

# WASHING MACHINE SERVICE MANUAL

## CAUTION

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

**MODEL : WD-14124(6)RD  
WD-12124(6)RD  
WD-10124(6)RD**

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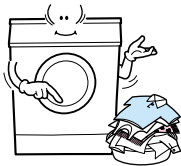
# 1. SPECIFICATION

| ITEM                          |             | WD-14124(6)RD/WD-12124(6)RD/WD-10124(6)RD                          |                       |
|-------------------------------|-------------|--|-----------------------|
| POWER SUPPLY                  |             | 220V-240V~, 50HZ   |                       |
| PRODUCT WEIGHT                |             | 71kg   |                       |
| ELECTRICITY<br>CONSUMPTION    | WASHING     | 140W   |                       |
|                               | SPIN        | 300W   |                       |
|                               | FAN MOTOR   | 25W  |                       |
|                               | DRAIN MOTOR | 40W  |                       |
|                               | WASH HEATER | 2000W  |                       |
|                               | DRY HEATER  | 2100W  |                       |
| REVOLUTION<br>SPEED           | WASH        | 45rpm  |                       |
|                               | SPIN        | WD-14124(6)RD  | 400/800/1000/1400 rpm |
|                               |             | WD-12124(6)RD  | 400/800/1000/1200 rpm |
|                               |             | WD-10124(6)RD  | 400/600/800/1000 rpm  |
| OPERATION WATER PRESSURE      |             | 0.3-10kgf/cm <sup>2</sup> (30-1000kPa)                             |                       |
| CONTROL TYPE                  |             | Electronic   |                       |
| WASH CAPACITY                 |             | 7.0kg (Cotton)   |                       |
| DRY CAPACITY                  |             | 3.5kg (Cotton)   |                       |
| DIMENSION                     |             | 600mm(W) × 600mm(D) × 850mm(H)                                     |                       |
| WASH PROGRAM                  |             | Cotton, Cotton-Eco, Synthetic, Delicate, Wool, Hand Wash, Quick 30 |                       |
| RINSE                         |             | Normal / Super / Rinse Hold  |                       |
| DOOR SWITCH TYPE              |             | Manual   |                       |
| WATER LEVEL                   |             | 8 steps (by sensor)  |                       |
| RESERVATION                   |             | From 3 hours to 19 hours   |                       |
| SENSING OF THE LAUNDRY AMOUNT |             | Adapted  |                       |
| FUZZY LOGIC                   |             | Adapted  |                       |
| DISPLAY OF THE REMAINING TIME |             | Adapted  |                       |
| ERROR DIAGNOSIS               |             | 10 items   |                       |
| POWER AUTO OFF                |             | Adapted  |                       |
| CHILD LOCK                    |             | Adapted  |                       |
| AUTO RESTART                  |             | Adapted  |                       |
| TIME SAVE                     |             | Adapted  |                       |

## 2. FEATURES & TECHNICAL EXPLANATION

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### 2-1.FEATURES



#### ■ **Automatic process from washing to drying.**

Automatic process from washing to drying can be selected easily.

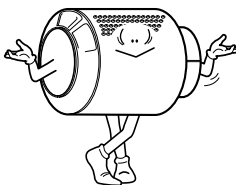
Washing capacity : 7 kg (Cotton)

Drying capacity : 3.5 kg (Cotton)



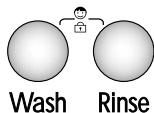
#### ■ **More economical by Intelligent Wash System**

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



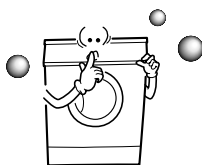
#### ■ **Direct Drive system**

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



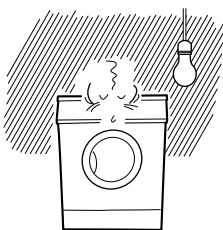
#### ■ **Child-Lock**

The Child-Lock system has been developed to prevent children from pressing any button to change the program during operation.



#### ■ **Low noise speed control system**

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



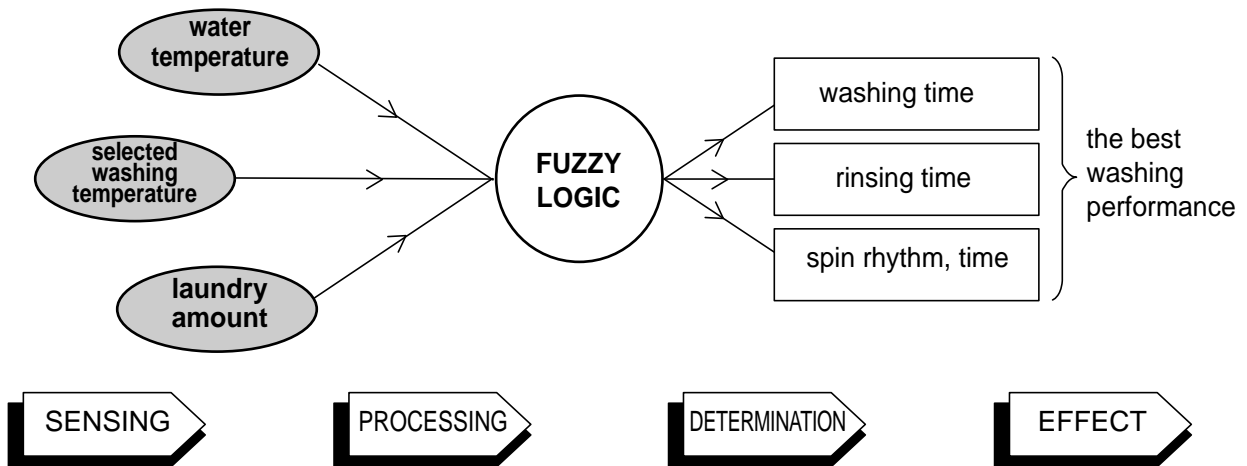
#### ■ **Auto Restart**

Although the washing machine is turned off by a power failure, it restarts automatically in its stopped process when power is supplied again. And it will be the same when the machine unplugged in operation is plugged in again.

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

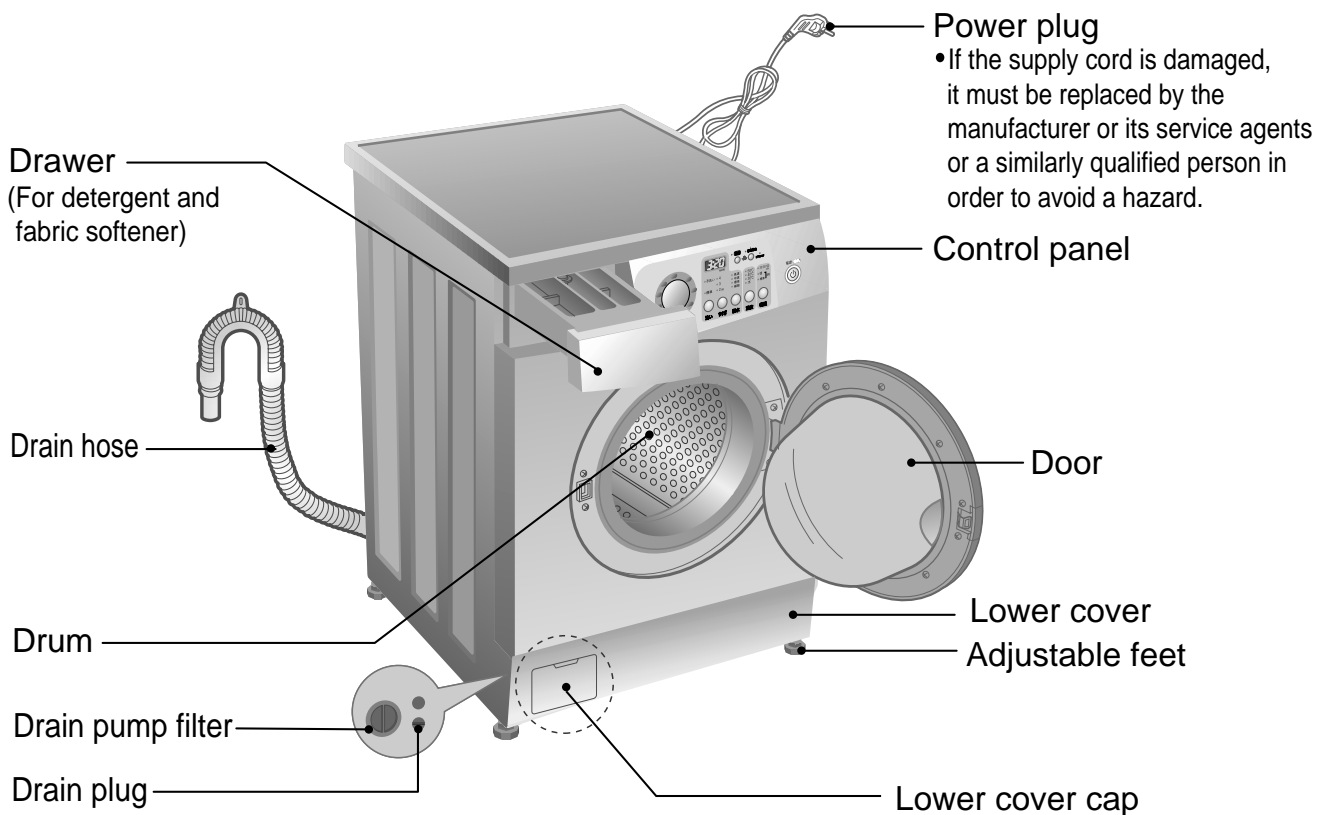
To get the best washing performance optimal time is determined by sensing of water temperature, selected washing temperature and laundry amount.



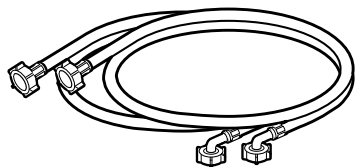
## 2-3.WATER LEVEL CONTROL

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

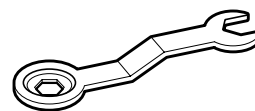
# 3. PARTS IDENTIFICATION



## ■ ACCESSORIES



Inlet hose(1EA) ※ Option 2EA



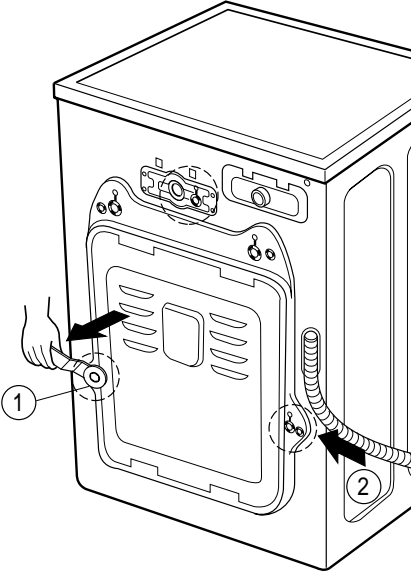
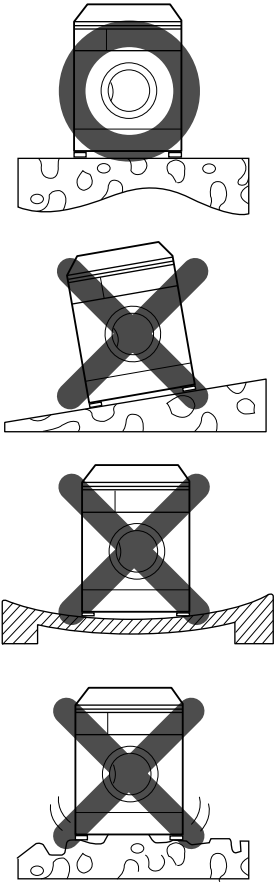
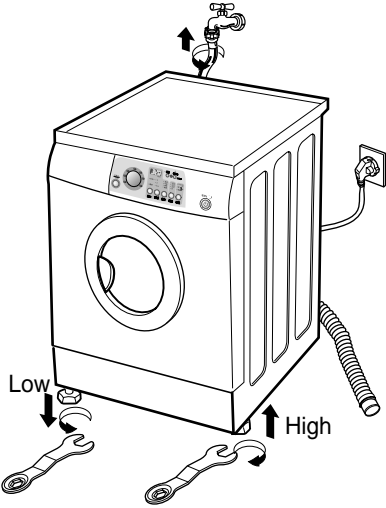
Spanner

# 4. INSTALLATION

- ① Before servicing ask troubles of customers
- ② Check the adjustment(power supply is 220-240V~, remove the transit bolts....)
- ③ Check the troubles referring to the trouble shooting.
- ④ Decide service steps referring to disassembly instructions.
- ⑤ And then, service and repair.
- ⑥ After servicing, operate the appliance whether it works O·K or NOT.

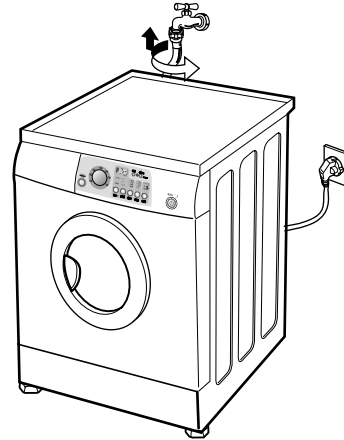
## ■ STANDARD INSTALLATION

The appliance should be installed as follows.

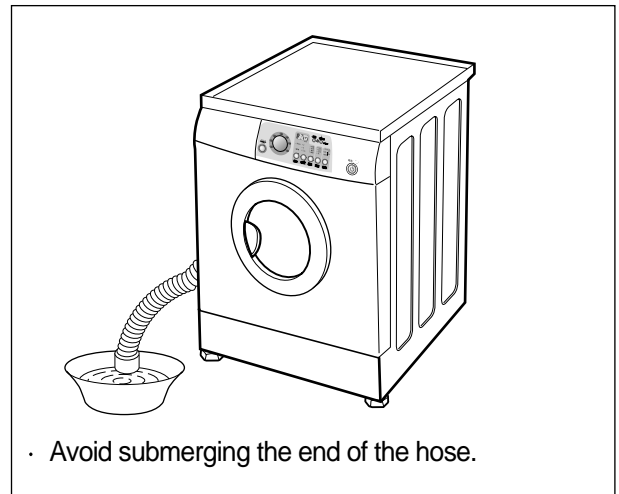
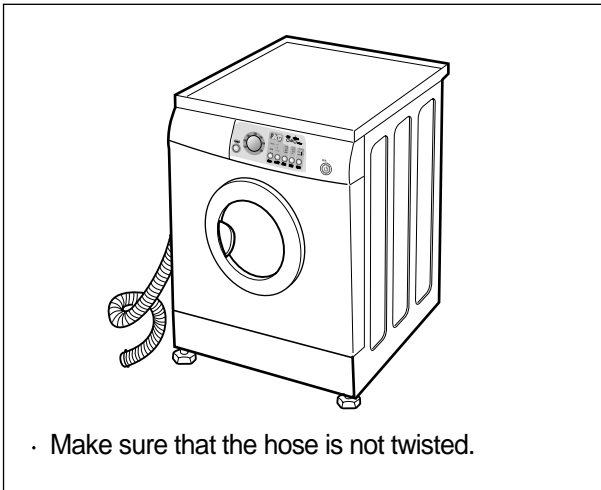
| REMOVE THE TRANSIT BOLTS  | INSTALL THE APPLIANCE ON FLAT AND FIRM SURFACE                                     | ADJUST THE HORIZONTAL  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Remove the transit bolts (3EA: ①)with supplied spanner.</li> <li>• Keep the transit bolts and spanner for future use.</li> <li>• Insert the 3 caps provided into the hole</li> </ul>  |  | <ul style="list-style-type: none"> <li>• Turn the leveling feet to set the appliance horizontally.</li> </ul>  <ul style="list-style-type: none"> <li>• The appliance goes up by rotating the feet clockwise.</li> <li>• The appliance come down by rotating the feet counter clockwise.</li> </ul> |

## ■ HOW TO CONNECT INLET HOSE

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

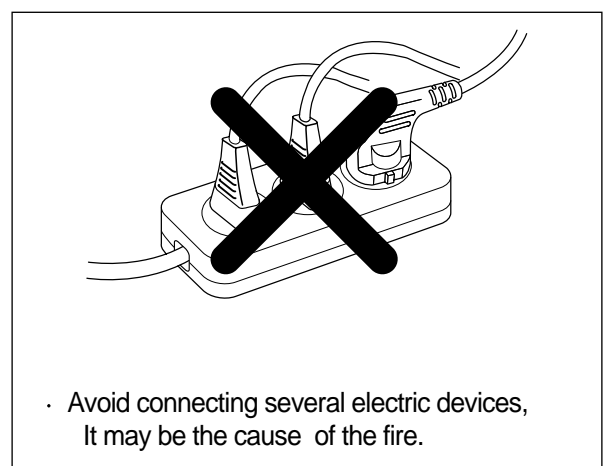
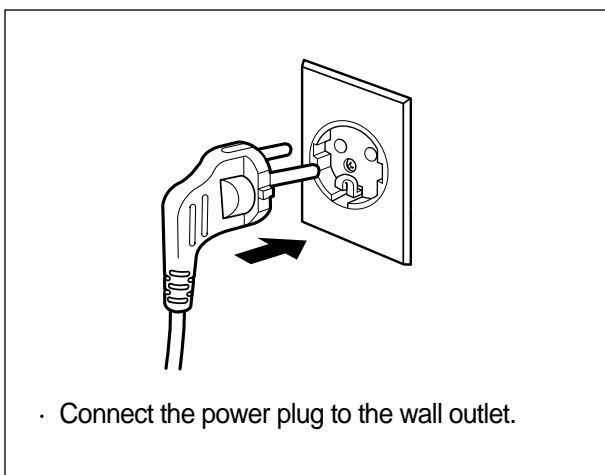


## ■ CONNECT DRAIN HOSE



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

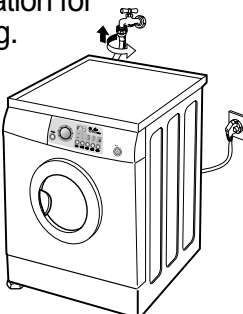
## ■ CONNECT POWER PLUG






## 7 TEST OPERATION

**1** Preparation for washing.




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

**2** Press the POWER button.



Power

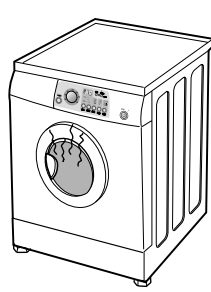
**3** Press the Start/Pause button.



Start/Pause

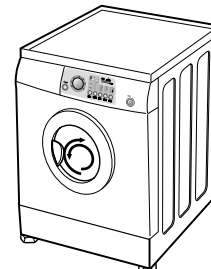
- In case of Coloreds program.

**6** Check the water heating.



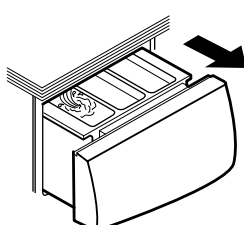
- Press the Temp. button and the present temperature will be displayed.

**5** Check automatic reverse turn.



- Check if the drum rotates clockwise and counterclockwise.

**4** Check the water supply.




- Check if water is supplied through the detergent dispenser.

**7** Check drain and spin

- Turn off Wash and Rinse after pressing the Start/Pause button and start the machine again.
- Check drain and spin.

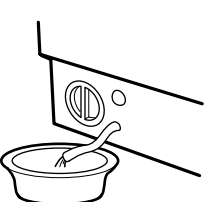
**8** Power off and open the door



Power

- Power off and then power on.
- Check if the door can be opened after 3 minutes.

**9** Water removal



- If SVC is needed during check, remove the remaining water by pulling out the hose cap.

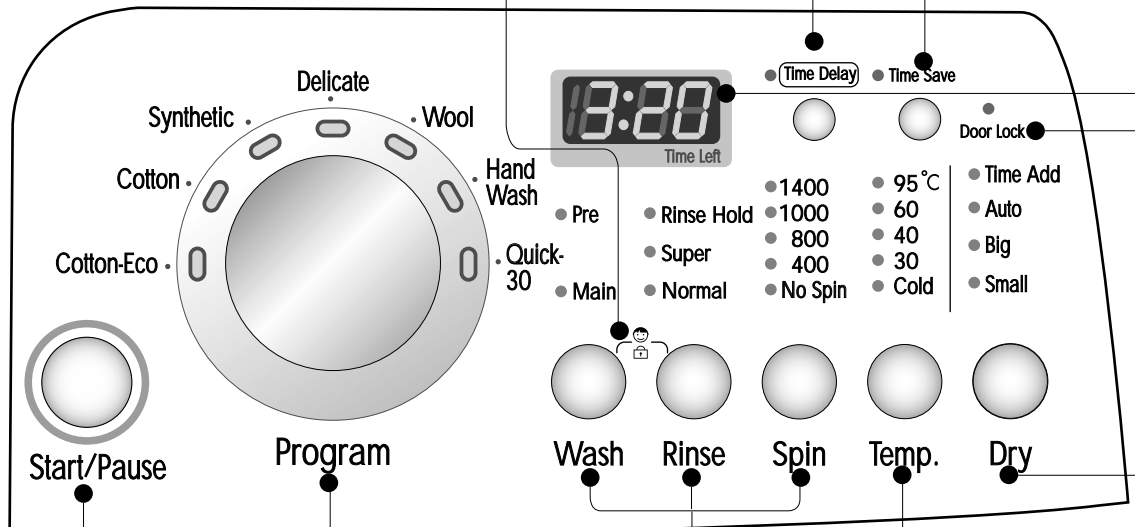
# 5. OPERATION

## Child lock

- Once Child-Lock is set, and canceled by pressing both [Wash] and [Rinse] simultaneously once Child lock is set. Once Child Lock is set, all buttons are inoperable.
- The Child-Lock system can be set at any time even including during Power-Off, on Pause and operation. It is automatically cancelled when an operational error occurs and when the cycle ends.
- When power is off, the LED indicates [ ] only. During operation, or when the programme is paused the LED will indicate [ ] and the remaining time.

## Delay finish

- Press the button when reservation washing is needed.
- When the button is pressed, [ 3 : 00 ] is displayed. A maximum delay of [ 19 : 00 ] hours can be set.
- Each press advances time delay by one hour.
- Use ON/OFF button to cancel [Time delay].



## Start/Pause button

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

## Wash program selector

- 7 programs can be selected depending on the type of the laundry.
- By turning the dial, [Cotton → Synthetic → Delicate → Wool → Hand Wash → Quick 30 → Cotton-Eco] can be selected

## Time Save

- This option can be used to reduce the time of a wash program.
- This function is not available with Quick 30 program.

## LED display

- Display the remaining time (Hour : Minute) to finish.
- In case of abnormal operation, error indications are displayed. (FE, FE, dE, LE, tE, CE, UE, dHE, tE, OE)
- See trouble shooting guide.
- When drying cycle is completed, [COOL DOWN] is displayed on the Multi display.
- The COOL DOWN is setting automatically when a drying cycle is complete.
- When you are not remove a load of clothes from the dryer as soon as it stops, wrinkles can form.
- The COOL DOWN operating periodically tumbles, rearranges and fluffs the load to avoid wrinkles without heat for up to 4 hours.
- The [COOL DOWN] message will continue to display until the clothes are removed or the START/PAUSE button is pressed.

## Door lock display

- It shows whether the door can be opened or not during the washing.
- If the lamp is off, the door can be opened .

## ON/OFF button

- Press the button to turn power on and off.

## Dry selector

- Dry programs can be selected by pressing the [Dry] button.
- By pressing the button, [Auto → Big → Time Add → Small ] can be selected.

## For manual wash, rinse and spin

- Use these buttons to change washing method, rinse times, spinning speed.
- When lamp is off, no selection has been made.
- Prewashing is available for Cotton, Cotton-Eco, Synthetic program.

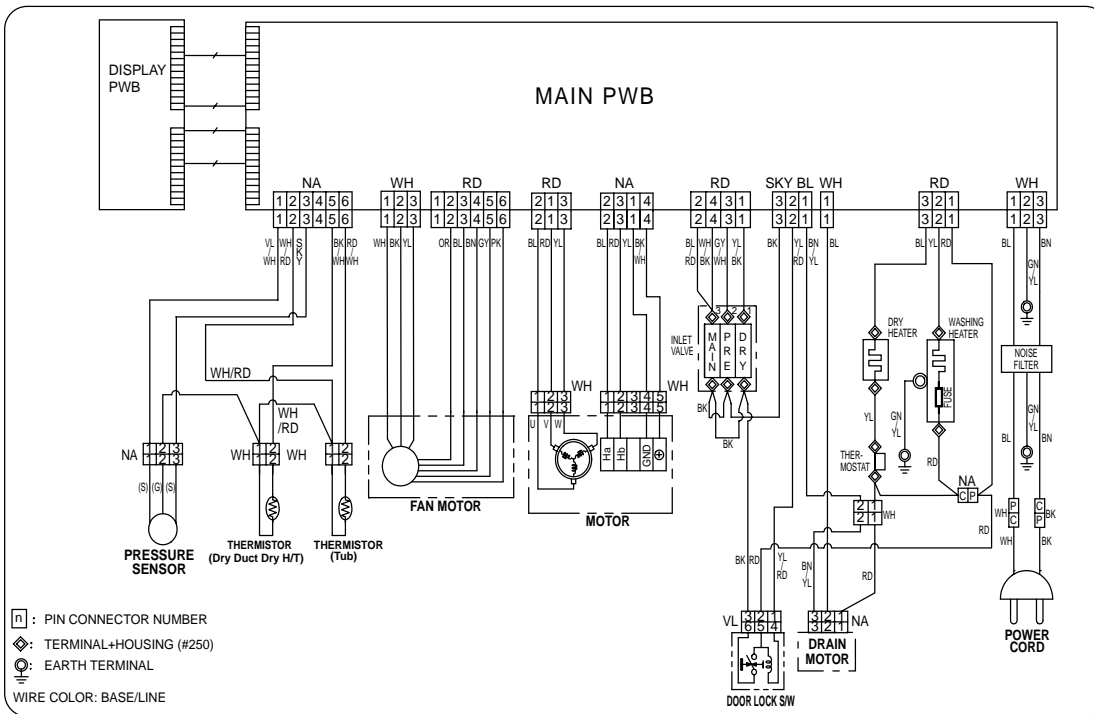
## Water temperature selector

- Press the button to select water temperature.
- The water temperature is selected [60°C → 95°C → Cold → 30°C → 40°C] during cotton program.
- 95°C is selected only for cotton program.
- By pressing the button during operating the washer, the present temperature is displayed.



Power●

# 6. WIRING DIAGRAM / PROGRAM CHART



## PROGRAM CHART

\* Water Supply : W·S

\* Intermittent Spin : I·S

\* Disentangle : D·T

| COURSE       | CYCLE STEP | Wash |         |      |         | Rinse         |    |    |    |     |     |              |    |     |     |       |      | Spin |     | D·T | DRY | END | OFF | Normal Working Time (Hour:Minute) |    |     |     |    |    |    |    |                  |
|--------------|------------|------|---------|------|---------|---------------|----|----|----|-----|-----|--------------|----|-----|-----|-------|------|------|-----|-----|-----|-----|-----|-----------------------------------|----|-----|-----|----|----|----|----|------------------|
|              |            | Pre  |         | Main |         | Normal (Hold) |    |    |    |     |     | Extra (Hold) |    |     |     | Drain | Spin |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    |                  |
|              |            | W·S  | Washing | W·S  | Washing | 1             |    | 2  |    | 3   |     | 4            |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    |                  |
|              |            | 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               |
| Time (SEC)   | 120        | MIN  | 60      | 300  | 120     | MIN           | 60 | 60 | 60 | 300 | 120 | 360          | 60 | 300 | 120 | 360   | 60   | 300  | 120 | 360 | 60  | 300 | 120 | 360                               | 60 | 600 | 120 | 20 | 20 |    |    |                  |
| Cotton       |            | 8    |         |      |         | 60            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 2:41(2:39) |
| Cotton-Eco   |            | 8    |         |      |         | 40            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 3:01       |
| Synthetic    |            | 8    |         |      |         | 23            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:30       |
| Quick 30     |            |      |         |      |         | 59            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 30         |
| Delicate     |            |      |         |      |         | 12            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:01       |
| Wool         |            |      |         |      |         | 1             |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:01       |
| HandWash     |            |      |         |      |         | 23            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:00       |
| Wash         |            | 8    |         |      |         | 29            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:03       |
| Rinse        |            |      |         |      |         | 60            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 39         |
| Rinse Hold   |            |      |         |      |         | 96            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 39         |
| Dry          |            |      |         |      |         |               |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 3:40       |
| Spin         |            |      |         |      |         |               |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 12         |
| Wash + Rinse |            | 8    |         |      |         | 60            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:48       |
| Wash + Spin  |            | 8    |         |      |         | 60            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 1:14       |
| Rinse + Spin |            |      |         |      |         | 96            |    |    |    |     |     |              |    |     |     |       |      |      |     |     |     |     |     |                                   |    |     |     |    |    |    |    | About 38         |

\* **Basic Cycle**  
 \* **Optional Cycle**  
 \* Pre-Setting Time : Water Supply - 120 sec.  
 Drain - 60 sec.  
 \* ~ Time for varies as the temperature or the amount of laundry.

\* Basic time is minute in washing chart  
 \* The actual program time can be varied with the load amount, water temperature or ambient temperature

# 7. TROUBLE SHOOTING

## 7-1.BEFORE SVC CHECKING

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

## 7-2.QC TEST MODE.

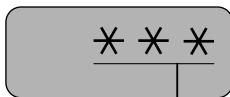
- ① Pressing Rinse, and Spin button simultaneously.
- ② Power supply ON with pressing upper two button. Then buzzer sound twice.
- ③ Press the Start/Pause button as follows.

[Press the Start/Pause button more 4 times until stop spinning]

| Pressing number of [Start/Pause] button | Checking Point                      | Display Status                     |
|---|-------------------------------------|------------------------------------|
| None                                    | All lamps turn on                   |                                    |
| 1 time                                  | Clockwise spin(right)               | Drum rpm(About 40~52)              |
| 2 times                                 | Low speed Spin                      | Drum rpm(About 70~90)              |
| 3 times                                 | High speed Spin                     | Drum rpm(About 90~110)             |
| 4 times                                 | Inlet valve for pre-wash operation  | Water level frequency(25~65)       |
| 5 times                                 | Inlet valve for main-wash operation | Water level frequency(25~65)       |
| 6 times                                 | Inlet valve for dry operation       | Water level frequency(25~65)       |
| 7 times                                 | Counterclockwise spin(left)         | Drum rpm(About 40~52)              |
| 8 times                                 | Heater is in operation for 3 sec.   | Water temperature                  |
| 9 times                                 | Draining pump operation             | Water level frequency              |
| 10 times                                | Dry operation for 6 minutes         | Auto off operation after 6 minutes |

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

\* Press the Rinse and Spin button simultaneously.



● The digits means water level frequency( $10^{-1}$  kHz)






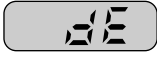


$$\begin{aligned} \text{ex) 241 : Water level frequency} &= 241 \times 10^{-1} \text{ kHz} \\ &= 24.1 \text{ kHz} \end{aligned}$$




## 7-4.HOW TO KNOW TO TEMPERATURE OF EACH THERMISTOR AT OPERATING CONDITION.

- Thermistor in tub : Press the [WATER TEMP] button.
- Thermistor in dry duct : Press the [DRY] button.
- Thermistor in condensing duct : Press the [SPIN] and [DRY] button simultaneously.

## 7-5.ERROR DISPLAY.

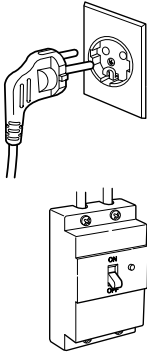


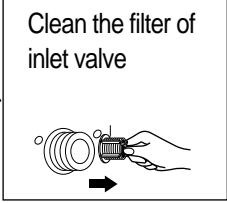
- If you press the Start/Pause button in error condition, any error except 'PE' will disappear and the machine will change into pause status.
- In case of 『PE』, 『LE』, 『HE』, if the error is not resolved within 20 sec., and in case of other errors, if the error is not resolved within 4 min., power will be turned off automatically and the error only will be blinked. But in case of 『FE』, power will not be turned off.

|   | ERROR                        | SYMPTOM   | CAUSE   |
|---|------------------------------|---|---|
| 1 | WATER INLET<br>ERROR         |    | <ul style="list-style-type: none"> <li>• Not reached to the water level(2 level)within 4 minutes after water supplied or not reached to the preset water level within 25 minutes.</li> </ul>  |
| 2 | DRAIN ERROR                  |    | <ul style="list-style-type: none"> <li>• Not fully drained within 5 minutes.</li> </ul>   |
| 3 | OVERFLOW<br>ERROR            |  | <ul style="list-style-type: none"> <li>• Water is over flowing(over 8 level).</li> <li>• If  is displayed, drain pump operates to drain water automatically.</li> </ul> |
| 4 | SENSOR PRESSURE<br>S/W ERROR |  | <ul style="list-style-type: none"> <li>• The sensor pressure switch is out of order.</li> </ul>   |
| 5 | DOOR OPEN<br>ERROR           |  | <ul style="list-style-type: none"> <li>• In case of operating the reservation function or the other function with door opened. Close the door, then the error display is resolved.</li> <li>• The door switch is out of order.</li> </ul>                   |
| 6 | IMBALANCE<br>ERROR           |  | <ul style="list-style-type: none"> <li>• The appliance is tilted.</li> <li>• Laundry is gathered to one side.</li> </ul>  |
| 7 | HEATING<br>ERROR             |  | <ul style="list-style-type: none"> <li>• The THERMISTOR is out of order.</li> </ul>   |



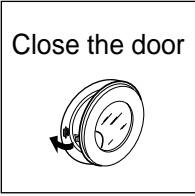

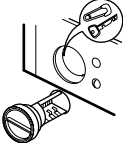
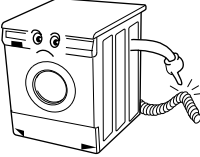
|           | <b>ERROR</b>     | <b>SYMPTOM</b>  | <b>CAUSE</b>  |
|-----------|------------------|---|---|
| <b>8</b>  | CURRENT ERROR    |    | <ul style="list-style-type: none"> <li>• MAIN PWB ASSEMBLY is out of order               <ul style="list-style-type: none"> <li>☞ Replace the MAIN PWB ASSEMBLY</li> </ul> </li> <li>• Winding in the STATOR ASSEMBLY is short-circuited.               <ul style="list-style-type: none"> <li>☞ Replace the STATOR ASSEMBLY</li> </ul> </li> <li>• “CE ” is displayed during a high spin               <ul style="list-style-type: none"> <li>☞ Replace the LEAD WIRE ASSEMBLY (MOTOR)</li> </ul> </li> </ul>                          |
| <b>9</b>  | MOTOR ERROR      |    | <ul style="list-style-type: none"> <li>• The connector in the LEAD WIRE ASSEMBLY is not connected to the connector of STATOR ASSEMBLY               <ul style="list-style-type: none"> <li>☞ Reconnect or repair the connector</li> </ul> </li> <li>• The hall sensor is out of order/defective.               <ul style="list-style-type: none"> <li>☞ Replace the STATOR ASSEMBLY</li> </ul> </li> </ul>  |
| <b>10</b> | DRY HEATOR ERROR |  | <ul style="list-style-type: none"> <li>• The Dry Heater is out of order               <ul style="list-style-type: none"> <li>☞ Replace the Dry Heater</li> </ul> </li> <li>• The Connector of the Dry Heater is not connected properly to the connector in the Main PWB ASSEMBLY               <ul style="list-style-type: none"> <li>☞ Reconnect or repair the connector</li> </ul> </li> <li>• The Dry fan motor is out of order               <ul style="list-style-type: none"> <li>☞ Replace the fan Motor.</li> </ul> </li> </ul> |

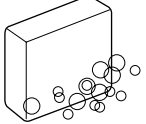
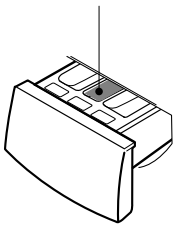
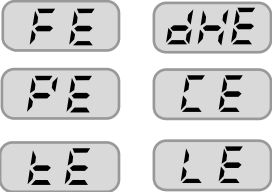
# 8. ERROR DIAGNOSIS AND CHECK LIST

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

| SYMPTOM   | GUIDE FOR SERVICE CALL   |
|---|--|
| <p>NO POWER</p>   | <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p>Is the power plug connected firmly to 220-240V~ outlet?</p> <p style="text-align: center;"><b>YES</b></p> <p>Power failure? or Breaker opened?</p> <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">Visit to check</p> </div> <div style="width: 30%; text-align: center;">  </div> </div>   |
| <p>Water inlet trouble</p> <div style="text-align: center; margin-top: 20px;">  </div> | <div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> <p>Is " IE " displayed?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the tap opened?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the tap frozen?</p> <p style="text-align: center;"><b>NO</b></p> <p>Is the water supply shut-off?</p> <p style="text-align: center;"><b>NO</b></p> <p>Is filter in the inlet valve clogged with foreign material?</p> <p style="text-align: center;"><b>NO</b></p> <p style="text-align: center;">Visit to check</p> </div> <div style="width: 30%; text-align: center;">  </div> </div> <div style="margin-top: 20px; text-align: right;"> <p><b>YES</b> → Clean the filter of inlet valve</p>  </div> |



| SYMPTOM  | GUIDE FOR SERVICE CALL   |
|--|--|
| <ul style="list-style-type: none"> <li>• Door does not open</li> <li>• Error displayed on the program</li> </ul>  | <p>Started with door opened? <b>YES</b> </p> <p><b>NO</b></p> <p>Close the door </p> <p>Visit to check</p> <p>&lt;Check if the door switch is O.K.&gt;</p>   |
| <ul style="list-style-type: none"> <li>• DRAIN TROUBLE</li> </ul>   | <p>Is "UE" displayed?</p> <p><b>YES</b></p> <p>Is the debris filter clogged with foreign material such as pin, coin and etc.? <b>YES</b> Clean up the filter. </p> <p><b>NO</b></p> <p>Is the drain hose frozen with water, kinked or crushed?</p> <p><b>NO</b></p> <p>Visit to check </p> |

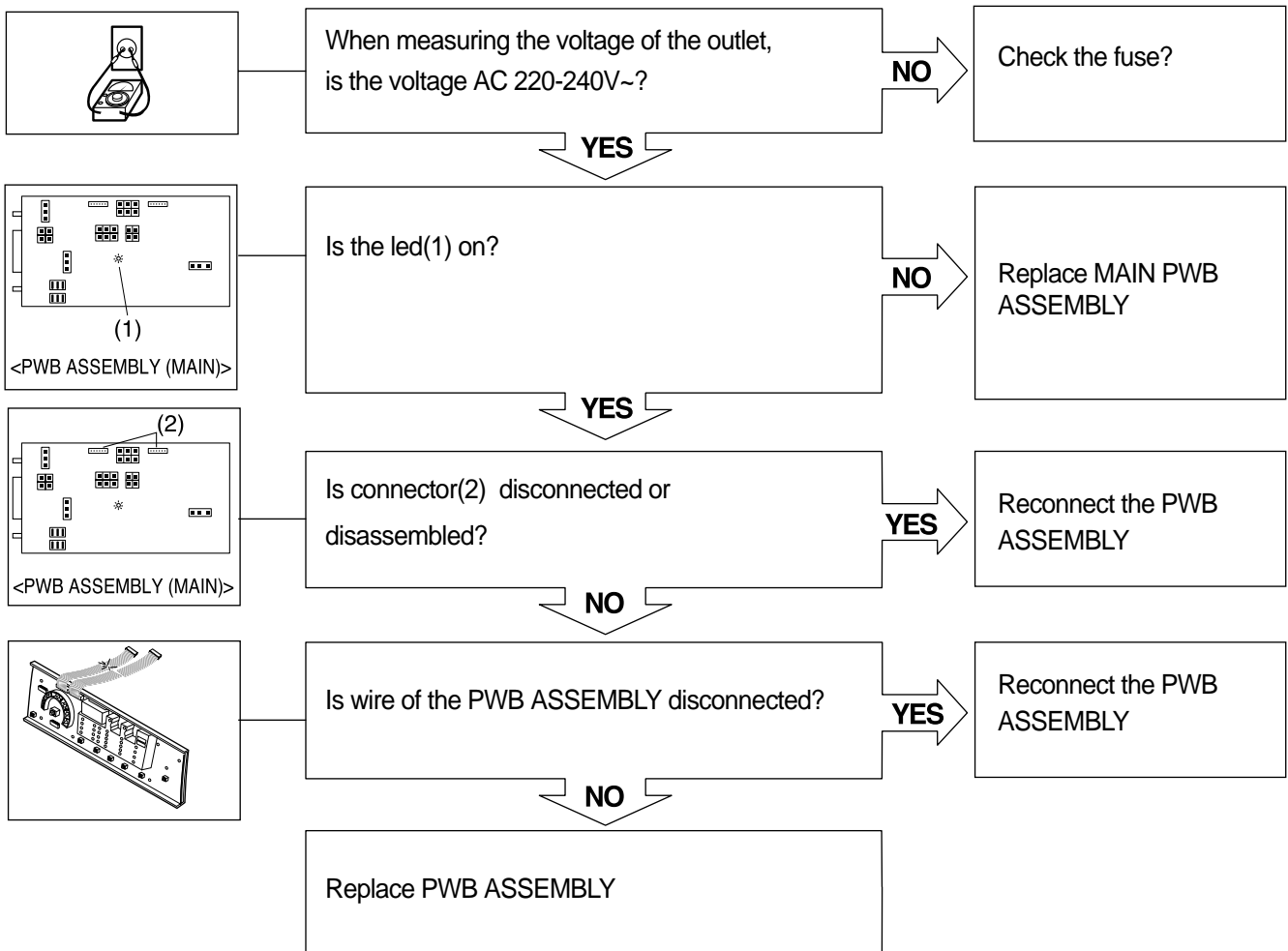
| SYMPTOM   | GUIDE FOR SERVICE CALL   |   |
|---|--|---|
| <p>◦ Suds overflow from the appliance.<br/>(In this condition, wash and spin do not operate normally)</p> | <p>Is low-sudsing detergent for the drum washing machine used?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the proper amount of detergent used as recommended?</p> <p style="text-align: center;"><b>YES</b></p> <p>Recommend to reduce the using amount of detergent.</p> <p>* This appliance has the automatic suds sensing function which operates under much suds condition for good rinse and preventing overflow.<br/>* When much suds are sensed, suds removing function such as drain, water input and pause will operate without rotating the drum.</p> |  <p>LOW-SUDSING</p>                |
| <p>◦ No effect of softener</p>  | <p>Is softener put in the correct compartment of the drawer?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the drawer closed during wash?</p> <p style="text-align: center;"><b>YES</b></p> <p>Is the softener cap clogged?</p> <p style="text-align: center;"><b>YES</b></p> <p>Explain how to use softener</p> <p><b>&lt; Clean the compartment for softener &gt;</b></p>  | <p>Compartment for softener</p>  |
|                        | <p style="text-align: center;">Visit to check</p>  |   |

## 8-2.FAULT DIAGNOSIS AND TROUBLE SHOOTING

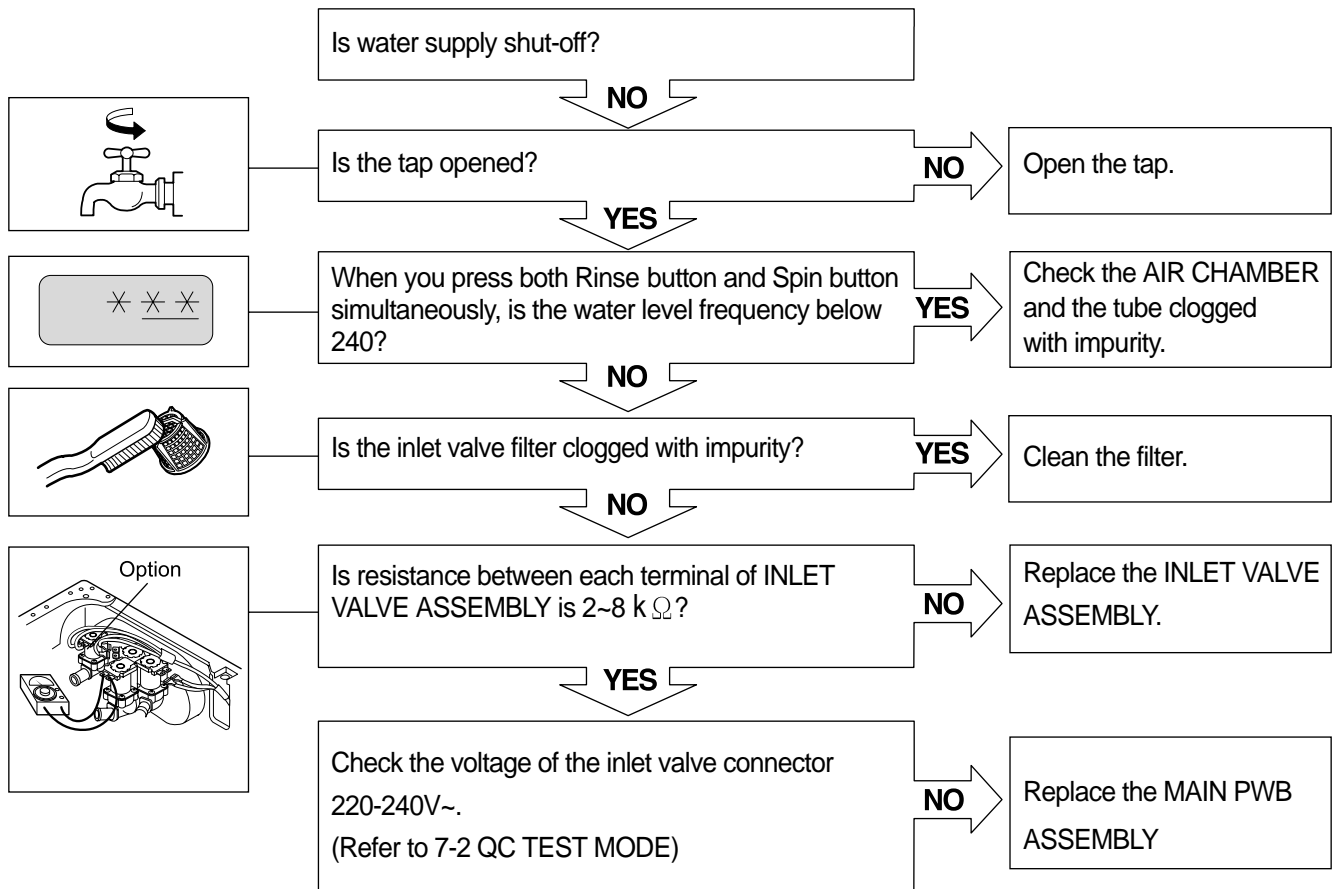
### CAUTION

1. Be careful of electric shock or disconnecting the parts while trouble shooting.
2. First of all, check the connection of each part terminal with wiring diagram.
3. If you replace the MAIN PWB ASSEMBLY, Put in the connectors correctly.

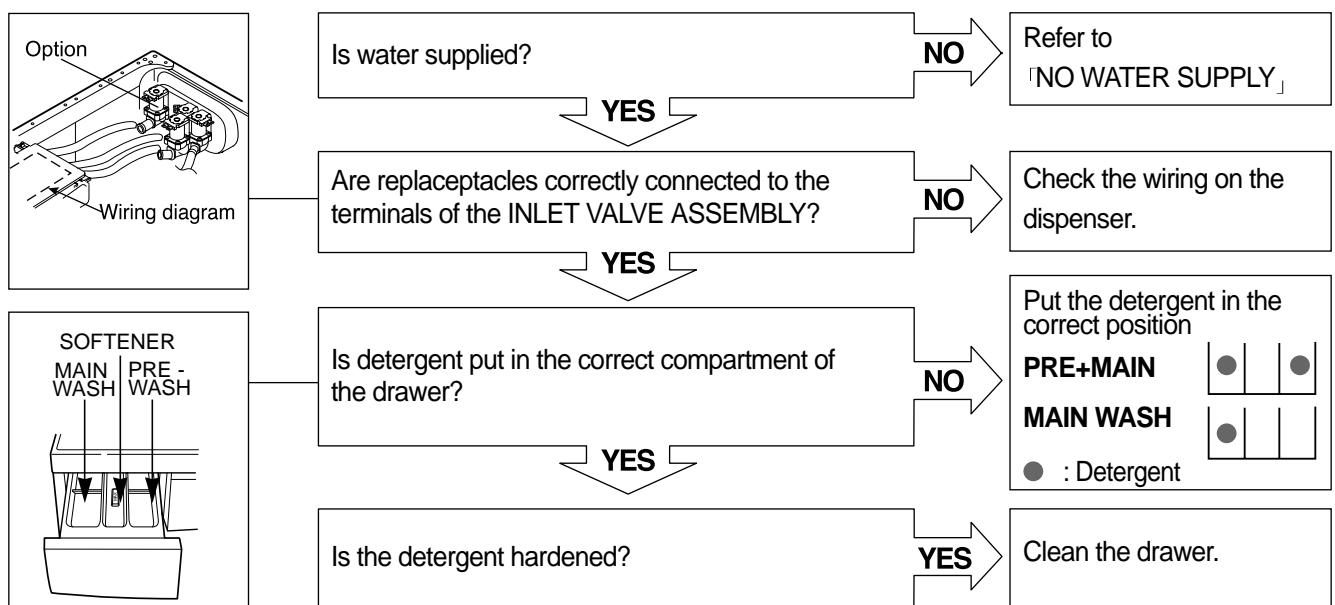
### NO POWER



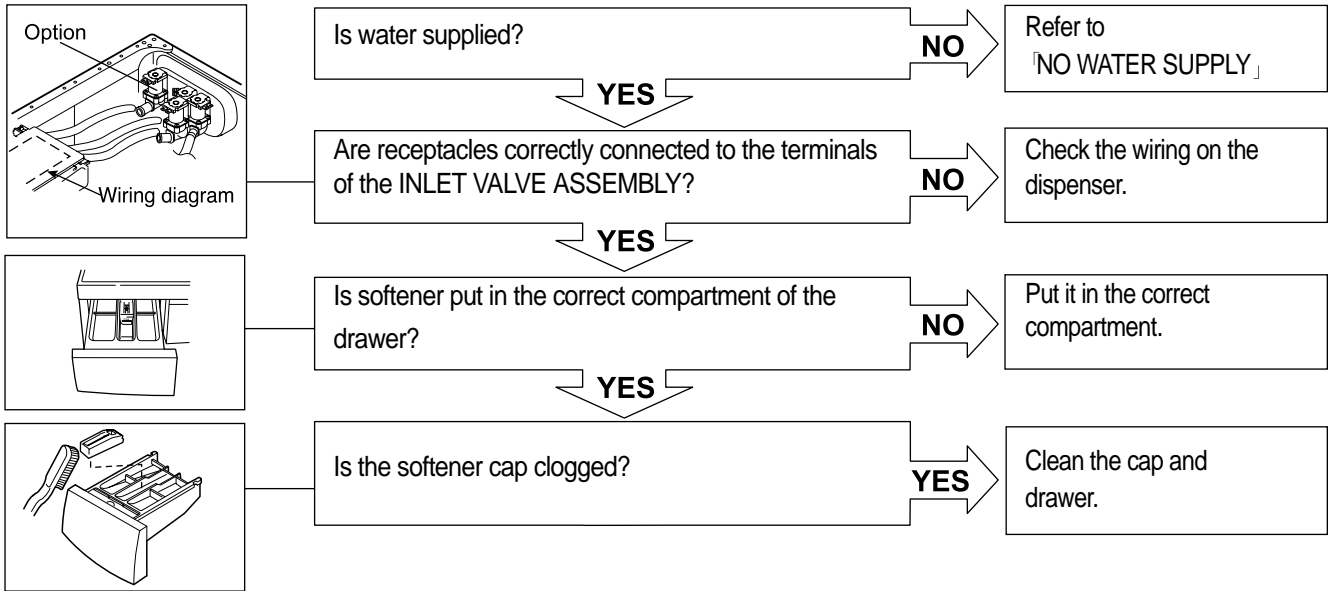
## NO WATER SUPPLY



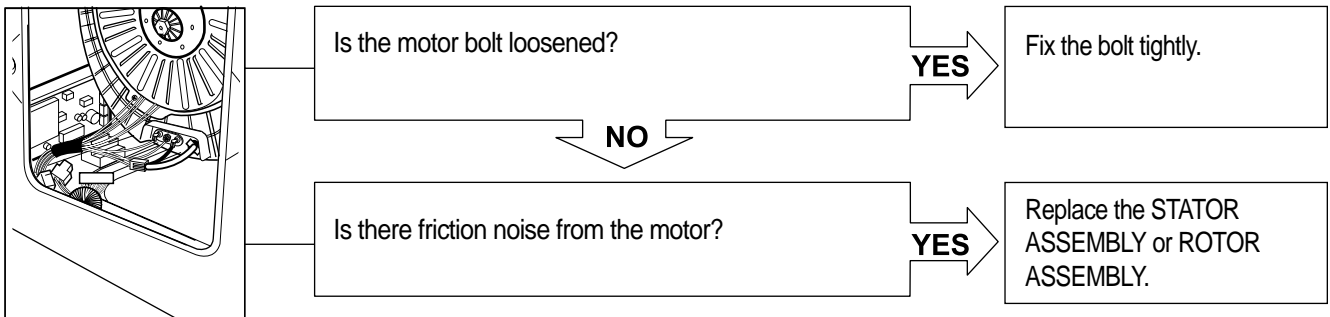
## DETERGENT DOES NOT FLOW IN



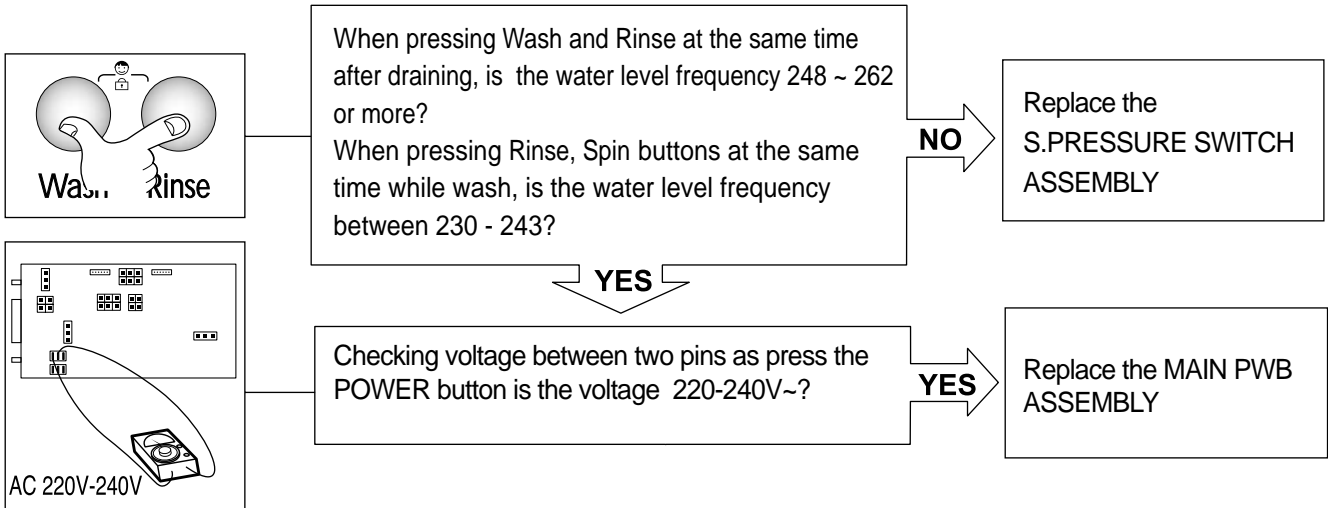
## SOFTENER DOES NOT FLOW IN



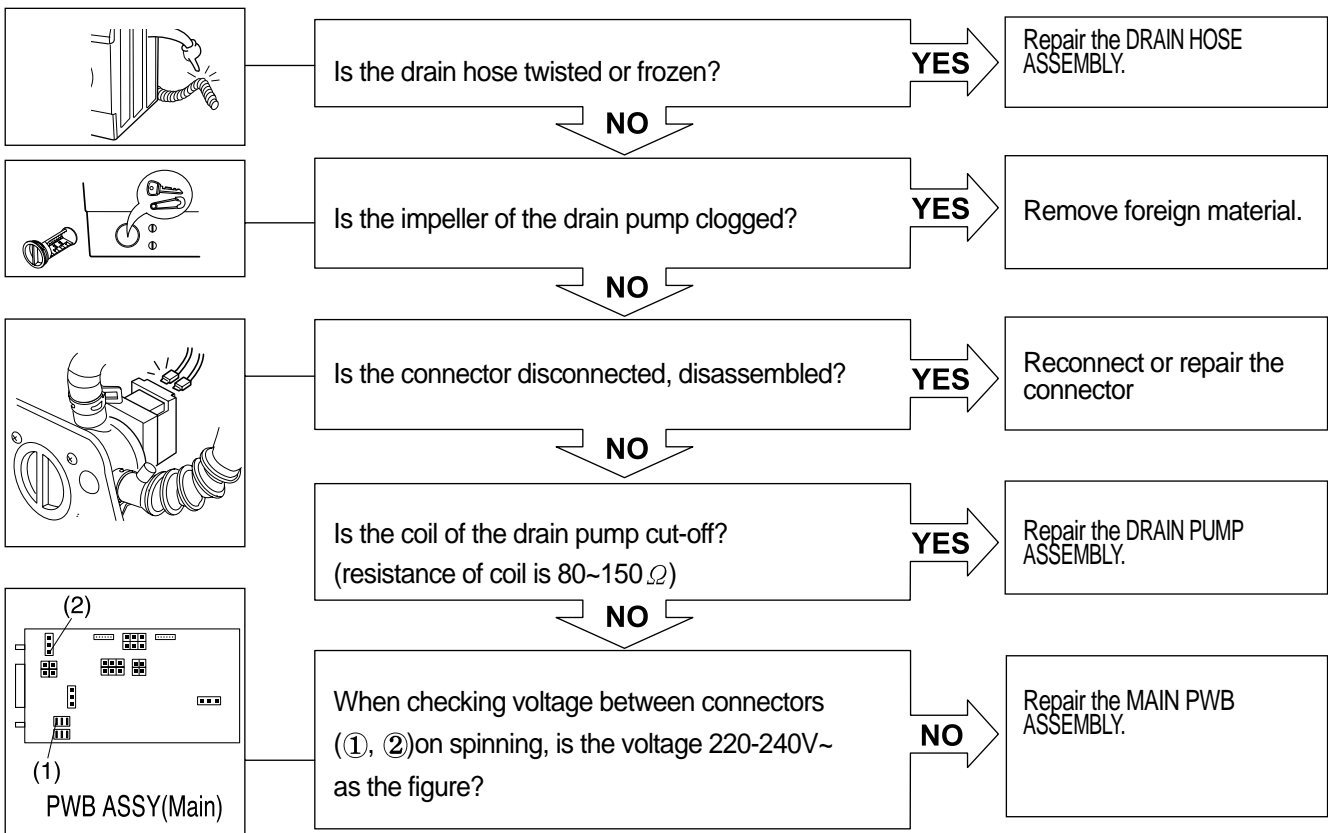
## ABNORMAL SOUND



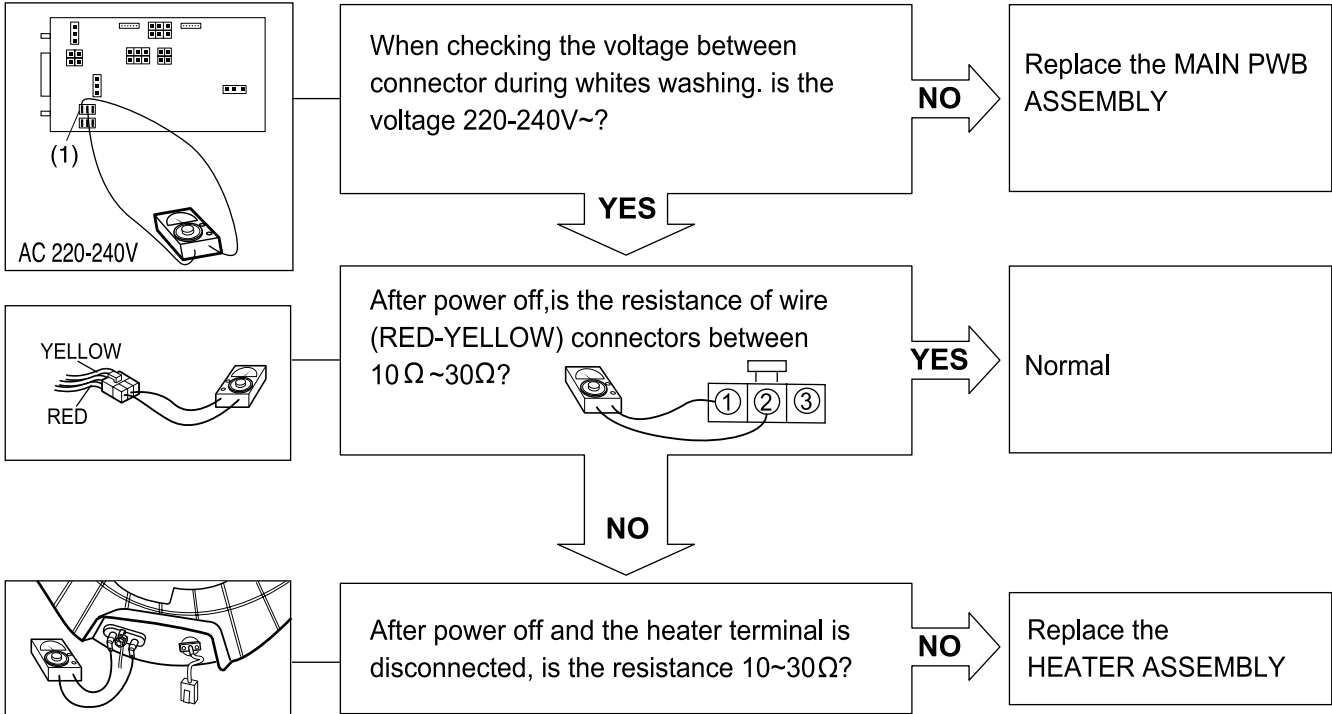
## HEATING WITHOUT WATER



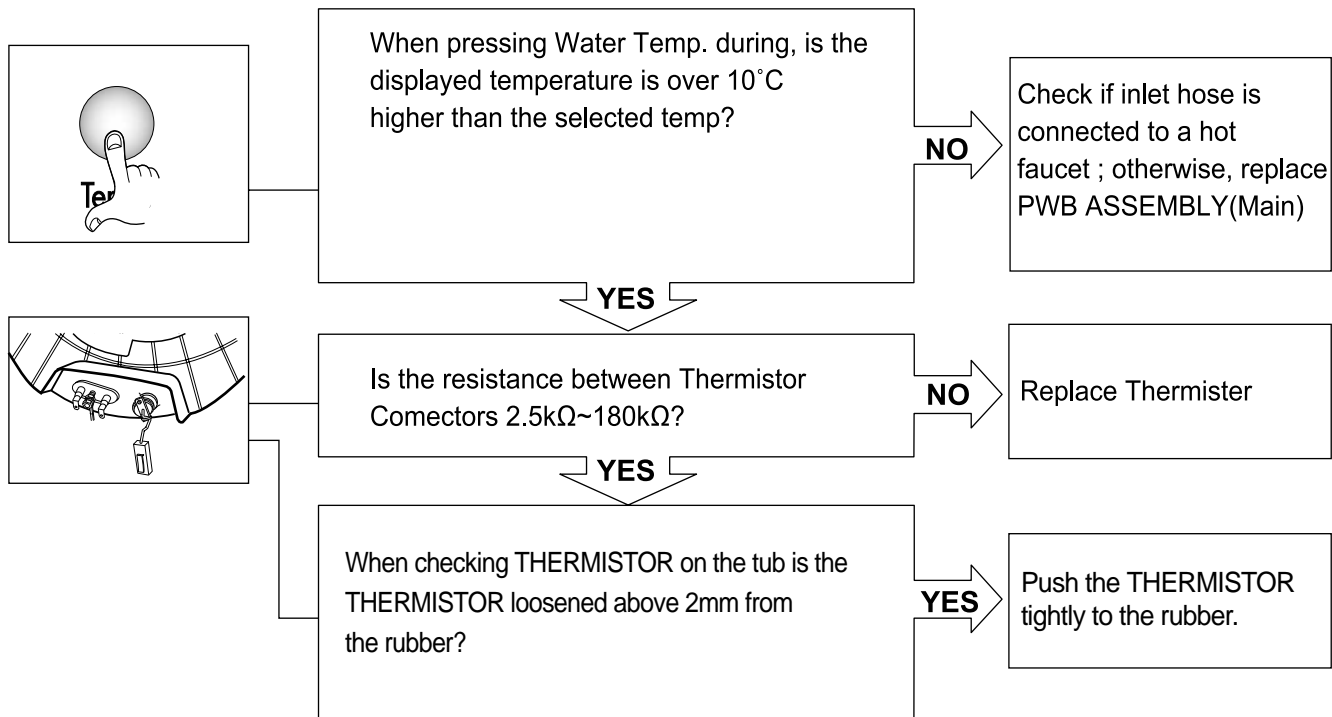
## DRAIN MALFUNCTIONING



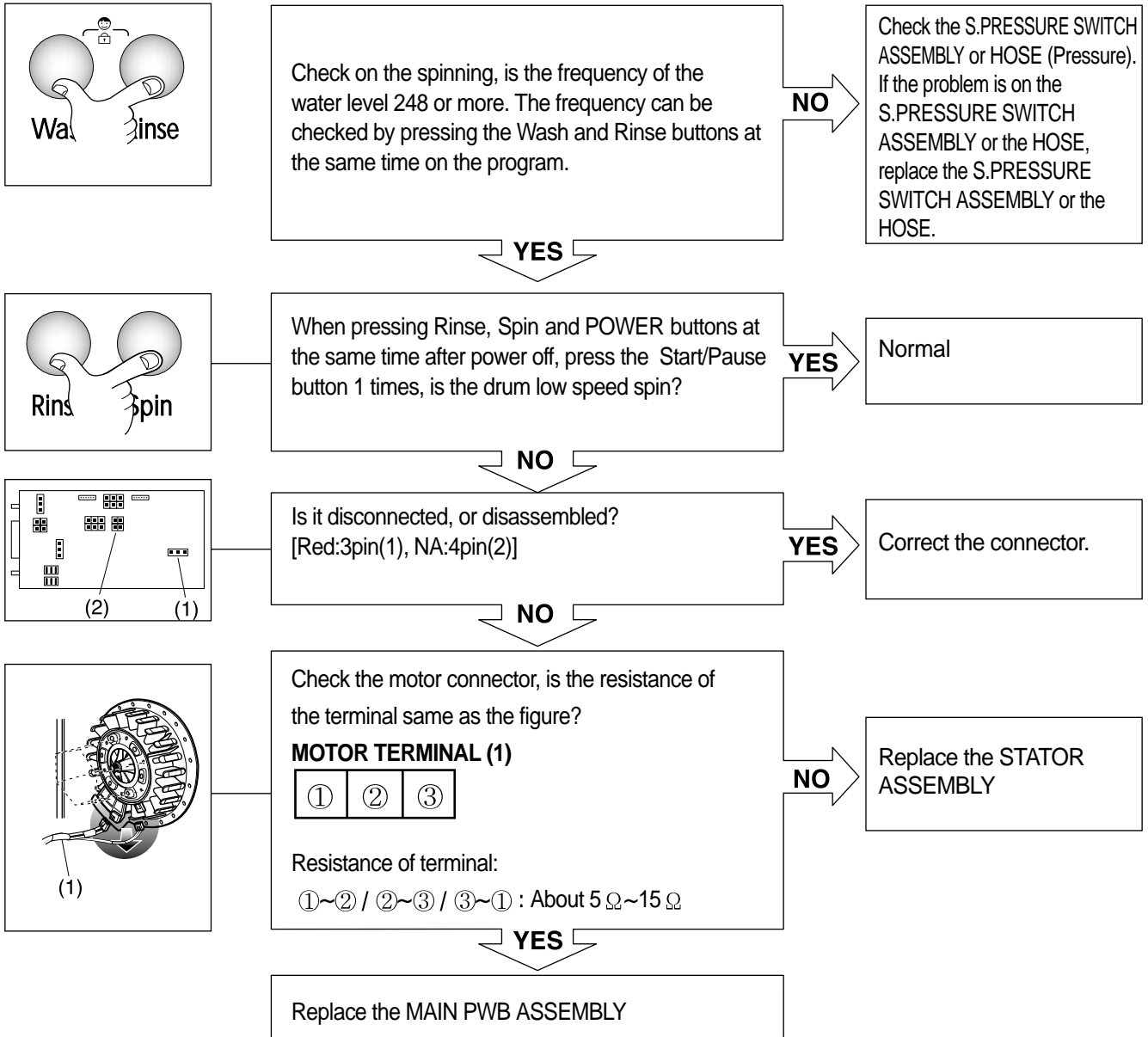
## WASH HEATER TROUBLE



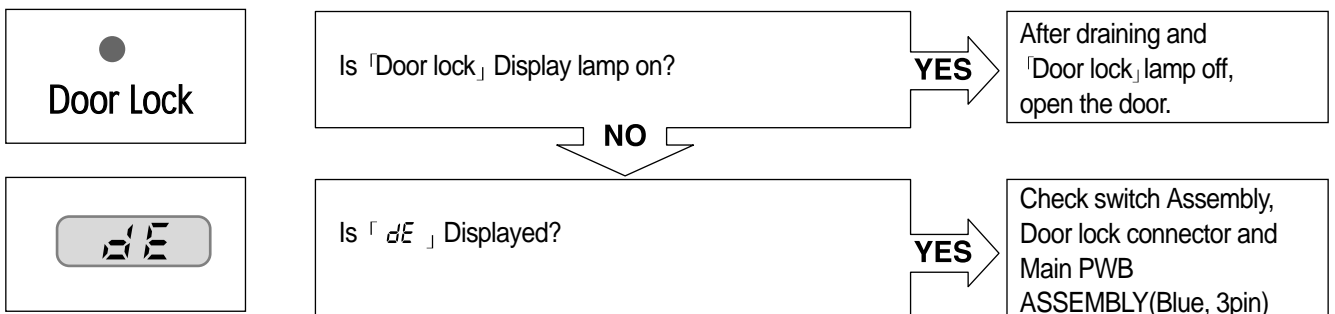
## HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE



## SPIN TROUBLE

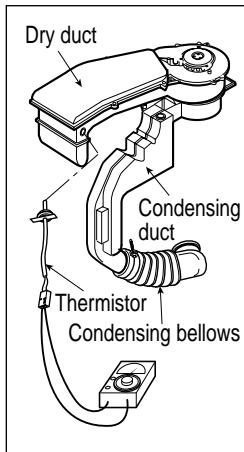


## DOOR DOES NOT OPEN





## [dHE] ERROR DISPLAY



Is the resistance of 1 thermistors on dry duct  $2.5k\Omega \sim 180k\Omega$  (at  $105^{\circ}\text{C} \sim 0^{\circ}\text{C}$ )

**NO**

Replace the thermistor.  
(6322FR2046B)

**YES**

## CHECK FOR DRY HEATER TROUBLE

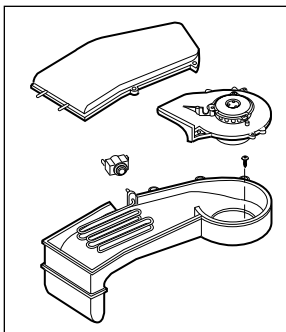
## CHECK FOR DRY FAN MOTOR TROUBLE

Disassemble the cabinet cover and condensing bellows.  
Is there any foreign object in condensing bellows.

**YES**

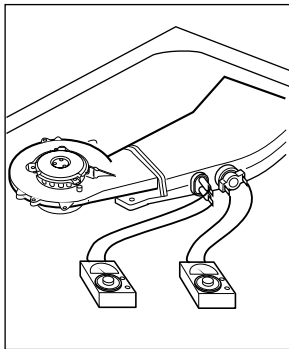
Clean the bellows

**NO**



Disassemble the dry fan assy and dry duct upper, and clean foreign object in duct and fan.

## DRY HEATER TROUBLE



After power off, is the resistance of dry heater 10 ~ 40Ω?

**NO**

Replace the dry heater.

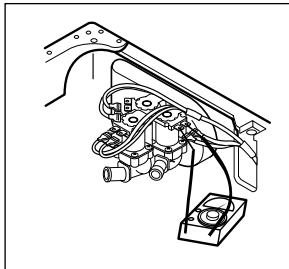
**YES**

Is thermostat closed?

**NO**

Replace the thermostat.

**YES**

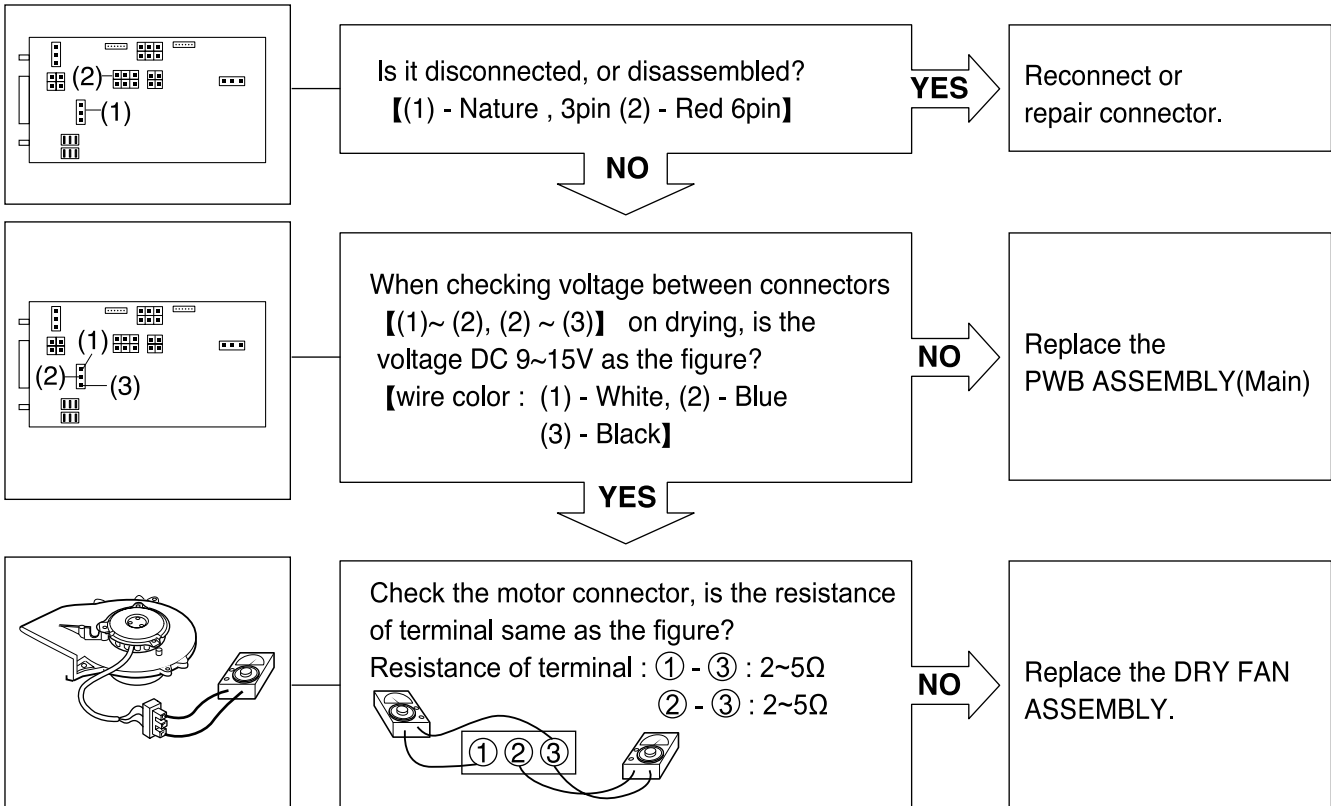


When checking voltage between connectors ( ① , ② ) on drying, is the voltage AC 220-240V as the figure?  
(wire color : ① - Red, ② - Blue)

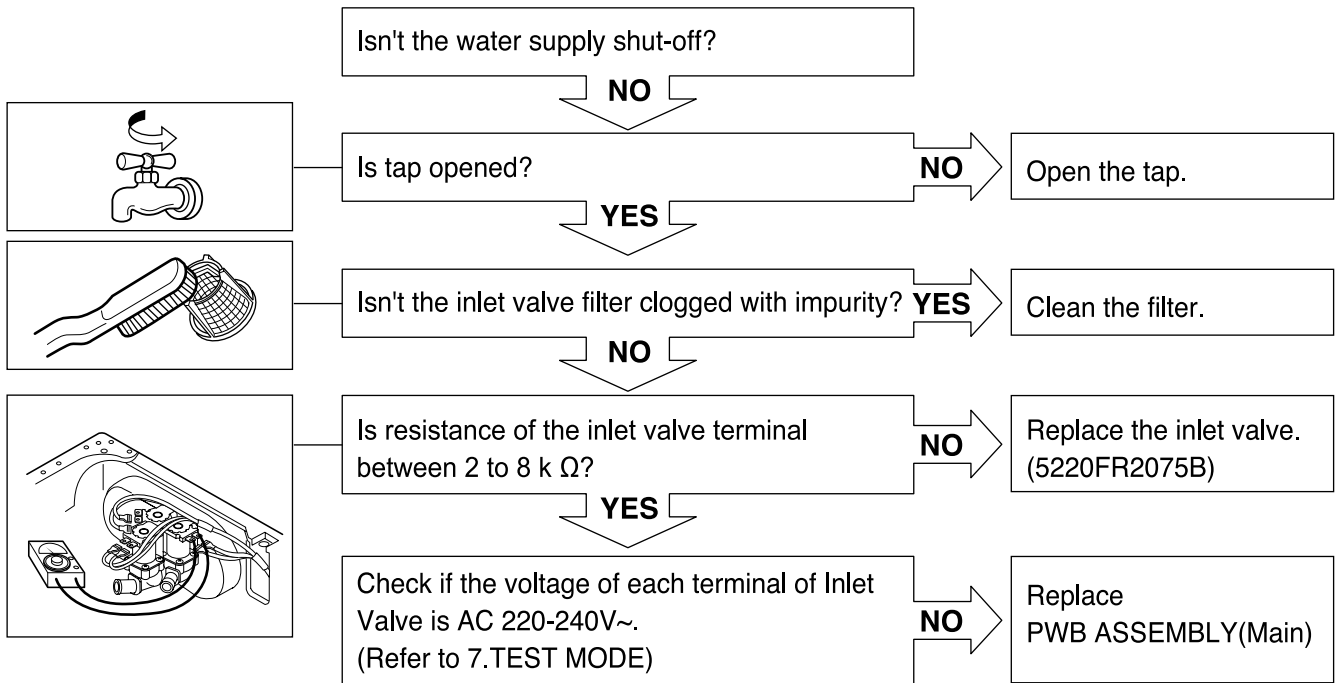
**NO**

Replace the PWB ASSEMBLY(Main)

## DRY FAN MOTOR TROUBLE



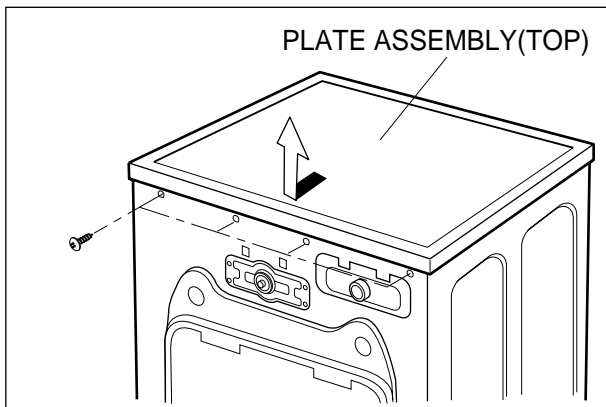
## LOT OF VAPOR IN DRAWER WHEN DRYING



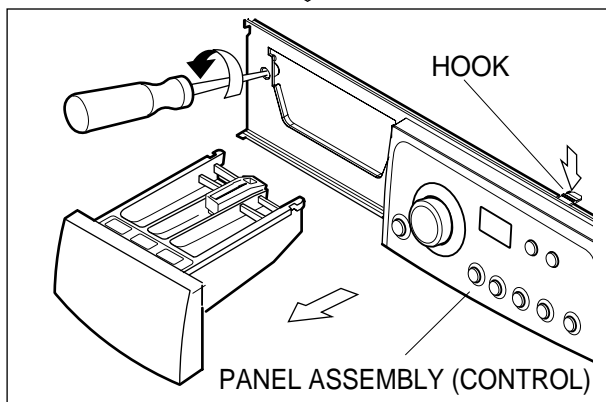
# 9. DISASSEMBLY INSTRUCTIONS

fR Disassemble and repair the parts after pulling out power cord from the outlet.

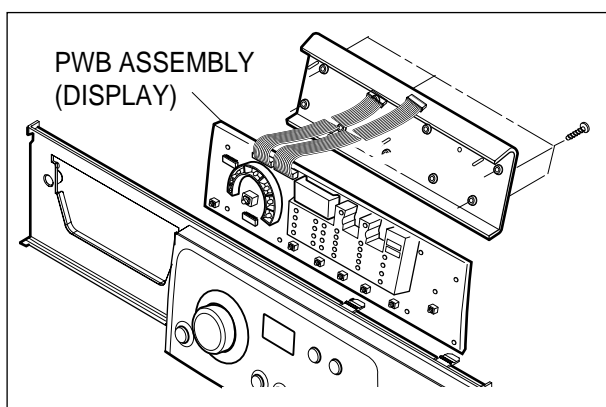
## CONTROL PANEL



- Unscrew the screws on the top plate.
- The plate assembly(Top) is pulled back and then upward to arrow direction.
- The cover(Inner) is disassembled.

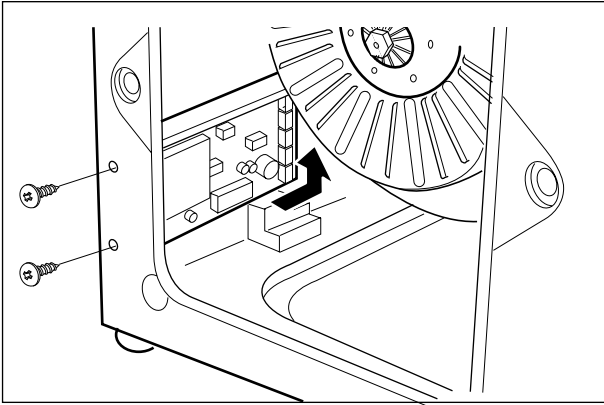


- The PWB assembly(Display) connectors are disconnected.
- Pull out drawer, three screws are unscrewed.
- Push two upper hooks and pull the control panel forward.



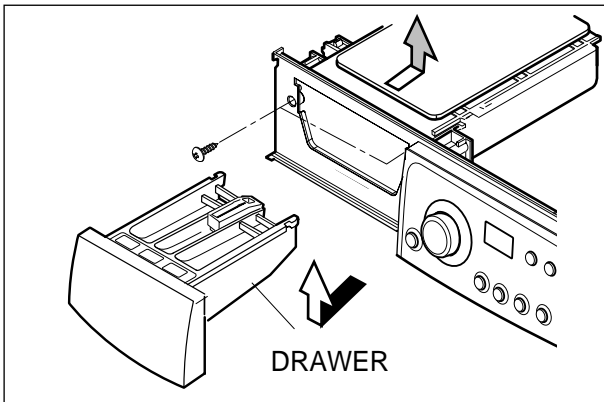
- The PWB assembly(Display) is disconnected.
- When 8 screws are unscrewed on the PWB insulator and the PWB assembly(Display) is disassembled from the PWB insulator.

## PWB ASSEMBLY(POWER)

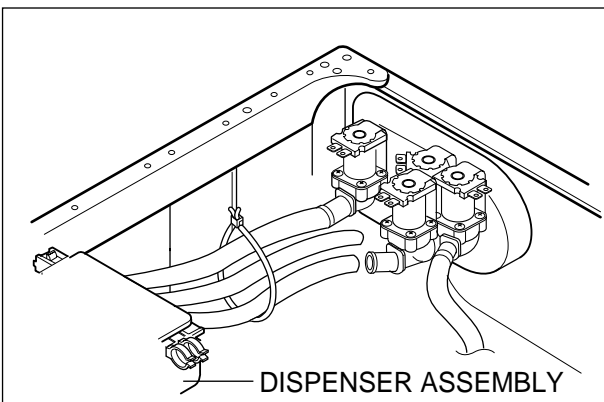


- The back cover is removed.
- E Two screws are unscrewed.
- Ø Disconnect connector from the wiring.
- E Pull the PWB assembly (Main) to arrow direction.

## DISPENSER ASSEMBLY

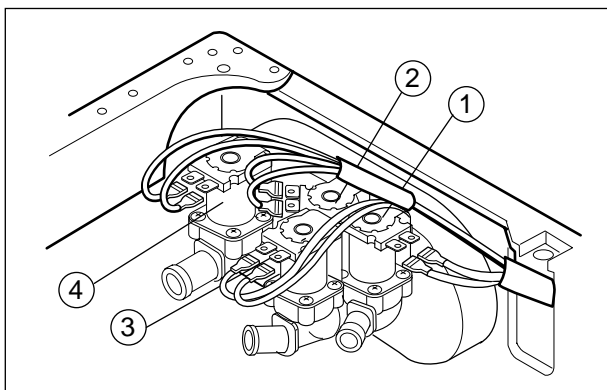


- The plate assembly(Top)and the cover(Inner)are disassembled.
- E Pull the drawer to arrow direction.
- Ø Two screws are unscrewed.



- The hose clamps and the hose are disassembled.
- E The ventilation bellows are disassembled on the tub.

## INLET VALVE

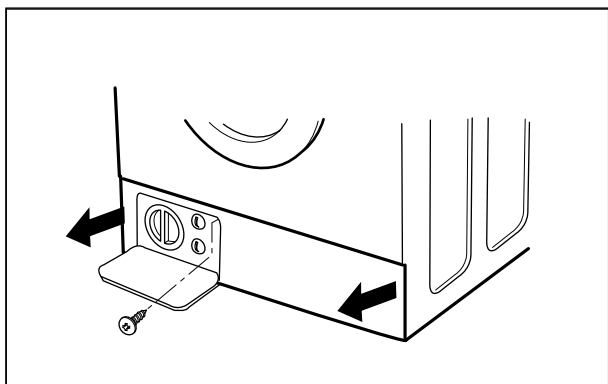


- Disconnect the wiring connector.
- Remove the valve by two screws of the valve holder.

*f* When reconnecting the connector

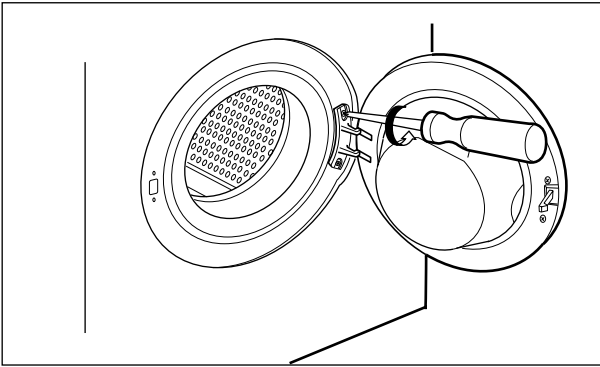
|                                  |                          |
|----------------------------------|--------------------------|
| VALVE $\yenmark L$ (DRY)         | YL/BK - BK               |
| VALVE $\yenmark M$ (PRE-WASH)    | GY/WH - BK               |
| VALVE $\yenmark N$ (NORMAL-WASH) | WH/BK - BK<br>BL/RD - BK |
| VALVE $\yenmark O$ (HOT)         | BL/RD - BK               |

## COVER LOWER

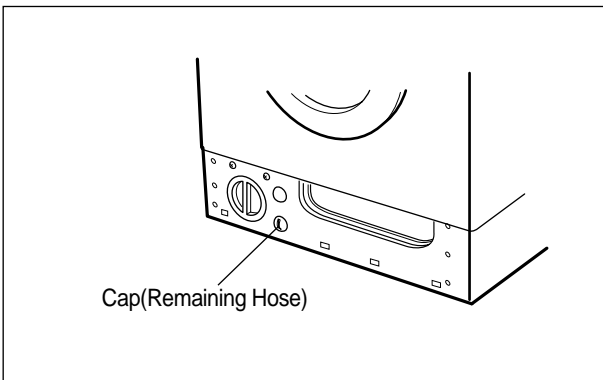


- Remove the lower cover to arrow direction after one screw is unscrewed.

## DOOR



- Open the door completely.
- ㄷ Remove the two screws from the hinge.
- ⓘ When removing the Door Assembly, it is necessary to hold the Bracket that is inner of the Cabinet Cover.

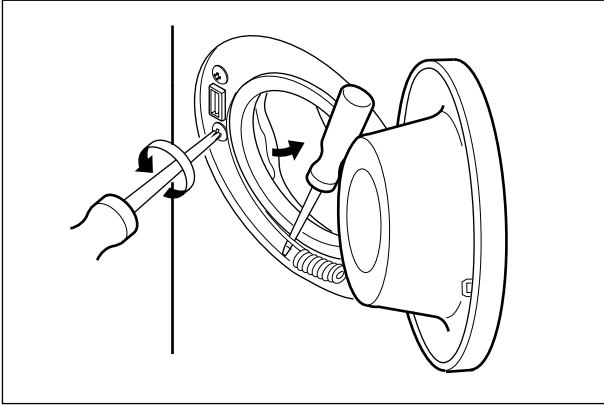


### Removing method of remained water

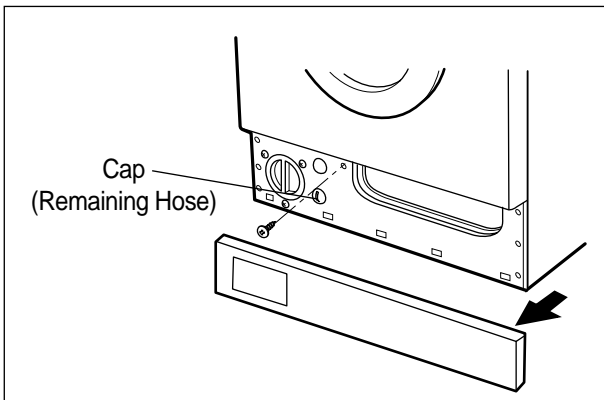
- Rotate the Cap (Remaining Hose) to arrow direction.
- ㄷ Pull it out from hose.
- ⓘ First, prepare a bucket to put in the remained water.



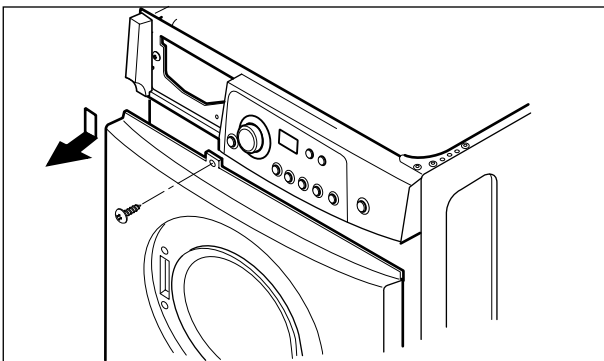
## GASKET ASSEMBLY



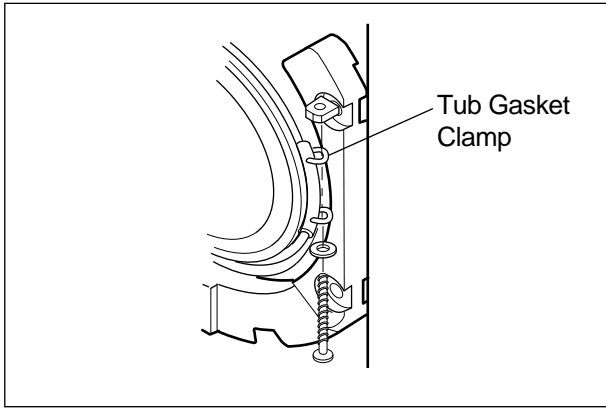
- The cabinet gasket clamp is released.
- Two screws are unscrewed from the cabinet cover.



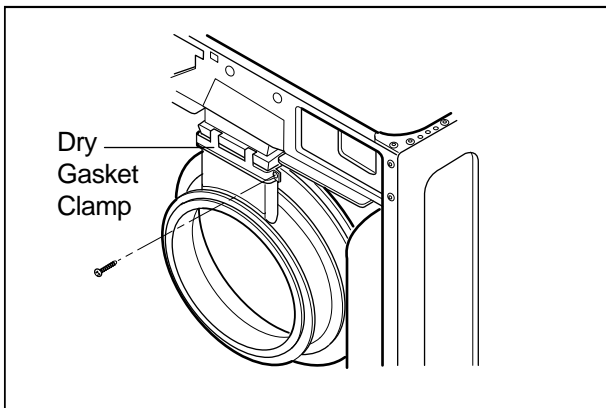
- One screw is unscrewed from the lower cover.
- The lower cover is disassembled by pulling out.
- Three screws are unscrewed from the cabinet.



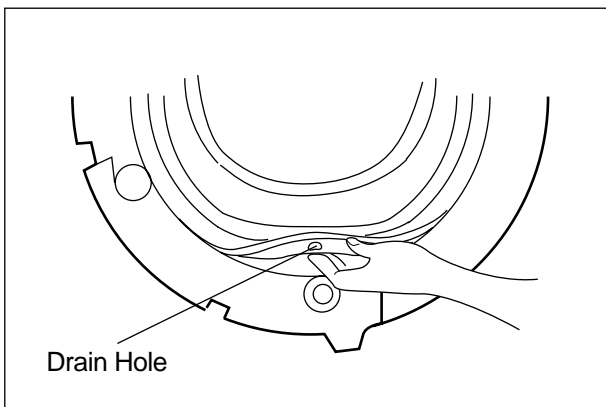
- The control panel is removed.
- Screw is unscrewed from the cabinet cover.



- Remove tub gasket clamp by loosening the screw.

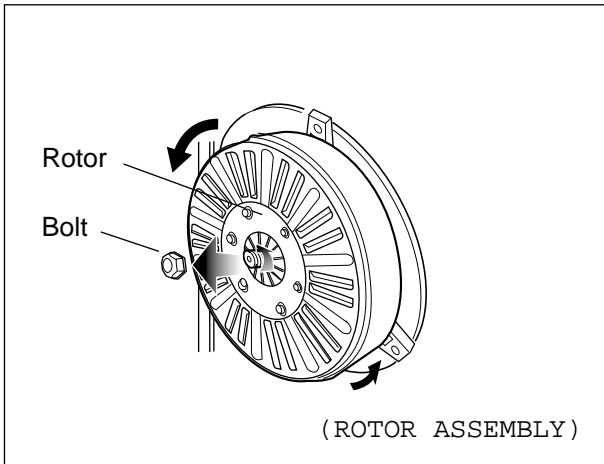


- Remove dry gasket clamp by loosening the screw.

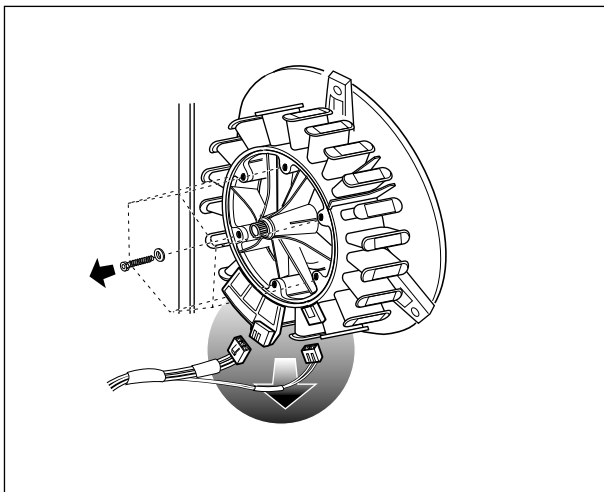


- When reassembling the gasket, put the drain hole of the gasket downward, then assemble.

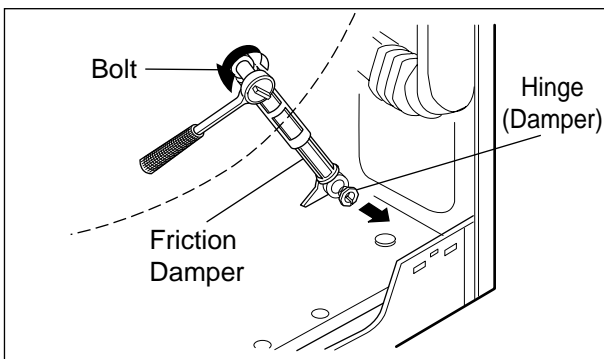
## ROTOR ASSEMBLY, STATOR ASSEMBLY, FRICTION DAMPER



- α Remove the back cover.
- αⓇ After loosening the bolt, Rotor, pull out the rotor.

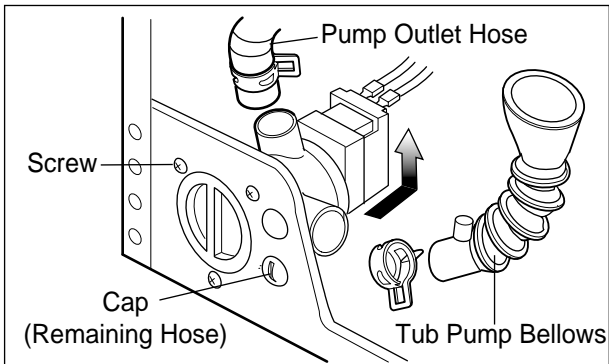


- α Remove the 6 bolt from the stator.
- αⓇ Disconnect the 2 connectors.



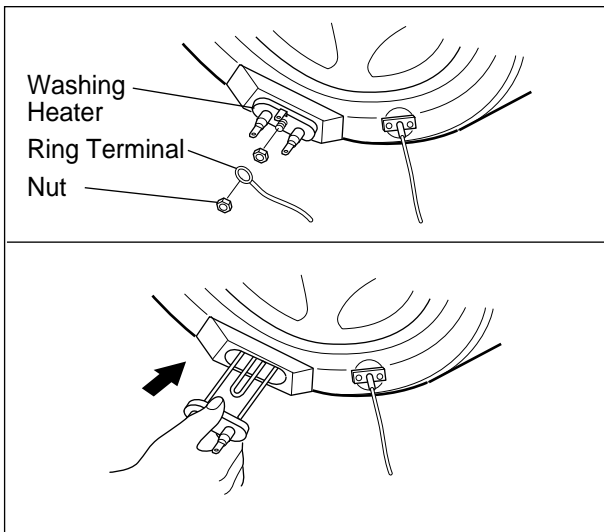
- α Remove the bolts at the Tub.
- αⓇ The Hinge(Damper) at the base is pulled off pressing on the snaps at the sharp end.
- α∅ The hinge at the base is pulled off. (To arrow direction)

## PUMP



- Remove pump outlet hose.
- $\text{E}$  Remove tub pump bellows.
- $\emptyset$  Remove cap (Remaining Hose).
- $\text{E}$  Disconnect the wiring.
- $\circ$  Three screws are unscrewed from the cabinet.
- Remove the pump to arrow direction.

## HEATER

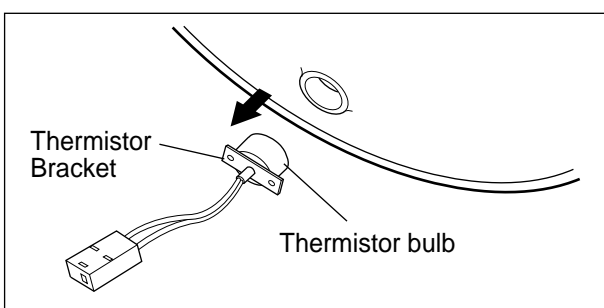


- Loosen the nut.
- $\text{E}$  Remove washing heater by pulling out.

### CAUTION

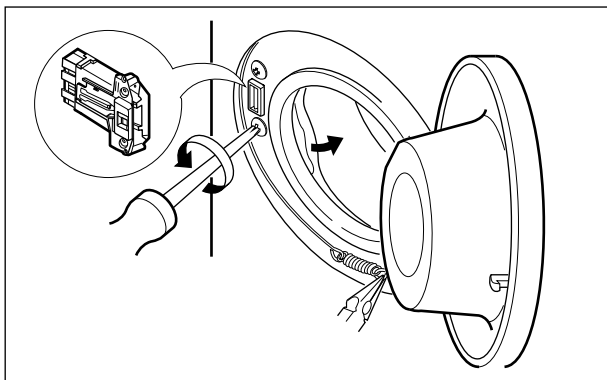
When assembling the washing heater, insert the heater to heater clip on the bottom of tub.

## THERMISTOR



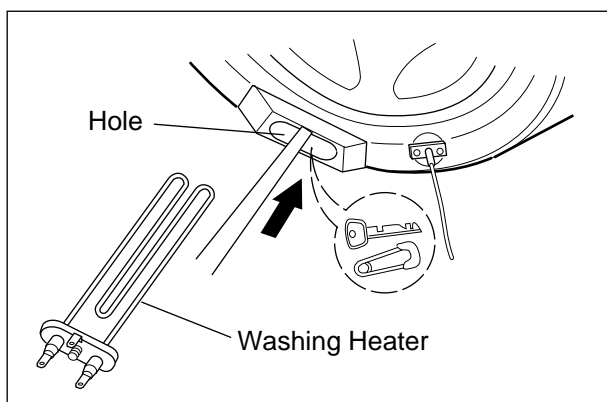
- Pull it out by holding the thermistor bracket.
- $f\text{T}$  If holding the wire and pulling out it, it may be broken.

### SWITCH ASSY, DOOR LOCK



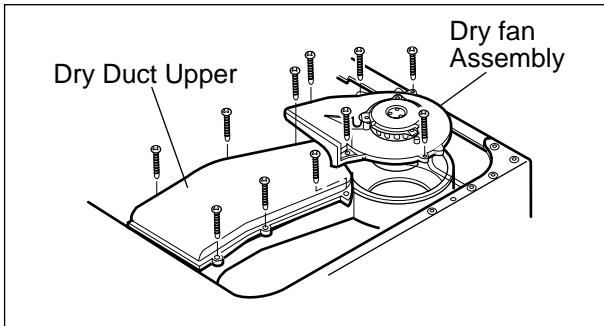
- The cabinet cover clamp is removed and the gasket is released.
- ⊕ Two screws are unscrewed.
- ∅ The door lock S/W is disconnected from the wiring connector and the strap.

### WHEN FOREIGN OBJECT STUCK BETWEEN DRUM AND TUB

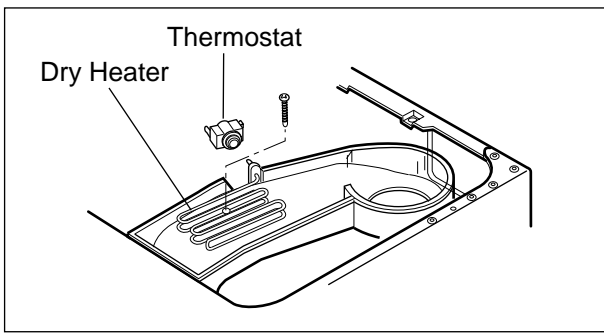


- Remove washing heater.
- ⊕ Remove the foreign object(wire,coin,etc) by inserting long bar in the hole.

## DRY DUCT

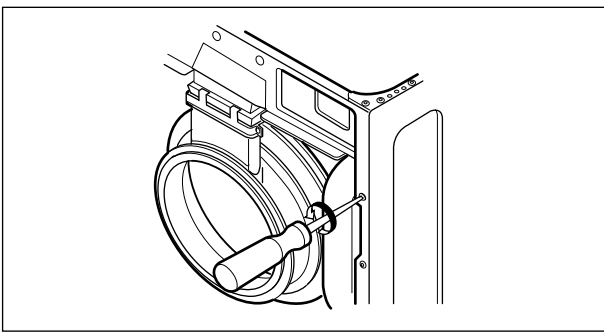


- Remove 5 screws and dry fan assembly.
- Remove 6 screws and dry duct upper.

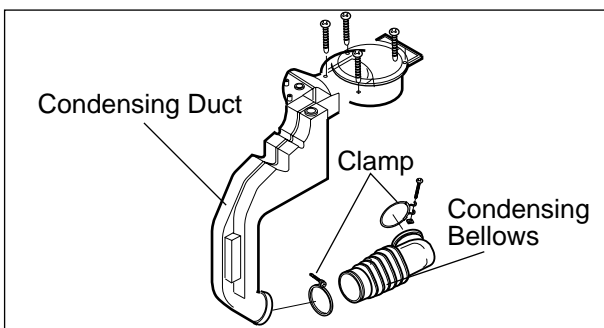


- Remove 1 screw and dry heater.
- Remove thermostat.

## CONDENSING DUCT



- Remove 2 screws from cabinet.



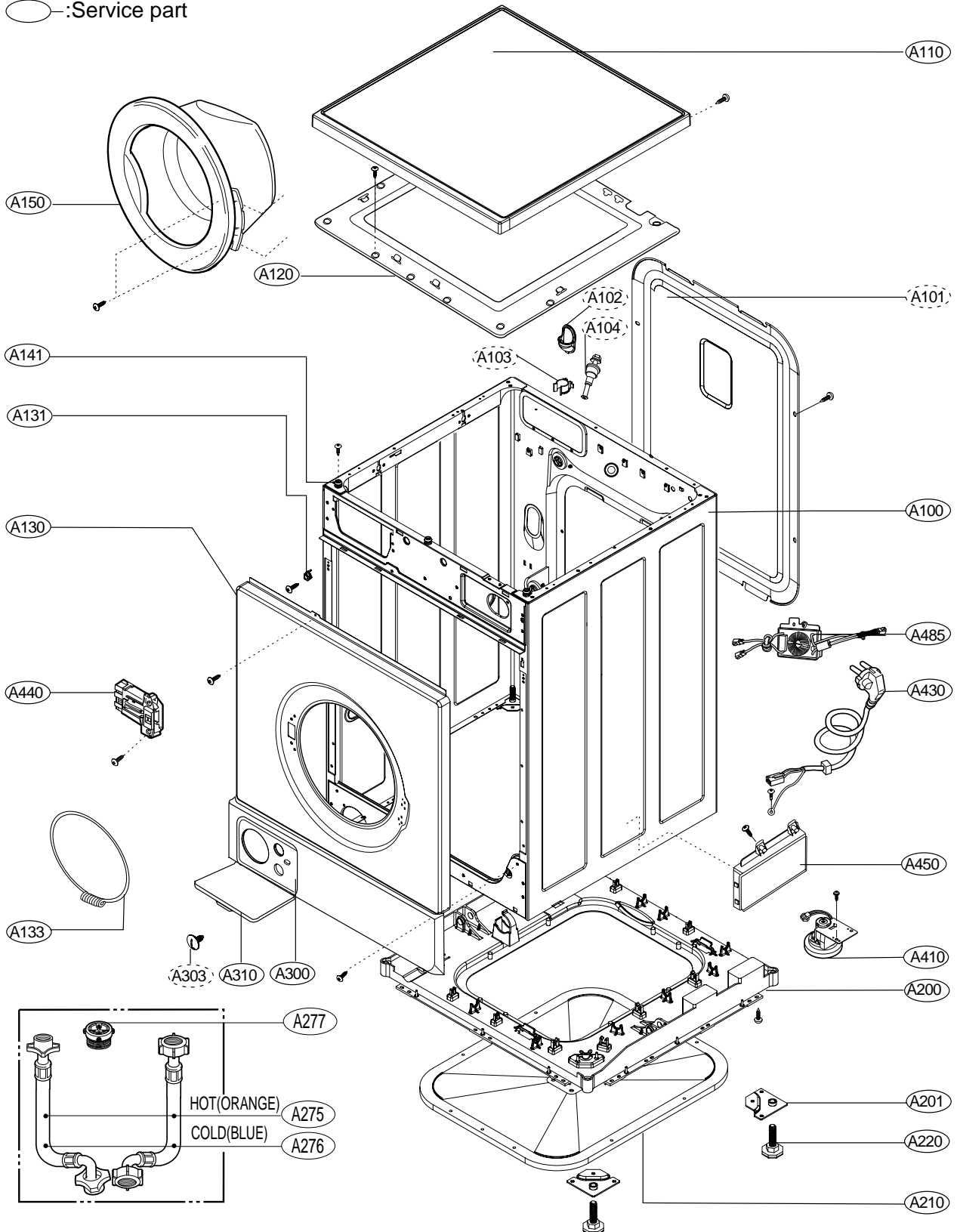
- Remove clamp and condensing duct.

# 10. EXPLODED VIEW AND PART LIST

## 10-1. THE PART LIST OF CABINET ASSEMBLY

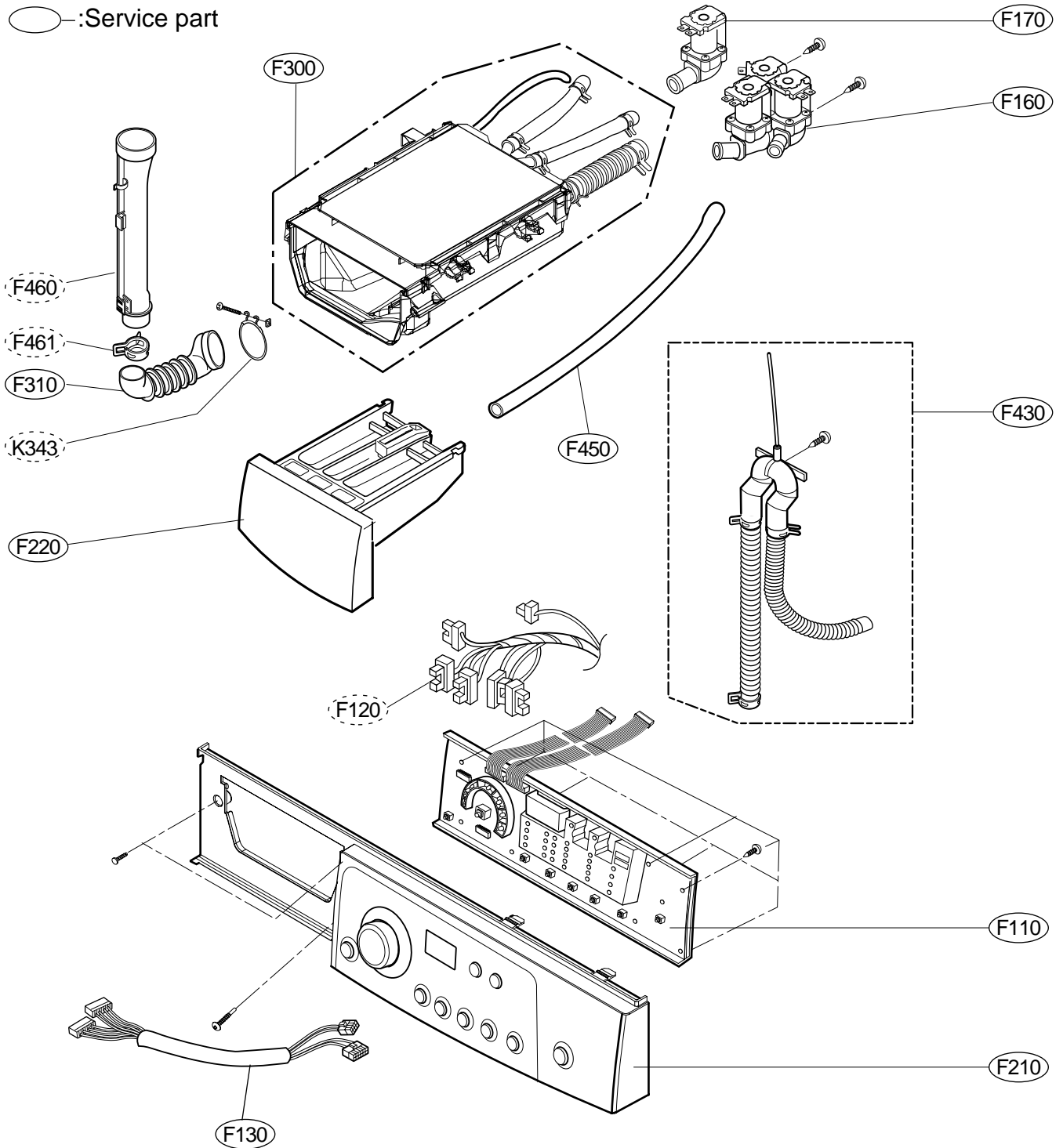
○: Non-service part

○: Service part



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

○: Non-service part  
●: Service part

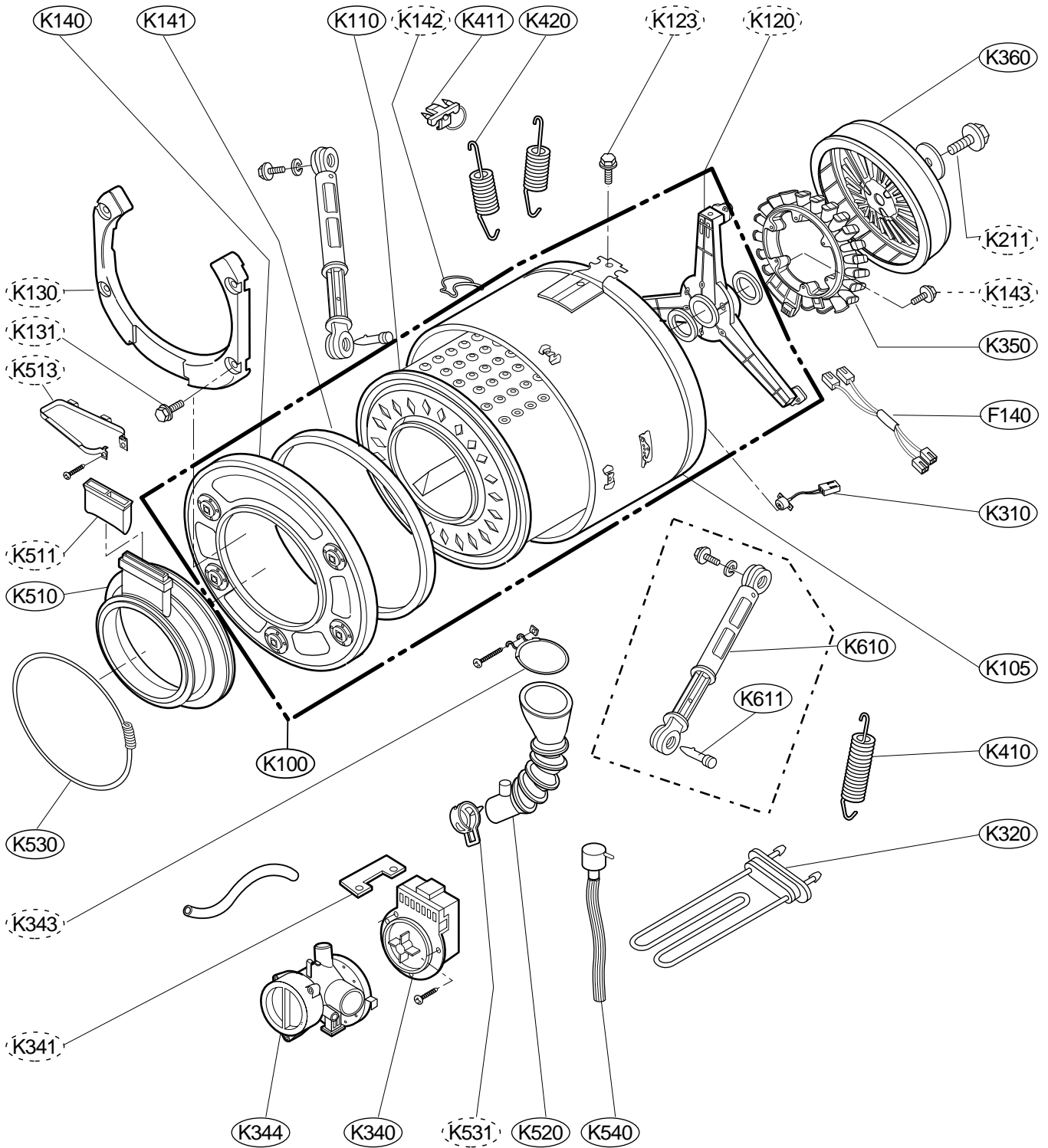




# 10-3 THE EXPLODED VIEW OF DRUM & TUB ASSEMBLY

○: Non-service part

○: Service part



## 10-4 THE EXPLODED VIEW OF DRYER

○:Non-service part

○:Service part

