

Website: <http://www.LGService.com>
E-mail: <http://www.LGService.com/techsup.html>

WASHING MACHINE SERVICE MANUAL

▲ CAUTION

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

MODEL : WM2411HW / WM2011 HS
WM2011HW / WM1811CW
WM2432HW / WM2032 HS
WM2032HW / WM1832CW
WM0532HW / WD-10210BD
WD-12210(5)BD

CONTENTS

| | |
|--|----|
| 1. SPECIFICATIONS | 3 |
| 2. FEATURES & TECHNICAL EXPLANATION | 4 |
| 3. PARTS IDENTIFICATION | 6 |
| 4. INSTALLATION | 7 |
| 5. OPERATION | 10 |
| 6. WIRING DIAGRAM / PROGRAM CHART | 13 |
| 7. TROUBLESHOOTING | 15 |
| 7-1. BEFORE PERFORMING SERVICE | 15 |
| 7-2. QC TEST MODE | 15 |
| 7-3. HOW TO CHECK THE WATER LEVEL FREQUENCY | 15 |
| 7-4. ERROR DISPLAY | 16 |
| 8. ERROR DIAGNOSIS AND CHECK LIST | 18 |
| 8-1. DIAGNOSIS AND SOLUTION FOR ABNORMAL OPERATION | 18 |
| 8-2. FAULT DIAGNOSIS AND TROUBLESHOOTING | 21 |
| 9. DISASSEMBLY INSTRUCTIONS | 28 |
| 10. EXPLODED VIEW | 36 |
| 10-1. CABINET & CONTROL PANEL ASSEMBLY | 36 |
| 10-2. DRUM & TUB ASSEMBLY | 37 |
| 10-3. DISPENSER ASSEMBLY | 38 |

1. SPECIFICATIONS

| ITEM | | WM2411HW WM2432HW WD-12210(5)BD | WM2011HS / WM2011HW WM2032HS / WM2032HW WM0532HW / WD-10210BD | WM1811CW WM1832CW |
|----------------------------------|-------------|--|---|----------------------|
| POWER SUPPLY | | 120V ~ 60Hz | | |
| PRODUCT WEIGHT | | 190 lbs. (86 kg) | | |
| ELECTRIC POWER CONSUMPTION | WASHING | 280W | | 235W |
| | DRAIN MOTOR | 80W | | |
| | WASH HEATER | 1000W | | — |
| REVOLUTION SPEED | WASH | 42 rpm | | |
| | SPIN | 0-1200 rpm | 0-1000 rpm | 0-900 rpm |
| CYCLES | | 9 | 7 | 5 |
| WASH / RINSE TEMPERATURES | | 6 | 5 | 4 |
| SPIN SPEEDS | | 6 | 5 | 5 |
| OPTIONS | | Prewash, Stain Cycle, Quick Cycle, Extra Rinse, Rinse+Spin, Delay Wash | | |
| CUSTOM PROGRAM | | Incorporated | | |
| WATER CIRCULATION | | Incorporated | | — |
| OPERATIONAL WATER PRESSURE | | 4.5–145 psi (30-1000 kPa) | | |
| CONTROL TYPE | | Electronic | | |
| WASH CAPACITY | | 3.22 cu.ft (3.72 cu.ft.IEC) | | |
| DIMENSIONS | | 27"(W) X 29 – $\frac{1}{2}$ "(D) X 42 – $\frac{3}{4}$ "(H), 49 – $\frac{4}{5}$ "(D, door open) | | |
| DELAY WASH | | up to 19 hours | up to 12 hours | up to 9 hours |
| DOOR SWITCH TYPE | | PTC + Solenoid | | |
| WATER LEVEL | | 7 steps (by sensor) | | |
| LAUNDRY LOAD SENSING | | Incorporated | | |
| ERROR DIAGNOSIS | | Incorporated | | |
| AUTO POWER OFF | | Incorporated | | |
| CHILD LOCK | | Incorporated | | |

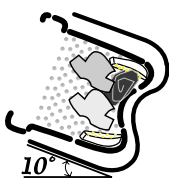
2. FEATURES & TECHNICAL EXPLANATION

2-1.FEATURES



■ Direct Drive System

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



■ Tilted Drum and Extra Large Door Opening

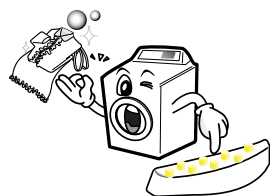
The tilted drum and extra large door opening make it possible to load and unload easily.



■ Water Circulation

(WM2411HW, WM2011HS, WM2011HW, WM2432HW, WM2032HS, WM2032HW, WM0532HW, WD-10210BD, WD-12210(5)BD)

Spray detergent solution and water onto the load repeatedly. Clothes are soaked more quickly and thoroughly during the wash cycle. Detergent suds are eliminated more easily by the water shower during rinse cycle. The water circulation system uses both water and detergent more efficiently.



■ RollerJets

(WM2411HW, WM2011HS, WM2011HW, WM2432HW, WM2032HS, WM2032HW, WM0532HW, WD-10210BD, WD-12210(5)BD)

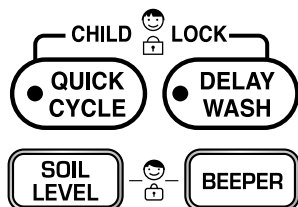
The washing ball enhances wash performance and reduces damage to clothing. The jets spray and help tumble clothes to enhance washing performance while maintaining fabric care.



■ Built-in Heater

(WM2411HW, WM2011HS, WM2011HW, WM2432HW, WM2032HS, WM2032HW, WM0532HW, WD-10210BD, WD-12210(5)BD)

The internal heater automatically heats the water to the optimum temperature on selected cycles.

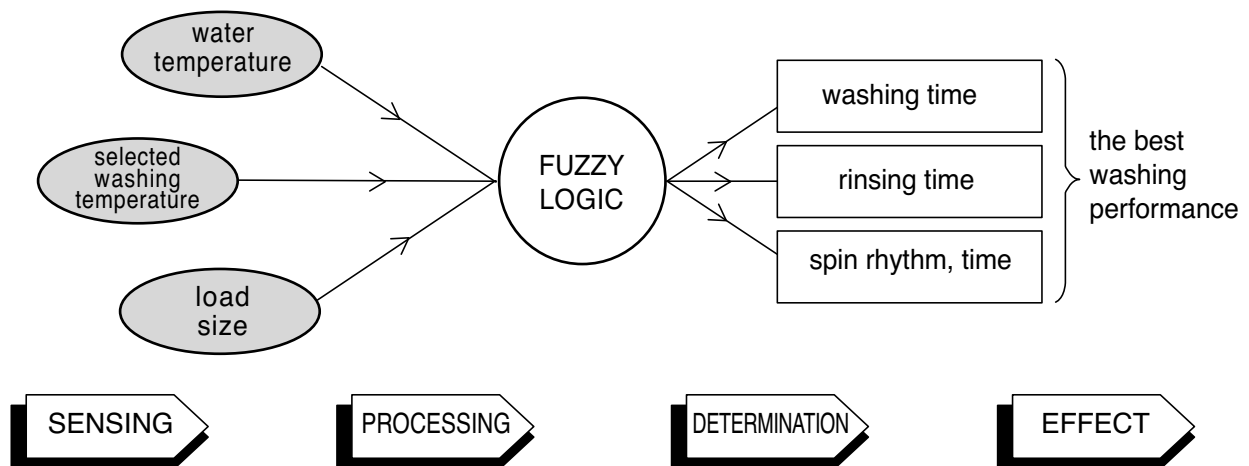


■ Child Lock

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

2-2.FUZZY LOGIC 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.



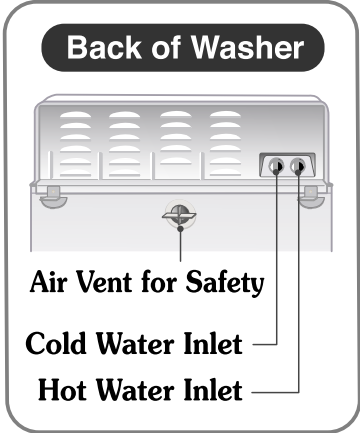
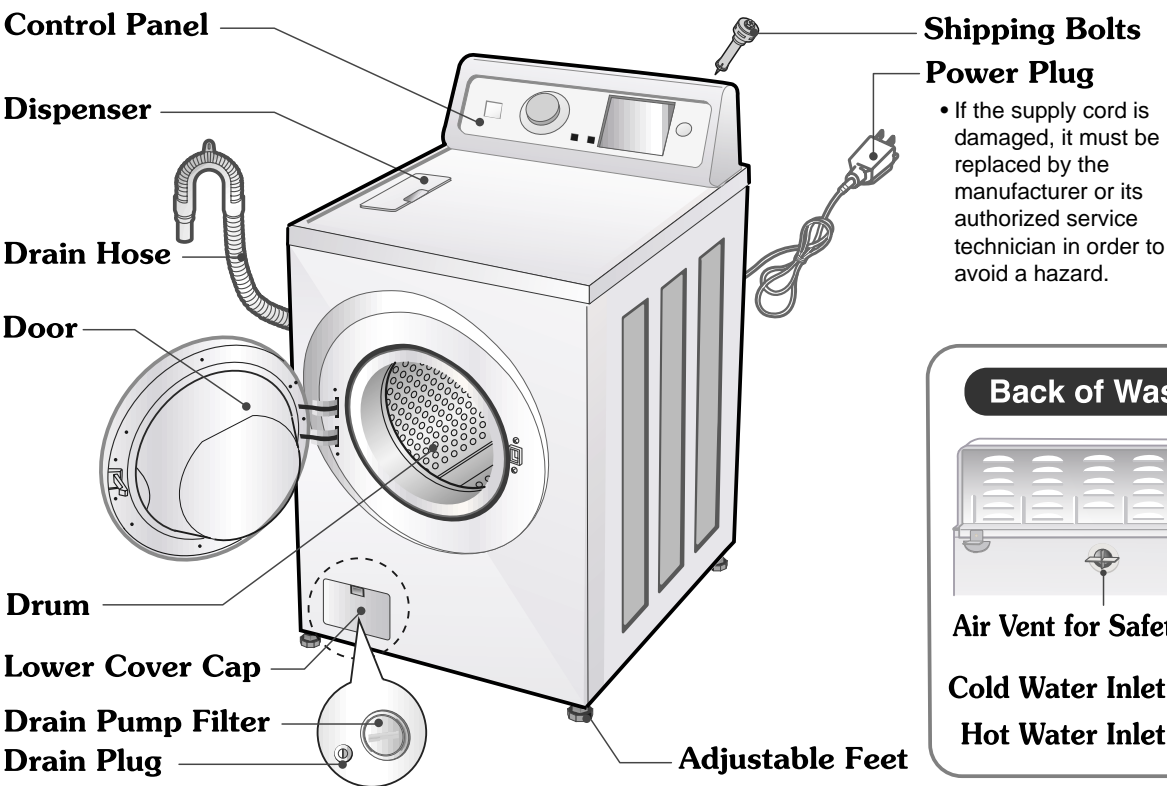
2-3.WATER LEVEL CONTROL

- 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.

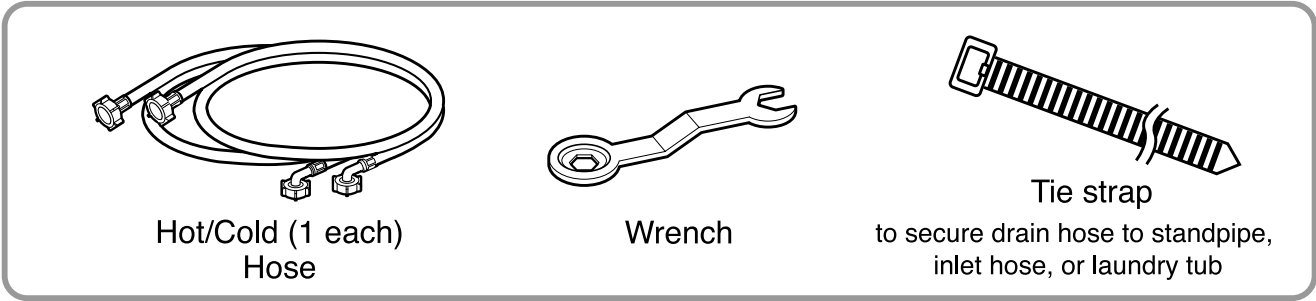
2-4.DOOR CONTROL

- 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 lock for 5 minutes.
- Clicking sounds can be heard when the door is locked / unlocked.

3. PARTS IDENTIFICATION



■ ACCESSORIES

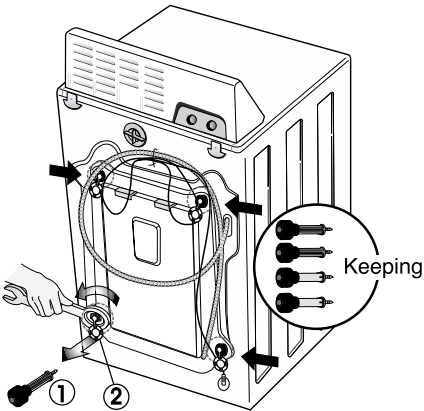
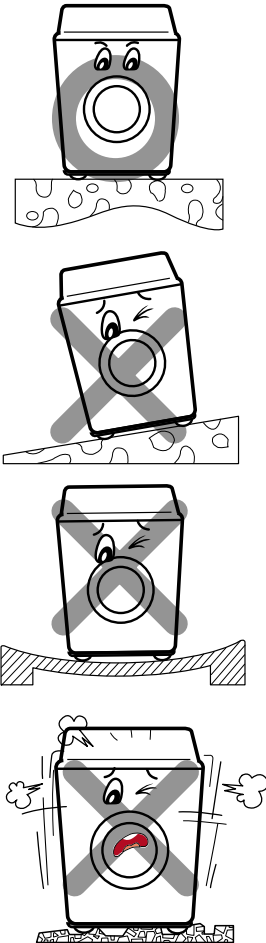
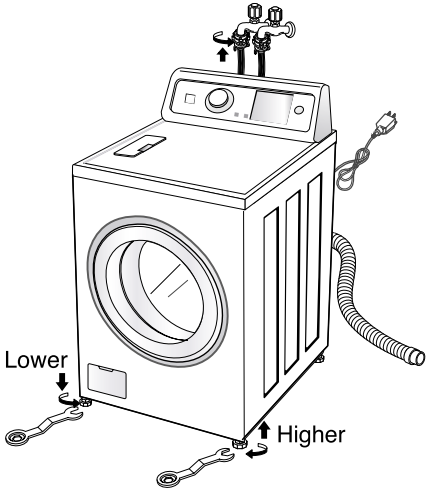


4. INSTALLATION

- ① Before servicing, ask the customer what the trouble is.
- ② Check the setup (power supply is 120V AC, remove the transit bolts....).
- ③ Check with the troubleshooting guide.
- ④ Plan your service method by referring to the disassembly instructions.
- ⑤ Service the unit.
- ⑥ After servicing, operate the appliance to see whether it functions correctly.

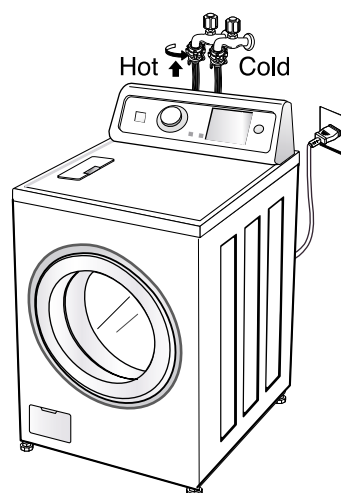
■ STANDARD INSTALLATION

The appliance should be installed as follows:

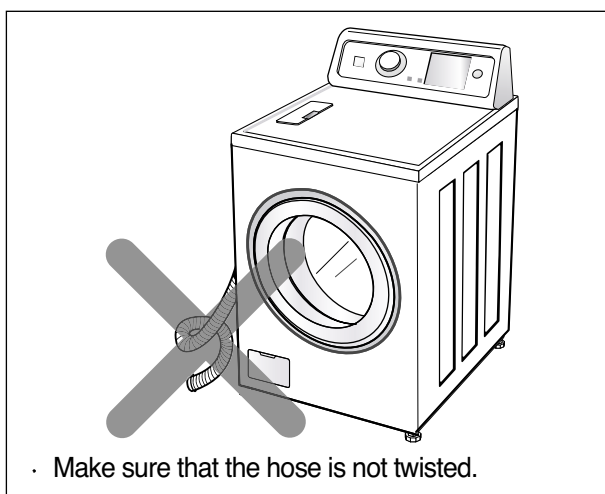
| REMOVE THE TRANSIT BOLTS | INSTALL THE APPLIANCE ON A FLAT AND FIRM SURFACE | ADJUST THE LEVELING |
|--|--|--|
| <ul style="list-style-type: none"> Remove the transit bolts (4 EA:①) with the supplied wrench. Keep the transit bolts and spanner for future use. Insert the 4 caps (provided) into the hole.  |  | <ul style="list-style-type: none"> Turn the leveling feet to adjust the appliance horizontally.  <ul style="list-style-type: none"> The appliance goes up by rotating the feet clockwise. The appliance come down by rotating the feet counterclockwise. |

■ HOW TO CONNECT THE INLET HOSE

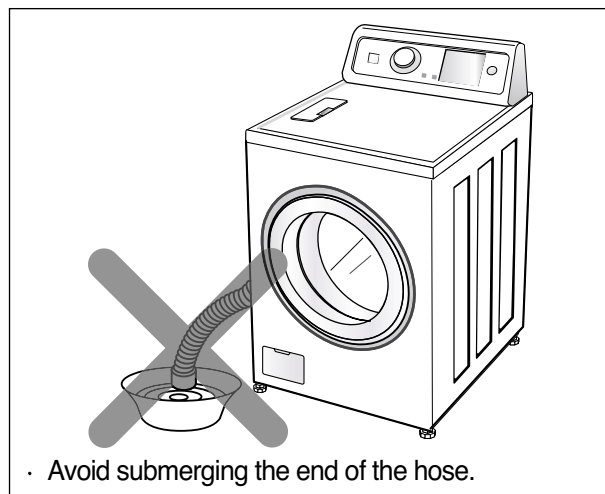
- Verify that the rubber washer is inside of the valve connector.
- Connect the inlet hose firmly to prevent leaks.



■ CONNECT THE DRAIN HOSE



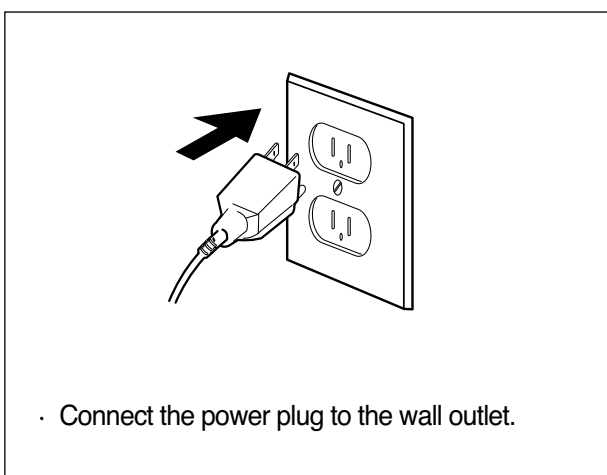
- Make sure that the hose is not twisted.



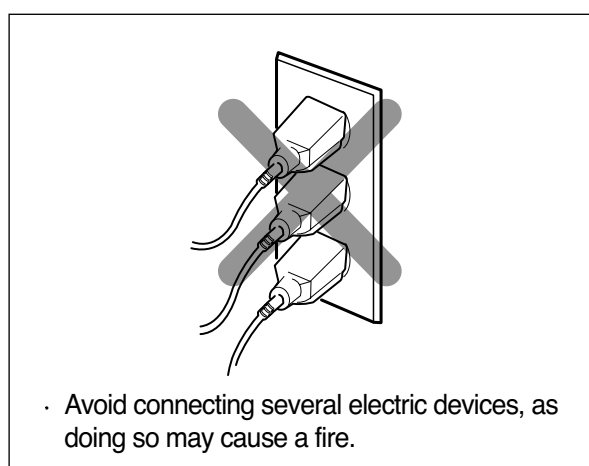
- Avoid submerging the end of the hose.

※ The end of the drain hose should be placed less than 96" from the floor.

■ CONNECT POWER PLUG



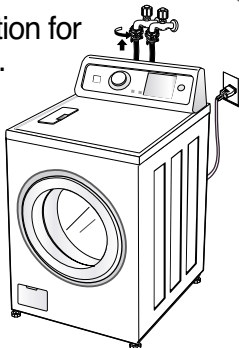
- Connect the power plug to the wall outlet.



- Avoid connecting several electric devices, as doing so may cause a fire.

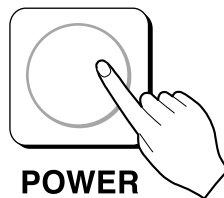
7 TEST OPERATION

1 Preparation for washing.

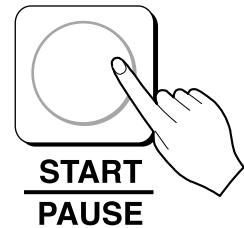


- Connect the power plug to the outlet.
- Connect the inlet hose.

2 Press the POWER button.

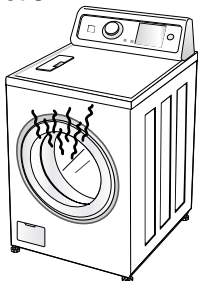


3 Press the Start/Pause button.



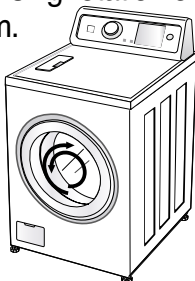
- Listen for clicking sounds to determine if the door has locked.

6 Check the water heating function.



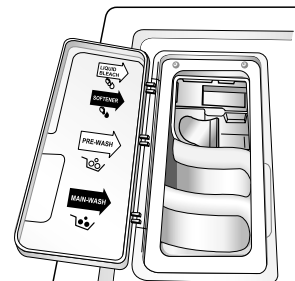
- Press the WASH / RINSE button and the present temperature will be displayed.

5 Check the automatic reversing rotation of the drum.



- Make sure that the drum rotates clockwise and counterclockwise.

4 Check the water supply.



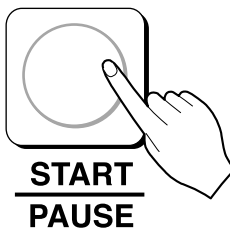
- Verify that if water is supplied through the detergent dispenser.

7 Check the drain and spin functions.

- Press the POWER button twice to restart.
- Press the SPIN SPEED button.
- Press the START / PAUSE button.
- Check the drain and spin functions.

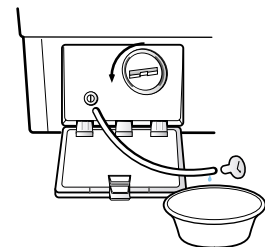


8 Press the START / PAUSE button.



- Listen for clicking sounds to determine if the door is unlocking.

9 Water removal



- If SVC is required, remove the remaining water in the tub, by pulling out the drain plug.

5. OPERATION

• POWER button

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

• DOOR LOCKED lamp

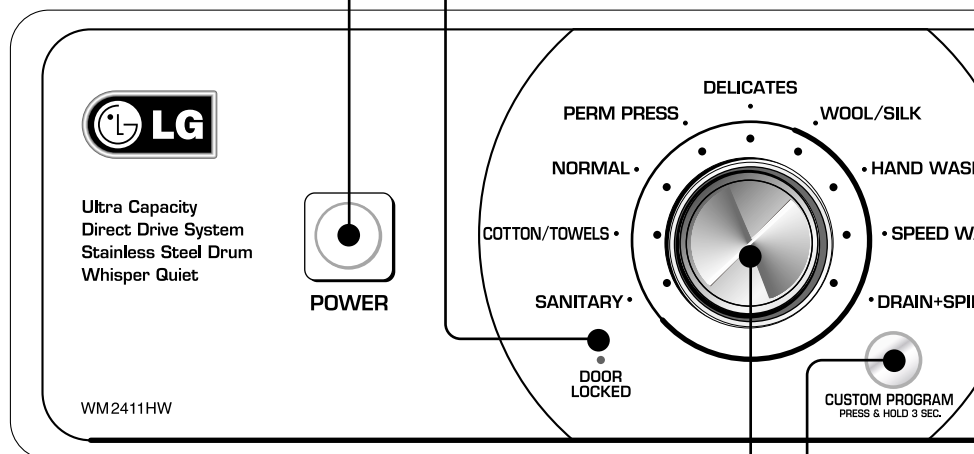
- Lights whenever the door is locked.
- The door can be unlocked by pressing the Start / Pause button to stop the washer.

• BEEPER button

- Choose High / Low

• CYCLE SELECTOR knob

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



• CUSTOM PROGRAM button

- Allows you to store a customized wash cycle for future use.
- To create a Custom Program :
 - 1) Select a cycle.
 - 2) Select the other desired Wash / Rinse Temp., Spin Speed, Soil Level.
 - 3) Select the desired Options.
 - 4) Press and hold the Custom Program button for 3 seconds (2 beep sounds).
 - 5) Press the Start / Pause button.

The Custom Program is now stored for future use.
- To reuse the program, select Custom Program and press Start / Pause.

• WASH / RINSE temp. SPIN SPEED, SOIL LEVEL

- Select a water temperature based on the load you are washing.
- To change the spin speed, select the Spin Speed button until the desired setting is displayed.
- To change the soil level, select the Soil Level button until the desired setting is displayed.

button

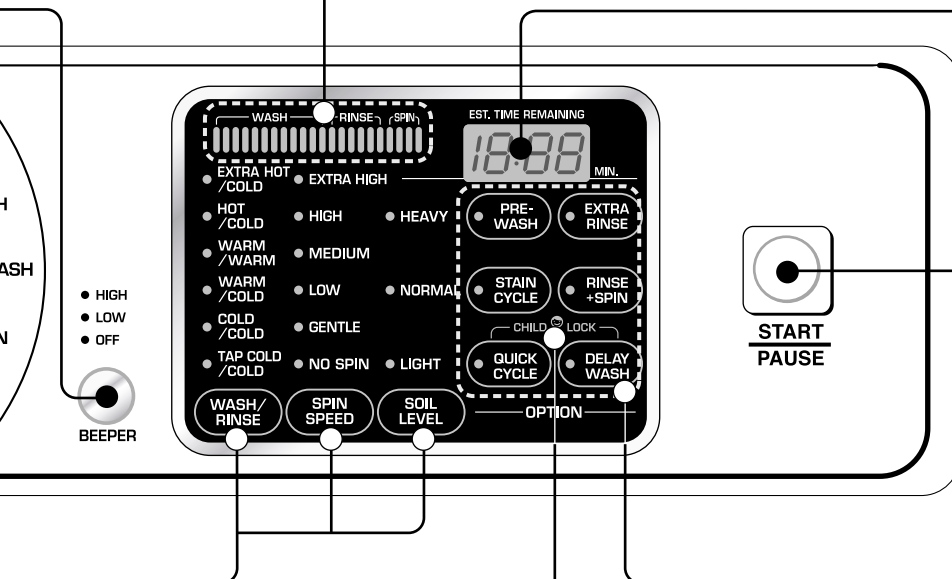
/ Off.

• STATUS INDICATOR

- These lights show elapsed time of the selected cycle.

• EST.TIME REMAINING

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



• START/PAUSE button

- Use this button to Start / Stop the washer.

EL button

on the type of

e
setting is

Soil Level
played.

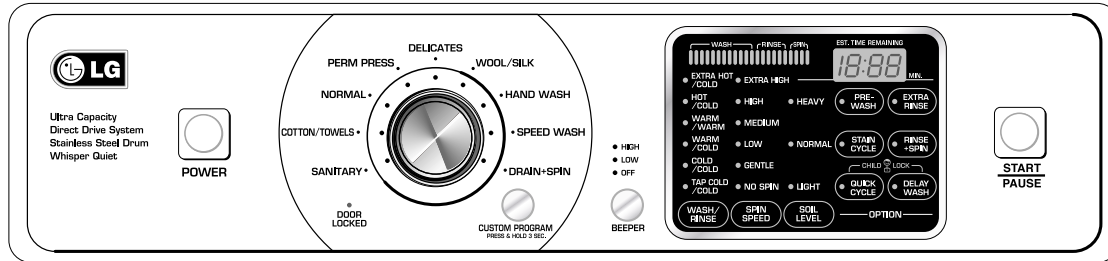
• CHILD LOCK

- Use this option to prevent unwanted use of the washer. Press and hold Quick Cycle and Delay Wash button for 3 seconds to lock / unlock control.
- When Child lock is set, "CL" blinks and all buttons are disabled but the Power button. You can thereby lock the washer while it is operating.

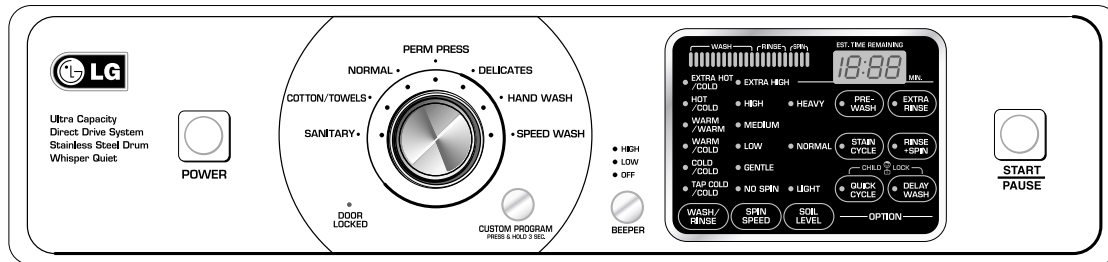
• OPTION button

- Prewash : Use this option for loads that need pretreatment. It adds 16 minutes prewash and drain.
- Stain Cycle : Adds time to the wash and rinse cycles for better stain removal. Automatically provides a rinse.
- Quick Cycle : The Quick cycle offers a quick cycle time.
- Extra Rinse : This option provides an additional rinse cycle.
- Rinse+Spin : Use this option to rinse and then spin.
- Delay Wash : Allows the start of any cycle to be delayed for 1~19(12, 9) hours.

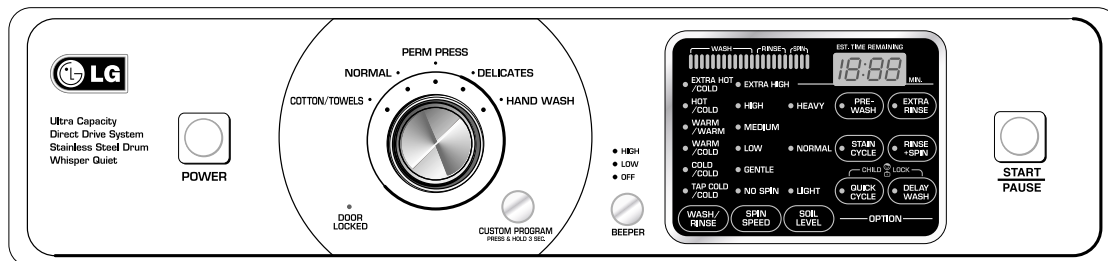
WM2411HW



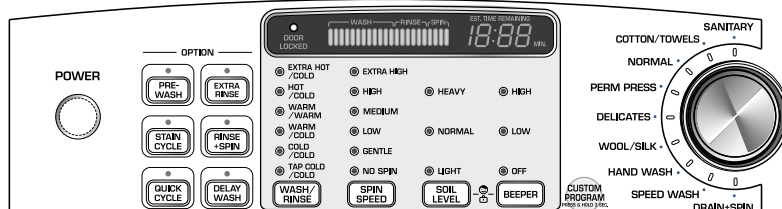
WM2011HS / WM2011HW



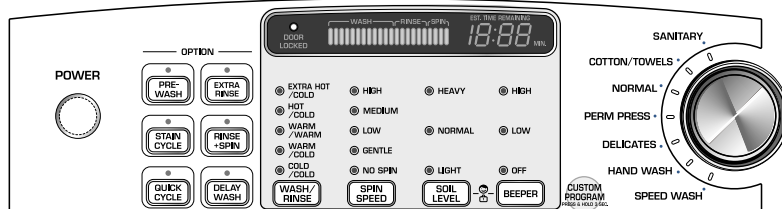
WM1811CW



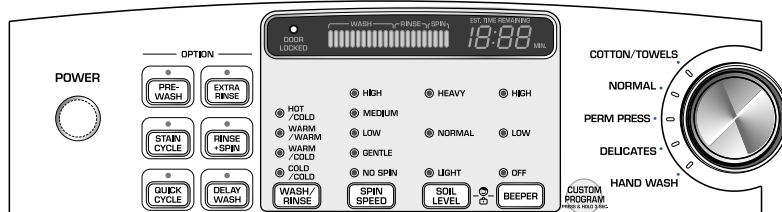
WM2432HW / WD-12210(5)BD



WM2032HS / WM2032HW / WM0532HW / WD-10210BD

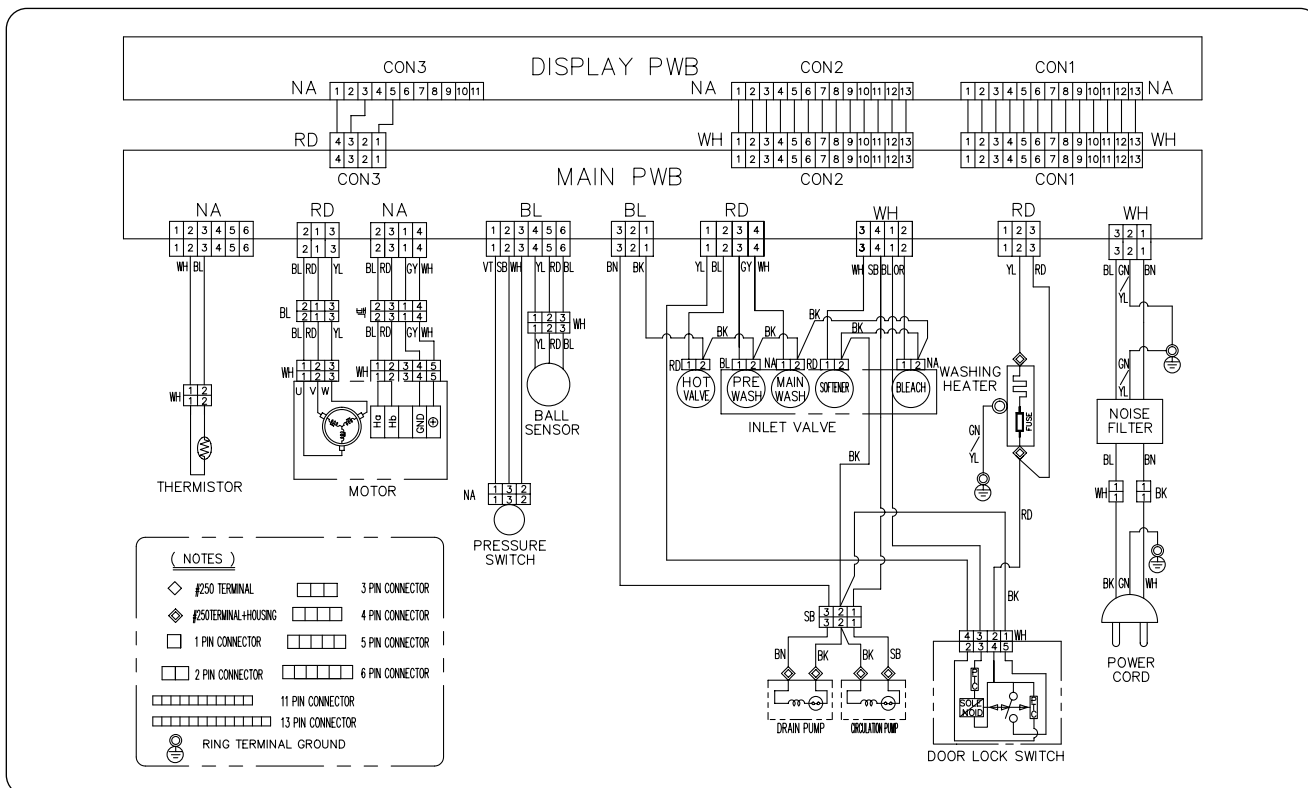


WM1832CW

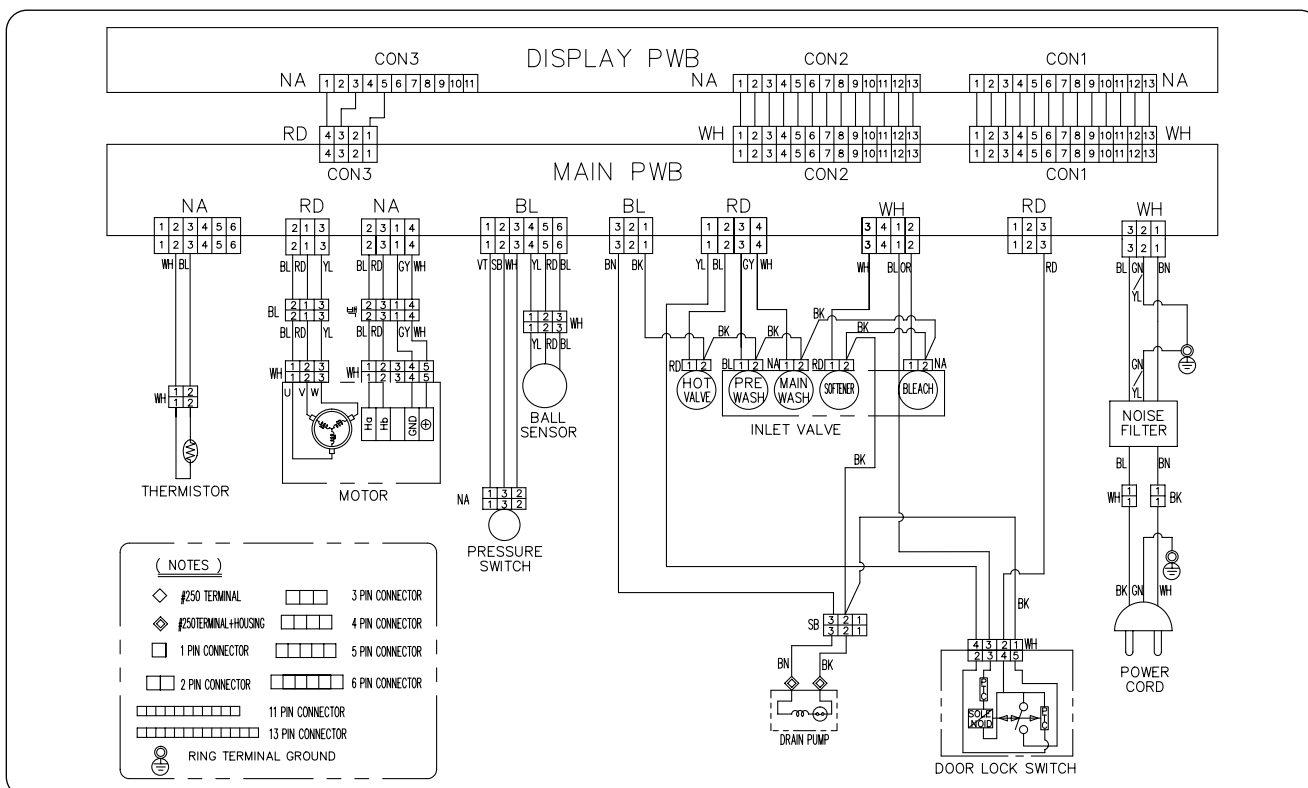


6. WIRING DIAGRAM / PROGRAM CHART

■ WM2411HW / WM2011HS / WM2011HW / WM2432HW / WM2032HS / WM2032HW / WM0532HW / WD-10210BD / WD-12210(5)BD



■ WM1811CW / WM1832CW



PROGRAM CHART

* Water Supply : W·S

* Intermittent Spin : I·S

* Disentangle : D·T

| C Y C L E C O U R S E | Time (SEC) | Washing | | | | | | | | | | Rinse | | | | | | | | | | Spin | | | E N D | A U T O O F F | Normal Working Time (Hour:Minute) | | | | | | | | | | | |
|---|---------------|-------------|---------|-------|-------------|-------------|---------|-------------|---------|-------|-------|-------------|-------------|---------|-------|----------------|-------------|---------------|-------|-------------|-------------|---------|-------|-------------|-------------|---------------------------------|--|-------------|---------|-------------|----------|---|---|---|---|--|---|--|
| | | Pre | | | | Main | | | | | | Normal | | | | Extra or Stain | | Extra & Stain | | | | | | | | | | | | | | | | | | | | |
| | | W · S | Washing | Drain | I · S | W · S | Washing | W · S | Rinsing | Drain | Drain | I · S | W · S | Rinsing | Drain | I · S | W · S | Rinsing | Drain | I · S | W · S | Rinsing | Drain | I · S | | | | W · S | Rinsing | | | | | | | | | |
| | | | | | | | Heating | | | | | | | | | | | | | | | | | | | | | | | Staycooling | 1 | | 2 | | 3 | | 3 | |
| | | | | | | | Washing | | | | | | | | | | | | | | | | | | | | | | | Staycooling | 1 | 2 | 3 | 3 | | | | |
| 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 | MIN | 60 | 300 | 60 | | MIN | 60 | 60 | 60 | 60 | 300 | 60 | 240 | 60 | 300 | 60 | 240 | 60 | 300 | 60 | 240 | 60 | 300 | 60 | 240 | 60 | 120 ~ 540 | 120 | 20 | 20 | | | | | | | | |
| Sanitary | | 8 | | | | 66 | 2 TIMES | | | | | | | | | | | | | | | | | | | | | | | About 1:44 | | | | | | | | |
| Cotton /Towels | | 8 | | | | 19 | | | | | | | | | | | | | | | | | | | | | | | | | About 57 | | | | | | | |
| Normal | | 8 | | | | 19 | | | | | | | | | | | | | | | | | | | | | | | | | About 56 | | | | | | | |
| Perm Press | | 8 | | | | 17 | | | | | | | | | | | | | | | | | | | | | | | | | About 53 | | | | | | | |
| Delicates | | 8 | | | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | About 34 | | | | | | | |
| Wool/Silk | | | | | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | About 34 | | | | | | | |
| Hand Wash | | | | | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | About 34 | | | | | | | |
| Speed Wash | | | | | | 7 | | | | | | | 120 | | | 120 | | | | 120 | | | | | | | | | | | About 29 | | | | | | | |
| Drain+Spin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | About 12 | | | | | | | |
| Wash + Rinse | | 8 | | | | 19 | | | | | | | | | | | | | | | | | | | | | | | | | About 45 | | | | | | | |
| Rinse + Spin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | About 29 | | | | | | | |
| Rinse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | About 18 | | | | | | | |

* Basic Cycle

* Optional Cycle

* Pre-Setting Time : Water Supply - 60 sec.
Drain - 60 sec.

* Basic time is minute in washing chart.

* The actual program time can be varied with the load amount, water temperature or ambient temperature.

7. TROUBLESHOOTING


7-1. BEFORE PERFORMING SERVICE

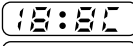
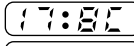
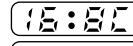
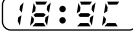
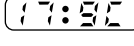
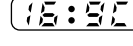
- Be careful of electric shock when disconnecting parts for while troubleshooting.
- The voltage of each terminal is 120V AC and DC when the unit is plugged in.

7-2. QC TEST MODE.

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

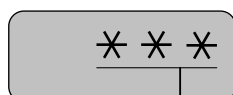
- ① Press the SPIN SPEED and SOIL LEVEL buttons simultaneously.
- ② Press the Power button, while the above condition. Then buzzer sound twice.
- ③ In order to advance to the next step of test mode, press the START / PAUSE button once.

| Number of times the Start/Pause button is pressed | Check Point | Display Status |
|---|--|--|
| None | Turns on all lamps and locks the door. |  ¹⁾ |
| 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 softener turns on. | Water level frequency (25~65) |
| 8 times | Inlet valve for bleach turns on. | Water level frequency (25~65) |
| 9 times | Tumble counterclockwise. | rpm (40~50) |
| 10 times | Heater turns on for 3 sec. | Water temperature |
| 11 times | Circulation pump turns on. | Water level frequency (25~65) |
| 12 times | Drain pump turns on. | Water level frequency (25~65) |
| 13 times | Power off and unlock the door. | Turn off all lamps. |

- 1)  WM2411HW  WM2011HS / WM2011HW  WM1811CW
 WM2432HW  WM2032HS / WM2032HW  WM1832CW
WD-12210(5)BD WM0532HW / WD-10210BD

7-3. HOW TO CHECK THE WATER LEVEL FREQUENCY

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





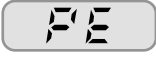
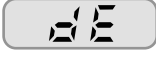








- The digits indicate the water level frequency (x.1 kHz).

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

7-4. ERROR DISPLAY

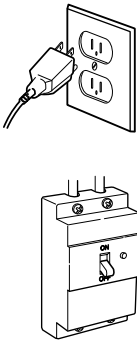


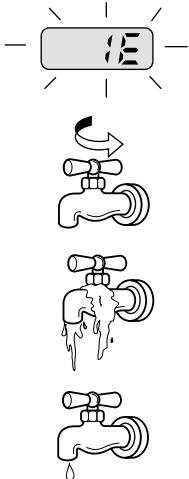
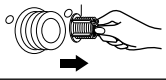
- If you press the START/PAUSE button when an error is displayed, any error except 『PE』 will disappear and the machine will go into the pause status.
- In case of 『PE』, 『UE』, 『DE』 if the error is not resolved within 20 sec., or the in case of other errors, if the error is not resolved within 4 min.,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


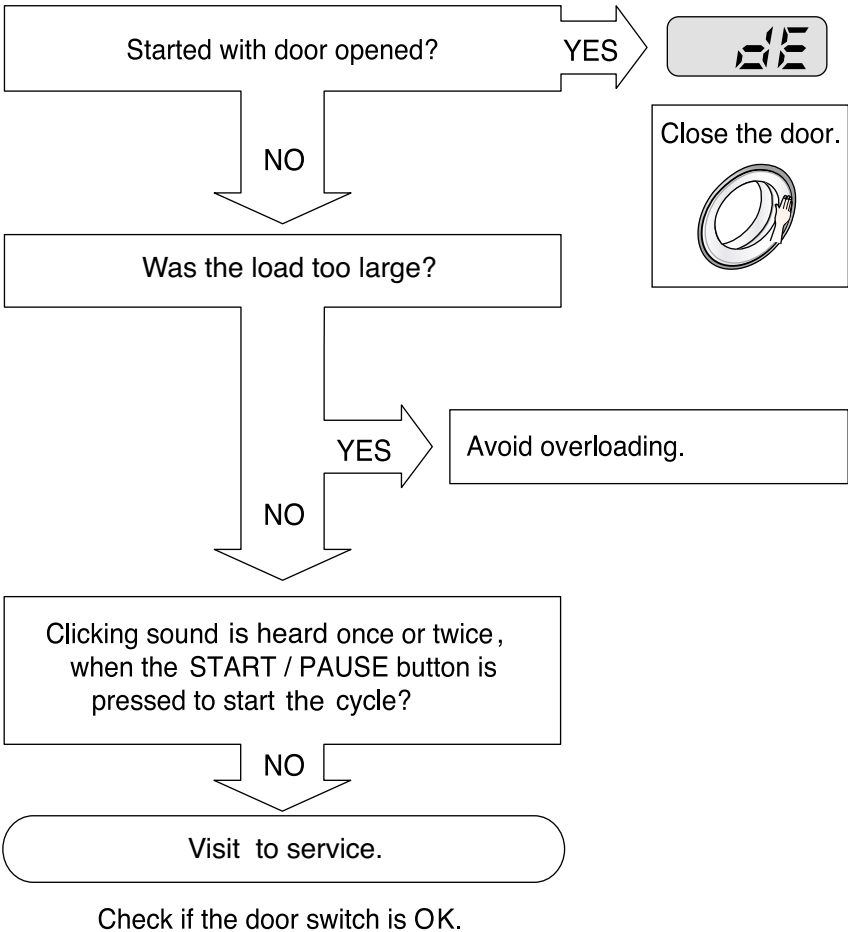

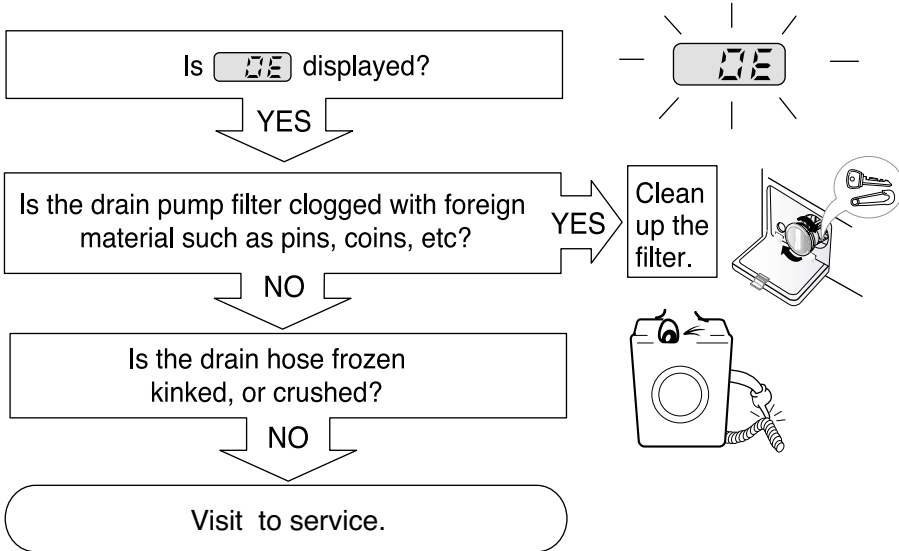
| | ERROR | SYMPTOM | CAUSE |
|---|-----------------------------|---|---|
| 1 | WATER INLET ERROR |  | <ul style="list-style-type: none"> • Correct water level (2 level) is not reached within 8 minutes after water is supplied or it does not reach the preset water level within 25 minutes. |
| 2 | IMBALANCE ERROR |  | <ul style="list-style-type: none"> • The load is too small. • The appliance is tilted. • Laundry is gathered to one side. • Non distributable things are put into the drum. |
| 3 | DRAIN ERROR |  | <ul style="list-style-type: none"> • Not fully drained within 10 minutes. |
| 4 | OVER FLOW ERROR |  | <ul style="list-style-type: none"> • Water is overflowing (over 8 level). ※ If 『FE』 is displayed, the drain pump will operate to the drain water automatically. |
| 5 | PRESSURE SENSOR ERROR |  | <ul style="list-style-type: none"> • The SENSOR SWITCH ASSEMBLY is out of order. |
| 6 | DOOR OPEN ERROR |  | <ul style="list-style-type: none"> • Door not all the way closed. • Loose electrical connections at Door switch and PWB Assembly. • The DOOR SWITCH ASSEMBLY is out of order. |
| 7 | HEATING ERROR |  | <ul style="list-style-type: none"> • The THERMISTOR is out order. |

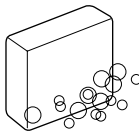
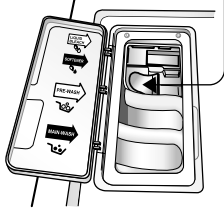
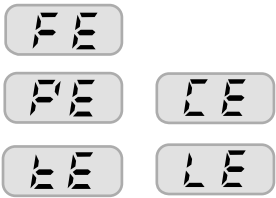
| | ERROR | SYMPTOM | CAUSE |
|----|--------------------------|---|---|
| 8 | OVER CURRENT ERROR |  | <ul style="list-style-type: none"> • MAIN PWB ASSEMBLY is out of order. • Winding in the STATOR ASSEMBLY is short-circuited. |
| 9 | LOCKED MOTOR ERROR |  | <ul style="list-style-type: none"> • The connector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

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="547 539 1107 909"> <p>Is the power plug connected firmly to 120V 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="1193 546 1329 887">  </div> |
| <p>Water inlet trouble</p> <div data-bbox="244 1111 405 1173">  </div> | <div data-bbox="547 1014 1107 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="1169 1025 1358 1503">  </div> <div data-bbox="1185 1518 1412 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 --> A1[dE] A1 --> B1[Close the door.] B1 --> Q2[Was the load too large?] Q2 -- YES --> A2[Avoid overloading.] Q2 -- NO --> Q3[Clicking sound is heard once or twice, when the START / PAUSE button is pressed to start the cycle?] Q3 -- NO --> A3([Visit to service.]) A3 --> C1[Check if the door switch is OK.] </pre> |
| <p>Drain trouble</p>  |  <pre> graph TD Q1[Is dE displayed?] -- YES --> Q2[Is the drain pump filter clogged with foreign material such as pins, coins, etc?] Q2 -- YES --> A1[Clean up the filter.] Q2 -- NO --> Q3[Is the drain hose frozen kinked, or crushed?] Q3 -- NO --> A2([Visit to service.]) </pre> |

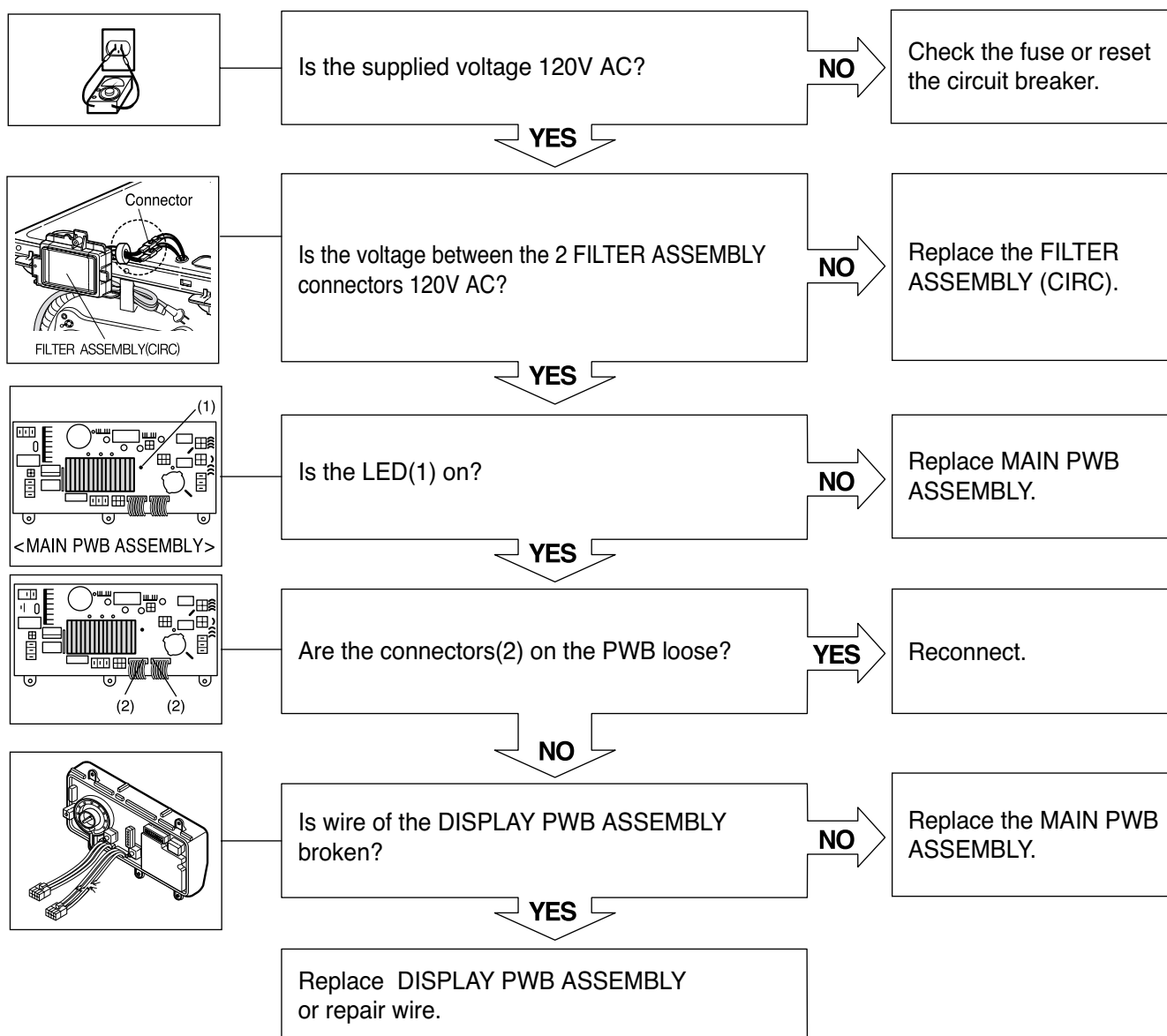
| SYMPTOM | GUIDE FOR SERVICE CALL |
|---|---|
| <p>Suds overflow from the appliance. (In this condition, wash and spin do not operate normally)</p> | <div data-bbox="571 394 1131 495">Is a low-sudsing detergent used?</div> <div data-bbox="778 495 922 539">YES</div> <div data-bbox="571 551 1131 651">Is the proper amount of detergent used as recommended?</div> <div data-bbox="778 651 922 696">YES</div> <div data-bbox="571 696 1131 797">Recommend to reduce the amount of detergent.</div> <div data-bbox="619 819 1342 976"> <ul style="list-style-type: none"> * This appliance has an automatic suds sensing function which prevents overflow. * When excessive suds are sensed, the suds removing implementations such as drain, water input, pause will operate, without rotating the drum. </div> <div data-bbox="1203 405 1390 573">  <p>LOW-SUDSING</p> </div> |
| <p>No softening effect</p> | <div data-bbox="571 1070 1131 1171">Is softener put in the correct compartment of the dispenser?</div> <div data-bbox="778 1171 922 1339">YES</div> <div data-bbox="571 1350 1131 1417">Is the softener cap clogged?</div> <div data-bbox="778 1417 922 1462">YES</div> <div data-bbox="571 1462 1131 1541">Explain proper use of softener.</div> <div data-bbox="608 1552 999 1585">Clean the softener compartment</div> <div data-bbox="1145 1137 1398 1435">  <p>Compartment for softener</p> </div> |
|  | <div data-bbox="571 1686 1131 1753">Visit to service.</div> |

8-2.FAULT DIAGNOSIS AND TROUBLESHOOTING

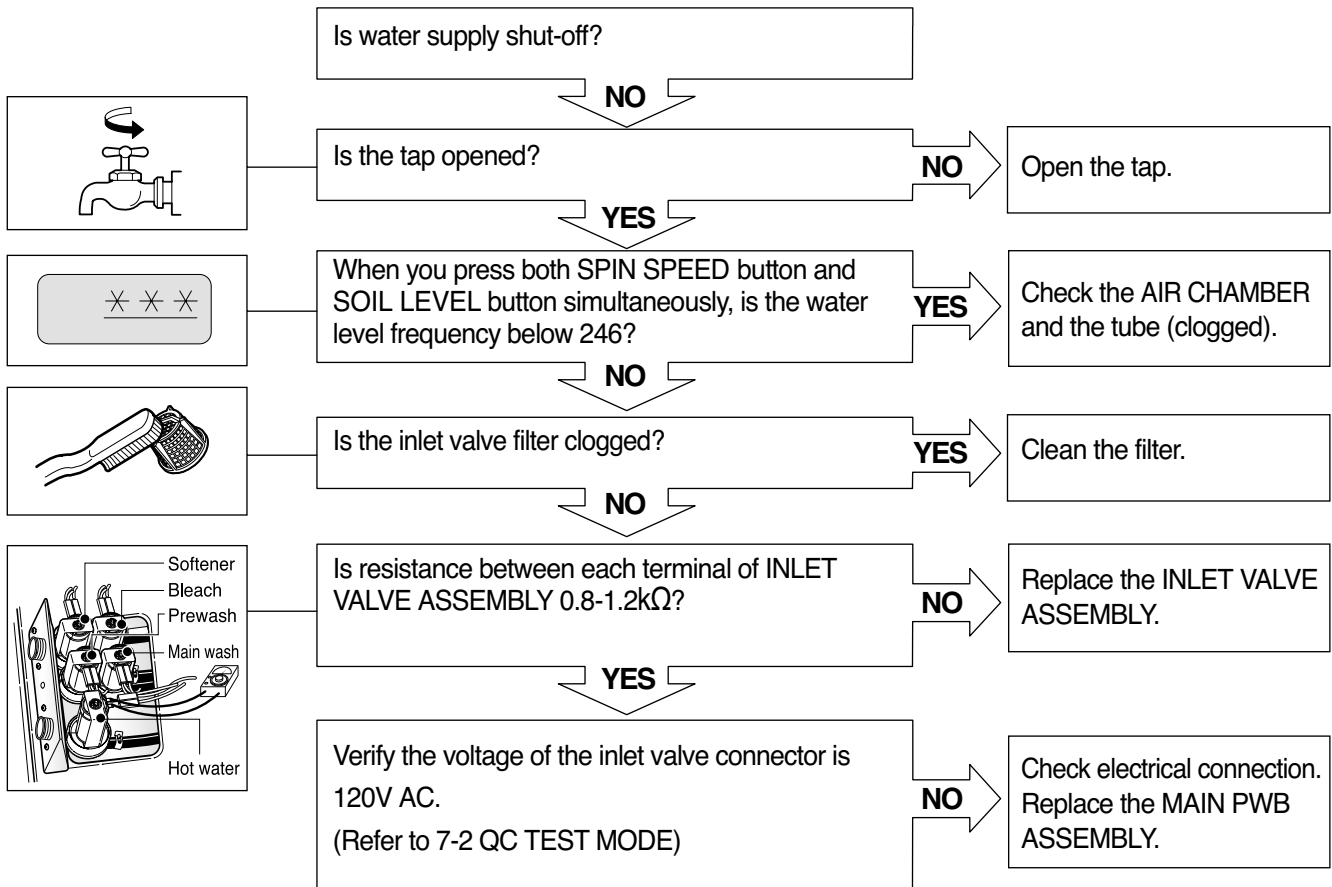
⚠ CAUTION

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.

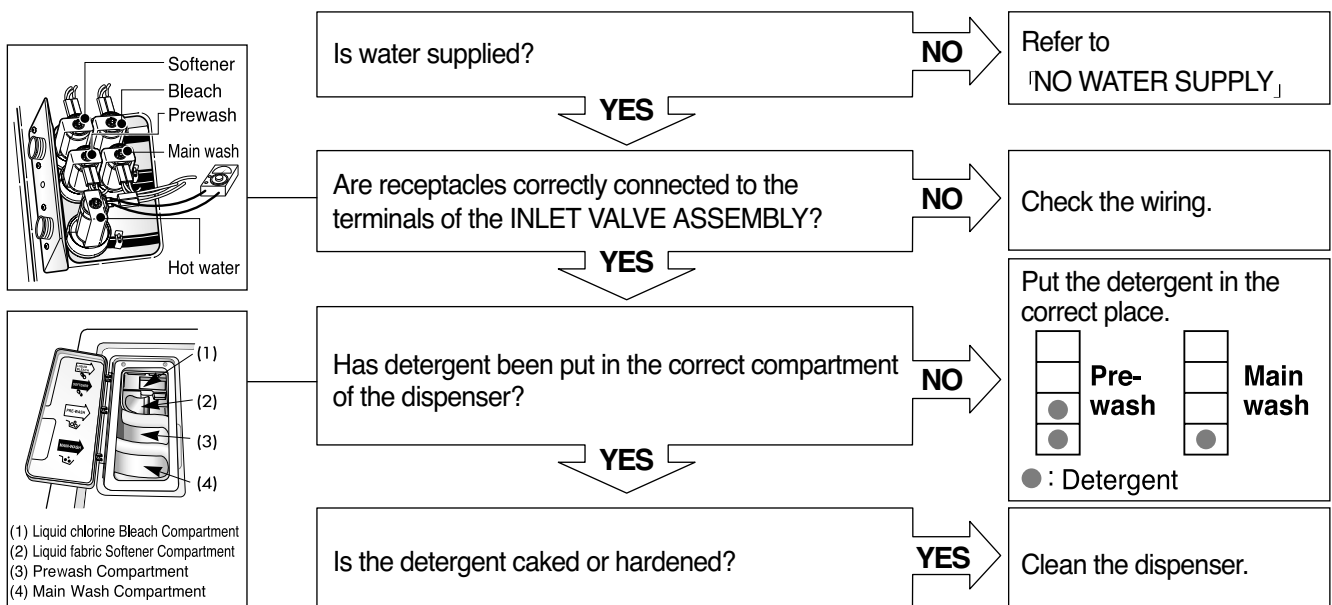
NO POWER



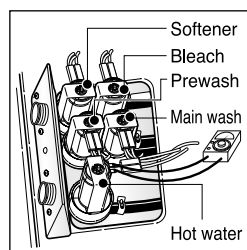
NO WATER SUPPLY



DETERGENT DOES NOT FLOW IN



SOFTENER / BLEACH DOES NOT FLOW IN



Is water supplied?

NO

Refer to
'NO WATER SUPPLY'

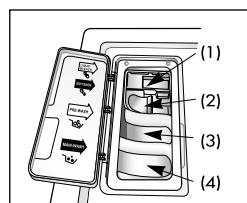
YES

Are the plugs correctly connected to the terminals of
the INLET VALVE ASSEMBLY?

NO

Check the wiring on the
dispenser.

YES



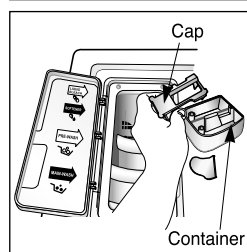
(1) Liquid chlorine Bleach Compartment
(2) Liquid fabric Softener Compartment
(3) Prewash Compartment
(4) Main Wash Compartment

Is softener / bleach put in the correct compartment of
the drawer?

NO

Put it in the correct
compartment.

YES

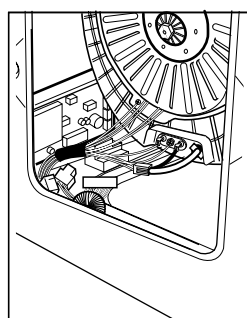


Is the softener / bleach cap clogged?

YES

Clean the Cap and
Container.

ABNORMAL SOUND



Is the motor bolt loosened?

YES

Secure the bolt.

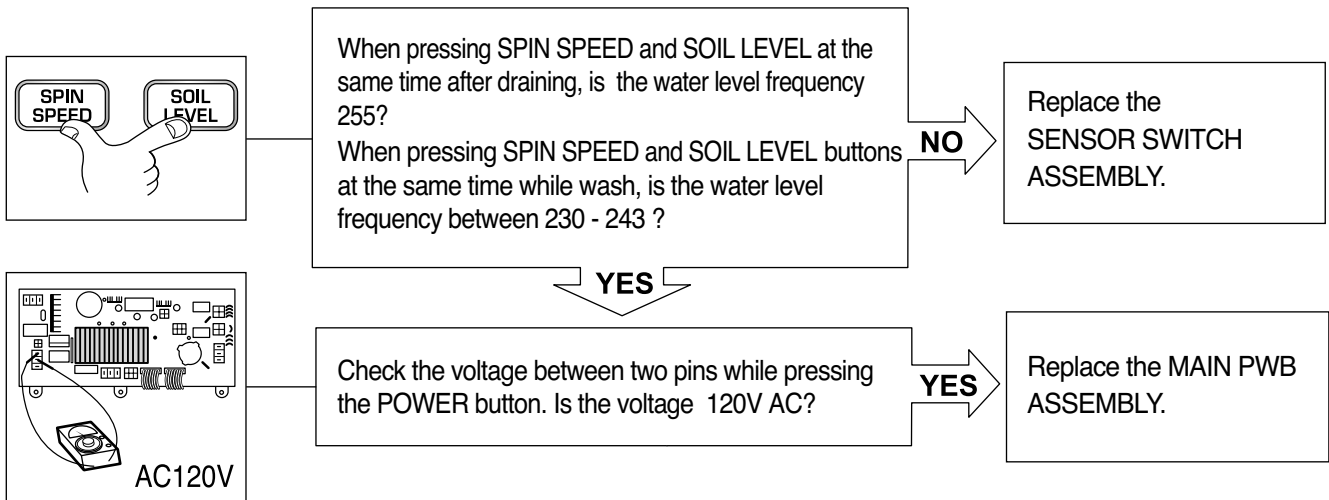
NO

Is there friction noise coming from the motor?

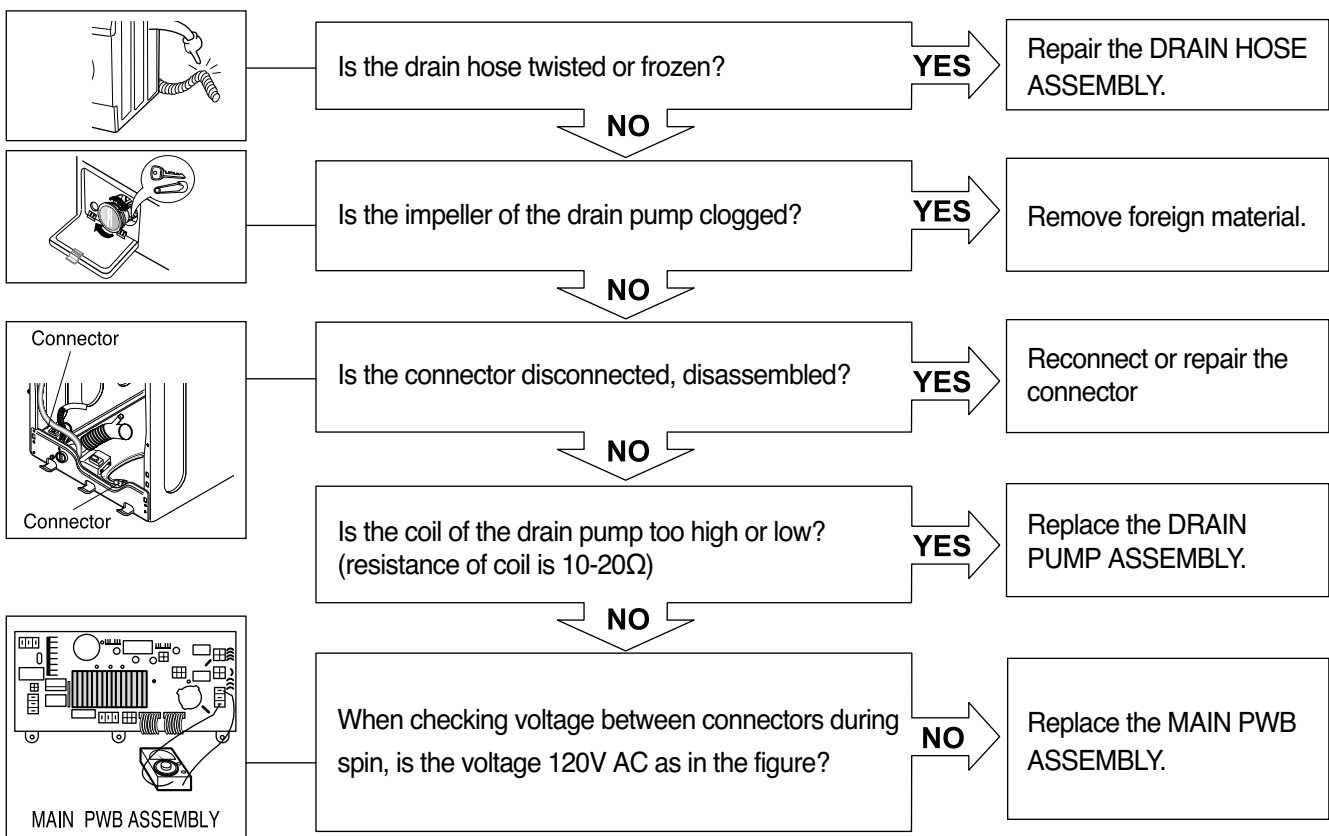
YES

Replace the STATOR
ASSEMBLY or ROTOR
ASSEMBLY.

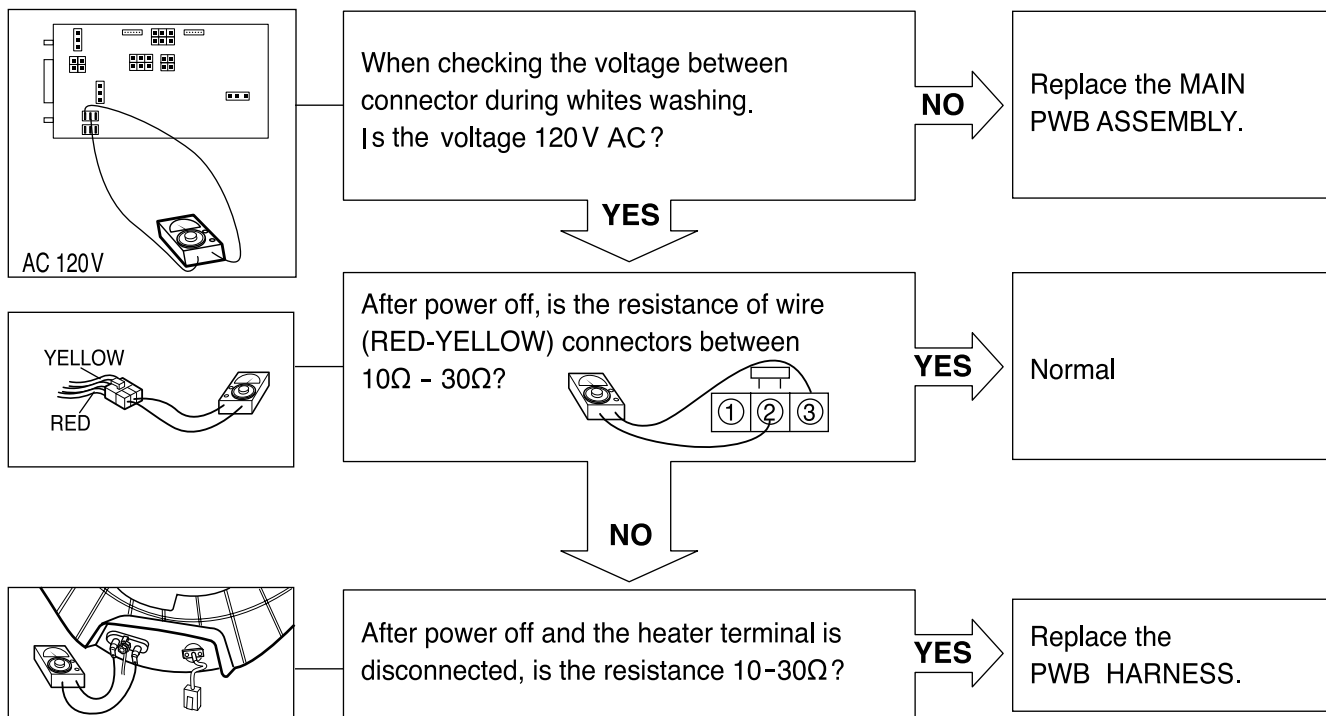
HEATING WITHOUT WATER



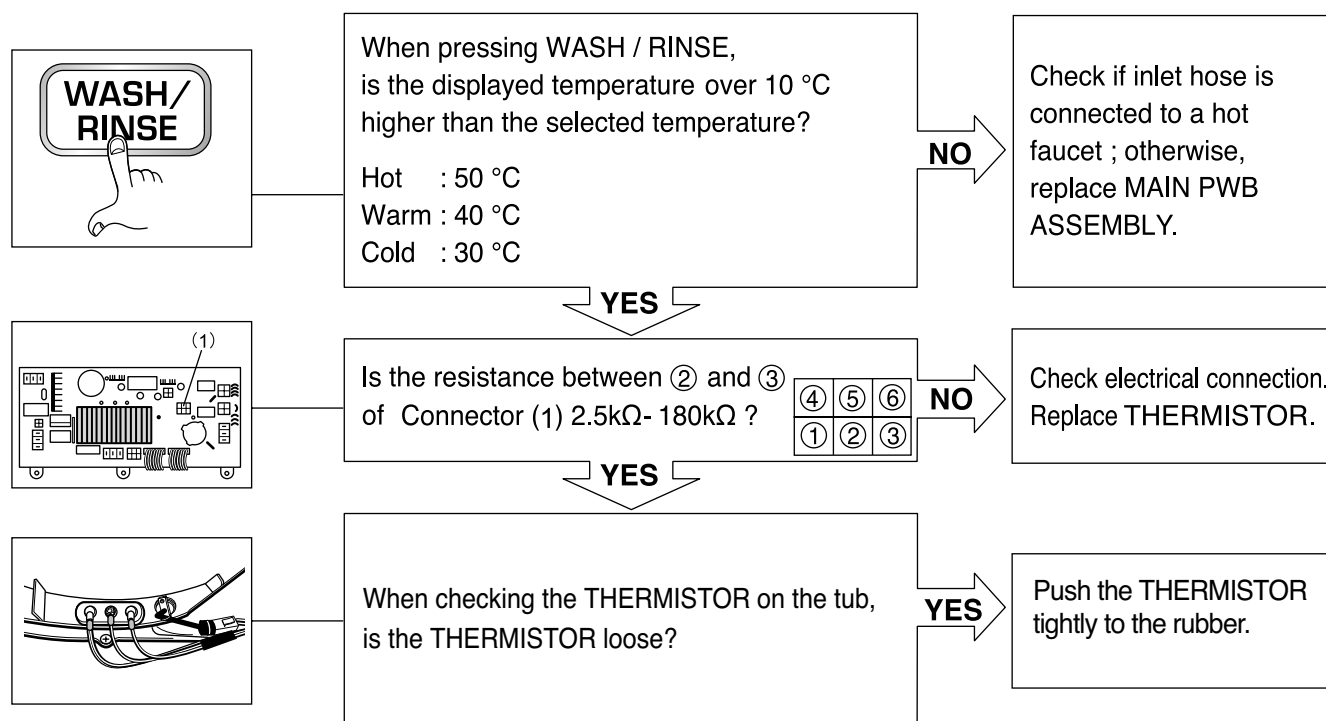
DRAIN MALFUNCTIONING



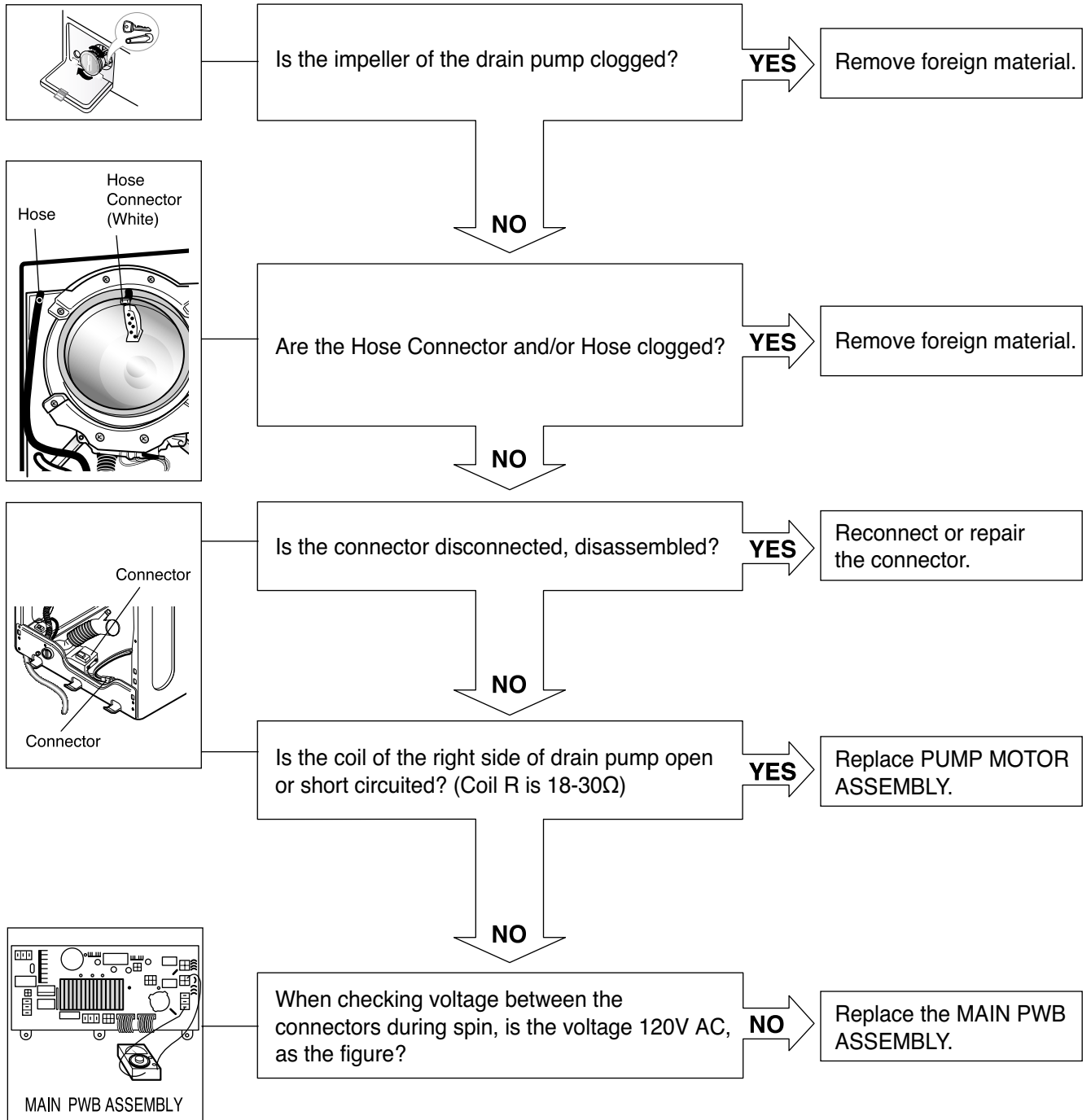
WASH HEATER TROUBLE



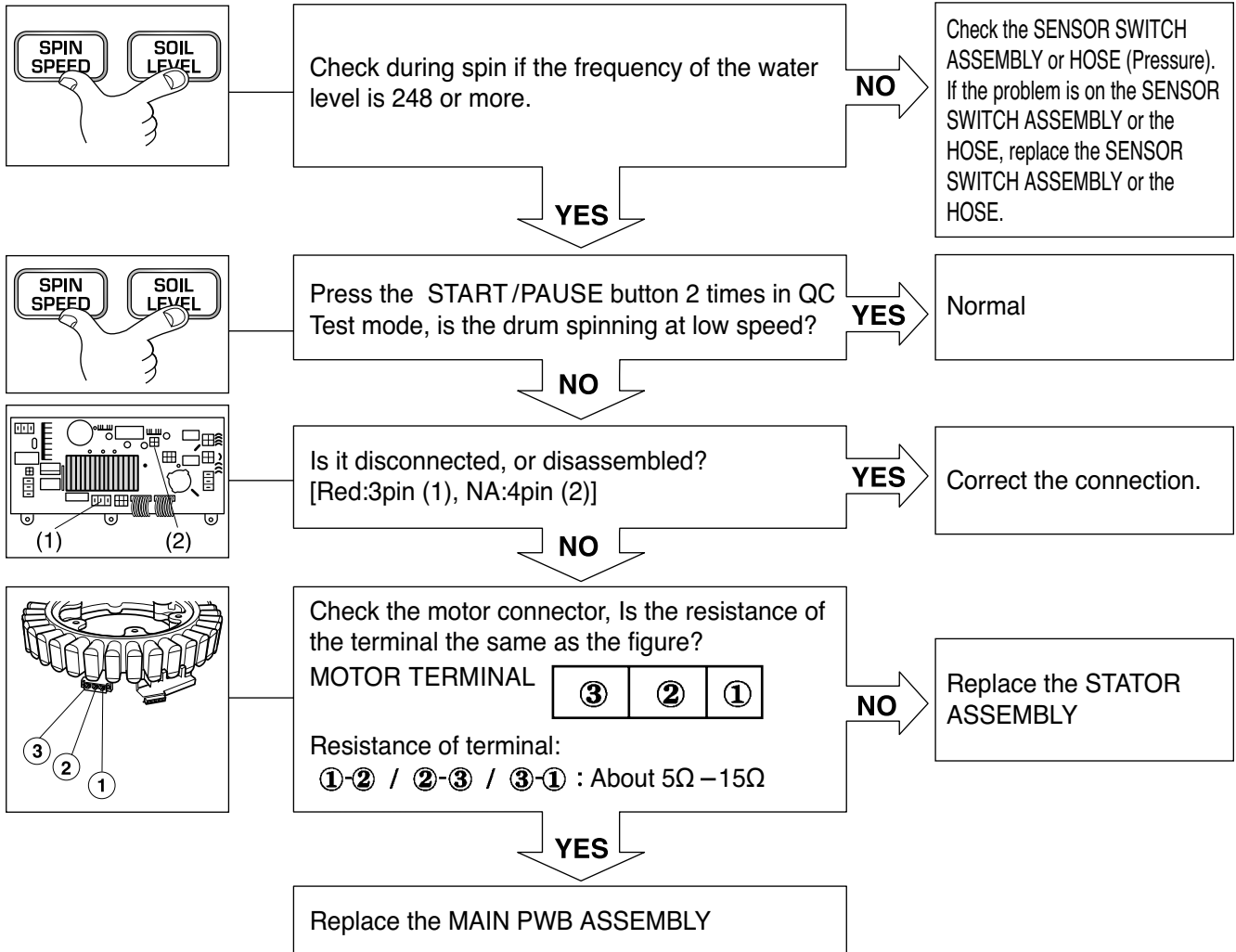
HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE



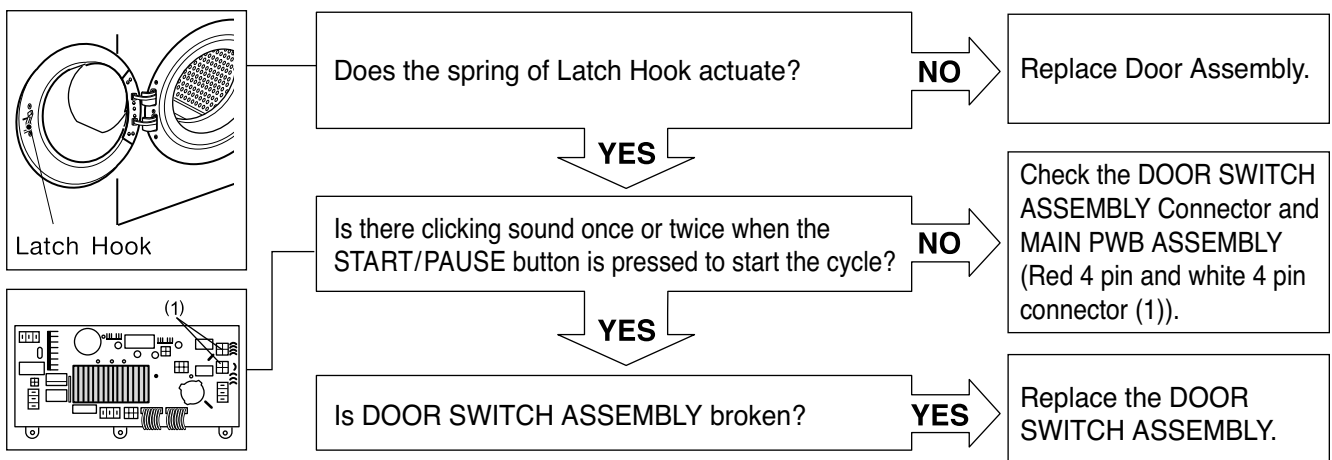
WILL NOT CIRCULATE WATER



SPIN TROUBLE



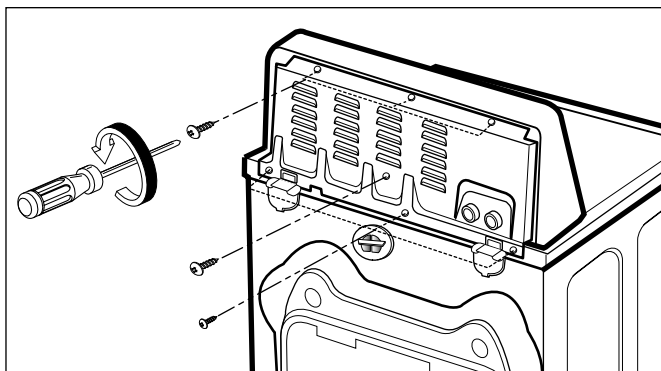
ERROR



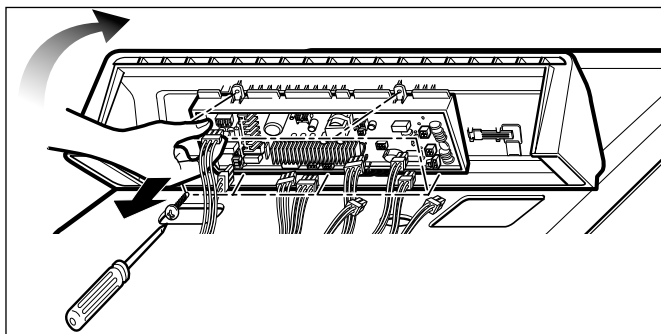
9. DISASSEMBLY INSTRUCTIONS

* Disassemble and repair the unit only after pulling out power plug from the outlet.

CONTROL PANEL ASSEMBLY

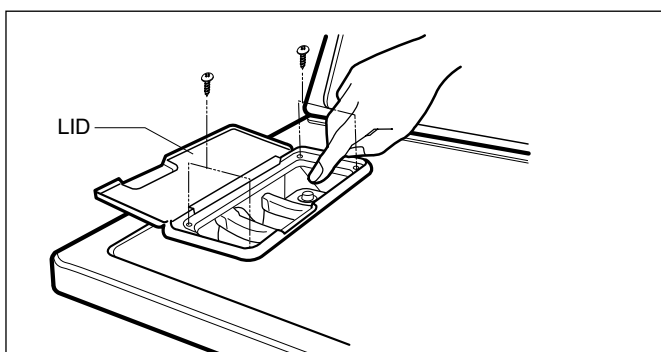


1. Unscrew 7 screws on the Rear Frame.
2. Disassemble the Rear Frame.

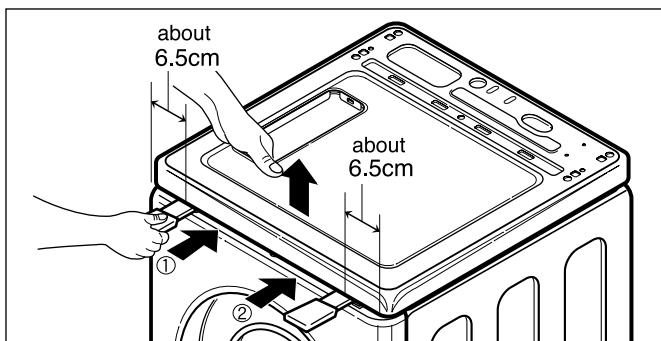


3. Pull the Control panel forward.
4. Disconnect connectors.
5. Unscrew 5 screws.
6. Disassemble the controller assembly.

TOP PLATE



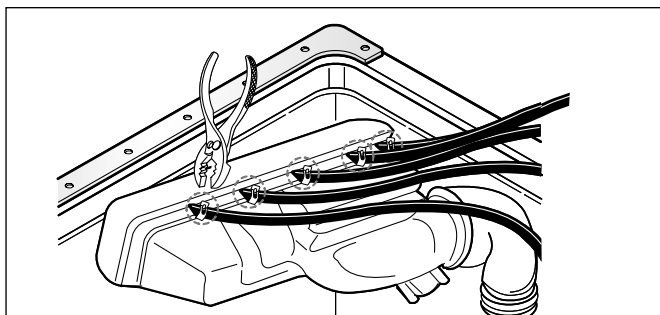
1. Open the Lid.
2. Unscrew 4 screws.
3. Disassemble the Lid Assembly.
4. Pull down the Dispenser by pushing hooks.



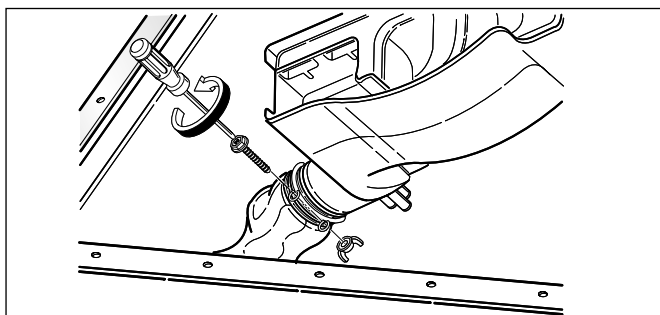
5. Put a hand into the dispenser hole and hold the top plate.
6. Push backward using an opener and lift the top plate.

* Do first left side (①).

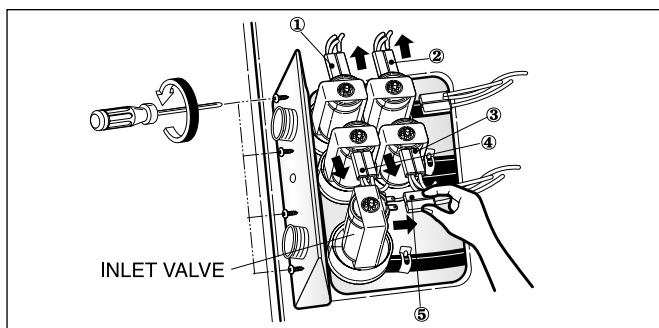
DISPENSER ASSEMBLY



1. Disassemble the 5 hose clamps.
2. Release the 5 hoses.



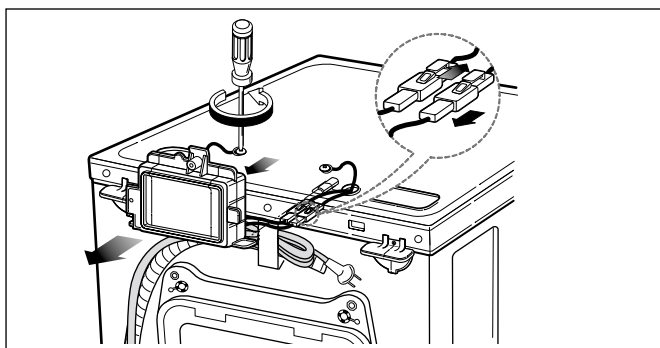
3. Unscrew the nut at the lower part of the dispenser.



4. Unscrew the 4 screws on the holder.
5. Disassemble the 5 connectors from the valves.

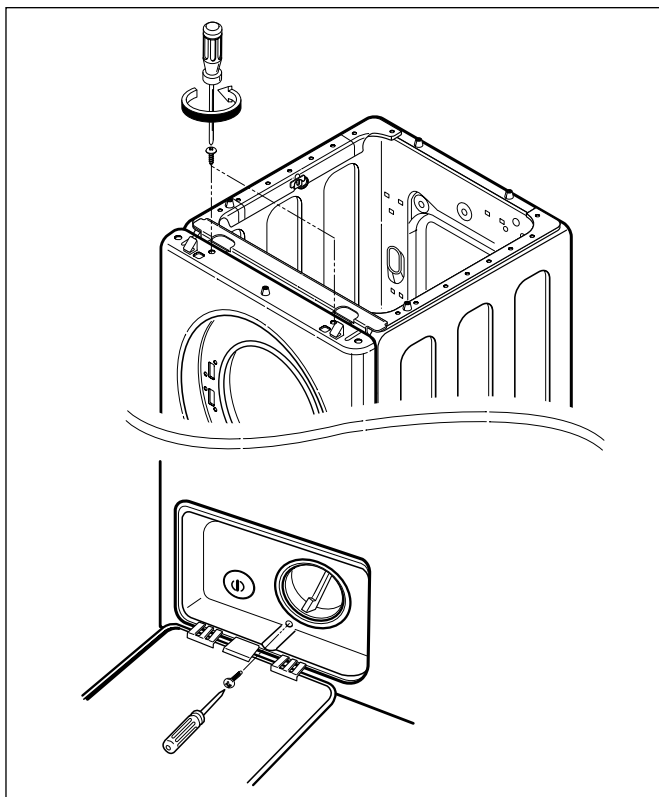
※ Wire color : ① WH-BK ② OR-BK
③ WH-BK ④ GY-BK
⑤ BL-BK

NOISE FILTER

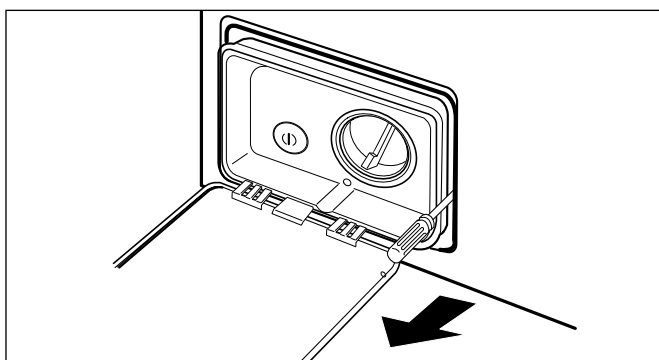


1. Unscrew the screw from the top plate.
2. Unplug the 2 connectors.

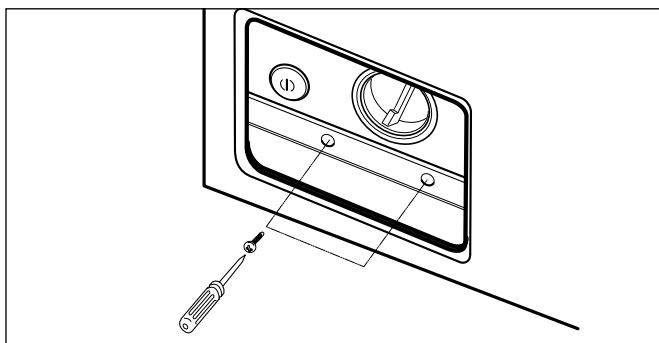
CABINET COVER



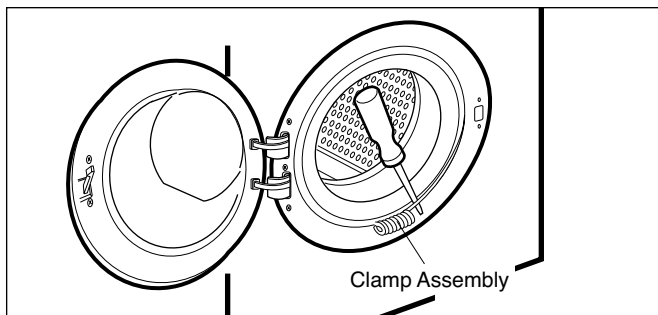
1. Unscrew the 2 screws from upper side of the cabinet cover.
2. Unscrew the screw from filter cover.



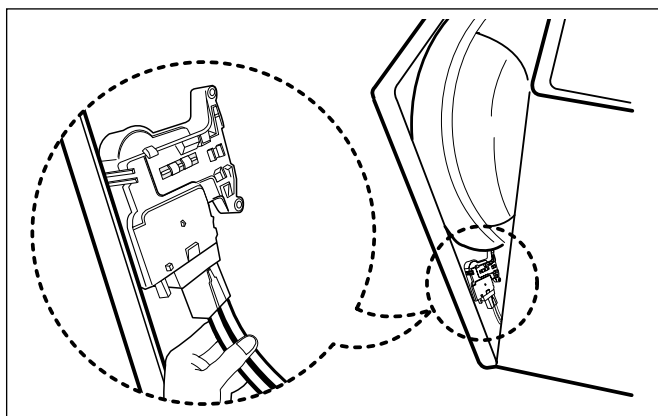
3. Put a flat (–) screwdriver into the both sides of the filter cover, and pull it out.



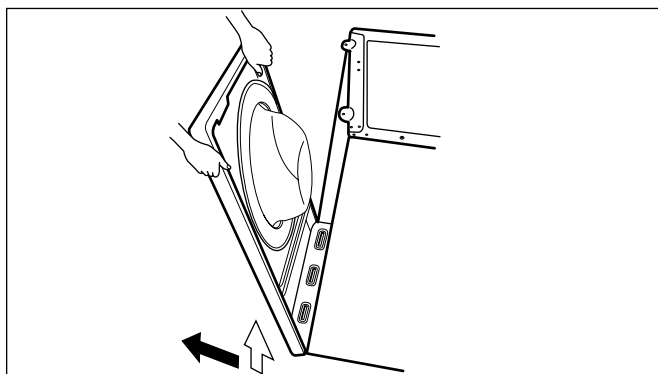
4. Unscrew the 2 screws from the lower side of the cabinet cover.



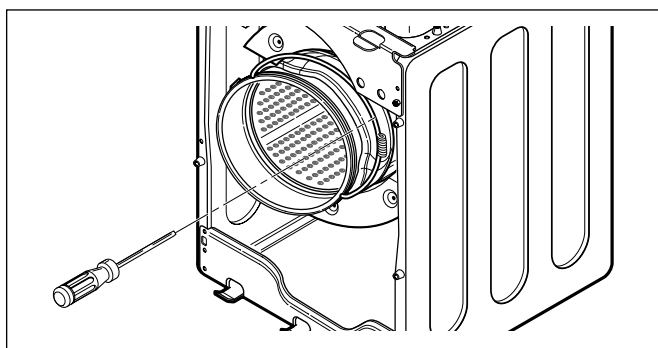
5. Open the door.
6. Disassemble the clamp assembly using a flat (–) screwdriver.
7. Separate the clamp assembly from cabinet cover.



8. Tilt the cabinet cover.
9. Disconnect the door switch connector.

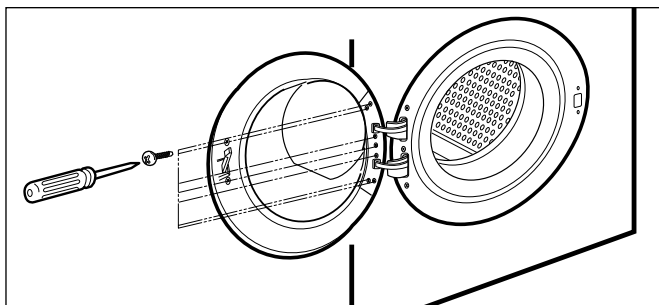


10. Lift and separate the cabinet cover.

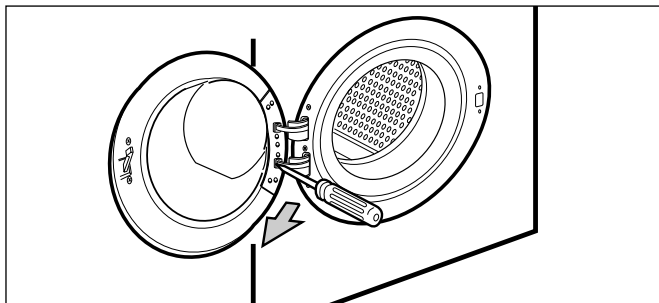


11. Disassemble the clamp assembly using a flat (–) screwdriver.
12. Disassemble the Gasket.

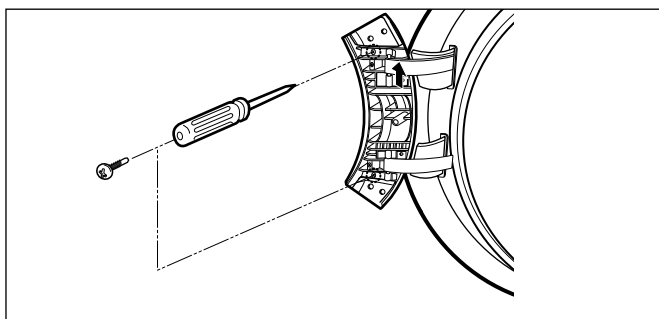
DOOR



1. Open the door.
2. Unscrew the 7 screws from the hinge cover.



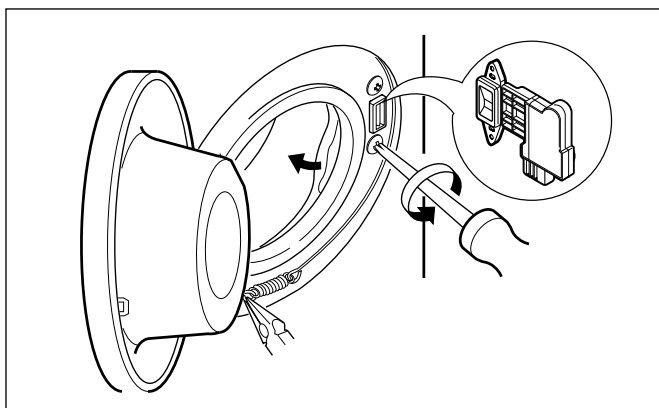
3. Put a flat (-) screwdriver into the opening of the hinge, and pull out the hinge cover.



4. Unscrew the screws from the door.
5. Disassemble the door upward / downward.

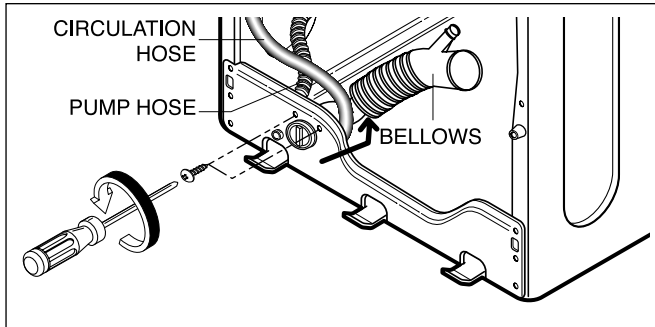
※ Be careful ! The door is heavy.

DOOR SWITCH ASSEMBLY



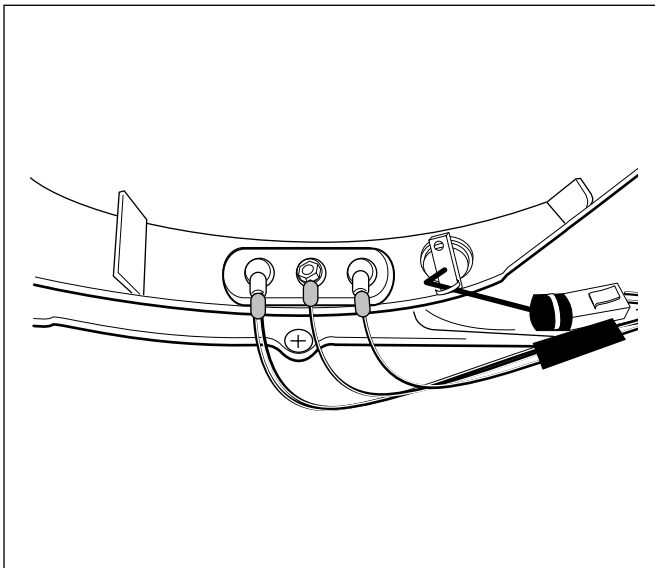
1. Open the door.
2. Disassemble the clamp assembly.
3. Unscrew the 2 screws from cabinet cover.

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.

HEATER

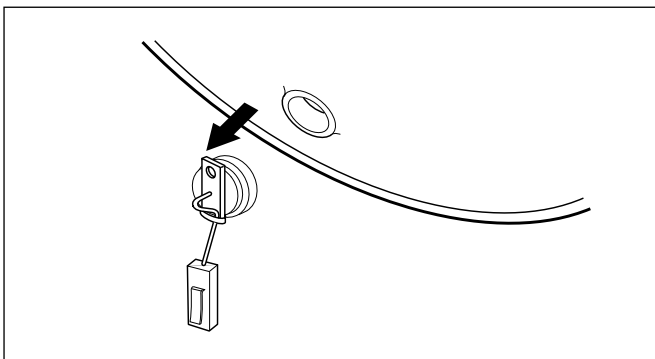


1. Disassemble the cabinet cover.
2. Separate 2 connectors from the heater.
3. Loose the nut and pull out the heater.

⚠ CAUTION

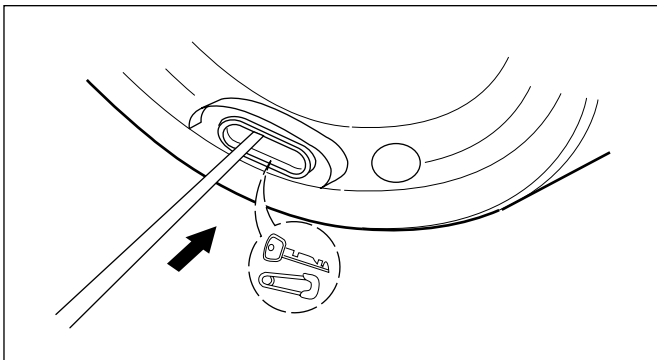
- When assembling the heater, insert the heater into heater clip on the bottom of the tub.
- Tighten the fastening nut so the heater is secure.

THERMISTOR



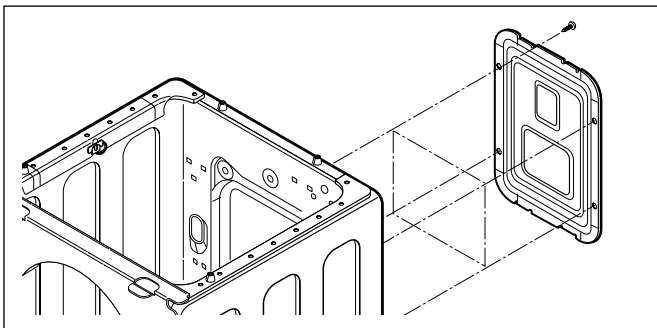
1. Disassemble the cabinet cover.
2. Unplug the white connector from the thermistor.
3. Pull it out by holding the bracket of thermistor.

WHEN FOREIGN OBJECT IS STUCK BETWEEN DRUM AND TUB

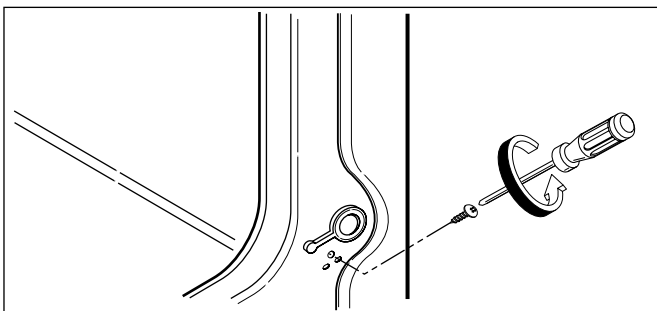


1. Disassemble the cabinet cover.
2. Separate the heater from the tub.
3. Remove any foreign objects (wire, coin, etc.) by inserting a long bar in the opening.

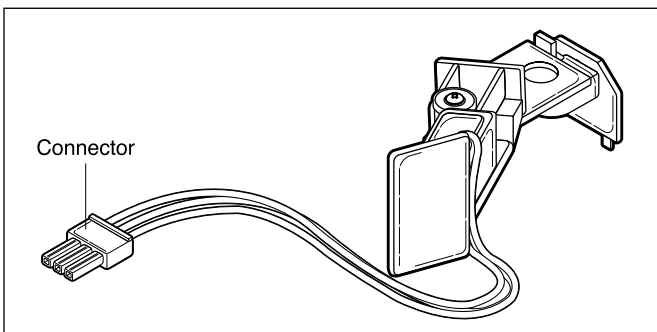
SENSOR ASSEMBLY(BALL SENSOR)



1. Unscrew the 4 screws from the back cover.

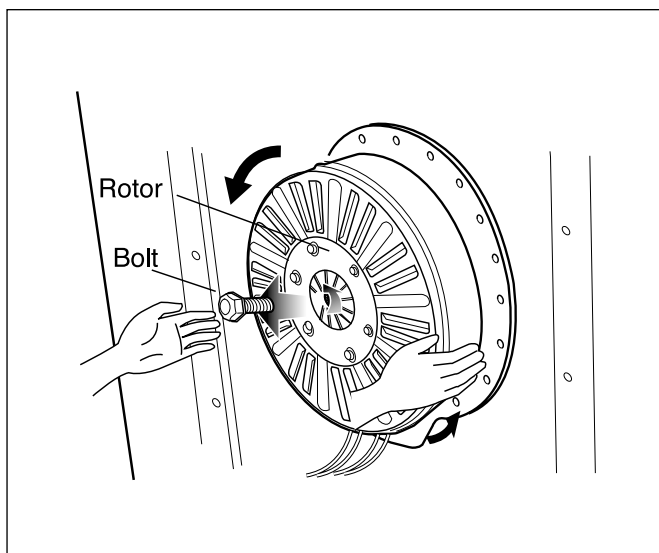


2. Unscrew the single screw from the lower-right side of the cabinet.

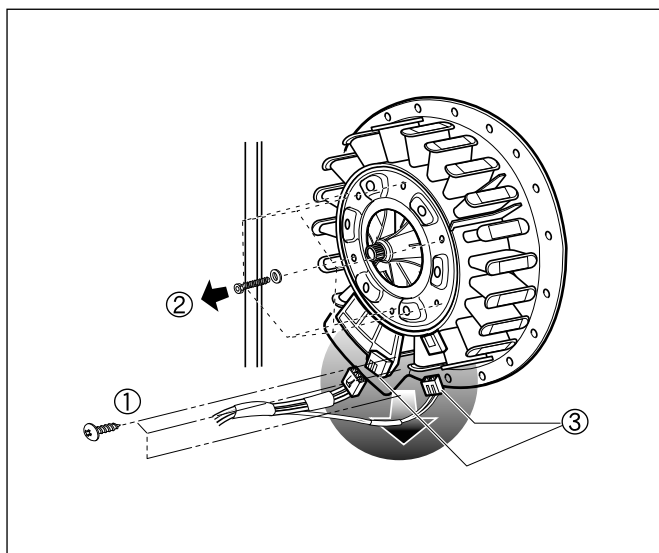


3. Disconnect the connector from PWB Harness.

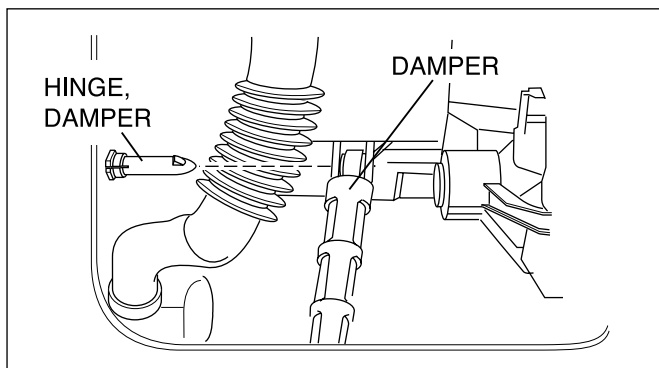
MOTOR / DAMPER



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



4. Unscrew the 2 screws from the tub bracket.
5. Loosen the 6 bolts on the stator.
6. Unplug the 2 connectors from the stator.

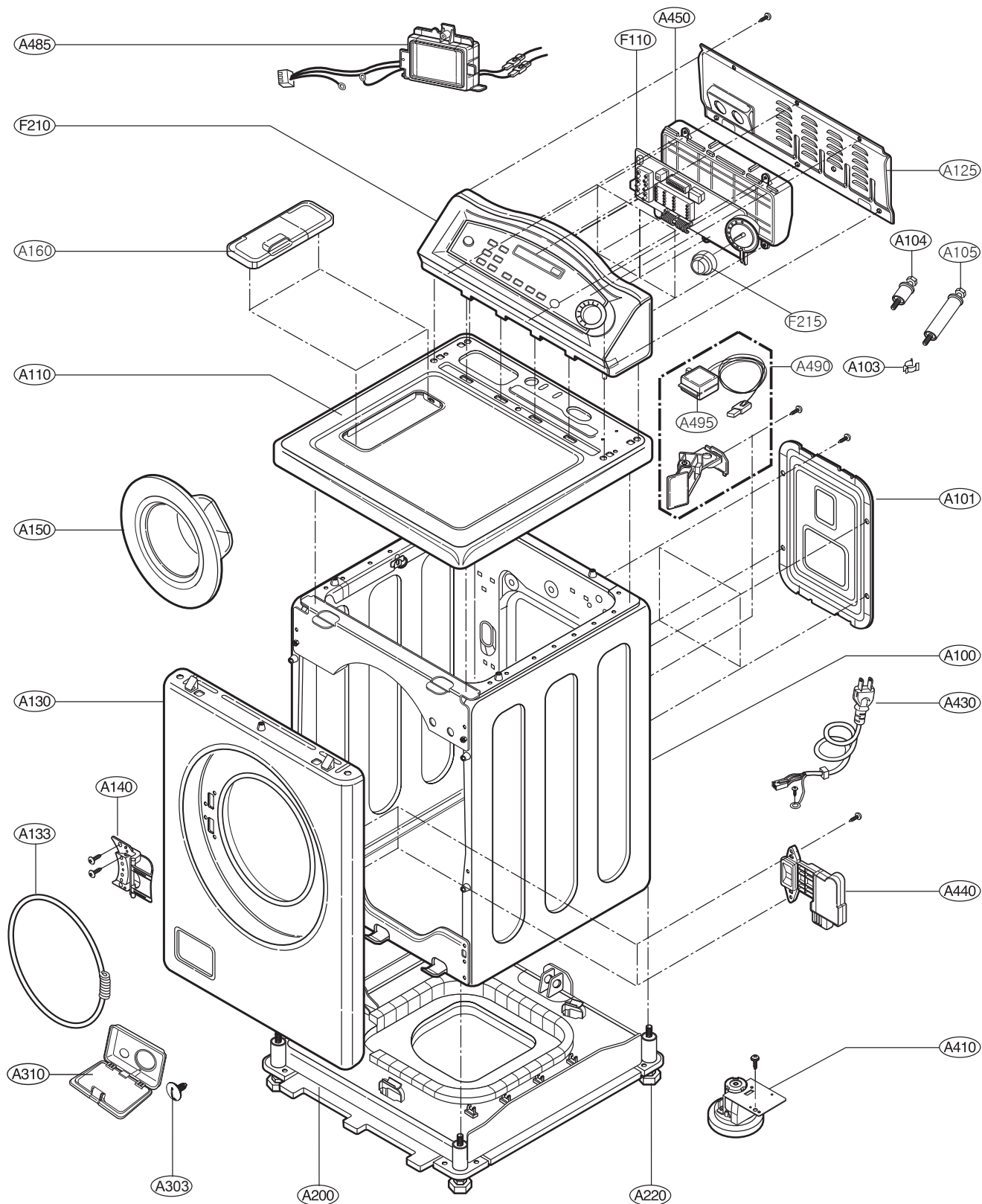


1. Disassemble the damper hinges from the tub and base.
2. Separate the dampers.

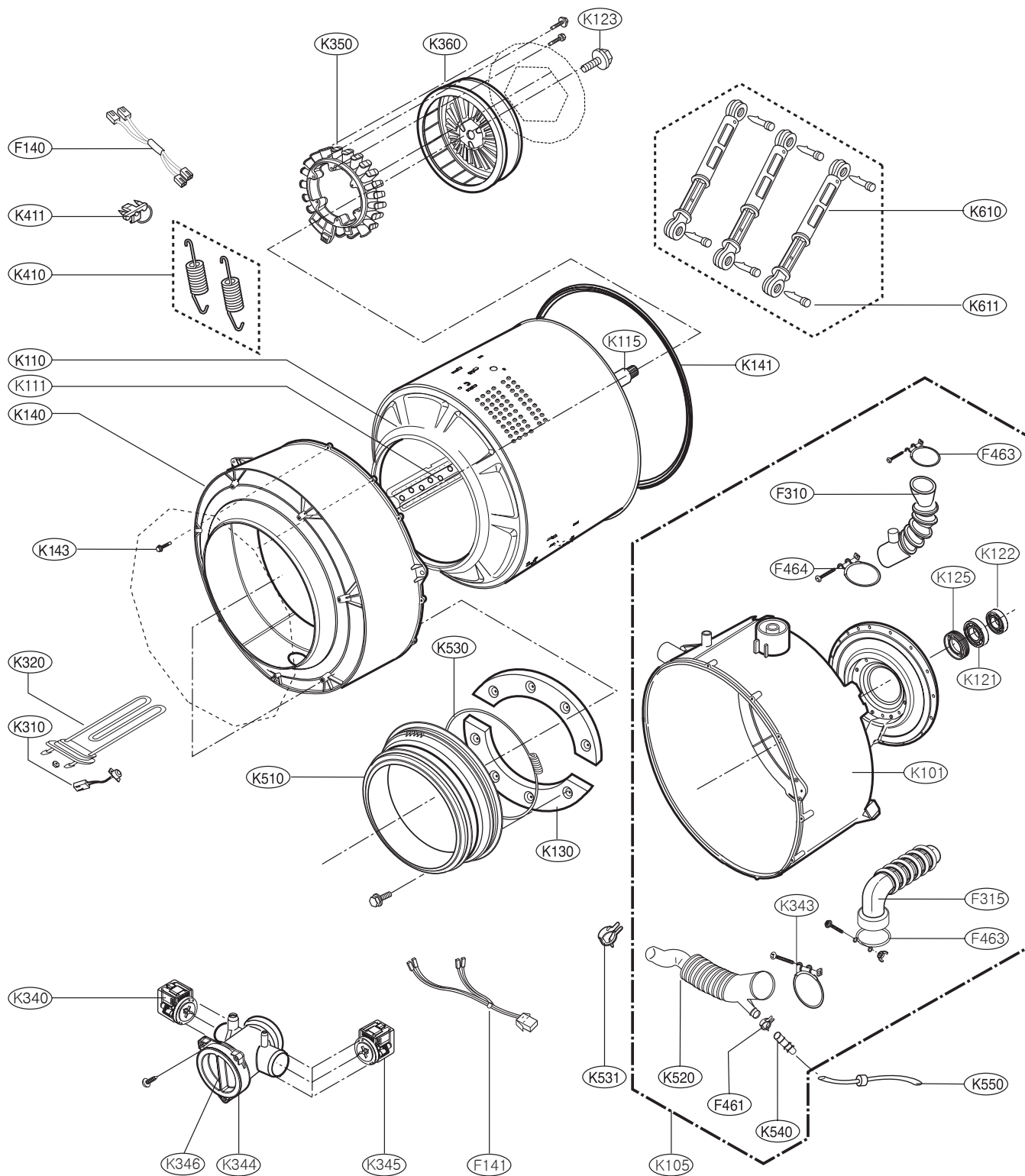
※ **NOTE**
• Once removed, replace the damper with new one.

10. EXPLODED VIEW

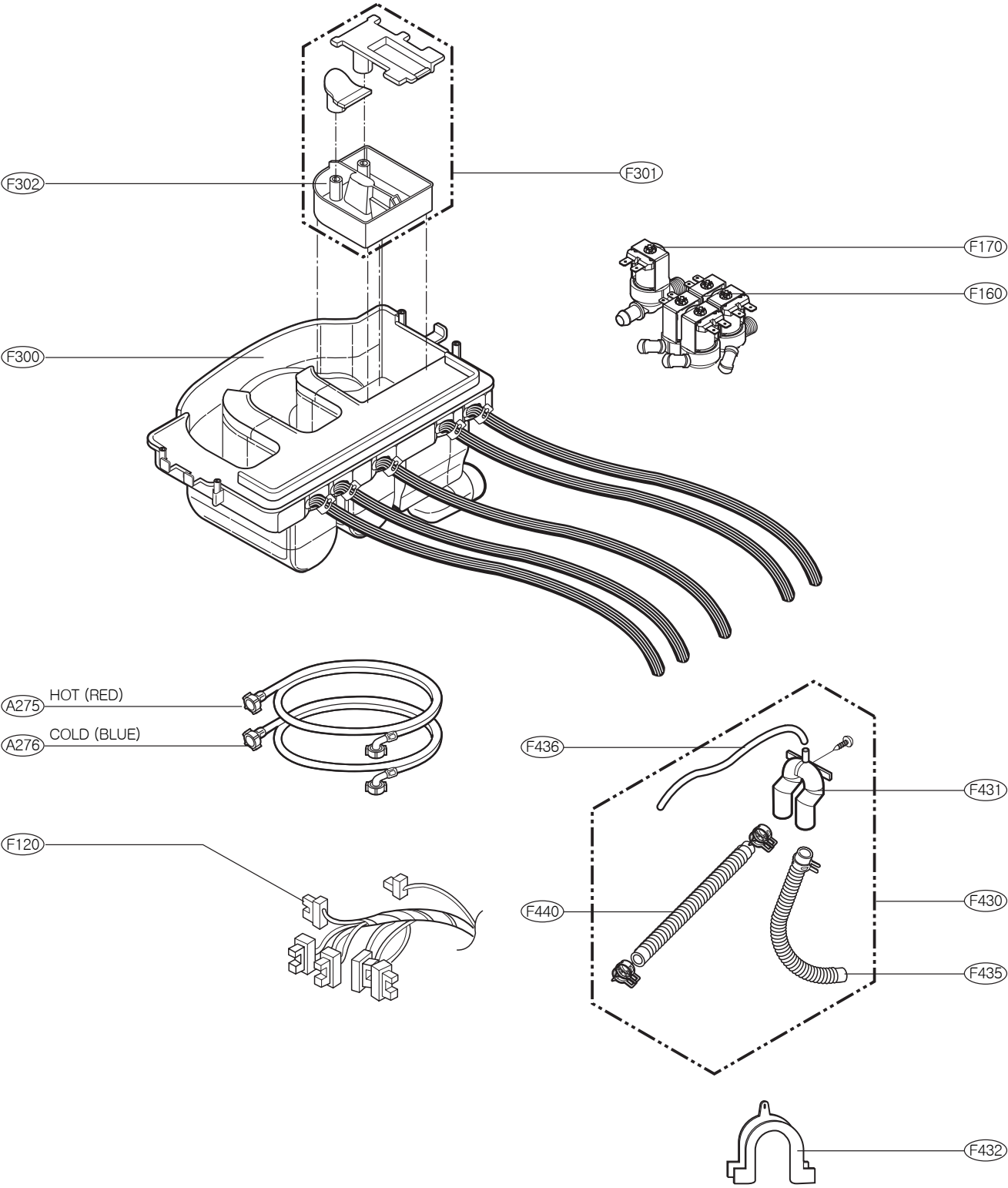
10-1. CABINET & CONTROL PANEL ASSEMBLY



10-2.DRUM & TUB ASSEMBLY



10-3.DISPENSER ASSEMBLY





DEC. 2002 PRINTED IN KOREA

P/No.:3828ER3013T