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# WASHING MACHINE SERVICE MANUAL

#### **A** CAUTION

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

MODEL: WM3431H\*/WM3434H\*



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# 1. SPECIFICATION

| ITE               | EM            | WM3431H* WM3434H*  |             |  |  |  |  |  |
|-------------------|---------------|--|-------------|--|--|--|--|--|
| POWER             | SUPPLY        | AC 120 V, 60 Hz  |             |  |  |  |  |  |
| PRODUCT           | T WEIGHT      | 147 lbs. (68 kg)   |             |  |  |  |  |  |
|                   | WASHING       | 140  | W           |  |  |  |  |  |
|                   | SPIN          | 410 W  |             |  |  |  |  |  |
| ELECTRIC<br>POWER | FAN MOTOR     | 25   | W           |  |  |  |  |  |
| CONSUMPTION       | DRAIN MOTOR   | 80   | W           |  |  |  |  |  |
|                   | WASH HEATER   | 1000   | ) W         |  |  |  |  |  |
|                   | DRY HEATER    | 1200   | ) W         |  |  |  |  |  |
| REVOLUTION        | WASH          | 50 r   | pm          |  |  |  |  |  |
| SPEED             | SPIN          | 0-1400 rpm   | 0-1200 rpm  |  |  |  |  |  |
| OPERATIONAL W     | ATER PRESSURE | 4.5-145 psi (3   | 0-1000 kPa) |  |  |  |  |  |
| CONTRO            | )L TYPE       | Electronic   |             |  |  |  |  |  |
| WASH C            | APACITY       | 2.11 cu. ft  |             |  |  |  |  |  |
| DRY CA            | PACITY        | 8 <sup>13</sup> / <sub>16</sub> lbs. (4 kg)  |             |  |  |  |  |  |
| DIMEN             | SIONS         | 23 <sup>3</sup> / <sub>8</sub> " (W) X 25 <sup>3</sup> / <sub>8</sub> " (D) X 33 <sup>1</sup> / <sub>4</sub> " (H) |             |  |  |  |  |  |
| CYC               | LES           | 9  |             |  |  |  |  |  |
| WASH/RINSE TE     | EMPERATURES   | 5  |             |  |  |  |  |  |
| SPIN SI           | PEEDS         | 5  |             |  |  |  |  |  |
| OPTI              | ONS           | Soak, Extra Wash, Rinse+Spin, Spin Only, Dry Only, Delay Wash, Extra Rinse   |             |  |  |  |  |  |
| DELAY             | WASH          | up to 19   | hours       |  |  |  |  |  |
| DOOR SWI          | TCH TYPE      | Bi-M   | etal        |  |  |  |  |  |
| WATER             | LEVEL         | 10 steps (b  | y sensor)   |  |  |  |  |  |
| LAUNDRY LO        | AD SENSING    | Incorporated   |             |  |  |  |  |  |
| ERROR DI          | AGNOSIS       | Incorporated   |             |  |  |  |  |  |
| POWER A           | UTO OFF       | Incorporated   |             |  |  |  |  |  |
| CHILD             | LOCK          | Incorporated   |             |  |  |  |  |  |
| AUTO RI           | ESTART        | Incorpo  | prated      |  |  |  |  |  |

# 2. FEATURES & TECHNICAL EXPLANATION

# 2-1.FEATURES



# n Automatic Process From Washing To Drying

Automatic process from washing to drying can be selected easily.



# n More economical by using 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.



# n Direct Drive System

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



#### n **Child-Lock**

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



#### n Built-in Heater

Internal heater automatically heats the water to the optimal temperature on selected cycles.



# n Low noise speed control system

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

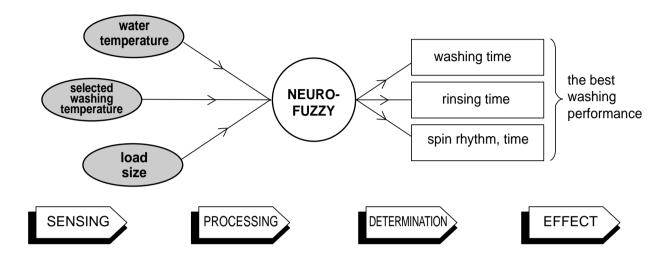


#### n Auto Restart

If the washing machine is turned off by a power failure, it will restart automatically from the position it stopped.

# 2-2. NEURO FUZZY WASHING TIME OPTIMIZATION

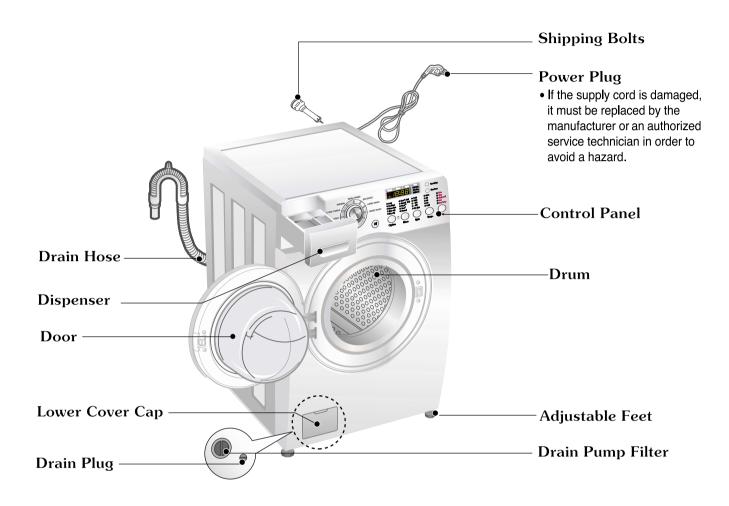
To get the best washing performance, optimal time is determined by the water temperature, the selected washing temperature, and the size of the load.



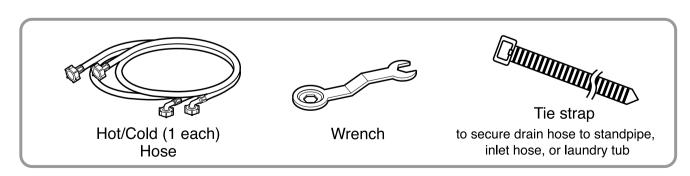
# 2-3. WATER LEVEL CONTROL

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

# 3. PARTS IDENTIFICATION



# ■ ACCESSORIES

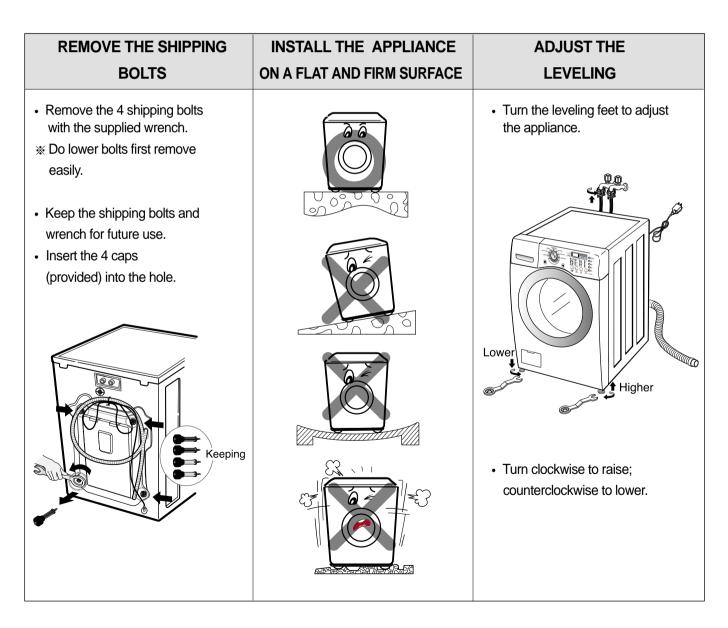


# 4. INSTALLATION & TEST

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

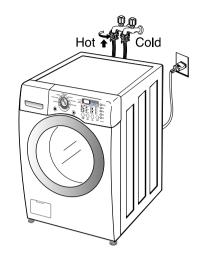
#### ■ STANDARD INSTALLATION

The appliance should be installed as follows:

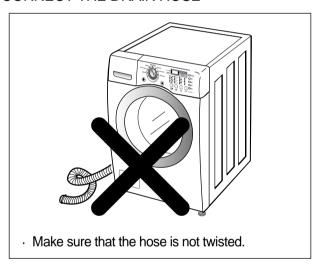


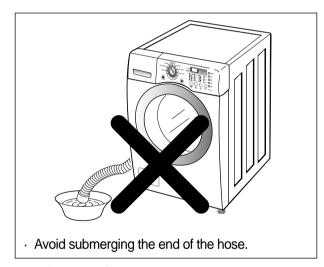
#### ■ HOW TO CONNECT THE INLET HOSE

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



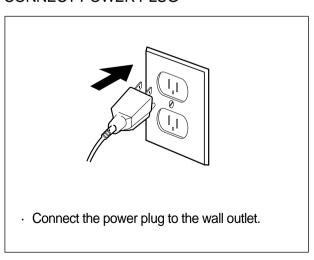
#### **■ CONNECT THE DRAIN HOSE**

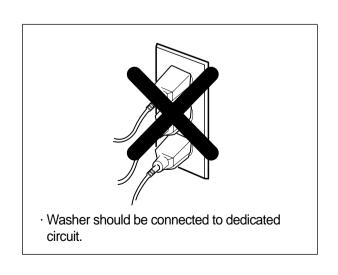




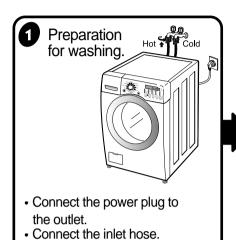
\* The end of the drain hose should be placed less than 96" from the floor.

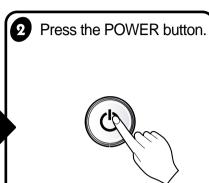
#### ■ CONNECT POWER PLUG

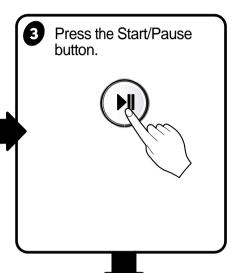




#### **7 TEST OPERATION**







6 Check the water heating function.

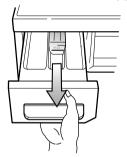


 Press the Wash/Rinse button and the present temperature will be displayed. Check automatic reverse rotation.



· Check if the drum rotates clockwise and counterclockwise.

4 Check the water supply.



· Check if water is supplied through the detergent dispenser.

- Check drain and spin functions.
- Power off and power on.
- Press the Spin Speed button.
- Press the Start/Pause button.
- Check the spin and drain functions.

Power off and open the door



- · Power off.
- Check if the door can be opened after 3 minutes.

Water removal



 If SVC is needed, remove the remaining water by pulling out the hose and removing the cap.

# POWER button

 Use this button to turn the power On/Off.

# EST.TIME REMAINING

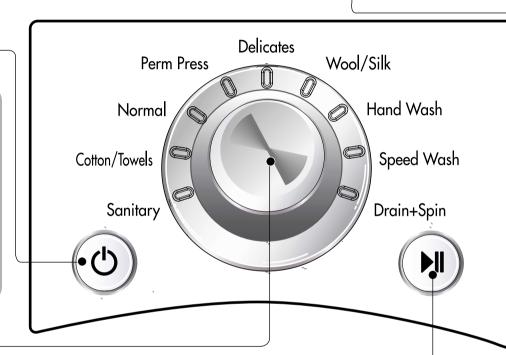
- This display shows:
- a) the estimated time remaining in the cycle when operating.
- b) an error code when an error has been detected.

# CHILD LOG

- Use this option to pr Press and hold Dela lock/unlock control.
- When Child lock is s are disabled except the washer while it is

# CYCLE SELECTOR knob

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



# START/PAUSE button

 Use this button to Start/ Stop the washer.

# OPTION button

- **Soak:** Use this option to wash normal clothes or thick and heavy clothes which are excessively dirty.
- Extra Wash: If the laundry is heavily soiled, this option is effective.
- Rinse+Spin: Use this option to rinse and then spin.
- Spin Only: Use this option to select spin cycle only.
- Dry Only: When you want Dry only, select this option.

#### **DCK**

prevent unwanted use of the washer. elay Wash button for 3 seconds to

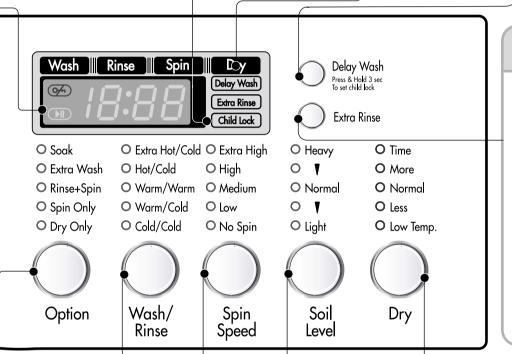
s set, Child Lock lights and all buttons opt the Power (b) button. You can lock it is operating.

# STATUS INDICATOR

 These lights show which portion of the cycle the washer is operating.

# Delay Wash

 Allows the start of any cycle to be delayed for 1~19 hours.



# Extra Rinse

- This option provides an additional rinse cycle.
- Use this option to ensure the removal of detergent or bleach residue from garments.

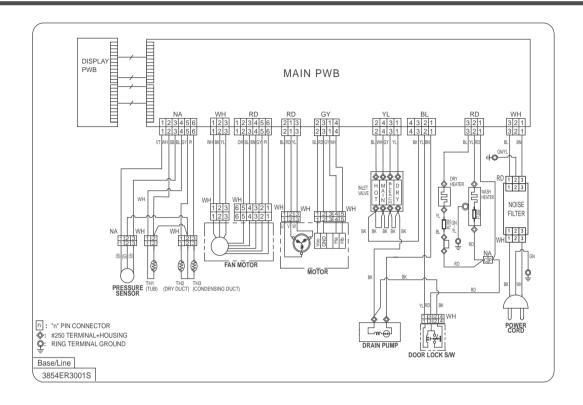
# Wash/Rinse, Spin Speed, Soil Level Button

- Select a water temperature based on the type of load you are washing.
- To change the spin speed, press the Spin Speed button repeatedly to cycle through available options.
- To change the soil level, press the Soil Level button repeatedly until the desired setting is on.

# DRY Button

- Dry programs selected by pressing the Dry button.
- By pressing the button [Normal More Time Off – Low Temp. – Less] can be selected.

# 6. WIRING DIAGRAM/PROGRAM CHART



| PROGRAM CHART                     |                  |                |             |        |          | * Water Supply: W-S * Intermittent Spin: I-S |               |             |       |               |               |       | 3     | * Disentangle: D <del>-</del> T |               |       |       |          |               |       |              |              |        |               |       |                 |                |        |               |                        |
|-----------------------------------|------------------|----------------|-------------|--------|----------|--|---------------|-------------|-------|---------------|---------------|-------|-------|---------------------------------|---------------|-------|-------|----------|---------------|-------|--------------|--------------|--------|---------------|-------|-----------------|----------------|--------|---------------|------------------------|
|                                   | Wash             |                |             |        |          | Rinse  |               |             |       |               |               |       | Spin  |                                 |               |       |       |          | Α             |       |              |              |        |               |       |                 |                |        |               |                        |
|                                   | Sc               | ak             | L           |        | Mai      | n  |               |             |       |               | Ν             | orn   | nal   |                                 |               |       | Ext   | ra oı    | Sta           | in    | Ex           | tra 8        | & St   | ain           | Орш   |                 |                | ļ_     | U<br>T        |                        |
| 11/2                              |                  |                |             | W      | ash      | Со   | ol-do         | wn          |       | 1             |               |       |       | 2                               |               |       |       | 3        |               |       |              | 3            |        |               | ]     |                 |                | E<br>N | Ιò            | **Approx.              |
| CS/C<br>U E E                     | W<br>S           | Wash           | W<br>-<br>S | Heat   | Wash     | <u>w</u><br>s                                | Rinse         | Drain       | Drain | <u>-</u><br>s | <u>w</u><br>s | Rinse | Drain | <br> -<br>  S                   | ₩<br> <br>  S | Rinse | Drain | -<br>  S | W<br> <br>  S | Rinse | Drain        | <u>-</u>   S | W<br>S | Rinse         | Drain | Spin            | <u>D</u><br>T  | D      | 0<br>F<br>F   | Working Time (Minutes) |
| R P                               | 1                | 2              | 5           | 6      | 7        | 8  | 9             | 10          | 11    | 12            | 13            | 14    | 15    | 16                              | 17            | 18    | 19    | 20       | 21            | 22    | 23           | 24           | 25     | 26            | 27    | 28              | 29             | 20     | 20            |                        |
| U E E<br>R P<br>S Time<br>E (SEC) | 60               | *              | 60          |        | *        | 60   | 60            | 60          | 60    | 360           | 60            | 240   | 60    | 360                             | 60            | 240   | 60    | 300      | 60            | 240   | 60           | 300          | 60     | 240           | 60    | 360<br>~<br>660 | 60<br>~<br>180 | 20     | 20            |                        |
| Sanitary                          | <b></b>          | 60             |             |        | 60<br>67 |  | TIM           |             |       |               |               | L     |       |                                 |               |       |       |          |               | -     |              |              |        | -             | _     |                 |                |        |               | 105                    |
| Cotton                            |                  | 60             |             |        | 13       |  | <u> </u>      |             |       |               |               |       |       |                                 |               |       |       |          |               |       |              |              |        |               |       |                 |                |        |               | 58                     |
| /Towels                           | ⊢                | 60             |             |        | 20<br>12 | $\vdash \!\! <$                              |               | $\geq$      |       | Ы             |               |       |       |                                 |               |       |       |          |               |       |              |              |        |               |       |                 |                |        |               |                        |
| Normal                            |                  | 60             |             |        | 19       |  | _             | $\geqslant$ |       |               |               |       |       |                                 |               |       |       |          |               |       |              |              |        |               |       |                 |                |        |               | 57                     |
| Perm Press                        |                  | 60             |             |        | 18       |  | $\sim$        | $\leq$      |       |               |               |       |       |                                 |               |       |       |          |               |       |              |              |        |               |       |                 |                |        |               | 55                     |
| Delicates                         |                  | $\leq$         |             |        | 14       |  | ><            | <u></u>     |       |               |               |       |       |                                 |               |       |       |          |               |       | $V\setminus$ | $\geq$       | <      |               |       |                 |                |        |               | 34                     |
| Wool<br>/Silk                     | $\triangleright$ | <              |             |        | 13       |  | ><            | <           |       |               | ┢             |       |       |                                 |               |       |       |          |               |       |              | >            | <      |               | ┢     |                 |                |        |               | 34                     |
| Hand Wash                         |                  | $\overline{<}$ |             |        | 14       |  | ><            | <u></u>     |       |               |               |       |       |                                 |               |       |       |          | *****         |       | $\bigvee$    | >            | <      | <u> </u>      |       |                 |                |        |               | 34                     |
| Speed Wash                        |                  | <              |             |        | 8        |  | ><            | <           | _     |               |               | 120   |       |                                 |               | 120   |       |          |               | 120   | / \          | >            | <      | $\overline{}$ | ┝     |                 |                |        |               | 30                     |
| Drain+Spin                        |                  |                |             |        |          |  |               |             | _     |               |               |       | _     |                                 |               |       |       |          |               |       |              |              |        |               |       |                 |                |        |               | 12                     |
| Wash<br>+ Rinse                   |                  | 60             |             |        | 19       |  | $\overline{}$ |             |       |               |               |       |       |                                 |               |       |       |          |               |       |              |              |        |               | F     |                 | $\geq$         | <      | $\overline{}$ | 45                     |
| Rinse<br>+ Spin                   |                  |                |             | $\geq$ |          |  | =             | $\equiv$    |       |               |               |       |       |                                 |               |       |       |          |               |       | /            | $\geq$       | $\leq$ |               | F     |                 |                |        |               | 29                     |

Basic Cycle
Cycle
Optional Cycle
Pre-Setting Time: Water Supply - 60 sec.
Drain - 60 sec.

<sup>\*</sup> Wash time is in minutes.

<sup>\*\*</sup> The total working time will vary with the load size, water temperature and ambient temperature.

# 7. TROUBLE SHOOTING

# 7-1. BEFORE PERFORMING SERVICE

- Be careful of electric shock when disconnecting parts while troubleshooting.
- The voltage of each terminal is 110/120 V AC and DC when the unit is plugged in.

# 7-2. QC TEST MODE.

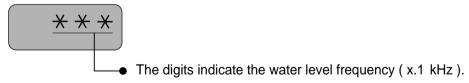
The washer must be empty and the controls must be in the off state.

- 1. Press the Wash/Rinse and Spin Speed buttons simultaneously.
- 2. Press the Power 🖒 button, while the above condition. Then buzzer will sound twice.
- 3. Press the Start/Pause ▶ button repeatedly to cycle through the test modes.

| Number of times the Start/Pause button is pressed | Check Point                            | Display Status                |
|---|--|-------------------------------|
| None  | Turns on all lamps and locks the door. | (;=:;=,'\f()                  |
| 1 time  | Tumble clockwise.                      | rpm (40~50)                   |
| 2 times   | Low speed Spin.                        | rpm                           |
| 3 times   | High speed Spin.                       | rpm                           |
| 4 times   | Inlet valve for bleach turns on.       | Water level frequency (25~65) |
| 5 times   | Inlet valve for main wash turns on.    | Water level frequency (25~65) |
| 6 times   | Inlet valve for hot water turns on.    | Water level frequency (25~65) |
| 7 times   | Inlet valve for dry turns on.          | Water level frequency (25~65) |
| 8 times   | Tumble counterclockwise.               | rpm (40~50)                   |
| 9 times   | Heater turns on for 3 sec.             | Water temperature             |
| 10 times  | Drain pump turns on.                   | Water level frequency (25~65) |
| 11 times  | Dry operation for 6 minutes.           | Temperature in Dry duct.      |
| 12 times  | Power off and unlock the door.         | Turn off all lamps.           |

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

\* Press the Wash/Rinse and Spin Speed button simultaneously.



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

# 7-4. ERROR DISPLAY

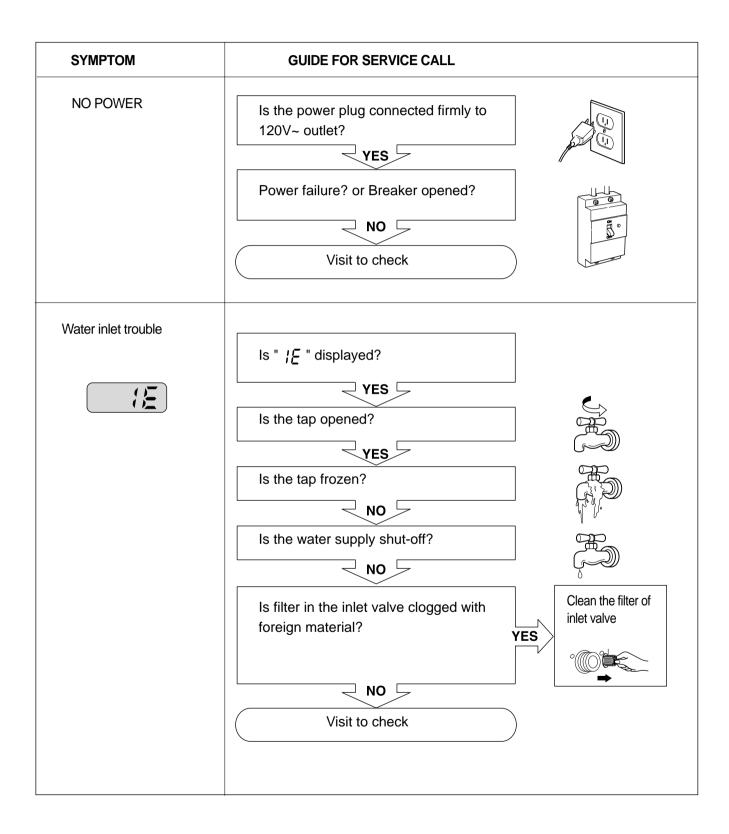
- If you press the Start/Pause button when an error is displayed, any error except <code>"PE</code> <code>"</code> will disappear and the machine will go into the pause status.
- In case of <code>"PE\_]</code>, <code>"EE\_]</code>, <code>"dE\_]</code> if the error is not resolved within 20 sec., or in the case of other errors, if the error is not resolved within 4 min., power will be turned off automatically and the error code will blink. In the case of <code>"FE\_]</code>, power will not be turned off.

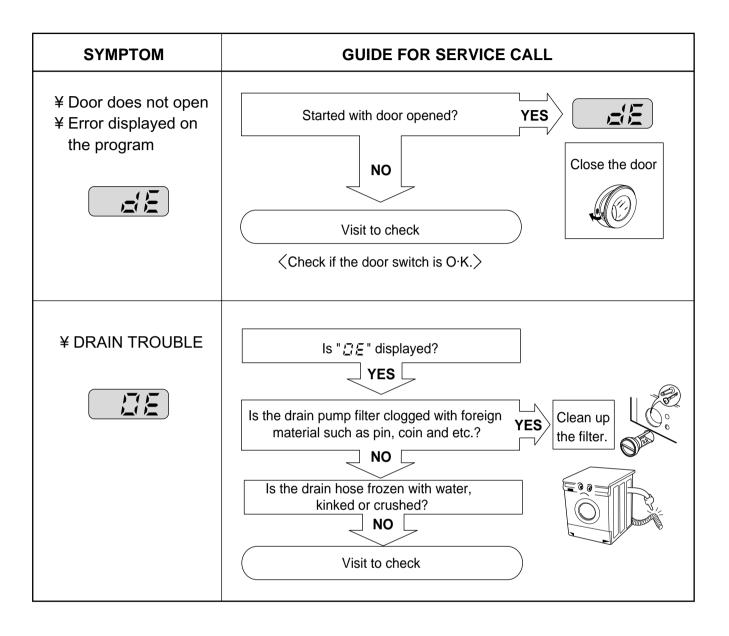
|   | ERROR                       | SYMPTOM  | CAUSE  |
|---|-----------------------------|----------|--|
| 1 | WATER INLET<br>ERROR        | HE       | Correct water level (246) is not reached within 8 minutes after water is supplied or it does not reach the preset water level within 25 minutes.                               |
| 2 | IMBALANCE<br>ERROR          |          | <ul> <li>The load is too small.</li> <li>The appliance is tilted.</li> <li>Laundry is gathered to one side.</li> <li>Non distributable items are put into the drum.</li> </ul> |
| 3 | DRAIN<br>ERROR              |          | Not fully drained within 10 minutes.   |
| 4 | OVER FLOW<br>ERROR          | FE       | Water is overflowing (water level frequency is over 213).  If FE is displayed, the drain pump will operate to drain the water automatically.                                   |
| 5 | PRESSURE<br>SENSOR<br>ERROR | FE       | The SENSOR SWITCH ASSEMBLY is out of order.  |
| 6 | DOOR OPEN<br>ERROR          |          | <ul> <li>Door not all the way closed.</li> <li>Loose electrical connections at Door switch and<br/>PWB Assembly.</li> <li>The DOOR SWITCH ASSEMBLY is out of order.</li> </ul> |
| 7 | HEATING<br>ERROR            | <u> </u> | The THERMISTOR is out order.   |

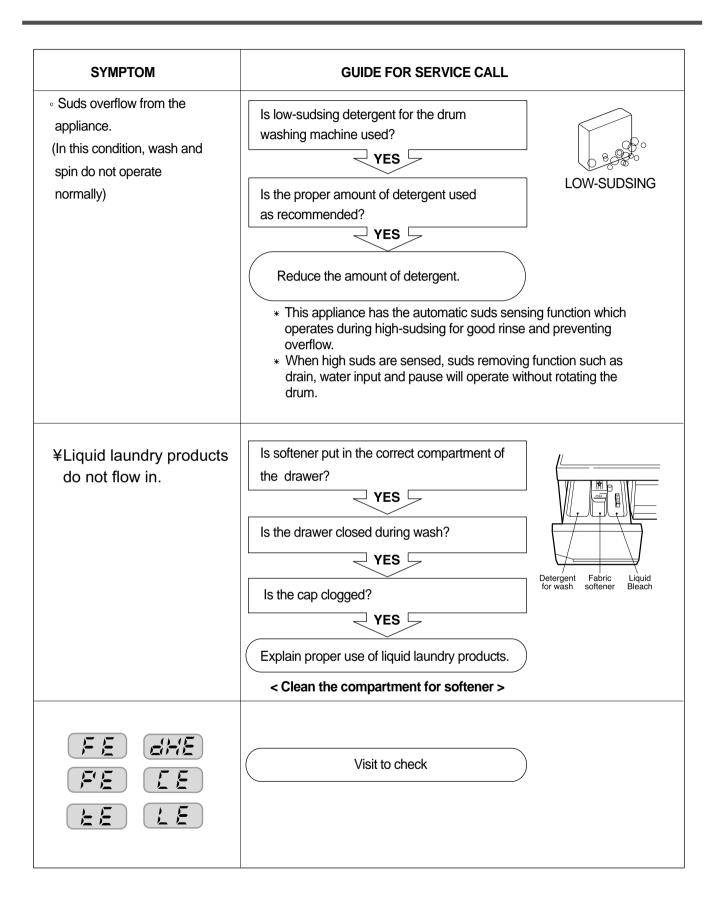
|    | ERROR                  | SYMPTOM       | CAUSE  |
|----|------------------------|---------------|--|
| 8  | CURRENT<br>ERROR       | <u> </u>      | <ul> <li>MAIN PWB ASSEMBLY is out of order Replace the MAIN PWB ASSEMBLY</li> <li>Winding in the STATOR ASSEMBLY is short-circuited.</li> <li>Replace the STATOR ASSEMBLY</li> <li>"[E" " is dispplayed during a high spin</li> <li>Replace the LEAD WIRE ASSEMBLY (MOTOR)</li> </ul>                        |
| 9  | MOTOR<br>ERROR         | LE            | The connector in the LEAD WIRE ASSEMBLY is not connected to the connector of STATOR ASSEMBLY Reconnect or repair the connector The hall sensor is out of order/defective. Replace the STATOR ASSEMBLY  |
| 10 | DRY<br>HEATOR<br>ERROR | <u>,±;;=;</u> | <ul> <li>The Dry Heater is out of order Replace the Dry Heater</li> <li>The Connector of the Dry Heater is not connected properly to the connector in the Main PWB ASSEMBLY</li> <li>Reconnect or repair the connector</li> <li>The Dry fan motor is out of order</li> <li>Replace the fan Motor.</li> </ul> |

# 8. ERROR DIAGNOSIS AND CHECKLIST

# 8-1. DIAGNOSIS AND SOLUTION FOR ABNORMAL OPERATION



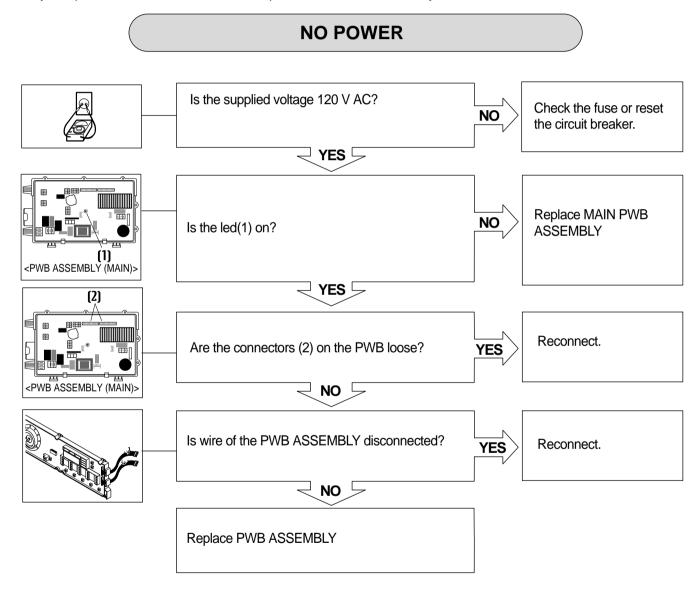


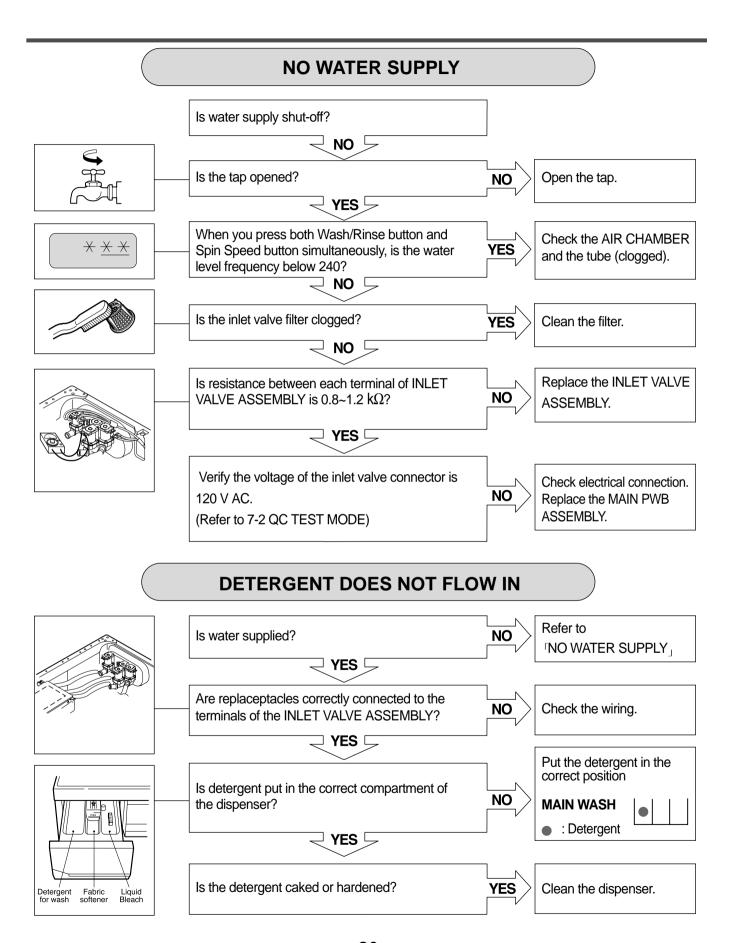


# 8-2. FAULT DIAGNOSIS AND TROUBLESHOOTING

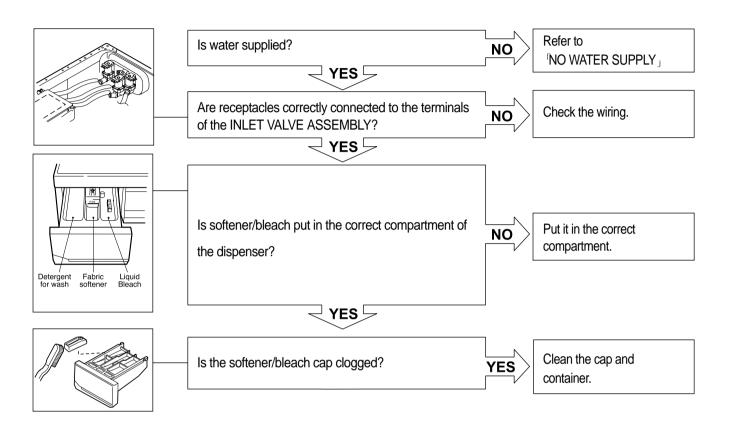
# **▲** CAUTION

- 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.

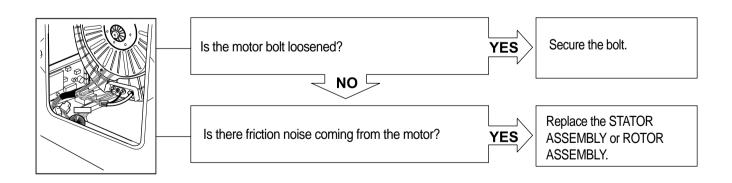




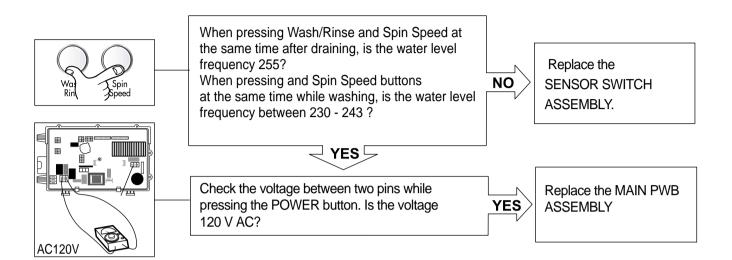
# SOFTENER/BLEACH DOES NOT FLOW IN



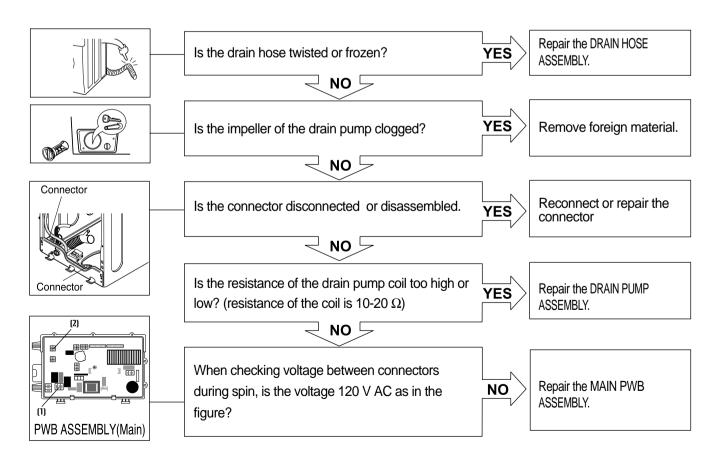
# **ABNORMAL SOUND**



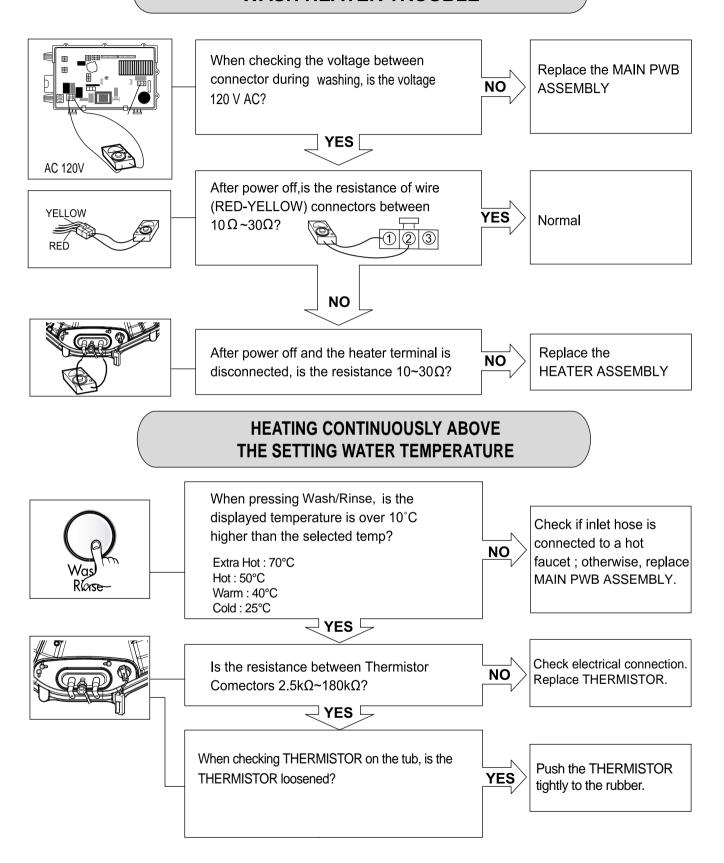
#### **HEATING WITHOUT WATER**



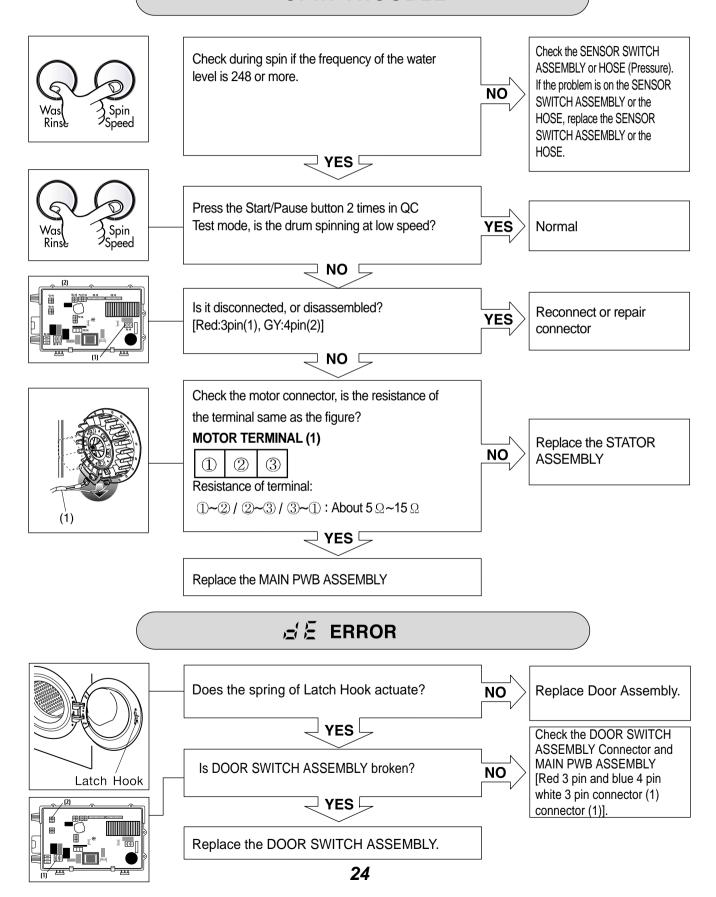
#### DRAIN MALFUNCTIONING



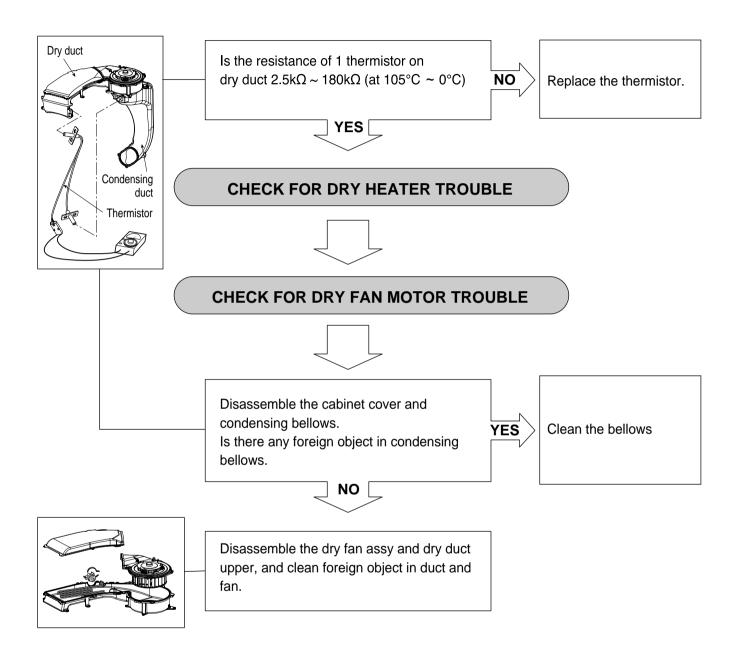
#### **WASH HEATER TROUBLE**



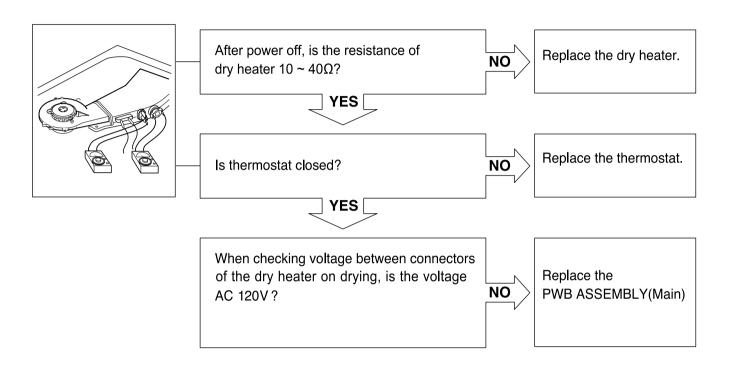




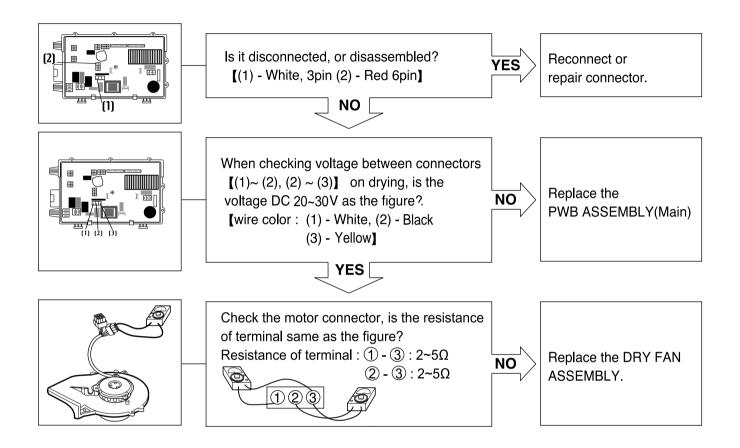
# [dHE] ERROR DISPLAY



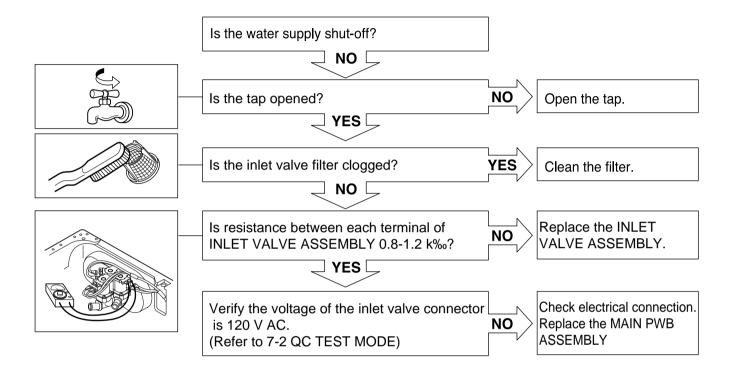
#### **DRY HEATER TROUBLE**



#### **DRY FAN MOTOR TROUBLE**



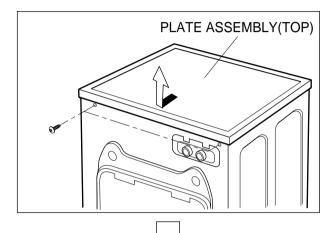
#### LOT OF VAPOR IN DRAWER WHEN DRYING



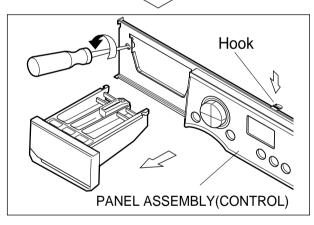
# 9. DISASSEMBLY INSTRUCTIONS

筳 Be sure to unplug the machine from 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.

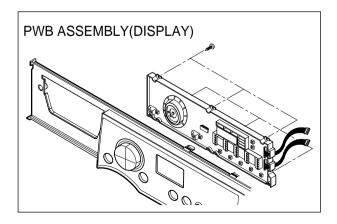


Disconnect the Display PWB Assembly connector from Flat cable.

Pull out the drawer and unscrew 2 screws.

Push 2 upper hooks and pull the Control Panel Assembly forward.

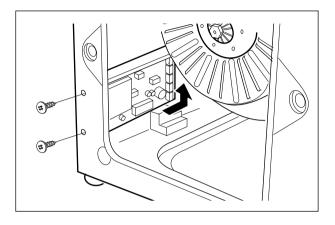




Unscrew the 6 screws from the Control Panel Assembly.

Disassemble the Display PWB Assembly.

# **PWB ASSEMBLY(MAIN)**



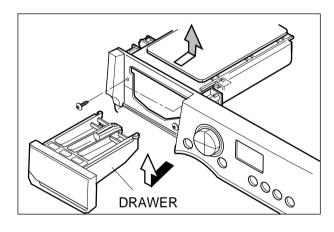
Unscrew the 4 screws from the back cover.

Unscrew the 2 screws from the lower-left side of the cabinet.

Disconnect the connectors.

Disassemble the Main PWB Assembly in arrow direction.

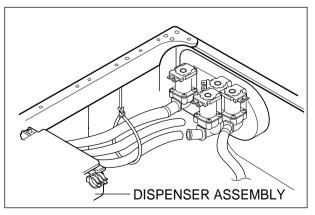
#### **DISPENSER ASSEMBLY**



Disassemble the Top plate assembly.

Pull out the drawer.

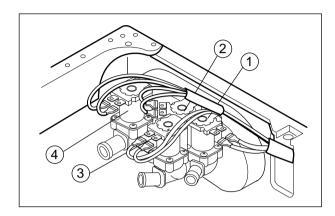
Unscrew the 2 screws and push out the dispenser assembly.



Disassemble the clamps and hoses.

Disassemble the bellows at the lower side of the dispenser.

#### **INLET VALVE**



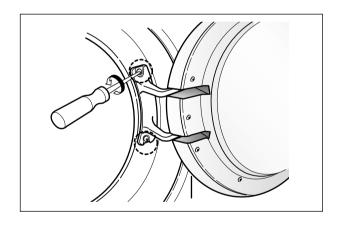
Disassemble the 4 connectors from the valves.

Unscrew the 2 screws from the back of the cabinet.

#### 筵Wire color

| VALVE 笐 (DRY)       | YL - BK  |
|---------------------|----------|
| VALVE 笑 (BLEACH)    | GY - BK  |
| VALVE 笒 (MAIN WASH) | WH/ - BK |
| VALVE 笓 (HOT)       | BL - BK  |

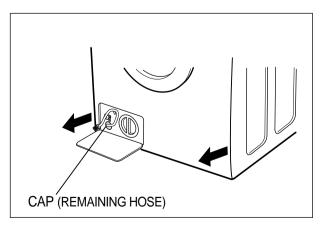
#### **DOOR**



#### Open the door.

Unscrew the 2 screws from the Cabinet Cover. Disassemble the door upward.

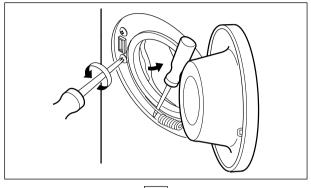
When removing the Door Assembly, it is necessary to hold the Bracket that is inside of the Cabinet Cover.



# Method of removing remaining water

Drain in to bucket by pulling out hose and removing cap.

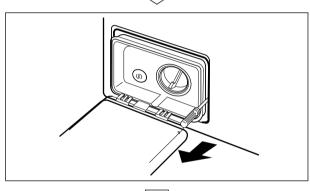
# **GASKET ASSEMBLY**



Disassemble the clamp assembly.

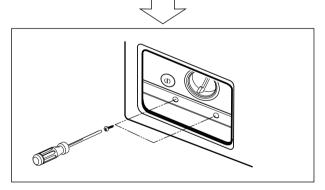
Unscrew the 2 screws from cabinet cover.



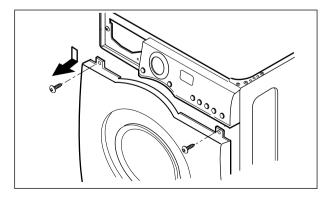


Unscrew the screw from filter cover.

Put a flat ( - ) screwdriver or putty knife into the both sides of the filter cover, and pull it out.

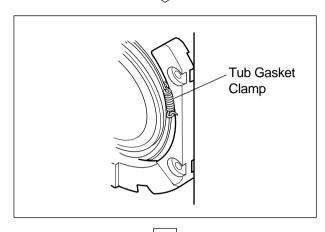


Unscrew the 2 screws from the lower side of the cabinet cover.

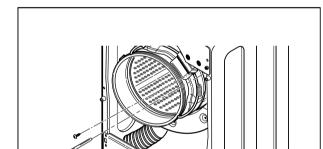


Unscrew the 2 screws from upper part of the cabinet cover.

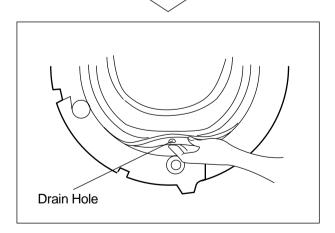




Disassemble the clamp assembly.

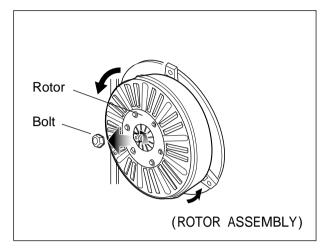


Remove dry gasket clamp by loosening the screw.



When reassembling the gasket, put the drain hole of the gasket downward.

# ROTOR ASSEMBLY, STATOR ASSEMBLY, FRICTION DAMPER

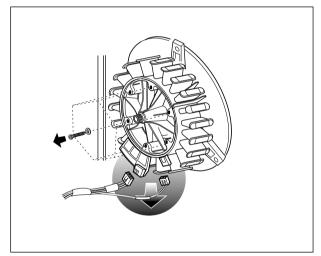


Disassemble the back cover.

Remove the bolt.

Pull out the Rotor.



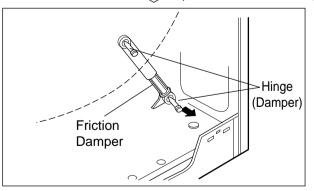


Unscrew the 2 screws from the tub bracket.

Remove the 6 bolts on the stator.

Unplug the 2 connectors from the stator.





(FRICTION DAMPER)

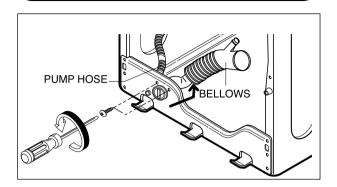
Disassemble the damper hinges from the tub and base.

Separate the dampers.

#### **\* NOTE**

Once removed, replace the damper pin with new one.

#### **PUMP**

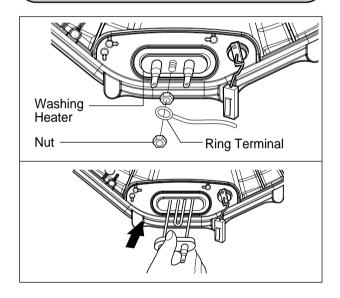


Disassemble the cabinet cover.

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

Disassemble the pump assembly in arrow direction.

#### **HEATER**



Disassemble the back cover.

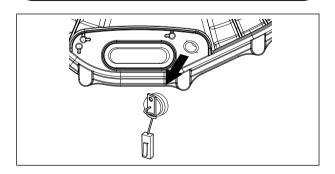
Separate 2 connectors from the heater.

Loosen the nut and pull out the heater.

#### **A** CAUTION

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

#### **THERMISTOR**

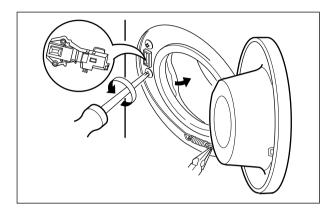


Disassemble the back cover.

Unplug the white connector from the thermistor.

Pull it out by holding the bracket of the thermistor.

# SWITCH ASSEMBLY, DOOR LOCK



Open the door and disassemble the Clamp assembly.

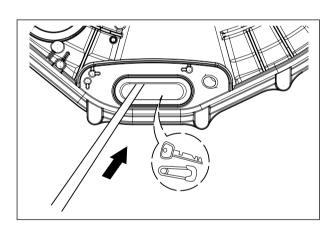
Unscrew the 2 screws.

Disconnect the connector from the Door switch assembly.

#### **\* NOTE**

Reconnect the connector after replacing the DOOR SWITCH ASSEMBLY.

#### WHEN A FOREIGN OBJECT IS STUCK BETWEEN DRUM AND TUB

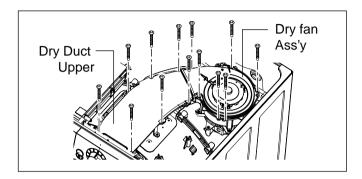


Disassemble the back cover.

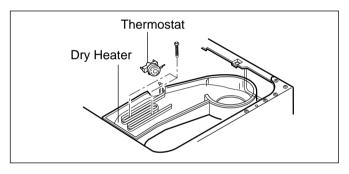
Separate the heater from the tub.

Remove any foreign objects (wire, coin, etc.) by inserting a long bar in the opening.

# **DRY DUCT**

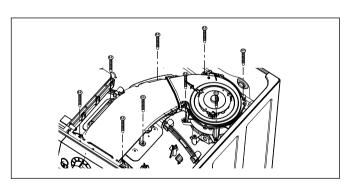


Remove 6 screws and dry fan assembly. Remove 7 screws and dry duct upper.

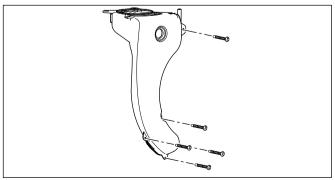


Remove 2 screws and dry heater. Remove thermostat.

# **CONDENSING DUCT**



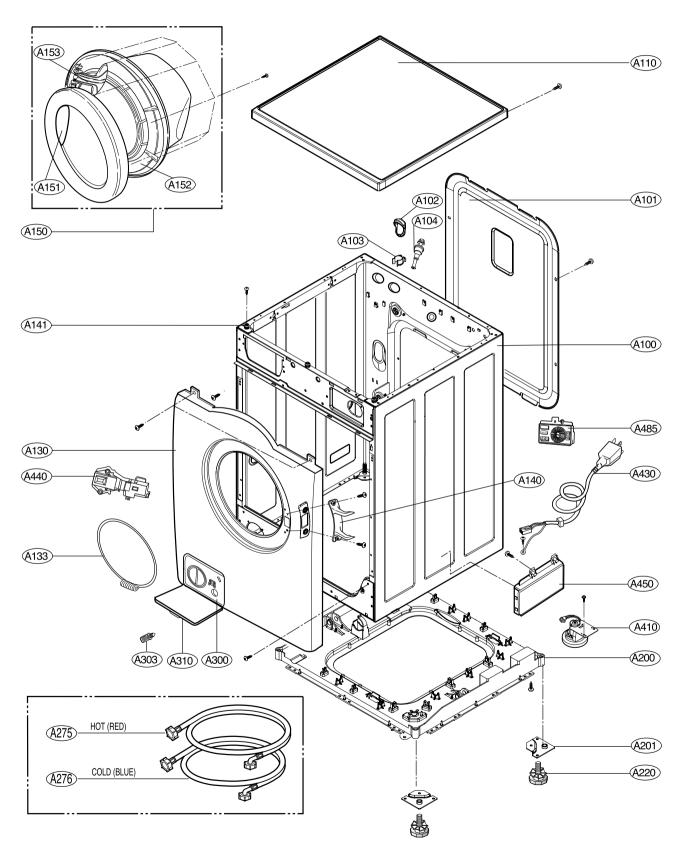
Remove 17 screws from Dry duct upper and Dry fan Assembly.



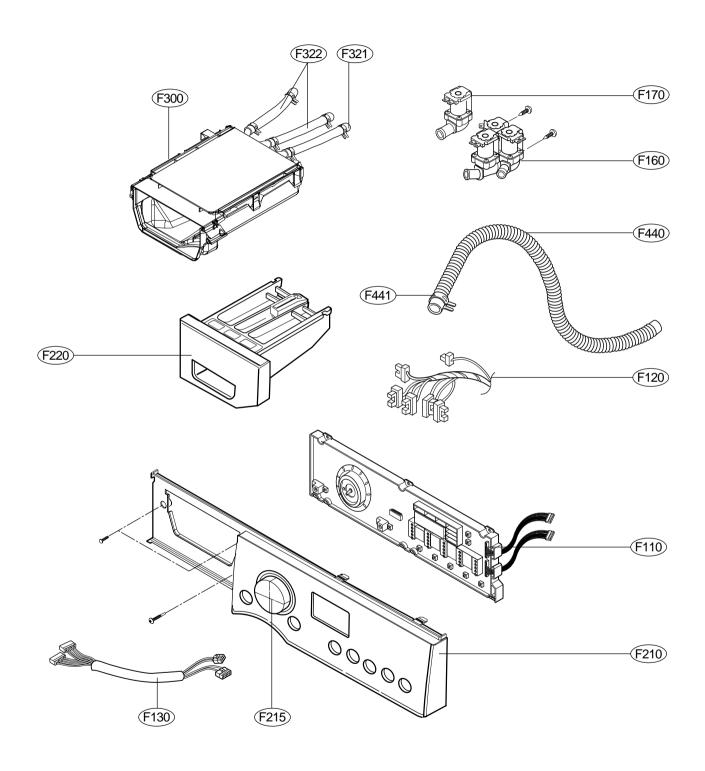
Remove 5 screws and condensing duct.

# 10. EXPLODED VIEW AND PART LIST

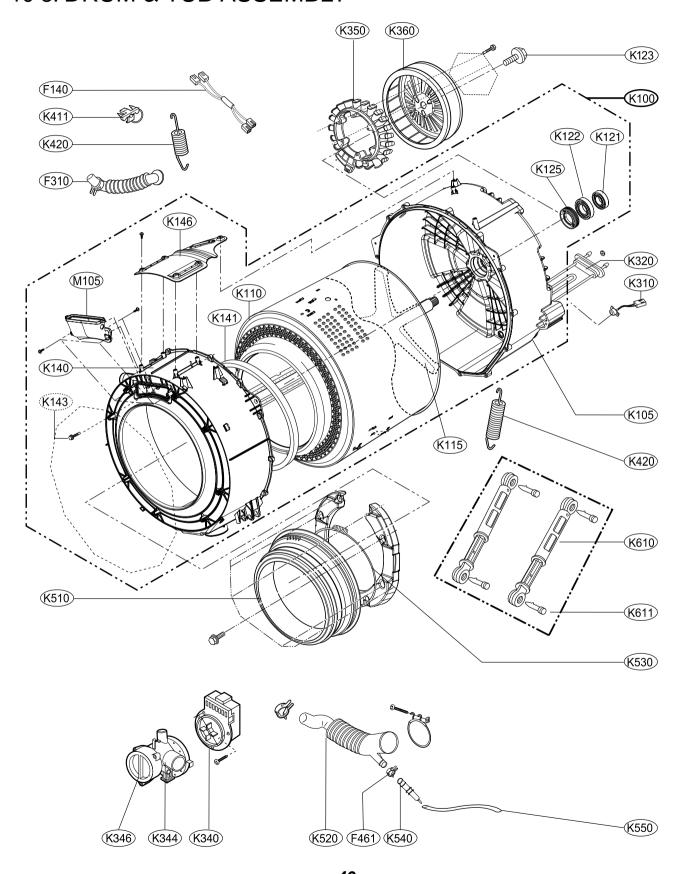
# 10-1. CABINET & CABINET COVER ASSEMBLY



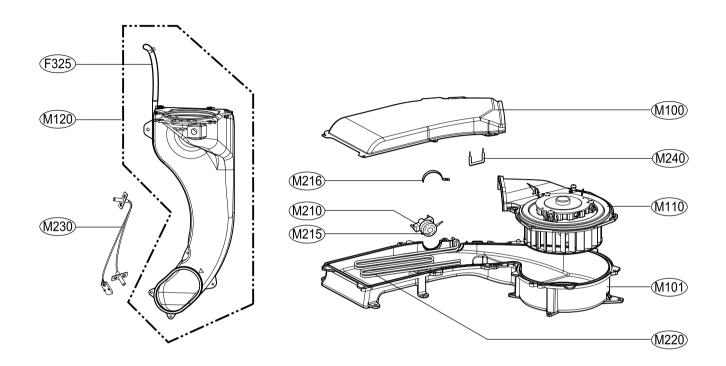
# 10-2. CONTROL PANEL & DISPENSER ASSEMBLY



# 10-3. DRUM & TUB ASSEMBLY



# 10-4. DRYER



#### REPLACEMENT PARTS LIST

CAUTION: Before replacing any part of these components

Read carefully the safety precautions in this manual

■ NOTE: S(Safety Parts), AL(Alternative parts)

| OUR  | MODEL:       | -14311RD.AOWEEUS<br>WM3431HW                | SPECIFICATION: 120\        |      | un_Date : 2005-01-24 |
|--|--------------|---|----------------------------|------|----------------------|
| S Al   | LOC          | DESCRIPTION                                 | PARTS No.                  | Q'TY | REMARKS              |
|  | *001         | MANUAL ASSEMBLY,OWNERS                      | 3829ER3031H                | 1    |                      |
|  | *002         | BOX,CARTON                                  | 3890EZ3446K                | 1    |                      |
|  | *003         | SPANNER                                     | 3W20018B                   | 1    |                      |
|  | *004         | MANUAL,SERVICE                              | 3828ER3035Q                | 0    |                      |
|  | A100         | CABINET ASSEMBLY                            | 3091ER0006P                | 1    |                      |
|  | A101         | COVER,BACK                                  | 3808FR1202A                | 1    |                      |
|  | A102         | BUSHING                                     | 4830FR3107A                | 1    |                      |
|  | A103         | HOLDER                                      | 4930FR3151A                | 1    |                      |
|  | A104         | BOLT ASSEMBLY                               | 4011FR3159G                | 4    |                      |
|  | A110         | TOP PLATE ASSEMBLY                          | 3457ER1005A                | 1    |                      |
|  | A130         | COVER,CABINET                               | 3550ER1018A                | 1    |                      |
|  | A133         | CLAMP ASSEMBLY                              | 2W20017C                   | 1    |                      |
|  | A140         | HINGE                                       | 4774ER2006A                | 1    |                      |
|  | A141         | HOLDER                                      | 4930ER4001A                | 3    |                      |
|  | A150         | DOOR ASSEMBLY                               | 3581ER1007B                | 1    |                      |
|  | A151         | DOOR FRAME,OUTER                            | 3212ER1015A                | 1    |                      |
|  | A152         | DOOR FRAME,INNER                            | 3212ER1014A                | 1    |                      |
|  | A153         | HANDLE                                      | 3650ER2003A                | 1    |                      |
|  | A200         | BASE,CABINET                                | 3040FR0049A                | 1    |                      |
|  | A201         | BRACKET.BASE                                | 4810ER3016A                | 4    |                      |
|  | A220         | LEG ASSEMBLY                                | 4779ER3002A                | 4    |                      |
|  | A275         | HOSE,INLET                                  | 5215FD3715G                | 1    |                      |
|  | A276         | HOSE,INLET                                  | 5215FD3715H                | 1    |                      |
|  | A300         | CASE  | 3110ER3002A                | 1    |                      |
|  | A303         | CAP,DRAIN HOSE                              | 5006ER3009A                | 1    |                      |
|  | A310         | CAP.COVER                                   | 5006ER3012A                | 1    |                      |
| <u> </u>                                     | A410         | SWITCH ASSEMBLY, SENSOR SWITCH              | 6600FA1704S                | 1    |                      |
| <u> </u>                                     | A430         | POWER CORD ASSEMBLY                         | 6411ER1006E                | 1    |                      |
| 1  | A440         | SWITCH ASSEMBLY,DOOR                        | 6601ER1005B                | 1    |                      |
| <u></u>                                      | A450         | PWB(PCB) ASSEMBLY,MAIN                      | 6871EC1126F                | 1    |                      |
| <u> </u>                                     | A485         | FILTER ASSEMBLY(CIRC)                       | 6201EC1006A                | 1    |                      |
| <u> </u>                                     | F110         | PWB(PCB) ASSEMBLY, DISPLAY                  | 6871EC2034A                | 1    |                      |
| <u> </u>                                     | F120         | HARNESS,PWB                                 | 6877ER1030L                | 1    |                      |
| <u>^</u>                                     | F130         | CABLE,FLAT                                  | 6877EC2001C                | 1    |                      |
| <u></u>                                      | F140         | HARNESS,MOTOR                               | 6877ER1007F                | 1    |                      |
| -  | F160         | ,   | 5220FR2075C                | 1    |                      |
|  |              | VALVE ASSEMBLY, INLET                       |                            | 1    |                      |
| <u>^</u>                                     | F170<br>F210 | VALVE ASSEMBLY,INLET PANEL ASSEMBLY,CONTROL | 5220FR2006H                | 1    |                      |
| <u>·                                    </u> | F210<br>F215 | · · · · · · · · · · · · · · · · · · ·       | 3721ER1080N                | 1    |                      |
| $\dashv$                                     | F215<br>F220 | NOB,ROTARY  DANEL ASSEMBLY DRAWER           | 4940ER3015B<br>3721ER1066W | 1    |                      |
| $\dashv$                                     | F300         | PANEL ASSEMBLY, DRAWER                      | 4925ER1017B                | 1    |                      |
| -  | F300         | DISPENSER ASSEMBLY BELLOWS                  | 4925ER1017B<br>4738ER2004A | 1    |                      |
| -  | _            |   |                            | 1    |                      |
| -  | F321         | HOSE INLET                                  | 5214FR4125D                |      |                      |
| +  | F322         | HOSE,INLET                                  | 5214FR4125L                | 2    |                      |
|  | F325         | HOSE,INLET                                  | 5214ER4003A                | 1    |                      |
|  | F440         | HOSE,PUMP                                   | 5214FR3188G                | 1    |                      |
| -  | F441         | CLAMP                                       | 4861FR3068C                | 1    |                      |
| -  | F461         | CLAMP                                       | 4861FR3068C                | 1    |                      |
| -}-  | K100         | TUB ASSEMBLY,DRUM                           | 3045ER0029D                | 1    |                      |
| -  | K105         | TUB ASSEMBLY,OUTER[SUB5]                    | 3045ER0030A                | 1    |                      |
| +  | K110         | TUB ASSEMBLY,INNER[DRUM]                    | 3045ER1010C                | 1    |                      |
|  | K115         | SPIDER                                      | 4434ER1005A                | 1    |                      |
|  | K121         | BEARING,BALL                                | 4280FR4048M                | 1    |                      |

|   |    |      | -14311RD.AOWEEUS<br>WM3431HW | Run_Date : 2005-01-24<br>SPECIFICATION: 120V 60Hz |      |         |  |  |  |  |
|---|----|------|------------------------------|---|------|---------|--|--|--|--|
| S | AL |      | DESCRIPTION                  | PARTS No.   | Q'TY | REMARKS |  |  |  |  |
|   |    | K123 | BOLT ASSEMBLY                | 4040FR4051C                                       | 1    |         |  |  |  |  |
|   |    | K125 | SEAL                         | 4036ER2003A                                       | 1    |         |  |  |  |  |
|   |    | K140 | COVER,TUB                    | 3550ER0028A                                       | 1    |         |  |  |  |  |
|   |    | K141 | SEAL                         | 4036ER4001A                                       | 1    |         |  |  |  |  |
|   |    | K143 | SCREW,DRAWING                | 1SZZFA4362C                                       | 13   |         |  |  |  |  |
|   |    | K146 | COVER,PROTECT                | 3550ER3011A                                       | 1    |         |  |  |  |  |
|   |    | K310 | THERMISTOR ASSEMBLY          | 6322FR2046C                                       | 1    |         |  |  |  |  |
|   |    | K320 | HEATER ASSEMBLY              | 5301FR1158K                                       | 1    |         |  |  |  |  |
|   |    | K340 | MOTOR ASSEMBLY,PUMP          | 4681EA2001D                                       | 1    |         |  |  |  |  |
|   |    | K344 | CASING ASSEMBLY,PUMP         | 3661FR2093E                                       | 1    |         |  |  |  |  |
|   |    | K346 | FILTER(MECH)                 | 5230ER3001A                                       | 1    |         |  |  |  |  |
|   |    | K350 | STATOR ASSEMBLY              | 4417FA1994E                                       | 1    |         |  |  |  |  |
|   |    | K360 | ROTOR ASSEMBLY               | 4413ER1001B                                       | 1    |         |  |  |  |  |
|   |    | K411 | HOLDER                       | 4930FR3040A                                       | 2    |         |  |  |  |  |
|   |    | K420 | SPRING,HINGE                 | 4970FR2084T                                       | 2    |         |  |  |  |  |
|   |    | K510 | GASKET                       | 4986ER1003A                                       | 1    |         |  |  |  |  |
|   |    | K520 | BELLOWS                      | 4738FR1145A                                       | 1    |         |  |  |  |  |
|   |    | K530 | CLAMP ASSEMBLY               | 4861ER2001B                                       | 1    |         |  |  |  |  |
|   |    | K540 | CHAMBER,AIR                  | 3504FR3134A                                       | 1    |         |  |  |  |  |
|   |    | K550 | HOSE,INLET                   | 5214FR4125M                                       | 1    |         |  |  |  |  |
|   |    | K610 | DAMPER ASSEMBLY, FRICTION    | 4900FR2030F                                       | 2    |         |  |  |  |  |
|   |    | K611 | HINGE                        | 4774FR3118B                                       | 4    |         |  |  |  |  |
|   |    | M100 | DUCT,OUTLET                  | 5208ER1006A                                       | 1    |         |  |  |  |  |
|   |    | M101 | DUCT,OUTLET                  | 5208ER1005A                                       | 1    |         |  |  |  |  |
|   |    | M105 | DUCT,INLET                   | 5208ER2003A                                       | 1    |         |  |  |  |  |
|   |    | M110 | MOTOR ASSEMBLY,FAN           | 4680ER1001G                                       | 1    |         |  |  |  |  |
|   |    | M120 | DUCT ASSEMBLY                | 5209ER0004B                                       | 1    |         |  |  |  |  |
|   |    | M210 | THERMOSTAT ASSEMBLY          | 6931FR3108A                                       | 1    |         |  |  |  |  |
|   |    | M215 | SEAL                         | 4036FR4045A                                       | 1    |         |  |  |  |  |
|   |    | M216 | CLAMP                        | 4860ER3004A                                       | 1    |         |  |  |  |  |
|   |    | M220 | HEATER ASSEMBLY              | 5301FR2076G                                       | 1    |         |  |  |  |  |
|   |    | M230 | THERMISTOR ASSEMBLY          | 6322FR2046K                                       | 1    |         |  |  |  |  |
|   |    | M240 | FUSE ASSEMBLY                | 6901ER4001A                                       | 1    |         |  |  |  |  |