# Haier

# SERVICE MANUAL

Order NO. TL1101S001V1

## **Automatic Washing Machine**

## Model Number HWM110-9188



## **⚠ WARNING**

This service information is designed for experienced repair technicians only an is nor 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

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# Service Manual Order No. TL1101S001V1

Rev.

## **Chapter 1 : General Information**

1-1	. Table of Contents	
	Chapter 1. General Information	2
	1-1. Table of Contents	2
	1-2. General Guidelines	(
	1-3. Caution and Warning symbols	3
	1-4. Function indication symbols	3
	Chapter 2. Product Feature	4
	2-1. Features	2
	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. Install the bottom plate	8
	4-3. Adjust the installation position	9
	4-4. How to change the direction of the drain hose	9
	4-5. Usage the drain hoses	10
	4-6. Confirm the water faucet	10
	4-7. Connection between the water inlet hose jointer and the water faucet	11
	4-8. Connection between the water inlet hose and the water	11
	4-9. Connection between the jointer of the water inlet hose and the water inlet hose	12
	4-10. Check the connection between the water inlet hose jointer and the water faucet	12
	4-11. Dismantle the water inlet hose	12
	Chapter 5. Parts and functions	13
	Chapter 6. Operating Instruction	14
	Chapter 7. Maintenance service and trouble shooting	16
	7-1. Trouble-shooting charts	16
	7-1-1. No action(The indicator is off)	16
	7-1-2. No draining	17
	7-1-3. Keep filling water	17
	7-1-4. No spinning	18
	7-1-5. Too much noise in spinning	18
	7-1-6. Too much noise in washing	18
	7-2. Trouble alarm and solve method	19
	7-3. Common phenomena	19
	Chapter 8. Wiring diagram	20

# Model No.: HWM110-9188/HWM110-9188DD

Issue	
Rev.	

#### 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.



Issue	
Rev.	

## 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

## Service Manual

Order No. TL1101S001V1

Issue	
Rev.	

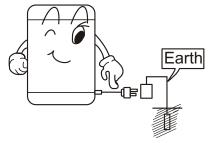
## 2-2. Specification

Product Specification			
Model		HWM110-9188	
Free standing		√	
Built under		×	
EAN code			
Energy efficiency class			
Features for use			
Wash capacity	kg	11	
Spin capacity	kg	11	
Level/Volume	L	1/21, 2/32, 6/42, 4/51, 5/60, 6/69, 7/77, 8/94	
Preset	H	√ √	
Residual dampness	%	<115	
Contral model	70	-110	
contraller		×	
Normal computerized		×	
Fuzzy computerized		, ,	
Frequency conversion		×	
· · · · ·		×	
Service features Programs		0	
		8	
Short cycle		?	
Inlet heating select		√ 	
Heating selection		x	
Spinning cycle (selector)		×	
Spinning cycle (variable)		×	
Start/Pause		√ _	
Automatic balncing		?	
Aesthetics			
Cabinet material (P=Plastic/Z=Zincking/C=Cold)		Z	
Rolled stainless steel			
Inner drum (stainl. steel=s / plastic=p)		S	
Drain type (U=drain up D=drain down)		drain down	
Door (glass=g / plastic=p)		×	
Adjustable feet		√	
Technical data			
Voltage/frequency	V/Hz	220V-240V/50HZ	
Wash power	W	550	
Spin power	W	360	
Special function		-	
Air-Bubble		×	
Feet wheel		×	
Water fall current		×	
Dimensions (measurements)			
Height / built under	m m	1055	
Width	m m	660	
Depth / with open door	m m	660	
Dimensions packed ( measurements packed)			
Height	m m	1140	
Width	mm	727	
Depth	mm	727	
Net weight	kg	57	
Gross weight	kg	70	
20'Container load	Sets	42	
40'Container load	Sets	90	
40H'Container load	Sets	90	
NOTE: "√" FOR AVALIABLE, "×" FOR NOT AVAL	IABLE "-"	FOR-NOOR VALUE ASPERLICABLE	

## **Chapter 3. Safety Precautions**

## 3-1. Safety

Be sure to earth the earthing wire reliably.





The power cord plug should be convenient to be pluged in or pluged 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.



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.



Do not put the machine at damp place like the bathroom. Never wash it with water.





Do not install or store the washer where it will be exposed to the weather.





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.

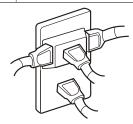


Do not wash water-proof laundries such as the raincoat, bicycle shelter etc. To avoid abnormal vibration during spinning.





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.







## 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

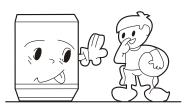




Do not wash laundries with volatile materials (such as thinner, petrol etc.).

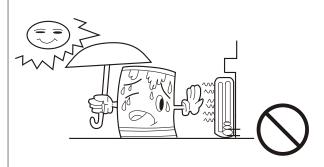


The handicapped or children without care shall not use the machine.  $_{\circ}$ 

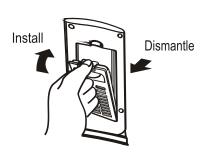




Keep the machine away from direct sunlight and heat source like the heater.

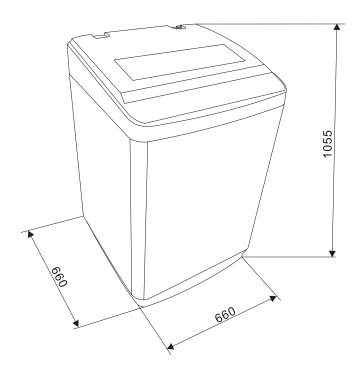


The lint filter shall be kept in good condition, and installed to proper position. If the lint filter is lost or damaged, please contact the local after-sales service department of our company.



Issue	
Rev.	·

#### 3-3.Net dimension



Unit (mm)

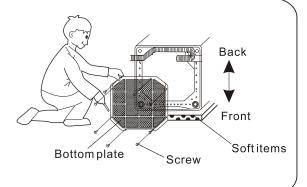
## **Chapter 4. Installation and accessory parts**

## 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. Install the bottom plate

After opening the package, please lean the washing machine gently down on soft items(liketowelcloth, blanket, etc.). Install the bottom plate to the bottom of the machine with eight screws by across screwdriver, then lift the machine up gently. See to the figure:



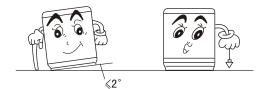
Issue	
Rev.	

## 4-3. Adjust the installation position

The largest allowed slope of the 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:

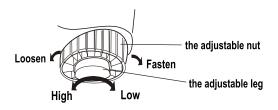
#### Confirm it's horizontal:

Hang the lead line to confirm if it is horizontal.



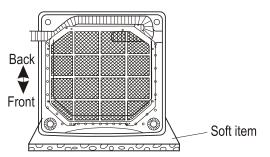
## • Adjust the adjustable foot:

- 1 .To twist the adjustable leg, please first lift up the side of the leg slightly, loosen the adjustable nut, and twist the leg.
- 2. After adjustment, fasten the nut.

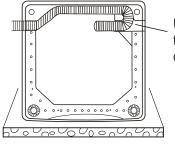


## 4-4. How to change the direction of the drain hose

1.Lean the machine down gently with the front surface facing the ground.

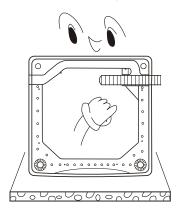


2.Pull out the drain hose from the groove at the left side.



Use groove at this side after direction changing

3.Extend the drain hose from the left side. Push the drain hose into the groove with hands.



4.Install the bottom plate (as perindicated before), then lift the machine upgently.



Order No. TL1101S001V1

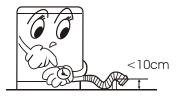
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## 4-5. Usage the drain hoses

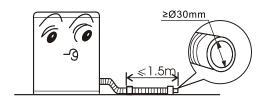
## The drainage shall be smooth with the drain hose.

- 1. The height of the drain hose shall be less than 10cm, or the drainage will not be smooth, and cost such long time that the machine may stop at mid way.
- 2.Do not step on or press the drain hose.

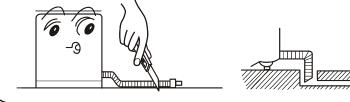
4.If extra drain hose is needed, please make separate purchase. The inner diameter of the extra hose shall not less than 30mm, and the length shall not exceed 1.5m.

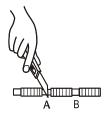






- 3. If the drain hose is too long, cut it at mid point. To make smooth drainage, cut the front end of the hose slantingly.
- 5. If the extra hose is too long, cut it either at A or at B.

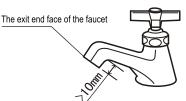




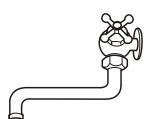
## 4-6. Confirm the water faucet

water faucet, suitable





water faucet, not suitable



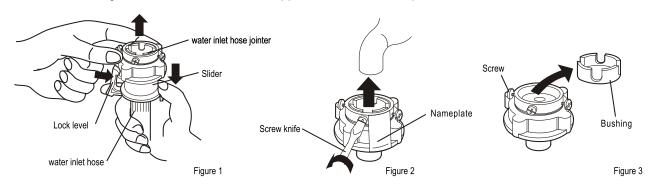
It is required that the front end shall be longer than 10mm.

The exit end face of the faucet shall be flat and smooth. If not please file it to avoid leakage.

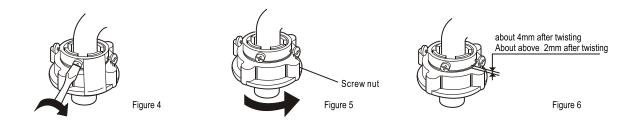
Issue	
Rev.	

## 4-7. Connection between the water inlet hose jointer and the water faucet

- 1.Press the lower end of the lock lever and push down the slider. Take off the water inlet hose jointer from the water inlet hose component. See to Figure 1.
- 2. Take off the nameplate. Make sure the threading is 4mm above the upper surface of the nut. See to Figure 6. If the threading is less than 4mm above the upper surface of the nut. please loosen the screws



- 3 Loosen the screw till the water faucet can be accessed. Put the jointer of the water inlet hose on the faucet. See to Figure 2. (If the faucet is too large and the jointer can not be set on the water faucet, please loosen the four screws and take out the bushing in the jointer. The front end of the faucet must be smooth, otherwise it may leak water. See to Figure 3.)
- 4. Fasten the four screws evenly. See to Figure 4.
- 5. Twisting the fastening nut, See to Figure 5. After twisting, the threading is less than 2mm above the upper surface of the nut.

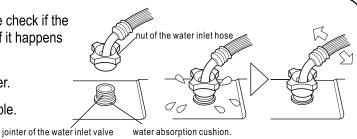


## 4-8. Connection between the water inlet hose and the water

1.Do not take off the water absorption cushion. Please check if the cushion is dropped or damaged before each usage. If it happens please contact our after-sale department immediately.

2 Put the nut of the water inlet hose on the valve jointer.

3 Fasten the nut. Swing it gently to confirm if it's suitable.





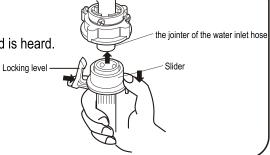
Order No. TL1101S001V1

Rev.

## 4-9. Connection between the jointer of the water inlet hose and the water inlet hose

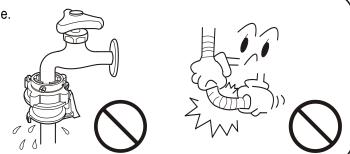
1. Push down the slider. Insert the water inlet hose into the jointer.

2 Hang the lock lever to the jointer. Release the slider till a click sound is heard.



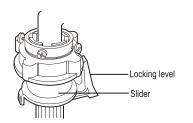
# 4-10. Check the connection between the water inlet hose jointer and the water faucet

- 1. Swing the hose gently to confirm if it is fastened stable.
- 2. After installation, open the faucet to check if it leaks.
- 3.Do not bend the hose with overstrain.
- 4.Before each usage please check if the connection between the jointer of the water inlet hose and the water faucet, and the installation of the water inlet hose are firm, so as to prevent dropping from improper installation position.



#### 4-11. Dismantle the water inlet hose

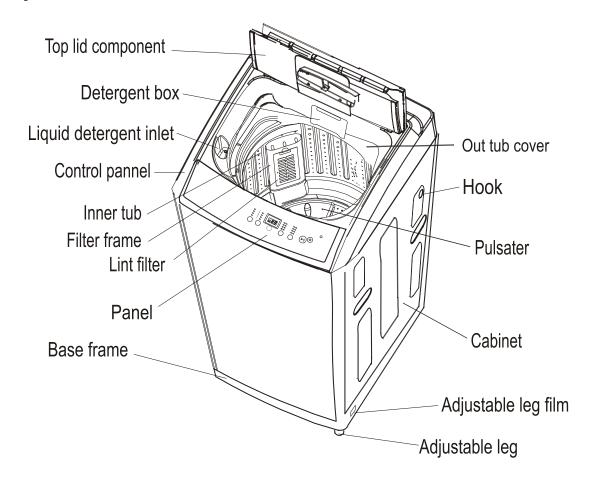
- 1. Close the water faucet.
- 2. Press the locking lever. Push down the slider. Then pull of the water inlet hose. If the machine is used frequently, the jointer of the water inlet hose can be kept on the faucet to prevent damaging the fixing screw.

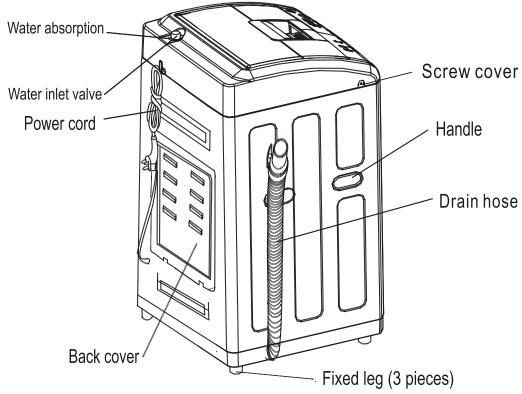




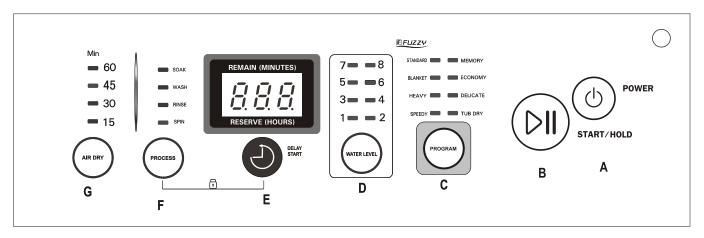
Issue Rev.

## **Chapter 5. Parts and functions**





## **Chapter 6. Operating Instruction**



## Indicator mode and meaning



Flashing, indicating the running program

On, indicating the program about to run or the selection mode

#### **Child lock function**

- The function is intended for children safety and preventing the washing program from accidental changes by children.
- Push down the **POWER** button, set desired washing procedures, After setting ,push down the **START/HOLD** button, then hold the **PROCESS** button and **DELAY START** button, The digitron displays"CL", The child lock function is activated. All of the buttons are locked and cannot make selection.
- Release the child lock function :push down the **PROCESS** button and **DELAY START** button at the same time for more 2seconds .After a beep sound ,the child lock function is released.



#### Digital tube

- During working, it displays the remained reserve time (minute). In case of trouble, it displays the abnormal symbol(see to page 13)
- During reserve, it displays the remained reserve time (hour)



#### A "POWER" button



- Push the "POWER" button to switch on the power.
- Under power-on mode, push it to switch off the power.
- Push the "POWER" button to switch on the power. If the "START/HOLD® button is not pushed, the machine will switch off the power automatically after 5 minutes.

## START/HOLD

#### B "START/HOLD" button

- After the power is switched on, press it to start the machine
- During working, push it to pause.
- During pause, push this button to restart and go on working

Order No. TL1101S001V1

Issue	
Rev.	



C "PROGRAM" button			
Program	Application	Program	Application
STANDARD	Standard saving washing for normal laundries	MEMORY	The commom wash , the washing machine will set to MEMORY program including "wash, rinse,spin,water value "automatically last time
BLANKET	Washing the relatively big and thick laundries	ECONOMY	Washing the cotton textiles
HEAVY	Washing the relatively big and thick laundries	DELICATE	Washing for light-soil saving laundriesl
SPEEDY	Quick washing for normal laundries	TUB DRY	Avoid growing mildew on the outer tub and the inner tub



#### D "WATER LEVEL"button

- You need to select the water level by yourself.
- If you put in wet laundries, you need to select suitable water level manually. Refer to water level water quantity and selection of powder in page 9.
- During Soak, Wash and Rinse, press this button to manually replenish water. Release to stop. Function automatically is inactive when water reaches overflow protection level.



#### **E** "DELAY START"button

- During operation, the digital tube will display the remained time.
- Push the delay button. The digital tube will display the delay time for finishing of washing in hour. The indicator will flash to indicate that the delay function is working.



## F "PROCESS"button

one or more one programs among SOAK WASH RINSE SPIN can be selected.



## **G** "AIR DRY"button

- Push the "AIR DRY" button to select air dry procedure. The program is chosen(15min,30min, 45min,60min). The purpose is drying laundries, at the same time can dry the outer tub and the inner tub, which can avoid growing mildew on the outer tub and the inner tub.
- The max drying capacity of the fibre laundries is 3.0 kg.
- "AIR DRY"program can not be reserved



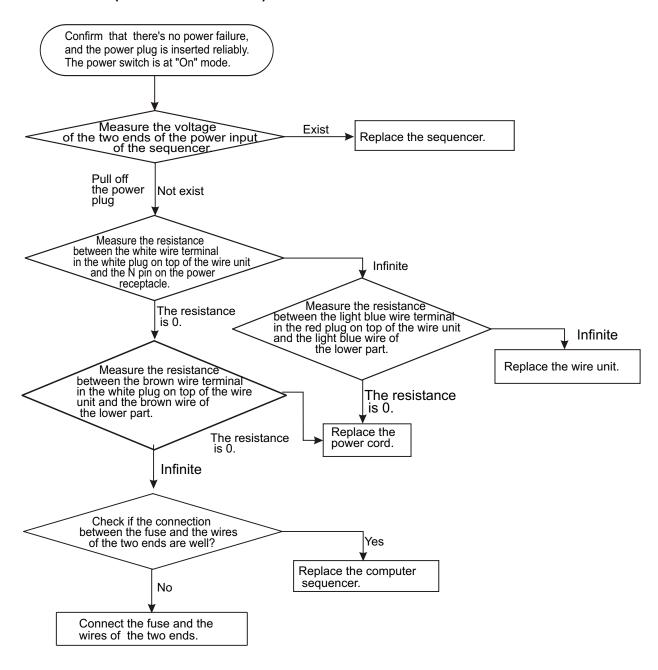
Issue	
Rev.	

## 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)

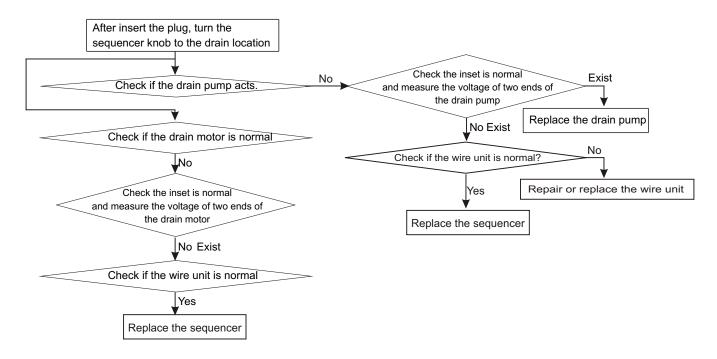


## Service Manual

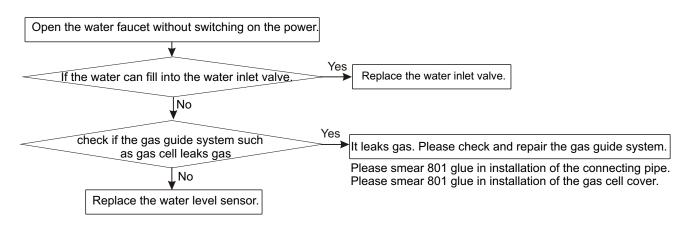
Order No. TL1101S001V1

Issue	
Rev.	

## 7-1-2. No draining

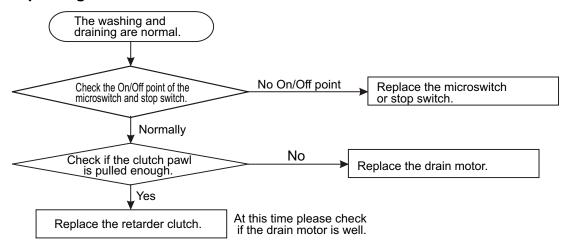


## 7-1-3. Keep filling water

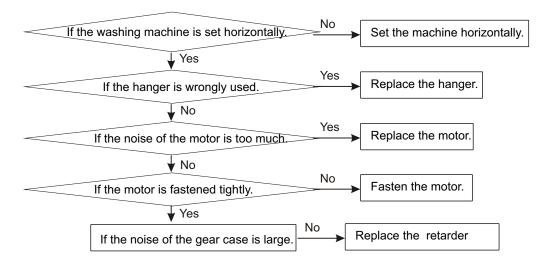


Rev.

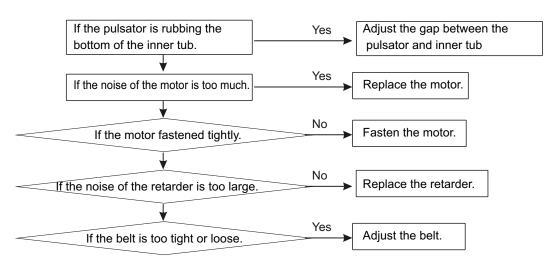
### 7-1-4. No spinning



## 7-1-5. Too much noise in spinning



#### 7-1-6. Too much noise in washing



## Service Manual

Order No. TL1101S001V1

Issue	
Rev.	

## 7-2. Trouble alarm and solve method

(If there's breakdown, please pull off the power plug before checking) The following phenomena are not breakdowns sometimes. Please confirm again before sending it to repair. If there are real breakdowns, please come to the special maintenance department or after-sale service department of our company. Do not repair it by yourself.

Phenomena		Thereason	Howtosettle
Buzzing upon reservation starts, the digitron displays "E0"		The top lid is not closed	Close the top lid
No or slow drain, the digitron displays "E1", buzzing.		<ul><li>Is the drain hose put down?</li><li>Is the drain hose blocked by foreign material?</li></ul>	<ul> <li>Put down the drain hose. Open and close the top lid once.</li> <li>Clean the foreign material. Open and close the top lid once.</li> </ul>
Running pauses during spin, the digitron displays "E2", buzzing		The top cover leaves open	● Close the top lid
Safety switch actuates, not spin, (after self-correction twice), the digitron displays "E3", buzzing		<ul><li>Are the laundries put slantingly?</li><li>Is the machine slanting?</li></ul>	<ul> <li>Re-order the laundries. Close the top lid. Level the machine in right position.</li> <li>Open and close the top lid once.</li> </ul>
No or slow water filling, the digitron displays "E4", buzzing		<ul> <li>The water tap is not open</li> <li>The water inlet valve is blocked</li> <li>The water pressure is too low and the current is too small</li> </ul>	<ul> <li>Open the water tap.         Push the "Start/Pause" button.     </li> <li>Clean the water inlet valve.         Push the "Start/Pause" button.     </li> <li>Wait for the normal water pressure Before use.</li> </ul>
The machine does not act	Not wash	<ul> <li>Is there power failure?</li> <li>Is the power plug loose?</li> <li>Does the water level arrive at the set water level?</li> <li>Is the top lid closed?</li> </ul>	<ul> <li>Use it when the power is on.</li> <li>Insert the power plug tightly.</li> <li>Affusion to the set water level.</li> <li>Close the top lid</li> </ul>
	Not spin	<ul><li>Is the power plug loose?</li><li>Is the top lid closed?</li><li>Are the laundries put orderly?</li></ul>	<ul> <li>Insert the power plug tightly.</li> <li>Close the top lid</li> <li>Put the laundries orderly.</li> </ul>
There's abnormal sound inside the machine		<ul><li>Is the machine slanting?</li><li>Are the laundries slanting in spinning?</li></ul>	<ul><li>Level the machine properly.</li><li>Re-order the laundries.</li></ul>
The water faucet leaks		Is the jointer screw of the water inlet hose is loose or twisted awry?	Fasten the jointer screw properly.

## Common phenomena

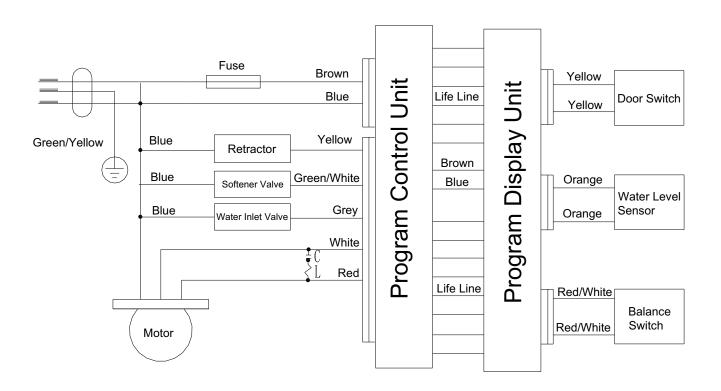
Phenomena	Explanation
The spinning is intermittent when it starts.	Balance the laundries to avoid slanting.
Select spin program, but it does not work.	<ul> <li>The program is setting the drain time, certain period is needed before it starts spinning.</li> </ul>
<ul> <li>There may be some water flowing out of the drain hose in the first use of the machine.</li> </ul>	<ul> <li>It is the water remained performance inspection by the factory.</li> </ul>
<ul> <li>The pulsator pauses during water inlet in wash and rinse.</li> </ul>	It is to avoid splashing during water inlet.



Issue	
Rev.	

## 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

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