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WASHING MACHINE SERVICE MANUAL

CAUTION

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

**MODEL : WD(M)-80150FB
WD(M)-90150(5)FB
WD(M)-10150(5)FB
WD(M)-11150(5)FB
WD(M)-12150(5)FB
WD(M)-13150(5)FB**

CONTENTS

1. SPECIFICATION.....	3
2. FEATURES & TECHNICAL EXPLANATION	4
3. PARTS IDENTIFICATION	6
4. INSTALLATION	7
5. OPERATION	10
6. WIRING DIAGRAM/PROGRAM CHART	12
7. TROUBLESHOOTING	13
7-1.BEFORE PERFORMING SERVICE	13
7-2.TEST MODE	13
7-3.HOW TO KNOW THE WATER LEVEL FREQUENCY.....	13
7-4.ERROR DISPLAY	14
8. ERROR DIAGNOSIS AND CHECK LIST	16
8-1. DIAGNOSIS AND ANSWER FOR ABNORMAL OPERATION	16
8-2. FAULT DIAGNOSIS AND TROUBLESHOOTING	19
9. DISASSEMBLY INSTRUCTIONS	25
10. EXPLODED VIEW	32
10-1. THE EXPLODED VIEW OF CABINET ASSEMBLY	32
10-2. THE EXPLODED VIEW OF CONTROL PANEL & DISPENSER ASSEMBLY	33
10-3. THE EXPLODED VIEW OF DRUM & TUB ASSEMBLY	34
*APPENDIX (Replacement parts list).....	35

1. SPECIFICATION

ITEM		WD(M)-80150FB, WD(M)-90150(5)FB, WD(M)-10150(5)FB, WD(M)-11150(5)FB, WD(M)-12150(5)FB, WD(M)-13150(5)FB,	
POWER SUPPLY		220-240V~, 50Hz	
PRODUCT WEIGHT		65kg	
ELECTRICITY CONSUMPTION	WASHING	150W	
	SPIN (800rpm)	300W	
	DRAIN MOTOR	32W	
	WASH HEATER	2000W	
REVOLUTION SPEED	WASH	45rpm	
	SPIN	WD(M)-80150FB	400/500/600/800 rpm
		WD(M)-90150(5)FB	400/600/800/900 rpm
		WD(M)-10150(5)FB	400/600/800/1000 rpm
		WD(M)-11150(5)FB	400/600/800/1100 rpm
		WD(M)-12150(5)FB	400/800/1000/1200 rpm
		WD(M)-13150(5)FB	400/800/1100/1300 rpm
OPERATION WATER PRESSURE		0.3-10kgf/cm² (30-1000kPa)	
CONTROL TYPE		Electronic	
WASH CAPACITY		7.0kg	
		Synthetic (3.5kg), Delicate (3.0kg) Wool (2.0kg), Hand Wash(2.0kg), Quick 30(2.0kg)	
DIMENSION		600mm(W) ×600mm(D) ×850mm(H)	
WASH PROGRAM		Cotton, Synthetic, Delicate, Wool, Hand Wash, Quick 30, Rinse+Spin	
OP		Bio, Time Save, Rinse +, Pre-Wash, Crease Care, Rinse Hold	
DOOR SWITCH TYPE		Bi-Metal type	
WATER LEVEL		9 steps (by sensor)	
RESERVATION		From 3 hours to 19 hours	
SENSING OF THE LAUNDRY AMOUNT		Adopted	
FUZZY LOGIC		Adopted	
DISPLAY OF THE REMAINING TIME		Adopted	
ERROR DIAGNOSIS		10 items	
POWER AUTO OFF		Adopted	
CHILD LOCK		Adopted	
AUTO RESTART		Adopted	

2. FEATURES & TECHNICAL EXPLANATION

2-1.FEATURES



■ **Jumbo drum**

LG's jumbo drum can wash about 40% more per load than conventional washing machine. A bigger drum improves the wash performance.



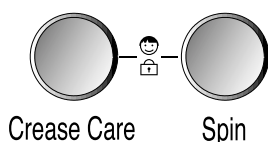
■ **Protection against creases**

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



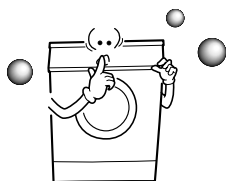
■ **More economical by Fuzzy Logic System**

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



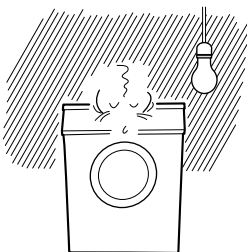
■ **Child-Lock**

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



■ **Low noise speed control system**

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

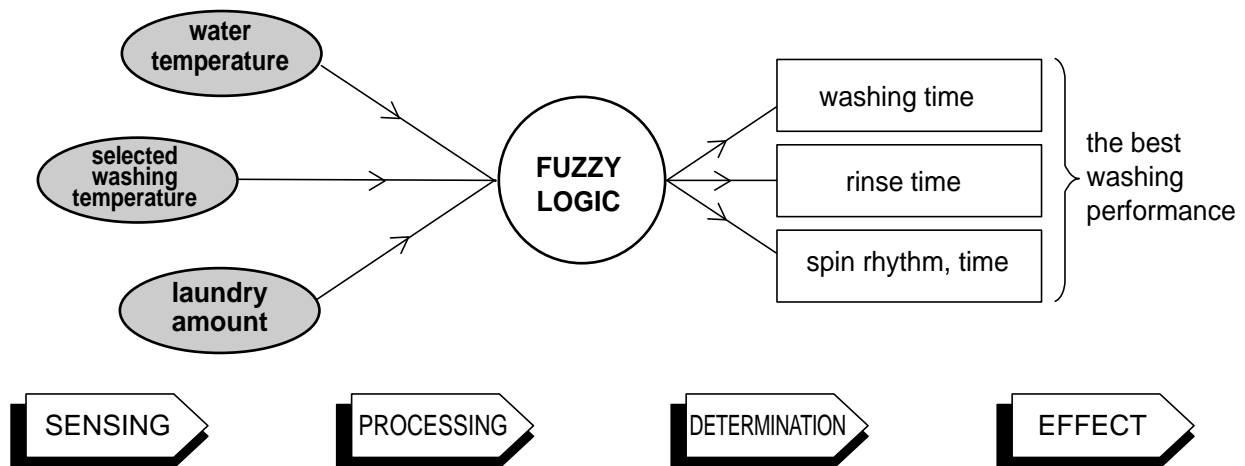


■ **Auto Restart**

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

2-2.DETERMINE WASHING TIME BY FUZZY LOGIC

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



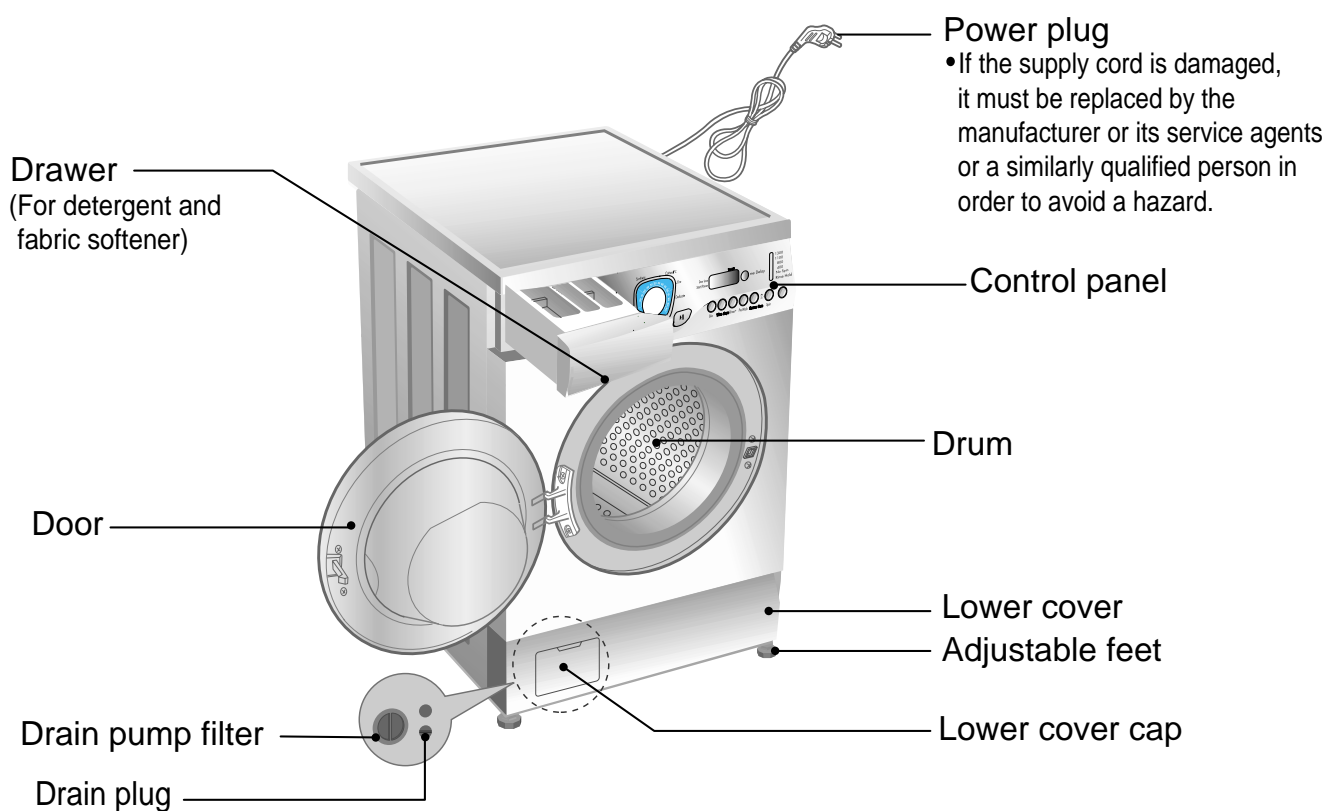
2-3.WATER LEVEL CONTROL

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

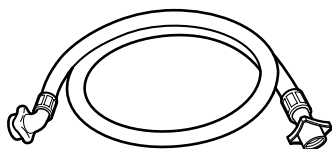
2-4.THE DOOR CAN NOT BE OPENED

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

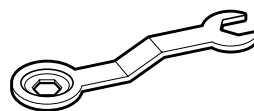
3. PARTS IDENTIFICATION



■ ACCESSORIES



Hot/Cold (2EA)
Cold (1EA)



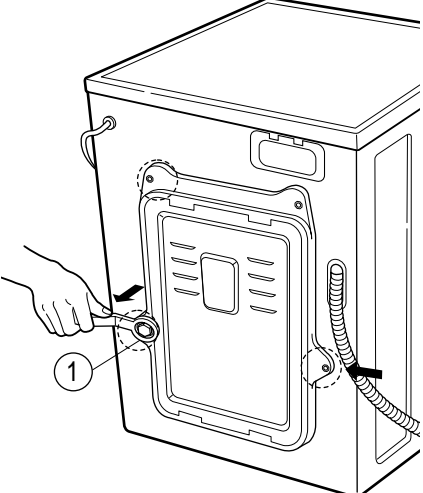
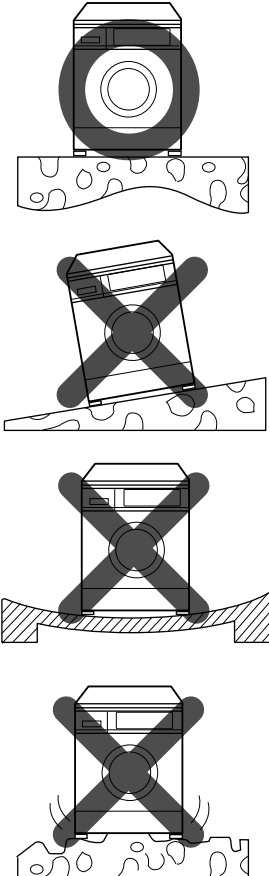
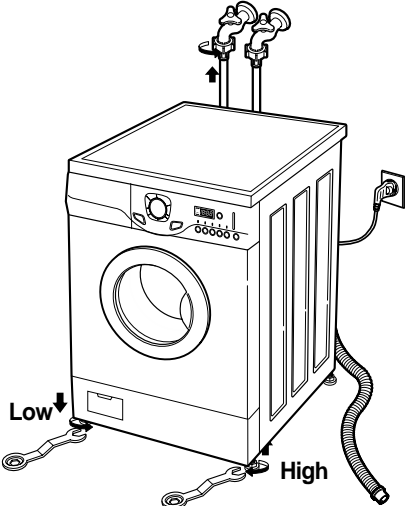
Wrench

4. INSTALLATION

- ① Before servicing ask the customer what the trouble is.
- ② Check the adjustment (power supply is 220-240V, remove the transit bolts....)
- ③ Check the troubles referring to the troubleshooting.
- ④ Decide service steps referring to disassembly instructions.
- ⑤ Then, service and repair.
- ⑥ After servicing, operate the appliance to see whether it works O.K or NOT.

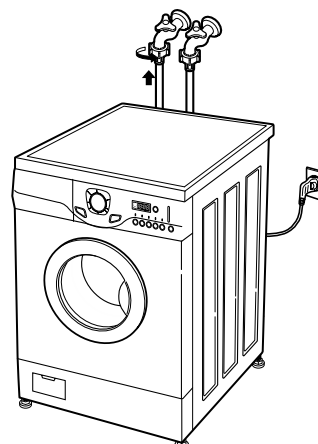
■ STANDARD INSTALLATION

The appliance should be installed as follows.

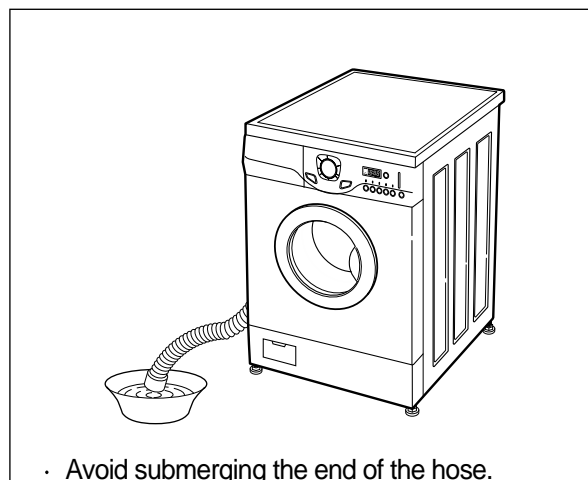
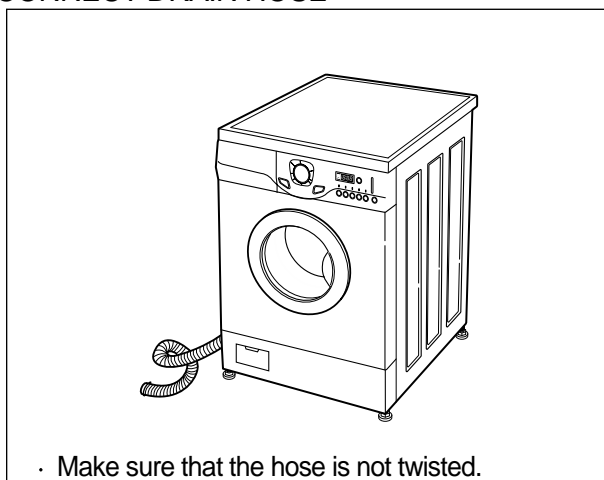
REMOVE THE TRANSIT BOLTS	INSTALL THE APPLIANCE ON FLAT AND FIRM SURFACE	ADJUST THE HORIZONTAL
<ul style="list-style-type: none"> Remove the transit bolts (4EA: ①) with supplied wrench. Keep the transit bolts and wrench for future use. Insert the 4 caps provided into the hole. 		<ul style="list-style-type: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

■ HOW TO CONNECT INLET HOSE

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

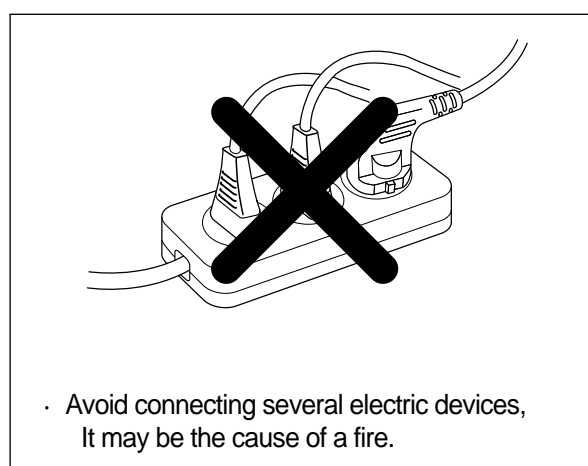
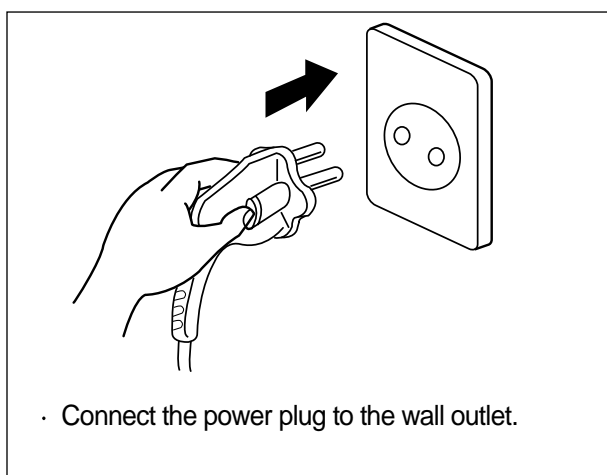


■ CONNECT DRAIN HOSE

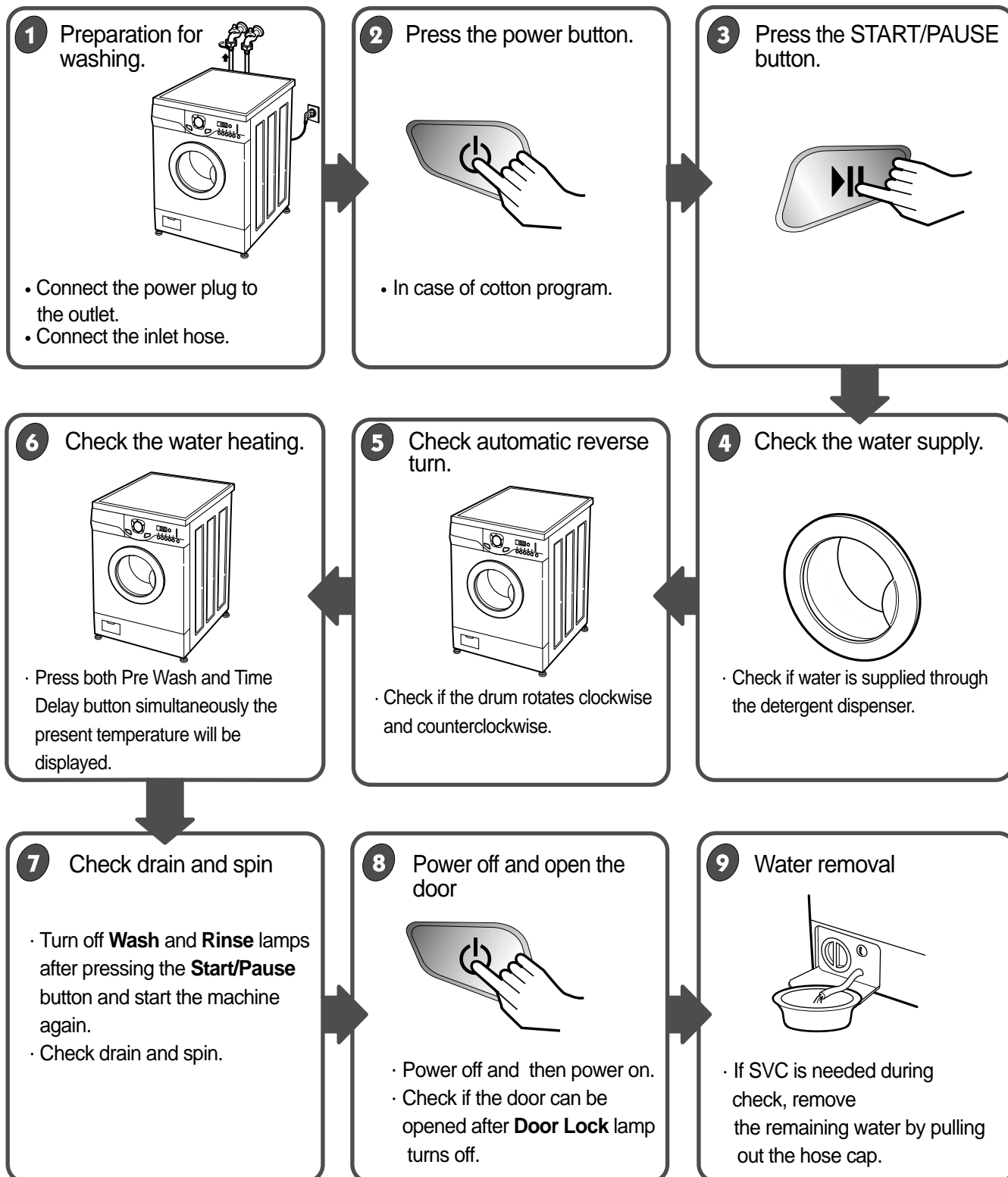


※ The drain hose should be placed under 100cm from the floor.

■ CONNECT POWER PLUG



7 TEST OPERATION



5. OPERATION

Eco

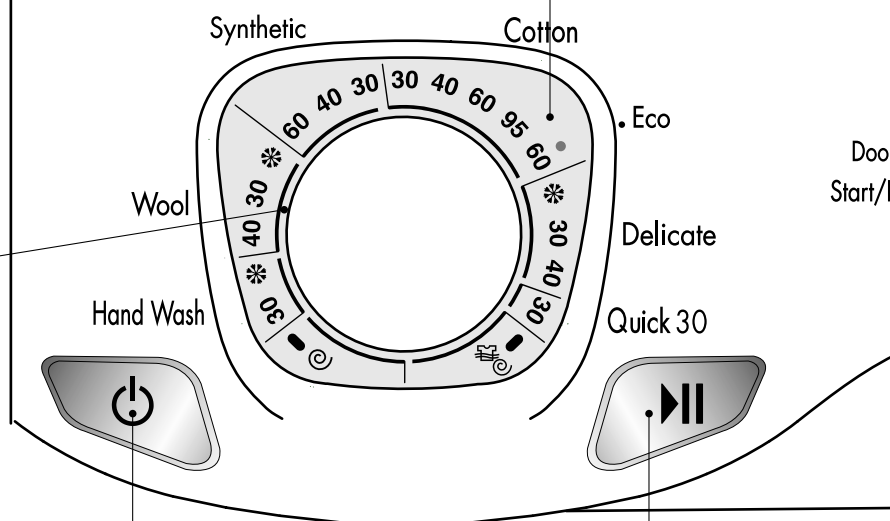
- It is possible in cotton course when 60°C

LED display

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

Wash program selector

- 8 program can be set depending on the type of the laundry.
- If the power button is pressed, all lamps are on
- By turning the dial, [Cotton ⇄ Delicate ⇄ Quick 30 ⇄ Rinse + Spin ⇄ Spin ⇄ Hand Wash ⇄ Wool ⇄ Synthetic] can be selected.
(The opposite is possible)



Power button

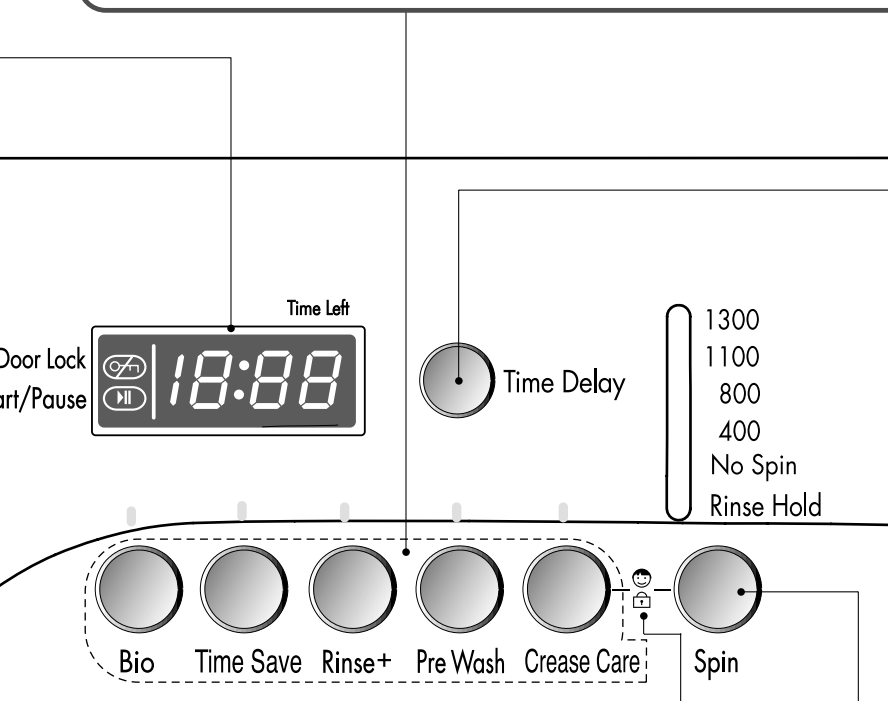
- Press the button to turn power on and off.
- Press the button to cancel the time delay.

Start/Pause button

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

Option

- Bio** : • If you want to eliminate protein stains(milk, blood, chocolate...), you may select Bio by pressing the option button.[You can select Bio when temperature is higher than 60°C in Cotton and Synthetic.]
- Time Save** : • By selecting the Time Save option, the wash time may be reduced, depending on the program selected.
- Rinse+** : • If you wish to rinse more, the Rinse+ option will remove any trace of detergents.
- Pre Wash** : • If the laundry is heavily soiled, "Pre Wash" course is effective.
• Pre Wash is available in Cotton and Synthetic Program.
- Crease Care** : • If you want to prevent crease, select this button with spin



Time Delay

- Press the button when delayed washing is needed.
- When the button is pressed, [3:00] is displayed, maximum delay of [19:00] hours can be set.
- Each press advances time delay by the hour.
- Use [Power] button to cancel [Time Delay]
- [Time Delay] means the time required from the present to the completion of washing.

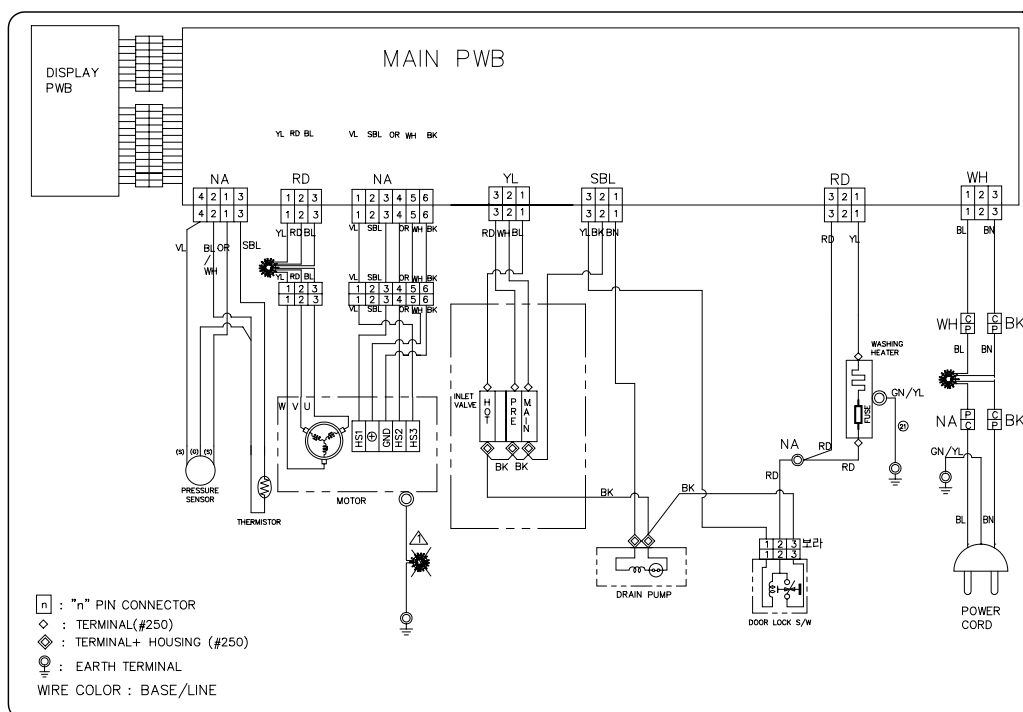
Child - Lock

- **Child Lock** system can be set and canceled by pressing and holding both [Spin] and [Crease Care] button simultaneously more than 2 seconds.
- Once **Child Lock** is set, all buttons are inoperable.
- **Child Lock** system can be set anytime even during Power-off and operation.
- It is automatically cancelled when an operational error occur.

Spin

- **WD(M)-80150FB** ⇨ No spin/400/500/600/800
- **WD(M)-90150(5)FB** ⇨ No spin/400/600/800/900
- **WD(M)-10150(5)FB** ⇨ No spin/400/600/800/1000
- **WD(M)-11150(5)FB** ⇨ No spin/400/600/800/1100
- **WD(M)-12150(5)FB** ⇨ No spin/400/800/1000/1200
- **WD(M)-13150(5)FB** ⇨ No spin/400/800/1100/1300

6. WIRING DIAGRAM / PROGRAM CHART



i () : WD-80150FB

* Water Supply : W.S

* Intermittent Spin : I·S

* Disentangle : D·T

[illegible]

* Basic Cycle

★ 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

- * Pre Wash : If the laundry is heavily soiled, "Pre Wash" course is effective. Pre Wash is available in Cotton and Synthetic Program.
- * Eco : By selecting Eco function, the water temperature is reduced and washing time is lengthened. So you can economize in your consumption of energy.
- * Rinse+ : If you wish to rinse more, the Rinse+ function will remove any trace of detergents.
- * Bio : If you want to eliminate protein stains (milk, blood, chocolate...), you may select Bio function by pressing the option button.
- * Quick 30 : By selecting this function, you may wash a small quantity of colored laundry which is lightly soiled fast.
- * You can select Bio function and Eco function when temperature is higher than 60°C in Cotton and Synthetic. If the function is selected, the beginning water temperature can not be changed.

7. TROUBLESHOOTING


7-1.BEFORE PERFORMING SERVICE

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

7-2.QC TEST MODE.

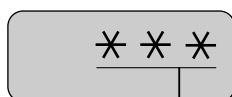
- ① Pressing **Crease Care**, and **Pre Wash** button simultaneously.
- ② Power button ON with pressing upper two button. then buzzer sound twice.
- ③ Press the START/PAUSE button as follows.

[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)	Motor rpm (About 45)
2 times	Low speed Spin	Motor rpm (About 63~67)
3 times	High speed Spin	Motor rpm (About 79~85) : WD(M)-80150FB
		Motor rpm (About 100~106) : WD(M)-10150(5)FB, 90150(5)FB
		Motor rpm (About 107~103) : WD(M)-11150(5)FB
		Motor rpm (About 114~120) : WD(M)-12150(5)FB
		Motor rpm (About 122~127) : WD(M)-13150(5)FB
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)
	Hot inlet valve in case of hot water fill	
6 times	Inlet valve for main-wash operation	Water level frequency (25~65)
7 times	Counterclockwise spin (left)	Motor rpm (About 45)
8 times	A Heater is in operation for 3 sec.	Water Temperature
9 times	Draining pump operation	Water level frequency
10 times	Auto off operation	

7-3.HOW TO KNOW THE WATER LEVEL FREQUENCY

* Press the **Bio** and **Time delay** button simultaneously.



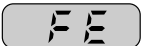

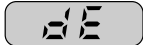
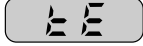






● The digits means water level frequency (10^{-1} kHz)

ex) 241 : Water level frequency = 241×10^{-1} kHz
=24.1kHz

7-4.ERROR DISPLAY.

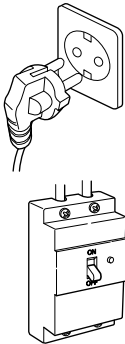






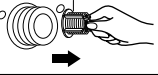
- If you press the [Start/Pause] button any error except **FE** will disappear and the machine will change into pause status.
- In case of 『**PE**』, 『**LE**』, 『**DE**』, if the error is not resolved within 20 sec. In case of other errors, if the error is not resolved within 4 min. Power will be turned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



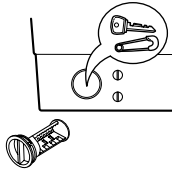
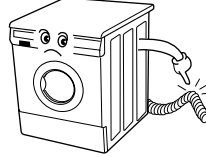
	ERROR	SYMPTOM	CAUSE
1	WATER INLET ERROR		<ul style="list-style-type: none"> ○ Water has not reached to the pre-set level within 4 min. since inlet valve operated, or water has not reached to the normal level within 25 min.
2	IMBALANCE ERROR		<ul style="list-style-type: none"> ○ The appliance is tilted. ○ Laundry is gathered to one side. ○ Non distributable things are put into the drum.
3	DRAIN ERROR		<ul style="list-style-type: none"> ○ Water has not drained enough within 5 min.
4	OVERFLOW ERROR		<ul style="list-style-type: none"> ○ Water is automatically being pumped out because too much water is in the tub.
5	SENSOR PRESSURE S/W ERROR		<ul style="list-style-type: none"> ○ The sensor pressure switch is out of order.
6	DOOR OPEN ERROR		<ul style="list-style-type: none"> ○ The [Start/Pause] button is pressed with the door open. ○ The door switch is out of order.
7	HEATING ERROR		<ul style="list-style-type: none"> ○ The thermistor is out of order.
8	SENSOR ERROR		<ul style="list-style-type: none"> ○ The connector (5-pin, male, white) in the wire harness is not connected to the connector (5-pin, female) of hall sensor in the MOTOR. ☞ Reconnect or repair the contact in the connector.

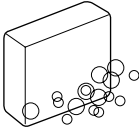
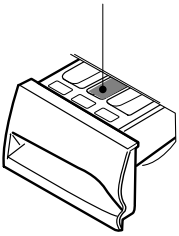
	ERROR	SYMPTOM	CAUSE
8	SENSOR ERROR		<ul style="list-style-type: none"> • The electric contact between the connectors (5-pin, male in the wire harness and 5-pin, female in the hall sensor) is bad or unstable. <ul style="list-style-type: none"> ☞ Reconnect or repair the contact in the connector • The connector (6-pin, male, natural) in the wire harness is not connected to the connector (6-pin, female, natural) of PWB ASSEMBLY (Main) or the electric contact of connectors is bad/unstable. <ul style="list-style-type: none"> ☞ Reconnect or repair the contact in the connector • The electric contact between the connectors [6-pin, male, in the wire harness and 6-pin, female in the controller (Main)] is bad or unstable. <ul style="list-style-type: none"> ☞ Reconnect or repair the contact in the connector • The Wire Harness between hall sensor in the MOTOR and PWB ASSEMBLY (Main) is cut (open circuited). <ul style="list-style-type: none"> ☞ Repair/replace the damaged WIRE HARNESS • The hall sensor is out of order/defective. <ul style="list-style-type: none"> ☞ Replace the motor • The controller (Main) is out of order/defective. <ul style="list-style-type: none"> ☞ Replace the PWB ASSEMBLY (Main)
9	CURRENT ERROR		<ul style="list-style-type: none"> • PWB ASSEMBLY (Main) is out of order <ul style="list-style-type: none"> ☞ Replace the PWB ASSEMBLY (Main) • Winding in the MOTOR is short-circuited. <ul style="list-style-type: none"> ☞ Replace the MOTOR
10	LOCK ERROR		<ul style="list-style-type: none"> • The Connector (3-pin, male, white) in the wire harness is not connected to the Connector (3-pin, female, white) of MOTOR. <ul style="list-style-type: none"> ☞ Reconnect or repair the connector • The electric contact between the connectors [3-pin, male, white in the wire harness and 6-pin, female, white in the PWB ASSEMBLY (Main)] is bad or unstable. <ul style="list-style-type: none"> ☞ Reconnect or repair the contact in the connector • The wire harness between the MOTOR and PWB ASSEMBLY (Main) is cut (open circuited). <ul style="list-style-type: none"> ☞ Repair the damaged (open-circuited) WIRE HARNESS • The hall sensor is out of order/defective. <ul style="list-style-type: none"> ☞ Replace the PWB ASSEMBLY (Main)

8. ERROR DIAGNOSIS AND CHECK LIST

8-1.DIAGNOSIS AND ANSWER FOR ABNORMAL OPERATION

SYMPTOM	GUIDE FOR SERVICE CALL
<p>NO POWER</p>	<div data-bbox="553 533 1112 629"> <p>Is the power plug connected firmly to 220-240V~ outlet?</p> </div> <div data-bbox="764 629 899 674"> <p>YES</p> </div> <div data-bbox="553 678 1112 779"> <p>Power failure? or Breaker opened? Is the outlet controlled by a switch.</p> </div> <div data-bbox="764 779 899 824"> <p>NO</p> </div> <div data-bbox="553 828 1112 898"> <p>Visit to check</p> </div> <div data-bbox="1208 533 1333 875">  </div>
<p>Water inlet trouble</p> <div data-bbox="261 1055 418 1106">  </div>	<div data-bbox="553 1005 1112 1102"> <p>Is  displayed?</p> </div> <div data-bbox="764 1102 899 1146"> <p>YES</p> </div> <div data-bbox="553 1151 1112 1220"> <p>Is the tap opened?</p> </div> <div data-bbox="764 1220 899 1265"> <p>YES</p> </div> <div data-bbox="553 1270 1112 1339"> <p>Is the tap frozen?</p> </div> <div data-bbox="764 1339 899 1384"> <p>NO</p> </div> <div data-bbox="553 1388 1112 1458"> <p>Is the water supply shut-off?</p> </div> <div data-bbox="764 1458 899 1503"> <p>NO</p> </div> <div data-bbox="553 1507 1112 1704"> <p>Is filter in the inlet valve clogged with foreign material?</p> </div> <div data-bbox="764 1704 899 1749"> <p>NO</p> </div> <div data-bbox="553 1753 1112 1823"> <p>Visit to check</p> </div> <div data-bbox="1187 1032 1344 1084">  </div> <div data-bbox="1224 1128 1321 1240">  </div> <div data-bbox="1224 1263 1321 1375">  </div> <div data-bbox="1224 1397 1321 1487">  </div> <div data-bbox="1187 1507 1414 1711"> <p>Clean the filter of inlet valve</p>  </div>

SYMPTOM	GUIDE FOR SERVICE CALL
<p>◦ DOOR OPEN ERROR</p> <p>Refer to 7-4 ERROR DISPLAY</p>	<div data-bbox="553 421 1382 857"> <div data-bbox="553 421 1109 539">Did you press the Start/Pause button when the door is open?</div> <div data-bbox="1101 461 1157 495">YES</div> <div data-bbox="1211 439 1360 465">Close the door</div> <div data-bbox="1227 488 1341 577">  </div> <div data-bbox="805 611 850 640">NO</div> <div data-bbox="740 768 893 797">Visit to check</div> <div data-bbox="634 831 1003 857">Check if the door switch is O.K</div> </div>
<p>◦ Drain Trouble</p> <div data-bbox="253 1003 407 1055">  </div>	<div data-bbox="553 931 1450 1447"> <div data-bbox="553 931 1081 1032">Is DE displayed?</div> <div data-bbox="805 1032 862 1061">YES</div> <div data-bbox="553 1077 1122 1178">Is the debris filter clogged with foreign material such as pins, coins, etc.?</div> <div data-bbox="1068 1111 1125 1144">YES</div> <div data-bbox="1149 1088 1247 1155">Clean up the filter.</div> <div data-bbox="1276 1032 1450 1200">  </div> <div data-bbox="805 1178 850 1207">NO</div> <div data-bbox="553 1223 1081 1323">Is the drain hose frozen with water, kinked, or crushed?</div> <div data-bbox="805 1335 850 1364">NO</div> <div data-bbox="740 1391 899 1420">Visit to check</div> <div data-bbox="1203 1223 1409 1379">  </div> </div>

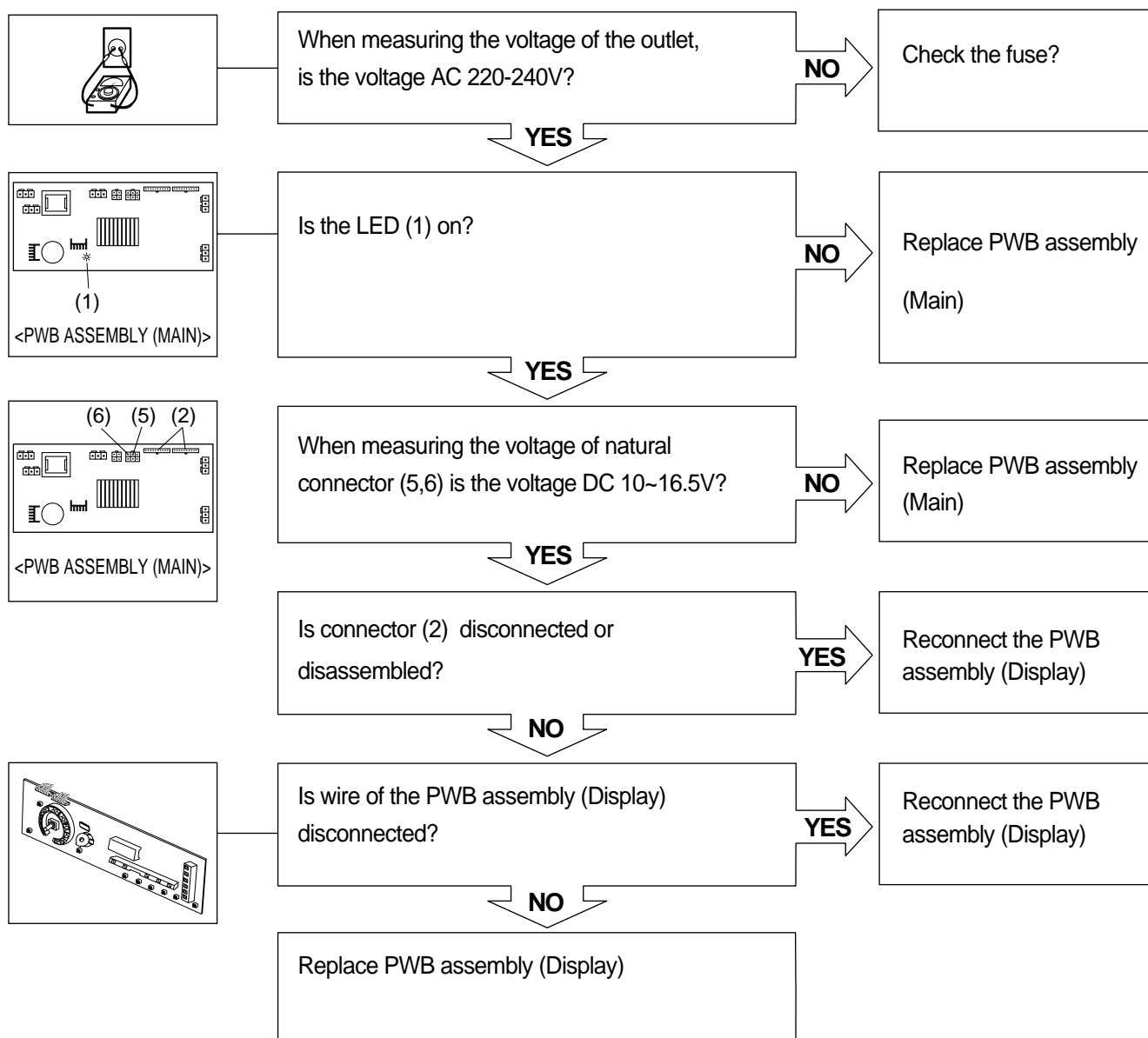
SYMPTOM	GUIDE FOR SERVICE CALL
<p>◦ Suds overflow from the appliance. (In this condition, wash and spin do not operate normally)</p>	<div data-bbox="586 394 1144 495">Is low-sudsing detergent for the drum washing machine used?</div> <div data-bbox="797 495 933 539">YES</div> <div data-bbox="586 551 1144 651">Is the proper amount of detergent used as recommended?</div> <div data-bbox="797 651 933 696">YES</div> <div data-bbox="586 696 1144 797">Recommend to reduce the amount of detergent.</div> <div data-bbox="634 797 1382 999"> <p>* This appliance has the automatic suds sensing function which operates under much suds condition for good rinse and preventing overflow.</p> <p>* When much suds are sensed, the suds removing function such as drain, water input, and pause will operate without rotating the drum.</p> </div> <div data-bbox="1243 409 1382 539">  </div> <div data-bbox="1219 544 1401 611"> <p>LOW SUDSING DETERGENT</p> </div>
<p>◦ No effect of softener</p>	<div data-bbox="586 1070 1144 1171">Is softener put in the correct compartment of drawer?</div> <div data-bbox="797 1171 933 1216">YES</div> <div data-bbox="586 1227 1144 1305">Is the drawer closed during wash?</div> <div data-bbox="797 1305 933 1350">YES</div> <div data-bbox="586 1350 1144 1429">Is the softener cap clogged?</div> <div data-bbox="797 1429 933 1473">YES</div> <div data-bbox="586 1473 1144 1541"> <p>Explain how to use softener</p> <p>Clean the compartment for softener</p> </div> <div data-bbox="1203 1111 1398 1178"> <p>Compartment for softener</p> </div> <div data-bbox="1170 1200 1349 1435">  </div>
<div data-bbox="220 1659 337 1715">FE</div> <div data-bbox="220 1727 337 1783">FE</div> <div data-bbox="370 1727 492 1783">CE</div> <div data-bbox="220 1794 337 1850">LE</div> <div data-bbox="370 1794 492 1850">LE</div>	<div data-bbox="581 1686 1144 1753">Visit to check</div>

8-2.FAULT DIAGNOSIS AND TROUBLESHOOTING

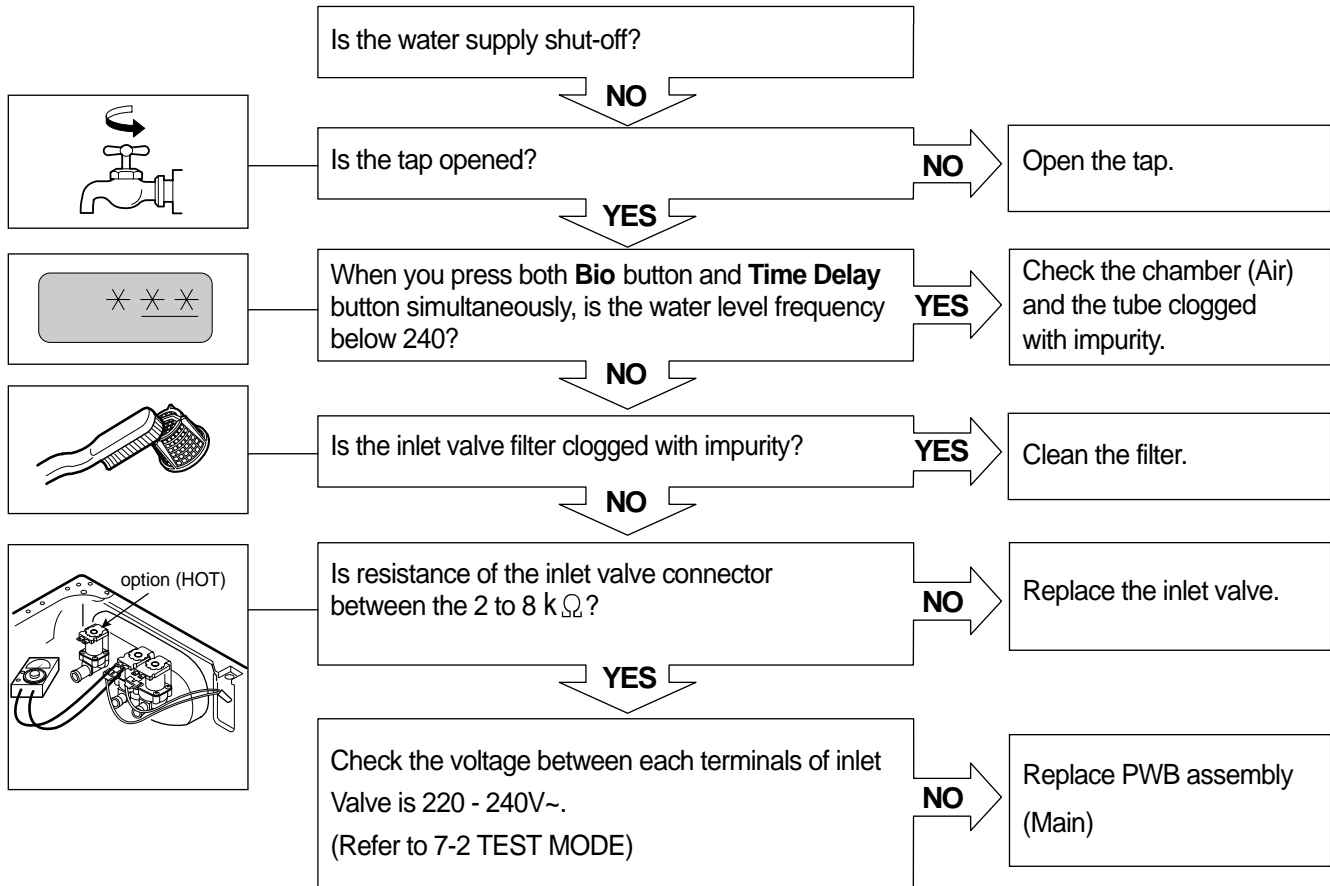
CAUTION

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

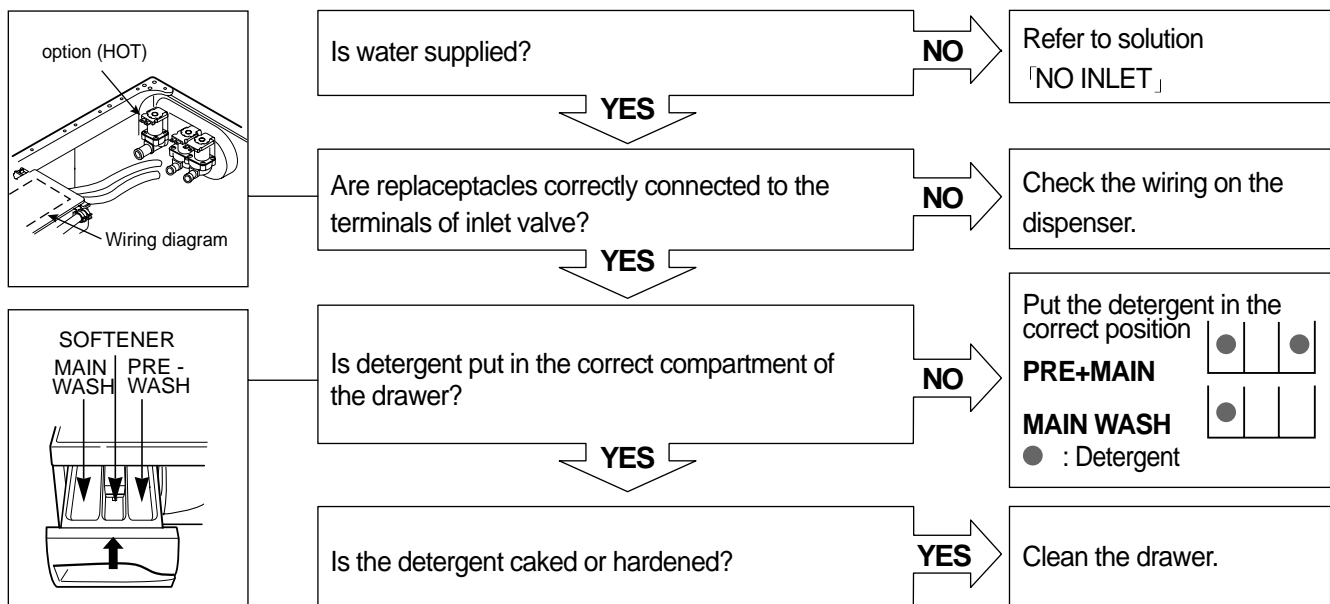
NO POWER



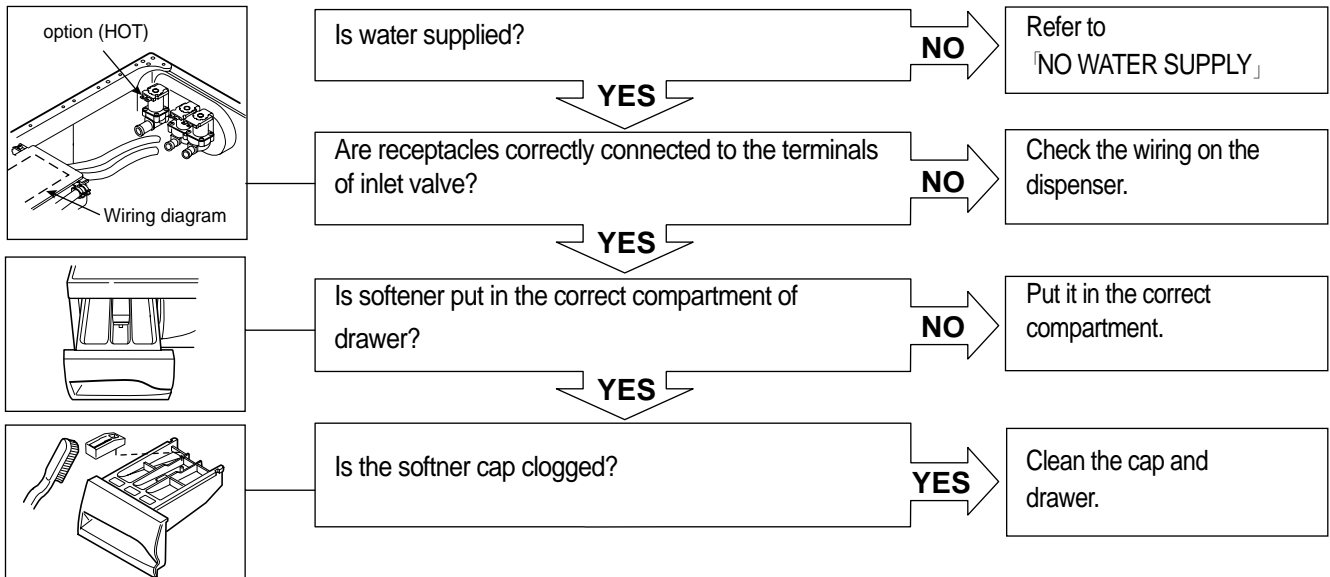
NO WATER SUPPLY



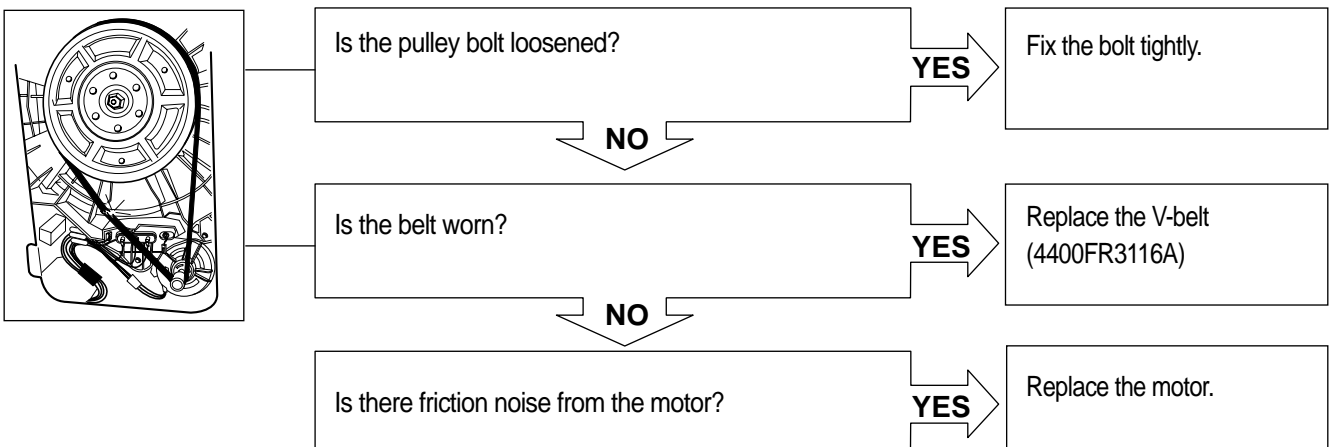
DETERGENT DOES NOT FLOW IN



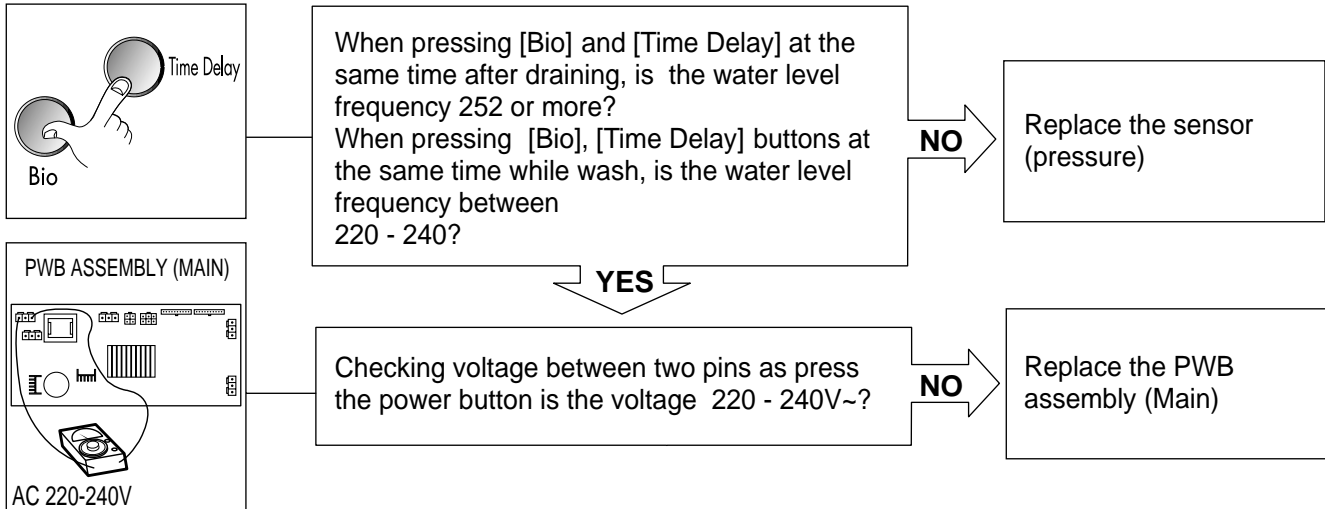
SOFTENER DOES NOT FLOW IN



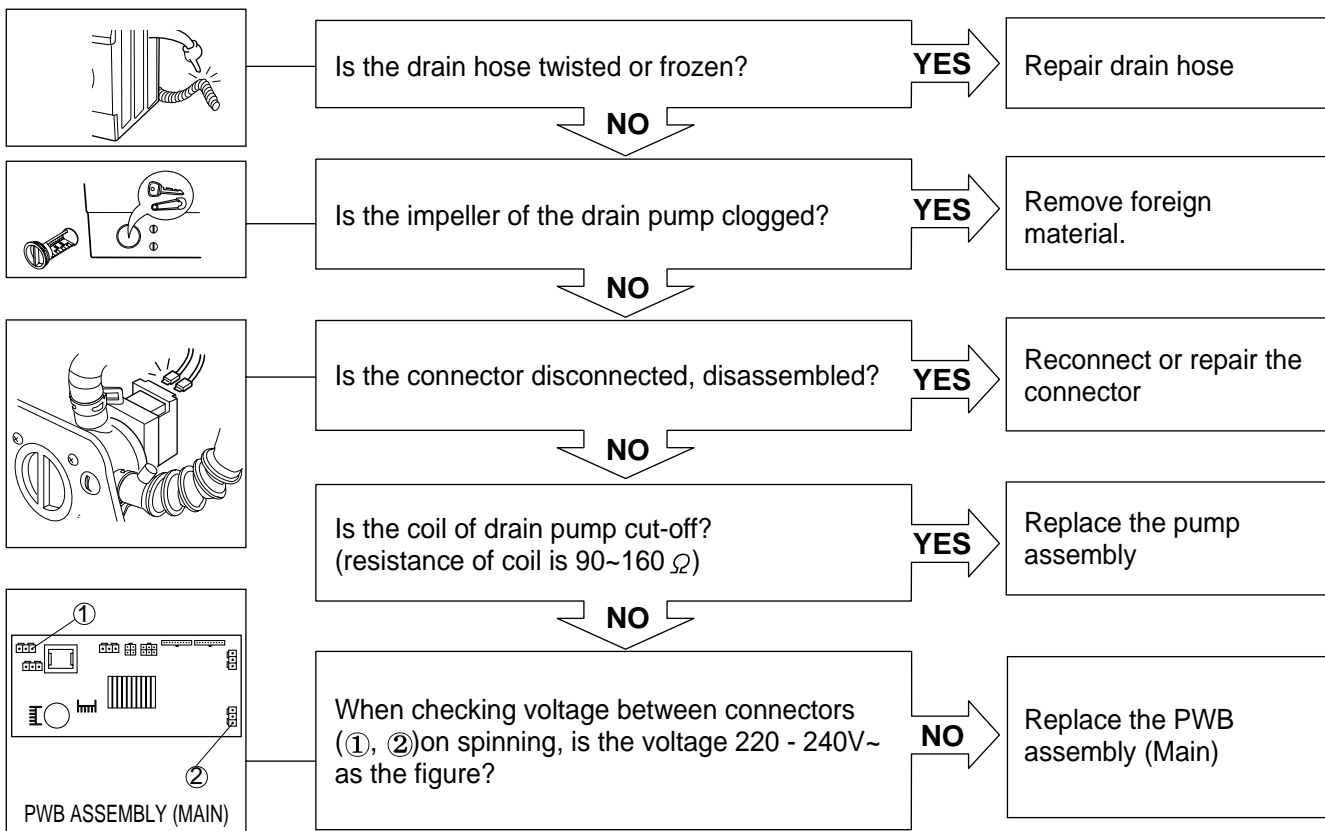
ABNORMAL SOUND



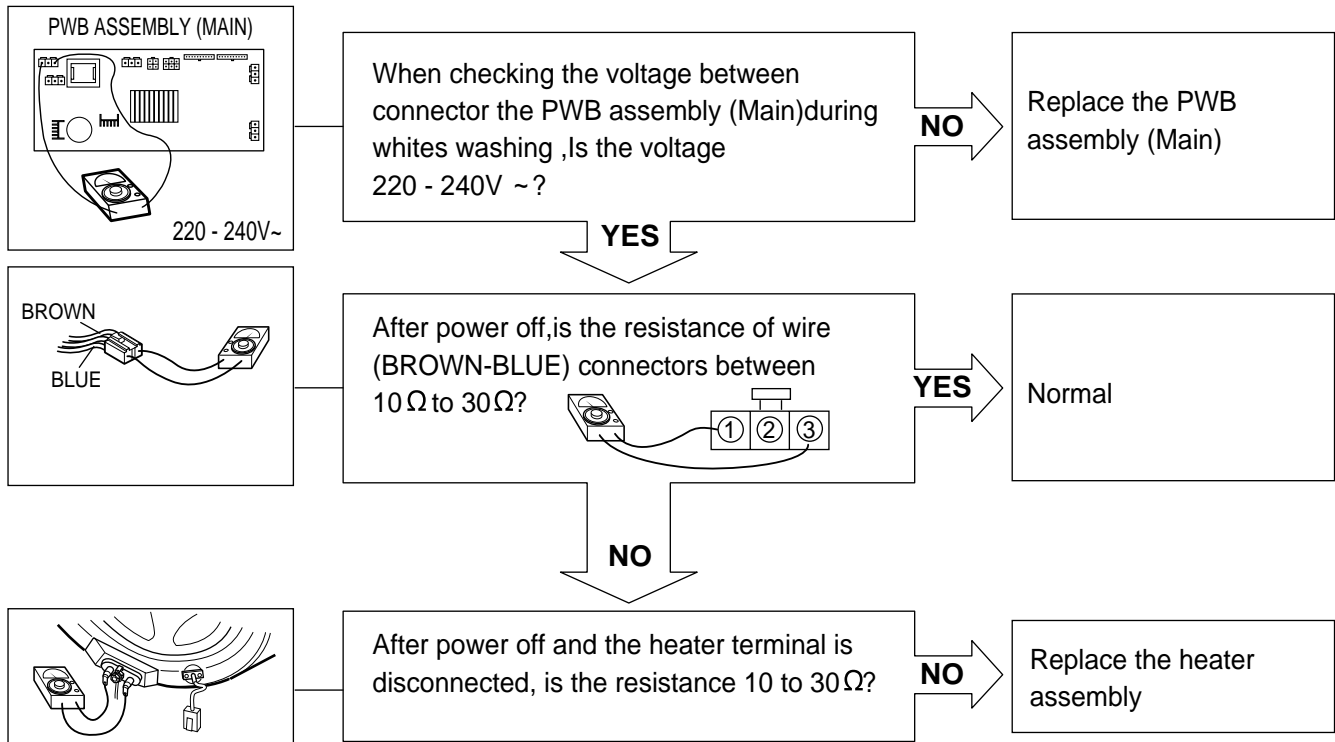
HEATING WITHOUT WATER



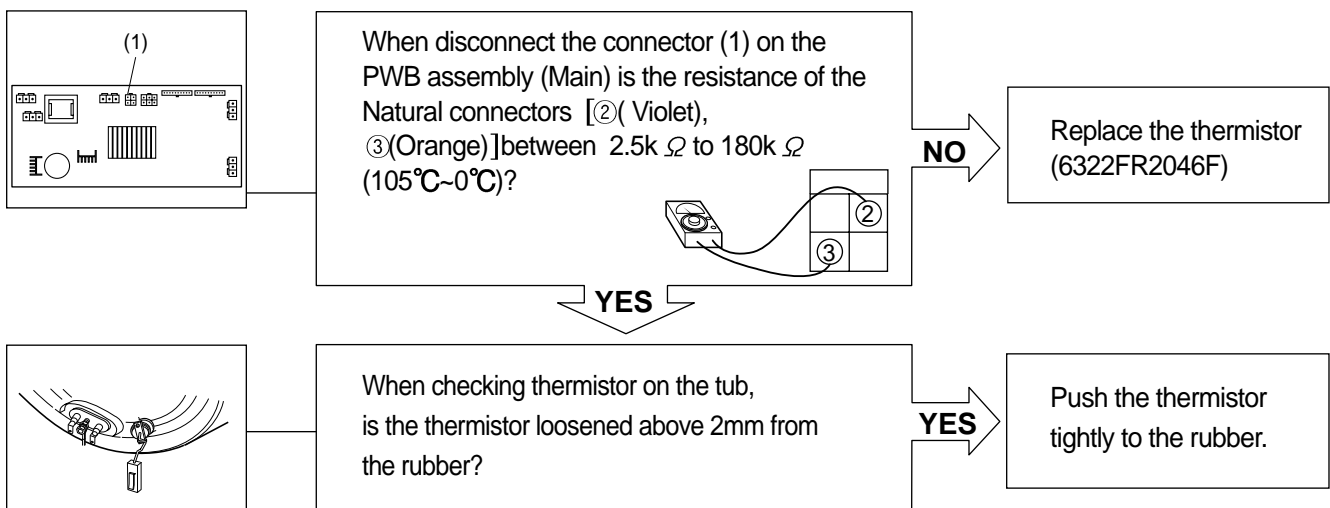
DRAIN MALFUNCTIONING



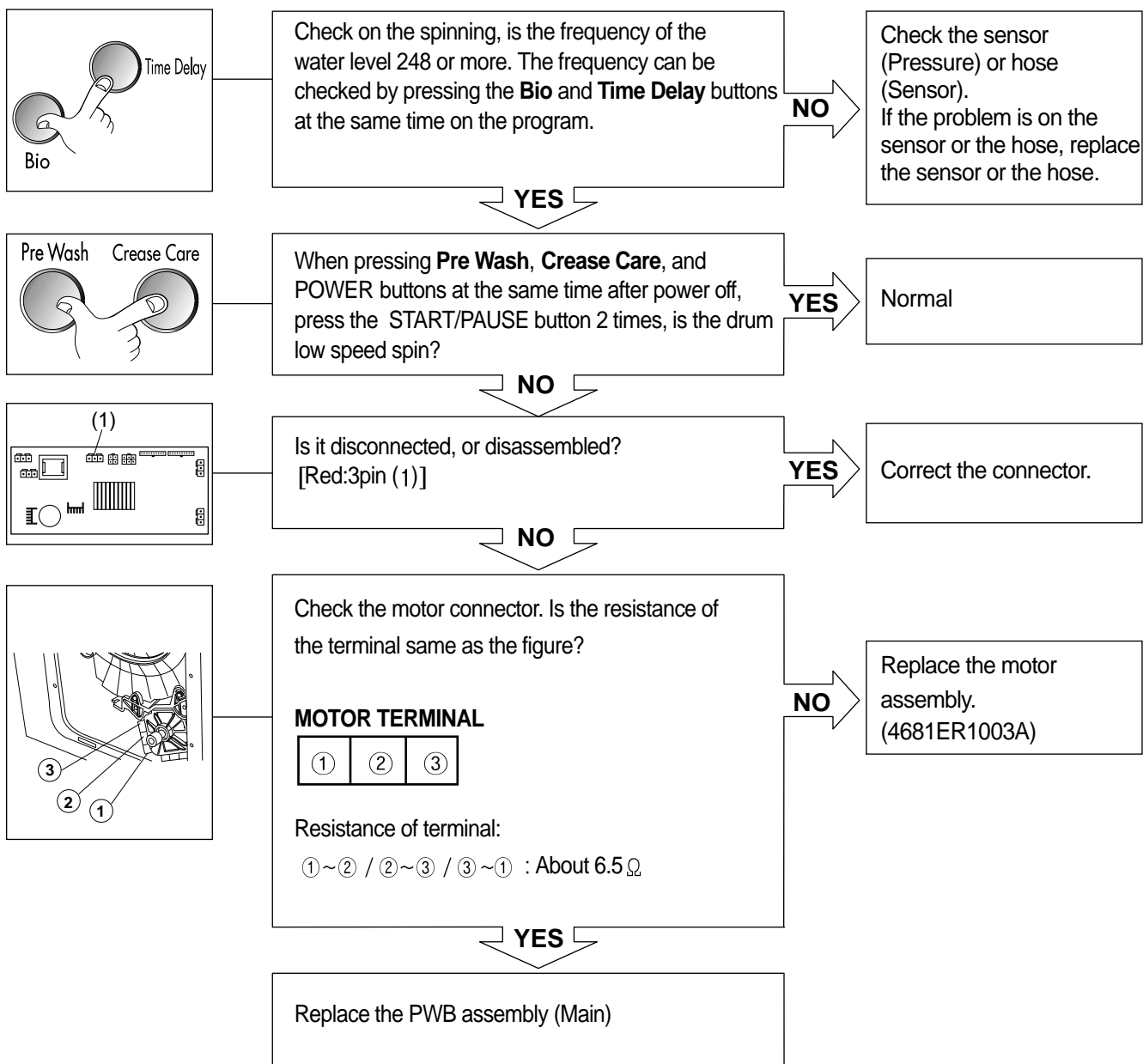
WASH HEATER TROUBLE



HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE



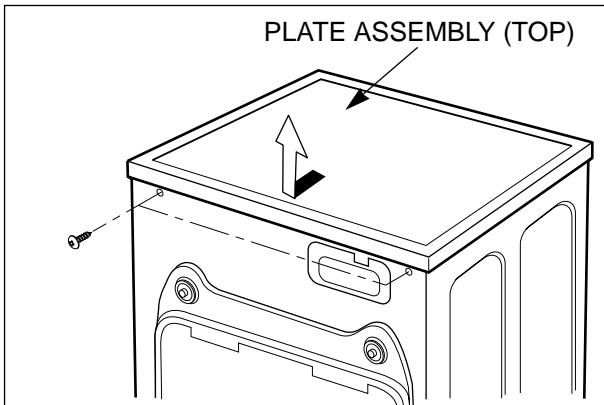
SPIN TROUBLE



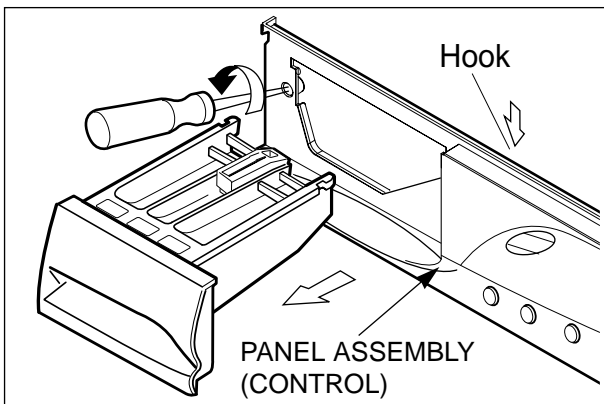
9. DISASSEMBLY INSTRUCTIONS

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

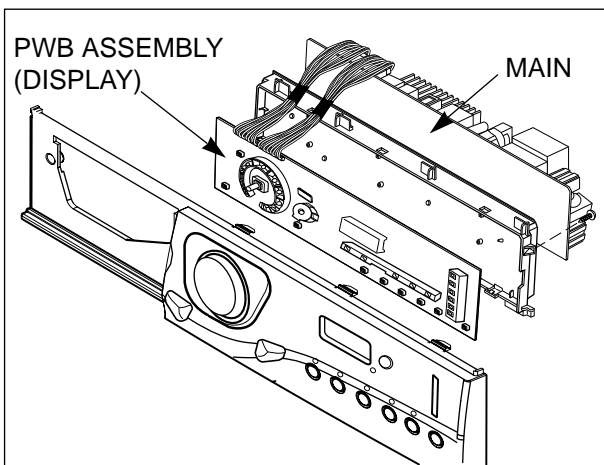
CONTROL PANEL



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

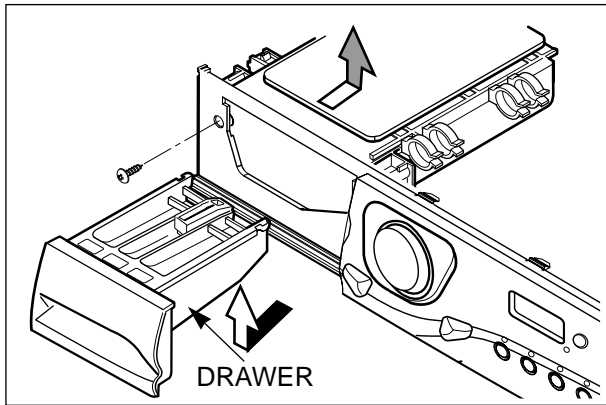


- ① Disconnect the PWB Assembly connector from Main lead wire Assembly.
- ② Pull out the drawer and unscrew 2 screws.
- ③ Push upper hooks down on the top and pull the control panel.

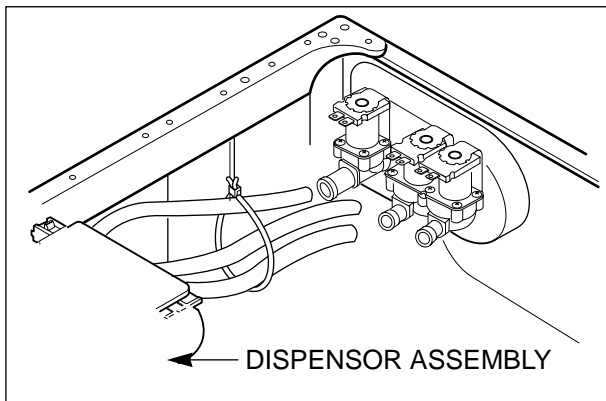


- ① Disconnect the PWB assembly (Main & Display) from the control panel by pushing 4 hooks down.

DISPENSER ASSEMBLY

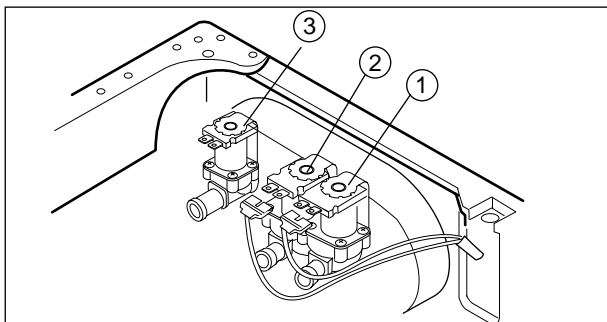


- ① Disassemble the top plate assembly.
- ② Pull out the drawer to arrow direction.
- ③ Unscrew 2 screws.



- ① The hose clamps and the hose are disassembled.
- ② The ventilation bellows and the water inlet bellows are disassembled on the tub.

INLET VALVE



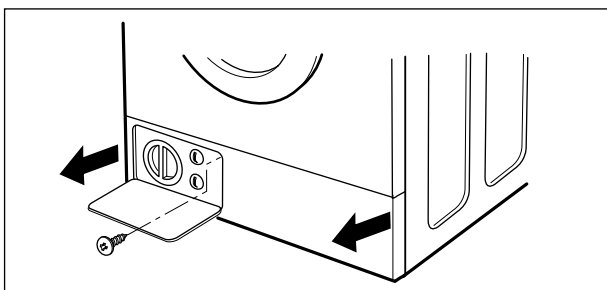
① Disconnect the wiring receptacle.

② Unscrew 2 screws from the back.

※When reconnecting the connector

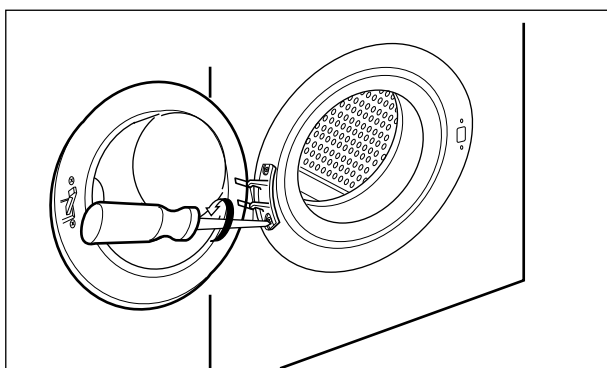
VALVE #1 (MAIN)	Whited/Black-Black
VALVE #2 (PRE)	White/Red - Black
VALVE #3 (HOT)	Blue/White - Black

LOWER COVER



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

DOOR

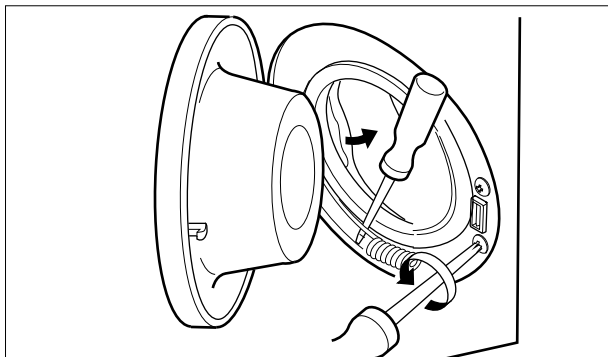


① Open the door completely.

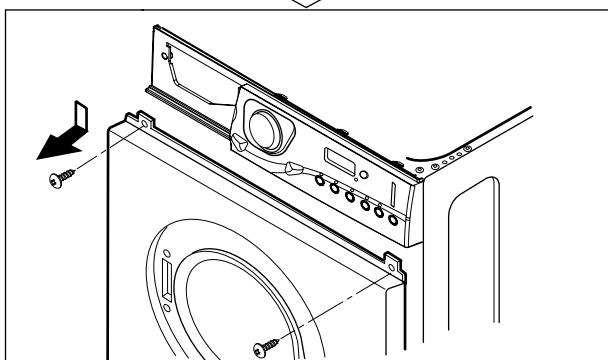
② Remove the two screws from the hinge.

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

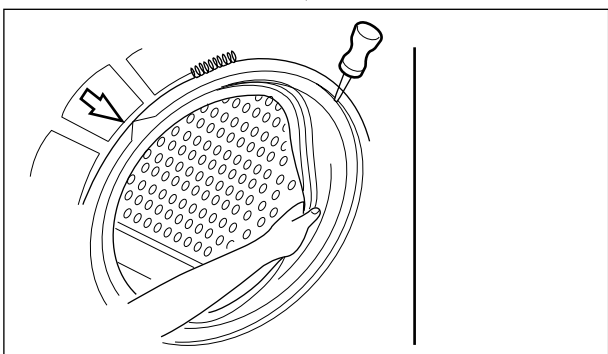
GASKET ASSEMBLY



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

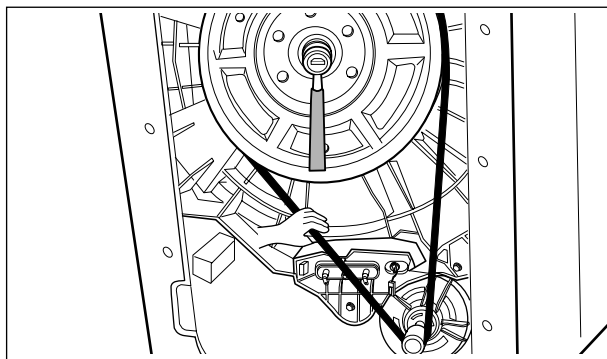


- ① Unscrew all the screws on the upper and lower sides of the cabinet cover.



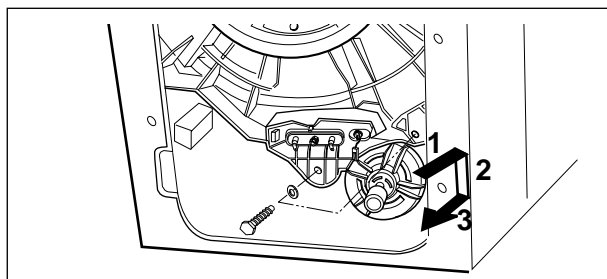
- ① Take apart the tub gasket clamp.
 - ② Make sure that the drain hole of the gasket is put beneath when reassembling the gasket.
- ※ Refer to the arrow mark on the tub cover.

PULLEY, MOTOR, DAMPER



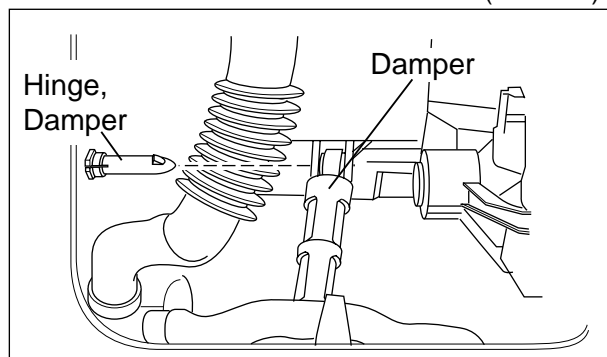
(PULLEY)

- ① Remove the back cover.
- ② Take off the belt turning the pulley.
- ③ Unscrew the bolt to pull out the pulley.



(MOTOR)

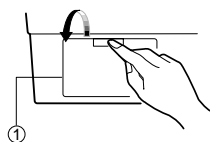
- ① Unscrew 2 screws from the bracket.
- ② Push the motor in the arrow direction for disassembling.
- ③ When reassembling the motor, make sure that motor mounting bushings are not taken off from the bracket.



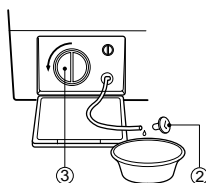
(DAMPER)

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

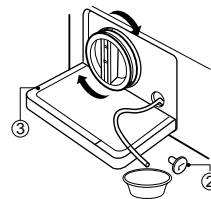
■ Clean the drain pump filter



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

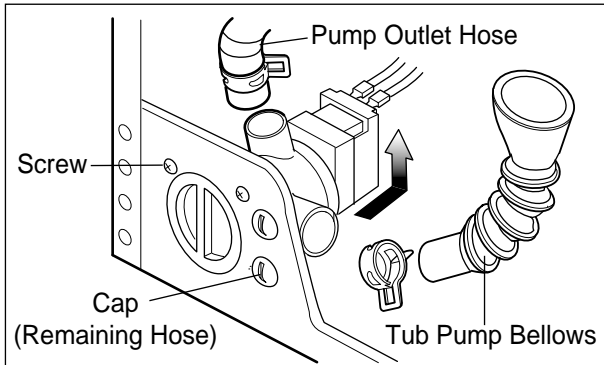


Unplug the drain plug (②), then the water flows out. At this time use a vessel to prevent water flowing on the floor. If the water does not flow any more, turn the pump filter (③) open to the left.



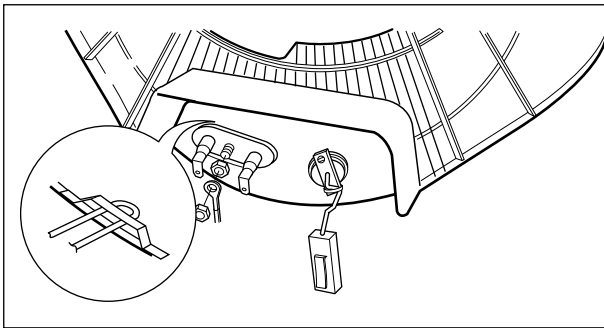
Take out any foreign material from the pump filter (③). After cleaning, turn the pump filter (③) clockwise and insert the drain plug (②) to the original place. Close the lower cover cap.

PUMP



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

HEATER

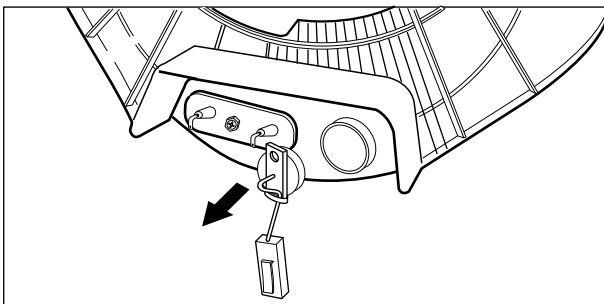


- ① Loosen the M6 heater nut to pull out the heater.

CAUTION

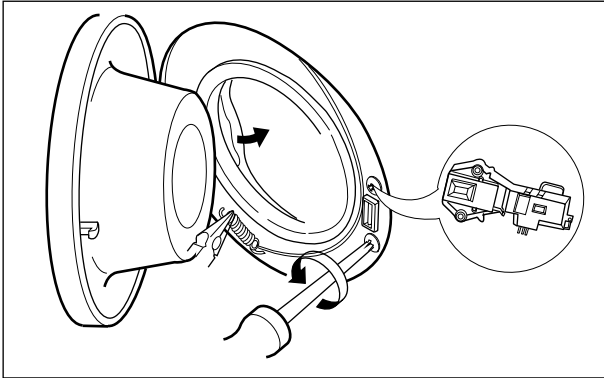
When mounting the heater, be sure to insert the heater into the heater clip on the bottom of the tub.

THERMISTOR



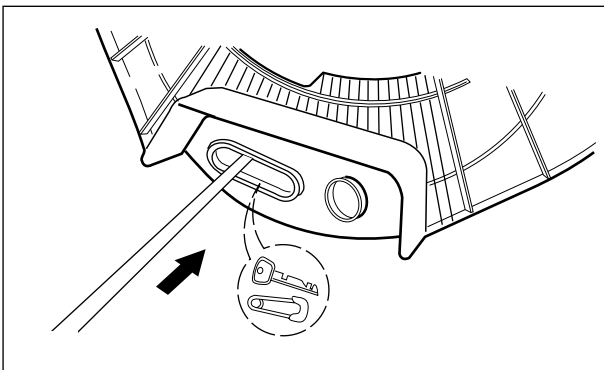
- ① Pull it out by holding the thermistor bracket.
* If it is pulled by the wire, it may be broken.
- ② When mounting the thermistor again, make sure that it is got back tight to the bushing.

SWITCH ASSEMBLY, DOOR LOCK



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

WHEN FOREIGN MATERIAL IS STUCK BETWEEN DRUM AND TUB



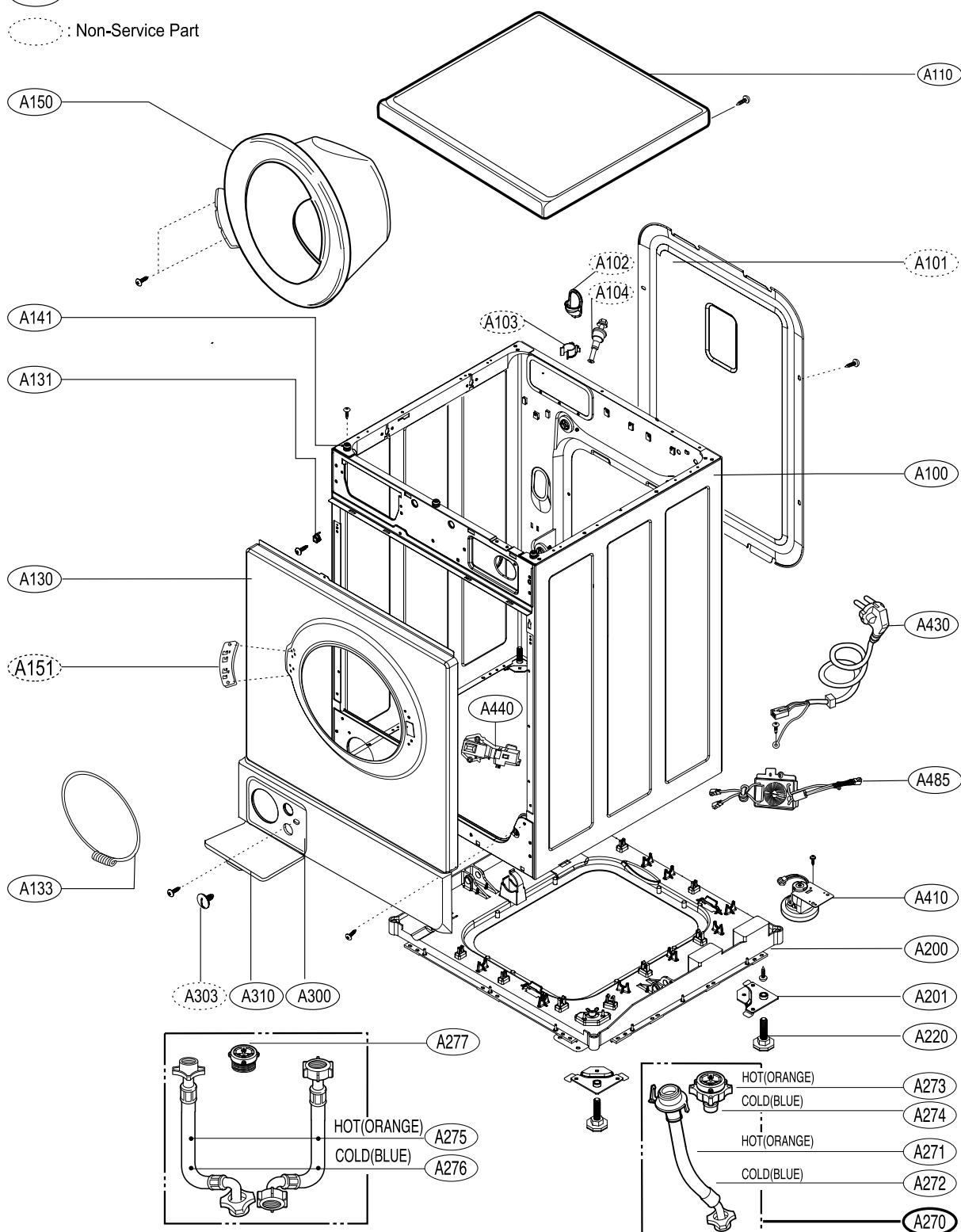
- ① Remove the heater.
- ② Remove the foreign material (wire, coin and others) by inserting a long bar through the hole.

10. EXPLODED VIEW

10-1.THE EXPLODED VIEW OF CABINET ASSEMBLY

○ : Service Part

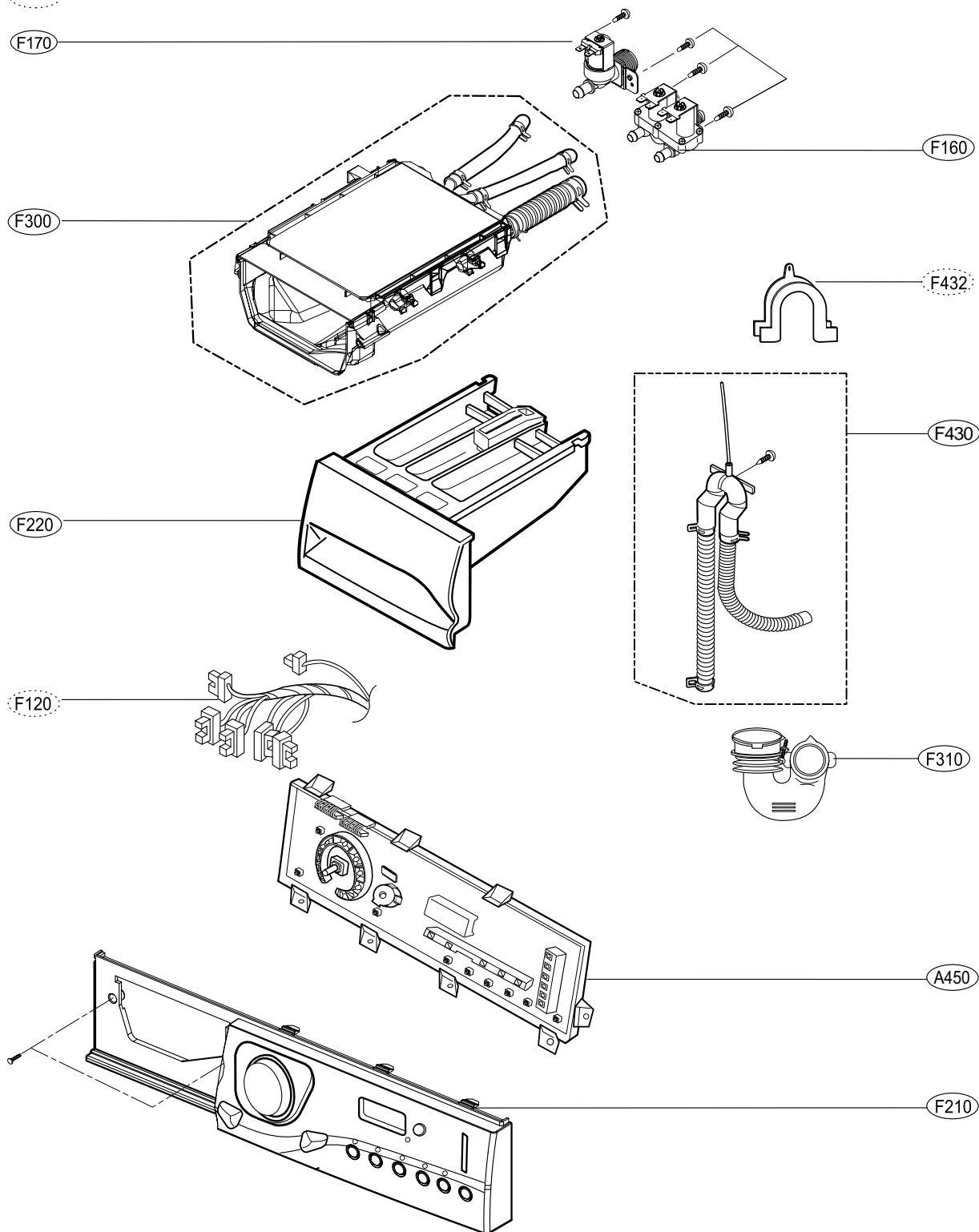
○ : Non-Service Part



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

○ : Service Part

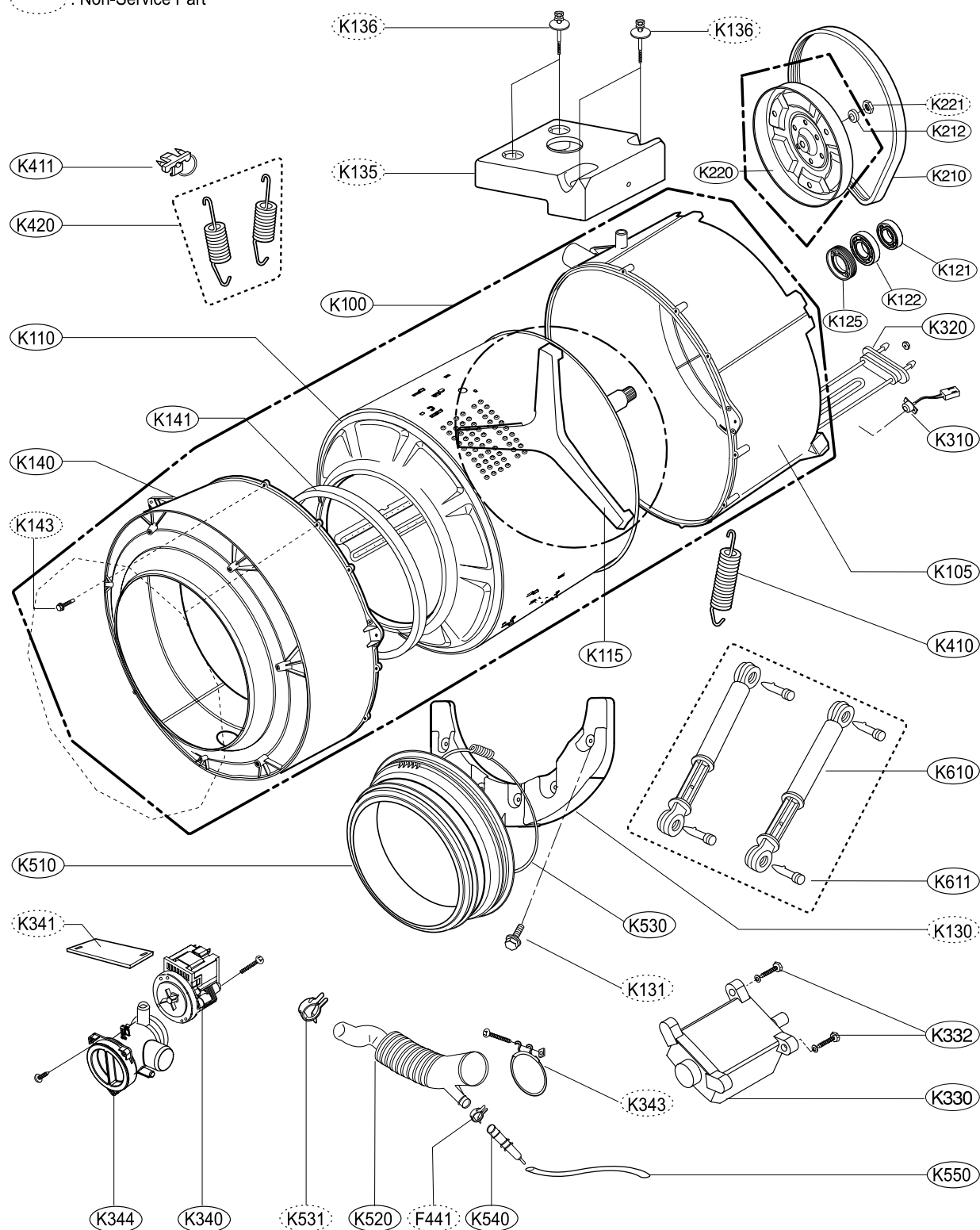
○ : Non-Service Part



10-3 THE EXPLODED VIEW OF DRUM & TUB ASSEMBLY

○ : Service Part

○ : Non-Service Part





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