# Service Manual



## **Front Load Washing Machine**

12 EXPLODED VIEW AND PART LIST .....

44

Model No. NA-126MB1WSA NA-126MB1LSA NA-475MB1WSA NA-475MB1LSA NA-126MB1WAS NA-126MB1LAS NA-127MB1WAS NA-127MB1LAS NA-148MB1WAS NA-148MB1LAS NA-127MB1LZA NA-148MB1LZA Product Color : White/Silver

Destination : India KSA UAE Oman South Africa Kuwait

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**Panasonic** 

When performing troubleshooting and part replacement during servicing, note the following safety precautions:

#### **1.1 Safety Precautions**

#### 1.1.1 Use Genuine Parts

The components of the washing machine have safety features such as non-combustibility and voltage with standing. Therefore, always use the same part as suggested by the maker. In particular be sure

to use only designated parts in case of major safety parts identified by the marker. 1.1.2 Grounding

Connect the grounding wire to the shell plate ,and bury it under at least 25cm of earth: alternatively, connect the ground wire to the appropriate pin on a properly grounded power receptacle. Never connect the wire to a telephone line, lightning rod, or gas pipe.

#### **1.2 Servicing Precautions**

1.2.10bserve Warnings

Be sure to follow special warning and precautions that are described on part labels and in the owner'

manual.

1.2.2 Parts Assembly and Wiring

Be sure to use insulation material(such as tube and tape). And be sure to restore all parts and wires to their original position. Take special care to avoid contact with sharp edges. 1.2.3 Perform Safety Checks after Servicing

After servicing, check to see that the screws, parts, and wiring are restored to their original positions, and check the insulation between the external metals and the socket plug. In addition, place the washing machine in a level position (less than1 degree)to prevent vibration and noise during operations.

1.2.4 Insulation Checks

Pull out the plug from the power receptacle, pour water into the spin tub, and then set the timer.

Check to see that the resistance insulation between the terminals of the plug and the externally

exposed metal is greater than 1M.

Note :When it is impossible to insulation check with a 500V insulation resistance tester, use other testers for inspection.

#### **1.3 CAUTIONS FOR SAFETY**

- Please observe the following notes for safety. The symbols indicate as follows. •
- •

| Symbol | Meaning   |
|--------|---|
|        | Indicates possibility of death or serious injury of a repair<br>technician and a person nearby through the misconducted<br>work , or of a user by a defect of the product after the work<br>performed by the technician.    |
|        | Indicates possibility of injury or physical damages* of a<br>repair technician and a person nearby through the<br>misconducted work, or of a user by a defect of the product<br>after the work performed by the technician. |

\* Means secondary damages of property, furniture , domestic animal and pet.

| Symbol             | Meaning  |
|--------------------|--|
|                    | Indicates a caution (including a warning).<br>Specific instruction is followed by a graphic or characters in<br>or near.<br>Symbol left warns an electric shock.                 |
| DO NOT DISASSEMBLE | Indicates prohibition (act must not be conducted).<br>Specific instruction is followed by a graphic or characters in<br>or near.<br>DO NOT Symbol left warns not to disassemble. |
| UNPLUG             | Indicates forcing (act must be conducted).<br>Specific instruction is followed by a graphic or characters in<br>or near .<br>Symbol left warns to unplug the power cord.         |

| Symbol           | Meaning  |
|------------------|--|
| OUT OF CHILD     | Advise the customer to keep children out of the work place.<br>Children may be injured with a tool or a disassembled part.   |
| UNPLUG POWER     | Unplug power cord for the work such as disassembling<br>which is not<br>unnecessary to power on . Do not hold the plug by a wet hand.<br>Failing to unplug may cause an electric shock.          |
| USE REPAIR PARTS | Use the specified repair parts when repairing the product.<br>Otherwise , amalfunction or a defect may occur.<br>Also , a short circuit , ignition or other danger to the<br>customer may occur. |

| WARNING                        |   |
|--------------------------------|---|
| CHECK INSULATION<br>RESISTANCE | After repair, measure insulation resistance between the<br>charging part(power cord plug) and the non-charging<br>metallic part (ground) with an insulation resistance meter<br>(500V).The resistance shall be 10M or more.<br>Failing to check the insulation resistance may cause a short<br>circuit, electric shock or other diseases to the customer. |
| DO NOT MODIF                   | Do not modify the product.<br>An electric shock or ignition may occur.  |
| DO NOT MODIFY                  | Only a repair technician can disassemble and repair.<br>An electric shock, ignition or malfunction may cause injury.  |
| USE EXCLUSIVE<br>SOCKET        | Use an exclusive 110 VAC/15 A socket for the washing<br>machine.<br>Use an exclusive 220VAC/17A socket for the washing<br>machine.<br>Otherwise , an electric shock or ignition may cause. Sharing<br>the same socket with other instrument causes heating of a<br>branch socket and result in a fire.  |
| CONNECT<br>GROUNDING WIRE      | Connect the grounding wire.<br>Failing to do so may cause an electric shock when a short<br>circuit occurs.<br>Consult an electric work shop or a sales shop.   |
| DO NUI USE WET<br>PLACE        | Do not install in a bath room or a place exposed to wind or<br>rain.<br>An electric shock or a short circuit may cause a fire.  |
| DO NOT SPLASH<br>WATER         | Do not pour or immerse electrical parts into water or liquid solution.<br>An electric shock or ignition may occur.  |
| REMOVE DUST                    | Wipe off dust adhered to the plug of power cord.<br>Dust may cause a fire.  |
| AVOID<br>INFLAMMABLE           | Do not put inflammable into the washing tub.<br>Do not put cloths stained with kerosene, gasoline, benzene,<br>thinner, alcohol, etc. It may cause a fire or explosion.   |

|                           | WARNING   |
|---------------------------|---|
| DO NOT TOUCH              | Do not touch the laundry before the spin basket stops<br>completely.<br>The laundry entangles your hand causing an injury even if<br>the basket rotates slowly. Pay special attention to children.  |
| INSTALL<br>CAREFULLY      | Ask an electric work shop to install the product.<br>Install the product securely and safely according to the<br>electrical equipment technical standard and the wiring<br>standard.<br>Incorrect work causes an electric shock and a fire. |
| DO NOT PULL               | Do not pull the power cord when unplugging.<br>Hold the power plug to unplug.<br>An electric shock or short circuit may cause a fire.   |
| DANGER HAND               | Do not insert your hand under the washing machine during<br>operation.<br>There is a rotary part under the machine which may cause<br>an injury.  |
| <b>Q</b><br>WATER LEAKAGE | Before starting washing, open the faucet and check water<br>supply hose joint which shall not be loosened for no water<br>leaks.<br>The loose screw or hose joint may cause water leakage<br>resulting in an unexpected damage.             |

| Model Name                   | NA-148MB1WAS      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-240 V~ 50Hz   |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 565 × 850mm |
| Washing Capacity             | 8kg               |
| Rated Spinning Capacity      | 8kg               |
| Net Weight                   | 70Kg              |
| Gross Weight                 | 75Kg              |
|                              |                   |

| Model Name                   | NA-148MB1LAS      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-240 V~ 50Hz   |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 565 × 850mm |
| Washing Capacity             | 8kg               |
| Rated Spinning Capacity      | 8kg               |
| Net Weight                   | 70Kg              |
| Gross Weight                 | 75Kg              |

| Model Name                   | NA-148MB1LZA      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 230 V~ 50Hz       |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 565 × 850mm |
| Washing Capacity             | 8kg               |
| Rated Spinning Capacity      | 8kg               |
| Net Weight                   | 70Kg              |
| Gross Weight                 | 75Kg              |

| Model Name                   | NA-475MB1WSA      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-230 V~60Hz    |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 565 × 850mm |
| Washing Capacity             | 7.5kg             |
| Rated Spinning Capacity      | 7.5kg             |
| Net Weight                   | 70Kg              |
| Gross Weight                 | 75Kg              |

| Model Name                   | NA-475MB1LSA      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-230 V~60Hz    |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 565 × 850mm |
| Washing Capacity             | 7.5kg             |
| Rated Spinning Capacity      | 7.5kg             |
| Net Weight                   | 70Kg              |
| Gross Weight                 | 75Kg              |

| Model Name                   | NA-127MB1WAS      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-240 V~ 50Hz   |
| Rated Power                  | 2050W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 495 × 850mm |
| Washing Capacity             | 7kg               |
| Rated Spinning Capacity      | 7kg               |
| Net Weight                   | 61Kg              |
| Gross Weight                 | 65Kg              |
|                              |                   |

| Model Name                   | NA-127MB1LAS      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-240 V~ 50Hz   |
| Rated Power                  | 2050W             |
| Color                        | White             |
| Net Dimensions (W×D×H)       | 595 × 495 × 850mm |
| Washing Capacity             | 7kg               |
| Rated Spinning Capacity      | 7kg               |
| Net Weight                   | 61Kg              |
| Gross Weight                 | 65Kg              |

| Model Name                   | NA-127MB1LZA      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 230 V~ 50Hz       |
| Rated Power                  | 2050W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 495 × 850mm |
| Washing Capacity             | 7kg               |
| Rated Spinning Capacity      | 7kg               |
| Net Weight                   | 61Kg              |
| Gross Weight                 | 65Kg              |

| Model Name                   | NA-126MB1WSA      |  |
|------------------------------|-------------------|--|
| Power Supply Rated Frequency | 220-230 V~ 60Hz   |  |
| Rated Power                  | 2000W             |  |
| Color                        | White             |  |
| Net Dimensions (W × D × H)   | 595 × 495 × 850mm |  |
| Washing Capacity             | 6kg               |  |
| Rated Spinning Capacity      | 6kg               |  |
| Net Weight                   | 61Kg              |  |
| Gross Weight                 | 65Kg              |  |

| Model Name                   | NA-126MB1LSA      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-230 V~ 60Hz   |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 495 × 850mm |
| Washing Capacity             | 6kg               |
| Rated Spinning Capacity      | 6kg               |
| Net Weight                   | 61Kg              |
| Gross Weight                 | 65Kg              |

| Model Name                   | NA-126MB1WAS      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-240 V~ 50Hz   |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 470 × 850mm |
| Washing Capacity             | 6kg               |
| Rated Spinning Capacity      | 6kg               |
| Net Weight                   | 54Kg              |
| Gross Weight                 | 58Kg              |

| Model Name                   | NA-126MB1LAS      |
|------------------------------|-------------------|
| Power Supply Rated Frequency | 220-240 V~ 50Hz   |
| Rated Power                  | 2000W             |
| Color                        | White             |
| Net Dimensions (W × D × H)   | 595 × 470 × 850mm |
| Washing Capacity             | 6kg               |
| Rated Spinning Capacity      | 6kg               |
| Net Weight                   | 54Kg              |
| Gross Weight                 | 58Kg              |

# **3 USER MANUAL**

NOTE :

Please check the user manual about the installation, operation, and spec etc.



# **4 WIRING DIAGRAM/PCB LAYOUT**

4.1 During the failure diagnosing and changing components, please do it as following:

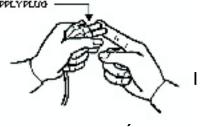
1)There is some static harm to the electrical parts from colophony in the

washing machine or humans. So it is better to elir POWER SUPPLYPLUM -

grounding the humans or touching the plugs.

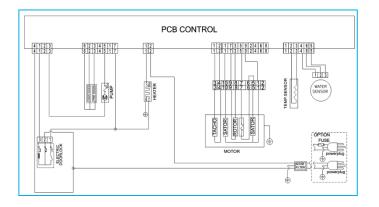
2)The rated voltage of the SCR in PCB is 220-240\

shock. Please take care while strong and weak ele



design of PCB is out of failure, so prohibit to change the PCB panel according to its alarm. Please do it according to the failure diagnose program.

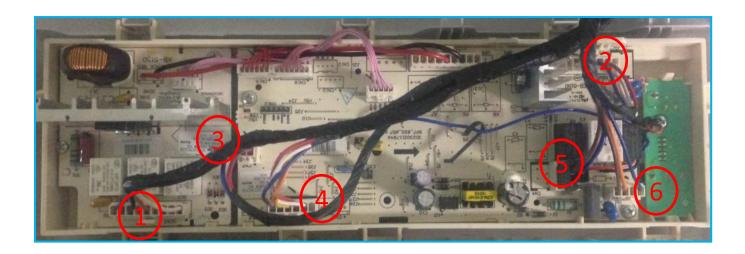
#### 4.2 The circuit program(Universal Motor)

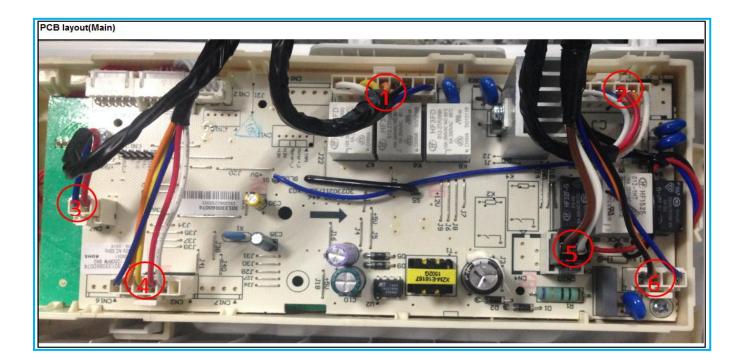


# **4 Wiring Diagram/PCB Layout**

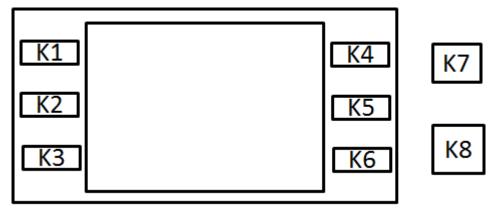
#### 4.3 PCB Layout(Universal Motor )

- 1 Moto
- 2 Inlet Valve & Drain Pump & Door Lock
- 3 Moto Tacho
- 4 Temp Sensor & Water Sensor
- 5 Noise Filter & Heater
- 6 Noise Filter & Drain Pump & Door Lock





#### 5.1 Service mode



Before entering into service mode, make sure no water remains in the inner drum, if not, select drain only program to drain them out.

Turn on the machine and take turns [K3] [K5] [K3] [K5] buttons in 10s. Press [K1] or [K2] to select test program. Press [K8] to confirm your selection and start the selected test. If you want to go back to test selection interface, press the [K8] to cancel previous selection.

| LED<br>Display | Check<br>Target                    | Check Method  | Check Item                                       |
|----------------|------------------------------------|---|--|
| t01            | Version<br>switchover              | <ol> <li>Press [K8] button</li> <li>Press [K2] to confirm switchover</li> <li>Press [K3] to change version</li> <li>Press [K2] button continuously for<br/>3s to confirm your change</li> </ol>   | LED displays "0xx"<br>x means current<br>version |
| t02            | Error code<br>checking             | <ol> <li>Press [K8] button</li> <li>Press [K1] to show the last code and press [K2] to show the next code</li> <li>Press [K2] and [K3] button at the same time continuously for 3s, after hearing the beep, all the error codes records deleted, LED displays E00.</li> </ol> | LED displays<br>"Err"                            |
| t03            | Version<br>information<br>checking | <ol> <li>Press [K8] button Enter into service mode,<br/>LED displays "cod".</li> <li>Press [K8], LED displays project number.</li> <li>Press [K1] button, LED displays version<br/>number</li> </ol>  | LED displays version<br>number                   |

#### 5.1 Service mode

| LED<br>Display | Check<br>Target  | Check Method   | Check Item                                 |
|----------------|--|--|--|
| t04            | UI Checking  | Press [K8] button  | The whole LED<br>display flashes           |
| t05            | Drain-pump<br>checking                                   | Press [K8] button to drain out all the<br>remaining water. If all water drained out, LED<br>displays "EP", and 6 minutes later ,if there is<br>still water remains in it, LED displays "FP"  | LED displays "PPt'                         |
| t06            | Pressure<br>switch<br>checking                           | <ol> <li>Press [K8] button to activate inlet valve.<br/>LED displays level frequency once water<br/>lever get the main wash level.</li> </ol>  | LED displays LL                            |
| t07            | Water<br>temperature<br>sensor and<br>heater<br>checking |  | LED displays the<br>current<br>temperature |
| t08            | Inlet valve<br>checking                                  | <ol> <li>Press [K8] button, LED displays "uu" and<br/>switch on the main wash inlet valve for 10<br/>min.</li> <li>Press [K1] button, LED displays "u1" and<br/>switch on prewash valve for 5s.</li> <li>Press [K1] button, LED displays "u2" and<br/>switch on the main wash inlet valve for 5s.</li> <li>Press [K1] button to switch on main wash<br/>and prewash valve and get the water lever<br/>to setting level, then drain out the water.</li> </ol> | LED displays "UU'                          |

#### 5.1 Service mode

| LED<br>Display | Check<br>Target | Check Method  | Check Item            |
|----------------|-----------------|---|-----------------------|
| TIM            | checking        | Press [K8] button, inner drum rotates in<br>45r/m clockwise for 15s and stop for 10s then<br>rotates counterclockwise for 15s, over and over<br>again.  | LED displays<br>"tUB" |
|                | checking        | Press [K8] button , the number on the<br>display goes up in the same pace with the real<br>speed and when it reach 400rpm, you need to<br>press [K1] button to get the machine to reach<br>its target speed | LED displays "spn     |

#### 5.2 Self-check

- Turn on the machine, to take turns [K3] [K5] [K3] [K5], the door locked, enter the test mode, display the T01, press the [K1] or [K2] to show "T15". - Press [K8] button, put into the function test mode, display TST, then press again, display version number and project number;

- Press [K1] or 3 seconds later again, display the temperature of NTC;

- Press [K1] or 3 seconds later again, display water level frequency;

- Press [K1] or 3 seconds later again, display "U2", main wash valve is open; - Press [K1] or 3 seconds later again, display "U1", main wash valve is close, prewash valve is open;

- Press [K1] or 3 seconds later again, display "PuP", pre-wash valve is close, drain pump is open;

- Press [K1] or 3 seconds later again, display "HEA", drain pump is close, HTC is open;

- Press [K1] or 3 seconds later again, the heater is close, the motor rotates forward 3 seconds, stop 2 seconds, display the motor speed, accelerate to 1000 rpm;

- Press [K8], display the "T15", back to the function test mode. Exit need to close the power.

#### 5.3 Marketing-show (no-water testing)

The sales display mode can not be used in this PCB.

# 6. MALFUNCTION CODES AND EXPLANATIONS

| Malfunction<br>code | Reason                                      | Possible cause  | Solution  |
|---------------------|---|---|---|
|                     |   | The water level<br>doesn't changed in 3<br>minutes during filling<br>the water.           | If the washer fills very slowly, the<br>water pressure from the house<br>might be too low. If the water inlet<br>valve isn't leaking and there are<br>no other symptoms this problem<br>does not need to be corrected.  |
|                     |   | Water inlet hose  | Make sure that water faucet is turned on and that the screens on the hoses are not restricted.  |
| E10                 | In 3 minutes,<br>the water level<br>doesn't | Water inlet<br>valve<br>(The voltage on<br>the water inlet<br>valve is normal)            | If the water pressure is good, try<br>cleaning the screens inside the<br>water inlet valve hose connection<br>ports. If those are clean replace<br>the water inlet valve.   |
| cha                 | change with<br>valves open                  | Water level<br>sensor or<br>control switch<br>(No voltage on<br>the water inlet<br>valve) | A water lever control switch<br>controls how much water enters<br>the washing machine by PCB. If<br>the water level control switch is<br>defective, or more commonly, if<br>the small air pipe attached to the<br>air bell restricted, The switch will<br>not be able to close the electrical<br>contacts to the washer fill valve.<br>CHECK THE AIR PIPE<br>CHECK THE WATER LEVERL<br>SENSOR<br>CHECK THE PCB and the inner<br>wire between PCB and the sensor |
|                     |   | Restart   | Sometimes just restart the unit can solve the problem.  |
|                     | E12<br>E12<br>For alarm                     | Water inlet valve<br>(The voltage on the<br>water inlet valve is<br>normal)               | If the washer is overflowing, the water inlet valve has failed.<br>Replace it.  |
| E12                 |   | Water level<br>sensor or<br>control switch<br>(No voltage on<br>the water inlet<br>valve) | A water lever control switch<br>controls how much water enters<br>the washing machine by PCB. If<br>the water level control switch is<br>defective, or more commonly, if<br>the small air pipe attached to the<br>air bell restricted, The switch will<br>not be able to close the electrical<br>contacts to the washer fill valve.<br>CHECK THE AIR PIPE<br>CHECK THE WATER LEVERL<br>SENSOR<br>CHECK THE PCB and the inner<br>wire between PCB and the sensor |

## 6. MALFUNCTION CODES AND EXPLANATIONS

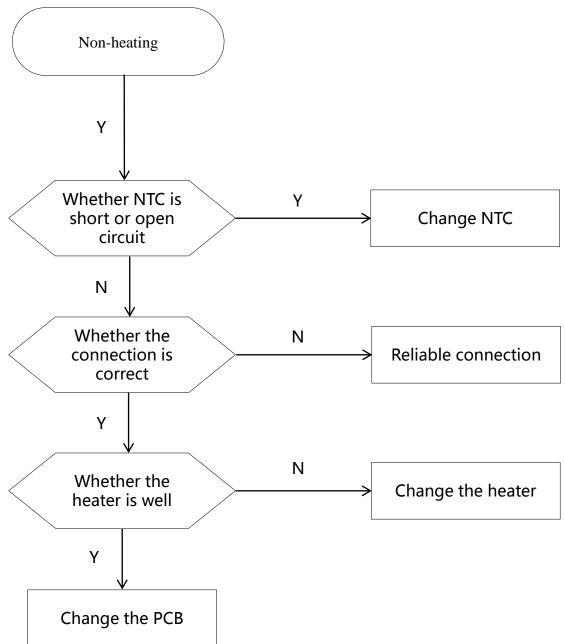
|     | In 3 minutes,<br>the water level<br>doesn't<br>change with<br>pump started | Drain hose                                   | If the washer won't drain water<br>check the drain hose. Be sure the<br>hose did not get kinked behind<br>the washer. Also, remove the<br>hose from the pump and check it<br>for obstructions.  |
|-----|--|--|---|
| E21 |  | pump   | If the washer won't drain water<br>the drain pump might be<br>defective. It's also common for a<br>small sock or other article of<br>clothing to get caught in the drain<br>pump or in the drain hose. Check<br>both for an obstruction before<br>replacing the pump. |
|     |  | РСВ  | Check the PCB   |
|     | Door can't be  | Door lock                                    | Check the door hook and the door lock to get correct location.  |
|     | unlocked with<br>over 3 time's<br>fail.                                    | РСВ  | If the washer door won't unlock<br>the problem might be the main<br>The PCB. This is not common.<br>Check the inner wire between the<br>PCB and the door lock.  |
| E33 | The PCB can not<br>detect the signal<br>of the water level<br>sensor.      | Water level sensor                           | Check the water level sensor<br>Check the PCB the inner<br>wire between PCB and the sensor  |
| E34 | Temperature<br>sensor fail   | The temperature<br>sensor(NTC) get<br>broken | Check the NTC   |
| E60 | The motor don't<br>drive   | The motor don't drive<br>for 5 times         | 1.Check the PCB and the motor<br>2.Check the motor communicate<br>wire  |

# 6. MALFUNCTION CODES AND EXPLANATIONS

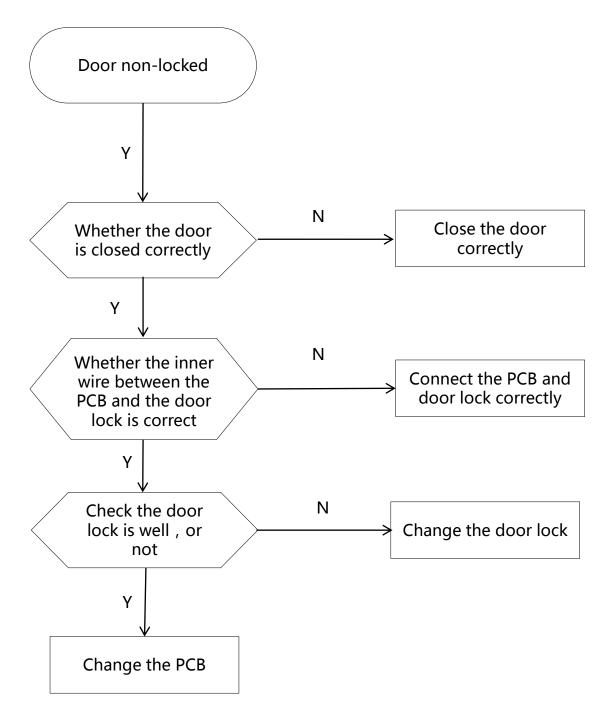
| E61 | The speed don't t transmit signal                    | The PCB can't get<br>speed transmit signal<br>when the motor drive | 1.Check the speed transmit line of<br>the motor to prevent fall of<br>2.Check the PCB and the motor<br>3.Check the motor communicate<br>wire |
|-----|--|--|--|
| E62 | The speed<br>don't transmit<br>signal<br>abnormality | Triac get broken   | 1.Check the speed transmit line<br>of the motor to prevent fall of<br>2.Check the PCB and the motor<br>3.Check the motor<br>communicate wire |

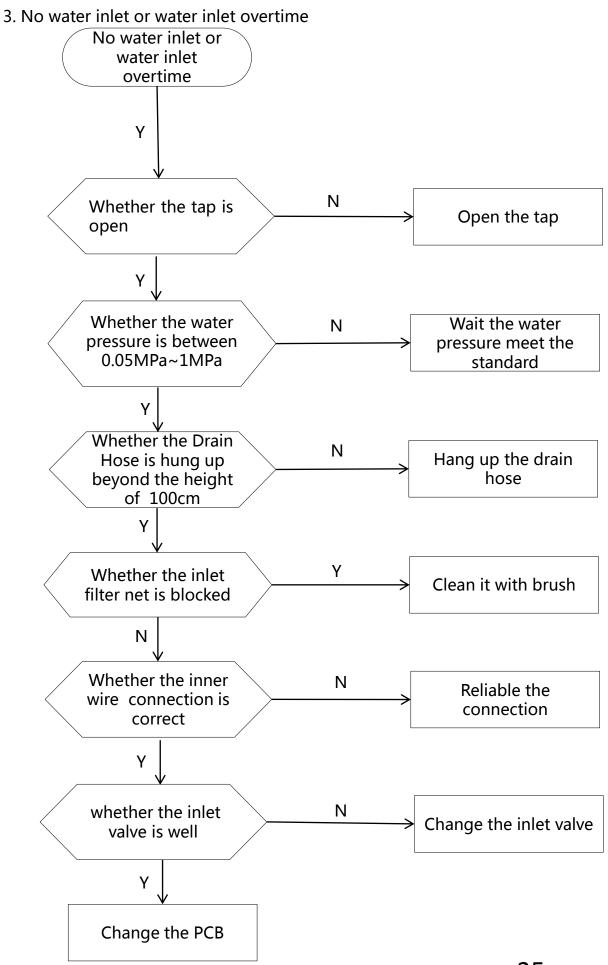
#### Fault tree

1. Maintenance non-heating malfunction

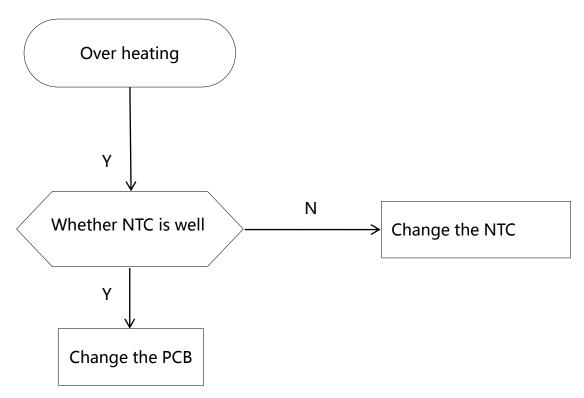


2. Door non-locked & its maintenance

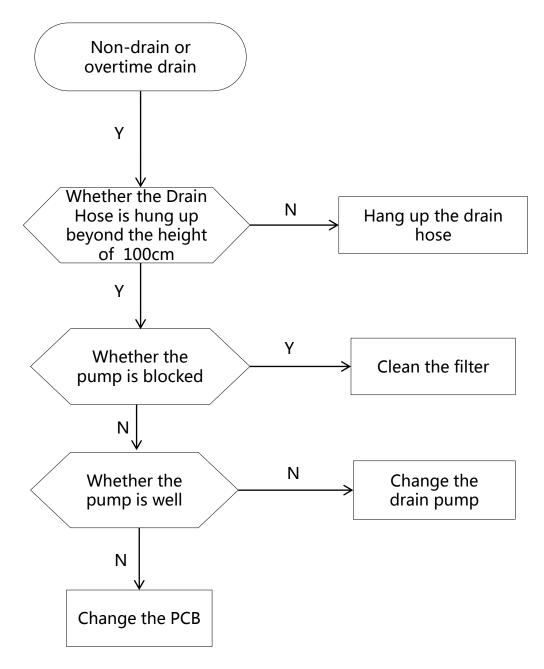




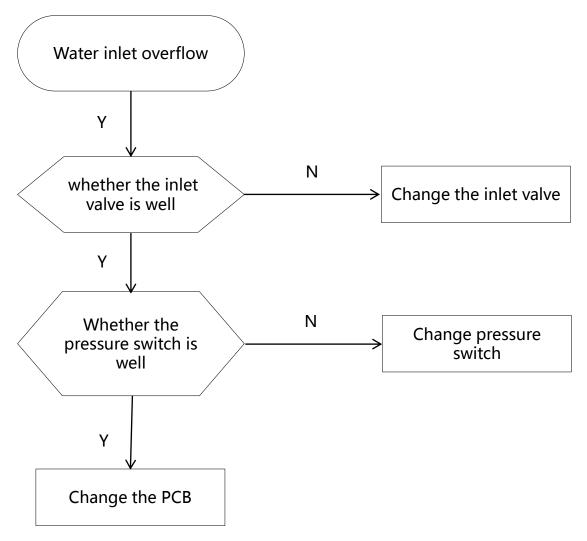
4. Over heating



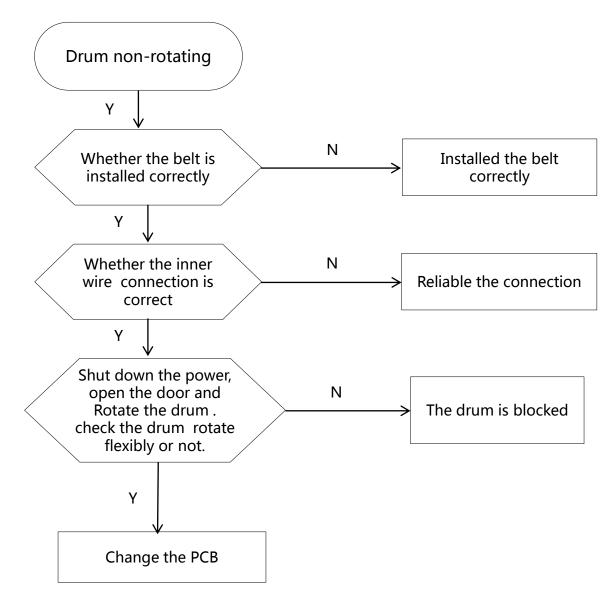
5. Maintenance of non-drain or drain exceed the setting time



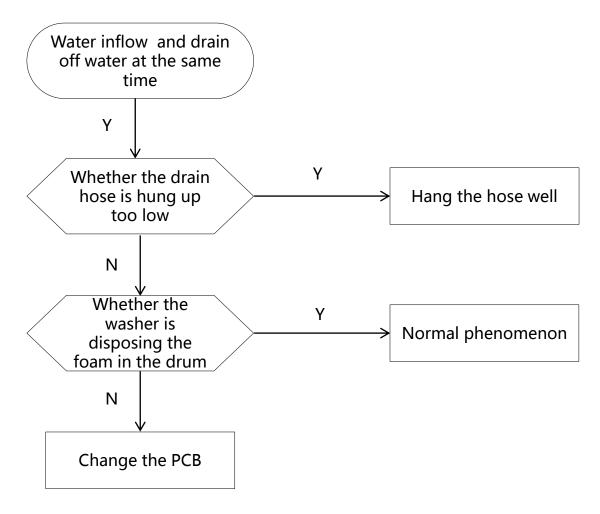
6. Water inlet overflow malfunction maintenance



7. Drum non-rotating malfunction maintenance



8. Maintenance water inflow and drain off water at the same time



#### Malfunction and solution

| Description   | Solution   |  |
|---|--|--|
| The washing machine does not work                             | Close the washing machine's door.  |  |
| Water leakage   | Correctly connect the inlet water pipe.  |  |
| The speed of the clothes is abnormal                          | Reload and distribute the laundry evenly in the drum.  |  |
| There is the peculiar smell in the washing machine            | Run a Self clean(Drum clean) cycle without any clothes.  |  |
| No water is visible in the drum                               | No fault-water is under the visible area.  |  |
| There is the remaining water in the softener's box            |  |  |
| The remaining detergent is left on the clothes                | The water-fast component of the non-phosphorus.<br>detergent will be left on the clothes to form the line scale.<br>Please select [rinse] or [ spin ] programme or brush<br>away the fleck with the brush when the clothes is dried.                                   |  |
| The washing machine<br>does not fill                          | Open the water tap.<br>Check the selection of the procedure.<br>Check the water.<br>Pressure to see if the water pressure is insufficient.<br>Put through the feed-water.<br>Close the washing machine's door.<br>To check it the inlet water pipe is bent or blocked. |  |
| The washing machine fills<br>and empties at the same<br>time. | Make sure the end of the drainage pipe to be higher.<br>Check if the drainage pipe and sewage have been sealed,<br>if they have been, there will be the poor ventilation to<br>cause the sip hon age effect.   |  |
| No drainage of the<br>washing machine                         | Check if the drainage pump is blocked.<br>Check if the drainage pipe is bent or blocked.<br>Check the height of the drainage nozzle, make sure it<br>is0.6-1 meter from the bottom of the washing machine.   |  |

| Vibration of the washing machine   | Level the washing machine.<br>Level the washing machine.<br>Fasten the footing.<br>To check if the internal packing for the transportation<br>have all been removed.   |  |
|--|--|--|
| The bubble spills from the detergent   | Check if the detergent is excessive, if it is the specialized<br>detergent for the cylinder washing machine.<br>Dip one scoop of the softener mixed with 1/2 liter of<br>water to the detergent box II.<br>Reduce the usage amount of the detergent in the next<br>time's wash.    |  |
| The machine stops when<br>the procedure has not<br>been finished                               | Power failure or water cut.  |  |
| The drainage pump has<br>noise during the<br>operation when the water<br>has just been drained | The inner barrel water of the washing machine has been<br>drained but there is still a small amount of water in the<br>drainage pump and pipe. The drainage pump<br>continuously operates and takes in the air, and at this time<br>there is the noise, which is normal situation. |  |
| To stop for some time<br>during the wash<br>procedure  | The washing machine adds water automatically.<br>Because there is too much bubble in the tube, the<br>washing machine is cleaning the bubble.  |  |

If you cannot solve the above abnormal situations, would you please:

1. To turn the procedure knob to [OFF], pull out the attachment plug;

2. To close the water tap, and contact the nearest service center.

Before repairing, use multimeter to judge circuit stand of fail (Universal Motor)

| No | Parts                    | Picture | Test Description   | Parameter   | Remarks |
|----|--------------------------|---------|--|---|---------|
| 1  | Water<br>Level<br>Switch |         | 1.Measuring two<br>straight line<br>terminals<br>2.Measuring two<br>vertical terminals | Break over after blow-<br>PASS  |         |
| 2  | Door<br>lock             |         | Electrify the<br>resistance  | 2 seconds after the<br>power supply can<br>automatically locked<br>1-2 mins after the<br>power off can<br>automatically locked-<br>PASS |         |
| 3  | Water<br>valve           | TT      | measuring<br>resistance  | Resistance value range<br>3-6KΩ- <mark>PASS</mark>  |         |
| 4  | Pump                     |         | Measure the<br>resistance of the<br>toroids  | Resistance value range<br>150-250Ω- <mark>PASS</mark>   |         |
| 5  | Heater                   |         | measuring<br>resistance  | Resistance value range<br>20-35Ω- <mark>PASS</mark>   |         |
| 6  | NTC                      | 3       | measuring<br>resistance  | Resistance value range<br>4.8kΩ±8%@25℃0-<br><mark>PASS</mark>   |         |
| 6  | Motor                    |         | Measure the<br>resistance of the<br>toroids  | Resistance value range<br>PIN5~PIN10<br>1.3±10%Ω-PASS   |         |

#### Before repairing, use multimeter to judge circuit stand of fail (Inverter Motor)

| No | Parts                    | Picture   | Test Description   | Parameter   | Remarks |
|----|--------------------------|---|--|---|---------|
| 1  | Water<br>Level<br>Switch | Here at the second se | 1.Measuring two<br>straight line<br>terminals<br>2.Measuring two<br>vertical terminals | Break over after blow-<br>PASS  |         |
| 2  | Door<br>lock             |   | Electrify the<br>resistance  | 2 seconds after the<br>power supply can<br>automatically locked<br>1-2 mins after the<br>power off can<br>automatically locked-<br>PASS |         |
| 3  | Water<br>valve           | Ħ   | measuring<br>resistance  | Resistance value range<br>3-6KΩ- <mark>PASS</mark>  |         |
| 4  | Pump                     |   | Measure the<br>resistance of the<br>toroids  | Resistance value range<br>150-250Ω- <mark>PASS</mark>   |         |
| 5  | Heater                   |   | measuring<br>resistance  | Resistance value range<br>20-35Ω- <mark>PASS</mark>   |         |
| 6  | NTC                      | 3   | measuring<br>resistance  | Resistance value range<br>4.8kΩ±8%@25℃0-<br><mark>PASS</mark>   |         |
| 6  | Motor                    |   | Measure the<br>resistance of the<br>toroids  | Resistance value range<br>PIN5~PIN10<br>1.3±10%Ω-PASS   |         |

- 1. Undo the back cover
- 2. Undo top cover
- 3. Undo the control panel and PCB4. Undo the door assembly

- 5. Undo the front plate
   6. Undo the detergent box
- 7. Undo the inlet valve
- 8. Undo the pressure switch

- 9. Undo the drain pump10. Undo the pulley and motor11. Undo the absorber pin from the cabinet
- 12.Undo the drum tub assembly
- 13. Undo the absorber pin from the drum
- 14.Undo the heater and NTC

| Operation  | Picture  |
|--|----------|
| <ol> <li>Undo the back cover<br/>Undo four screws fit<br/>between back plate and<br/>cabinet, and then pull out.</li> </ol>  |          |
| <ul> <li>2. Undo the top cover <ul> <li>I.Undo 2 screws fit back</li> <li>Cabinet.</li> <li>II.Push back the top cover</li> <li>15mm until it leaves away</li> <li>from the control panel,</li> <li>and then take it down.</li> </ul> </li> </ul>  |          |
| <ul> <li>3. Undo the control panel and PCB</li> <li>I.Departing the top cover II.Draw out the detergent drawer.</li> <li>III.Loosen two screws fit on the control panel .</li> <li>IV.Loosen two screws fit on the control panel.</li> <li>V.Take out the control Panel inclined from the panel .</li> <li>VI. Extract the cycle select knob</li> <li>VII.Pull out the wire and press the buckle to take out the PCB.</li> </ul> | <image/> |





## **9 UNPACKING WAYS OF MAIN PARTS**



## **9 UNPACKING WAYS OF MAIN PARTS**

# **11. Undo the absorber pin from the cabinet**

Use pliers to pinch the absorber pin's protuberance, and knock the absorber pin out from back lightly; in the same way, remove the other one





#### 12.Undo the drum tub assembly

Undo the upper and façade counterweight I.Remove 3 screws fit on the upper counterweight and then pull out it. II.Remove 6 screws pull out the facade counterweight. Undo the panel support Remove two screws fixing the panel support, and then remove it.





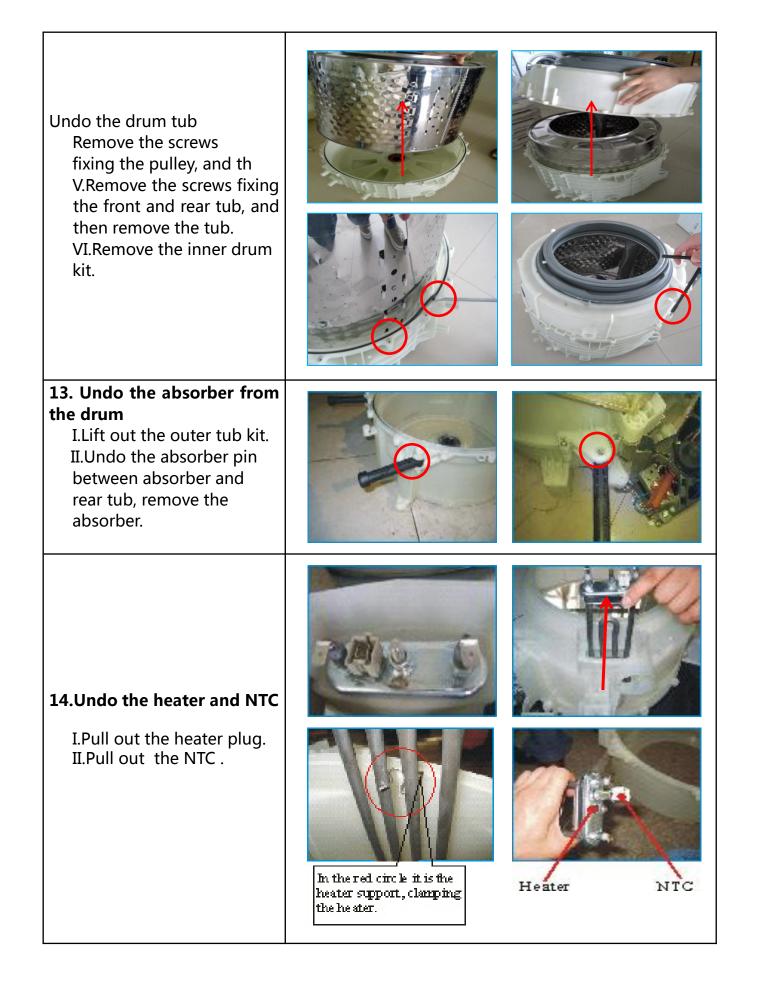








## **9 UNPACKING WAYS OF MAIN PARTS**



## **10 SERVICE TOOLS**



| Number | Tools                                      | Suitable kit                                     |  |  |
|--------|--|--|--|--|
| 1      |  | Heater 1   |  |  |
|        | Sleeve spanner                             | Motor 1 counterweight 5                          |  |  |
| •      |  | Drum tub assembly                                |  |  |
|        |  | Strap screw                                      |  |  |
| 2      | Spanner                                    | Adjust pulley screw leg and undo transport bolts |  |  |
| 3      | Pliers and pinchers                        | Assembling or auxiliary function                 |  |  |
| 4      | Other tools(screwdriver, pliers and so on) | Common service tools                             |  |  |

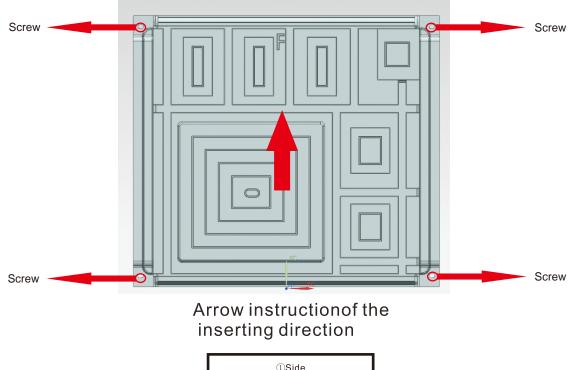
#### Installation Instruction of Rat Resistance Panel

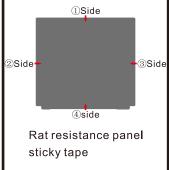
The rat resistance panel should be installed before disassembling the shipping bolt and the installation shall be done by at least two persons. **Pls follow below Steps to fix the bottom Panel;** 

- Incline machine in front direction to a suitable angle for installation. When inclining machine, make sure no damage to the machine body.
- 2. Remove the tape pasted on four sides of Panel.
- 3. Insert the rat resistance panel as per marked direction and to the correct position, you could find the UP mark on the panel.
- Paste the b ottom cover on the machine body and use the four screws fixing the panel. The screws are provided in the accessory bag.
- 5. Upright the machine to the correct position.

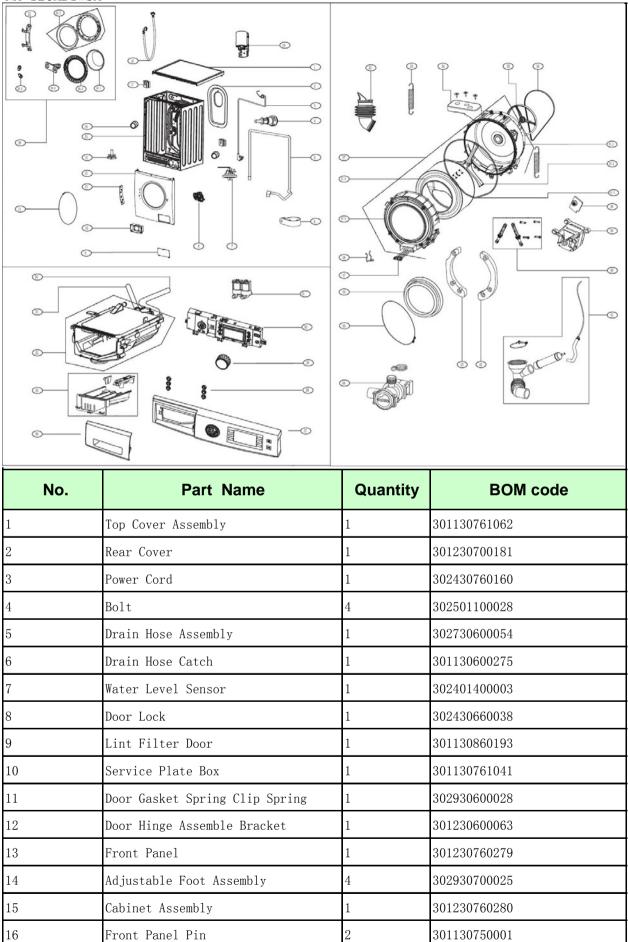








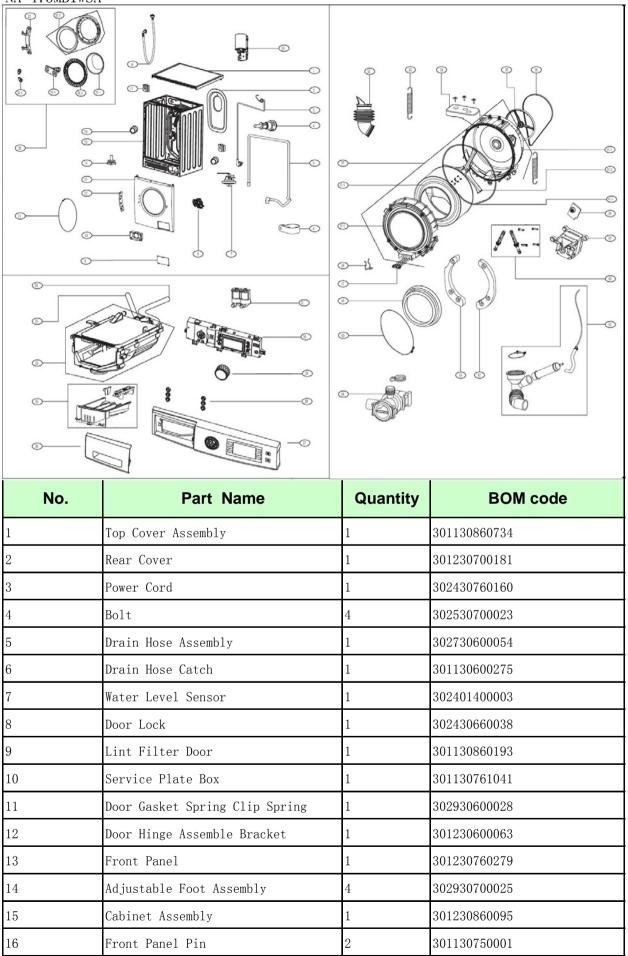
NA-126MB1WSA



| 17   |                               | 0 | 20112060027  |
|------|-------------------------------|---|--------------|
| 17   | Spring Support                | 2 | 301130600277 |
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 301130960018 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130761040 |
| 20.3 | Outer Frame Assembly          | 1 | 301130761039 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730700050 |
| 24   | Water Inlet Pipe              | 1 | 302730700051 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011306A1922 |
| 27   | Control Panel Assembly        | 1 | 3011307A2657 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | РСВ                           | 1 | 301330660293 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930600020 |
| 34   | Rear Conterweight             | 1 | 302930660011 |
| 35   | Pulley                        | 1 | 302930660018 |
| 36   | Belt                          | 1 | 302730600010 |
| 37.1 | Rear Tub Assembly             | 1 | 3011307A6576 |
| 37.2 | Spider Assembly               | 1 | 302930660016 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230700183 |
| 37.5 | Front Tub Assembly            | 1 | 301130761057 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660056 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730500049 |
| 42   | Front Right Counterweight     | 1 | 302930700059 |

| 43 | Front Left Counterweight | 1 | 302930700060 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302400610004 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |

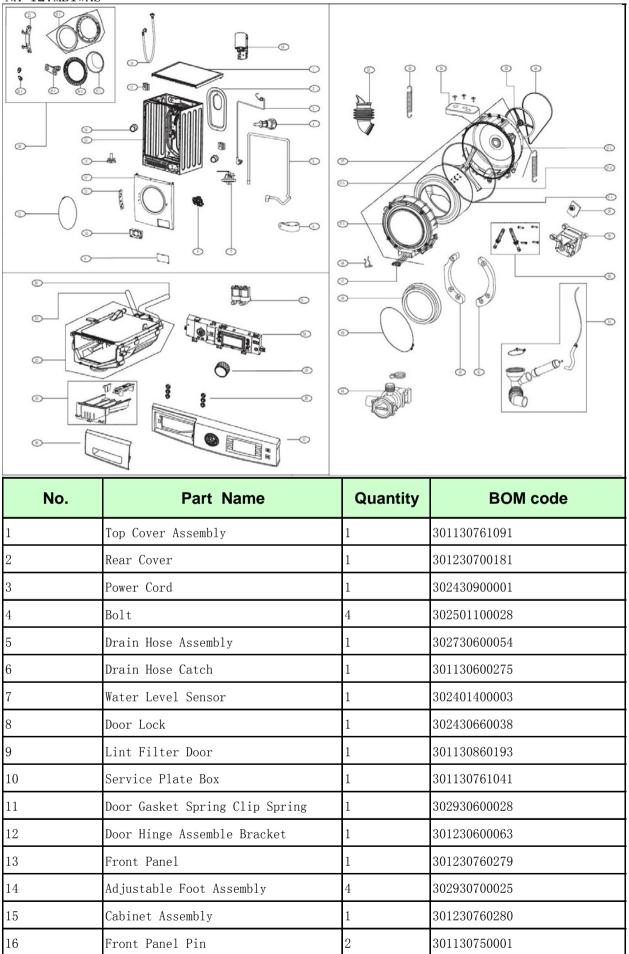
NA-475MB1WSA



| 17   | Service Current               | 0 | 20112060027  |
|------|-------------------------------|---|--------------|
| 17   | Spring Support                | 2 | 301130600277 |
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 301130960018 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130761040 |
| 20.3 | Outer Frame Assembly          | 1 | 301130761039 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730800021 |
| 24   | Water Inlet Pipe              | 1 | 302730700054 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011307A2659 |
| 27   | Control Panel Assembly        | 1 | 3011307A2657 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | РСВ                           | 1 | 301330760344 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930760023 |
| 34   | Rear Conterweight             | 1 | 302930760012 |
| 35   | Pulley                        | 1 | 302930800032 |
| 36   | Belt                          | 1 | 302730660008 |
| 37.1 | Rear Tub Assembly             | 1 | 3011308A6577 |
| 37.2 | Spider Assembly               | 1 | 302930860020 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230800152 |
| 37.5 | Front Tub Assembly            | 1 | 301130860252 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660056 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730760009 |
| 42   | Front Right Counterweight     | 1 | 302930760020 |

| 43 | Front Left Counterweight | 1 | 302930760021 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302400610004 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |

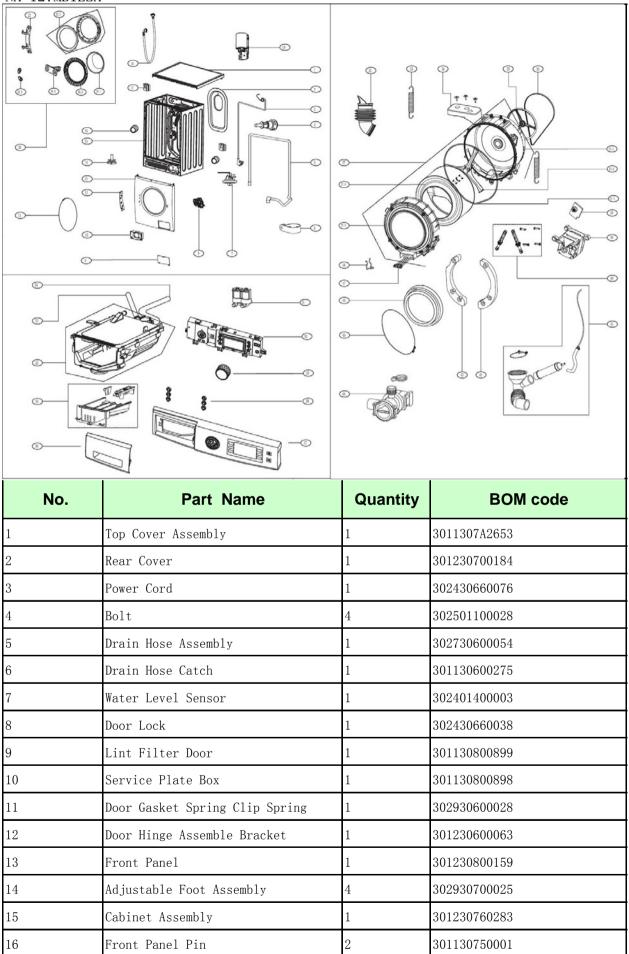
NA-127MB1WAS



| 17   | Spring Support                | 2 | 301130600277 |
|------|-------------------------------|---|--------------|
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 301130960018 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130761040 |
| 20.3 | Outer Frame Assembly          | 1 | 301130761039 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730700050 |
| 24   | Water Inlet Pipe              | 1 | 302730700051 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011307A2656 |
| 27   | Control Panel Assembly        | 1 | 3011307A2657 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | PCB                           | 1 | 301330760339 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930600020 |
| 34   | Rear Conterweight             | 1 | 302930660011 |
| 35   | Pulley                        | 1 | 302930660018 |
| 36   | Belt                          | 1 | 302730600010 |
| 37.1 | Rear Tub Assembly             | 1 | 3011307A6576 |
| 37.2 | Spider Assembly               | 1 | 302930660016 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230700183 |
| 37.5 | Front Tub Assembly            | 1 | 301130761057 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660044 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730500049 |
| 42   | Front Right Counterweight     | 1 | 302930700059 |

| 43 | Front Left Counterweight | 1 | 302930700060 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302430660003 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |

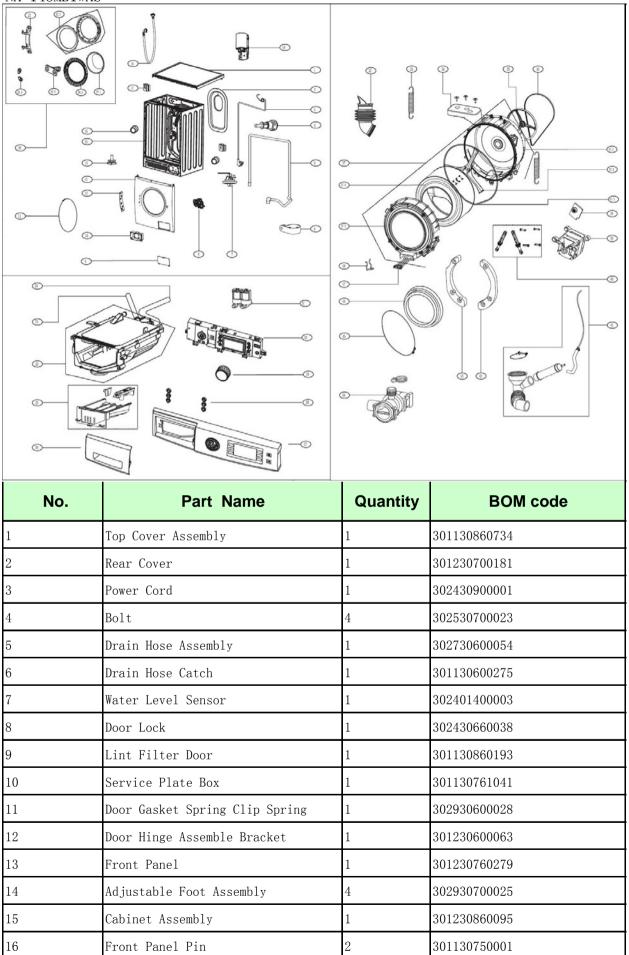
NA-127MB1LZA



| 1.7  |                               | 0 | 001100000075 |
|------|-------------------------------|---|--------------|
| 17   | Spring Support                | 2 | 301130600277 |
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 3011308A1746 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130800930 |
| 20.3 | Outer Frame Assembly          | 1 | 3011308A1749 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730700050 |
| 24   | Water Inlet Pipe              | 1 | 302730700051 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011307A2662 |
| 27   | Control Panel Assembly        | 1 | 3011307A2660 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | PCB                           | 1 | 301330760337 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930600020 |
| 34   | Rear Conterweight             | 1 | 302930660011 |
| 35   | Pulley                        | 1 | 302930660018 |
| 36   | Belt                          | 1 | 302730600010 |
| 37.1 | Rear Tub Assembly             | 1 | 3011307A6576 |
| 37.2 | Spider Assembly               | 1 | 302930660016 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230700183 |
| 37.5 | Front Tub Assembly            | 1 | 301130761057 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660044 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730500049 |
| 42   | Front Right Counterweight     | 1 | 302930700059 |

| 43 | Front Left Counterweight | 1 | 302930700060 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302430660003 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |

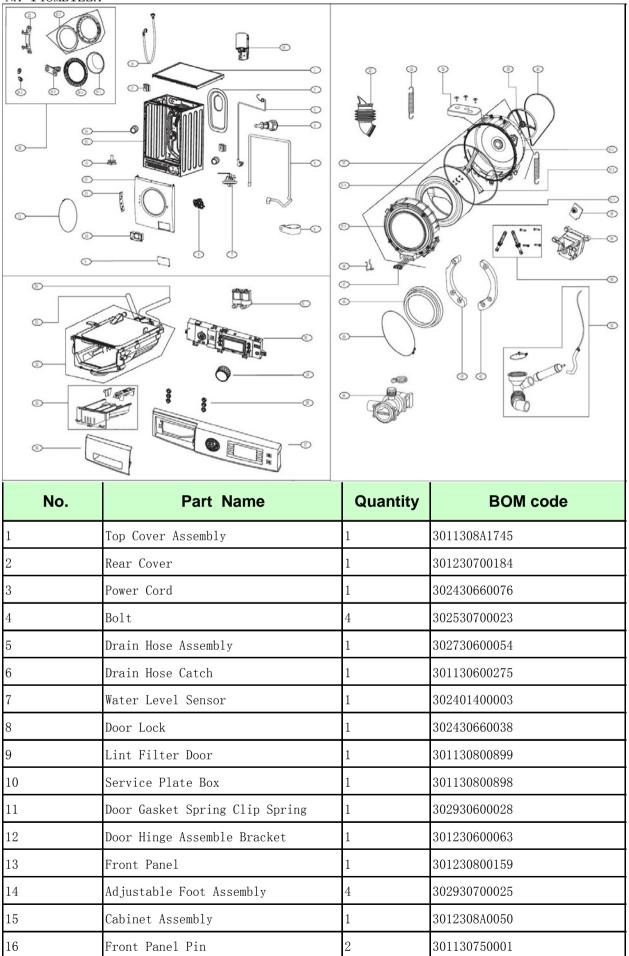
NA-148MB1WAS



| 17   | Spring Support                | 2 | 301130600277 |
|------|-------------------------------|---|--------------|
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 301130960018 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130761040 |
| 20.3 | Outer Frame Assembly          | 1 | 301130761039 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730800021 |
| 24   | Water Inlet Pipe              | 1 | 302730700054 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011308A1753 |
| 27   | Control Panel Assembly        | 1 | 3011307A2657 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | PCB                           | 1 | 301330860100 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930760023 |
| 34   | Rear Conterweight             | 1 | 302930760012 |
| 35   | Pulley                        | 1 | 302930800032 |
| 36   | Belt                          | 1 | 302730660008 |
| 37.1 | Rear Tub Assembly             | 1 | 3011308A6577 |
| 37.2 | Spider Assembly               | 1 | 302930860020 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230800152 |
| 37.5 | Front Tub Assembly            | 1 | 301130860252 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660002 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730760009 |
| 42   | Front Right Counterweight     | 1 | 302930760020 |

| 43 | Front Left Counterweight | 1 | 302930760021 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302430660003 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |

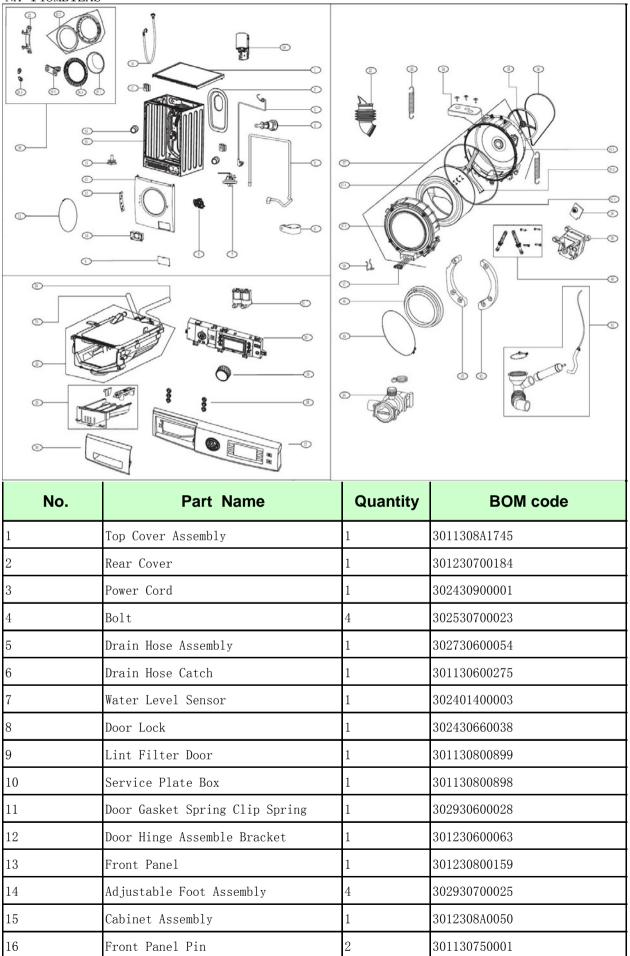
NA-148MB1LZA



| 17   | Spring Support                | 2 | 301130600277 |
|------|-------------------------------|---|--------------|
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 3011308A1746 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130800930 |
| 20.3 | Outer Frame Assembly          | 1 | 3011308A1749 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730800021 |
| 24   | Water Inlet Pipe              | 1 | 302730700054 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011308A1754 |
| 27   | Control Panel Assembly        | 1 | 3011307A2660 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | PCB                           | 1 | 301330860086 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930760023 |
| 34   | Rear Conterweight             | 1 | 302930760012 |
| 35   | Pulley                        | 1 | 302930800032 |
| 36   | Belt                          | 1 | 302730660008 |
| 37.1 | Rear Tub Assembly             | 1 | 3011308A6577 |
| 37.2 | Spider Assembly               | 1 | 302930860020 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230800152 |
| 37.5 | Front Tub Assembly            | 1 | 301130860252 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660002 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730760009 |
| 42   | Front Right Counterweight     | 1 | 302930760020 |

| 43 | Front Left Counterweight | 1 | 302930760021 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302430660003 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |

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| 17   | Spring Support                | 2 | 301130600277 |
|------|-------------------------------|---|--------------|
| 18   | Water Inlet Hose Assembly     | 1 | 301130660043 |
| 19   | Electric Filter               | 1 | 302430660070 |
| 20   | Door Subassembly              | 1 | 3011307A2442 |
| 20.1 | Door Glass                    | 1 | 303630960001 |
| 20.2 | Inner Ring                    | 1 | 301130761040 |
| 20.3 | Outer Frame Assembly          | 1 | 3011307A2443 |
| 20.4 | Door Plunger                  | 1 | 302930600035 |
| 20.5 | Door Hinge Pin Cover          | 2 | 301130800139 |
| 21   | Hinge Assembly                | 1 | 302930800033 |
| 22   | Detergent Box Assembly        | 1 | 301130700634 |
| 23   | Water Inlet Pipe              | 1 | 302730800021 |
| 24   | Water Inlet Pipe              | 1 | 302730700054 |
| 25   | Drawer Assembly               | 1 | 301130800932 |
| 26   | Drawer Handle And Printing    | 1 | 3011308A1754 |
| 27   | Control Panel Assembly        | 1 | 3011308A1755 |
| 28   | Silicone Button               | 2 | 302760860002 |
| 29   | Cycle Select Knob Assembly    | 1 | 301130800828 |
| 30   | PCB                           | 1 | 301330860086 |
| 31   | Water Inlet Valve             | 1 | 302419950012 |
| 32   | Tub Water Inlet Hose Assembly | 1 | 302730800019 |
| 33   | Suspension Spring             | 2 | 302930760023 |
| 34   | Rear Conterweight             | 1 | 302930760012 |
| 35   | Pulley                        | 1 | 302930800032 |
| 36   | Belt                          | 1 | 302730660008 |
| 37.1 | Rear Tub Assembly             | 1 | 3011308A6577 |
| 37.2 | Spider Assembly               | 1 | 302930860020 |
| 37.3 | Tub Seal                      | 1 | 302730600028 |
| 37.4 | Basket Assembly               | 1 | 301230800152 |
| 37.5 | Front Tub Assembly            | 1 | 301130860252 |
| 38   | Motor Bracket                 | 1 | 302930600013 |
| 39   | Motor                         | 1 | 302430660002 |
| 40   | Damper                        | 2 | 302502300005 |
| 41   | Tub Drain Hose Assembly       | 1 | 302730760009 |
| 42   | Front Right Counterweight     | 1 | 302930760020 |

| 43 | Front Left Counterweight | 1 | 302930760021 |
|----|--------------------------|---|--------------|
| 44 | Drain Pump               | 1 | 302430660003 |
| 45 | Door Gasket Clamp        | 1 | 302930600029 |
| 46 | Door Gasket              | 1 | 302730960001 |
| 47 | Heater                   | 1 | 302430660045 |
| 48 | Heater Support           | 1 | 301130600163 |