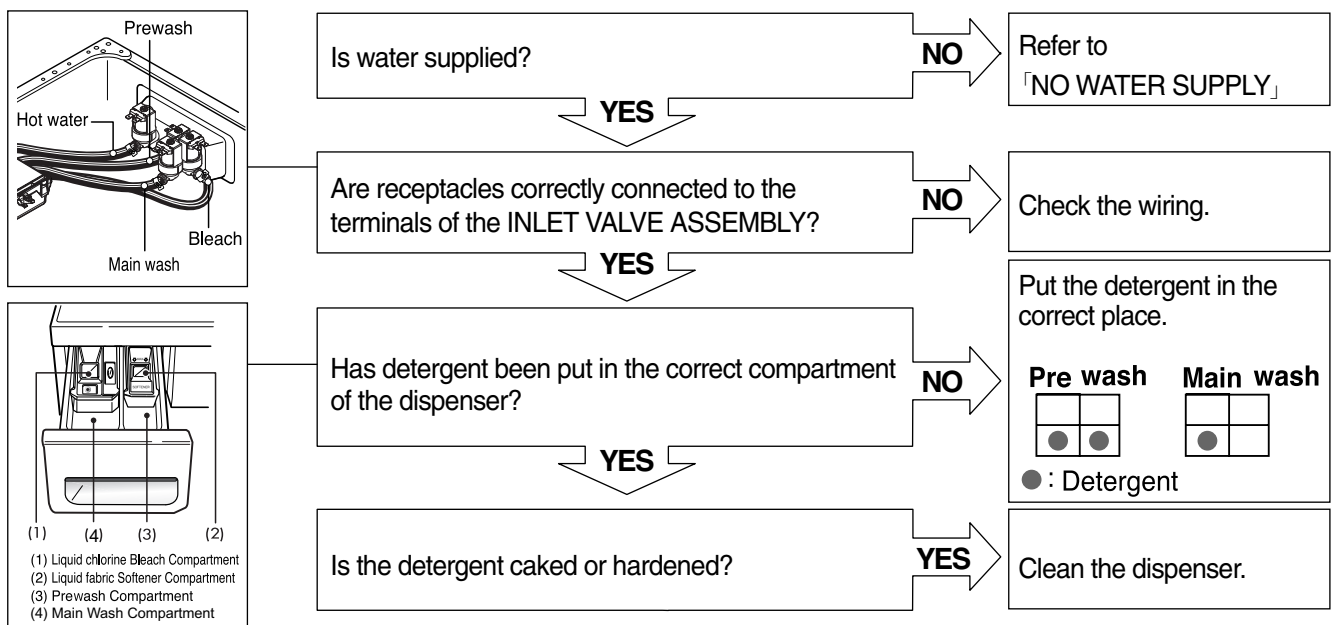
If it still has severe vibration and noise, regulate a specific spin speed that generates excessive vibration and noise as follows:

- 1) Put an unbalance part (rubber) inside of the drum.
  - 2) Start the QC test mode (Refer to section 7-2).
  - 3) Press Delay Wash button, then ' ㄹ ㄷ ㄹ ' is displayed.
  - 4) Press the Spin Speed button repeatedly to select HIGH.
  - 5) Press the Start/Pause button.
  - 6) Press the Beeper button repeatedly to set spin speed (600, 700, 800, 900, 1000 rpm) and check if there is vibration and noise.
  - 7) If there is no vibration and noise, increase the spin speed by pressing Beeper button.
  - 8) If there is vibration and noise, press the Cycle selector button to reduce the Spin Speed (reduce by 50 and 100 rpm). In case of 600 rpm, it can not reduce the spin speed.
  - 9) If vibration and noise are reduced, press the WASH/RINSE button to store (2 beep sounds).
- \* If you want to return to factory default spin speed setting, repeat above steps except step 8).

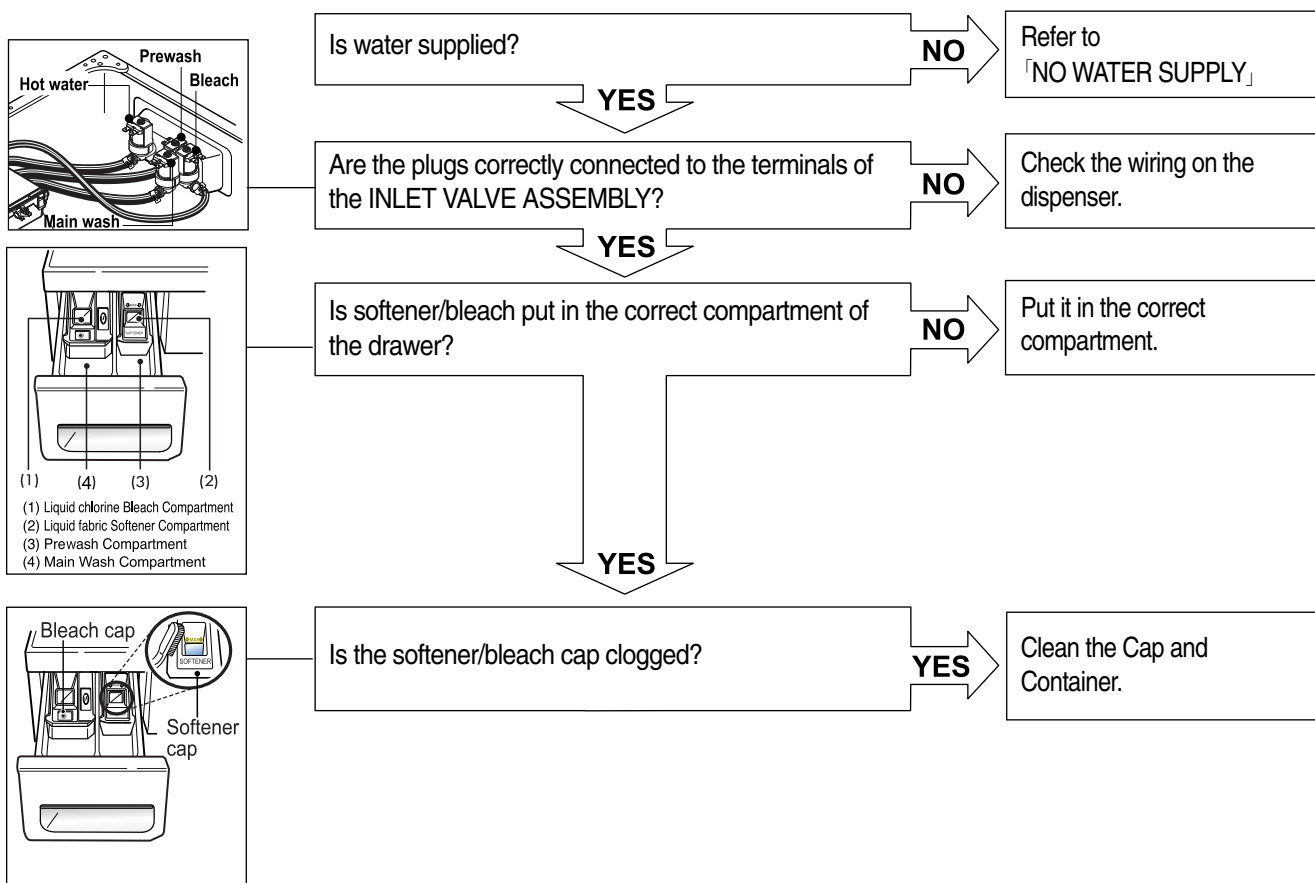
## NO WATER SUPPLY



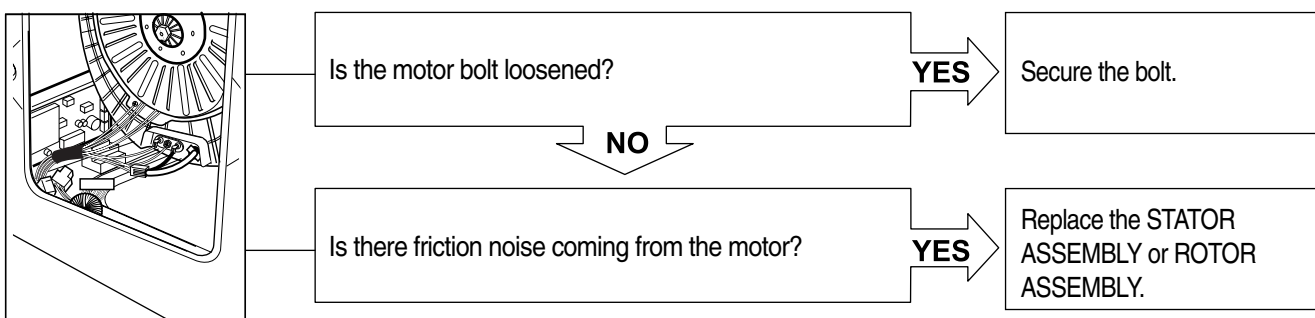
## DETERGENT DOES NOT FLOW IN



## SOFTENER/BLEACH DOES NOT FLOW IN

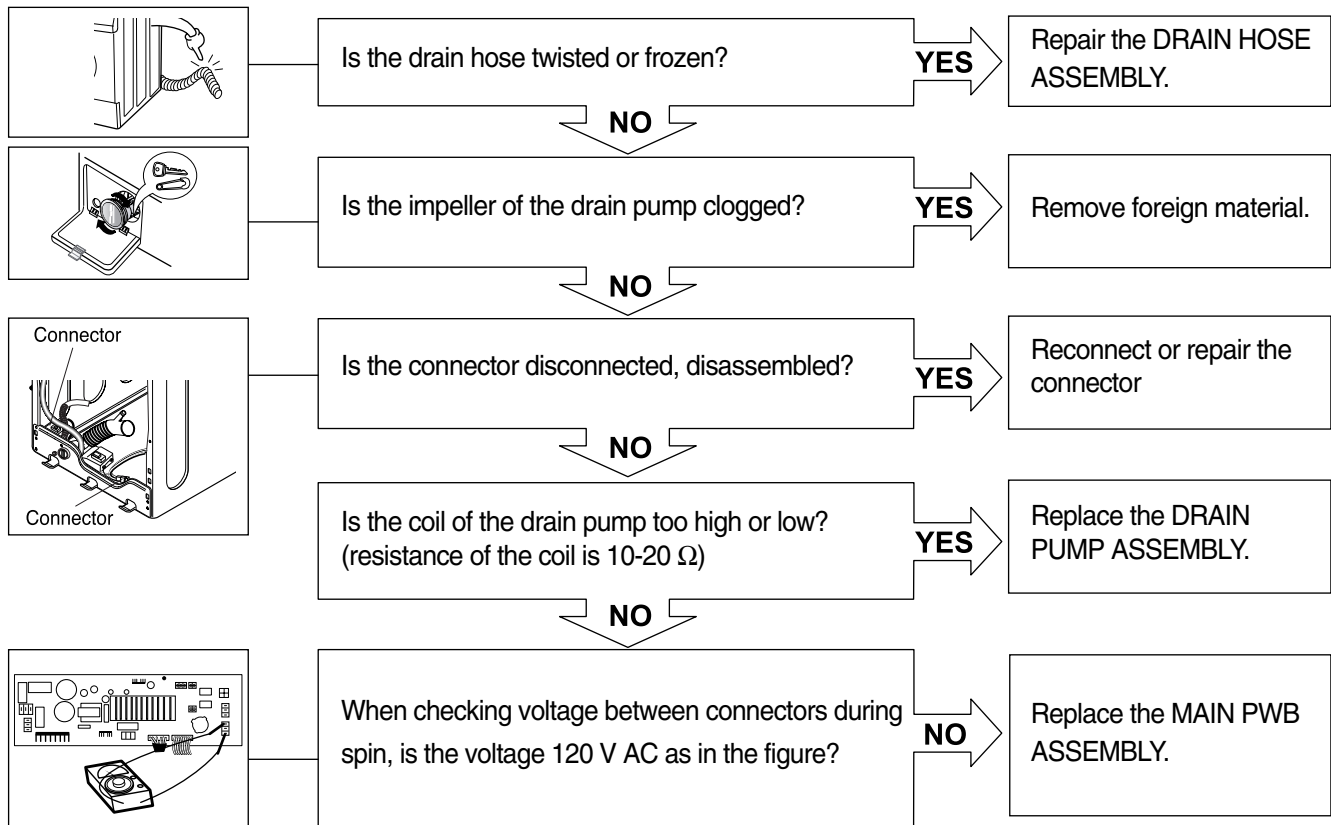


## ABNORMAL SOUND

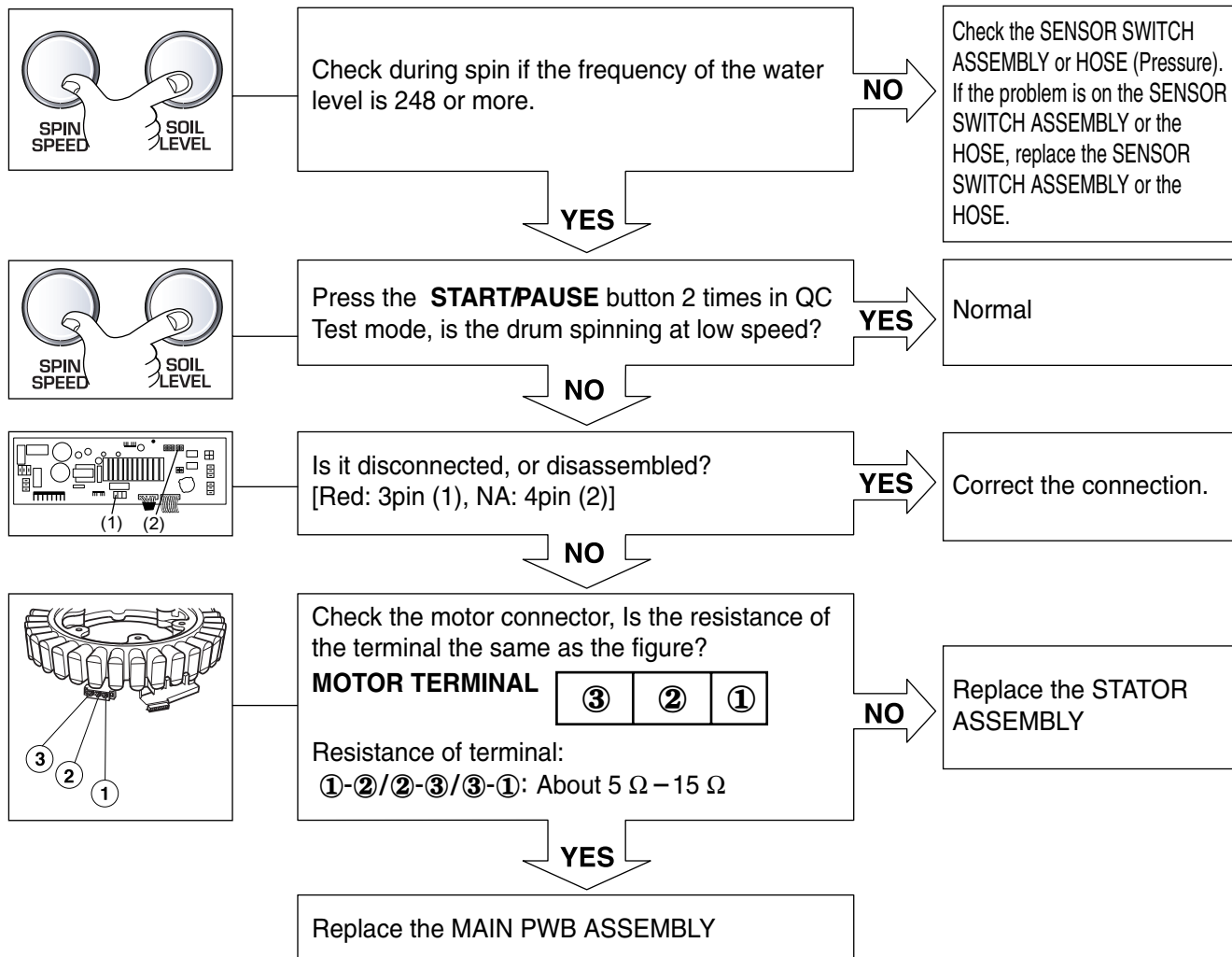




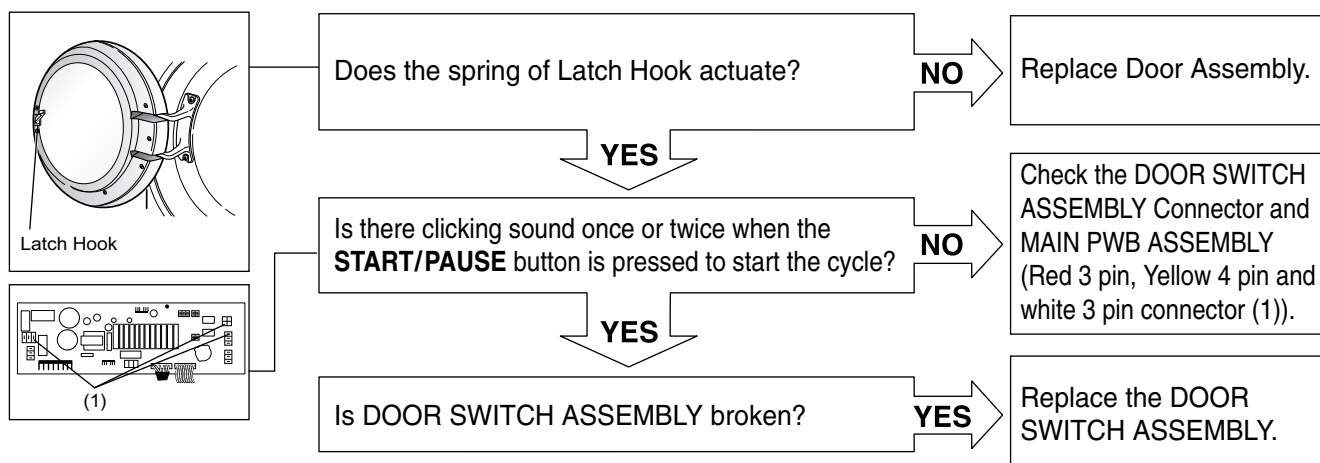
## DRAIN MALFUNCTION



## SPIN TROUBLE



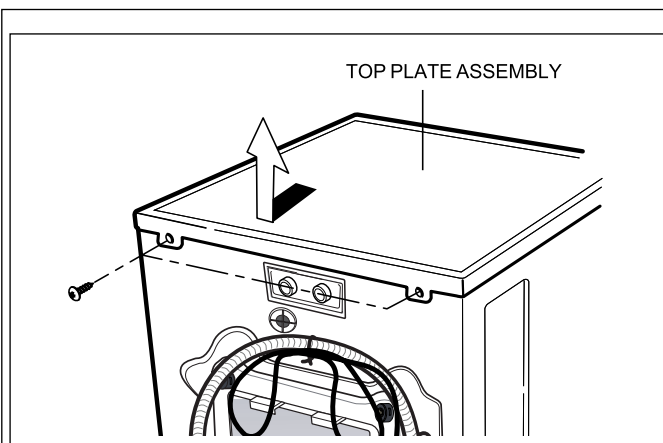
## ERROR



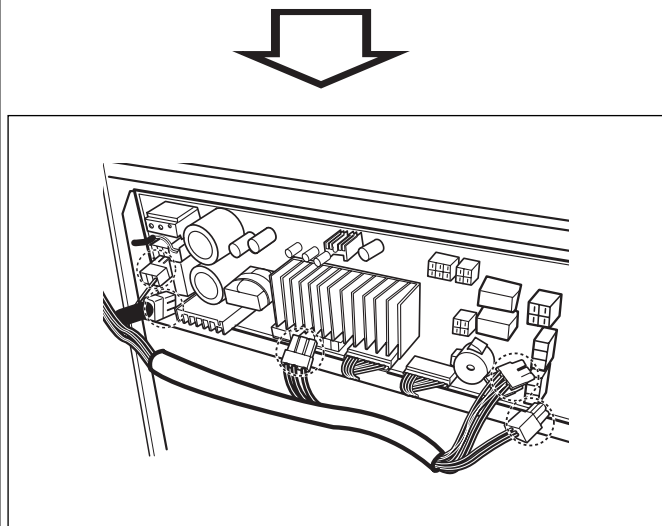
## 9. DISASSEMBLY INSTRUCTIONS

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

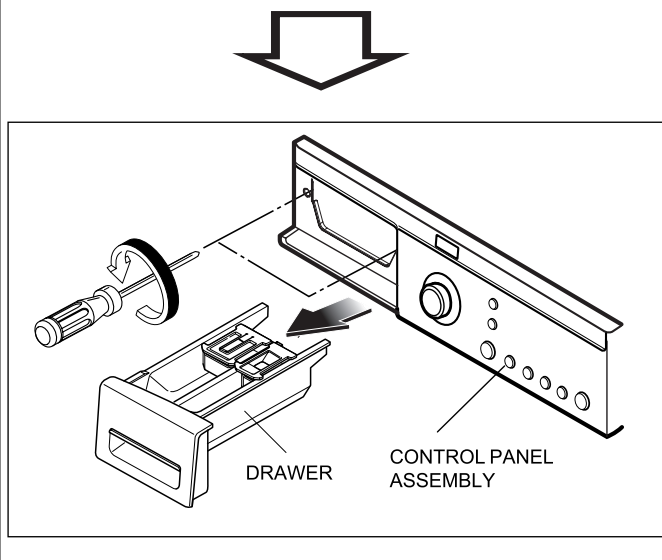
### CONTROL PANEL ASSEMBLY



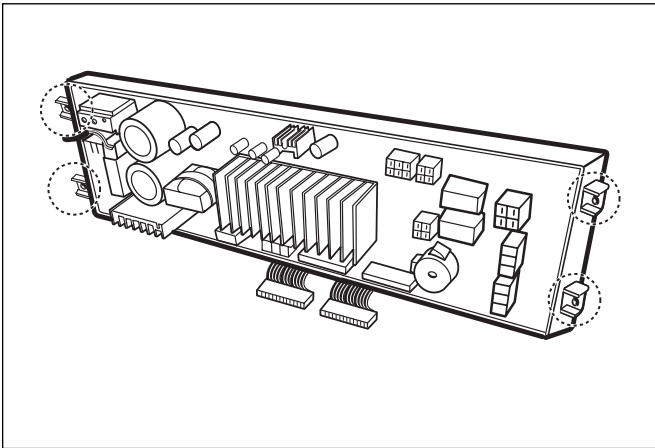
- ① Unscrew 2 screws on the back of the top plate.
- ② Pull the top plate backward and upward as shown.



- ③ Disconnect the connectors from the Main PWB Assembly

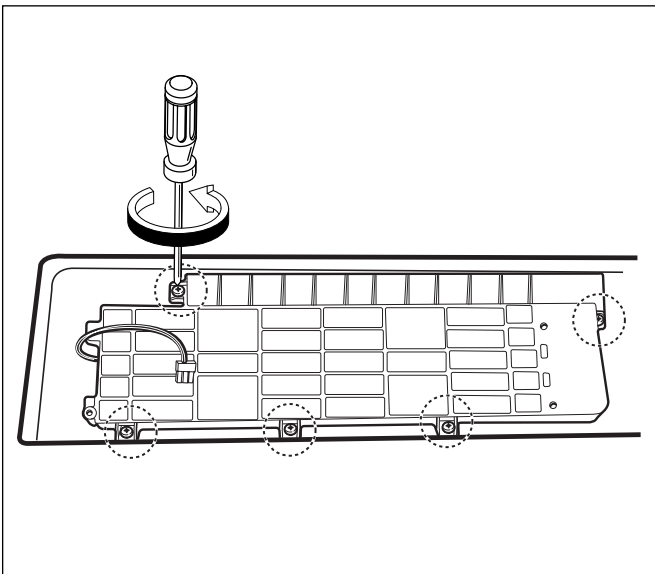


- ④ Pull out the drawer and unscrew 2 screws.
- ⑤ Lift the left side of the Control Panel Assembly and pull it out.



⑥ Unscrew the 4 screws from the Control Panel Assembly.

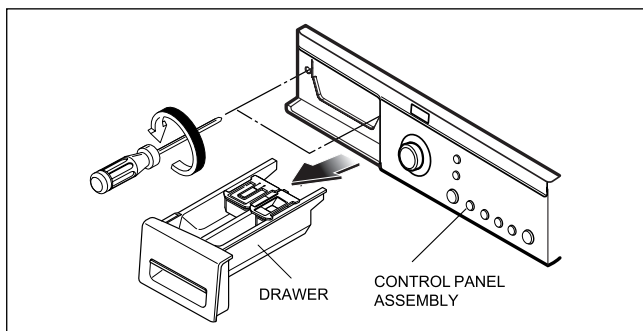
⑦ Disassemble the Main PWB Assembly.



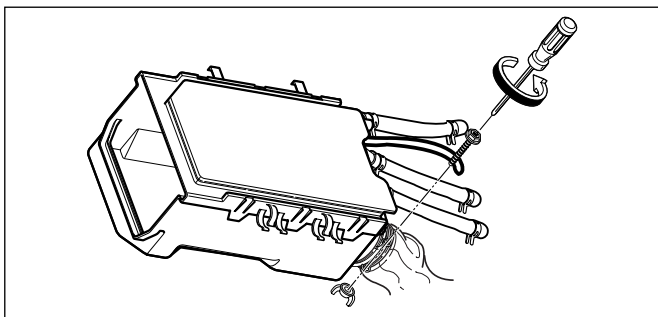
⑧ Unscrew the 5 screws from the Control Panel Assembly.

⑨ Disassemble the Display PWB Assembly.

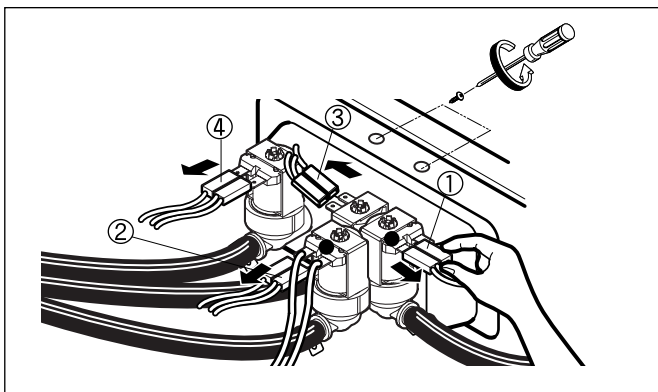
## DISPENSER ASSEMBLY



- ① Disassemble the top plate assembly.
- ② Pull out the drawer.
- ③ Push out the DISPENSER ASSEMBLY after unscrew 2 screws.



- ④ Unscrew the nut at the lower part of the dispenser.



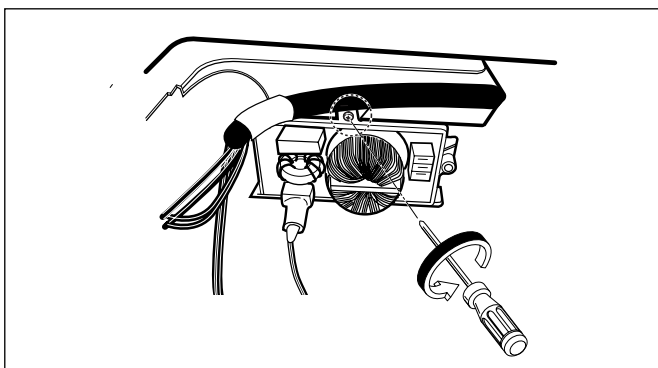
- ⑤ Disassemble the 4 connectors from the valves.

### ※ Wire Color

- ① Blue Housing (OR-BK)
- ② White Housing (WH-BK)
- ③ Blue Housing (GY-BK)
- ④ Red Housing (BL-BK)

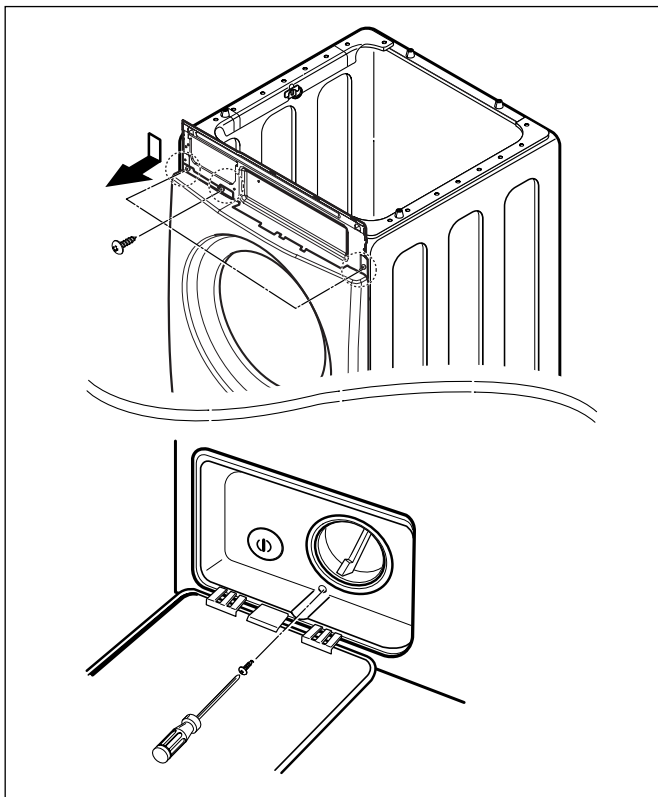
- ⑥ Unscrew 2 screws from the back of the cabinet.

## NOISE FILTER

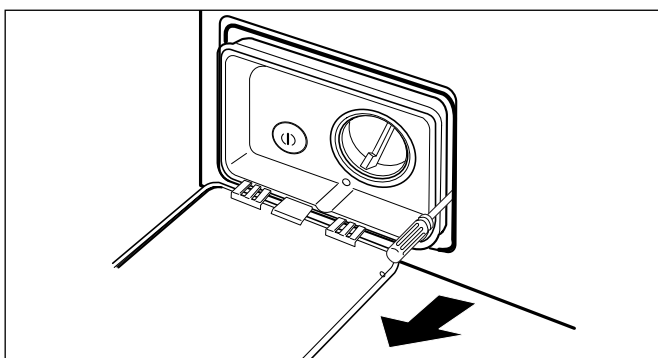


- ① Disassemble two connectors from the Filter Assembly.
- ② Unscrew a screw from the TOP BRACKET.

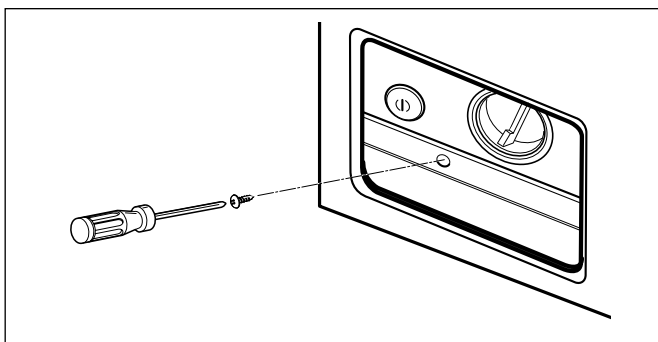
## CABINET COVER



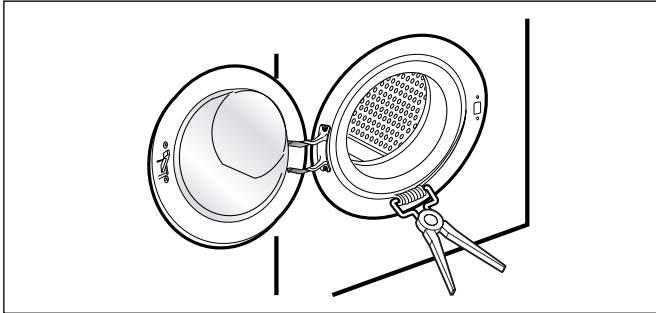
- ① Unscrew the 3 screws from upper of the cabinet cover.
- ② Unscrew the screw from filter cover.



- ③ Put a flat ( – ) screwdriver or putty knife into the both sides of the filter cover, and pull it out.

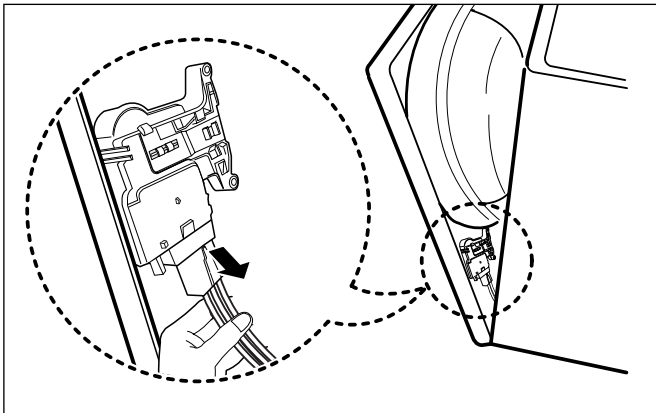


- ④ Unscrew the screw from the lower side of the cabinet cover.



⑤ Open the door.

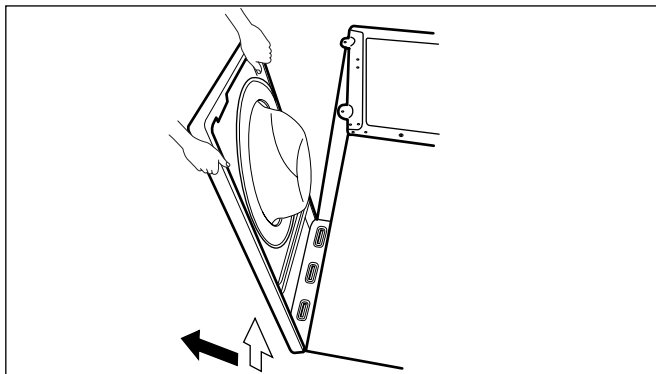
⑥ Disassemble the clamp assembly.



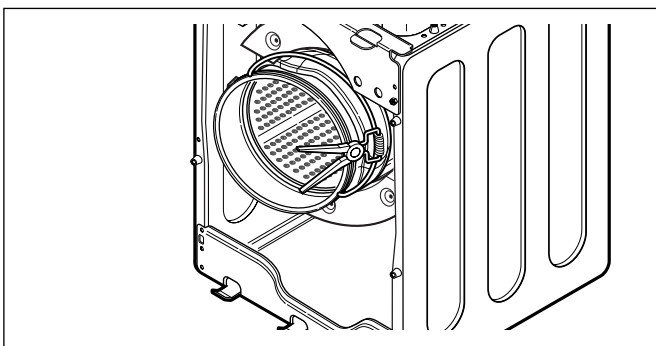
⑦ Tilt the cabinet cover.

⑧ Disconnect the door switch connector.

※ **NOTE:** When assembling the CABINET COVER, connect the connector.



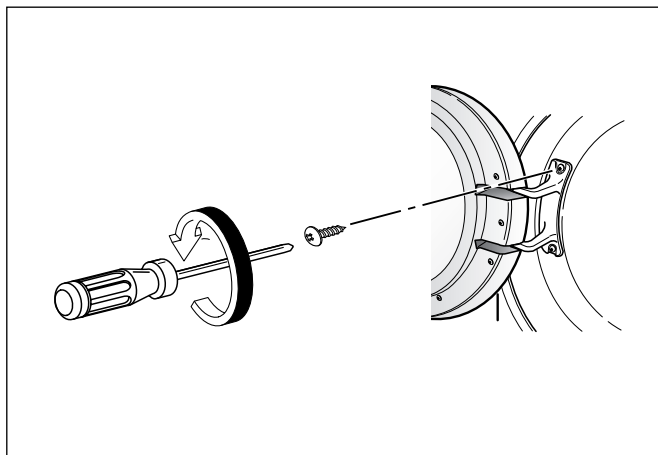
⑨ Lift and separate the cabinet cover.



⑩ Disassemble the clamp assembly.

⑪ Disassemble the Gasket.

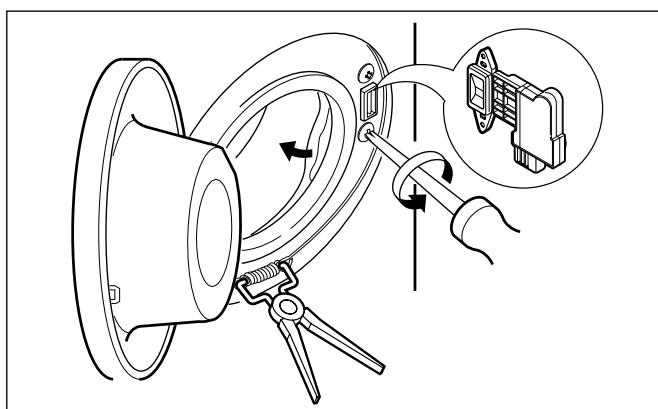
## DOOR



- ① Open the door.
- ② Unscrew the 2 screws from the Cabinet Cover.
- ③ Disassemble the door upward.

※ **Be careful!** The door is heavy.

## DOOR LOCK SWITCH ASSEMBLY

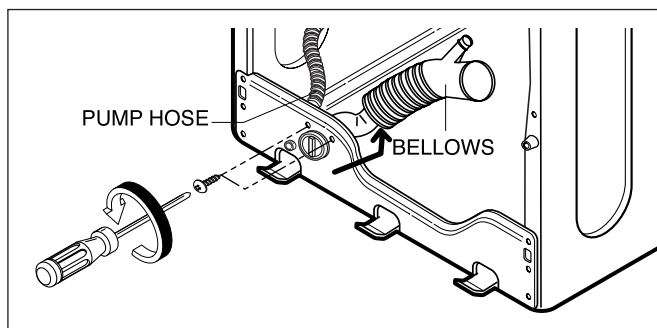


- ① Open the door and disassemble the CLAMP ASSEMBLY.
- ② Unscrew the 2 screws.

### ※ NOTE

- Reconnect the connector after replacing the DOOR SWITCH ASSEMBLY.

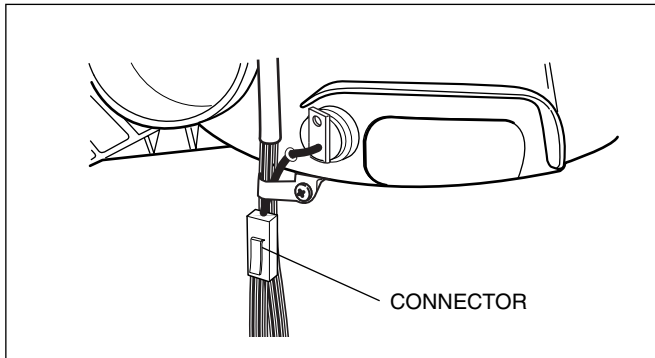
## PUMP



- ① Disassemble the cabinet cover.
- ② Separate the pump hose, the bellows and the circulation hose assembly from the pump assembly.
- ③ Disassemble the pump assembly in arrow direction.

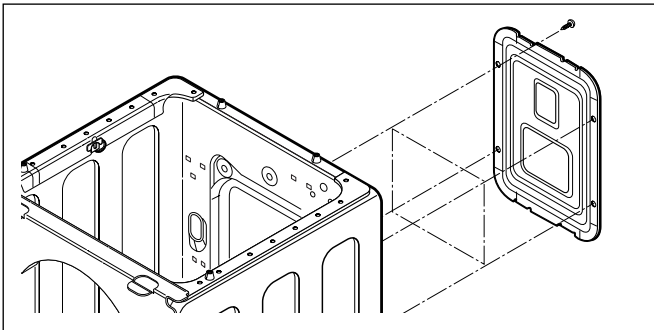


## THERMISTOR

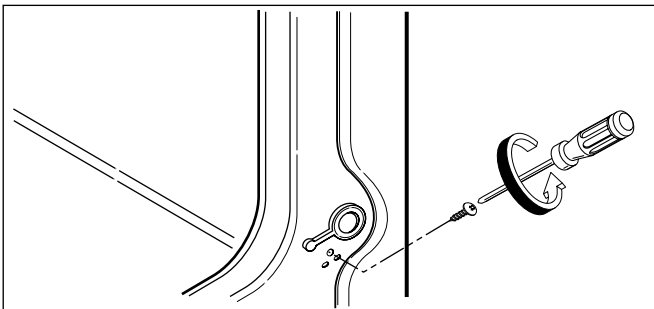


- ① Disassemble the Back cover.
- ② Unscrew a screw from the Tub.
- ③ Unplug the white connector from the thermistor.
- ④ Pull it out by holding the bracket of the thermistor.

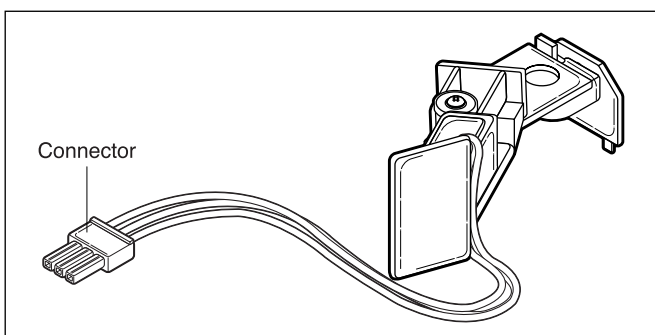
## SENSOR ASSEMBLY(BALL SENSOR)



- ① Unscrew the 4 screws from the back cover.

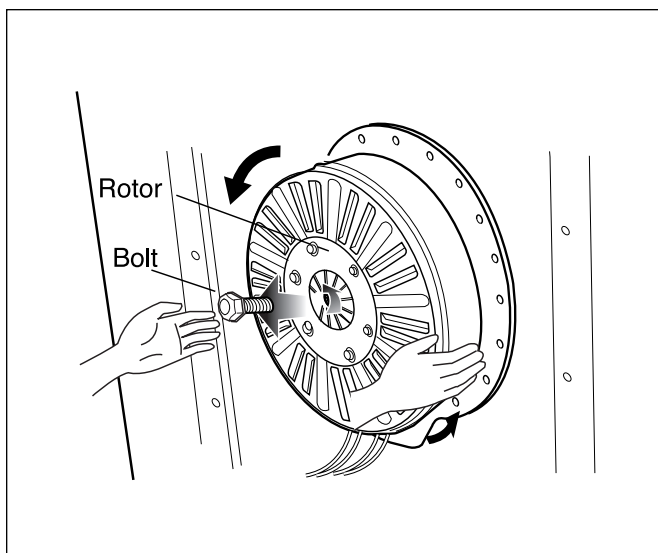


- ② Unscrew the single screw from the lower-right side of the cabinet.

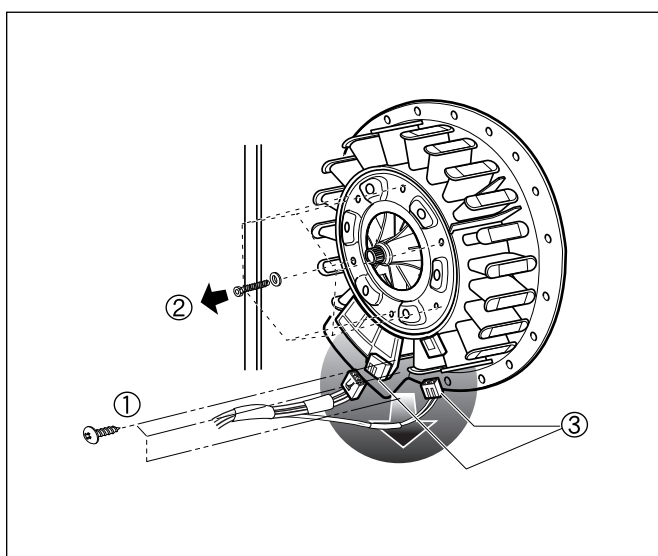


- ③ Disconnect the connector from PWB Harness.

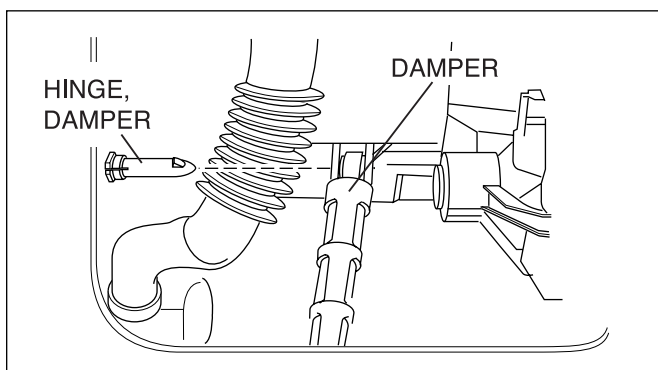
## MOTOR/DAMPER



- ① Disassemble the back cover.
- ② Remove the bolt.
- ③ Pull out the Rotor.



- ① Unscrew the 2 screws from the tub bracket.
- ② Remove the 6 bolts on the stator.
- ③ Unplug the 2 connectors from the stator.



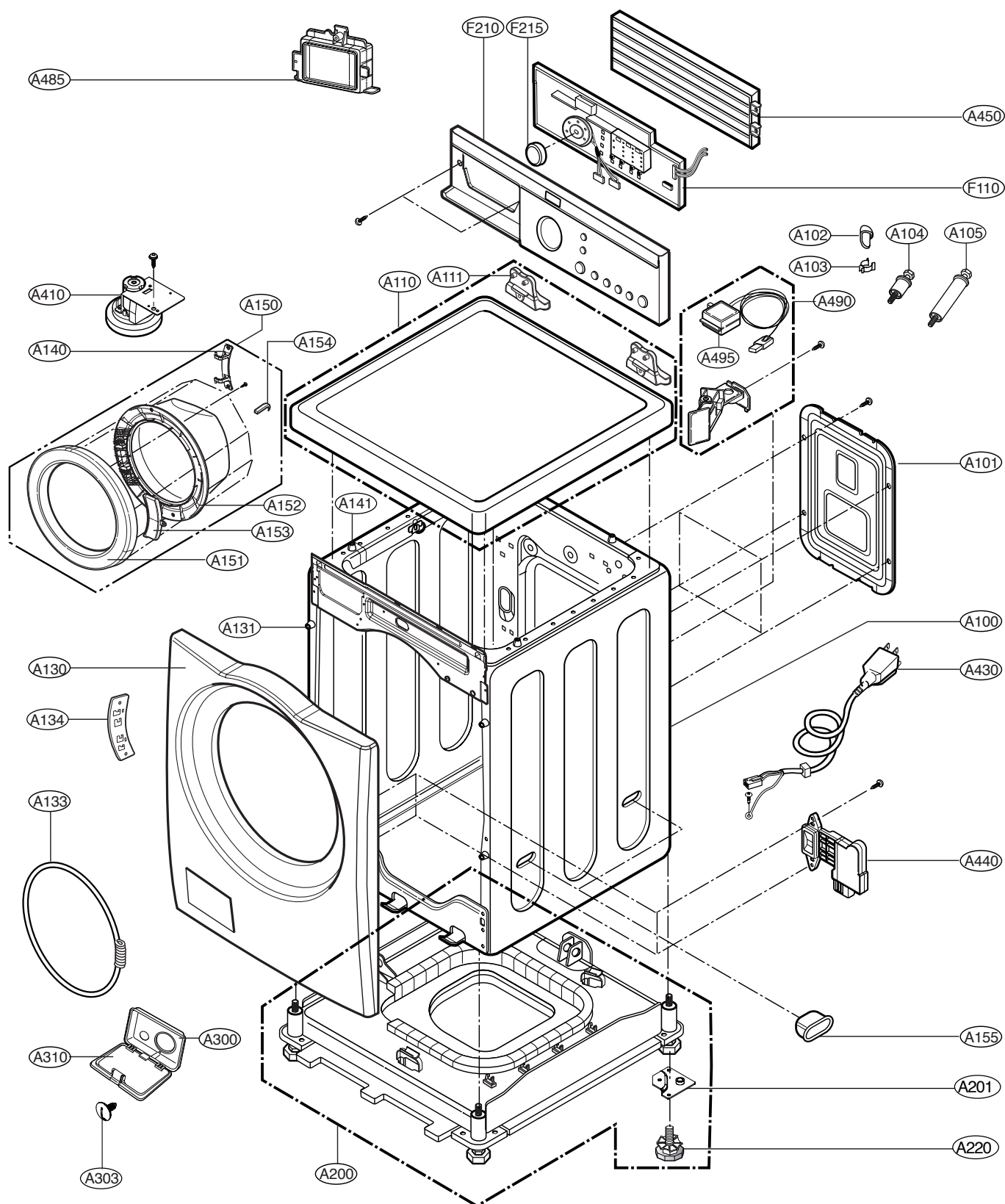
- ① Disassemble the damper hinges from the tub and base.
- ② Separate the dampers.

### ※ NOTE

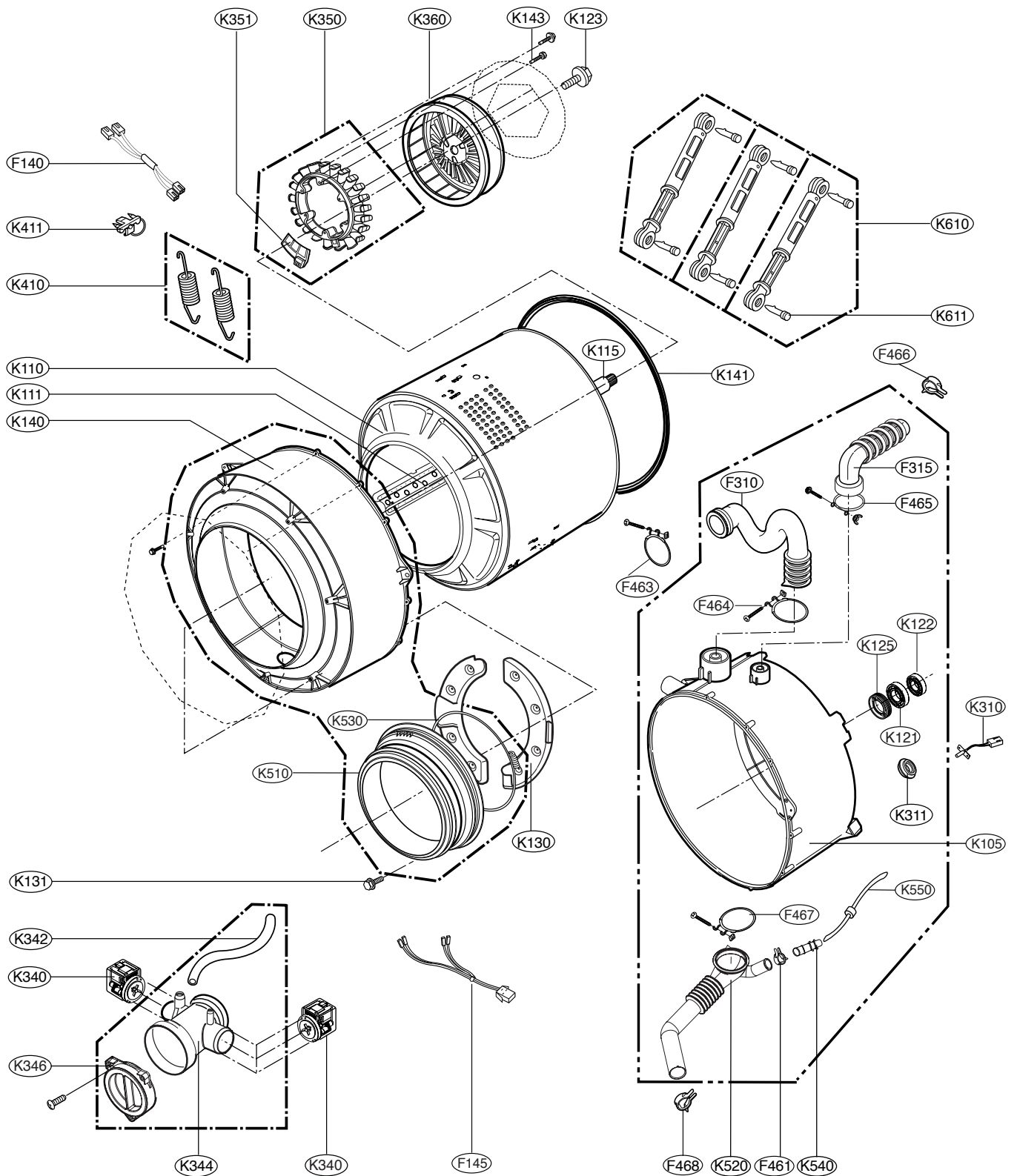
- Once removed, replace the damper with new one.

# 10. EXPLODED VIEW

## 10-1. CABINET & CONTROL PANEL ASSEMBLY



## 10-2. DRUM & TUB ASSEMBLY



## 10-3. DISPENSER ASSEMBLY

