CAUTION

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

MODEL: WM2688H*M
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## 1. SPECIFICATIONS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>WM2688H*M</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOR</td>
<td>W: BLUE WHITE, N: NAVY BLUE</td>
</tr>
<tr>
<td>POWER SUPPLY</td>
<td>AC 120 V, 60 Hz</td>
</tr>
<tr>
<td>PRODUCT WEIGHT</td>
<td>192 lbs (87kg)</td>
</tr>
<tr>
<td>ELECTRIC POWER CONSUMPTION</td>
<td></td>
</tr>
<tr>
<td>WASHING</td>
<td>280 W</td>
</tr>
<tr>
<td>DRAIN MOTOR</td>
<td>80 W</td>
</tr>
<tr>
<td>WASH HEATER</td>
<td>1000 W</td>
</tr>
<tr>
<td>REVOLUTION SPEED</td>
<td></td>
</tr>
<tr>
<td>WASH</td>
<td>46 rpm</td>
</tr>
<tr>
<td>SPIN</td>
<td>0-1320 rpm</td>
</tr>
<tr>
<td>CYCLES</td>
<td>9</td>
</tr>
<tr>
<td>WASH/RINSE TEMPERATURES</td>
<td>5</td>
</tr>
<tr>
<td>SPIN SPEEDS</td>
<td>5</td>
</tr>
<tr>
<td>OPTIONS</td>
<td>Prewash, Rinse+Spin, Extra Rinse, Water Plus, Stain Cycle</td>
</tr>
<tr>
<td>WATER CIRCULATION</td>
<td>Incorporated</td>
</tr>
<tr>
<td>OPERATIONAL WATER PRESSURE</td>
<td>14.5–116 psi (100-800 kPa)</td>
</tr>
<tr>
<td>CONTROL TYPE</td>
<td>Electronic</td>
</tr>
<tr>
<td>WASH CAPACITY [cu.ft]</td>
<td>3.47 (4.0 IEC)</td>
</tr>
<tr>
<td>DIMENSIONS</td>
<td>27&quot; (W) X 29 3/4&quot; (D) X 38 11/16&quot; (H), 50 13/16&quot; (D, door open)</td>
</tr>
<tr>
<td>DELAY WASH</td>
<td>up to 19 hours</td>
</tr>
<tr>
<td>DOOR SWITCH TYPE</td>
<td>PTC + Solenoid</td>
</tr>
<tr>
<td>WATER LEVEL</td>
<td>10 steps (by sensor)</td>
</tr>
<tr>
<td>LAUNDRY LOAD SENSING</td>
<td>Incorporated</td>
</tr>
<tr>
<td>ERROR DIAGNOSIS</td>
<td>Incorporated</td>
</tr>
<tr>
<td>AUTO POWER OFF</td>
<td>Incorporated</td>
</tr>
<tr>
<td>CHILD LOCK</td>
<td>Incorporated</td>
</tr>
<tr>
<td>RLM ENABLE</td>
<td>Incorporated</td>
</tr>
<tr>
<td>STEAM</td>
<td>Incorporated</td>
</tr>
</tbody>
</table>
2. FEATURES & TECHNICAL EXPLANATION

2-1. FEATURES

- **Ultra Capacity**
  The Larger drum enables not just higher head drop and stronger centrifugal force, but also less tangling and wrinkling of the laundry. Heavier loads, such as king size comforters, blankets, and curtains, can be washed.

- **Direct Drive System**
  The advanced Brushless DC motor directly drives the drum without belt and pulley.

- **Tilted Drum and Extra Large Door Opening**
  Tilted drum and extra large opening make it possible to load and unload clothing more easily.

- **Steam Washing and SteamFresh™**
  Steam Washing features upgraded washing performance with low energy and water consumption. SteamFresh™ cycle removes wrinkles from dry clothes.

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

- **Automatic Wash Load Detection**
  Automatically detects the load and optimizes the washing time.

- **Built-in Heater**
  Internal heater helps to maintain water temperature at its optimum level for selected cycles.

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

- **Using the RLM (Remote Laundry Monitor)**
  The RLM monitors status of your washer and/or dryer. You can plug the display unit into any power outlet in your home. The RLM Display Unit can be purchased separately for this washer.
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.
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 intertial 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 PRE WASH button for 3 seconds to lock/unlock control.
- When Child lock is set, CHILD LOCK lights and all buttons are disabled except the Power button. You can lock the washer while it is operating.

2-8. WATER CIRCULATION
- When Washing and Rinsing function of shower at the upper part of Gasket.
- When Washing, it continuously operates for 3 minutes and intermittently.
- When Rinsing, it continuously operates after completion of water supply.

2-9. STEAM
- For tough stained clothes, underwear, or baby clothes.
- Steam Wash is available with Sanitary, Bulk/Large, Perm. Press, Cotton/Normal, and baby Wear cycles.
- This option features upgraded washing performance with low energy and water consumption
- Do not load delicates such as wool, silk, and easily discolored clothes.

2-10. DRUM LIGHT
- The Drum Light comes on when the Power button is pressed. It goes off when the door is closed and the washer starts operation.
- The Drum Light remains off when the door is locked.
- The Drum Light can be turned on while the washer is in operation by pressing the Rinse+Spin button for 3 seconds. The light will turn off automatically 4 minutes later.
- The Drum Light comes on when the washing cycle is finished and goes off 4 minutes later.
3. PARTS IDENTIFICATION

- Shipping Bolts
- Power Plug
  - If the supply cord is damaged, it must be replaced by the manufacturer or its authorized service technician in order to avoid a hazard.
- Control Panel
- Water Circulation & Steam Nozzle
- Drum Light
- Drum
- Door Seal
- Cold Water Inlet
- Air Vent for Safety
- Hot Water Inlet
- Safety Cover (PLC Modem)

Accessories

- Hot/Cold (1 each) Hose
- Wrench
- Tie strap (Option)
  - to secure drain hose to standpipe, inlet hose, or laundry tub
4. INSTALLATION & TEST

1. Before servicing, ask the customer what the trouble is.
2. Check the setup (power supply is 120 V 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:

<table>
<thead>
<tr>
<th>REMOVE THE SHIPPING BOLTS</th>
<th>INSTALL THE APPLIANCE ON A FLAT AND FIRM SURFACE</th>
<th>ADJUST THE LEVELING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remove the 4 shipping bolts with the supplied wrench.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Do first lower side to remove easily.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Keep the shipping bolts and spanner for future use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Insert the 4 caps (provided) into the hole.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Turn the leveling feet to adjust the appliance.
- Turn clockwise to raise; counterclockwise to lower.
HOW TO CONNECT THE INLET HOSE
- Verify that the rubber washer is inside of the valve connector.
- Tighten the inlet hose securely 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 hoses.

2 Press the POWER button.

3 Press the Start/Pause button.
   • Listen for a click to determine if the door has locked.

4 Check the water supply.
   • Check if water is supplied through the detergent dispenser.

5 Check the automatic reverse rotation.
   • Check if the drum rotates clockwise and counterclockwise.

6 Check the water heating function.
   • Press the WASH/RINSE button and the present temperature will be displayed.

7 Check the drain and spin functions.
   • Power off and the power on.
   • Press the SPIN SPEED button.
   • Press the START/PAUSE button.
   • Check the spin and drain functions.

8 Press the START/PAUSE button.
   • Listen for a click to determine if the door is unlocking.

9 Water removal
   • If SVC is needed during check, remove the remaining water by pulling out the hose cap.
5. OPERATION

WM2688H*M
**Power Button**
- Use this button to turn the power On/Off.

**Status Indicator**
- It shows elapsed time of the cycle the washer is operating.

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

**Start/Pause**
- Use this button to Start/Stop the washer.
Option Button

- **PREWASH**: Use this option for loads that need pretreatment. It adds 16 minutes prewash and a spin cycle.
- **RINSE+SPIN**: Use this option to rinse and then spin.
- **EXTRA RINSE**: This option provides an additional rinse.
- **STAIN CYCLE**: Adds time to the wash and rinse cycles for better stain removal. Automatically provides a rinse.
- **WATER PLUS**: Add extra water to the wash and rinse cycles for superior results.

Wash/Rinse, Spin speed, Soil Level, Beeper 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.
- Press repeatedly to adjust the volume of the Beeper.
**Cool-down**

Approx. (Minutes)

* Wash time is in minutes.

The total working time will vary with the load size, water temperature and ambient temperature.

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**WIRING DIAGRAM/PROGRAM CHART**

**PROGRAM CHART**

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

**Approx. Working Time** (Minutes)

- Sanitary: 105
- Cotton / Normal: 58
- Bulky / Large: 57
- Perm Press: 55
- Delicates: 34
- Baby Wear: 120
- Hand Wash Wool: 34
- Speed Wash: 30
- Drain + Spin: 14
- Wash + Rinse: 45
- Rinse + Spin: 19

* Wash time is in minutes.

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

**Note**: 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.

<table>
<thead>
<tr>
<th>Number of times the Start/Pause button is pressed</th>
<th>Check Point</th>
<th>Display Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Turns on all lamps and locks the door.</td>
<td>QC TEST MODE</td>
</tr>
<tr>
<td>1 time</td>
<td>Tumble clockwise.</td>
<td>rpm (42–50)</td>
</tr>
<tr>
<td>2 times</td>
<td>Low speed Spin.</td>
<td>rpm (55–65)</td>
</tr>
<tr>
<td>3 times</td>
<td>High speed Spin.</td>
<td>rpm (125–135)</td>
</tr>
<tr>
<td>4 times</td>
<td>Inlet valve for prewash turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>5 times</td>
<td>Inlet valve for main wash turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>6 times</td>
<td>Inlet valve for hot water turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>7 times</td>
<td>Inlet valve for steam turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>8 times</td>
<td>Inlet valve for bleach turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>9 times</td>
<td>Tumble counterclockwise.</td>
<td>rpm (42–50)</td>
</tr>
<tr>
<td>10 times</td>
<td>Heater turns on for 3 sec.</td>
<td>Water temperature</td>
</tr>
<tr>
<td>11 times</td>
<td>Circulation pump turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>12 times</td>
<td>Drain pump turns on.</td>
<td>Water level frequency (25–65)</td>
</tr>
<tr>
<td>13 times</td>
<td>Water level Sensor for Steam</td>
<td>Water level frequency of TSG(0–255)</td>
</tr>
<tr>
<td>14 times</td>
<td>Steam Heater turns on for 1.2 sec.</td>
<td>TSG temperature</td>
</tr>
<tr>
<td>15 times</td>
<td>Off</td>
<td>-</td>
</tr>
</tbody>
</table>

7-3. HOW TO CHECK THE WATER LEVEL FREQUENCY

※ Press the WASH/RINSE and SOIL LEVEL button simultaneously.

- The digits indicate the water level frequency.

So, for example a display indicating 058: a Water level frequency of \(20 + (58 \times 0.1)\)

\[= 25.8 \text{ kHz}\]
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`, `FE`, `tE` 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.

<table>
<thead>
<tr>
<th>ERROR</th>
<th>SYMPTOM</th>
<th>CAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 WATER INLET ERROR</td>
<td>• 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.</td>
<td></td>
</tr>
<tr>
<td>2 IMBALANCE ERROR</td>
<td>• The load is too small.</td>
<td>• The appliance is tilted.</td>
</tr>
<tr>
<td></td>
<td>• Laundry is gathered to one side.</td>
<td>• Non distributable things are put into the drum.</td>
</tr>
<tr>
<td>3 DRAIN ERROR</td>
<td>• Not fully drained within 10 minutes.</td>
<td></td>
</tr>
<tr>
<td>4 OVER FLOW ERROR</td>
<td>• Water is overflowing (water level frequency is over 213).</td>
<td>• If <code>FE</code> is displayed, the drain pump will operate to drain the water automatically.</td>
</tr>
<tr>
<td>5 PRESSURE SENSOR ERROR</td>
<td>• The SENSOR SWITCH ASSEMBLY is out of order.</td>
<td></td>
</tr>
<tr>
<td>6 DOOR OPEN ERROR</td>
<td>• Door not all the way closed.</td>
<td>• Loose electrical connections at Door switch and PWB Assembly.</td>
</tr>
<tr>
<td></td>
<td>• The DOOR SWITCH ASSEMBLY is out of order.</td>
<td></td>
</tr>
<tr>
<td>7 HEATING ERROR</td>
<td>• The THERMISTOR is out order.</td>
<td></td>
</tr>
<tr>
<td>ERROR</td>
<td>SYMPTOM</td>
<td>CAUSE</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 8 LOCKED MOTOR ERROR | LE      | • 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 EEPROM ERROR  | EE      | • EEPROM is out of order.  
※ Displayed only when the START/PAUSE button is first pressed in the QC Test Mode. |
| 11 POWER FAILURE   | PF      | • The washer experienced a power failure. |
# 8. ERROR DIAGNOSIS AND CHECK LIST

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

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>GUIDE FOR SERVICE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No power</td>
<td>Is the power plug connected firmly to 120 V AC outlet?</td>
</tr>
<tr>
<td></td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td></td>
<td>Power failure? or Breaker opened? Is the outlet controlled by a switch?</td>
</tr>
<tr>
<td></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td></td>
<td>Visit to service.</td>
</tr>
<tr>
<td>Water inlet trouble</td>
<td>Is displayed?</td>
</tr>
<tr>
<td></td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td></td>
<td>Is the tap opened?</td>
</tr>
<tr>
<td></td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td></td>
<td>Is the tap frozen?</td>
</tr>
<tr>
<td></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td></td>
<td>Is the water supply shut-off?</td>
</tr>
<tr>
<td></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td></td>
<td>Is filter in the inlet valve clogged with foreign material?</td>
</tr>
<tr>
<td></td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td></td>
<td>Clean the filter of inlet valve</td>
</tr>
<tr>
<td></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td></td>
<td>Visit to service.</td>
</tr>
<tr>
<td>SYMPTOM</td>
<td>GUIDE FOR SERVICE CALL</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Door error</strong></td>
<td></td>
</tr>
<tr>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td>Started with door opened?</td>
<td>YES</td>
</tr>
<tr>
<td>NO</td>
<td>Close the door.</td>
</tr>
<tr>
<td><strong>Was the load too large?</strong></td>
<td>YES</td>
</tr>
<tr>
<td><strong>Avoid overloading.</strong></td>
<td>NO</td>
</tr>
<tr>
<td><strong>Clicking sound is heard once or twice, when the START/PAUSE button is pressed to start the cycle?</strong></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>Visit to service.</td>
</tr>
<tr>
<td><strong>Check if the door switch is OK.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Drain trouble</strong></td>
<td></td>
</tr>
<tr>
<td>![Icon]</td>
<td></td>
</tr>
<tr>
<td><strong>Is ** displayed?</strong></td>
<td>YES</td>
</tr>
<tr>
<td><strong>Is the drain pump filter clogged with foreign material such as pins, coins, etc?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Clean up the filter.</strong></td>
<td>YES</td>
</tr>
<tr>
<td><strong>Is the drain hose frozen, kinked, or crushed?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Visit to service.</strong></td>
<td>NO</td>
</tr>
</tbody>
</table>
### SYMPTOM
Suds overflow from the appliance.  
(In this condition, wash and spin do not operate normally)

<table>
<thead>
<tr>
<th>GUIDE FOR SERVICE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a HE (High Efficiency) detergent used?</td>
</tr>
<tr>
<td><strong>YES</strong></td>
</tr>
<tr>
<td>Is the proper amount of detergent used as recommended?</td>
</tr>
<tr>
<td><strong>YES</strong></td>
</tr>
<tr>
<td>Recommend to reduce the amount of detergent.</td>
</tr>
</tbody>
</table>

* 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.

### SYMPTOM
Liquid laundry products do not flow in.

<table>
<thead>
<tr>
<th>GUIDE FOR SERVICE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is liquid laundry product put in the correct compartment of the dispenser?</td>
</tr>
<tr>
<td><strong>YES</strong></td>
</tr>
<tr>
<td>Is the cap clogged?</td>
</tr>
<tr>
<td><strong>YES</strong></td>
</tr>
<tr>
<td>Explain proper use of liquid laundry products.</td>
</tr>
<tr>
<td><strong>Clean the compartment.</strong></td>
</tr>
</tbody>
</table>

### SYMPTOM

<table>
<thead>
<tr>
<th>GUIDE FOR SERVICE CALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit to service.</td>
</tr>
</tbody>
</table>

---

**Diagram:**

1. Liquid chlorine Bleach Compartment  
2. Liquid Fabric Softener Compartment  
3. Prewash Compartment  
4. Main Wash Compartment
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**

- Is the supplied voltage 120 V AC?
  - **NO**
    - Check the fuse or reset the circuit breaker.
  - **YES**
    - Is the voltage between the 2 FILTER ASSEMBLY connectors 120 V AC?
      - **NO**
        - Replace the FILTER ASSEMBLY (CIRC).
      - **YES**
        - Is the LED (1) on?
          - **NO**
            - Replace MAIN PWB ASSEMBLY.
          - **YES**
            - Are the connectors (2) on the PWB loose?
              - **YES**
                - Reconnect.
              - **NO**
                - Is wire of the DISPLAY PWB ASSEMBLY broken?
                  - **NO**
                    - Replace the MAIN PWB ASSEMBLY.
                  - **YES**
                    - Replace DISPLAY PWB ASSEMBLY or repair wire.
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 → Check if the washer is perfectly level as follows:

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.

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.
NO WATER SUPPLY

Is water supply shut-off?

Is the tap opened?

When you press both WASH/RINSE button and SOIL LEVEL button simultaneously, is the water level frequency below 246?

Is the inlet valve filter clogged?

Is resistance between each terminal of INLET VALVE ASSEMBLY 0.8-1.2 kΩ?

Verify the voltage of the inlet valve connector is 120 V AC.
(Refer to 7-2 QC TEST MODE)

YES

NO

YES

Open the tap.

Check the AIR CHAMBER and the tube (clogged).

Clean the filter.

Replace the INLET VALVE ASSEMBLY.

Check electrical connection. Replace the MAIN PWB ASSEMBLY.

DETERGENT DOES NOT FLOW IN

Is water supplied?

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

Has detergent been put in the correct compartment of the dispenser?

Is the detergent caked or hardened?

YES

NO

YES

Refer to NO WATER SUPPLY

Check the wiring.

Put the detergent in the correct place.

Pre wash

Main wash

● : Detergent

Clean the dispenser.

Clean the dispenser.
LIQUID DETERGENT/SOFTENER/BLEACH DOES NOT FLOW IN

Is water supplied?  
- **YES**
- **NO** Refer to 'NO WATER SUPPLY'

Are the plugs correctly connected to the terminals of the INLET VALVE ASSEMBLY?  
- **NO** Check the wiring on the dispenser.

Is liquid detergent/softener/bleach put in the correct compartment of the drawer?  
- **NO** Put it in the correct compartment.

Is the liquid detergent/softener/bleach cap clogged?  
- **YES** Clean the Cap and Container.

ABNORMAL SOUND

Is the motor bolt loosened?  
- **YES** Secure the bolt.

Is there friction noise coming from the motor?  
- **YES** Replace the STATOR ASSEMBLY or ROTOR ASSEMBLY.
HEATING WITHOUT WATER

When pressing WASH/RINSE and SOIL LEVEL at the same time after draining, is the water level frequency 255?
When pressing WASH/RINSE and SOIL LEVEL buttons at the same time while washing, is the water level frequency between 230 - 243?

Replace the SENSOR SWITCH ASSEMBLY.

Check the voltage between two pins while pressing the POWER button. Is the voltage 120 V AC?

Replace the MAIN PWB ASSEMBLY.

DRAIN MALFUNCTION

Is the drain hose twisted or frozen?

Repair the DRAIN HOSE ASSEMBLY.

Is the impeller of the drain pump clogged?

Remove foreign material.

Is the connector disconnected, disassembled?

Reconnect or repair the connector

Is the coil of the drain pump too high or low? (resistance of the coil is 10-20 Ω)

Replace the DRAIN PUMP ASSEMBLY.

When checking voltage between connectors during spin, is the voltage 120 V AC as in the figure?

Replace the MAIN PWB ASSEMBLY.
When checking the voltage between connector during whites washing, is the voltage 120 V AC?

YES → Replace the MAIN PWB ASSEMBLY.

NO →

After power off, is the resistance of wire (RED-YELLOW) connectors between 10 Ω-30 Ω?

YES → Normal

NO →

After power off and the heater terminal is disconnected, is the resistance 10~30 Ω?

YES → Replace the Heater Assembly

NO →

**HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE**

When pressing WASH/RINSE and SOIL LEVEL at the same time, is the displayed temperature over 10 °C higher than the selected temperature?

- Extra Hot: 70 °C
- Hot: 50 °C
- Warm: 40 °C
- Cold: 30 °C

Water Temperature [°C]

NO → Check if inlet hose is connected to a hot faucet; otherwise, replace MAIN PWB ASSEMBLY.

*** →

YES →

Is the resistance between ② and ③ of Connector (1) 2.5-180 kΩ?

NO → Check electrical connection. Replace THERMISTOR.

YES →

When checking the THERMISTOR on the tub, is the THERMISTOR loose?

YES → Push the THERMISTOR tightly to the rubber.
WILL NOT CIRCULATE WATER

Is the impeller of the drain pump clogged?  
- **YES**  Remove foreign material.
- **NO**

Are the Hose Connector and/or Hose clogged?  
- **YES**  Remove foreign material.
- **NO**

Is the connector disconnected, disassembled?  
- **YES**  Reconnect or repair the connector.
- **NO**

Is the coil of the right side of drain pump open or short circuited? (Coil R is 18-30 Ω)  
- **YES**  Replace PUMP MOTOR ASSEMBLY.
- **NO**

When checking voltage between the connectors during spin, is the voltage 120 V AC, as the figure?  
- **NO**  Replace the MAIN PWB ASSEMBLY.
SPIN TROUBLE

Check during spin if the frequency of the water level is 248 or more.

Press the START/PAUSE button 2 times in QC Test mode, is the drum spinning at low speed?

Is it disconnected, or disassembled? [Red: 3pin (1), NA: 4pin (2)]

Check the motor connector, Is the resistance of the terminal the same as the figure?

MOTOR TERMINAL


Replace the MAIN PWB ASSEMBLY

ERROR

Does the spring of Latch Hook actuate?

Is there clicking sound once or twice when the START/PAUSE button is pressed to start the cycle?

Is DOOR SWITCH ASSEMBLY broken?
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 Display PWB Assembly connector from Trans cable.
4. Pull out the drawer and unscrew 2 screws.

5. Taking out 1 screw.
6. Lift the side the Control Panel Assembly and pull it out

7. Unscrew the 8 screws from the Control Panel Assembly.
8. Disassemble the Display PWB Assembly.
Disconnect the POWER connector and SENSOR SWITCH ASSEMBLY.

2. Remove the Protect Cover.

3. Disconnect the connectors.

4. Unscrew 1 screw on the back.

5. Disassemble the Main PWB.
**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.

<table>
<thead>
<tr>
<th>Wire Color</th>
<th>Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blue (YL-BK)</td>
</tr>
<tr>
<td>2</td>
<td>Red (VT-BK)</td>
</tr>
<tr>
<td>3</td>
<td>White (WH-BK)</td>
</tr>
<tr>
<td>4</td>
<td>Blue (GY-BK)</td>
</tr>
<tr>
<td>5</td>
<td>Red (BL-BK)</td>
</tr>
</tbody>
</table>

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

**NOISE FILTER**

1. Disassemble two (or three) connectors from the NOISE FILTER.
2. Unscrew a screw from the TOP BRACKET.
1. Unscrew the 5 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 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 a screw from the lower side of door.
5. 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.
Disassemble the cabinet cover.

Separate the pump hose, the bellows and the circulation hose assembly from the pump assembly.

Disassemble the pump assembly in arrow direction.

---

Disassemble the cabinet cover.

Separate 2 connectors from the heater.

Loosen the nut and pull out the heater.

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

---

Disassemble the cabinet cover.

Unplug the white connector from the thermistor.

Pull it out by holding the bracket of the 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.

**LAMP 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 connector.
4. Disassemble the lamp assembly.
Disassemble the back cover.
Remove the bolt.
Pull out the Rotor.

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

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

NOTE
- Once removed, replace the damper with a new one.
### Checking the TSG (TURBO STEAM GENERATOR)

1. To check out the fault diagnosis of TSG, in case of removing the water inside, you can pull out the plug and let the water drain away.

2. Be cautious in case of the TSG is hot temperature.

### TSG (TURBO STEAM GENERATOR)

1. Remove the housing coupled the TSG (Heater, Water level frequency-sensor, Thermistor)

2. Taking out the screw of the TSG and Body Frame.
3. Taking out the screws of Body Frame (2EA)

4. Separate the hoses from the TSG.

5. Remove the Body Frame and then, separate the TSG from the washer.
10-2. DRUM & TUB ASSEMBLY
10-3. DISPENSER ASSEMBLY