

Skyworth Front-loading WM working fundamental and troubleshooting—— 55series


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1. Product introduction

(1) Functions and specifications

Model	F80455NB	F10455RB	F12455GB
Color	White/Silver/Brown/Golden/Dim gray		
Product picture			
LED display	√	√	√
Automatic program	√	√	√
Smart memory	√	√	√
Tub-clean program	√	√	√
Variable temp wash	√	√	√
Adjustable spinning speed	√	√	√
Stainless steel tub	√	√	√
Water draining	√	√	√
Up drain	√	√	√

Child lock	√	√	√
Power-off automatically	√	√	√
Rated voltage	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Rated washing power(W)	200	200	200
Rated spin power(W)	600	500	700
Rated heating power(W)	2000	1800	2000
Washing temp	cold/20/40/60/90	cold/20/40/60/90	cold/20/40/60/90

(2) Features

- (1) Various functions and easy operations for use
- (2) Various programe to use expediently
- (3) Washing (heating wash) and spinning are operated automatically.
- (4) High accuracy of cloth measurement and eccentric force check to enhance wash ratio.
- (5) Auto door-lock, BLDC motor(lighter vibration, lower noise)
- (6) Various automatic program: Cotton, Mix,Synthetic, Baby Care,Quick15', Quick42', Under-wear.Shirt,Rinse+Spin, Spin, Duvet, Wool,Eco,Sports,Eco, Tub Clean,There are also different Pre delay,temp and spin speeds for choose.

(3) Spefications

Items	F80455NB	F10455RB	F12455GB
Product size	595x600x850 mm	595x600x850 mm	595x640x850 mm
Packing size (W×D×H)	660x670x885 mm	660x670x885 mm	660x710x885 mm
tub size (mm)	Φ484*317	Φ484*372	Φ484*400
Net weight	63kg	65kg	76kg
Washing way	Front-loading		
Spin way	Centrifugal		
Vibration way	Friction damper+ hanging spring		
water level check way	Frequency switch		

Water level		Program shifted automatically		
Washing, spin way		BLDC Motor		
Motor quantity		1		
Tub spin speed	washing	50rpm		
	spin	400/800/1000/1200/1400rpm	400/800/1000/1200/1400rpm	400/800/1000/1200/1400rpm
Rated washing capacity		8.0kg	10.0kg	12.0kg
Rated spin capacity		8.0kg	10.0kg	12.0kg
Heating wash temp		20/40/60/90℃		
Voice	Washing	60dB		
	Spin	75dB	75dB	76dB
Water pressrure		0.03 ~ 1MPa (0.3 ~ 1.0kgf/cm ²)		
Parts: Manual. In-let components, Wrench				





(4) Main parts specification


Parts name	specification	Parts name	specification
body	Material: PCM	outer drum	Material: PP+glass fiber
back cover	SGCC	Bottom feet	Four adjustable feet
Power Switch	Mechanical	Optional switch	program
Start/stop switch	Mechanical	Door Lock	electronic Door
water level sensor	Frequency switch Rated voltage: 5V	inlet valve	Water pressure range: 0.03~1.0Mpa Max flow: A: Main: 14L/min B: Prewash: 14L/min Rated voltage: 220-240V Coil resistance: 4.66KΩ±0.1
Drain pipe	Bellows 1.87m		
Drain pump	Flat		
Water inlet pipe	PVC pipe 1.0m	Washing heating tube	1) 440 or 470 platform Rated voltage: 230V AC Rated power: 1500W 2) 550 or 590 platform Rated voltage: 230V AC Rated power: 2000W
Washing, spin motor	1) 470 BLDC motor: 230V AC 50Hz (X2362-001-72L) 2) 550 or 590 BLDC Motor Rated voltage: 230V AC 50Hz		

	(X2362-001-55L)		
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(5) Notice before washing

- (1) Before washing, please adjust and tight each screw to keep the machine flat and stable for the risk of great vibration when spinning.
- (2) Please use the low bubble detergent and refer to its manufacture suggestions specially to wash the cloths.
- (3) Please check and confirm the suitable temp from clothes label before heating.
- (4) Caution:

 WARNING	
	<p>● May cause the risk of electric shock or fire</p> <p>Please do not place the washing machine in damp places like the bathroom, or in weather-beaten places. It needs to be safely grounded during being used. After using, please Unplug the power cord and cut off the power.</p>
	<p>● May cause the risk of being injured</p> <p>Before WM stopping running, don't put your hands into dewatering cylinder even though the cylinder spin slowly, because it may cause injury due to clothes wrapped in arms. Pay special attention to the danger of children</p>
	<p>● May cause the risk of fire</p> <p>Please use special groundable wire socket of 220~240, more than 10A. If share sockets with other electrical appliances, it may cause fire due to heating.</p> <p>● May cause the risk of explosion or fire</p> <p>Please do not put in items carrying with kerosene, gasoline, thinner, alcohol and other chemicals, or wash clothes which may cause fire due to heating. Please do not place beside the WM with flammable items.</p>

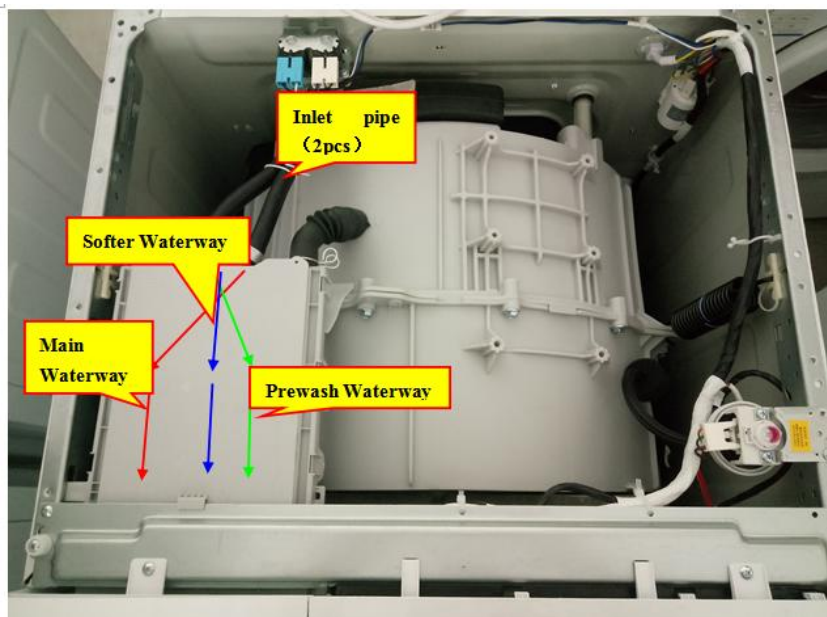
	<p>● May cause the risk of children going inside and injured</p> <p>Don't let people,like children use WM,who are not familiar with operation of WM. It may cause children go inside and lead to injury, etc.</p>
WARM PROMPT	
<ul style="list-style-type: none"> ● Installation, Before using,please read the instructions carefully and remove the transport screws behind the machine. ● To avoid overflow and burns,please Please confirm the water level in the tub before opening the door when adding items or power cut. ● In the process of running don't put the items on the top cover, the vibration may lead to items damage. 	
Attentions when using mesh laundry bags	
<ul style="list-style-type: none"> ● Do not use mesh laundry bags when washing items such as blankets, cotton quilt (it may cause abnormal vibration). ● Do not put too much clothing into the mesh laundry bags. 	

2. Structure and functions

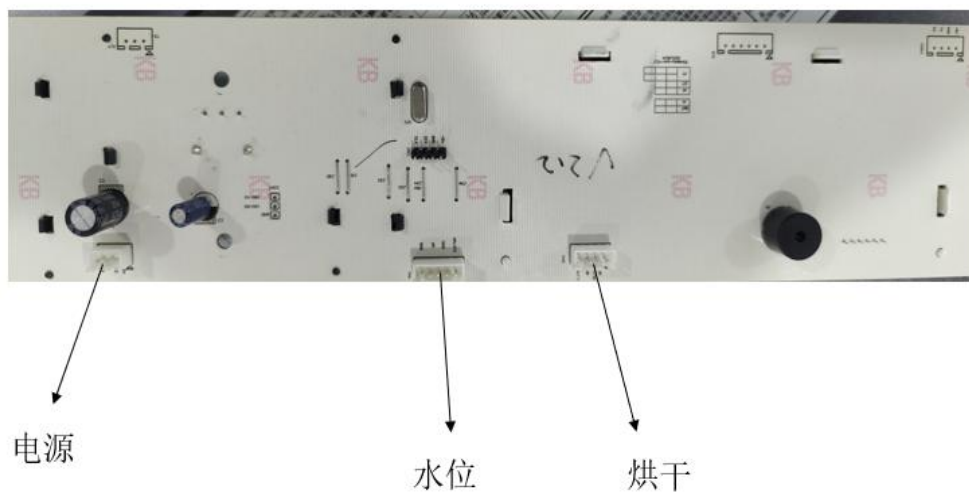
(1) System of waterway

Water inlet: inlet pipe→inlet valve→inlet hose→detergent box→detergent box bellows →outer tub

Dewatering: inner tub→outer tub→pump→bellows→drain pipe



(2) Main control panel connector and function



(3) Control panel and its settings

(1) control panel



Control Panel for reference

(2) Setting and display

ON/OFF: Press it 3 seconds; Procedure finished, power off automatically

Start/Pause: Press Start button to start operation; Press Pause button to stop temporarily

Program: press it to select additional functions as following:

Model: F80455NB

Program	Temperature (°C)	Spin Speed (Run/Min.)	time (m)
Cotton	40°C(cold water,20°C,60°C,90°C)	1000(0,400,800,1200,1400)	75
Eco	20°C(cold water,40°C,60°C)	800(0,400,1000,1200,1400)	52
Sports	cold water(20°C,40°C)	800(0,400)	44
Duvet	40°C(cold water,20°C)	800(0,400)	88
Delicate	20°C(cold water,40°C)	800(0,400)	48
Baby Care	60°C(40°C,90°C)	800(0,400,1000)	142
Steam	60°C(cold water,20°C,40°C,90°C)	800(0,400,1000)	182
Spin Only	—	1000(0,400,800,1200,1400)	11
Rinse+Spin	—	1000(0,400,800,1200,1400)	17
Wool	40°C(cold water,20°C)	800(0,400)	47
Synthetic	40°C(cold water,20°C,60°C)	1000(0,400,800,1200,1400)	68
Rapid 42'	20°C(cold water,40°C)	800(0,400)	42
Quick 15'	cold water(20°C,40°C)	800(0,400)	15
Mix	cold water(20°C,40°C)	800(0,400)	76

Model: F80455NB,F10455RB,F12455GB

Pre-delay: When use "Pre Delay" function for washing, the delay time is 3-24hours

Door Lock: When operating, door lock effects automatically and the door lock light is lighting; Press "Start/Pause" , tub stops for 2 mins, door is unlocked; High-temp and high water level working, door is locked;

Child Lock: If you want to start child lock function, you should press Pre Delay button for 3 seconds ; To unlock the lock, you can press "Pre Delay " button for 3 seconds during any programs.

(3) Additional functions

Power-off automatically: Finishing washing program about 10mins, the machine will be powered-off automatically.

Eccentricity check: When spinning, the machine is loaded to check the eccentricity and find the spinning track automatically.

Defoam: When washing and spinning, the machine will check the foam and handle it accordingly.

Smart dewatering: When program is finished, the machine will check the water level whether it exceeds the inner tub or not. If yes, it will open the drain valve and let it comes down to the inner tub and closed the valve automatically.

Smart unlock: After program finished, if the water level is too high, drain pump will start to work until the level reaches the right line and it is unlocked. If the inner temp is too high, it will be unlocked when the temp comes down to the safe and waits for 1mins.

(4) Control check

Abnormal heated pipe check: When the machine doesn' t work properly, broken or short circuit of the heated pipe will be checked and set the alarm.

Door lock check: Any abnormal action will cause the alarm when the door is locked or unlocked.

Speed check: When motor both runs and stops, the machine will alarm if the speed is abnormal.

Water temp sensor check: Abnormal sensor will cause an alarm.

Water level check: When the level is higher than overflow level, the machine will alarm

(5) Process of electric units check

Function application s of LQC

- When plug-in, pressing Program, rinse and ON/OFF at the same time means LQC effected

- Under this condition, only ON/OFFr, Start/Pause and rinse are available

- Under this condition, press ON/OFF means power-off; press Start/Pause means units test as following steps; Press rinse within 5s means Life Test effects.

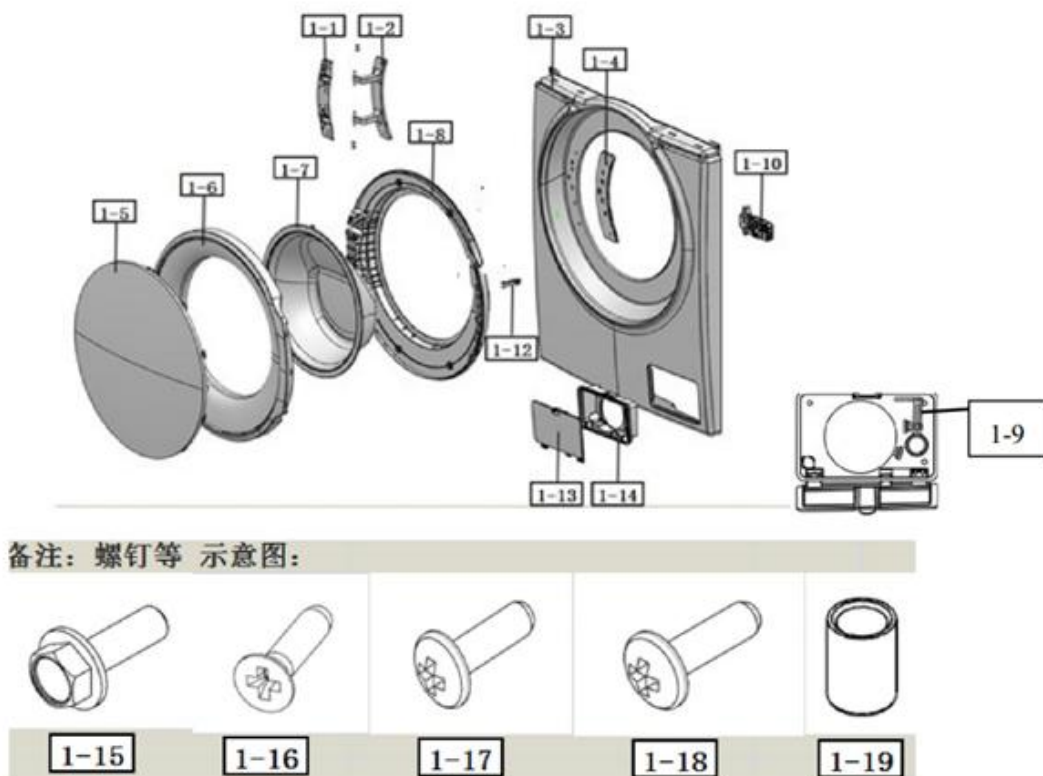
Test each units function by following steps:

★Function application s of LQC:			
Steps	Function	Display	Note
1	Inject water, worker check the structure	/	The machine hasn' t power-on yet
2	Enter LQC	All lights shine 2s continuously	Press theprogram, rinse and ON/OFF together, then power on to move the next step.
3	Check the programs changes ande versions	it shows program changes-2S, and 2S of versions next	Move to the next step-Whether all LED lights are OK?
4	Check whether all LED lights are OK; check all using programs whether is ok(No need of draining)	Door lock light is on	Press the Start button to continue
5	Inlet test of prewash valve	Door lock light is on	press "Start" to next step
6	Inlet test of wash valve	Door lock light is on	press "Start" to next step

7	Inlet test of heated water valve,	Door lock light is on (except for the alarm light)	press "Start" to next step
8	Inlet confirm of Rinse (two valves)	Door lock light is on	press "Start" to next step
9	Heater test (power-on 5s)	Door lock light is on	press "Start" to next step
10	Motor spinning with water test	Door lock light is on	Firstly rotate in 50 speed in clockwise for 5s, then stop for 3s, later change automatically in anticlockwise in 400 speed for 40s, afterwards move to the next step, the motor stopped, and pump started to drain. All situation over could start the next step
11	Drain pump test	Door lock light is on	press "Start" to next step(The water should be drained totally, otherwise when the level is over 2mm, it will alarm.
12	Motor test with no water and high speed	Door lock light is on	Drain totally, then move to the next step.
13	Motor test with no water and high speed	Door lock light is on	press "Start" to next step
14	LQC test finished	All lights are off	power-off

3. EXPLOSIVE VIEW

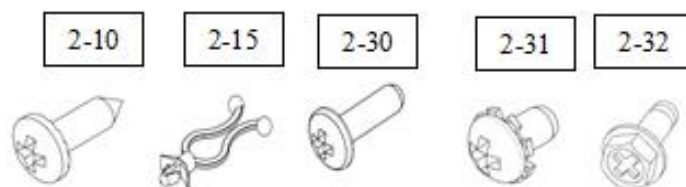
(1) Cabinet cover asm

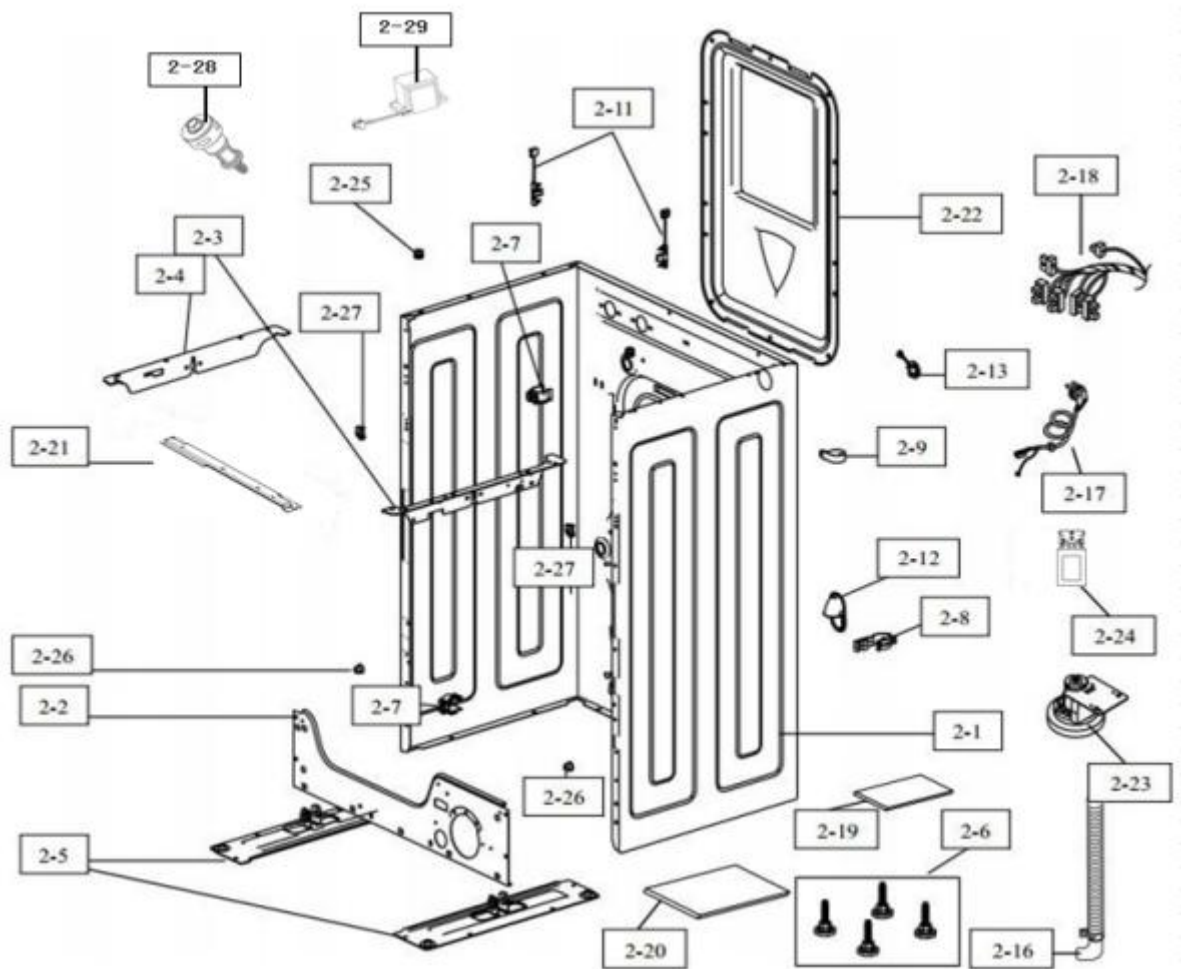


NO.	Chinese Name	English Name	Quantity	Unit	Note
1-1	门铰链固定板	Door hinge holder	1	PC	
1-2	门铰链	Door hinge	1	PC	
1-3	前门板-自动门锁	Cabinet Cover	1	PC	
1-4	门加强板	Door holder	1	PC	

1-5	外门	Outer door	1	PC	
1-6	门玻璃	Door glass	1	PC	
1-7	内门	Inner Door-09	1	PC	
1-8	门锁	Door switch	1	PC	
1-9	门把手	Door handle-09	1	PC	
1-10	门把手支架	Door handle holder	1	PC	
1-11	门卡勾	Latch hook	1	PC	
1-12	门销	Pin	1	PC	
1-13	排水盖板-欧系	Cap cover	1	PC	
1-14	排水盖板盒子-欧系	Case	1	PC	
1-15	门铰链螺栓	Bolt	2	PC	
1-16	螺钉	Screw	12	PC	
1-17	螺钉	Screw	6	PC	
1-18	螺钉	Screw	2	PC	
1-19	门铰链帽子	Holder	4	PC	

(2) Cabinet asm/Back Cover



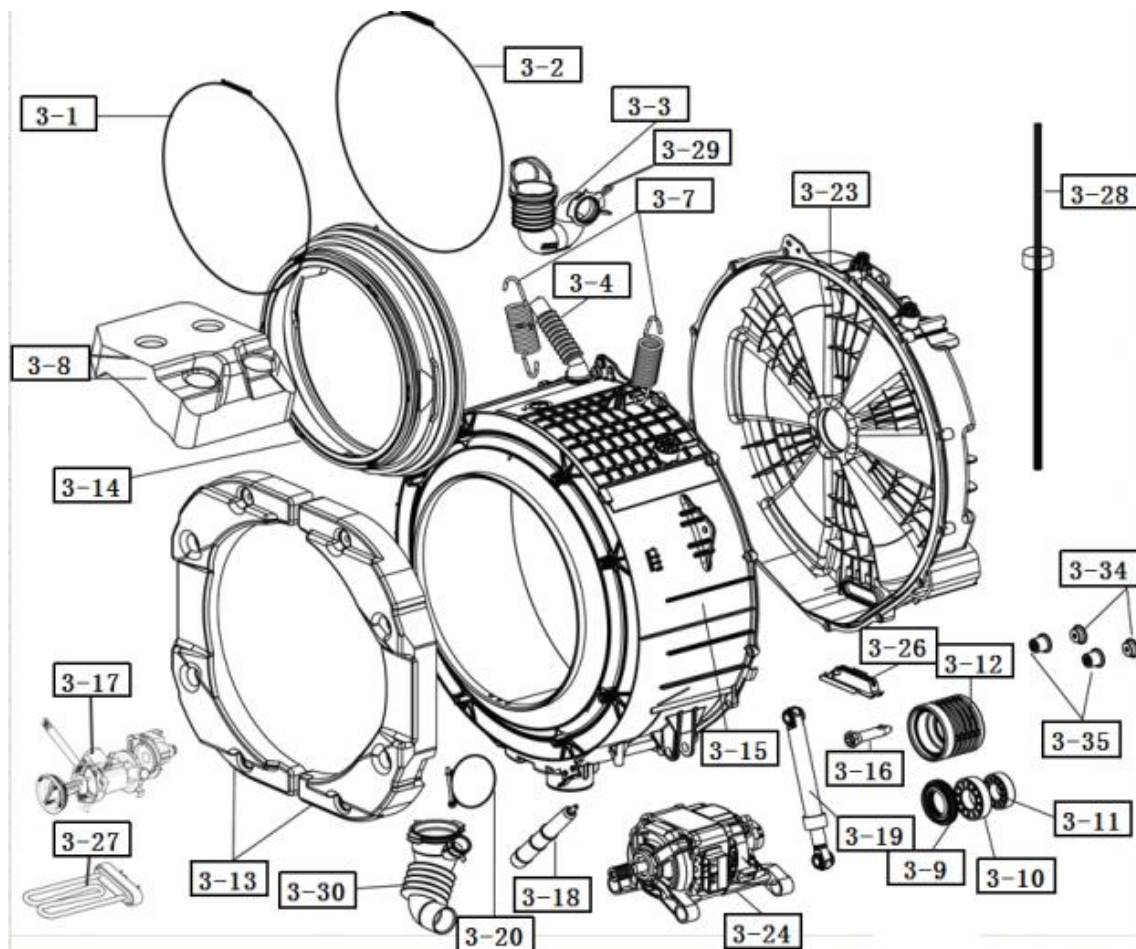


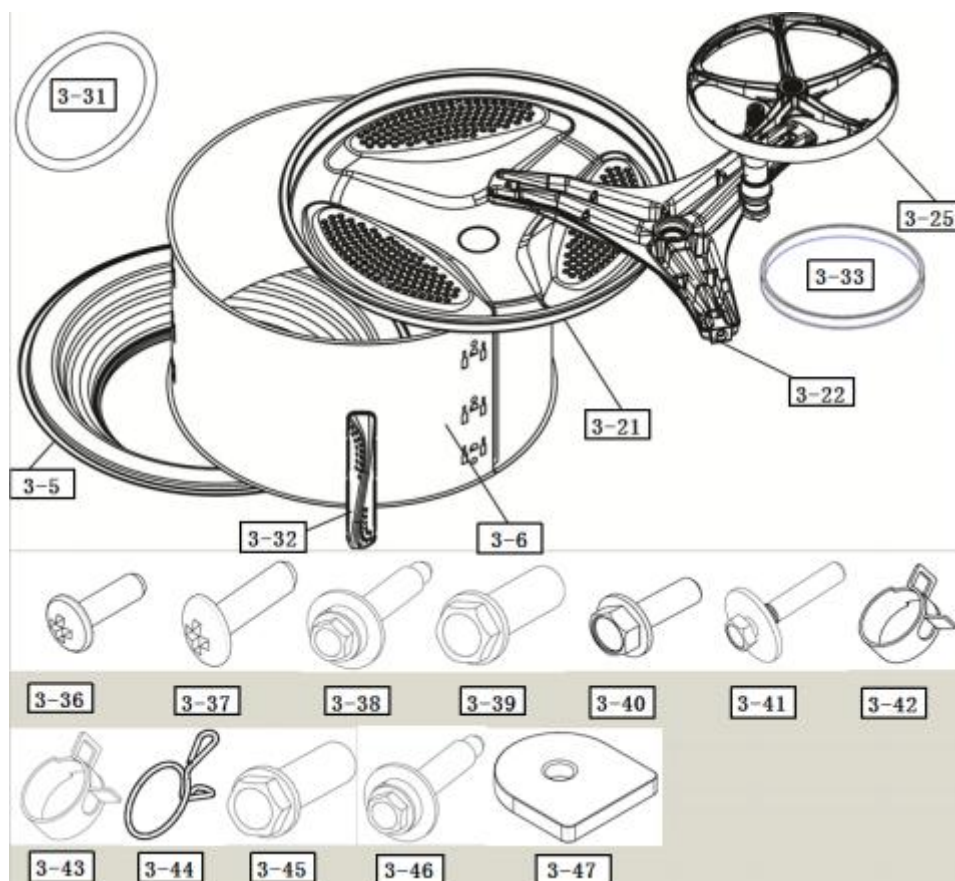
NO.	Chinese Name	English Name	Quantity	Unit	Note
2-1	箱体 PCM 钢板	Cabinet	1	PC	
2-2	下支架	Low Frame	1	PC	
2-3	上撑板-左	Top bracket-Left	1	PC	
2-4	上撑板-右	Top bracket-Right	1	PC	
2-5	下撑板-左	Base bracket-Left	1	PC	
	下撑板-右	Base bracket-Right	1		
2-6	调整脚	Leg	4	PC	

2-7	排水管卡	Holder	2	PC	
2-8	排水管卡	Holder	1	PC	
2-9	排水管卡	Holder	1	PC	
2-10	螺钉	Screw	1	PC	
2-11	吊簧卡座	Holder	2	PC	
2-12	排水管卡套	Holder	1	PC	
2-13	运输螺栓帽	Holder	4	PC	
2-14	铁线扎	Tread	1	PC	
2-15	八字线卡	Holder	4	PC	
2-16	排水管	Pump hose	1	PC	
2-17	电源线 (低端 内销)	Power Cord	1	PC	
2-18	主线束	Main harness	1	PC	
2-19	箱体海绵(侧)	Damper	1	PC	
2-20	箱体海绵(后)	Damper	1	PC	
2-21	上支架	Panel Frame	1	PC	
2-22	后盖板	Back Cover	1	PC	
2-23	水位传感器	Pressure switch	1	PC	
2-24	滤波器	Noise filter	1	PC	
2-25	上盖板卡	Holder	1	PC	
2-26	前门板销子	Holder	2	PC	
2-27	前门板销子	Holder	2	PC	

2-28	运输螺栓	Transport Bolt	4	PC	
2-29	电抗器	Reactor	1	PC	CIM motor
2-30	螺钉	Screw	6	PC	
2-31	地线螺钉	Screw	2	PC	
2-32	螺钉	Screw	10	PC	
2-33	运输螺栓	Transport Bolt	4	PC	

(3) Tub asm



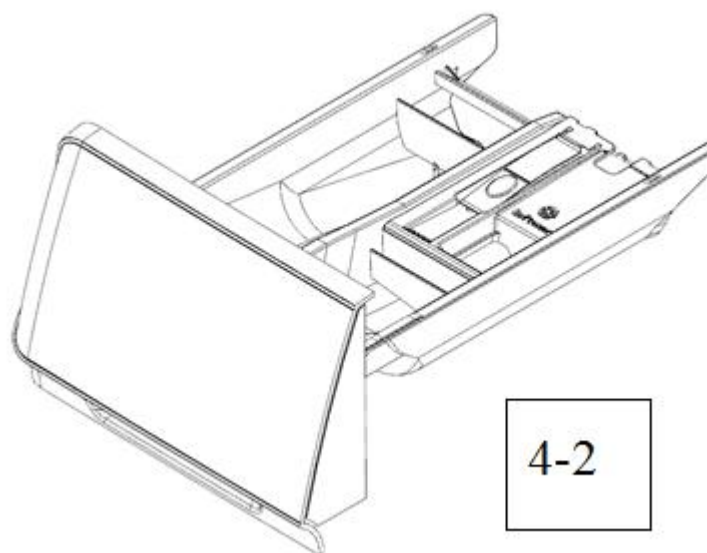
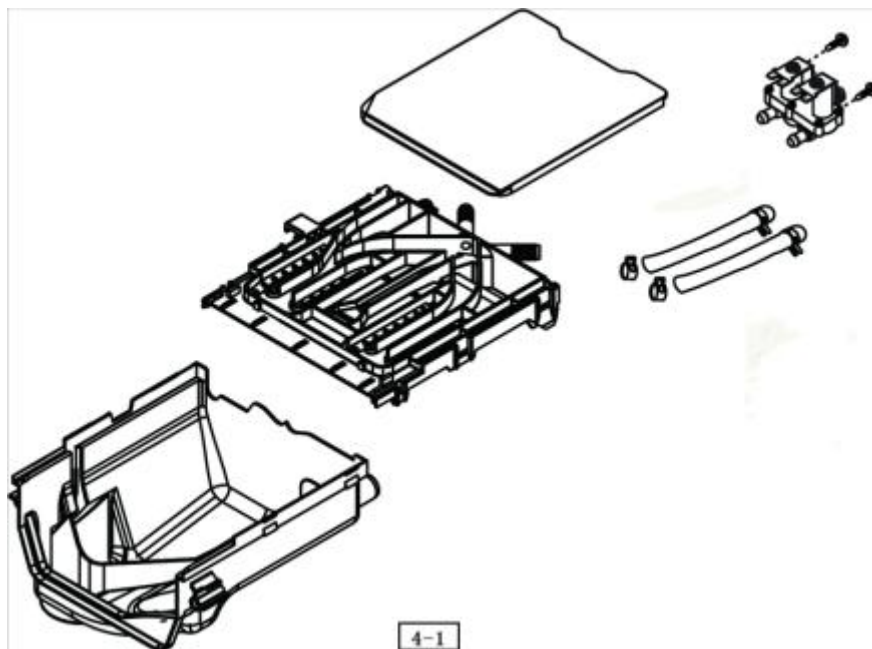


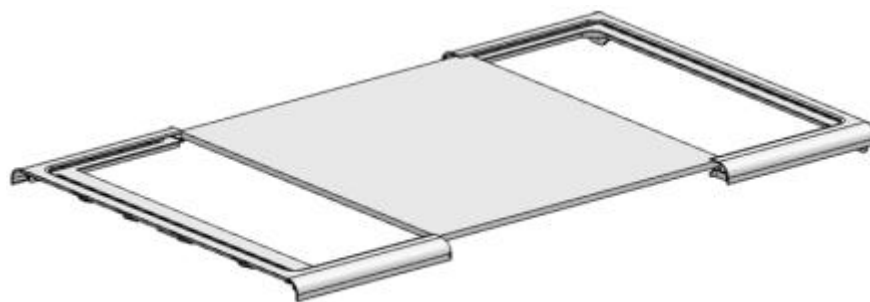
NO.	Chinese Name	English Name	Quantity	Unit	Note
3-1	门密封圈卡簧(小)	Clamp	1	PC	
3-2	门密封圈卡簧(大)	Clamp	1	PC	
3-3	洗涤剂盒波纹管	Hose	1	PC	
3-4	通气管	Hose	1	PC	
3-5	内桶前盖	Inner tub,front	1	PC	
3-6	内桶桶身不锈钢钢板	Inner Tub,center	1940	G	
3-7	吊簧	Spring	2	PC	
3-8	上平衡块	Balance weight	2	PC	
3-9	水封	Water seal	1	PC	

3-10	轴承 6206	Bearing	1	PC	
3-11	轴承 6205	Bearing	1	PC	
3-12	轴盘	Bearing housing	1	PC	
3-13	前平衡块	Balance weight	2	PC	
3-14	门密封圈	Seal	1	PC	
3-15	外桶桶盖	Tub cover	1	PC	
3-16	减震销	Damper pin	2	PC	
3-17	排水泵	Pump	1	PC	
3-18	气室	Air chamber	1	PC	
3-19	减震器	Damper	2	PC	
3-20	排水波纹管卡簧	Clamp	1	PC	
3-21	内桶桶底	Inner Tub,back	1	PC	
3-22	三脚架	Spider	1	PC	
3-23	外桶桶底	Tub outer	1	PC	
3-24	BLDC 电机	Universal Motor	1	PC	
3-25	皮带轮	Belt pulley	1	PC	
3-26	加热器支架	Heater bracket	1	PC	
3-27	加热器	Heater	1	PC	
3-28	水位传感器管子	Hose	1	PC	
3-29	洗涤剂盒波纹管管夹	Clamp	1	PC	
3-30	排水波纹管	Hose	1	PC	

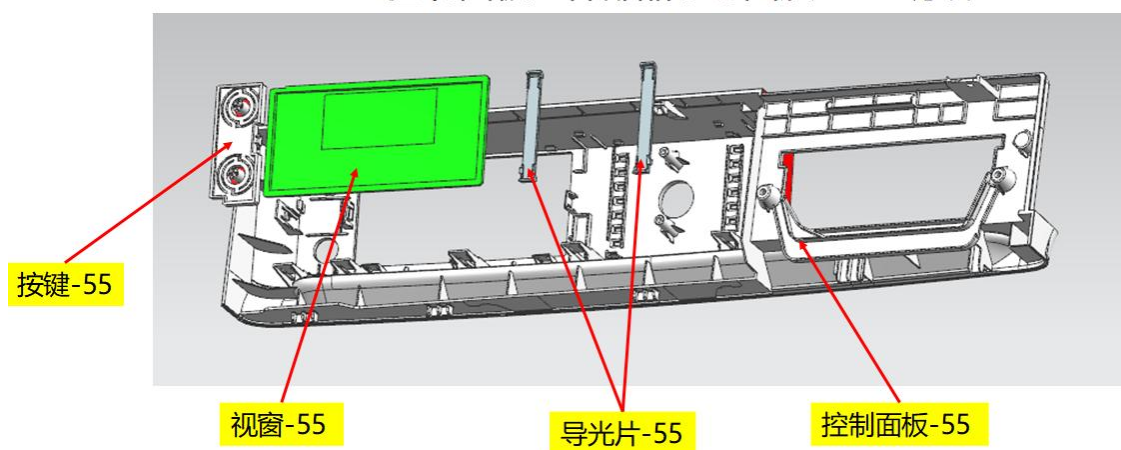
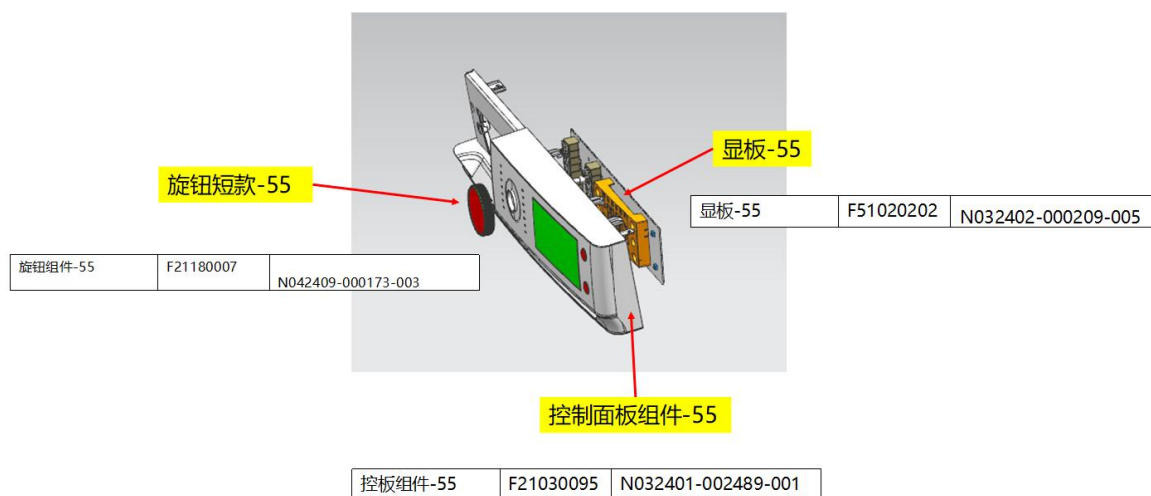
3-31	密封圈	Seal	1	PC	
3-32	提升筋	Lifter	3	PC	
3-33	皮带	Belt	1	PC	
3-34	BLDC 电机脚套	Cover	2	PC	
3-35	BLDC 电机脚套	Cover	2	PC	
3-36	螺钉	Screw	7	PC	
3-37	螺钉	Screw	3	PC	
3-38	定子螺栓	Screw	6	PC	
3-39	皮带轮螺栓	Bolt	1	PC	
3-40	平衡块螺栓	Bolt	12	PC	
3-41	外桶螺栓	Bolt	15	PC	
3-42	气室片簧	Clamp	1	PC	
3-43	排水泵片簧	Clamp	1	PC	
3-44	洗涤剂盒管夹	Clamp	4	PC	
3-45	三脚架螺栓	Bolt	3	PC	
3-46	BLDC 电机螺栓	Screw	2	PC	
3-47	BLDC 电机螺栓垫片	Gasket	2	PC	

(4) Dispenser asm/Drawer panel asm/Top plate asm/Control panel asm



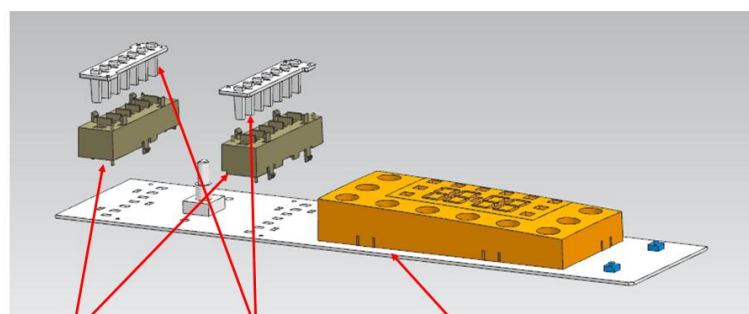


4-3



控板组件-55	F21030095	N032401-002489-001
控制面板-55	F31030099	N042409-000162-001
方视窗-55	F31050073	N042409-000165-001
按键-55	F31040063	N042409-000164-001
导光片-55	F31530187	N042409-000174-001

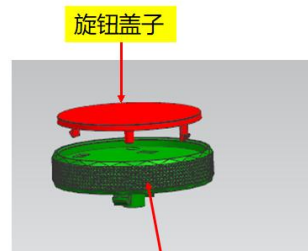
4-4



导光柱套-55

导光柱-55

显板-55



旋钮

显板-55	F51020202	N032402-000209-005
导光柱-55	F31520020	N042409-000166-001
导光柱套-55	F31530186	N042409-000167-001

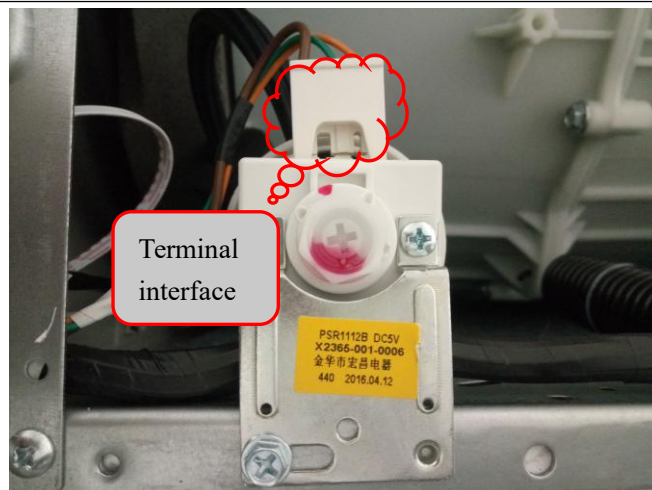
旋钮组件-55	F21180007	N042409-000173-003
旋钮-55	F31320050	N042409-000177-001
旋钮盖子	F31530182	N042413-000161-001

4-5



NO.	Chinese Name	English Name	Quantity	Unit	Note
4-1	洗涤剂盒组件	Dispenser assembly	1	PC	
4-2	抽屉面板组件	Drawer panel assembly	1	PC	
4-3	上盖板	Top plate	1	PC	
4-4	控制面板	Control panel	1	PC	
4-5	电脑板	PWB assembly	1	PC	

4. Disassemble steps

Related pictures	Disassemble steps
	<p>Remove 2 screws from the fixed upper cover.</p>
	<p>Push the cover and take it away as the arrow direction shows</p>
	<p>Remove 2 screws fixed from the control panel</p>
	<p>1.Pull out the detergent parts</p> <p>2.Remove 2 screws fixed from the detergent parts</p>



- 1.Pull out the terminal of PWB and take it away.
- 2.Split the control panel:remove screws fixed from the PWB panel.
- 3.pry the knob parts.
- 4.Take out the display panel, button parts and the frame parts

	<p>The replaced units as follows</p> <ol style="list-style-type: none"> 1. detergent box parts; 2. water inlet pipe; 3. double inlet valve; 4. single inlet valve; 5 air pipe 6. water level sensor 7. balancing weight(up) 8. balancing spring and the base
	<p>Remove 2 screws fixed from the door and take the parts away.</p>

	<p>1.Remove the spring coil from the door seal.</p> <p>2.Remove 2 screws from the latch hook</p>
	<p>Open the cap cover, remove 2 screws fixed from it, take the cover and case away.</p>

	<ol style="list-style-type: none"> 1. Remove 6 screws from the door cover, 2. Take the front door cover as the arrow direction
	<p>replaceable:</p> <ol style="list-style-type: none"> 1.door seal 2.spring coil 3.balance weight(front left) 4.balance weight(front right) 5.drain pump; 6.drain pipe parts; 7.door switch

	<p>Remove 4 screws from the back cover and take the cover away.</p>
	<p>Replacable: 1.Universal Motor (or Belt pulley) ; 2.Heater parts;</p>

5. Faults code

Phenomenon	Indicator light state				check points	solutions
	Child Lock	Wash	Rinse	Spin		
Water inflow	flash	light	quench	quench	<ul style="list-style-type: none"> ● Check if turn the tap off? ● Is the water supply cut off or the water pressure too low? ● Are the water inlet pipes frozen? ● Are the filters blocked? 	Open the stopcock. Please wait. Use hot water to unfreeze the pipes. Take out the filters and clean them.
Water outflow	flash	quench	light	quench	<ul style="list-style-type: none"> ● Are the outlet pipes placed too highly? ● Are the outlet pipes frozen? ● Are the outlet pipes blocked? ● Are the floor drain blocked? 	Please put away the outlet pipes and make sure the height within 1M. Use hot water to unfreeze the pipes. Take out the foreign matter and dredge the pipes. Clean the floor drain.
Door trouble	flash	quench	quench	light	<ul style="list-style-type: none"> ● Make sure if start the washer without closing the door well. 	Make sure the door truly closed
Spin trouble	flash	light	quench	light	<ul style="list-style-type: none"> ● Check if disassemble the carriage bolt? ● Is the machine placed steadily? ● Are the clothes too small or light? ● Are the locknuts on under the feet tightened up? 	Disassemble the carriage bolt. Place the machine on a steady ground. Add more clothes. Tighten up the locknuts.
Continuous water	flash	light	light	quench	Close the stopcock, pull the plug and , entrust the after-sales service.	
No heating	flash	light	light	light	Please pull the plug and entrust the after-sales service	
when wash tub doesn't rotate.	flash	quench	quench	quench	Close the stopcock, pull the plug and , entrust the after-sales service.	
Too much foam					<ul style="list-style-type: none"> ● Check if add too much detergent? 	Add reasonable amount of detergent. Use the detergent correctly.

Notes:

1. When faults occur, only Power and Start/Pause button are available; If Child lock was set, it is available also.

Power button: power-off

Start/Pause: first press stops alarming, second press continues the operation.

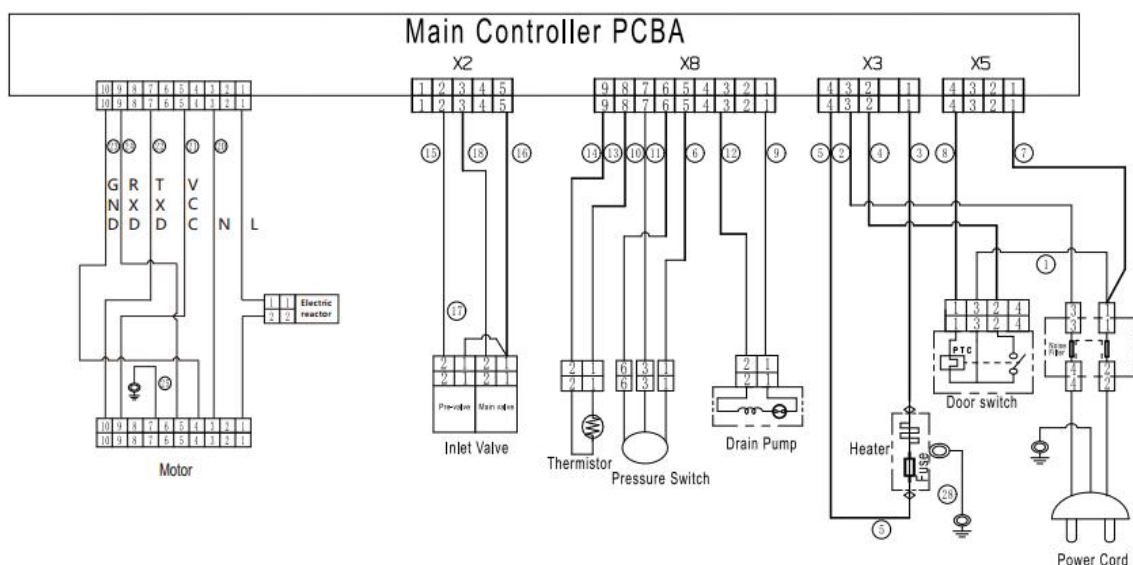
2. Dynamic balance NG alarms when the machine moves to spinning. When spinning from prewash or rinse program, if high speed spinning failed 28 times, please stop and move to next step.

3. Additional notes of door lock alarm: The lock alarming under unusual shut(with too strong or light power) is not quality problem. It needs reset by another push to effect closing. Suggest customer to close the door as the picture shows.



6. Common troubleshootings

(1) Circuit diagram



(2) Troubleshooting procedure

