HAIER

Fuzzy Computerized Automatic Washing Machine

Service Manual

PART # WD-8888-71

HAIER AMERICA TRADING, LLC www.haieramerica.com

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FEATURES

Brand new appearance

It adopts full streamline arc model with compact structure, novel and unique.

Dual power

The unique drive system of "Dual Power" washing machine has applied for the international patent. Basin-shape large pulsator drive system, and the inner wash tub power drive system, make the inner tub rotating with low speed like drum washing machine to reduce the abrasion, and rotating with small angle like agitator washing machine to reduce tangling. Therefore it realizes even anti-tangling washing, and produces powerful "boiling" current to acquire more powerful, even and cleaner washing effect.

Dual half saving half water, saving half time

It adopts the new technology of synchronized rinse and spin. It only costs 16.5(gal) water for 11(Ib) laundries, which is about a half of the common washing machine.

Saving half time

The Dual Power series automatic washing machine costs 25 minutes for standard program with cleaning ratio of 1.05,50% higher than the national standard; it costs 15 minutes for the quick program with cleaning ratio reaching the national standard; it costs 6 minutes for super quick program, suitable for washing small quantity light soil laundries. The full set of washing programs can shorten the wash time significantly.

Boiling current

It produces "boiling" current under the powerful driving of the pulsator and inner tub with dual power drive system. The water current is even and powerful.

Basin-shape large pulsator

The large pulsator can produce stronger drive strength on the water. Meanwhile the concave basin shape reduces the direct contact between laundries and pulsator, and decreases the abrasion ratio.

Child lock function

It can prevent the children from operating the washing machine improperly and causing poor washing effect causing harm to the children during washing procedure, and can guarantee the normal operation of the washing machine.

Music reminding function

It offers different music for each buttons on the computer board. You cannot only get corresponding operation hint, but also enjoy the wonderful music.

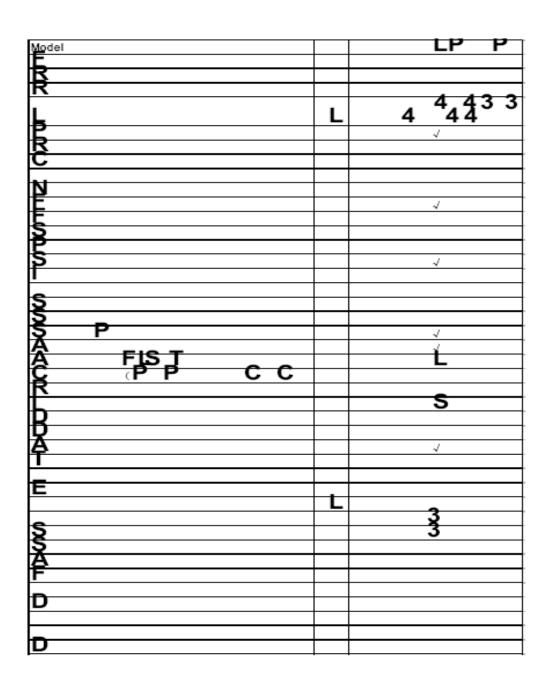
Fuzzy control function

It can detect the cloth character and weight of the laundries, and set the best washing method, the best water level, the best washing speed and the best wash time, and realizes the best washing effect automatically.

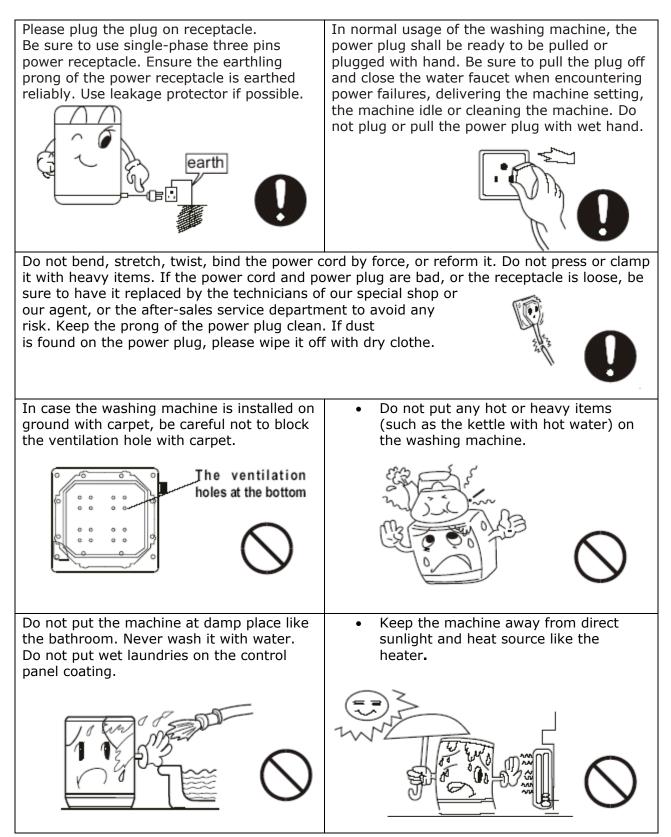
Automatic power-off protection function

It will switch off the power automatically 5 minutes after the washing is finished.

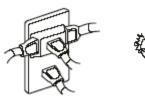
SPECIFICATION



SAFETY PRECAUTIONS

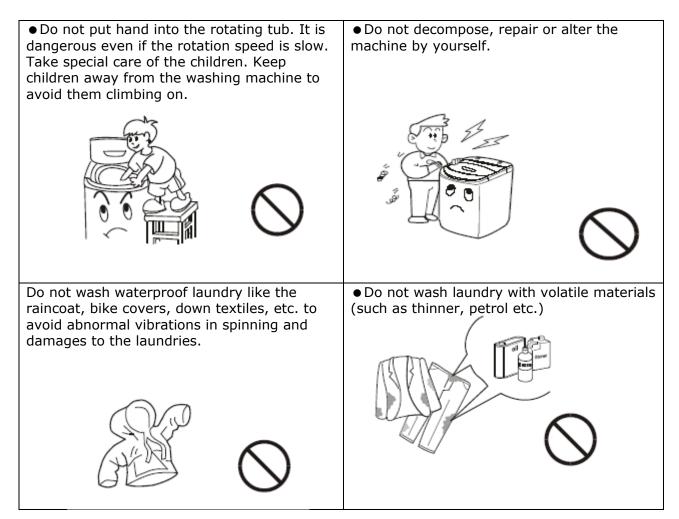


Do not let the machine share one receptacle with other electric appliances. If the power plug is damaged, or the plugging into the receptacle is loose, do not use the plug any more.



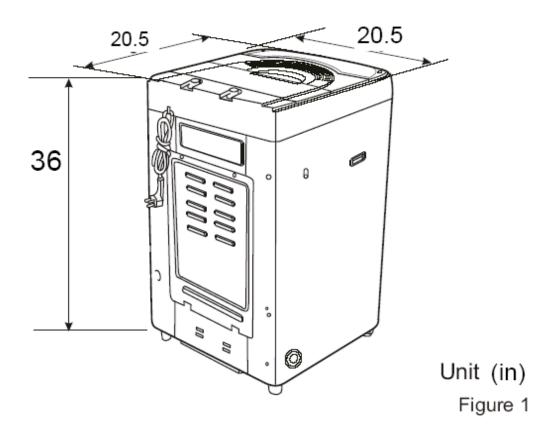


WARING AND CAUTION



• The handicapped or children without care shall not use the machine.	• To protect your laundries and washing machine, please take out all of the coins, buttons, sand, hairpins and other foreign materials before washing.
 Please keep the lint filter in good condition, and install it to proper position during washing. If the lint filter is lost or damaged, please contact the local after-sales service department of our company. 	 Please check if the water faucet is open, and if the connection of the water inlet pipe is proper. It is suggested to use foamless washing powder.

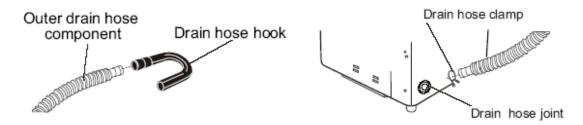
NET DIMENSION



INSTALLATION AND ACCESSORY PARTS

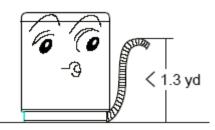
Install the drain hose

- 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 clamp.



Usage of the drain hose

- Hang the outer drain hose at 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.

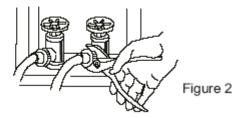


Install the water inlet hose

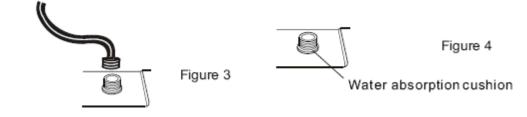
1. Insert a new flat washer into each end of the inlet hoses. Firmly seat the washer in the coupling. (As figure 1)



Figure 1



- 2. Respectively attach the water inlet hoses to the water faucet. Using pliers, tighten the coupling. (As figure 2) **NOTE:** Do not over tighten. Damage to the valves can result.
- 3. Run water through the 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.
- 4. Attach the hose connected with the water faucet to the water valve. (As figure 3) **NOTE:** Do not over tighten. Damage to the valves can result.



- 5. Check for leaks
- (1). Swing the water inlet hose gently to confirm if it's 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.

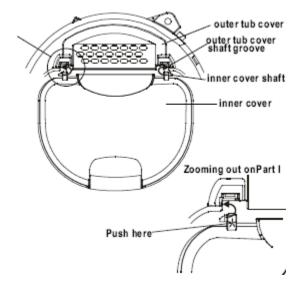
Do not take off the water absorption cushion. Please check if the cushion is dropped or damaged before each usage. If it happens please contact our after-sale department immediately. (As Figure 4)

Please install and adjust the machine according to the requirement of the service manual, which is very important for safe and proper usage of the machine.

Install the inner cover component

Please install the inner cover component as per followings in your first usage of the washing machine:

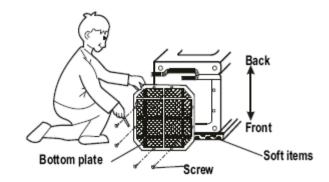
- 1. Open the top lid of the washing machine.
- 2. Put the inner cover component on the outer tub cover, aiming the inner cover shaft to the installation hole of the corresponding outer tub cover shaft groove.
- 3. Firstly insert the inner cover shaft of one side into the corresponding outer tub cover shaft groove, then push the point marked with * on the other side, and push the inner cover shaft into the corresponding outer tub cover shaft groove. Please install in designated position to guarantee there are no droppings or abnormal sound in opening and closing of the inner cover,



and the operation shall be smooth. Do not dismount the inner cover component after washing.

Install the bottom plate

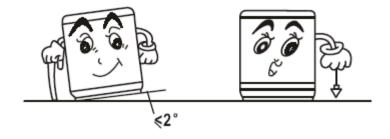
After opening the package, please lean the washing machine gently down on soft items like (towel cloth, blanket, etc.). Install the bottom plate to the bottom of the machine with eight screws by a cross screwdriver, then lift the machine up gently. See to the figure:



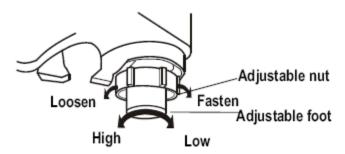
Adjust the installation position

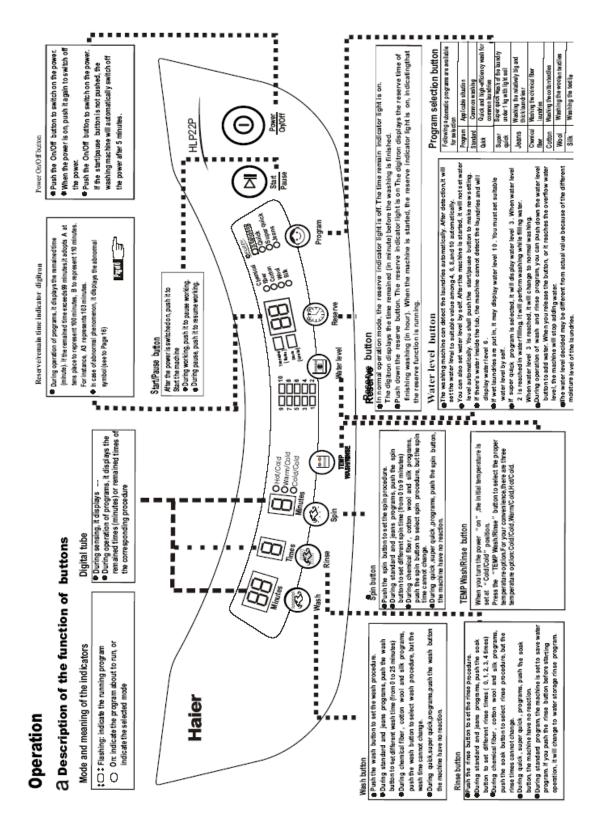
The largest allowed slope of the base of the machine is 2°. The slanting or rough ground will result in unstable running or stoppage of the machine. Please adjust it with the following methods:

• Confirm it's horizontal: Hang the lead line to confirm if it is horizontal.

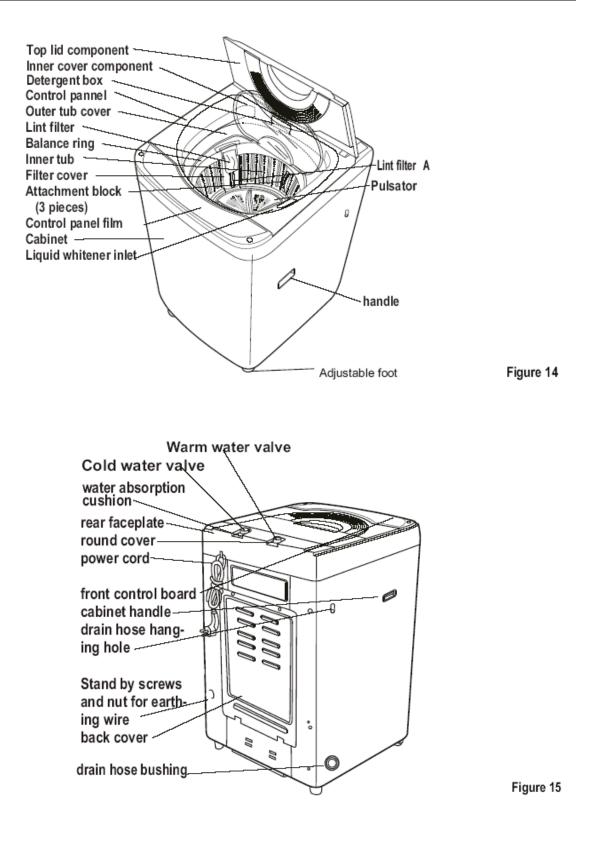


Adjust the adjustable foot:
1.To twist the adjustable foot, please, first lift up the side of the foot slightly, loosen the adjustable nut, and twist the foot.
2. Fasten the nut after adjustment.





PARTS AND FUNCTIONS



PROGRAM DIAGRAM

				So	aking wa	ash						Rin	ise/spin 2-i	n-1						
		×		PW.			m		Inter-				spir	n ON				Spin	Inertia	
Pr	ogram	Water level	Cloth	Water inlet	Soak	Wash	Balance	Drain		Waterinkt	Water inlet	Water ini et	Water inlet	Water ini d	Water ini et	Waterinlet	Waterinist	opin	spin	Brake
		level		10					n,	ON	OFF	ON	OFF	ON	OFF	ON	OFF			
				1 Min			30 S	1 Min	30 S	35	30 S	35	30 S	35	30 S	35	30 S	3	30 S	5 S
			Hati doth	•	30 Min	16 Min	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ş	Scak,		Canmon doth	٠	30 Min	15 Min	٠	٠	٠	٠	•	•	•	٠	٠	•	•	•	٠	•
Auto- matio	wash, rinse,	High	Saft cloth	٠	30 Mi n	12 Min	٠	٠	٠	٠	•	٠	•	٠	٠	٠	•	•	٠	•
đö	spin		Hard cloth	٠	20 Mi n	15 Min	٠	٠	٠	٠	•	٠	•	٠	٠	٠	•	•	٠	•
		Wedium	Common didth	٠	20 Min	12 Min	٠	٠	٠	٠	•	•	•	٠	٠	٠	•	•	٠	•
		-	Softcloth	•	20 Min	10 Min	•	٠	٠	٠	•	٠	•	٠	٠	٠	•	•	٠	٠
		Low	-	٠	10 Min	10 Min	٠	٠	٠	٠	•	•	•	٠	٠	٠	•	•	٠	•
	Wash rinse spin			•		•.	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ма	Wash only			٠	٠	٠.	٠													\square
nuals	Wash, rinse			٠	٠	٠.	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	•			\square
Manual setting	Rinse, spin							٠	٠	٠	٠	٠	•	٠	٠	٠	•	•	٠	٠
_	Spinonly																	•	•	•
Renarks																				

Detail description of the normal program (rinse/spin 2-in-1)

* Indicates that the laundries quantity and cloth character influences the wash time. The soak and wash time do not include the time needed by cloth character detection. The wash time during wash/rinse procedure includes the 30 seconds of balance.

Jean program

		Wa	sh							Ri	inse										Spin		
	Water in let	Soak	Wash	Balance		Inter- mitten spin	a selection of the sele	Inertia spin	Brake	Water inlet	Rinse	Drain	uids uebiu -ietui	Spin	inertia Spin	Brake	Water inlet	Rinse	Drain	Inertia spin	Spin	lnertia spin	Brake
	٠			3 0	Т	6 0	6 0	3 0	5	٠		т	6 0	6 0	3 0	5	٠		Т	6 0		3 0	5
Automatic	•	2400	1200	•	•	•	•	•	•	•	300	•	•	•	•	•	•	300	٠	•	300	•	•
Wash	•		1200	٠																			
Rinse					•	•	٠	•	•	•	300	•	•	٠	٠	•	•	300					
Spin																			•	•	300	•	•

** The water current relates to the water level.

Chemical fiber program

		Wa	sh							Ri	nse										Spin		
Program	Water in let	Soak	Wash	Balance	_	Inter- mitten spin		Inertia spin	Brake	Water inlet	Rinse	Drain	Inter- mitten spin	Spin	lnertia Spin	Brake	Water inlet	Rinse	Drain	lnertia spin		lnertia spin	Brake
	*			30	т	6	6	3 0	5	*		Т	6	6 0	3	5	*		T	6 0		3 0	5
Automatic	•	1800	720	•	•	ě	ě	ě	•	•	180	•	ě	ě	ě	•	•	180	•	ě	180	ě	•
Wash	•		720	•																			
Rinse					•	•	•	•	•	•	180	•	•	•	•	•	•	180					
Spin																			•	•	180	•	•

** The water current relates to the water level.

Silk program

	1	Wash							Rins	e									Spin		
	Water inlet	Wash	Drain	Inter- mitter spin		Inertia spin	Brake	Water inlet	Rinse	Drain	uids mitter-	Spin	inertia Spin	Brake	Water inlet	Rinse		Inertia spin	Spin	Inertia spin	Brake
Program	*		Т	6 0	6 0	3 0	5	*		т	6 0	6 0	3 0	5	*		т	6 0		3 0	5
Automatic	•	300	•	•	•	•	•	•	120	•	•	•	•	•	•	120	•	•	120	•	•
Wash	•	300																			
Rinse			•	•	•	•	•	•	120	•	•	•	•	•	•	120					
Spin																	•	•	120	•	•

Cotton program

			Wash					Rina	se 1							Rin	se 2							Rins	se 3					5	Spin		
Program	Water inlet	Soak	Wash	Balance	Grain	inter- nitte spin	Spin '	Inertia Spin	Brake	Water inlet	Rinse	Balance	Ovain	inter- mitter spin	Spin	Inetia Spir	Brake	Water inlet	Rinse	Balance	Drahn	inter- mitten spin	Spin	Inertia Spin	Brake	Water inlet	Rinse	Balance	Drain	Inter-mitten	spin	Spininertia	Brake
rogian	*		60 0	3 0	т	6 0	6 0	3 0	5	*	18 0	3 0	т	6 0	6 0	3 0	5	*	18 0	3 0	т	6 0	6 0	3 0	5	*	18 0	3 0	т	6 0	18 0	3 0	5
Automatic	•	12 00	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wash	٠		•	•																													
Rinse					•	•	•	•	•	•	٠	•	•	٠	•	٠	•	٠	•	•	•	•	•	•	•	•	•	•					
Spin																													•	•	•	•	•

Detail description of the woolen program

	Wa	ash							R	inse								Sp	in		
Program	Water inlet	Wash	Drain	niter- mitten	Spin	Inertia Spin	Brake	Water Inlet	Rinse	Drain	niter-	Spin	Inertia Spin	Brake	Water inlet	Wash	Drain	Inter- mitten	Spin	Inertia Spin	Brake
	—	3 Min	-	30 Sec	10 Sec	30 Sec	5 Sec	-	2 Min	—	30 Sec	10 Sec	30 Sec	5 Sec	-	2 Min	-	120 Sec	20 Sec	30 Sec	5 Sec
Wash, rinse, spin	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wash only	•	•																			
Wash, rinse	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•					
Rinse, spin			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Spin only																	•	•	•	•	•

High efficiency program (total 15 minutes)

Water inlet to water level 1-- motor rotates clockwise and counterclockwise 0.3s/5s, meanwhile water inlet to 1/2 of set value--set to gentle current, meanwhile water inlet to set value-- wash for 5 min (1.0/1.0 wash for 1 min; 1.3/0.6 wash for 3 min;

1.0/0.6 wash for 1 min), and balance for 15s--switch on drain motor, tub and pulsator intermittent act for 10s/15s, operate for 135s-- spin consecutively, the cool water valve is switched on/off for 35s/30s-- spin consecutively, the cool water valve is switched on for 35s--brake after 30s inertia spin the cool water valve performs water inlet for 35s, the motor rotates clockwise and counterclockwise for 0.35s/5s-- spin consecutively, the cool water valve is switched off for 30s-- spin consecutively, the cool water valve is switched off for 30s-- spin consecutively, the cool water valve is switched on/off for 35s/30s-- spin consecutively for 1 min--inertia spin for 20s--brake-- buzzer alarms and finish washing.

Past haste program (total 6 minutes)

Water inlet to water level 1-- motor rotates, clockwise and counterclockwise 0.3s/5s, meanwhile water inlet to the set water level 2--set to gentle current, meanwhile water inlet to water level 3-- wash for 1.5min, balance for 10s-- switch on drain motor, drain for 10s, intermittent spin for 20s-- spin consecutively, the cool water valve is switched on/off for 35s/30s for two cycles-- spin consecutively for 30s-- inertia spin for 20sbrake-- buzzer alarms and finish washing.

MAINTENACE SERVICE AND TROUBLESHOOTING

Phenomena		nethod alarm The reason	How to settle
The digitron disp	lavs F0	The top lid is opened during	Close the top lid.
	Idy5 LU.	reserve procedure.	
The drainage can or is too slow. Th displays E1.		 Is the drain hose put down? Is the drain hose blocked? 	 Put down the drain hose. Open and close the top lid once. Clean the foreign material. Open and close the top lid once.
It stops running i The digitron disp		• The top lid is not closed.	Close the top lid
The safety switch the spinning can The digitron disp	not work.	 Are the laundries put slantingly? Is the machine slanting? 	 Reorder the laundries. Close the top lid. The machine will start running after 10 seconds of being placed horizontally.
The water filling work, or is slow. about 15 minutes the digitron displ	After s later,	 Is the water tap opened, or is there water supply failure? Is the water inlet valve blocked? Is the water pressure too low? 	 Open the water tap. Push the Start/ Pause button once. Clean the water inlet valve then push the Start/Pause button once. Push the start/Pause button once.
The machine does not act	Not wash	 Is there power failure? Is the power plug inserted tightly? Is the water level reached preset position? 	 Please use it when there's power supply. Insert the power plug tightly. Fill water to the preset position.
	Not spin	 Is the power plug inserted tightly? Is the top lid closed reliably? Are the laundries set flat? 	 Insert the power plug tightly. Close the top lid. Set the laundries flat.
There's abnorma inside the machir		 Is the machine slanting? Are the laundries put slantingly in spinning? Are there any foreign materials? 	 Adjust the machine to be even Reorder the laundries and close the top lid. Remove the foreign materials.

1. Trouble and solve method alarm

The water tap leaks	• Is the screw of the jointer of water inlet hose loose or awry?	• Fasten the screw of the jointer properly.
No water inlet	 Is the power plug tightly plugged? Is the water faucet open? Have you pushed down the power switch and start/pause button? 	 Plug the power plug tightly. Open the water faucet. Push down the power switch and start/pause button.

2. Test program (test without water)

- (1) Under standby mode, push and hold the RESERVE and PROGRAM buttons, then push down the POWER ON/OFF buttons. The buzzer rings once, and the digitron displays C1. It enters the finish check procedure of the no-water test. Push the reserve button to switch between the C1, C2 and C3 test programs. After each switching, it will wait for 3 seconds, and then enter the relative self-test program;
- (2) Switch the program. Push the RESERVE button, and the program will switch in the following sequence:

→Buzzer testprogram	→Wash test program -	→Spin test program
C1	C2	C3

(3) Program description:

Buzzer test C1: The remain time digitron displays C1. The other indicators are all on. After 3 seconds, the digitron displays 88. The indicator lights all flash, and meanwhile the buzzer rings three times, each time for 1 second. Then it will switch off the power, and enter the standby mode with power switched on. The start/pause button is disabled.

MAINTENANCE SERVICE AND TROUBLESHOOTING

Wash test C2: The remain time digitron displays C2. The medium water level, wash and normal indicator lights are on. After 3 seconds the wash digitron displays 20. The wash digitron flashes. It will execute wash current, and switch off the power automatically after 20 minutes. Push the program button to switch. See to the following table for the current. Switching will influence the time. During this procedure, only the reserve, program and start/pause buttons are enabled. It will not detect the top lid opening.

Normal	0.7/0.5	l fiber	0.6/0.5
Quick	0.8/0.5	Cotton	0.4/0.5
Posthaste	1.0/0.5	Woolen	0.2/0.5
Jean	1.2/0.5	Silk	0.3/0.5

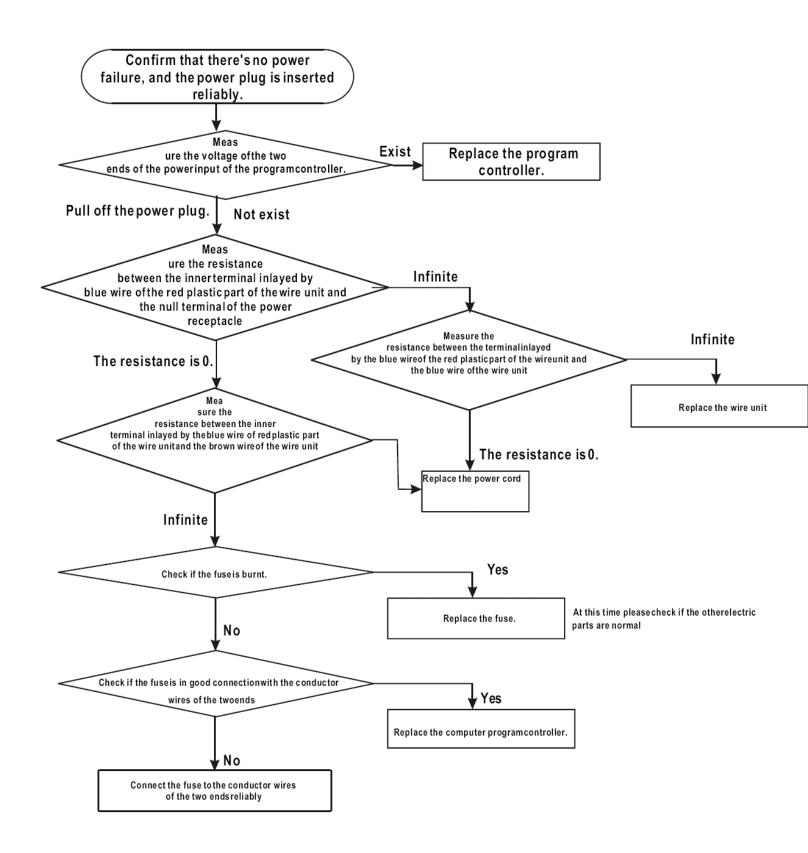
Spin test C3: The remain time digitron displays C3. The spin and normal indicator lights are on. After 3 seconds the spin digitron displays C5. The spin digitron flashes. After 5 minutes of spinning, it will switch off the power automatically.

Check the top lid opening and tub bumping during spinning, and test the breakdown alarm. During this procedure, only the reserve and start/pause buttons are enabled. In the moment while it just enters spinning procedure, opening of top lid will activate alarm. Manually create one imbalance situation, and confirm that it activates imbalance alarm.

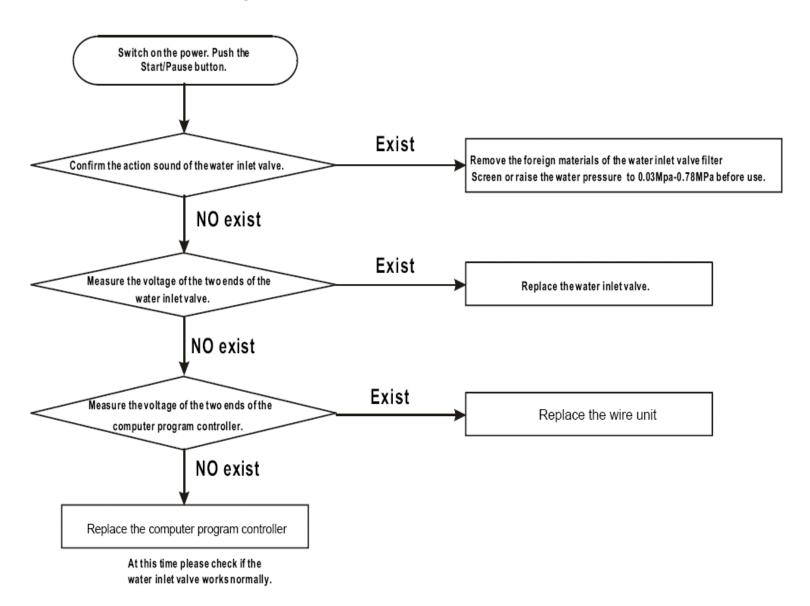
3. Troubleshooting charts

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

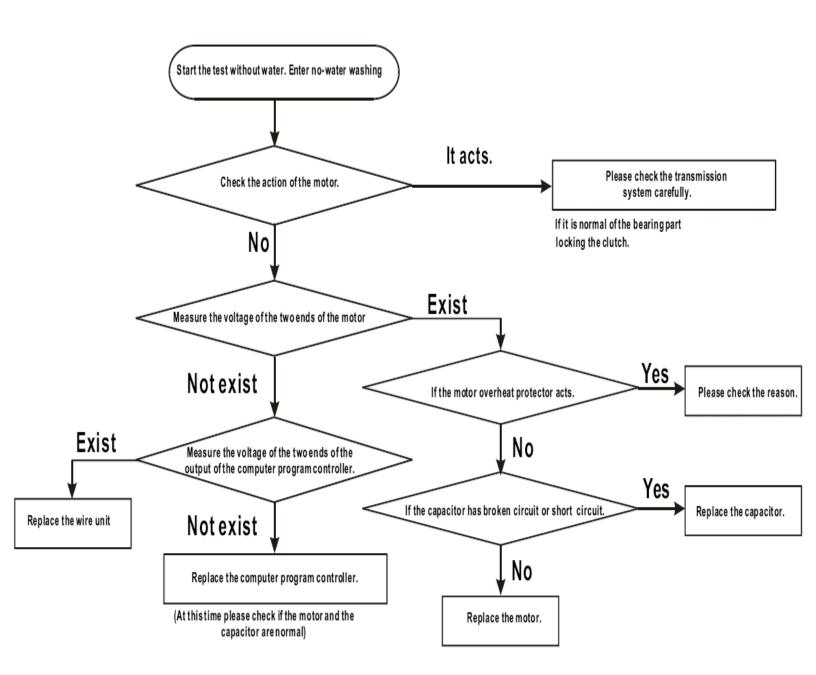
1. No action. (The indicator is off)



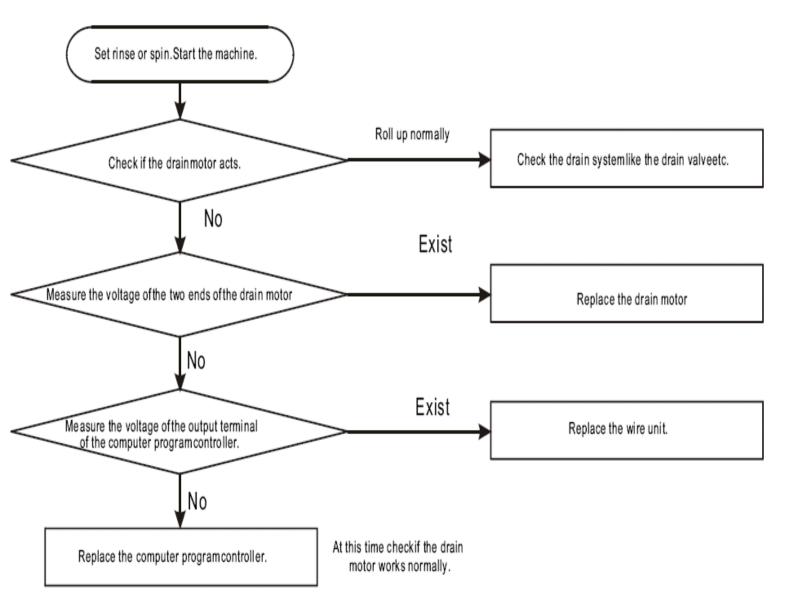
2. No water filling



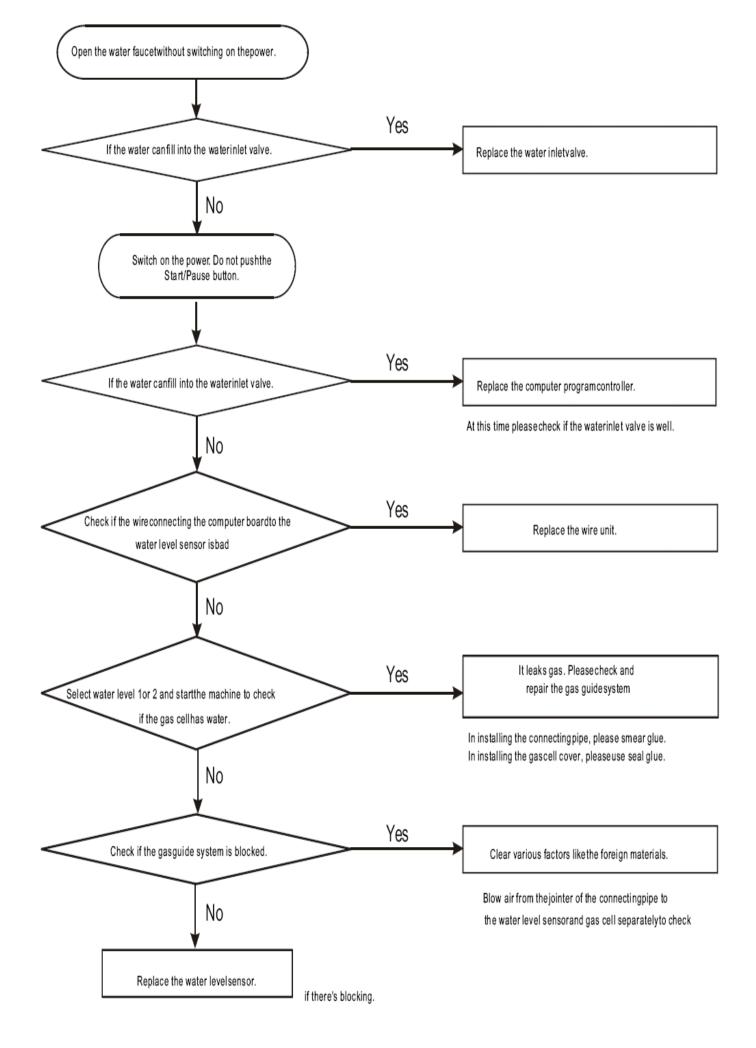
3. No rotation in washing (or rotating to one direction only)



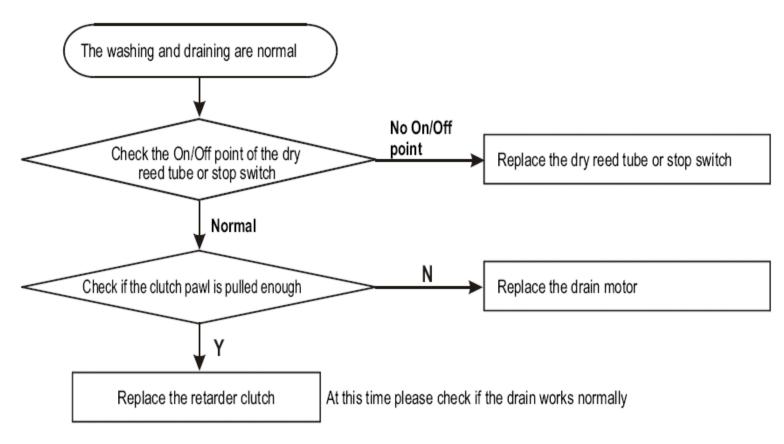
4. No draining



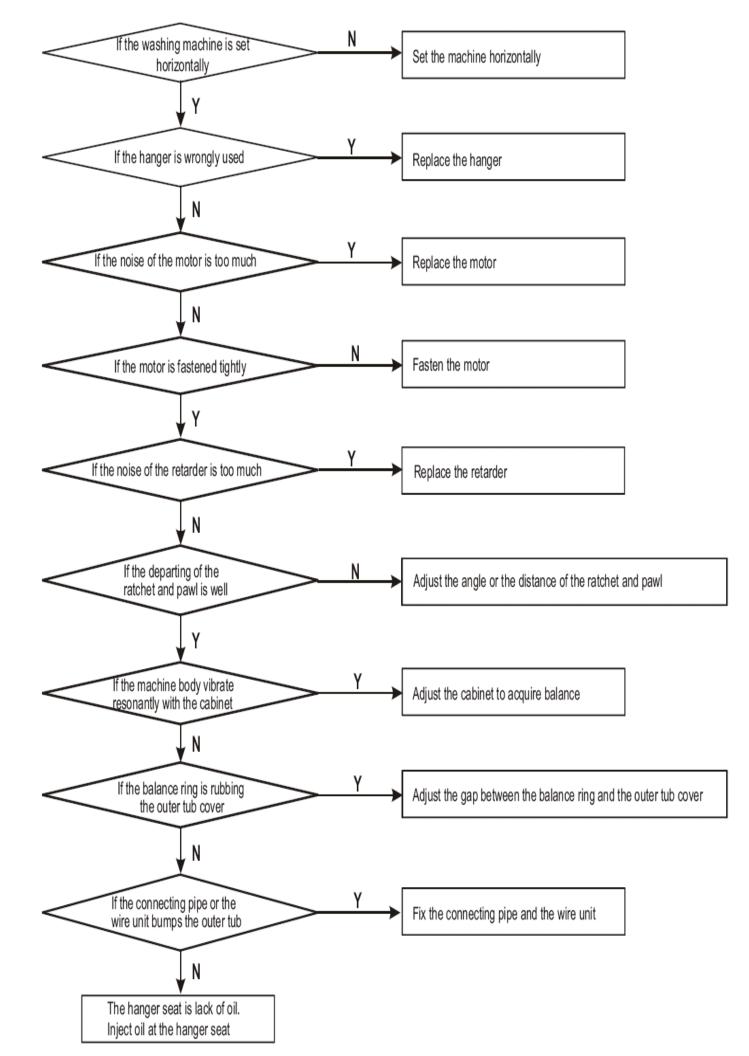
5. Keep filling water



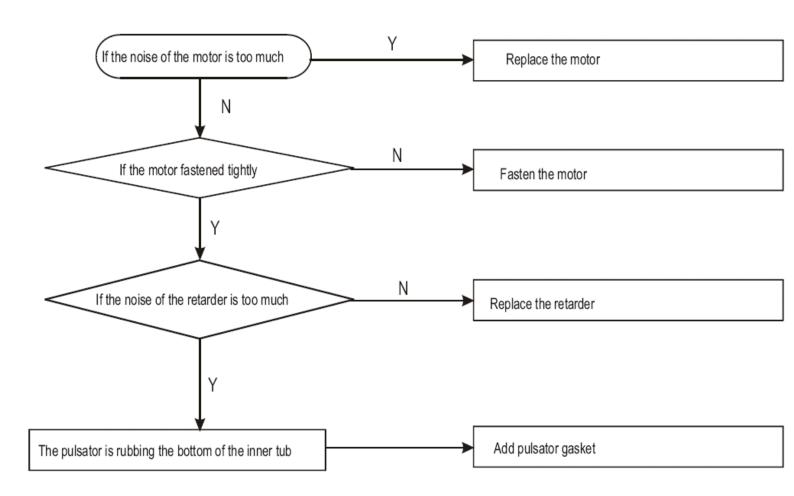
6. No spinning



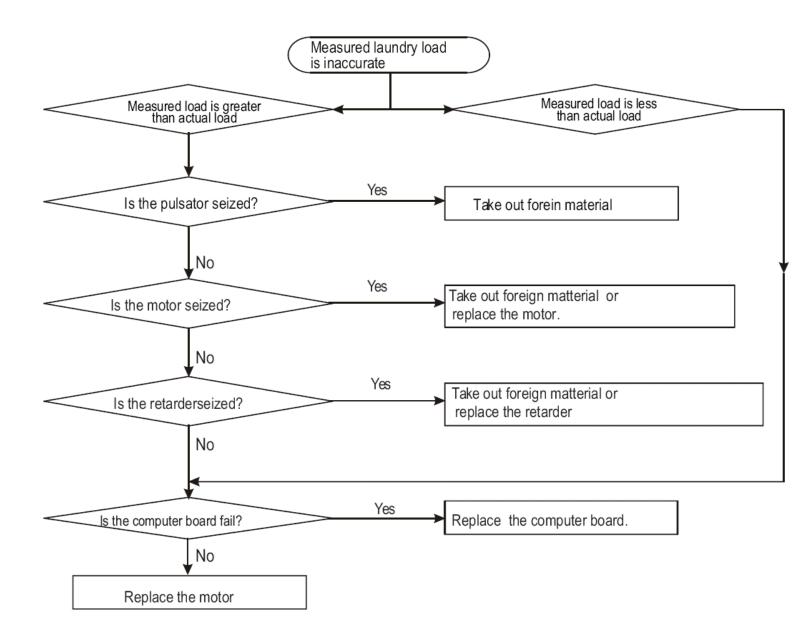
7. Too much spinning noise



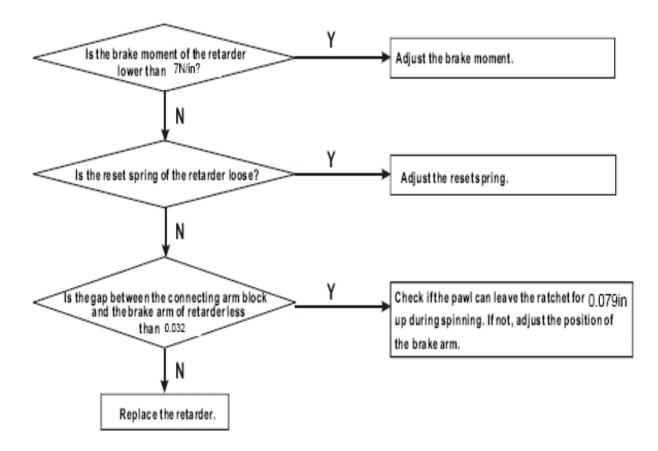
8. Too much noise in washing



9. The measured laundry load is inaccurate

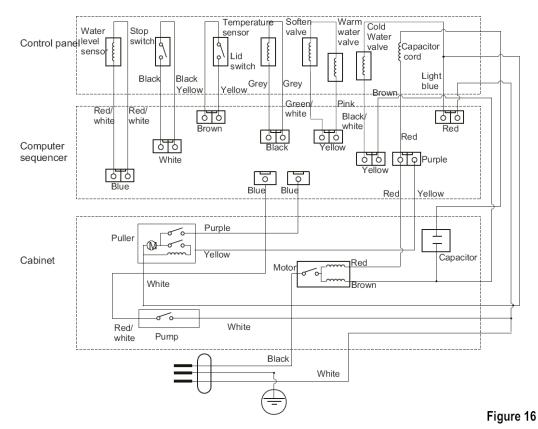


10. Break time out



WIRING DIAGRAM

Actual Circuit Diagram



Circuit Diagram

