

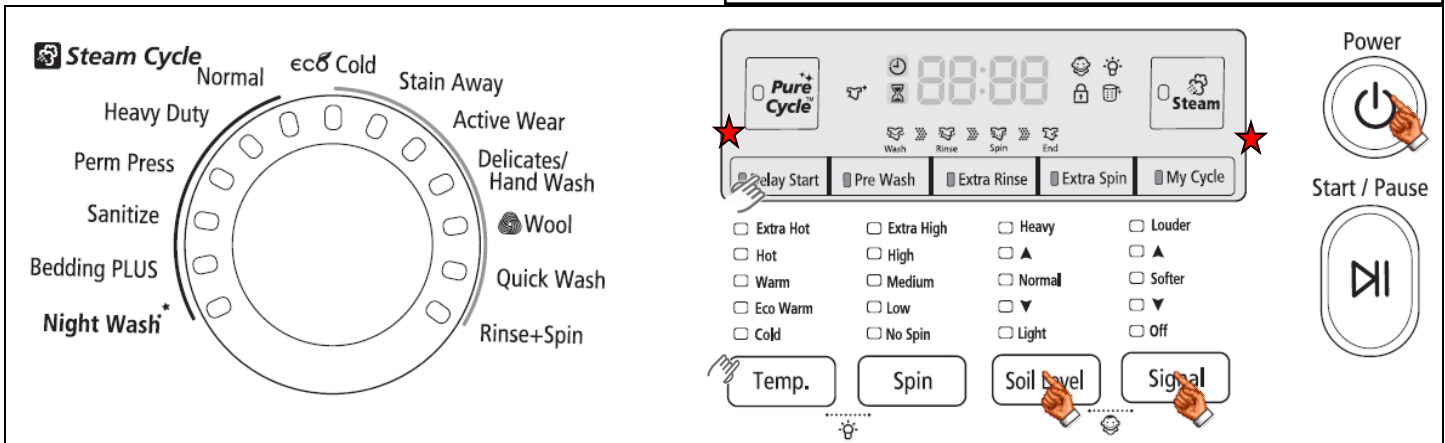


Fast Track Troubleshooting

Model:
WF461ABP/XAA
WF461ABW/XAA

IMPORTANT SAFETY NOTICE – “For Technicians Only” This service data sheet is intended for use by persons having electrical, electronic, and mechanical experience and knowledge at a level generally considered acceptable in the appliance repair trade. Any attempt to repair a major appliance may result in personal injury and property damage. The manufacturer or seller cannot be responsible, nor assume any liability for injury or damage of any kind arising from the use of this data sheet.

Revision Date 4-30-2012



Quick Test Mode

To enter press Spin, Soil, & Power simultaneously with the power off.

1. All LED's light up and the washer beeps as it enters the Quick Test Mode.
2. After the displaying the software version, LCD will display Model information. If EEEE is displayed the PCB ass'y is defective.
4. When the version is displayed, turn the Jog-Dial CCW so that the "TST" is displayed. Press the following keys to test the various components:

Press **Temp Key** to cycle through the Water Valves circuit test (lock the door first) in this order: Pre-Wash, Bleach, Cold Main, Hot, & Steam, then off.

Press **Spin Key** to test Door Lock/Unlock circuit

Press **Steam Level Key** to test Circulation/Drain Pump.

Press **Soil Key** to test the Water/Steam Heater.

Press **My Cycle** to test the Blower motor

When either **Test or Spin** is displayed on the LCD, press **Start/Pause key** to conduct the motor test.

EEPROM Clear Check

Power off, Press Delay Start, Signal and Power Key at the same time. Good = Good Fail = FAIL

All memory will be cleared, including Fault Codes

Service Mode:

This mode allows more detailed operation tests and troubleshooting, to enter press Signal & Extra Rinse simultaneously with the power on.

While in Service Mode the following tests ★ can be performed:

Quick Spin Test = Delay Start & Extra Rinse: This accelerates the drum motor from 0 to maximum RPM over a few minutes. **Note: Stay with the washer during this test, out of balance detection may be bypassed.** Press the **Start/Pause** button during the test to hold its spinning speed for 10 minutes before going back to Quick Spin Test Mode. Press and hold the **Delay Start & Extra Rinse** button to continue.

Cycle Count = Press the Signal button to see how many times the unit was used

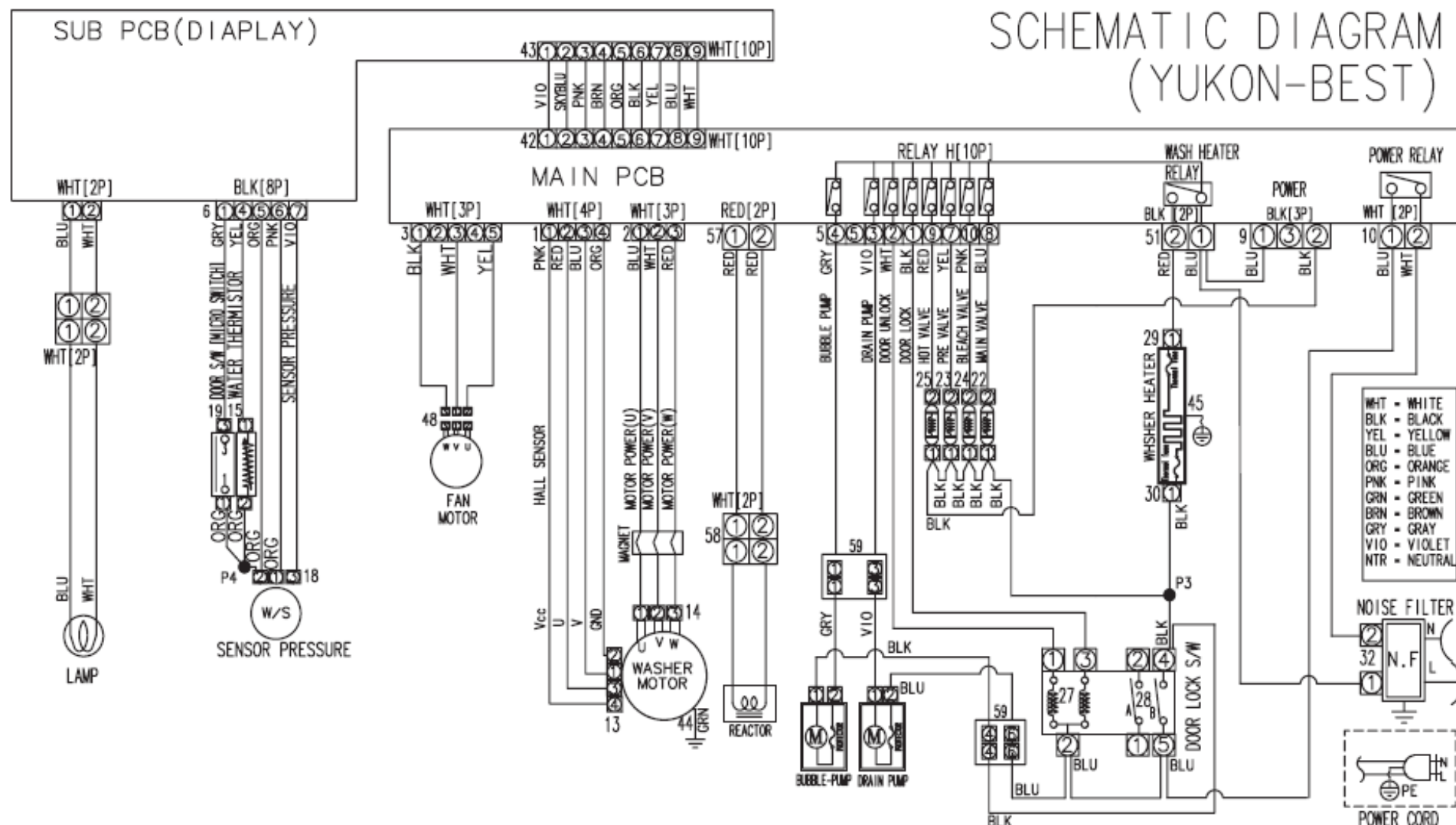
Soft Ware # = Press the **Soil** button to see the software version information

Fault Code Test = Press the **Spin** button to view the stored fault codes – then turn **Jog Dial** to view error codes (Push **Start/Pause** while the code is displayed to view the number of cycles since the error occurred, Push **Start/Pause** to go back to faults)

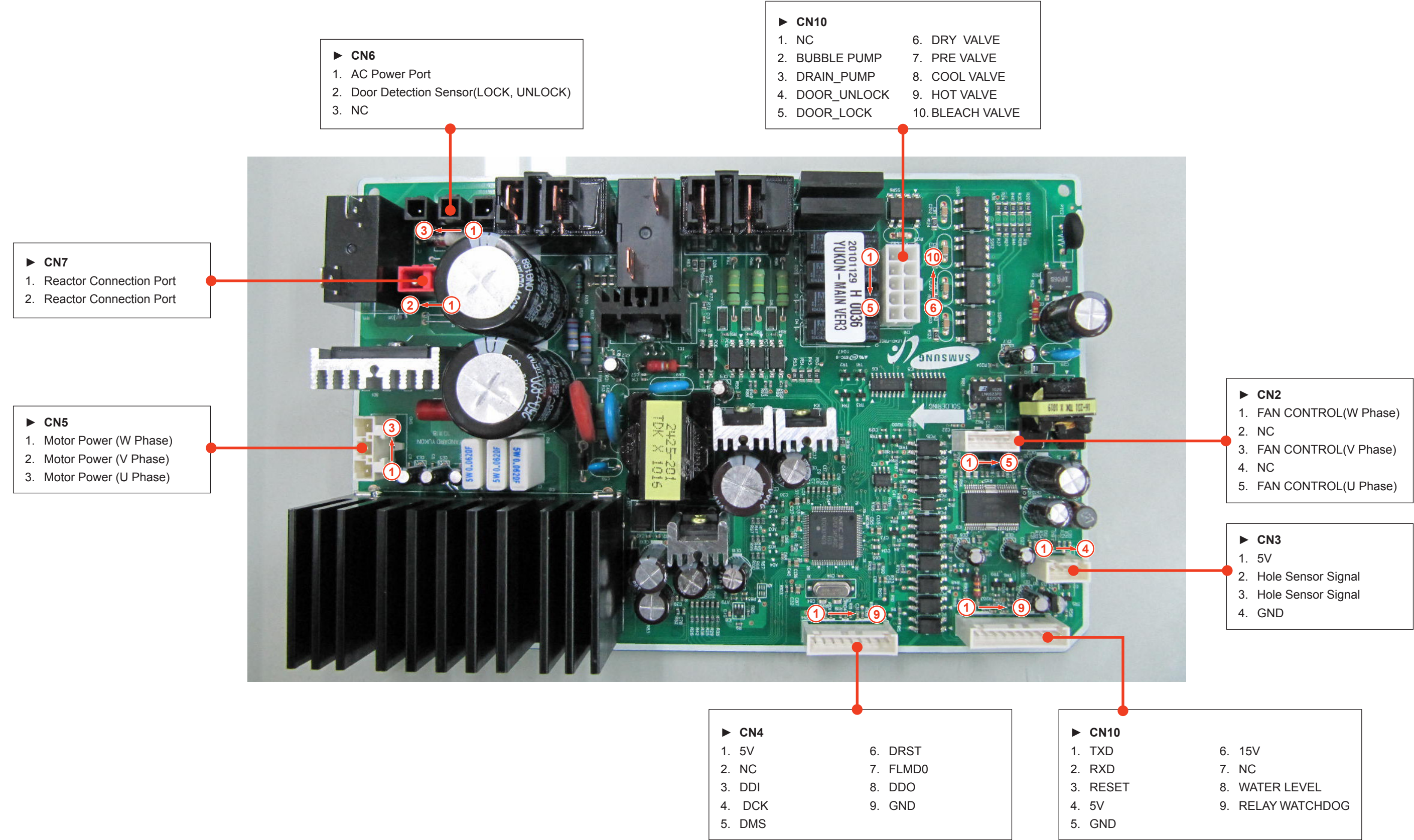
Peripheral (Main PCB) input Tests:

1. Select Extra Wash. Then turn the Jog-Dial so that the **Heavy Duty LED** is turned on. Next, press the **Start/Pause** Key. The Water Temperature will be displayed in Fahrenheit.
2. Select Extra Wash. Then turn the Jog-Dial so that the **Permanent Press LED** is turned on. The door status will be displayed (OP if open, CL if closed).
3. Select Extra Wash. Then turn the Jog-Dial so that the **Sanitize LED** is turned on. The door lock Switch status will be displayed (UL if unlocked, Lo if locked).
4. Select Extra Wash. Then turn the Jog-Dial so that the **Bedding Plus** is turned on. The Water Frequency will be displayed.

SCHEMATIC DIAGRAM (YUKON-BEST)



6-2. CONNECTOR AND RELAY PORT PART DETAILED MANUAL (MAIN PCB)



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
	LED	LCD		
Water Level Sensor	461	1E	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.	
Motor Driving Error and Hall Sensor Error	3E	Error! The motor is not working properly. Error! El motor no funciona correctamente.	- 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. - 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 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	This error occurs because of restrained revolutions This error occurs when an interference is generated due to too much laundry, etc.
Water Supply Error	nF	Error! Low Water Pressure Error! Baja presión de agua.	- 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
	nF1		- The cold and warm water supply hoses are wrongly engaged into each other. - The water temperature is sensed as higher than 50 °C in the Wool or Lingerie or Delicates courses.	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.	- 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.	

Error Type	For USA		Causes	Remarks
	LED	LCD		
Power Error	-	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)	
Communication Error	-	Error! Electronic Control Problem Error! Problemas con el control electrónico.	- The signals between the sub and main PBAs are not sensed because of communication 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 30 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

Error Type	For USA		Causes	Remarks
	LED	LCD		
Door Error	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
	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.	- 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! The washer door would not lock. Error! No se podía trabar la puerta de la lavadora.		

Error Type	For USA		Causes	Remarks
	LED	LCD		
Heater Error	Hr (Heater Relay)	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.
		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
	LED	LCD		
Unbalance Error	dc	Error! Unbalanced Load	- As laundry causes this error, check the laundry. - Find the reason for the unbalance and solve it as directed in the user manual.	
		Error! La carga desequilibrada.		
Foaming Detected	SUdS	Error! Excessive Suds	- 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.)	
		Error! Exceso de espuma.		

Water valve connections for the Detergent Drawer

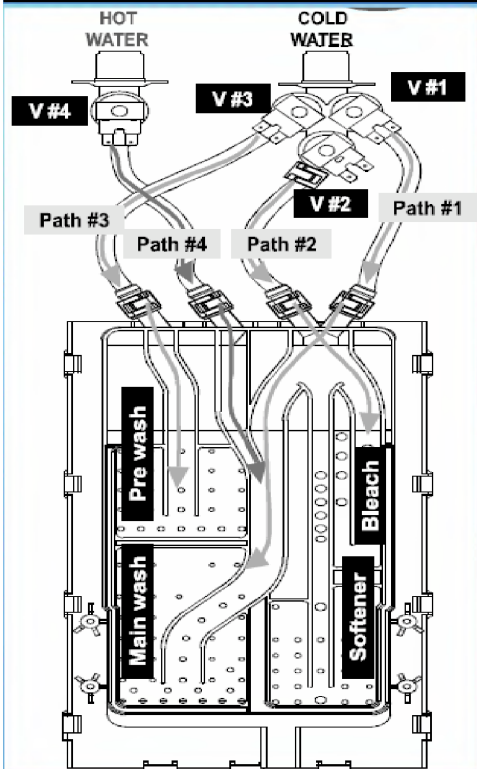
V #1	V #2	V #3	V #4
MAIN(C)	BLEACH	PRE WASH	MAIN(H)

Items Packed With Washer

BOLT-SPANER (10-13mm Wrench) DC60-40146A
 ASSY HOSE WATER DC97-15691A and DC97-15692A
 MANUAL-BOOK DC68-02535A
 CAP-FIXER DC67-00307A HOSE-HANGER DC62-10278A

Stacking Kit : (Model No : SK-5A/XAA)

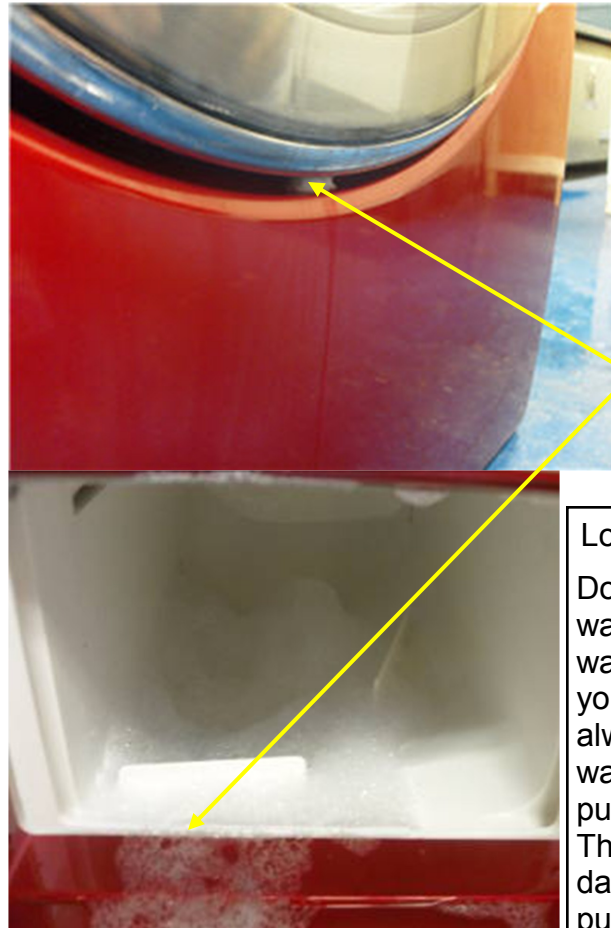
Samsung washers and dryers can be stacked to maximize usable space.
 An optional stacking kit is available for purchase from your Samsung retailer



It is normal for some water to remain in the Detergent Drawer after it completes washing. Bleach is usually flushed out into the tub at the beginning of the washing. Also, its compartment is washed again during the following rinse cycle, removing any remnants.

Laundry Touch Up Paints

TOUCH UP PAINT, BLUE ONYX	DH81-11980A
TOUCH UP PAINT, IMPERIAL SILVER	DH81-11981A
TOUCH UP PAINT, NEAT WHITE	DH81-11982A
TOUCH UP PAINT, STRATUS GRAY	DH81-11983A
TOUCH UP PAINT, TANGO RED	DH81-11984A



When using non-HE detergents, or using too much detergent for the water hardness and soil level of the clothing, over sudsing will occur. When this happens there will be leaks out of the detergent drawer and door. Please advise consumer of proper detergent usage.

Location considerations

Do not install your washer in areas where water may freeze, since your washer will always maintain some water in its water valve, pump, and hose areas. This can cause damage the belts, the pump, hoses and other components. **Operating temperature should be above 60°F/16°C.**

SUPPORT INFORMATION

Training — Plus One <http://my.plus1solutions.net/clientPortals/samsung/>
 Help — GSPN <http://service.samsungportal.com/>

NOTICE

The unit sometimes will pause during Sanitize, or Pure Cycle, wash modes and appear not to be functional. The Sanitize and Pure Cycle wash cycles have target temperatures to assure washer performance. If the water temperature doesn't meet the target temperature during the wash cycle, the washer will automatically add extra time to allow the heater to bring the water up to the programmed, or target temperature. In this stage, the displayed time will pause and hold until the heating operation has been completed. It is at this point that the customer may feel that operation has stopped. (The maximum added programmed time is 30 minutes)