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WASHING MACHINE SERVICE MANUAL

A CAUTION

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

MODEL : WM0742H*A





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1. SPECIFICATION

| ІТ | EM | WM0742H∗A | | | | | | | |
|--------------|---------------|---|--|--|--|--|--|--|--|
| CO | LOR | W:BLUE WHITE, G:PEARLY GRAY | | | | | | | |
| POWER | SUPPLY | AC 120 V, 60 Hz | | | | | | | |
| PRODUC | T WEIGHT | 192 lbs (87kg) | | | | | | | |
| | WASHING | 280 W | | | | | | | |
| | DRAIN MOTOR | 80 W | | | | | | | |
| | WASH HEATER | 1000 W | | | | | | | |
| REVOLUTION | WASH | 46 rpm | | | | | | | |
| SPEED | SPIN | 0-1200 rpm | | | | | | | |
| Су | cles | 9 | | | | | | | |
| WASH/RINSE T | EMPERATURES | 5 | | | | | | | |
| SPIN S | SPEEDS | 5 | | | | | | | |
| 0.07 | | PRE-WASH, STAIN CYCLE, STEAM, EXTRA RINSE, | | | | | | | |
| | IONS | RINSE+SPIN, DELAY WASH | | | | | | | |
| WATER CI | RCULATION | Incorporated | | | | | | | |
| OPERATION WA | ATER PRESSURE | 14.5-116 psi (100-800 kPa) | | | | | | | |
| CONTR | OL TYPE | Electronic | | | | | | | |
| WASH CAF | ACITY [cu.ft] | 3.63 (4.2 IEC) | | | | | | | |
| DIMEN | NSIONS | 27" (W) X 29 $^{3}\!/_{4}$ " (D) X 38 $^{11}\!/_{16}$ (H), 50 $^{13}\!/_{16}$ " (D, door open | | | | | | | |
| DELAY | (WASH | up to 19 hours | | | | | | | |
| DOOR SW | ITCH TYPE | PTC + Solenoid | | | | | | | |
| WATEF | RLEVEL | 10 steps (by sensor) | | | | | | | |
| LAUNDRY LO | DAD SENSING | Incorporated | | | | | | | |
| ERROR D | IAGNOSIS | Incorporated | | | | | | | |
| AUTO PC | WER OFF | Incorporated | | | | | | | |
| CHILD | D LOCK | Incorporated | | | | | | | |
| RLM E | NABLE | - | | | | | | | |
| ST | EAM | Incorporated | | | | | | | |

2. FEATURES & TECHNICAL EXPLANATION

2-1. FEATURES



Ultra Capacity

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



Direct Drive System

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



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



Steam Washing and SteamFresh

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



RollerJets

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



Automatic Wash Load Detection

Automatically detects the load and optimizes the washing time.



Built-in Heater

Internal heater helps to maintain water temperature at its optimum level for selected cycles.



Child Lock

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

2-2. NEURO FUZZY WASHING TIME OPTIMIZATION

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



2-3. WATER LEVEL CONTROL

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

2-4. DOOR CONTROL

- The door can be opened by pulling the door handle whenever washer is not in operation.
- When the cycle is completed, the DOOR LOCKED light will turn off.
- If a power failure has occurred while in operation, the door will unlock after 5 minutes.
- Clicking sounds can be heard when the door is locked/unlocked.

2-5. THE DOOR CAN NOT BE OPENED

- While program is operating.
- When a power failed and power plug is taken out in operation.
- While Door Lock lights turn on.
- White the motor is in the process of intertial rotating, through the operation is paused.

2-6. DOOR LOCKED LAMP LIGHTS

- When the frequency of water level is lower than 22.9 kHz.
 (It can be canceled when the frequency is more than 23.8 kHz).
- When the temperature inside the tub is higher than 45 °C and water level is not 25.5 kHz. (It can be canceled when the water level is 25.5 kHz or the temperature inside the tub is lower than 40 °C).

2-7. CHILD LOCK

- Use this option to prevent unwanted use of the washer. Press and hold PRE WASH button for 3 seconds to lock/unlock control.
- When Child lock is set, CHILD LOCK lights and all buttons are disabled You can lock the washer while it is operating.

2-8. WATER CIRCULATION

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

2-9. STEAM

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

2-10. DRUM LIGHT

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



Hot and Cold Caps (4) Water Hoses (for cover shipping

Caps (4) (for covering shipping bolt holes)

Wrench (for removing shipping bolts and adjusting leveling feet)

Tie Strap (for securing drain hose) Elbow Bracket (for securing drain hose)

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:

| REMOVE THE SHIPPING BOLTS | INSTALL THE APPLIANCE ON A FLAT AND FIRM SURFACE | ADJUST THE LEVELING |
|--|---|---|
| Remove the 4 shipping bolts with the supplied wrench. Do first lower side to remove easily. | | Turn the leveling feet to adjust the appliance. |
| Keep the shipping bolts and spanner for future use. Insert the 4 caps (provided) into the hole. | | Lower |
| | | Higher |
| to a second seco | | Turn clockwise to raise; counterclockwise to lower. |

■ HOW TO CONNECT THE INLET HOSE

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



CONNECT DRAIN HOSE





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

CONNECT POWER PLUG





7 TEST OPERATION



5. OPERATION

■ WM0742H*A







WASH/RINSE temp. SPIN SPEED, SOIL LEVEL button

• **Prewash**: Use this option for loads that need pretreatment.

It adds 16 minutes prewash and drain.

- Stain Cycle: Adds time to the wash and rinse cycles for better stain removal. Automatically provides a rinse.
- Extra Rinse : This option provides an additional rinse cycle.
- Rinse+Spin : Use this option to rinse and then spin.
- Delay Wash : Allows the start of any cycle to be delayed for 1~19(12, 9) hours.

CUSTOM PROGRAM button

- Allows you to store a customized wash cycle for future use.
- To create a **Custom Program** : 1) Select a cycle.
 - 2) Select the other desired Wash / Rinse Temp., Spin Speed, Soil Level.
 - 3) Select the desired Options.
 - 4) Press and hold the Custom Program button for 3 seconds (2 beep sounds).
 - 5) Press the **Start/Pause** button.
- The Custom Program is now stored for future use. • To reuse the program, select **Custom Program** and
- press Start/Pause.

6. WIRING DIAGRAM/PROGRAM CHART



| PROGRA | GRAM CHART | | | | | | | | | * Water Supply: W-S * Intermittent Spin: I-S | | | | | | | | | | | * Disentangle: D-T | | | | | | | | | | | | |
|--------------------|------------|--------|-------|--------------|-------------|------|----------|--------|----------|--|-------|--------------|-------------|-------|-----------------------------|-------------|-------------|-------|-------|---------------|--------------------|-------|--------|----------------|----------|---------------|----|-------|-----------------|----------------|----|-------------|-----------------|
| M | | Wash | | | | | | | | | | Rinse | | | | | | | | | | | | | Ste Spin | | | n | | Α | | | |
| | Pre Main | | | | | | Normal | | | | | | | Ext | xtra or Stain Extra & Stain | | | | | | ain | am | | | | | ۱Ų | | | | | | |
| 142 | | | | | | W | ash | Coc | ol-down | | | 1 | 1 | | | 2 | | | 3 | | | | | 3 | | | | | | | E | 6 | **Annrox |
| | s S | Wash | Drain | - S | W - S | Heat | Wash | W S | Rinse | Drain | Drain | <u> </u> | W _ S | Rinse | Drain | _ _ | W _ S | Rinse | Drain | <u> </u> S | W _ S | Rinse | Drain | | ₩ s | Rinse | | Drain | Spin | D T | D | O F F | Working Time |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | | 27 | 28 | 29 | 20 | 20 | (1111111100) |
| S E (SEC) | 60 | * | 60 | 300 | 60 | | * | 60 | 60 | 60 | 60 | 360 | 60 | 240 | 60 | 360 | 60 | 240 | 60 | 300 | 60 | 240 | 60 | 300 | 60 | 240 | | 60 | 360 ~ 660 | 60 ~ 180 | 20 | 20 | |
| Sanitary | - | 8 | | | _ | | 60 67 | 1 | TIM | | | - | | | | | | | | | | | | | | | 0 | _ | | | | | 105 |
| Cotton /Normal | - | 8 | | | | | 13 | | \geq | | | | | | | | | | | | | | | | | | 0 | _ | | | | | 58 |
| Bulky | | 8 | | | | | 25 | | \times | | | | | | | | | | | | | | | | | | 0 | | | | | | 57 |
| Perm Press | | 8 | | | | | 18 | | > | | | | | | | | | | | | | | | | | | 0 | | | | | | 55 |
| Delicates | - | 8 | | | | | 14 | | > | $\overline{}$ | | | | | | | | | | | | | | \geq | \leq | $\overline{}$ | | _ | | | | | 34 |
| Baby Wear | | \geq | < | | | | 70 | | \times | | | | | | | | | | | | | | _ | | | | 0 | | | | | | 120 |
| Hand Wash /Wool | | > | < | \leq | | | 14 | | > | | | | | | | | | | | | | | | > | < | \leq | 0 | | | | | | 34 |
| Speed Wash | | > | < | \langle | | | 8 | | > | \leq | | | | 120 | | | | 120 | | | | 120 | / | > | < | \langle | | | | | | | 30 |
| Drain+Spin | | | | | | | | | | | | | | | | | | | | | | | | | | | | _ | | | | | 14 |
| Wash + Rinse | | 8 | | | | | 19 | \sum | \succ | $\langle \cdot \rangle$ | | | | | | | | | | | | | | | | | | | | > | < | \leq | 45 |
| Rinse + Spin | | | | | | > | < | | \leq | | | | | | | | | | | \geq | \geq | > | \leq | \leq | \leq | | | | | | | | 19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

* Wash time is in minutes.

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

7. TROUBLESHOOTING

7-1. BEFORE PERFORMING SERVICE

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

7-2. QC TEST MODE

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

- 1. Pressing SPIN SPEED and SOIIL LEVEL button simultaneously.
- 2. Press the Power log 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. | | | | | | | | |
| 1 time | Tumble clockwise. | rpm (42~50) | | | | | | | |
| 2 times | Low speed Spin. | rpm (55~65) | | | | | | | |
| 3 times | High speed Spin. | rpm (125~135) | | | | | | | |
| 4 times | Inlet valve for prewash 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 steam turns on. | Water level frequency (25~65) | | | | | | | |
| 8 times | Inlet valve for bleach turns on. | Water level frequency (25~65) | | | | | | | |
| 9 times | Tumble counterclockwise. | rpm (42~50) | | | | | | | |
| 10 times | Heater turns on for 3 sec. | Water temperature | | | | | | | |
| 11 times | Circulation pump turns on. | Water level frequency (25~65) | | | | | | | |
| 12 times | Drain pump turns on. | Water level frequency (25~65) | | | | | | | |
| 13 times | Water level Sensor for Steam | Water level frequency of TSG (0~255) | | | | | | | |
| 14 times | Steam Heater turns on for 1.2 sec. | TSG temperature | | | | | | | |
| 15 times | Off | - | | | | | | | |

7-3. HOW TO CHECK THE WATER LEVEL FREQUENCY

* Press the WASH/RINSE and DELAY WASH button simultaneously.



• The digits indicate the water level frequency (x. 1 kHz).

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

= 24.1 kHz

7-5. ERROR DISPLAY

- If you press the START/PAUSE button when an error is displayed, any error except " PE _ will disappear and the machine will go into the pause status.
- In case of "PE_, "LE_, "LE_, " dE_ if the error is not resolved within 20 sec., or the in case of other errors, if the error is not resolved within 4 min., power will be turned off automatically and the error code will blink. But in the case of "FE_, power will not be turned off.

| | ERROR | SYMPTOM | CAUSE |
|---|-----------------------------|--------------|---|
| 1 | WATER INLET ERROR | :5 | • 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 ERROR | | The load is too small. The appliance is tilted. Laundry is gathered to one side. Non distributable things are put into the drum. |
| 3 | DRAIN ERROR | | Not fully drained within 10 minutes. |
| 4 | OVER FLOW ERROR | , , , | 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 SENSOR ERROR | Ţ, Ę | The SENSOR SWITCH ASSEMBLY is out of order. |
| 6 | DOOR OPEN ERROR | <u>, 4 E</u> | Door not all the way closed. Loose electrical connections at Door switch and PWB Assembly. The DOOR SWITCH ASSEMBLY is out of order. |
| 7 | HEATING ERROR | ÷ E | The THERMISTOR is out order. |

| | ERROR | SYMPTOM | CAUSE |
|----|-----------------------|---------|---|
| 8 | LOCKED MOTOR ERROR | | The connector (3-pin, male, white) in the MOTOR HARNESS is not connected to the connector (3-pin, female, white) of STATOR ASSEMBLY. The electric contact between the connectors (3-pin, male, white) in the MOTOR HARNESS and 4-pin, female, white connector in the MAIN PWB ASSEMBLY is bad or unstable. The MOTOR HARNESS between the STATOR ASSEMBLY and MAIN PWB ASSEMBLY is cut (open circuited). The hall sensor is out of order/defective. |
| 9 | EEPROM ERROR | EE | EEPROM is out of order. ※ Displayed only when the START/PAUSE button is first pressed in the QC Test Mode. |
| 10 | POWER FAILURE | ;=', ;= | The washer experienced a power failure. |

8. ERROR DIAGNOSIS AND CHECK LIST

8-1. DIAGNOSIS AND SOLUTION FOR ABNORMAL OPERATION







8-2. FAULT DIAGNOSIS AND TROUBLESHOOTING

- 1. Be careful of electric shock if disconnecting parts while troubleshooting.
- 2. First of all, check the connection of each electrical terminal with the wiring diagram.
- 3. If you replace the MAIN PWB ASSEMBLY, reinsert the connectors correctly.







DETERGENT DOES NOT FLOW IN



(LIQUID DETERGENT/SOFTENER/BLEACH DOES NOT FLOW IN)





Containe





DRAIN MALFUNCTION



WASH HEATER TROUBLE



HEATING CONTINUOUSLY ABOVE THE SETTING WATER TEMPERATURE



WILL NOT CIRCULATE WATER



SPIN TROUBLE



9. DISASSEMBLY INSTRUCTIONS

* Disassemble and repair the unit only after pulling out power plug from the outlet.

CONTROL PANEL ASSEMBLY





TOP PLATE

- **1.** Unscrew 7 screws on the Rear Frame.
- 2. Disassemble the Rear Frame.

- 3. Pull the Control panel forward.
- 4. Disconnect connectors.
- 5. Unscrew 5 screws.
- 6. Disassemble the controller assembly.





- 1. Open the Lid.
- 2. Unscrew 4 screws.
- **3.** Disassemble the Lid Assembly.
- **4.** Pull down the Dispenser by pushing hooks.
- **5.** Put a hand into the dispenser hole and hold the top plate.
- **6.** Push backward using an opener and lift the top plate.

 \times Do first left side(1).

DISPENSER ASSEMBLY





- **1.** Disassemble the 5 hose clamps.
- 2. Release the 5 hoses.

3. Unscrew the nut at the lower part of the dispenser.

- 4. Unscrew the 4 screws on the holder.
- **5.** Disassemble the 5 connectors from the valves.



Wire colr : 1 WH-BK 2 OR-BK
 3 WH-BK 4 GY-BK
 5 BL-BK

NOISE FILTER



- **1.** Unscrew the screw from the top plate.
- 2. Unplug the 2 connectors.

CABINET COVER



- **1.** Unscrew the 2 screws from upper side of the cabinet cover.
- 2. Unscrew the screw from filter cover.

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

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







- 5. Open the door.
- **6.** Disassemble the clamp assembly using a flat (-) screwdriver.
- **7.** Separate the clamp assembly from cabinet cover.
- 8. Tilt the cabinet cover.
- 9. Disconnect the door switch connector.

10. Lift and separate the cabinet cover.

- **11.** Disassemble the clamp assembly using a flat () screwdriver.
- **12.** Disasemble the Gasket.







DOOR SWITH ASSEMBLY



- 1. Open the door.
- **2.** Unscrew the 7 screws from the hinge cover.

3. Put a flat (-) screwdriver into the opening of the hinge, and pull out the hinge cover.

- 4. Unscrew the screws from the door.
- 5. Disassemble the door upward / downward.
 - **※ Be careful ! The door is heavy.**

- **1.** Open the door.
- **2.** Disassemble the clamp assembly.
- **3.** Unscrew the 2 screws from cabinet cover.



- **1.** Disassemble the cabinet cover.
- **2.** Separate the pump hose, the bellows and the circulation hose assembly from the pump assembly.
- **3.** Disassemble the pump assembly in arrow direction.

HEATER



- **1.** Disassemble the cabinet cover.
- **2.** Separate 2 connectors from the heater.
- **3.** Loose the nut and pull out the heater.

A CAUTION

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

WHEN FOREIGN OBJECT IS STUCK BETWEEN DRUM AND TUB



- **1.** Disassemble the cabinet cover.
- **2.** Separate the heater from the tub.
- **3.** Remove any foreign objects (wire, coin, etc.) by inserting a long bar in the opening.

MOTOR / DAMPER





3. Pull out the Rotor.

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- HINGE, DAMPER

- 4. Unscrew the 2 screws from the tub bracket.
- **5.** Loosen the 6 bolts on the stator.
- **6.** Unplug the 2 connectors from the stator.

- **1.** Disassemble the damper hinges from the tub and base.
- 2. Separate the dampers.

*** NOTE**

• Once removed, replace the damper pin with new one.

10. EXPLODED VIEW AND PART LIST

10-1. THE PART LIST OF CABINET ASSEMBLY



10-2. DRUM & TUB ASSEMBLY



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

