# 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 durm improves the wash performance.



## 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 to change the programme 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.

# 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 water supply is stopped, then washing program proceeds.
- Spinning does not proceed until the water in the tub reduces to a certain level.

# 2-4.THE DOOR CAN NOT BE OPENED

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

# 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	INSTALL THE APPLIANCE	ADJUST THE
BOLTS	ON FLAT AND FIRM SURFACE	HORIZONTAL
<text></text>	ON FLAT AND FIRM SURFACE	HORIZONTAL • Turn the leveling feet to set the appliance horizontally. • <b>WALL OF THE APPLIANCE OF THE APP</b>

#### ■ 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



#### ■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B





# 7. PROGRAM CHART

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\* Pre Wash : If the laundry is heavily soiled, "Pre Wash" course is effective. Pre Wash is available in Coloureds, Whites 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 elimenate protein stains (milk, blood, chocolate...), you may select Bio function by pressing the option button.

\* You can select Bio function and Eco function when temperature is higher than 60°C in Whites, Coloureds and Synthetic.

# 8. TROUBLE SHOOTING

# 8-1. BEFORE SVC CHECKING

; ÆBe careful of electric shock or disconnecting the parts while trouble shooting.

; ÆVoltage of each terminal in 220-240V~ and DC while applying an electric current.

# 8-2. QC TEST MODE.

 $\ensuremath{\,^{\ensuremath{\alpha}}}$  Pressing Spin, and Temp button simultaneously.

¤ŁPower supply ON with pressing upper two button. then buzzer sound twice.

 ${\tt ¤} {\it \varnothing} {\sf Press}$  the START/PAUSE button as follows.

; aPress the START/PAUSE button more 4 times until stop spinning ; b

Pressing number of £ START/PAUSE£ button	Checking Point	Display Status							
None	All lamps turn on	(18:88)							
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)-8070F(H)(B)							
		Motor rpm(About 100~106) : WD(M)-1070(5)F(H)(B)							
		Motor rpm(About 107~103) : WD(M)-1170(5)F(H)B							
		Motor rpm(About 114~120) : WD(M)-1270(5)F(H)B							
		Motor rpm(About 122~127) : WD(M)-1370(5)F(H)B							
4 times	Inlet valve for pre-wash operation	Water level frequency(25~65)							
5 timos	Inlet valve for main-wash operation	Water level frequency(25~65)							
5 umes	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								

# 8-3. HOW TO KNOW THE WATER LEVEL FREQUENCY

fRPress the Option and Spin button simultaneously.



The digits means water level frequency(10<sup>-1</sup> § )

ex) 241 : Water level frequency =  $241_{i : 2} 10^{-1}_{S}$ =24.1§

# 8-4. 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", "EE", "EE", 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 ERROR	:5	S 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> <li>S The appliance is tilted.</li> <li>S Laundry is gatherd to one side.</li> <li>S Non distributable things are put into the drum.</li> </ul>
3	DRAIN ERROR		§ Water has not drained enough within 5 min.
4	OVER FLOW ERROR	<b>F</b> <u>F</u>	S Water is automatically being pumped out because too much water is in the tub.
5	SENSOR PRESSURE S/W ERROR	<b>,-',-'</b>	S The sensor pressure switch is out of order.
6	DOOR OPEN ERROR		<ul> <li>S Thei aStart/Pause i boutton is pressed with the door open.</li> <li>S The door switch is out of order.</li> </ul>
7	HEATING ERROR	<u> </u>	§ The thermistor is out of order.
8	SENSOR ERROR	55	<ul> <li>S The connector (5pin, male, white) in the Wire Harness is not connected to the connector (5 pin, female) of Hall Sensor in the MOTOR.</li> <li>f_' reconnect or repair the contact in the connector</li> </ul>

	ERROR	SYMPTOM	CAUSE
8	SENSOR ERROR	<u>5</u> E	<ul> <li>The electric contact between the connectors <ul> <li>(5 pin, male in the Wire Harness and 5 pin female in the Hall Sensor) is bad or unstable.</li> <li><i>f</i>_Reconnect or repair the contact in the connector</li> </ul> </li> <li>The connector (6 pin, male, natural) in the Wire Harness is not connected to the connector (6 pin, female, natural) of PWB <ul> <li>ASSY(Main) or the electric contact of connectors is bad/unstable.</li> <li><i>f</i>_Reconnect or repair the contact in the connector</li> </ul> </li> <li>The electric contact between the connectors is bad/unstable.</li> <li><i>f</i>_Reconnect or repair the contact in the connector</li> <li>The electric contact between the connectors; a6 pin, male in the Wire Harness and 6 pin female in the controller(Main); its bad or unstable.</li> <li><i>f</i>_Reconnect or repair the contact in the connector</li> </ul> <li>The Wire Harness between Hall Sensor in the MOTOR and PWB ASSY(Main) is cut(open circuited).</li> <li><i>f</i>_Repair/replace the damaged WIRE HARNESS</li> <li>The Hall Sensor is out of order/defective.</li> <li><i>f</i>_Replace the Motor</li> <li>The controller(Main) is out of order/defective.</li> <li><i>f</i>_Replace the PWB ASSY(Main)</li>
9	CURRENT ERROR		<ul> <li>PWB ASSY(Main) is out of order f_ Replace the PWB ASSY(Main)</li> <li>Winding in the MOTOR is short-circuited. f_ Replace the MOTOR</li> </ul>
10	LOCK ERROR		<ul> <li>The Connector(3 pin, male, white) in the Wire Harness is not connected to the Connector(3 pin, female, white) of MOTOR.</li> <li><i>f</i>_Reconnect or repair the connector</li> <li>The electric contact between the connectors a pin, male, white in the Wire Harness and 6 pin, female, white in the PWB ASSY(Main); its bad or unstable.</li> <li><i>f</i>_Reconnect or repair the contact in the connector</li> <li>The Wire Harness between the MOTOR and PWB ASSY(Main) is cut(open circuited).</li> <li><i>f</i>_Repair the damaged(open-circuited) WIRE HARNESS</li> <li>The hall sensor is out of order/defective.</li> <li><i>f</i>_Replace the PWB ASSY(Main)</li> </ul>

# 9. ERROR DIAGNOSIS AND CHECK LIST

# 9-1. DIAGNOSIS AND ANSWER FOR ABNORMAL OPERATION







# 9-2. FAULT DIAGNOSIS AND TROUBLE SHOOTING

■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B

# 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 PWB assy(Main), Put in the connectors correctly.



#### ■ WD-8070F(H), WD-1070(5)F(H)

# CAUTION

Be careful of electric shock or disconnecting the parts while trouble shooting.
 First of all, check the connection of each part terminal with wiring diagram.
 Voltage between each terminal is AC 220-240V while applying an electric current (except secondary part of the transformer and sensors)





# SOFTENER DOES NOT FLOW IN



# ABNORMAL SOUND



# **HEATING WITHOUT WATER**

■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B







#### WASH HEATER TROUBLE

■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B





## HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE

■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B





# SPIN TROUBLE

#### ■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B





# **10. DISASSEMBLY INSTRUCTIONS**

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

## **CONTROL PANEL**



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

- ① Disconnect the PWB assy (Display) connector.
- 0 Pull out the drawer and unscrew 3 screws.
- 3 Push 2 upper hooks down and pull the control panel.

① Pull out the Rotary (Dial) knob.

② Disconnect the PWB assy (Display) from the control panel by pushing 5 hooks down and unscrewing 1 screw.

# **PWB ASSY(POWER)**

#### ■ WD-8070F(H), WD-1070(5)F(H)



## **DISPENSER ASSY**



- 1 Disassemble the top plate assy.
- (2) Unscrew 2 screws.
- 3 Disconnect connector from the wiring.

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



- $(\underline{)}$  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.

0 Unscrew 2 screws from the back.

 $\$ When reconnecting the connector

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

[WD-8070FH/WD-1070(5)FH(B)/WD(M)-1170(5)F(H)B / WD(M)-1270(5)F(H)B / WD(M)-1370(5)F(H)B]

## PWB ASSY(MAIN)

■ WD(M)-8070F(H)B, WD(M)-1070(5)F(H)B, WD(M)-1170(5)F(H)B, WD(M)-1270(5)F(H)B, WD(M)-1370(5)F(H)B



<sup>x</sup> The back cover is removed.

¤ŁUnscrew 2 screws

■ WD-8070F(H), WD-1070(5)F(H)



Unscrew 2 screws
 Pull the PWB assy(Main) as shown.

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 **GASKET ASSY**

- ① Open the door completely.
- O Remove the two screws from the hinge.

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

 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.



## Clean the drain pump filter



Open the lower cover cap ( YL ) by using coin.



Unplug the drain plug  $(\underline{\mathbb{Y}}M)$ , 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  $(\underline{\mathbb{Y}}N)$ open to the left.

Take out any foreign material

from the pump filter (¥N). After cleaning, turn the pump filter(¥N) clockwise and insert the drain plug (¥M)to the original place. close the lower cover cap.

- Remove the back cover.
- O Take off the belt turning the pulley.
- (3) Unscrew the bolt to pull out the pulley.

- 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 rubbers are not taken off from the bracket.
- 1 Pull out the hinge pressing its snap.
- ② Do not use the pulled out hinge again..it may be taken off during operation.



# THERMISTOR



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

Unscrew 3 screws fixing the heater protecting cover.
 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.

- Pull it out by holding the thermistor bracket.
- $\ast\,$  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 rubber.

## DOOR HINGE ASSY



# SWITCH ASSY, DOOR LOCK



- 1 Disassemble the door from the door hinge.
- ② Take apart the cabinet cover clamp and release the gasket.
- 3 Unscrew 2 screws on the door hinge.
- ④ Push the door hinge arm to the inside of the cabinet cover for disassembling.

- 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)



- $(\widehat{\ensuremath{\mathbb I}})$  Remove the heater.
- ② Remove the foreign material (wire, coin and others) by inserting a long bar through the hole.

# 11. EXPLODED VIEW



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# 11-2 THE EXPLODED VIEW OF CONTROL PANEL & DISPENSER ASSY

# 11-3 THE EXPLODED VIEW OF DRUM & TUB ASSY



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