

WARNING
Electrical Shock Hazard
 Disconnect power before servicing.
 Replace all parts and panels before operating.
 Failure to do so can result in death or electrical shock.

SPECIFICATIONS
Electrical Supply: (Under load) 60 Hz, 120 VAC.
Supply Water Flow Rate: To fill 1.9 L (2 qt) in 27 seconds, 120 psi maximum, 20 psi minimum.
Supply Water Temperature: 49°C (120°F) (Before starting a cycle, run water from sink faucet until hot).

Water Charge: 4.5 L (1.2 gal.) approximate
Lower Spray Arm Rotation: 12 to 30 rpm
Upper Spray Arm Rotation: 12 to 30 rpm

REPAIR KITS
Vinyl Touch-Up Kits:
 675576 (Blue)
 676453 (White)
 676455 (Gray)

SERVICE DIAGNOSTICS WITH ERROR CODES
 Entry sequence: HEATED DRY ⇒ NORMAL ⇒ HEATED DRY ⇒ NORMAL ⇒ HEATED DRY ⇒ NORMAL
 NOTE: Some models have replaced the "Clean" LED with "Completed."

DISPLAY TEST - ALL LEDS ON

ERROR 1 - MOST RECENT

| | | | | |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|
| Clean LED will flash FUNCTION code | Pause 2 seconds | Clean LED will flash PROBLEM code | Pause 5 seconds | Repeat 3 times unless advanced by Start key |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|

ERROR 2

| | | | | |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|
| Clean LED will flash FUNCTION code | Pause 2 seconds | Clean LED will flash PROBLEM code | Pause 5 seconds | Repeat 3 times unless advanced by Start key |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|

ERROR 3

| | | | | |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|
| Clean LED will flash FUNCTION code | Pause 2 seconds | Clean LED will flash PROBLEM code | Pause 5 seconds | Repeat 3 times unless advanced by Start key |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|

ERROR 4 - OLDEST

| | | | | |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|
| Clean LED will flash FUNCTION code | Pause 2 seconds | Clean LED will flash PROBLEM code | Pause 5 seconds | Repeat 3 times unless advanced by Start key |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|

10 seconds pause Hi Temp LED will be on
 Press Hi Temp key to clear errors
 Hi Temp LED will blink twice to indicate errors have been cleared

Service Diagnostics Cycle
 Turns on loads and checks sensors

SERVICE CYCLE ERROR 1

| | | | | |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|
| Clean LED will flash FUNCTION code | Pause 2 seconds | Clean LED will flash PROBLEM code | Pause 5 seconds | Repeat 3 times unless advanced by Start key |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|

SERVICE CYCLE ERROR 2

| | | | | |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|
| Clean LED will flash FUNCTION code | Pause 2 seconds | Clean LED will flash PROBLEM code | Pause 5 seconds | Repeat 3 times unless advanced by Start key |
|------------------------------------|-----------------|-----------------------------------|-----------------|---|

SERVICE DIAGNOSTICS CYCLE

| INTERVAL | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
|---|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| CYCLE, OPTION & STATUS LEDS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NORMAL | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 HR WASH | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HI TEMP | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| START/RESUME | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CIRC | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RUNNING | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRYING | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SANITIZED | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLEAN/COMPLETED | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ALL OTHER CYCLE, OPTION, & STATUS LEDS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INTERVAL TIME (min:sec) | 0:06 | 1:21 | 1:21 | 1:21 | 1:21 | 0:10 | 0:45 | 0:05 | 0:42 | 0:05 | 1:30 | 0:26 | 0:05 | 1:00 | 0:30 | 4:00 | 0:01 | 0:01 | 0:01 | 0:01 | 1:52 | 0:06 | 2:30 | 0:10 | 1:21 | 1:21 | |
| TOTAL TIME (MAX.): | 24:11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SOIL SENSING INTERVALS & SENSOR CHECKS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| THERMISTOR (temperature sensor) CHECK INTERVAL | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| O.W.I. (soil sensor) CHECK INTERVALS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NOTE: OWI has thermistor built in; see check below. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DIVERTER POSITION SENSOR CHECK | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOADS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PILOT RELAY | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VENT | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FILL | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WASH MOTOR | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DETERGENT/RINSE AID DISPENSER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DIVERTER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DIVERTER POSITION | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAIN MOTOR | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HEATER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INTERVAL TIME (min:sec) | 2 | 1 | 1 | 1 | 1 | 3 | | | | | | | | | | | | | | | | | | | | | |
| TOTAL TIME (MAX.): | 24:11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SERVICE DIAGNOSTICS CYCLE NOTES

"Clean" LED is also referred to as "Completed" on some models.

1 To invoke the Diagnostics Cycle, perform the following key presses or actions in less than 6 seconds while in standby:

Diagnostics WITHOUT Error Codes:
 Heated Dry → Normal → Heated Dry → Normal
 (Skips intervals 26-22 and 2-1)

Diagnostics WITH Error Codes:
 Heated Dry → Normal → Heated → Normal → Heated → Dry → Normal
 (Includes intervals 26-22 and 2-1)

2 To rapid advance one interval at a time, press the Start/Resume key. Rapid advancing may skip sensor checks as some checks require two complete intervals.

3 Invoking Service Diagnostics clears all status and last ran information from memory and restores defaults; it also forces the next cycle to be a sensor calibration cycle.

4 Calibration cycle forces two rinses to occur prior to Final Rinse (to assure clear water), then calibrates the OWI during the final rinse.

5 Turn on all LEDs immediately upon receiving entry sequence (even if door open) and throughout this first interval as a display test.

6 Diverter will be on continuously in interval 16. In all other diverter intervals, diverter will be on only until it reaches the intended position for that interval.

7 5 sec. pause in interval 18 and turn on the Clean LED in interval 17 if water detected.

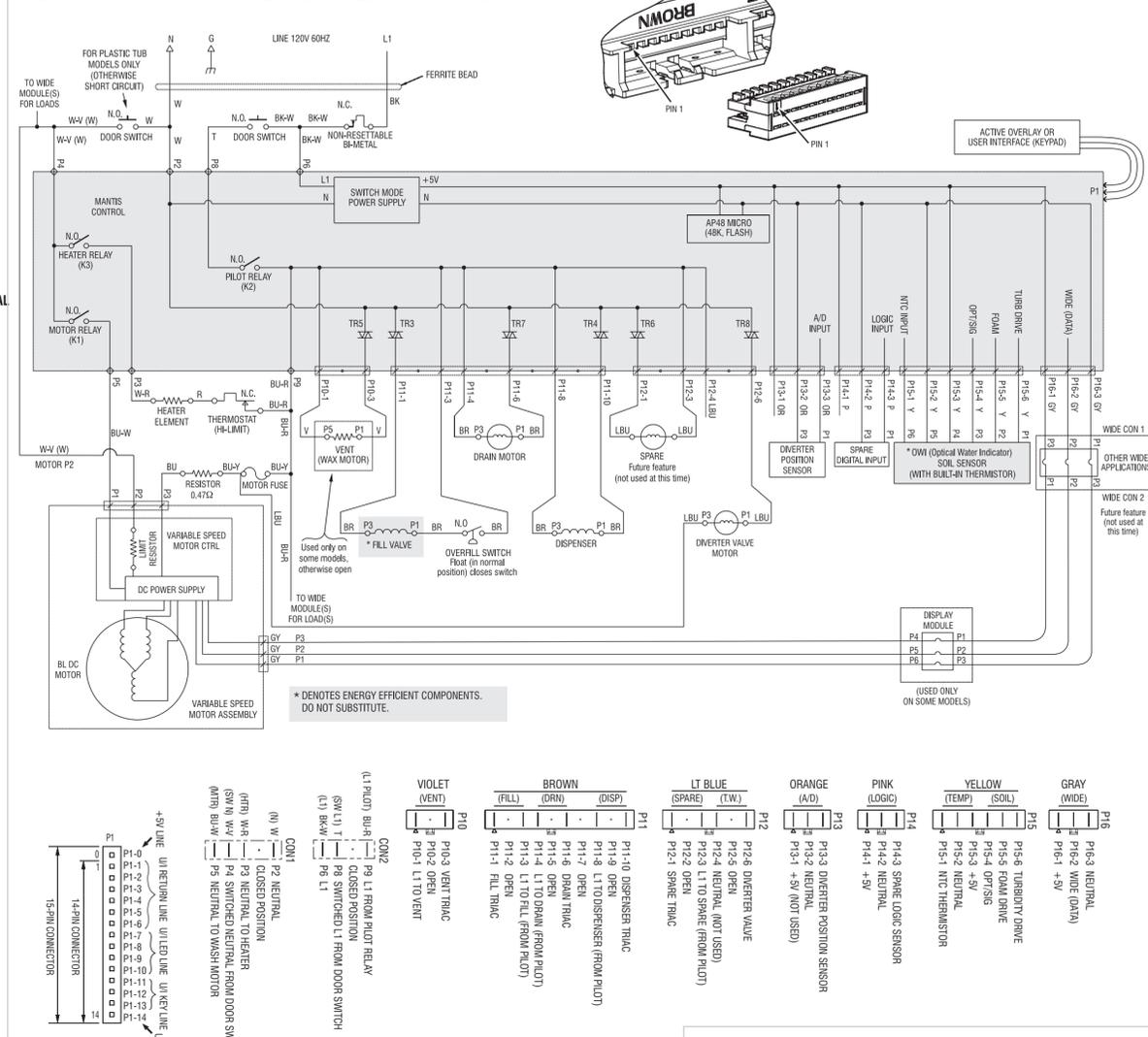
8 Check OWI sensor for presence of bulk soil during pause interval 14 and turn on the Clean LED in interval 13 if bulk soil detected.

9 Drain until OWI sensor sees the presence of air or a max. of 1:52 during interval 6 and turn on the Clean LED in interval 5 if air detected.

10 Heater relay must lag wash motor relay by 1.5 sec. at start-up of heated wash intervals to avoid simultaneous heater and motor in-rush current.

11 Check OWI sensor for the presence of water during the

WIRING DIAGRAM
 SCHEMATIC SHOWN WITH DOOR SWITCH AND ALL OTHER NORMALLY OPEN CONTACTS OPEN.



CHECKING KEYPAD OPERATION
 A rapidly blinking LED over one of the keys of the keypad (or sometimes a "dead" keypad/console) indicates one or more key switch lines are stuck or shorted on the control or the keypad. To determine if the control or keypad is faulty, do the following test:

Stuck Key Test:

- Unplug dishwasher or disconnect power.
- Open the dishwasher door.
- Open console and disconnect the keypad ribbon connection from the control (at P1). Make sure all other connections are made.
- Put console back together. Do not close the dishwasher door.
- Plug in dishwasher or reconnect power.
- Wait 5 seconds.
- Close dishwasher door.
- Monitor the control's response.

→ If the control is OK (no longer sees shorts with the keypad unplugged), it will respond by turning on the drain motor for 2 minutes. Check and/or replace the keypad if the control responds OK.
 → If the control is not OK (still sees shorts with the keypad unplugged), then the drain motor will NOT respond. If drain motor does not start within 10 seconds, repeat or verify that all steps were followed, then replace the control.

General keypad inspection:

- Unplug dishwasher or disconnect power.
- Check keypad ribbon tail for broken/shorted/corroded/creased traces.
- Check for loose connection to control.
- Check for evidence of contaminants or corrosion around the perimeter of the keypad, on the keypad ribbon tail and/or on the keypad connector at the control.
- Perform keypad function checks below.

To test the model ID diodes in the keypad:
 Check each key and confirm corresponding LED turns on and that the proper delay selections for that model are available. If ID diodes for this keypad are opened or shorted, key and LED mapping and features like Delay may be altered.

To test an LED function:
 Confirm that the LED turns on during the "Display Test" at the beginning of the Service Diagnostics Cycle (see "Service Diagnostics Cycle Time Chart," NOTE 2).

Checking key switch contacts:

- Unplug dishwasher or disconnect power.
- Remove connector P1 from the control board.
- Using the table at right, measure the resistance across the switch when the key is pressed.

NOTES:

- The meter must be connected with the proper polarity.
- This test will not work on models with a "Touch Sensor" type User Interface.
- The resistance reading should go from infinity (open circuit) with the key open down to a readable ohm level with the key pressed. The level may be different depending on your meter, since there is a diode in the circuit.

If available, you could use the "Diode Test" function of a digital meter, which will give a voltage to turn on the diode in the circuit.

→ If any switches fail this test, replace the console panel/keypad assembly.
 → If all switches test OK, replace the machine control board.

KEY SWITCH RESISTANCE CHECK TABLE

| KEY | + Pos. Lead | - Neg. Lead |
|--------------------------------------|-------------|-------------|
| DELAY HOURS | P1-12 | P1-2 |
| SMART WASH/ADAPTIVE WASH | P1-13 | P1-3 |
| TOP RACK ONLY | P1-11 | P1-2 |
| CANCEL/DRAIN | P1-12 | P1-3 |
| POTS & PANS/HEAVY | P1-13 | P1-4 |
| HIGH TEMP SCOUR/ HIGH TEMP SCRUB | P1-11 | P1-4 |
| START/RESUME | P1-12 | P1-4 |
| NORMAL WASH/NORMAL/ PLATE WARMER | P1-13 | P1-5 |
| SANI RINSE/SANI WITH STEAM | P1-11 | P1-5 |
| TURBO ZONE/PRO SCRUB/ POWER SCOUR | P1-11 | P1-3 |
| CHINA/LIGHT | P1-13 | P1-6 |
| HEATED DRY | P1-11 | P1-6 |
| RINSE ONLY/QUICK RINSE | P1-12 | P1-5 |
| ONE HOUR WASH | P1-12 | P1-6 |

DISHWASHER STRIP CIRCUITS
 The following individual circuits are for use in diagnoses. Do not continue with the diagnosis of the appliance if a fuse is blown, a circuit breaker is tripped, or if there is less than a 120 volt power supply at the wall outlet.

■ Unplug dishwasher or disconnect power.
 ■ Perform resistance checks. To check resistance of a component, disconnect harness leads first.

POWER UP

WASH/RINSE

WATER HEATING/HEAT DRY

SOIL SENSING

METERING OF TRIAC LOADS

FILL

VENT

DRAIN

DISPENSER (DETERGENT AND RINSE AID)

DIVERTER VALVE

DIVERTER SENSOR

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 4,693,526 5,018,550 5,165,433 5,803,100 5,909,743 6,103,017 6,418,943 6,546,942 6,393,333 6,472,023
 4,798,057 5,039,828 5,202,582 5,881,906 5,924,433 6,182,674 6,431,188 6,595,164 6,441,149 6,473,980
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TROUBLESHOOTING GUIDE

NOTES:

- For resistance checks, refer to "Dishwasher Strip Circuits" section.
- For checking operation with diagnostics, refer to "Service Diagnostics Cycle" section.
- For information on normal cycle and options, see "Cycle Operation" section.

| CUSTOMER DESCRIPTION | POTENTIAL CAUSES | CHECK | RELATED ERROR CODE(S) |
|---|--|--|-----------------------|
| Clean LED Flashes | Control programmed with self diagnostics. | Read error code from the dishwasher and refer to Service Error Codes table. | |
| Won't Run or Power Up ("Dead" Keypad/Console) | No power to unit or bad connection. | Check fuses, circuit breakers, and junction box connections. | |
| <ul style="list-style-type: none"> ■ No operation ■ No keypad response ■ No LEDs or display | Loose connections in dishwasher power up circuit or between keypad(s) and control. | 1. Unplug dishwasher or disconnect power. 2. Check continuity of all components in power up circuit. Check connections between keypad(s) and control. | |
| | Door switch not making contact: ■ Faulty door latch assembly. ■ Faulty door switch. | 1. Unplug dishwasher or disconnect power. ■ Faulty door latch assembly. ■ Faulty door switch. | |
| | Opened bi-metal attached to control. | 1. Unplug dishwasher or disconnect power. 2. Measure resistance. If open, replace. If replaced more than once, replace harness as well. NOTE: Replace any component with evidence of overheating. | |
| | Multiple open or shorted circuits in keypad. | See "Checking Keypad Operation." | |
| | Faulty control. | 1. Unplug dishwasher or disconnect power. 2. Check/replace control. | |
| Won't Run and LED for Start/Resume Key is Blinking Slowly | By design, if the door is opened or power is interrupted during a cycle, the user must press the Start/Resume key to resume operation. | Instruct customer. Refer to Use & Care manual. | |
| | Start/Resume key not responding. | See "One or More Keys Won't Respond." | |
| | Control detected door switch problem. | Refer to "Service Error Codes" table. | 5-1 |
| Won't Run and LED Above Key(s) is Flashing Rapidly | Stuck key or short circuit(s) in keypad, or in control's input lines that read the keys. | Don't replace both: See first section of "Checking Keypad Operation" for test to determine whether shorts are in the keypad or the control. | 2-1 |
| Won't Start and Start/Resume Key LED Flashes 3 Times When Start/Resume Key is Pressed | Control is programmed to not start if it suspects door switch is stuck closed. Control looks for switch to open between cycles. ■ Customer didn't open door between cycles. ■ Door switch contacts stuck closed. | 1. Open and close door and then press Start/Resume key. Instruct customer. 2. Unplug dishwasher or disconnect power. 3. Measure resistance of door switch contacts while checking mechanical operation of latch assembly. | 5-2 |
| Won't Start and Start/Resume Key LED Flashes 3 Times When Start/Resume Key is Pressed and Clean LED or Completed is Blinking | Control detected motor and/or heater problems. | Refer to "Service Error Codes" table. | 6-1 7-1 7-2 |
| Won't Accept Key Presses and Control Lock LED On | Control Lockout feature accidentally turned on by customer. | Instruct customer. Press and hold the Heated Dry key for 5 seconds to turn off (or on) the Control Lock feature. | |
| | Control detected keypad problem. | Refer to "Service Error Codes" table. | 2-1 |
| Some Keys Work but One or More Keys Won't Respond | Open key or LED circuit(s) on the keypad, or open circuits on the control to the key(s) and LEDs. | See "Checking Keypad Operation." | |
| Unusual LED or Display Readouts | Open ID diodes and/or LED circuit(s) in keypad, or open circuits on the control that drive the ID diodes or LEDs. | See "Checking Keypad Operation." | |
| Washes for <45 Seconds Without Filling and then Shuts Off | Unit is in Sales Demo mode. | Press the following key sequence in less than 3 seconds to turn Demo mode off (or on): High Temp ⇒ Heated Dry ⇒ Heated Dry ⇒ High Temp ⇒ Heated Dry ⇒ Heated Dry NOTE: Service Diagnostics will also clear Demo mode. | |
| Long Cycles and/or Stuck in Certain Part of Cycle | As part of normal operation, the dishwasher pauses 2 or 3 times during the cycle for thermal holds and advances once temperature is met. | Instruct customer. Explain thermal holds and how the cycle pauses when they occur. | |
| | OWI soil sensor picking high soil cycle too often. | 1. Run Service Diagnostics cycle to check if OWI is showing high soil with no soil added. 2. Check lens surface. Clean if needed. 3. Unplug dishwasher or disconnect power. 4. Replace OWI. NOTE: If OWI soil sensor is replaced, run Diagnostics after installing new OWI to force calibration on next regular wash cycle. | |
| | Heater takes a long time to heat water with low voltage. | Check for at least 100 VAC at power source. | |
| | A water heating problem could cause long cycles but will typically cause a "water heating fault". | Refer to "Service Error Codes" table. | 7-1 |
| | Diverter problem prevented water from heating. | Refer to "Service Error Codes" table. | 4-1 4-4 |
| | Incoming water too cold. | Refer to "Service Error Codes" table. | 8-2 8-3 |
| | Sensor problem. | Refer to "Service Error Codes" table. | 3-1 3-3 |
| Can Start a Cycle, but Cycle Does Not Complete (and Clean LED or Completed May Blink) | Control canceled cycle due to error detected with wash motor, low water, or suds. | Refer to "Service Error Codes" table. | 6-1 6-2 8-1 |
| Will Not Drain, or Excess Water Left in Unit | Drain loop check valve not sealing. | 1. Disconnect drain hose at plumbing connection. 2. Elevate hose above dishwasher and fill with water. If water flows into dishwasher, replace entire drain loop (install as high as possible and attach to underside of countertop if possible). | |
| | Customer misunderstands water level after drain. | Instruct customer. Sump will normally have about 2.4 cm (1 inch) of water remaining after cycle. | |
| | Draining problem. | Refer to "Service Error Codes" table. NOTE: Refer to table even if error code not recorded by control. | 9-1 |

CYCLE OPERATION

NOTE: Cycles shown depict typical low soil version. Cycles will vary based on sensor inputs and options selected. All washes alternate spray arms and vary motor speed.

| POTS & PANS | DRAIN | FILL | WASH | DRAIN SEQUENCE | FILL | DETERGENT DISPENSE | WASH | THERMAL HOLD *1 | WASH | DRAIN SEQUENCE | FILL | WASH | DRAIN SEQUENCE | FILL | HEATED WASH | THERMAL HOLD *1 | RINSE AID DISPENSE | WASH | DRAIN SEQUENCE | PAUSE | DRY *2,3 | |
|---------------------------------|-----------------|------------|-----------|----------------|-----------|--------------------|-----------|-----------------------|-----------|----------------|-----------|------------|----------------|------------|-------------|-----------------------|--------------------|------------|-----------------------|------------|-----------|-------|
| | 0 MIN. 0:40 MAX | 1:13 | 4:00 | 1:43 MAX | 1:11 | | 2:15 | 49°C (120°F) OR 55:00 | 50:00 | 1:12 MAX | 1:06 | 6:00 | 1:12 MAX | 1:06 | 15:00 | 60°C (140°F) OR 45:00 | | 8:00 | 1:08 MAX | 06:00 | 26:00 | |
| NORMAL | 0 MIN. 0:40 MAX | 1:13 | 4:00 | 1:43 MAX | 1:09 | | 2:15 | 41°C (105°F) OR 35:00 | 25:00 | 1:12 MAX | 0:18 | 4:42 | 0:35 MAX | 0:18 | 4:42 | 0:35 MAX | 1:04 | 15:00 | 60°C (140°F) OR 45:00 | 08:00 | 06:00 | 26:00 |
| SMART WASH/ADAPTIVE WASH | 0 MIN. 0:40 MAX | 1:13 | 4:00 | 1:43 MAX | 1:09 | | 3:45 | 41°C (105°F) OR 35:00 | 25:00 | 1:12 MAX | 0:18 | 4:42 | 0:35 MAX | 0:18 | 4:42 | 0:35 MAX | 1:04 | 15:00 | 60°C (140°F) OR 45:00 | 08:00 | 06:00 | 26:00 |
| CHINA | 0 MIN. 0:40 MAX | 1:13 | 4:00 | 1:43 MAX | 1:09 | | 2:15 | 41°C (105°F) OR 35:00 | 25:00 | 1:12 | 0:18 | 4:42 | 0:35 MAX | 0:18 | 4:42 | 0:35 MAX | 1:04 | 15:00 | 57°C (135°F) OR 45:00 | 08:00 | 06:00 | 26:00 |
| ONE HOUR WASH | 0 MIN. 0:40 MAX | 1:13 | 3:00 | 1:43 MAX | 1:04 | | 3:00 | | 14:45 | 1:12 MAX | 1:06 | 03:00 | 1:12 MAX | 1:06 | 15:00 | | | 05:30 | 1:08 MAX | 06:00 | 29:00 | |
| PLATE WARMER | HEAT 10:30 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | PAUSE 2:00 | HEAT 2:00 | |

*1: Thermal hold = heated wash until temperature reached or maximum time. *2: Heater not on for entire dry period. *3: If selected.

SERVICE ERROR CODES TABLE Example: 8-1 means "Inlet Water" function, "Low Water/Air in Pump" problem.

| FUNCTION CODE | PROBLEM CODE | CAUSES | WHAT TO CHECK |
|---------------------------|------------------------------|--|--|
| 1- CONTROL | 1 Pilot Stuck On | Control detected K2 relay stuck closed. | 1. Unplug dishwasher or disconnect power. 2. Check all loads for shorts. 3. Replace control and all faulty components. |
| | 2- USER INTERFACE | 1 Stuck Key | Control detected stuck key(s) in keypad or keypad connection. See "Checking Keypad Operation." |
| | 2 No Response | User interface cannot communicate with main control. | 1. Unplug dishwasher or disconnect power. 2. Check all wiring connections between display module and P16 on the main control. |
| 3- THERMISTOR/ OWI | 1 Open | <ul style="list-style-type: none"> ■ Open connector or component in Temperature Sensing Circuit. ■ Open or faulty temperature sensor. ■ Faulty temperature sensor input on control. | 1. Check operation of temperature sensor in Service Diagnostic Cycle. 2. Unplug dishwasher or disconnect power. 3. Check all components and connections in the Temperature Sensing Circuit. |
| | 2 Shorted | <ul style="list-style-type: none"> ■ Incoming water temperature above 71°C (160°F). ■ Shorted connection or component in Temperature Sensing Circuit. ■ Shorted or faulty temperature sensor. ■ Faulty temperature sensor input on control. | 1. Check incoming water temperature. 2. Check operation of temperature sensor in Service Diagnostic Cycle. 3. Unplug dishwasher or disconnect power. 4. Check all components and connections in the Temperature Sensing Circuit. |
| | 3 Failed Calibration | OWI failure. | 1. Unplug dishwasher or disconnect power. 2. Check all connections in soil sensing circuit. 3. Check OWI lens surface. Clean if needed. 4. Replace all parts and panels. 5. Plug in dishwasher or reconnect power. 6. Run Service Diagnostics to check OWI operation. OWI should see low soil with just water. Replace OWI or control if needed, then; 7. Unplug dishwasher or disconnect power. 8. Replace OWI. NOTE: Run Diagnostics after replacing new OWI to force calibration on next regular wash cycle. |
| 4- DIVERTER | 1 Can't Find Position | Control cannot determine diverter position. | 1. Unplug dishwasher or disconnect power. 2. Check all connections in diverter motor and diverter sensor circuits. 3. Verify diverter is working during Service Diagnostic cycle. Replace diverter and/or control. |
| | 2 | Reserved for future use. | |
| | 3 | Reserved for future use. | |
| | 4 Stuck On | Diverter motor is stuck ON. | 1. Unplug dishwasher or disconnect power. 2. Check all connections in diverter motor and diverter sensor circuits. 3. Verify diverter is working during Service Diagnostic cycle. Replace diverter, harness or control. |
| | 5 Disk Missing | Control detected diverter disk in sump is missing. | 1. Unplug dishwasher or disconnect power. 2. Remove lower spray arm, turbo zone assembly, rear feed tube and outlet cover, and verify the round diverter disk is installed. |
| 5- DOOR SWITCH(ES) | 1 Door Open | Door was not latched within 3 seconds of pressing the Start/Resume key. Door switch not making contact: ■ Faulty or sloppy door latch assembly (which can be aggravated by high door closure force, keeping strike plate from fully seating). ■ Faulty door switch (high resistance). | Instruct customer. Refer to Use and Care Guide. 1. Unplug dishwasher or disconnect power. 2. Measure resistance of door switch contacts while checking mechanical operation of latch assembly. Confirm switches not loose from assembly. Check strike plate and door closure force. |
| | 2 Not Opening | Loose connections between door switches and pin 8 on control (also pin 4 on plastic tub models only). Faulty control. | 1. Unplug dishwasher or disconnect power. 2. Check resistance of all harness connections between door switches and pin 8 of the control (pin 4 on plastic tub models only). 1. Unplug dishwasher or disconnect power. 2. Check/replace control. |
| | | Control programmed to not start if it suspects the door switch is stuck closed. Control looks for the door switch to open between cycles. ■ Customer didn't open the door between cycles. ■ Door switch contacts stuck closed. | 1. Open and close door and then press Start/Resume key. Instruct customer. 2. Unplug dishwasher or disconnect power. 3. Measure resistance of door switch contacts while checking mechanical operation of latch assembly. |
| 6- WASH MOTOR | 1 No Communication | Loose connections between control and motor. Motor fuse open. Faulty wash motor or diverter motor. | 1. Unplug dishwasher or disconnect power. 2. Check all connections in Wash/Rinse Circuit and Motor Communications Circuit. 1. Unplug dishwasher or disconnect power. 2. Use inspection mirror to inspect for water leakage and/or overheating on the diverter and wash motor. 3. Measure resistance of diverter from load side of fuse (long wire side) to test pad at P12-6 on control (normal resistance 1300-1600 Ω). 4. Check error code history for both components. 5. If resistance of diverter is normal and there is no history of diverter errors, then replace wash motor and fuse. |
| | | Neutral door switch not making contact consistently: ■ Faulty or sloppy door latch assembly (which can be aggravated by high door closure force, keeping strike plate from fully seating). ■ Faulty door switch (high resistance). NOTE: Neutral switch on plastic tub models is only in series with motor and heater. Other loads are not affected. | 1. Unplug dishwasher or disconnect power. 2. Measure resistance of door switch contacts while checking mechanical operation of latch assembly. Confirm switches not loose from assembly. Check strike plate and door closure force. |
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| FUNCTION CODE | PROBLEM CODE | CAUSES | WHAT TO CHECK |
|-----------------------|-------------------------------------|---|---|
| 6- WASH MOTOR | 1 No communication continued | Faulty control on wash motor or dishwasher. | 1. Run Service Diagnostics and confirm if other loads operate. If so go to step 2. 2. Unplug dishwasher or disconnect power. 3. Replace wash motor. 4. Replace all parts and panels. 5. Plug in dishwasher or reconnect power. 6. If no other loads turn on go to step 6. 7. Unplug dishwasher or disconnect power. 8. Replace control. |
| | 2 Motor Error | Communication error between control and motor. | 1. Visually check all connections to motor and control. 2. Check for proper operation during Service Diagnostics. 3. Unplug dishwasher or disconnect power. 4. Replace motor and/or control. |
| 7- HEATING | 1 No Heat | Control programmed to stop running and not allow further cycles if it detects a water heating problem (no temperature increase detected during heated wash on three consecutive cycles). Control disables the Start/Resume key until cleared. Heater Circuit problem: ■ Open in heater. ■ Open connection or component in Heater Circuit. ■ Faulty Heater Drive Circuit on control. Neutral door switch not making contact consistently. ■ Faulty or sloppy door latch assembly (which can be aggravated by high door closure force, keeping strike plate from fully seating). ■ Faulty door switch (high resistance). NOTE: Neutral switch on plastic tub models is only in series with motor and heater. Other loads are not affected. | Running Diagnostics clears the control and allows a cycle to run again. The water heating problem must be fixed or the control will stop running again. See potential causes below. 1. Check operation of heater in Service Diagnostics Cycle. 2. Unplug dishwasher or disconnect power. 3. Measure resistance of heater and all components and connections in Water Heating Circuit/Heat Dry Circuit. 1. Unplug dishwasher or disconnect power. 2. Measure resistance of door switch contacts while checking mechanical operation of latch assembly. Confirm switches not loose from assembly. Check strike plate and door closure force. |
| | 2 Stuck On | Heating element stuck ON. | 1. Unplug dishwasher or disconnect power. 2. Check resistance of all components in Water Heating Circuit/Heat Dry Circuit. Replace faulty components. 3. Check for continuity between P8 and P9 on control. If shorted, replace control. |
| 8- INLET WATER | 1 Low Water/Air in Pump | No water to dishwasher. Bowls or pots loaded or flipped upside down and captured wash water. Loose connection to dishwasher fill valve, or in the valve circuit, or in fill valve solenoid. "Overflow" switch stuck in "Overflow" position and/or dishwasher not level. Drain loop detached from tub and/or improper drain connection. Inlet screen or fill valve plugged. | Verify water supply is turned on and supply line adequate. Correct installation if necessary. Instruct customer on loading. Refer to Use and Care Guide. 1. Unplug dishwasher or disconnect power. 2. Check resistances of fill valve solenoid and all connections in the Fill Circuit. Remove any items stuck under float. Verify that the float moves freely and you hear the "click" of the switch contacts. Check/adjust levelness of dishwasher. Check for water siphoning out of unit: 2. Drain for 5-10 seconds by pressing Cancel/Drain. 3. Open door and confirm water does not siphon out of unit. If it does, confirm drain loop is attached to side of dishwasher and drain hose is connected to a drain at least 50.8 cm (20") off the floor. 1. Turn off water supply to dishwasher. 2. Disconnect water line to fill valve and inspect inlet for obstruction. |
| | 2 Cool Water | Dishwasher creating too many suds during washing. Faucet fill valve drive circuit on the control. Water leaking from dishwasher. Diverter disk in sump is missing. | 1. Allow unit to fill and wash for 1 minute. Open door and check for excessive sudsing. 2. Confirm using proper dishwasher detergent, not hand detergent. 3. Check for excessive rinse aid leakage. Check operation of fill valve during Diagnostics. Check for leaks under dishwasher. 1. Unplug dishwasher or disconnect power. 2. Remove lower spray arm, turbo zone assembly, rear feedtube and outlet covert and verify whether the round diverter disk is installed. |
| | 3 Cold Water | Incoming water under 32°C (90°F). Incoming water under 18°C (65°F). | 1. Be sure dishwasher is connected to the hot water supply. 2. Confirm temperature at sink (recommend 49°C/120°F). Instruct customer to run water at sink before running dishwasher. 1. Be sure dishwasher is connected to the hot water supply. 2. Unplug dishwasher or disconnect power. 3. Check all connections and measure resistance in "Temperature Sensing Circuit." Replace OWI if needed. 4. Confirm temperature at sink (recommend 49°C/120°F). Instruct customer to run water at sink before running dishwasher. |
| 9- DRAINING | 1 Slow Drain | Obstructed drain hose or path. Open winding on drain pump motor or loose/open connection in Drain Motor Circuit. Drain pump impeller fractured. Faulty drain motor drive circuit on control. | 1. Unplug dishwasher or disconnect power. 2. Check for blockages from sump check valve to customer's plumbing. Potential items: ■ Plugged garbage disposal or plug not knocked out. ■ Blocked/stuck sump or drain loop check valve. ■ Plugged hoses. 1. Unplug dishwasher or disconnect power. 2. Check resistances of drain motor windings and all connections in Drain Motor Circuit. 1. Unplug dishwasher or disconnect power. 2. Remove drain pump and check impeller by pulling and rotating. If the impeller pulls off easily or turns freely (normally there is some uneven resistance), it is stripped. Replace drain pump. Check operation of drain motor during Diagnostics. |