

WASHING MACHINE DRUM TYPE

Basic Model	:	WF405ATPAWA/A2
Model Name	:	WF42H5000AW
		(WF5000HA-PJT)
Model Code	:	WF42H5000AW/A2 (WF5000HA-PJT)

SERVICE Manual

WASHING MACHINE (DRUM)



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1. SAFETY INSTRUCTIONS

1-1. SAFETY INSTRUCTIONS FOR SERVICE ENGINEERS

- Be sure to observe the following instructions to operate the product correctly and safely to prevent possible accidents and hazards while servicing.
- ► Two types of safety symbols, Warning and Caution, are used in the safety instructions.



Hazards or unsafe practices that may result in severe personal injury or death.



Hazards or unsafe practices that may result in minor personal injury or property damage.

MARNING BEFORE SERVICING

- (When servicing electrical parts or harnesses) Make sure to disconnect the power plug before servicing. $\sqrt{}$ Failing to do so may result in a risk of electric shock.
- Do not allow consumers to connect several appliances to a single power outlet at the same time.
 - \checkmark There is a risk of fire due to overheating.
- When removing the power cord, make sure to hold the power plug when pulling the plug from the outlet.
 - \checkmark Failing to do so may damage the plug and result in fire or electric shock.
- When the washing machine is not being used, make sure to disconnect the power plug from the power outlet.
 - \checkmark Failing to do so may result in electric shock or fire due to lightning.



 \checkmark There is a risk of explosion and fire caused from electric sparks.





- Check if the power plug and outlet are damaged, flattened, cut or otherwise degraded.
 - ✓ If faulty, replace it immediately. Failing to do so may result in electric shock or fire.
- Completely remove any dust or foreign material from the housing, wiring and connection parts.
 - $\checkmark\,$ This will prevent a risk of fire due to tracking and electrical hazard..
- When connecting wires, make sure to connect them using the relevant connectors and check that they are completely properly.
 - \checkmark If tape is used instead of the connectors, it may cause fire due to tracking.
- Make sure to discharge the PBA power terminals before starting the service. $\sqrt{}$ Failing to do so may result in a high voltage electric shock.
- When replacing the heater, make sure to fasten the nut after ensuring that it is inserted into the bracket-heater. $\sqrt{16}$ If not inserted into the bracket-heater, it touches the drum and causes noise and electric leakage.

WARNING AFTER SERVICING

- Check the wiring.
 - \checkmark Ensure that no wire touches a rotating part or a sharpened part of the electrical harness.
- Check for any water leakage.
 - \checkmark Perform a test run for the washing machine using the standard course and check whether there is any water leakage through the floor section or the pipes.
- Do not allow consumers to repair or service any part of the washing machine themselves.
 - $\sqrt{}$ This may result in personal injury and shorten the product lifetime.



If it seems that grounding is needed due to water or moisture, make sure to run grounding wires.

(Check the grounding of the power outlet, and additionally ground it to a metallic water pipe.)

 \checkmark Failing to do so may result in electric shock due to electric leakage.

[Running a grounding wire]

- Twist a grounding wire (copper wire) two or three times around the tap.
- If you connect the grounding wire to a copperplate, bury it 75 cm under the earth in a place with a lot of moisture.
 - \triangle Do not connect the grounding wire to a gas pipe, plastic water pipe or telephone wire. There is a risk of electric shock or explosion.





\checkmark This may result in electric shock or fire, and may shorten the product lifetime. Do not place any containers with water on the washing machine. $\sqrt{}$ If the water is spilled, it may result in electric shock or fire. This will also shorten the product lifetime. Do not install the washing machine in a location exposed to snow or rain. \checkmark This may result in electric shock or fire, and shorten the product lifetime.

Do not press a control button using a sharp tool or object.

 \checkmark This may result in electric shock or damage to the product.

WHILE SERVICING

- When wiring a harness, make sure to seal it completely so no liquid can enter.
 - \checkmark Make sure that they do not break when force is exerted.
- Check if there is any residue that shows that liquid entered the electric parts or harnesses. \checkmark If any liquid has entered into a part, replace it or completely remove any remaining moisture from it.
- If you need to place the washing machine on its back for servicing purposes, place a support(s) on the floor and lay it down carefully so its side is on the floor.
 - $\sqrt{}$ Do not lay it down on its front. This may result in the inside tub damaging parts.











CAUTION AFTER SERVICING

- · Check the assembled status of the parts.
 - $\sqrt{}$ Now is a good time to inspect your work. Review all connections and wiring, including mounting hardware.
- Check the insulation resistance.
 - \checkmark Disconnect the power cord from the power outlet and measure the insulation resistance between the power plug and the grounding wire of the washing machine. The value must be greater than 10M Ω when measured with a 500V DC Megger
- Check whether the washing machine is level the floor with respect to the original position of the washing machine prior to service.

By doing this now will reduce for the need of customer dissatisfaction and redo call.

 $\checkmark\,$ Vibrations can shorten the lifetime of the product.



2. FEATURES AND SPECIFICATIONS

2-1. FEATURES

Features	Description	
BUBBLE	 BUBBLE Technology's Engine generates foam by dissolving detergent with air and water before the normal cycle starts. Foam allows detergent to distribute evenly and penetrate fabrics 2.5 times faster than high efficiency detergent and deeper. Perfectly dissolved detergent by bubble generator penetrates very quickly and widely. BUBBLE Technology's Engine generates foam by dissolving detergent with air and water before the normal cycle starts. Foam allows detergent to distribute evenly and penetrate fabrics 2.5 times faster than high efficiency detergent and deeper. Samsung's effective BUBBLE delivers perfect cleanliness even with delicate fabrics without any damages . 	
SpeedSpray™	 Samsung's new SpeedSpray technology saves you time by shortening wash times while still keeping all portions of the washing process and getting your clothes clean. 	
Smart Care	 Samsung's Smart Care, an automatic error-monitoring system, detects and diagnoses problems at an early stage and provides a quick and easy solution. 	
PureCycle™ (Tub Cleaning cycle)	Clean your drum with one button! This Pure Cycle is specially designed to remove detergent residue and dirt buildup in the tub, diaphragm, and on the door glass without the need for special chemical detergents. (The cycle is run without clothes.)	
Deep steam	The Deep Steam feature boosts cleaning performance and loosens grime and dirt, thus providing superior cleaning results.	
The Large Capacity	 Maximum Capacity, Time & energy Saving King Size comforter with other beddings 	
Quietest VRT™	 Lowest Vibration & Noise Samsung's VRT™ provides smooth operation at spin speeds up to 1,200rpm. 2nd floor as well as main floor installation available 	
High efficiency energy & Water saving	 Washing with Samsung's Silver Wash, even in cold water, sanitizes the laundry thereby saving 92% of the energy normally used with hot water sanitization. 	
Direct drive inverter motor	• The power to handle anything! Our direct-drive inverter motor delivers power right to the washer tub from a variable speed, reversible motor. A beltless direct-drive motor generates a higher spin speed of 1,200rpms for more effective, quiet operation. The washer also has fewer moving parts, meaning fewer repairs.	
Woolmark certified	• The machine wash wool cycle on Samsung machines has been tested and has passed the required Woolmark Company specification for machine washable wool products. Fabrics should be washed according to the instructions on the garment label as specified by Woolmark and Samsung.	

Features	Description	
Diamond Drum	 The washing performance has improved and potential damage to the clothing has been minimized. (The size of the holes on the diamond drum has been reduced for minimizing damage to the clothing/garment.) The embossed wall of the drum serves as a washboard, dramatically increasing the washing performance compared with existing drum washing machines, which uses the power of the difference in elevation only. The size of holes has been reduced drastically, maintaining the optimal wash performance (Washing Cost 1.0) while saving on water and electricity required for washing. The structure of the holes on the diamond drum was redesigned to minimize potential damage to the clothing. 	
	Conventional	
	Diamond Drum	

2-2. SPECIFICATIONS

Model		WF42H	5000AW
Wash type		FRONT LOADING WASHER	
A: High-Overall		38.7"	(984)
Dimension	B: Width	27.0"	(686)
(Inches / mm)	C: Depth with door open 90°	51.2" ((1300)
	D: Depth	33.0" (838)	
Water pressure		20-116psi(137-800kPa)	
Weight	88kg (194 lb)		194 lb)
Heater Rating		900 W	
	Washing	120 V	300 W
Power	Washing and heating	120 V	1200 W
consumption	Spin	120 V	700 W
	Drain	120 V	80 W
Spin revolution 1200 rpm		rpm	



2-3. COMPARING SPECIFICATIONS WITH EXISTING MODELS

	Grade	WF5000HA	YUKON BETTER
Model Name		WF42H5000AW	WF431ABW WF431ABP
Image			
	Capacity (cu.ft / IEC)	4.2cu.ft	4.5cu.ft
	Motor type	DD Motor	DD Motor
	Max RPM	1,200	1300
	VRT	Yes	Yes
Main Snaa	heater(900w)	Yes	Yes
Main Spec	Diamond Drum	Yes	Yes
	Washing Cycle#	9	13
	Delay wash	24hrs	24hrs
	Tilted Drum	10°	10°
	Sound Pressure	Ave 58dBA	Ave 56.3dBA
_	MEF	3.2	3.2
Target performanece	WCF	2.9	2.99
periormanece	kWh/year	93 kWh/year	95 kWh/year
	control Display	LED	G.LED
Design	Frame Color	Refined-wine	W: White P: Stainless platium
	Dimension	27.0X 33.0 X 38.7"	27 X 32.3 X 38.7"

2-4. OPTIONS SPECIFICATIONS

Item		Code	QTY	Remarks
O S	BOLT SPANER	DC60-40146A	1	Default
	ASSY HOSE WATER	DC97-15648A	1	Default
	ASSY HOSE WATER	DC97-15648B	1	Default
	MANUAL USERS	DC68-03397A	1	Default
	CAP-FIXER	DC67-00307A	5	Default
	HOSE HANGER	DC62-10278A	1	Default

🖉 Note

• Customer can purchase additional water supply and drain hoses from a service center.

3. DISASSEMBLY AND REASSEMBLY

3-1. TOOLS FOR DISASSEMBLY AND REASSEMBLY

ТооІ			Remarks
	Socket Wrench with 6" Extension	10mm 13mm 19mm	Heater (1) Motor (1), Balance (5), 2 holes of each left and right of the shock absorber 1 Pulley hole
	Open End wrench	10mm 13mm 19mm	Replaceable for the box driver. Since the bolt runs idle when the box driver is used, use the box driver 17mm.
	Vice pliers		Tool to protect the idle and abrasion of the bolt for the box driver.
	Others (Driver, Nipper, Long nose)		General tools for the after service.
	JIG for the Tub		1 (Disassemble and Assemble)

3-2. STANDARD DISASSEMBLY DRAWINGS

This is a standard disassembly diagram and may differ from the actual product. Use this material as a reference when disassembling and reassembling the product.

Part	Figure	Description
		 Remove the two screws holding the Top Cover at the back of the unit.
ASSY COVER TOP		 Remove the top-cover by lifting it up after pulling it back about 15mm.
	Noise filter Water valve	 With the top cover removed you will now have access to service the Water pressure sensor, EMI Noise Filter, Hot and Cold Water Valves, Hose Draw ASSY.

Part	Figure	Description
MAIN-PCB AND SUB-PCB PANEL		 Remove the 2 screws at the top of the ASSY- PANEL CONTROL.
		 Hold the ASSY-PANEL CONTROL while pulling it upwards and release the hook to remove it.
		 Carefully disconnect the two wiring connectors by hand.
		 Remove the 8 screws holding the PCB and release the hooks on both sides to remove the PCB for repair / replacement.

Part	Figure	Description
		 Seperate the Wire-Diaphragm with the Long-nose from the Front-Frame.
		1. Remove the Diaphragm.
		2. Remove the 4 screws holding the FRAME-FRONT.
	0 0	 Remove the 2 screws holding the bottom of the FRAME-FRONT.
FRAME FRONT		4. Untie the hose.
		5. Remove the 3 screws.
		6. Push both hooks.
		 Disconnect the terminal for the DOOR-LOCK switch.

Part	Figure	Description
COVER-BACK		 Remove the 2 screws holding the Back-Cover at the back of the washing machine
DD MOTOR		1. Remove the one bolt for the DD Motor.
DD MOTOR		2. Remove the 6 screws.
WATER SUPPLY VALVE		 Remove the Top Assy-Plate. Disconnect the 5 water valve connectors.
	00000	 Remove the 4 screws securing the Hot and Cold water supply valves.

Part	Figure	Description
		The Hook type water level sensor
	Noise filter Water valve	 Disassembly Separate the Top Assy-Plate.
WATER LEVEL		 To remove the water lever sensor, push it slowly in the direction of the arrow shown in the figure on the left. Since this disassembly method uses the elasticity of the water level sensor hook, imposing too strong a force may damage it.
SENSOR (The Hook type)		 While a force is imposed on the water lever sensor as directed in step 1, pull the hook (A) in the direction of the arrow until it is removed from the bracket spring.
		 Impose a force slowly in the direction of the arrow designated in the figure on the left until the hook is removed. Then remove the water level sensor.
		 Assembly Connect the pressure hose to the body of the water level sensor and lock it using the clamp. When connecting the water level sensor to the set, make sure to connect it after draining water by operating the spin cycle.
		 To reattach the water level sensor, insert the hook back into the square hole until you hear a "click".

Part	Figure	Description
DOOR HINGE		1. Remove the 2 screws holding the Door Hinge and separate the door.
DOOK IIIIKOL		 Remove the 15 screws holding the Holder Glass, separate the Holder Glass and replace the hinge.
		 Push the Cover-Filter downwards to release the latch.
DRAIN PUMP		 2. Drain the remaining water through the drainage hose. Be sure to use a small bowl to collect the water collected from the drain hose.
		 Separate the Drain Filter by turning it counterclockwise. Since the remaining water may flow out, place a bowl underneath it when separating the filter

Part	Figure	Description
		4. Remove the 2 screws holding the Drain Pump.
		 Drain the remaining water through the drainage hose.
DRAIN PUMP (Continued)		6. Disconnect the wire connector.
		7. Push it back and lift it up.
	* Check Points for Troubleshooting	·
	1. Separate the Drain Filter and check buttons, etc.) → Remove if found	k for any alien substances inside the pump (e.g. coins, d.
		Drain Pump ASSY hasn't come loose. Reconnect if
	3. When water leaks, check the asse the relevant countermeasure if new	mbly status of the Clamp Hose, and Cap Drain \rightarrow Take cessary. e, clean and remove any material that has collected.

Part	Figure	Description
		 Open the Door. Seperate the Wire-Diaphragm with Long-nose plier and remove it from the Front Frame Since the Diaphragm can be damaged when removing it, remove it slowly in one direction.
DOOR-LOCK S/W		2. Remove the 3 screws.
		 Remove the screw holding the Door-Lock S/W. Remove the Door-Lock S/W. Remove the connection wire. (Remove the connector after releasing it by pressing the latch.)
		1. Remove the 3 bolts from the balance weight.
Heater		 Seperate the Connection Housing(3). Remove the nut holding the heater and the heater.
		 Remove the heater from the Tub. ▲ Caution Make sure to insert the Heater into the correct position of the bracket inside the Tub when reassembling it. Otherwise, there is a risk of fire.

4. TROUBLESHOOTING

4-1. ERROR MODES

▶ This is a washer integrated error mode. For detailed information, refer to the general repair scripts.

Error Type		For USA	Causes	Remarks
Error Type	LED	LCD	Causes	Remarks
Water Level Sensor	LE	Error! Water Level Sensor Problem Error! Sensor del nivel de agua.	 The part of the hose where the water level sensor is located is damaged (punctured). The hose is clogged with foreign material. The hose is folded. Too much lubricant has been applied to the insertion part of the air hose. Hose engagement error (disengaged) Part fault (Faulty internal soldering) The water level sensor terminal is disengaged. Main PBA fault. 	
	3E	Error! The motor is not	 The PBA connector terminal is not connected. The motor spin net is not engaged. The motor's internal coil is damaged (short-circuited or cut) The hall sensor terminal is not connected. Foreign material (a screw) has entered the motor. 	This error occurs because of restrained revolutions
Motor Driving Error and Hall Sensor Error	E3	Error! El motor no funciona correctamente.	 Motor overloaded due to too much laundry (Non-sensing) The motor hall sensor terminal is not connected. PBA fault The motor driving error from the PBA is weak. Unstable relay operation, etc. 	This error occurs when an interference is generated due to too much laundry, etc.
	bE		 This occurs due to erroneous operating signals from the motor hall sensor. The IPM terminal of the main PBA is not connected. The DD motor cover is out of place. The PCB housing terminal is not connected. PBA fault DD motor fault 	
Water Supply	nF	Error! Low Water Pressure Error!	 Foreign material is entering the water supply valve. The water supply valve terminal is not connected. (Wire disconnected) The warm water and rinse connectors are wrongly connected to each other. This occurs if the PCB terminal from the drain hose to the detergent drawer is not connected. Check whether the transparent hose is folded or torn. 	If this error occurs in the Wool course
Error	nF1	Baja presión de agua.	 The cold and warm water supply hoses are wrongly engaged into each other. The temperature of the water supplied through the dry valve during a dry cycle is sensed as higher than 70 °C. The water temperature is sensed as higher than 50 °C 	The water supplied for 1 minute drying the drying cycle is 0.3 ~ 0.4 L.
Drain Error	nd	Error! No Draining Error! No funciona el drenaje.	 in the Wool or Lingerie courses. The pump motor impeller is damaged internally. The wrong voltage (220 V → 110 V) is supplied to the parts. Part fault This occurs due to freezing in the winter season The drain hose is clogged. (Injection error, foreign material) Clogged with foreign material The water pump terminal is not connected: rubber band, bills, cotton, hair pins, coins have collected inside the drain pump ASSY. 	

		For USA		D
Error Type	LED	LCD	Causes	Remarks
Power Error	2E	Error High/Low Voltage Detected Error! Se detectó alto/ bajo voltaje.	 Check the consumer's power conditions. Make sure to check the operating voltage. Connect a tester to the internal power terminals during the Boil or Dry operations and observe the washing machine's operation carefully. Check the voltages. (An error occurs when under or over voltage is supplied.) Check whether a plug receptacle is used. When the connecting wire is 1m, a momentary low voltage may drop up to 10 V Main PBA fault (sometimes) 	
	PF	-	 This error is not a fault but occurs during a momentary power failure When this error code is displayed, the operation restarts from the cycle that was stopped due to the power failure. If the washing machine is not operating and this error code is displayed, it is displayed to notify that a power failure has occurred. 	
Communication Error	AE	Error! Electronic Control Problem Problemas con el control electrónico.	 The signals between the sub and main PBAs are not sensed because of commuication error. Check the connector connections between the sub and main PBAs carefully. → Check for incorrect or loose connections, etc. Remove the sub PBA C/Panel and check for any faulty soldering. 	
Switch Error (Main Relay Error)	E2	Error! A button is either stuck, or is being pressed continuously. Error! 1/2 Algún botón se encuentra trabado o está sometido Error! 2/2 a presión en forma ininterrumpida.	 The Power button is pressed continually (for more than 12 seconds). A switch is jammed or stuck due to be pressed unevenly due to deformation of the control panel or button. This error may occur when the screws that hold the sub PBA in place are tightened too much. A button other than the Power button is continually pressed (for more than 30 seconds). Deformation of an internal plastic injection part A screw for assembling the sub PBA is tightened too much. 	
	Sr	Error! Power Interruption Error! Corte de energía eléctrica.	 The main relay of the PBA is short-circuited. The main relay terminal is connected incorrectly. (The terminal is bent and contact cannot be made.) 	When the PBA motor relay does not operate

F		For USA	•	Demonto
Error Type	LED	LCD	Causes	Remarks
	dS (Before operation)	Error! Door is open. Error! La puerta está abierta.	 A switch contact error because of a deformation of the door hook When the door is pulled by force 	When the door is not opened after the door open operation
Door Error	dL (During operation)	Error! The door was unlocked while the washer was running. Error! 1/2 La puerta fue destrabada mientras la lavadora estaba Error! 2/2 en funcionamiento.	 This occurs in the Boil wash because the door is pushed due to a pressure difference from internal temperature changes 	When the door is not locked after the door close operation
	LO (Unlock Fail)	Error! The door will not unlock. Error! La puerta no se puede abrir. Error! The washer door would not lock.	 The door lock switch terminal is connected incorrectly. The door lock switch terminal is broken. This occurs intermittently because of an electric wire leakage Main PCB fault 	
	FL (Lock Fail)	Error! No se podía trabar la puerta de la lavadora.		

		For USA		
Error Type	LED	LCD	Causes	Remarks
	LL-	Error! Water Temperature Control Problem	 The washing heater is short-circuited or has a wire disconnected. The washing heater in the tub has an error. (Contact error, temperature sensor fault) If the water level sensor operates without water because water is frozen or for any other reason and the temperature sensor engaged at the bottom to prevent overheating for the washing heater detects a temperature of 100 to 150 °C, the washing machine turns the input power off. 	If the heater has no error, this occurs because of a PBA relay malfunction.
Heater Error	Hr (Heater Relay)	Error! Problema con el control de la temperatura del agua.	 This error occurs when the red temperature sensor at the center of the dry heater operates (at a temperature higher than 145 °C) Corrective action – Press the button at the center lightly. The washing machine will operate normally. Alternatively, replace the temperature sensor if the temperature sensing is unstable because of functional degradation. This occurs when the steam function does not operate normally. This error does not occur in existing drum products. Check whether the product is a steam model 	
Water Leakage Error	LE	Error Water Leakage Problem Error! Problemas de pérdida de agua.	 Heater engagement fault (out of place) The air hose is out of place and water leakage occurs during the spin cycle. The tub back at the safety bolts fixing part is broken. Water leakage occurs at the front with foaming because of too much detergent Water leakage occurs because the connecting hose to the detergent drawer is connected incorrectly. The drain pump filter cover is engaged incorrectly. Water leakage occurs at the drain hose. The duct condensing holding screws are worn. The nozzle-diaphragm is engaged in the opposite direction or the rubber packaging is omitted. Water leakage occurs because the screws that hold the tub back and front in place are fastened incorrectly. The leakage sensor is faulty. 	
Overflow Error	OE	Error Water Supply Problem Error! Suministro de agua.	 Water is supplied continually because the water level detection does not work. Because the drain hose is clogged and there is an injection error (at a narrow section), the water level detection does not work and water is supplied continually. Water is supplied continually because of freezing or because there is foreign material in the water supply valve. This error may occur when the water level sensor is degraded. 	This error occurs because the water level sensor terminal is out of place.
Temperature Sensor Error	tE	Error! Temperature Sensor Problem Error! Sensor de temperatura.	 The washing heater in the tub has an error. (Contact error, temperature sensor fault) The connector is connected incorrectly or is disconnected. If the water level sensor operates without water because the water is frozen or for any other reason and the temperature sensor engaged at the bottom to prevent overheating for the washing heater detects a temperature of 100 to 150 °C, the washing machine turns the input power off. 	Heater sensor fault : When the connector is connected incorrectly or has a wire disconnected or contact error

Error Type		For USA	Causes	Remarks
Error Type	LED	LCD	Causes	Remarks
Unbalance Error	dc	Error! Unbalanced Load Error! La carga desequilibrada.	 As laundry causes this error, check the laundry. Find the reason for the unbalance and solve it as directed in the user manual. 	
Foaming Detected	SUdS	Error! Excessive Suds Error! Exceso de espuma.	 This occurs when too much foaming is detected. It is also displayed while foaming is removed. When the removal is finished, the normal cycle proceeds. "Sud" or "SUdS" is displayed when too much foaming is detected and "End" is displayed when the removal of the foaming is finished. (This is one of the normal operations. It is an error for preventing non-sensing faults.) 	
System Error	SF	-	 In case of EEPROM deteced In case of PBA problem System Error 	



4-2. CORRECTIVE ACTIONS FOR EACH ERROR CODE



an of Dhote			Check the contact between the control panel buttons and their corresponding tact switch. - There must be a gap between a control panel button and its corresponding micro switch.
	nescriptio		
Camadita Antina	Corrective Actions	 Check the wire connections and terminal contacts between the sub and main PBAs. Check for disconnected wires. Check whether the sub PBA is short-circuited because of moisture. If the main PBA's communication circuit is faulty, replace it. 	 Check whether either the Power switch or a tact switch is continually pressed. Check whether the service PBA holding screws are fastened too tight, loosen them a little. If they are fastened too tight, loosen them a little. If the main PBA switching IC on/off error has occurred, replace the main PBA. The "E2" error occurs if the main relay connections. If there is no error in the connections, replace the main PBA.
	causes	 The signals between the sub and main PBAs are not sensed. Incorrect wire connections between the sub and main PBAs. 	 The Power button is continually pressed. A button other than the Power button is continually pressed. Main PCB relay fault
Error Mode	ГСD	Electronic Control Problem Problemas con el control electrónico.	Abutton is either stuck or is being pressed continuously. Errori 1/2 Algún botón se encuentra trabado o está sometido está sometido a presión en forma ininterrumpida.
	LED	,	تە 🗹
	Error lype	Communication Error	Switch Error (Main Relay Error)

Dacamination of Dhoda			 TYPE 1 TYPE 1 Check the door switch Resistance. The resistance of 1 and 3 Pin Must be approximately 1250. 	LPFS	The resistance of Nos. 3 and 5 of the DOOR LOCK SWITCH must be approximately 949 Ω.
Commetitor Antipara			 If a dS error occurs, check whether it occurs during the Boil cycle. If it is detected that the door is open, close the door. The 120V is directly connected to the door. Check and repair the power wire connections and insulation state. 	 Check the door switch. Keplace if faulty. Check the main PBA door sensing circuit. Replace if faulty. 	
	Causes		 Door switch fault Drain pump fault Dry duct fan motor fault. Main PCB fault 		
Error Mode	LCD	Error! Loor is open. Error! La puerta está abierta.	The door was unlocked while the washer was running. Errori 1/2 La puerta fue destrabada mientras la lavadora estaba Errori 2/2 en funcionamiento.	The door will not unlock. Error! La puerta no se puede abrii.	The washer door would not lock. Error! No se podía trabar la puerta de la lavadora.
	ype LED	ရိ	ਚ	P	L.
T a Can	Error type		Door Error		

P		Error Mode				
Error Iype	LED	ГСD	causes	Corrective Actions	Description of Photo	
	Ė	Error! Water Temperature Control Problem	 Heater fault A fault of the red A fault of the red 	 Check for wires are disconnected in the washing heater. Replace if faulty. An Hr error occurs. If the dry heater or cair refresh heater or context occurs. 	[FRONT]	TYPE 1 Check the resistance between A and B. It should be 16.05±0.65Ω.
5	Ē	Error! Problema con el control de la temperatura del agua.	 Steam function fault Freezing in the winter season 	 An Hr error occurs. An Hr error occurs. Check the steam heater. Replace if it is faulty. An Hr error occurs. 	[BACK]	 TYPE 2 If TYPE 1 is OK, Change a wash-thermistor at back of Tub.
Water Leakage	Ш	Error! Water Leakage Problem	 Check for any leakage. Foreign material in the DV case 	 Check for any leakage on the base, Hose, Valve and Tub connections and take any required action. During natural draining, this error occurs because the drain belows are 		 DRAIN PUMP TYPE Check whether there is any foreign material in the bellows. Check for any foreign material, such as underwear wires or coins.
		Error! Problemas de pérdida de agua.	 Fault of a hose or incorrect part engagement in the product 	clogged with foreign material. Kemove the foreign material. • Check the drain motor operation. Replace if it does not operate normally.		 PUMP TYPE Check for any leakage on the base, Hose, Valve and Tub connections.

Description of Photo	Check the hose connected to the water level sensor.	,	
Corrective Actions	 If the water level sensor has a functional error, replace it. Check the hose. This error occurs if it is torn or has a hole. This error occurs if water is frozen in the winter season. Use hair dryer to defrost hose. Consider relocating the unit to warmer location. 	 Check the connections for the washing heater temperature sensor connector. If the washing heater temperature sensor replace it. A tE error occurs. Check the connections for the dry heater temperature sensor heater temperature sensor has a functional error, replace it. Check the connections for the dry heater temperature sensor connector. If the duct condensing temperature sensor connector. If the duct condensing temperature sensor connector. 	 Check the type of laundry. Check whether they may cause an unbalanced situation. Educate the consumer in this case is to press pause reposition the load or remove a few items. Press start to continue and complete the wash cycle.
Causes	 Water level sensor fault Freezing in the winter season 	 Washing temperature sensor fault Dry temperature sensor fault But and incorrect connections of the dry condensing sensor Main PCB fault Freezing in the winter season 	 Motor hall sensor fault Caused by the laundry contents
Error M	Water Supply Mater Supply Poblem Errort Suministro de agua.	Error! Problem Error! Sensor de temperatura.	Groad Unbalanced Load Error! La carga desequilibrada.
Error Type	Overflow Error OE	Temperature Sensor Error	Unbalance Error dc

5. PCB DIAGRAM

5-1. MAIN PCB

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Location	Part No.	Function	Description		Location	Part No.	Function	
1	CN11	PBA Power Supply	Supply 120V of AC power.		7	CN5	Smart dispenser Connection Port	Supply pov communica
2	RY7	Main Relay	Be Supplied PBA power when the Power button is pressed.		8	CN6	Sensor Connection Port	Supply pov function.
3	RY8	Dry Heater Relay	The switch for the Dry Heater power.					Supply pow
4	RY2	Washing Heater Relay	The switch for the Washing Heater power.		9	CN4	LCD PBA Connection Port	function.
5	CN2	Fan motor Connection Port	Oursely the Outboard drive welfage for the FANIMeter		10	CN9	Smart test FLash Writing Port	Supply SE
5	CINZ		Supply the 3-phase drive voltage for the FAN Motor.		44	017		Supply pov
6 CN3	I3 MEMS Connection Port	Supply power to the MEMS PBA and provides a communications		11	CN7	SUB PBA Connection Port	function.	
			function.		12	CN10	Each Load Connection Port	The port to



Description

power to the dispenser PBA and provides a nications function.

power to the sensor and provides a communications

power to the LCD PBA and provides a communications

SET MAIN LINE smart test

power to the SUB PBA and provides a communications

t to supply power for each electric device.

5-2. CIRCUIT DIAGRAMS OF MAIN PARTS FOR MAIN PCB

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ST			

CN7

- 1. SUB Communications signal
- 2. SUB Communications signal
- 3. SUB Reset signal
- 4. 5V
- 5. Ground
- 6. 12V
- 7. Empty pin
- 8. Power SW signal
- 9. Water leakage signal
- 10.5V
- 11. Inverter Communications signal
- 12. Inverter Communications signal
- 13. Ground

5-3 INVERTER PCB

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Location	Part No.	Function	Description
1	CN1	Communication	Communication with MAIN
2	CN2	Hall Sensor	Sensing Hall signal
3	CN6	Motor Output	MOTOR 3-Phase Output
4	CN5	AC Power Source	Supply AC Power
5	CN4	JTAG Connector	Debugging connector (Deleted in massproduction)
6	CN3	Flash Writing Port	Writing Flash memory

5.4. CIRCUIT DIAGRAMS OF MAIN PARTS FOR INVERTER PCB

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5-5. SUB PCB

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Location	Part No.	Function	Description
1	BZ1	Buzzer Circuit	Be generated sound when the menu key is pressed or the encoder is operated, the menu is clo
2	CN601	SUB PBA LED DISPLAY Wire Connect	Connect the LED and DISPLAY.
3	CN701	Drum Light	Turn on when door is opened.
4	CN401	FLASH WRITING	WRITING PROGRAMME TO SUB.
5	CN201	GRAPHIC PBA Connection Port	For communications with Graphic PBA.
6	CN402	TOUCH PBA COMMUNICATION	SUPPLY POWER TO TOUCH PBA AND COMMUNICATION TO SUB PBA

5-6. CIRCUIT DIAGRAMS OF MAIN PARTS FOR SUB PCB

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- ► CN402
- 1. 12V
- 2. GROUND
 3. SDA1
- 4. SCL1
- 5. Empty Pin

► CN201

- 1. Communications Port(Rx)
- 2. Communications Port(Tx)
- 3. Reset Signal input
- 4. 5V
- 5. GROUND
- 6. 12V
- 7. Empty Pin
- 8. POWER_SWI
- 9. Water level Signa
- 10. Empty Pin

6. WIRING DIAGRAM

6-1. WIRING DIAGRAM

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REFERENCE INFORMATION

BLK	BLACK		
BLU	BLUE		
GRN	GREEN		
GRY	GRAY		
NTR	NATURAL		
ORG	ORANGE		
PNK	PINK		
RED	RED		
SKYBLU	SKYBLUE		
VIO	VIOLET		
WHT	WHITE		
YEL	YELLOW		



7. REFERENCE

7-1. PROJECT NAME





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