

Error Code

Washer

A-Type

- Affective Model
→ WA45H7*** / WA48H7*** / WA56H9***



Enter the Service Mode

during power on status or Normal operation. Press **Delay End + Pre Soak** at the same time for 3 Seconds or until the unit sends out beeping sounds



Enter the Diagnostic Mode

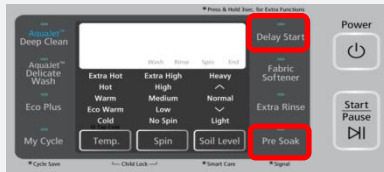
Press the **Spin** key to start Diagnostic Code Check Mode with Code "d" flashing To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW



- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

B-Type

- Affective Model
→ WA50F9*****



Enter the Service Mode

How to enter the Service Mode, during power on status or Normal operation

Press **Delay Start + Pre Soak** at the same time for 3 Seconds or until the unit sends out beeping sounds



Enter the Diagnostic Mode

Press the **Spin** key to start Diagnostic Code Check Mode with Code "d" flashing

To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW



- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

C-Type

- Affective Model
→ WA400*** / WA422***



Enter the Service Mode

during power on status or Normal operation

Press **Delay Start + Extra Rinse** at the same time for 3 Seconds or until the unit sends out beeping sounds



Enter the Diagnostic Mode

Press the **Spin** key to start Diagnostic Code Check Mode with Code "d" flashing

To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW



- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

D-Type

- Affective Model
→ WA456***



Enter the Service Mode

during power on status or Normal operation

Press **Delay Start** + **Aqua Jet** at the same time for 3 Seconds or until the unit sends out beeping sounds



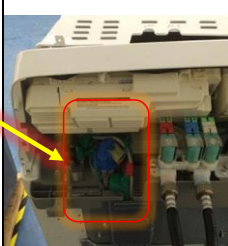
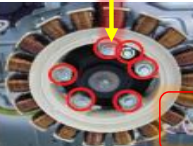
Enter the Diagnostic Mode

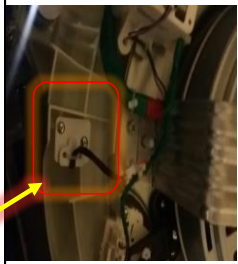
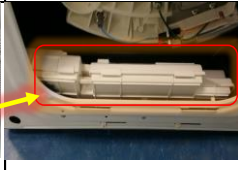
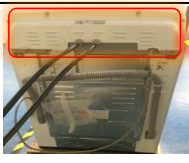
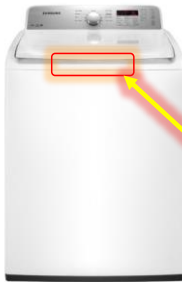
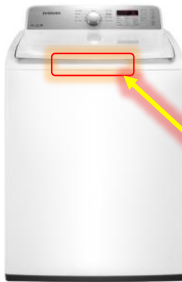
Press the **Spin** key to start Diagnostic Code Check Mode with Code "d" flashing

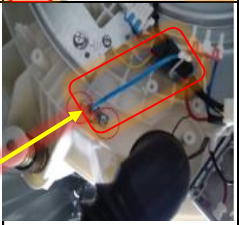
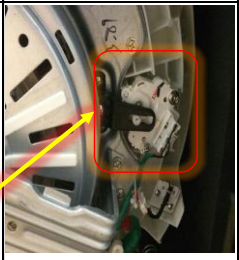
To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW



- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

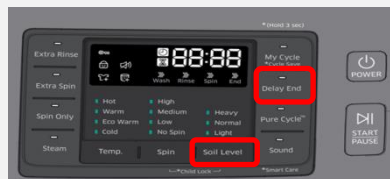
Diagnostic Code	Diagnostic Item	Trouble contents	Image 1	Image 2
1E	Pressure Hose Clogged Pressure Level Sensor Wire Harness Main PBA	- The water level frequency is continuously over 30kHz or below 15kHz for 10sec ① Water Level Sensor Fault (Resistance Pin 1-2 : Open, 2-3 : Open, 1-3 : Short) ② Wire Harness connection problem ③ The pressure hose is folded ④ Main PBA fault (DV 2~3V)		
3E	Motor (Stator) Wire Harness Main PBA	① Motor overloaded due to too much laundry (Non sensing) or Coil Open (cut) ② Check Resistance of motor (U-V-W) → The Resistance : approximately 11Ω ③ Wire Connection of hall sensor terminal ④ Main PBA fault		
3E 1	Hall Sensor Wire Harness Main PBA	① Defective Hall Sensor ② The motor hall sensor terminal is not connected ③ Main PBA fault		
3E2	Wire Harness Main PBA	① The Motor wire connection on Main PBA ② Main PBA fault		
4E/nF	Hose Water Installation Water Valve Wire Harness Water Valve (Filter Blockage)	- Water level does not increase more than 100Hz from previous water level on every 3min. - Water level does not reach set water level for 40 mins ① Hose Kinked ② Water Valve Defect (Check resistance approximately 1K~2KΩ) or filter blockage ③ Wire Harness connection problem ④ Main PBA (Check for AC 120V) / ⑤ Hose Pressure Hole		
5E/nD	Drain Hose Installation Drain Pump Drain Pump (Filter Blockage) Wire Harness PBA	- If it does not reach target water level after 15min draining ① Drain Hose Installation ② Drain Pump defect (Check for resistance approximately 26.4Ω) or Filte Blockage ③ Wire Harness connection problem ④ Main PBA (Check for AC 120V)		

8E/8E I	Mems Sensor (WA456**,45H7200**,48H7400) Wire Harness Sub PBA (WA456**,45H7200**,48H7400) Main PBA (WA400**,422**,45H7000**)	- The signal of tub location is out of normal range in Mems during spining (Unbalance status) ① Check for Mems Sensor (WA456**,45H7200**,48H7400 have Mems Sensor, For Other model Mems IC located on Main PBA) ② Wire Harness connection problem ③ Check for SUB PBA input voltage : DC 5V(WA456***,45H7200***,48H7400***) ④ Check for Main PBA (WA400**,422**,45H7000**)		
AE	Wire Harness Sub PBA Main PBA	- When there is communication error between main PBA & sub PBA is for over 24sec ① Check for Wire connection between Main PBA and Sub PBA ② Check IF the sub PBA is short-circuited because of moisture		
bE I/bE2	Control Panel Sub PBA Main PBA	- Any button on control panel is continually pressed for over 30s ① A button other than the Power button is continually pressed. ② Tact S/W on Main PCB relay fault		
dE/dS	Door-Lock S/W Wire Harness Main PBA	- Reed S/W in Door-Lock S/W does not detect door is close. ① Check Door is properly closed ② Check if there is a deformation of the door hook ③ Fault of Reed S/W which is detecting if door is open or close ④ Main PBA Fault		
FL/LO/dE I	Door-Lock S/W Wire Harness Main PBA	- In case that it fails to lock / unlock continuously door lock S/W seven times ① Check the resistance of terminal 1-2 in door lock s/w (The Resistance : approximately 33 ~ 46Ω) ② Check Door-Lock S/W curcuit in Main PBA		
LE	Drain Hose Installation Detergent Usage Main PBA	- If water level frequency above 30kHz is detected for 5 sec during wash / rinse cycle. ① Water leaks from diaphragm, pump drain, heater, tub or all hoses etc. ② Drain hose is inserted into drainage too deeply. ③ Water level sensor / hose defective		

OE	Water Valve Water Level Sensor Main PBA Detergent Usage	- If water level frequency below 21kHz is detected for 10 sec. - This can be caused by continuous water supply. ① Check the frequency value of water level sensor under the condition no load → If the value is normal, replace the water level sensor (Normal : approximately 24.6~25.6kHz) → How to Check water level (with no power, press spin + soil level + power at the same time and then, turn Knob dial 3 turns to CCW direction) ② Check for detergent that customer use if it is HE		
DC/UE	Unit Installation (Leveling) Load Size (Overloaded) Load Type Damper	- If washer detects unbalance 3 times ① Check Unit is properly leveled ② Check customer wash right type of laundry or too sall size or overloaded ③ Check for Damper tension		
tE/tE I	Thermistor (Temperature Sensor) Wire Harness Connection Main PBA	- If washer detects that water temperature is lower than – 3°C during heater on ① Check for wire connection ② Check for resistance of thermistor ※ Normal resistance : Approximately 60~61 kΩ (20°C) ③ Check for Main PBA (DC5V)		
PE	Wire Harness Clutch Motor Coupler	- If the position detection signal is not received 15sec after the clutch motor starts, the spin drum is shaken left and right and then the motor is restarted ① Check for wire connection of clutch motor ② Check for resistance between clutch motor's terminals(1 and 3) ※ Normal Resistance : 2.18kΩ±7% (20°C) ③ Check If Coupler on Clutch is broken then replace		
PE I	Wire Harness Clutch Motor Hall Sensor	- The hall sensor location detection fails 15 times after running the clutch-motor and aligning the motor left and right. ① Check the connection of clutch motor's housing ② Check the resistance on the main PCB motor (Between pins 2 and 4, 3 and 4 of the four (4) pins) → Normal Resistance: Approx. 2 to 4 MΩ		
sud	Customer Usage	- This occurs when too much foaming is detected ① Check what kind of and how much detergent is used. If customers use non HE or too much detergent		

E-Type

- Affective Model
→ WF42H5*** / WF45H6*** / WF56H9***



Enter the Service Mode

during power on status or Normal operation

Press **Soil Level + Delay End** at the same time for 3 Seconds or until the unit sends out veeping sounds



Enter the Diagnostic Mode

Press the **Spin** key to start Diagnostic Code Check Mode with Code "d" flashing

To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW

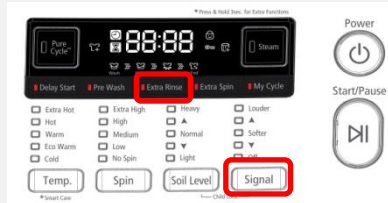


- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

F-Type

- Affective Model

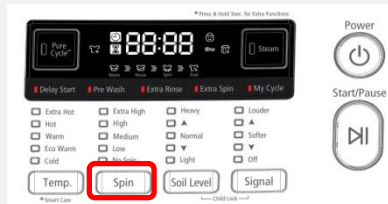
→ WF393*** / WF405*** / WF433*** / WF455***



Enter the Service Mode

during power on status or Normal operation

Press **Signal** + **Extra Rinse** at the same time for 3 Seconds or until the unit sends out veeping sounds



Enter the Diagnostic Mode

Press the **Spin** key to start Diagnostic Code Check Mode with Code "d" flashing

To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW



- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

G-Type

- Affective Model
→ WF457***



Enter the Service Mode

during power on status or Normal operation

Tap **Segment "4"** three times, Tap **Segment "1"** Two Times, Tap **Segment "4"** once on the service Mode.



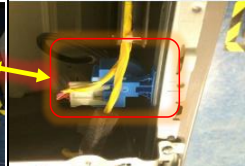
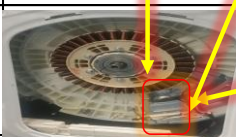
Enter the Diagnostic Mode

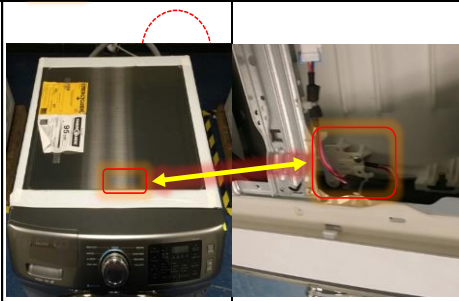
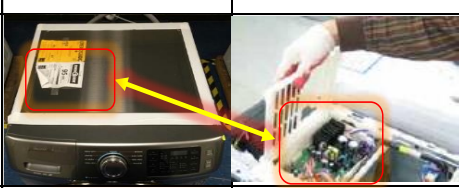
Press the **3** key on the bottom to start Diagnostic Code Check Mode with Code "d" flashing

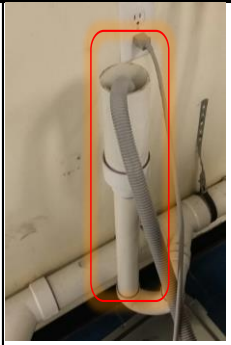
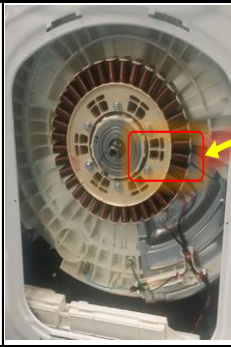
To cycle through the diagnostic codes(d1,d2,d3~d7), turn the Rotary cycle selector in CW or CCW



- To enter the Diagnostic Code Check Mode, Press the designated Key of Each Model during Service Mode.

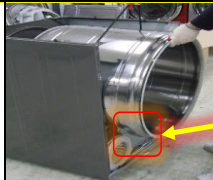
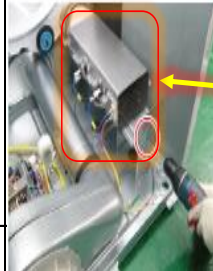
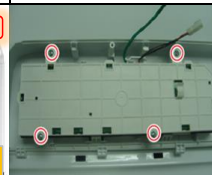
Diagnostic Code	Diagnostic Item	Trouble contents	Image 1	Image 2
IE	Pressure Hose Clogged Pressure Level Sensor Wire Harness Main PBA	- The water level frequency is continuously over 30kHz or below 15kHz for 10sec ① Water Level Sensor Fault (Resistance Pin 1-2 : Open, 2-3 : Open, 1-3 : Short) ② Wire Harness connection problem ③ The pressure hose is folded ④ Main PBA fault (DV 2~3V)		
3E	Motor (Stator) Wire Harness Main PBA	① Motor overloaded due to too much laundry (Non sensing) or Coil Open (cut) ② Check Resistance of motor (U-V-W) → The Resistance : approximately 11Ω ③ Wire Connection of hall sensor terminal ④ Main PBA fault		
3E 1	Hall Sensor Wire Harness Main PBA	① Defective Hall Sensor ② The motor hall sensor terminal is not connected ③ Main PBA fault		
3E2	Wire Harness Main PBA	① The Motor wire connection on Main PBA ② Main PBA fault		
4E/nF	Hose Water Installation Water Valve Wire Harness Water Valve (Filter Blockage)	- Water level does not increase more than 100Hz from previous water level on every 3minute ① Check If Hose is Kinked or filter on water valve is blocked ② Check Water Valve resistance (approximately 1K~2KΩ) ③ Wire Harness connection problem ④ Main PBA (Check for AC 120V) ⑤ Hose Pressure Hole		
5E/nD	Drain Hose Installation Drain Pump Drain Pump (Filter Blockage) Wire Harness PBA	- If it does not reach target water level after 15min draining ① Drain Hose Installation ② Drain Pump defect (Check for resistance approximately 26.4Ω) or Filte Blockage ③ Wire Harness connection problem ④ Main PBA (Check for AC 120V)		

8E/8E I	Mems fault (Front) Wire Harness Sub PBA	- The signal of tub location is out of normal range in Mems during spinning (Unbalance status) - Tub location data sent from Mems is not matched with normal range in Mems for 2 sec ① Check for Mems Sensor ② Wire Harness connection problem ③ Check for SUB PBA input voltage : DC 5V	
8E2	Mems fault (Rear) Wire Harness Sub PBA		
AE/AE6	Wire Harness Sub PBA Main PBA	- When there is communication error between main PBA & sub PBA is for over 24sec ① Check for Wire connection between Main PBA and Sub PBA ② Check if the sub PBA is short-circuited because of moisture	
bE I/bE2	Control Panel Sub PBA Main PBA	- Any button on control panel is continually pressed for over 30 sec. ① A button is continually pressed. ② Tact S/W on Main PCB relay fault	
dE/dS	Door-Lock S/W Wire Harness Main PBA	- Micro S/W in Door-Lock S/W does not defect door is close. ① Check Door is properly closed ② Check resistance of Micro s/w in Door-Lock S/W is short when press the button of micro s/w ③ Check Door-Lock S/W curcuit in Main PBA	
FL/LO/dE I	Door-Lock S/W Wire Harness Main PBA	- In case that it fails to lock / unlock continuously door lock S/W seven times ① Check the resistance of coil Pin 1-2 / 2-3 in door lock s/w (The Resistance : approximately 55.8 ~ 68.2Ω) ② Check Door-Lock S/W curcuit in Main PBA ③ Check Door-Lock S/W assembling section in Frame Front	
HE/HE I	Heater Wire Harness Main PBA	- Heater fault ① Check for the resistance of Heater (The Resistance : approximately 15.4 ~ 16.7Ω) - A fault of The Temperature sensor at the center of the dry ② Wire connection on Heater ③ AC 120 Voltage coming from Wire for Heater (If wrong then replace Main PBA)	

LE/LE I	Drain Hose Installation Detergent Usage Main PBA	- If water level frequency above 30kHz is detected for 5 sec during wash / rinse cycle. ① Water leaks from diaphragm, pump drain, heater, tub or all hoses etc. ② Drain hose is inserted into drainage too deeply. ③ Water level sensor / hose defective		
OE	Water Valve Water Level Sensor Main PBA Detergent Usage	- If water level frequency below 21kHz is detected for 10 sec. - This can be caused by continuous water supply. ① Check the frequency value of water level sensor under the condition no load → If the value is normal (approximately 24.6~25.6kHz) replace the water level sensor (How to Check water level : with no power, press spin + soil level + power at the same time and then, turn Knob dial 3 turns to CCW direction) ② Check IF customer use HE detergent or Not		
tE /tE I	Thermistor (Temperature Sensor) Wire Harness Connection Main PBA	- If washer detects that water temperature is lower than – 3°C during heater on ① Check for wire connection ② Check for resistance of thermistor ※ Normal resistance : Approximately 60~61 kΩ (20°C) ③ Check for Main PBA (DC5V)		
sud	Customer Usage	- This occurs when too much foaming is detected ① Check what kind of and how much detergent is used. If customers use non HE or too much detergent		

Error Code

Dryer

Diagnostic Code	Diagnostic Item	Trouble contents	Image 1	Image 2
tE	Thermistor (Temperature Sensor) Wire Harness Main PBA	- If The thermistor resistance is very low or high ① Check for resistance of thermistor : → The resistance : Approximately 10kΩ (25°C /77F) ② Check for Main PBA (DC5V)		
HE/HE I	Heater Wire Harness Main PBA	- Heater fault (Only for Gas Dryer) ① Check for the resistance of Heater (approximately 10Ω) ② Wire connection on Heater ③ AC 230 Voltage coming from Wire for Heater → If wrong then replace Main PBA		
dE	Door Door S/W Wire Connection Main PBA	- Door close not detected ① Check Door is properly closed or not loose ② Check Resistance of Door S/W → Door open status (terminals COM to NC : Open / terminals COM to NO : less than 1Ω) → Door close status (terminals COM to NC : less than 1Ω / terminals COM to NO : Open) ③ Check Wire Connection		
bE/bE2	Control Panel Sub PBA Main PBA	- Any button on control panel is continually pressed for over 30 sec. ① A button other than the Power button is continually pressed. ② Tact S/W on Main PCB relay fault	  Front Loader Top Loader	
RE	Wire Harness Sub PBA Main PBA	- When there is communication error between main PBA & sub PBA is for over 24sec ① Check for Wire connection between Main PBA and Sub PBA ② Check whether the sub PBA is short-circuited because of moisture	 Front Loader	 Top Loader
tUH	Sensor Plate (Sensor Bar) Main PBA	- If sensor bar is short in "tSt" or "SPn" Test mode. ① Check If sensor bar is short when a drum is empty		