

Haier

SERVICE MANUAL

Order NO. TL1003S001V0

Automatic Washing Machine

Model Number GWT450AW



WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could

© 2010 Haier Washing Machine

All rights reserved. Unauthorized copying and distribution is a violation of law.

Haier Group

Chapter 1 : General Information

1-1. Table of Contents

Chapter 1. General Information	2
1-1. Table of Contents	2
1-2. General Guidelines	3
1-3. Caution and Warning symbols	3
1-4. Function indication symbols	3
Chapter 2. Product Feature	4
2-1. Features	4
2-2. Specification	5
Chapter 3. Safety Precautions	6
3-1. Safety	6
3-2. Warning and cautions	7
3-3. Net dimension	8
Chapter 4. Installation and accessory parts	8
4-1. Key points in installation	8
4-2. Adjustment of the installation position	8
4-3. Install the drain hose	9
4-4. Usage of the drain hose	9
4-5. Connect the water inlet hoses	9
Chapter 5. Parts and functions	11
Chapter 6. Operating Instruction	12
Chapter 7. Maintenance service and trouble shooting	13
7-1. Trouble-shooting charts	13
7-1-1. No action(The indicator is off)	13
7-1-2. No draining	14
7-1-3. Keep filling water	14
7-1-4. No spinning	15
7-1-5. Too much noise in spinning	15
7-1-6. Too much noise in washing	15
7-2. Trouble alarm and solve method	16
7-3. Common phenomena	16
Chapter 8. Wiring diagram	17

1-2. General Guidelines

When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed. Confirm that the screws parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the service places serviced or not. And be sure safety of that

1-3. Caution and Warning symbols

(You will see them in "Matters needing attention")



Any instructions in this service manual with this "Warning" sign must be followed strictly.



To prevent damage to the washing machine, any instructions in this service manual with this "Stop" sign must be followed strictly.

1-4. Function indication symbols

(You will see them in the specification table)



Signify the washing machine has this function.



Signify the washing machine doesn't have this function.

Chapter 2. Product Feature

2-1. Features

- Shift washing, shift spinning
- Cold & warm water inlet selection
- Drain up function
- Cabinet with the door open in the front:
- Super capacity for more clothes
- Pulsator type for wash efficiency, twist free and low wear

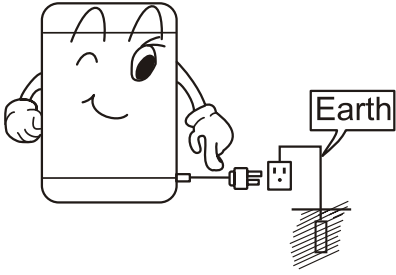



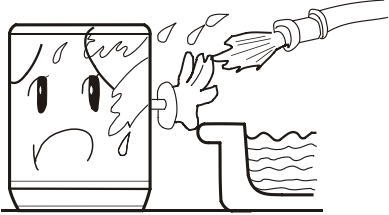






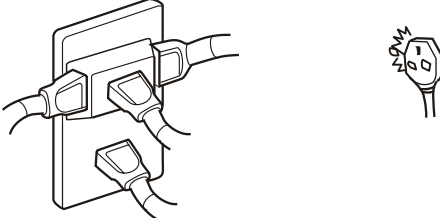

2-2. Specification

Model		GWT450AW
Free standing		√
Built under		x
EAN code		---
Energy efficiency class		-
Technical data		
Wash capacity	Cu.Ft.	3.6
Spin capacity	Cu.Ft.	3.6
Level/Volume	L	
Residual dampness	%	115%
Voltage/frequency	V/Hz	120V/60Hz
Energy consumption	kWh	
Water consumption	L	
Wash power	W	500
Spin power	W	380
Voice power of washing	dB	62
Voice power of spinning	dB	72
Net weight	kg	about59
Gross weight	kg	about71
Control model		
Timer		x
contraller		x
Normal computerized		×
Fuzzy computerized		√
Frequency conversion		√
Service features		
Programs		7
Short cycle		√
Inlet heating select		×
washing and rinse water temperature selection		√
Spinning cycle (selector)		√
Spinning cycle (variable)		√
Start/Pause		√
Preset	H	2~24
Automatic balancing		√
Aesthetics(V.L.H.S.H.T)		-
Cabinet material (P=Plastic/Z=Zincking/C=Cold)		Z
Inner drum (stainl. steel=s / plastic=p)		S
Drain type (U=drain up D=drain down)		Drain up
Door (glass=g / plastic=p)		×
Adjustable feet		√
Special function		
inner cycle		×
Feet wheel		x
Double driver		√
Two-in-one with rinse and spin		√
Disinfect		×
Dimensions (measurements)		
Height / built under	mm	1105
Width	mm	686
Depth / with open door	mm	686
Dimensions packed (measurements packed)		
Height	mm	1140
Width	mm	752
Depth	mm	752
20'Container load	Sets	21
40'Container load	Sets	45
40H'Container load	Sets	90

NOTE: "√" FOR AVAILABLE, "x" FOR NOT AVAILABLE "-"FOR NOT AVAILABLE, "-"FOR BE APPLICABLE,"V"FOR SQUIRE HIGH HEAD,"H"FOR HAIF HIGH HEAD,"L"FOR SQUIRE FLAT HEAD,"S"FOR ARC HIGH HEAD,"F"FOR ARC FLAT HEAD,"T"FOR TRANSPARENT VIEW WINDOW.

Chapter 3. Safety Precautions

3-1. Safety

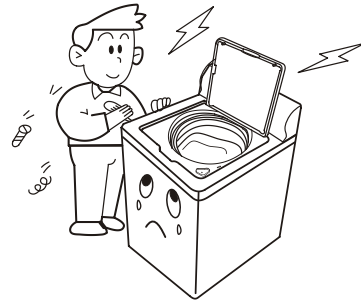
<p>Be sure to earth the earthing wire reliably.</p>  	<p>The power cord plug should be convenient to be plugged in or plugged out with hand while the washing machine runs normally. Be sure to pull the plug out and close the water tap when the machine is idle, when moving the machine, or when cleaning the machine. Do not use wet hand to insert or pull out the power plug.</p> 
<p>If the power cord is bad, to avoid risk it is required to replace it by the technicians of our special shop or the after-sale service department. Keep the pin of the power plug clean.</p> 	
<p>Do not put the machine at damp place like the bathroom. Never wash it with water.</p>  	<p>Do not install or store the washer where it will be exposed to the weather.</p>  
<p>Do not let the machine share one receptacle with other electric appliances. If the power plug is damaged, or the plugging into the receptacle is loose, do not use the plug any more.</p> 	<p>Do not wash water-proof laundries such as the raincoat, bicycle shelter etc. To avoid abnormal vibration during spinning.</p>  
<p>Do not share one receptacle with other electric appliances. Do not use it in case that the power plug is damaged or the inserting into the receptacle is loose.</p>	 

3-2. Warning and cautions

Do not stretch hands into the working machine. It is dangerous even if the rotation is slow. Take special care of the children.



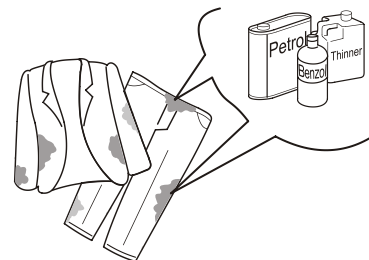
Do not decompose, repair or alter the machine by yourself.



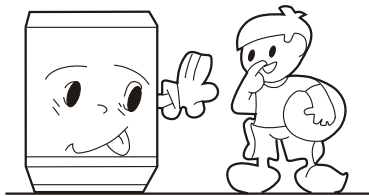
Do not put any hot or heavy items (such as the kettle with hot water) on the washing machine.



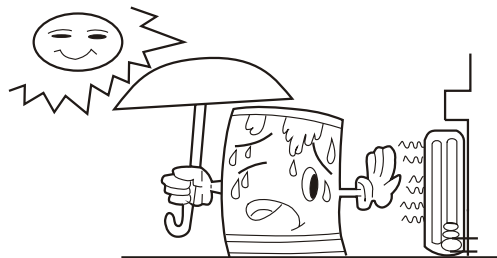
Do not wash articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, dry-cleaning solvents, other flammable, or explosive substances as they give off vapors that could ignite or explode. Do not add gasoline, dry-cleaning solvents, or other flammable, or explosive substances to the wash water. These substances give off vapors that could ignite or explode.



The handicapped or children without care shall not use the machine.



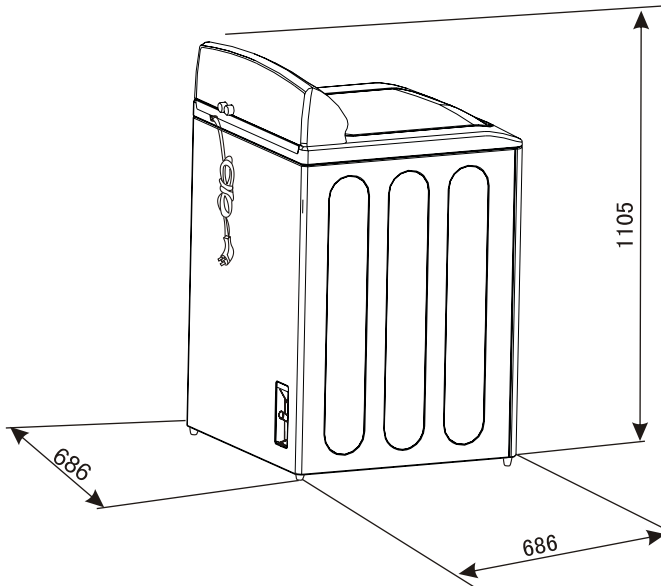
Keep the machine away from direct sunlight and heat source like the heater.



Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for 2 weeks or more. **HYDROGEN GAS IS EXPLOSIVE.** If the hot water has not been used for such a period, before using the washing machine, turn on all hot faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. As the gas is flammable, do not smoke or use an open flame during this time.



3-3. Net dimension



Unit (mm)

Chapter 4. Installation and accessory parts

4-1. Key points in installation

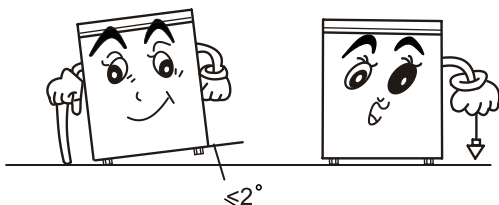
Please install and adjust the machine according to the requirement of the manual. It is very important to your security and correct operating the machine.

4-2. Adjustment of the installation position

The largest allowed slope of the shank base of the machine is 2° . The slanting or rough ground will result in unstable running or stoppage of the machine. Please adjust it with following methods:

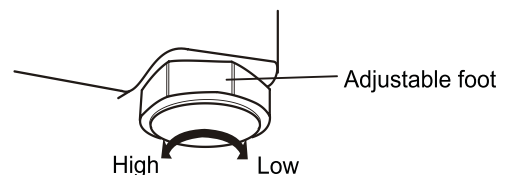
- Confirm it's horizontal

Hang the plumb to confirm it's horizontal.



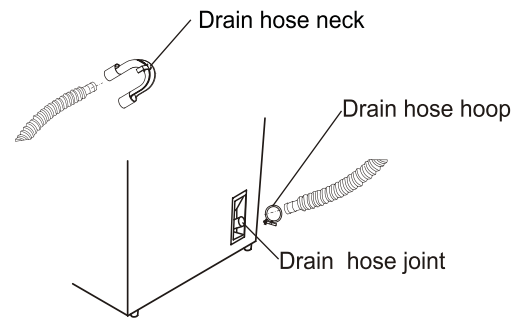
- Adjust the adjustable feet

- 1) To twist the adjustable foot, please first lift up the side of the foot slightly, and twist the foot.
- 2) Fasten the nut after adjustment.



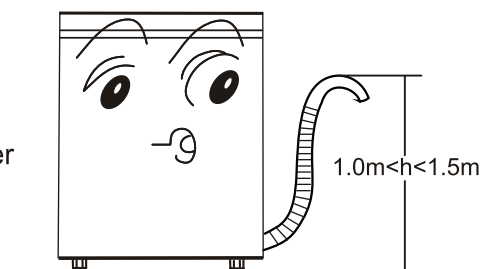
4-3. Install the drain hose

- First install the drain hose hook on the parts of outer drain hose component.
- Put the drain hose clamp on the outer drain hose, insert the outer drain hose into the joint for it, and then clutch tightly with drain hose hoop.



4-4. Usage of the drain hose

- Hang the outer drain hose on the proper place before washing(do not use it toppled down on the ground).
- Attend that the outlet of drain hose shall be higher than the water level in washtub to avoid siphon phenomenon.

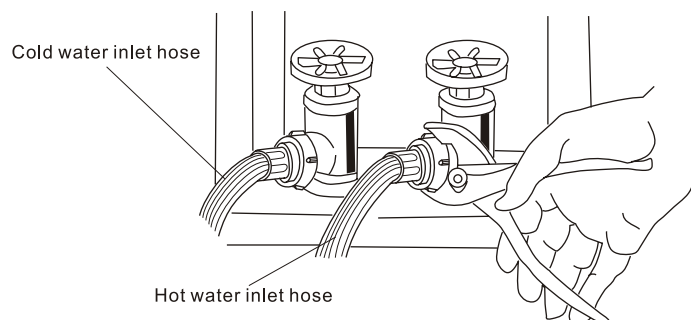


4-5. Connect the water inlet hoses

1. Do not use water inlet hoses without a flat washer on each end. The washer in the coupling has to be placed firmly. Flat water inlet hose washers are preinstalled in each end of the water inlet hoses. New hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.



NOTE: You may have to use pliers to tighten the coupling. Do not over tighten because you may cause damage to the valve.



2. Run water through both faucets and inlet hoses, into a bucket or laundry tub, to get rid of particles in the water lines that might clog the inlet valves screens.
3. Attach the hose connected with hot water faucet to the HOT water inlet valve(sign with "H"). Attach the hose connected with cold water faucet to the COLD water valve(sign with **C**). (As figure 2)

NOTE: Do not over-tighten.

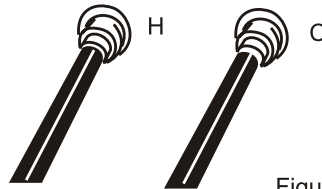
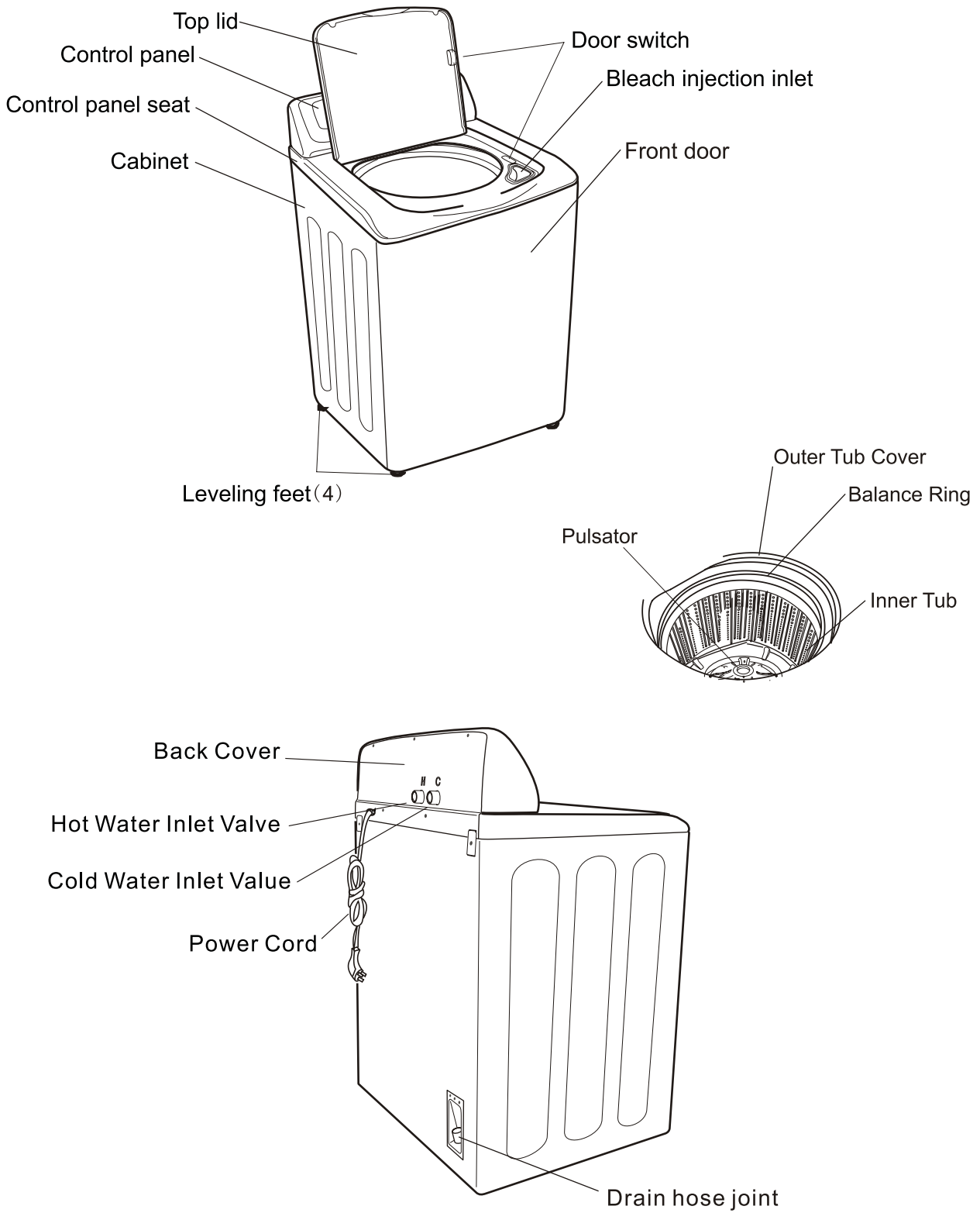


Figure 2

4. Check for leaks
 - (1). Swing the water inlet hose gently to confirm if it is suitable.
 - (2). Turn on the water faucets and check for leaks. A small amount of water might enter the washers. You will drain this later.

Chapter 5. Parts and functions



Chapter 6. Operating Instruction



Temperature Wash / Rinse (1)

- To select inlet water temperature for wash and rinse. Selection here may vary per the cycle chosen. All selections are not available in all cycles.

Select (2)

Here in certain cycles the wash process could be changed per your needs. This also shows the cycle process of the wash load.

Cycles (3)

- Heavy Duty - Use this cycle for heavily soiled durable garments. Also this cycle could be used for towels, sports gear, childrens clothes, etc.
- Normal - Use this cycle for normally soiled cottons and mixed fabric loads.
- Whites - Use this cycle for white and light colored clothing.
- Colors - Use this cycle for lightly soiled, dark or highly dyed natural fabrics such as cotton that may be susceptible to dye loss.
- Bulky - Use this cycle to wash large items such as comforters, sleeping bags and blankets
- Delicate - Use this cycle to wash lightly soiled garments and delicate clothes that need gentle washing.
- Quick - Use this cycle to wash small, lightly soiled loads that are needed in a hurry.

Load Size (Water Level) (4)

- Load size may be set at the beginning of the wash or in pause mode.
- During Prewash, Wash or Rinse, press this button to manually replenish water. Release for the water to stop. Function automatically is inactive when water reaches the overflow protection level.

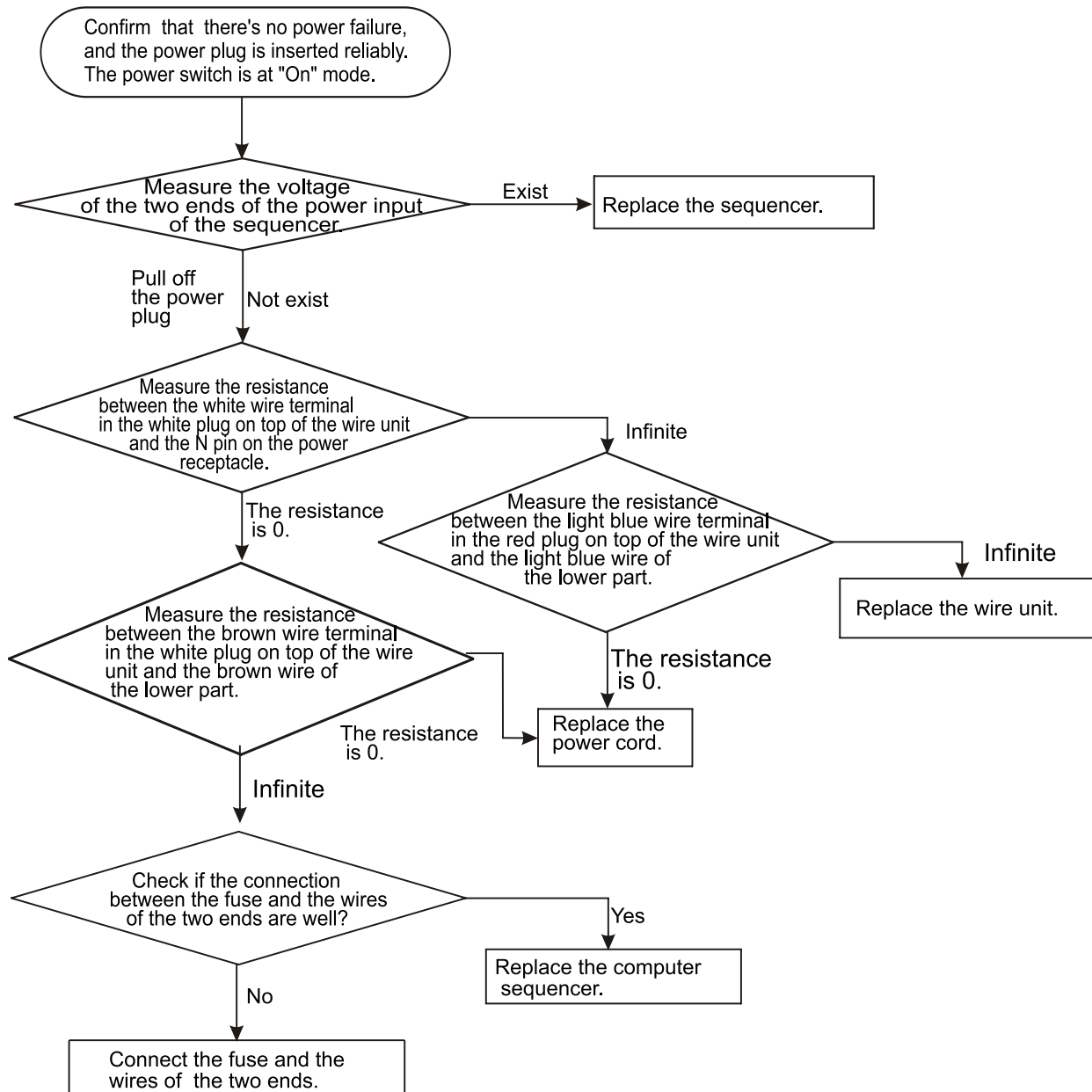
Preset Cycle Settings		
Cycles	Time (In Minutes)	Wash/Rinse Temperature
Heavy Duty	65	Hot/Cold
Normal	44	Warm/Cold
Whites	83	Hot/Cold
Colors	36	Cold/Cold
Bulky	35	Warm/Cold
Delicates	37	Warm/Cold
Quick	32	Warm/Cold

Chapter 7. Maintenance service and trouble shooting

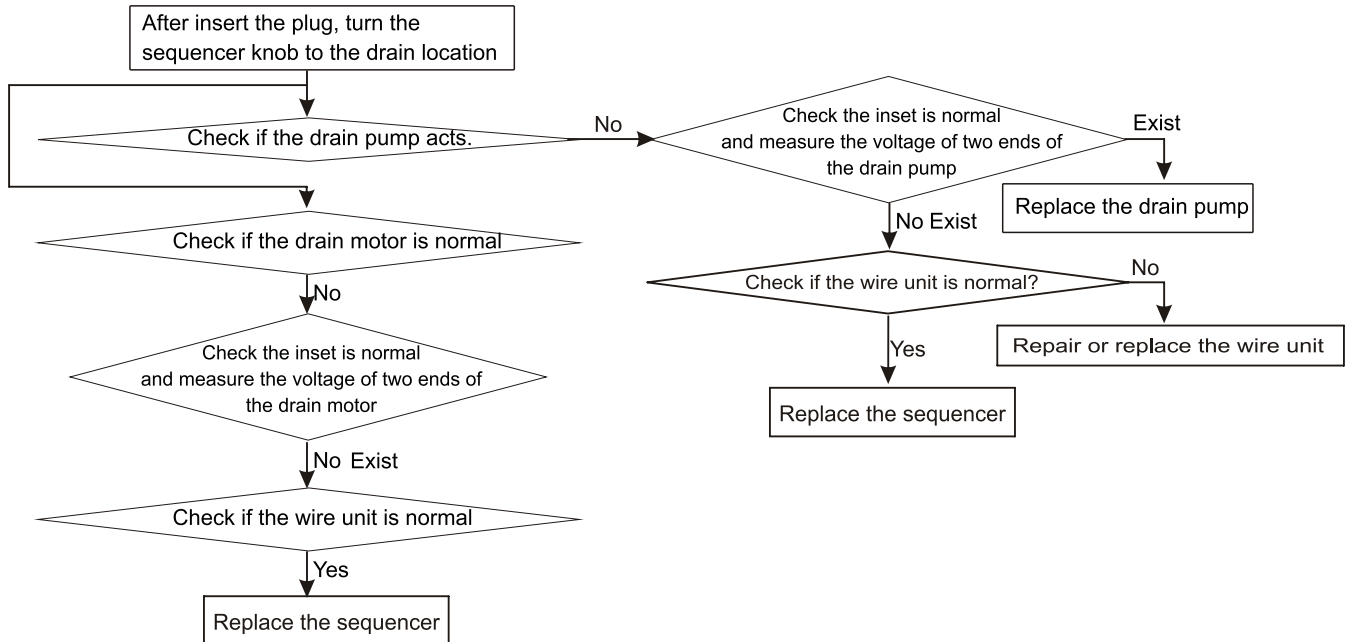
7-1. Trouble-shooting charts

If you replace the computer sequencer without checking the other components carefully, the computer sequencer may be damaged again. Therefore, please first check if the other components working normally before replacing the sequencer in maintenance.

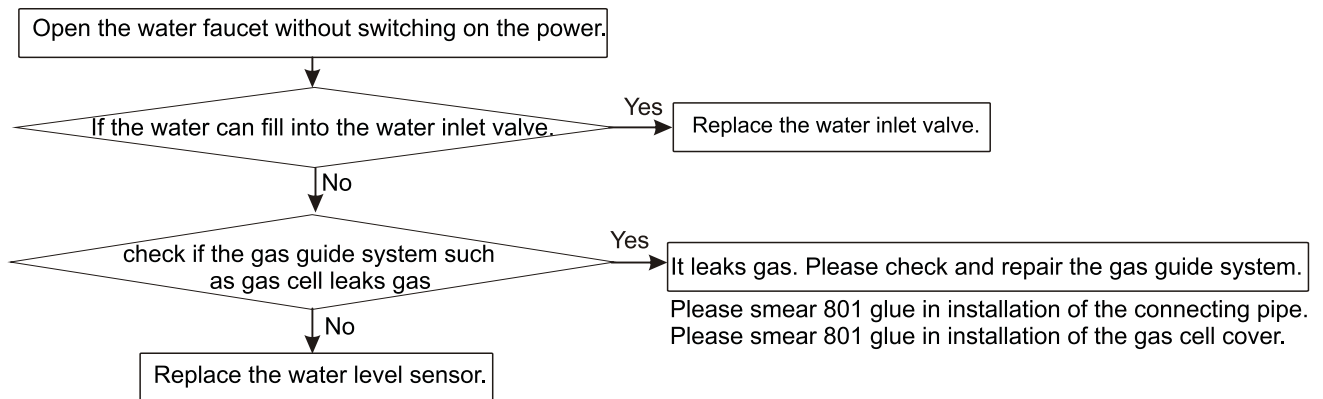
7-1-1. No action(The indicator is off)



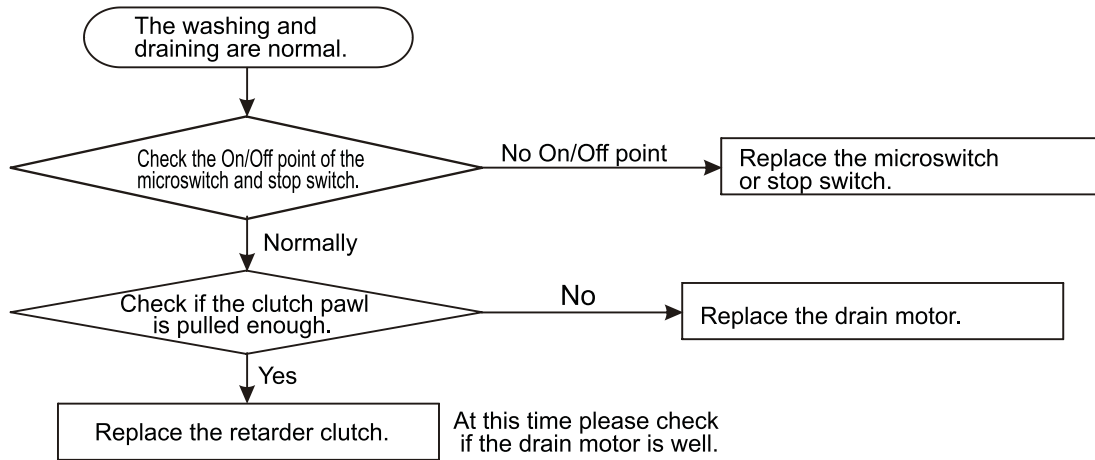
7-1-2. No draining



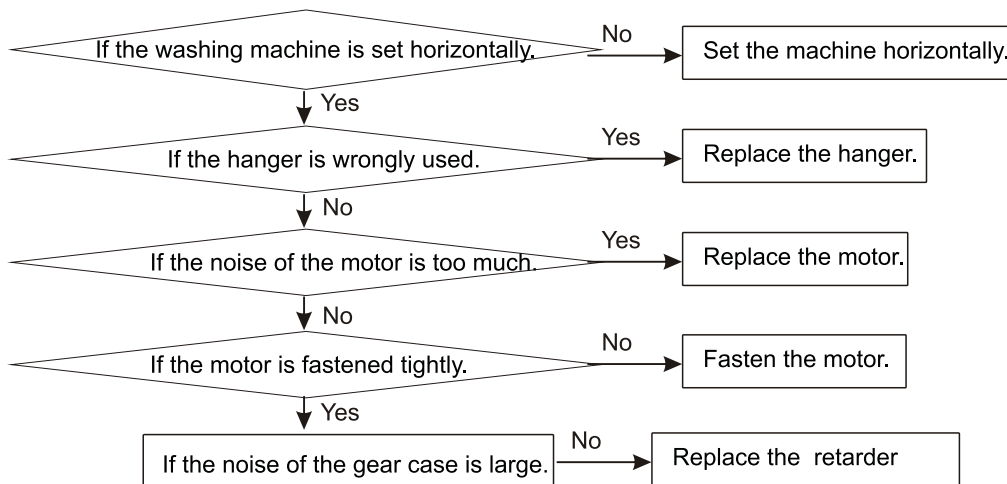
7-1-3. Keep filling water



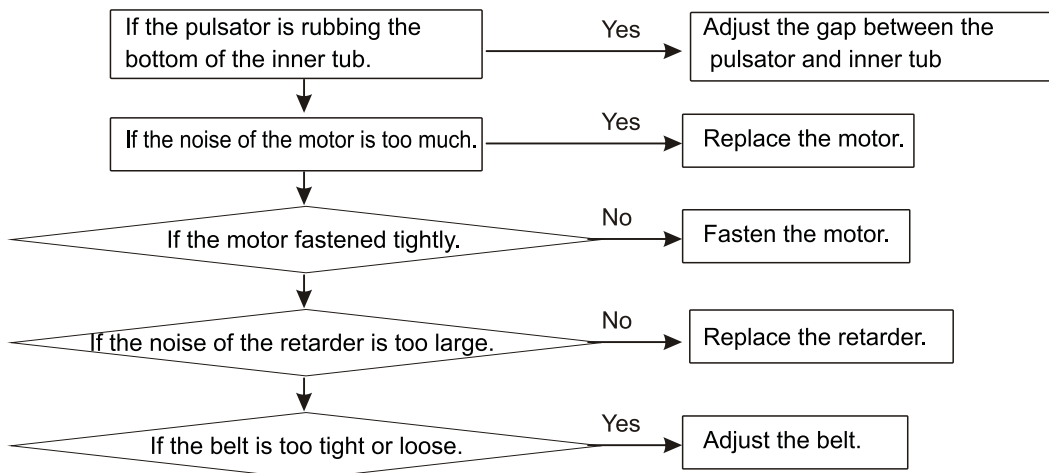
7-1-4. No spinning



7-1-5. Too much noise in spinning



7-1-6. Too much noise in washing



7-2. Trouble alarm and solve method

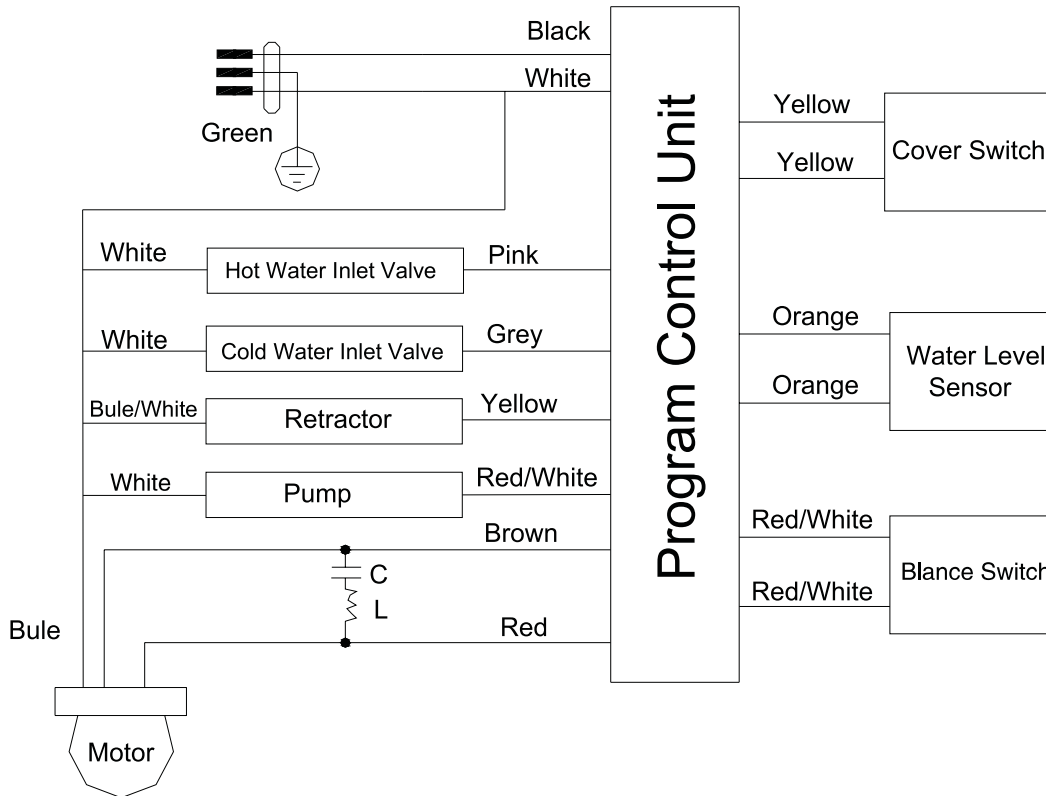
Phenomenan	The reason	How to settle
No water filling or filling slowly (the suitable water level doesn't research about 40 minutes) .All load size (water level) indicators flash	The top lid is not closed.	Open and close the top lid once.
The draining does not work, or the speed of draining is too slow (the suitable water level doesn't research about 16 minutes) .Rinse and Spin indicators flash.	The top lid is not closed.	Open and close the top lid once.
The machine stops running In washing ,rinsing or spinning.	The top lid is not closed.	Close the top lid.
The spinning can not work (after amending twice automatically) All Select indicators flash	Are the laundries put slantingly? Is the machine slanting?	Level the machine in right position. Open and close the top lid once.
The water level sensor fault "Super" and "Large" load size (water level) indicators flash	The water level sensor loose	Call service.
" Medium" and "Small" load size (water level) indicators flash	Water overflow protection.	Turn off power supply
The machine does not act. (Indicators are off.)	Is the power off? Does the power cord loose?	Use it when the power is on. Insert the power plug tightly.

7-3. Common phenomena

Phenomena	Explanation
<ul style="list-style-type: none"> ● Press the "Process " button to select "Spin", but it doesn't work. 	<ul style="list-style-type: none"> ● The program is setting the drain time. Some time is needed before it starts spinning.
<ul style="list-style-type: none"> ● There may be some water flowing out of the drain hose in the first use of the machine. 	<ul style="list-style-type: none"> ● It is the water remained in the factory inspection of performance.

Chapter 8. Wiring diagram

Wiring Diagram



- There is overload protector installed in the motor. In case that the motor is overload or meets breakdown in working, the protector will act and stop the motor. When the breakdown is removed, the motor will resume normal working.

Sincere For ever

Haier Group

Haier Industrial Park , No.1 , Haier Road
266101, Qingdao, China
<http://www.haier.com>