

## ⚠ 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.

### Electrostatic Discharge (ESD)

#### Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an anti-static wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance  
-OR-  
Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.
- Before removing the part from its package, touch the anti-static bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in anti-static bag, observe above instructions.

Before servicing, perform the following checks:

- Power cord is firmly plugged into a live circuit with proper voltage. Check household fuses and circuit breakers.
- Is washer in a Pause mode? See Pause Mode, under **GENERAL INFORMATION** section below.
- Both hot and cold water faucets are open, water supply hoses and water inlet screens are unobstructed.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms per volt DC or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
- Resistance checks **must** be made with power cord **unplugged** from outlet, and with wiring harness or connectors **disconnected**.
- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.

See **TROUBLESHOOTING GUIDE** on page 2.

## GENERAL INFORMATION

### Cycle/Status Indicators

There are three red status indicators (LEDs): one each for wash, rinse, and final spin.

**NOTE:** A blinking signal in any cycle indicates a Pause mode.

### Pause Mode

The Pause mode can be used to interrupt any machine cycle. To initiate a Pause mode, press the START/PAUSE button. Any cycle/status indicator LEDs that were on before the START/PAUSE will flash every 1/2 second until the Pause mode is exited. To exit the Pause mode, press the START/PAUSE button again.

**NOTE:** If the machine stays in Pause mode for more than two hours, the microcontroller will shut the machine off.

## Soak Mode

The Soak mode suspends the wash cycle for a timed interval before completion of the cycle. In order to alert the user that the washing process hasn't finished, the Wash LED stays on, and if the START/PAUSE button is pressed, the last LED on blinks.

## Long Fill Time

If, during any fill, the water has not reached the selected level after 30 minutes, the control will disregard the program and shut off all LEDs and water inlet valves.

## Long Drain Time

If, during a drain cycle, the water level switch does not detect a low water level condition after 14 minutes, the control shuts off (drain time is approximately 5 minutes).

### NOTES:

The preferred diagnostic service test is the Actuator and Switch Test. See page 4.

Diagnostic refers to the 9 pin connector. Direct measurements over the 10 pin connector must be avoided to prevent ESD damages.

## TROUBLESHOOTING GUIDE

**IMPORTANT:** Possible Cause/Tests **MUST** be performed in the sequence shown for each problem.

PROBLEM	Possible Cause/Test
<b>WON'T POWER UP</b> (Verify lid is closed.)	<ol style="list-style-type: none"> <li>1. Verify unit is not in Pause mode.</li> <li>2. Unplug unit for more than 5 seconds, then plug back in.</li> <li>3. Verify the power cord is firmly plugged into a live circuit with the proper voltage.</li> </ol> <p><b>NOTE:</b> These checks are done with the washer unplugged.</p> <ol style="list-style-type: none"> <li>4. Check continuity of the power cord from the plug to the Electronic Control board. If an open circuit is found within the power cord, replace the power cord.</li> <li>5. If continuity checks are good, continue with the remaining Troubleshooting Tests as needed.</li> </ol>

PROBLEM	Possible Cause/Test
<b>WON'T START</b> (Verify lid is closed.)	<ol style="list-style-type: none"> <li>1. Verify unit is not in Pause or Service mode.</li> <li>2. Unplug unit for more than 5 seconds, then plug back in.</li> <li>3. Unplug washer and verify continuity between pins 6 and 4 of nine pin connector with the lid closed.* If an open circuit is found, verify lid switch is operating properly by measuring resistance across switch.*</li> <li>4. Check resistance across motor windings and pump using resistance test. See Ohmmeter Resistance Check and Table 5, page 7.*</li> <li>5. With machine empty, verify continuity between pin 6 of nine pin connector and pressure switch violet wire, and from pin 6 to pressure switch pink wire.*</li> </ol>
<b>CONTROL LOOPS THROUGH CYCLE REPEATEDLY</b>	Unit is in Service mode. Unplug for more than 5 seconds, then plug back in.
<b>WON'T FILL</b> (Verify lid is closed.)	<ol style="list-style-type: none"> <li>1. Check installation. Verify water supply. Verify valves turned on.</li> <li>2. Unplug washer.</li> <li>3. Check screens on water valve.</li> <li>4. Actuate pressure switch from low to high water level.</li> <li>5. Perform Actuator and Switch Test, page 4.*</li> <li>6. Check resistance for water valve solenoids using resistance test. See Ohmmeter Resistance Check and Table 5, page 7.*</li> <li>7. Check connections on water valves.</li> <li>8. If above solutions fail, replace the electronic control.</li> </ol>
<b>WRONG WATER TEMPERATURE</b>	<ol style="list-style-type: none"> <li>1. Verify water supply hoses are connected correctly.</li> <li>2. Check water temperature from faucet.</li> <li>3. Check for blocked screens.</li> <li>4. Check harness wiring by wire color.</li> <li>5. Check fill valve wiring.*</li> </ol>

\* See Strip Circuits on page 16.

PROBLEM	Possible Cause/Test	PROBLEM	Possible Cause/Test
<b>OVERFILLS</b>	<ol style="list-style-type: none"> <li>1. Verify water supply hoses are connected correctly.</li> <li>2. Check water level switch hose connections.</li> <li>3. Check water level switch using ohmmeter.</li> <li>4. Blow into pressure switch hose to tub to dislodge lint in air dome.</li> <li>5. Do not adjust pressure switch screw. Adjusting pressure switch will cause flood.</li> <li>6. Check connections on pressure switch: <ol style="list-style-type: none"> <li>A. Check inlet valve to see if it closes securely (listen for valve leakage).</li> <li>B. Perform Actuator and Switch Test to verify pressure switch. See page 4.</li> </ol> </li> <li>7. If machine still overfills, replace pressure switch.</li> <li>8. If above solutions fail, replace electronic control.</li> </ol> <p><b>NOTE:</b> Unit uses only two pressure switch wires, pink and violet.</p>	<b>WON'T SPIN</b> (continued)	<ol style="list-style-type: none"> <li>3. Verify Water Level switch is reset by disconnecting the hose to it. If this works, repeat step 1.</li> <li>4. Actuate pressure switch from low to high water level.</li> <li>5. Blow into pressure switch hose.</li> <li>6. Check resistance across motor windings using resistance test. See Ohmmeter Resistance Check and Table 5, page 7.*</li> <li>7. If resistance readings are OK and above solutions fail, replace electronic control.</li> </ol>
<b>WON'T AGITATE OR AGITATES IN ONE DIRECTION</b> (Verify lid is closed.)	<ol style="list-style-type: none"> <li>1. Perform Actuator and Switch Test for Dry Agitate. See page 4.</li> <li>2. Check resistance for clockwise and counterclockwise rotation using resistance test. See Ohmmeter Resistance Check and Table 5, page 7.*</li> <li>3. If resistance readings are OK, connections are good and above solutions fail, replace electronic control.</li> </ol>	<b>SPINS AT WRONG SPEED</b>	<ol style="list-style-type: none"> <li>1. Check brake system.</li> <li>2. Verify actuator operation and that it is not jammed.</li> <li>3. If actuator does not operate during the Actuator and Switch Test for Pump and Brake Actuator, page 4, replace actuator.</li> <li>4. If no power at 9-pin connector and actuator resistance readings are OK, replace actuator. See Ohmmeter Resistance Check and Table 5, page 7.</li> <li>5. Check transmission clutch system.</li> </ol>
<b>WRONG AGITATE SPEED</b>	<p>Check belt tension. There should be light deflection (approximately 1/8") when pressed. A loose belt will also cause a black mark on the inside of the cabinet.</p>	<b>WON'T DRAIN/SLOW DRAIN</b>	<ol style="list-style-type: none"> <li>1. Perform Actuator and Switch Test for Pump and Brake Actuator. See page 4.</li> <li>2. Check connections to pump.</li> <li>3. Check pump using resistance test. See Ohmmeter Resistance Check and Table 5, page 7.*</li> <li>4. Clean pump.</li> <li>5. Check for lint in drain hose.</li> <li>6. Repeat step 3.</li> <li>7. If above solutions fail, replace electronic control.</li> </ol>
<b>WON'T SPIN</b> (Verify lid is closed.)	<p><b>NOTE:</b> Unit has a drain cycle of approximately 5 minutes before spin.</p> <ol style="list-style-type: none"> <li>1. Perform Actuator and Switch Test for Spin. See page 4.</li> <li>2. With machine empty, disconnect washer from power and verify continuity between pin 6 of nine pin connector and pressure switch violet wire, and from pin 6 to pressure switch pink wire.*</li> </ol>	<b>UNIT STOPS WITH LID OPEN</b>	<p>Machine is designed to fill with lid open or closed. All other functions will be stopped with the lid open. When the lid closes, the machine continues the cycle.</p>

\* See Strip Circuits on page 16.

## DIAGNOSTIC TEST PROGRAM

The Diagnostic Test Program is intended to be an aid for authorized service personnel. There are two tests in the program, accessed from the control board by following an appropriate entry sequence. Each test is only accessible after powering up the washer.

**To end any diagnostic test and return to normal machine operation, unplug machine power cord from outlet for more than 5 seconds, then plug back in.**

### Actuator and Switch Test

(Preferred Service Test)

The Actuator and Switch Test can detect malfunctions in the following:

- Transmission
- Water Inlet Valves
- Clutch with Actuator
- Pump
- Lid Switch

Each function is tested separately.

**NOTE:** For this series of tests, the lid must be closed.

1. Set the TEMP SELECT switch to Hot/Cold (HC). Note flat of shaft position in relation to knob pointer position. See Figure 1A.
2. See Figure 1B and set the CYCLE SELECT switch so the flat on the shaft faces position 1 (3 o'clock).
3. Unplug machine power cord from outlet for more than 5 seconds, then plug back in (lights may blink on and off) and wait 5 seconds before proceeding.
4. Press and hold the START/PAUSE button.
5. Turn the CYCLE SELECT switch one step clockwise (position 2 or 3 depending on model), and release the START/PAUSE button.
6. Referring to Table 1 and the following text, check the actuators, starting and stopping each test by pressing the START/PAUSE button:

TEMP SELECT POSITION	WATER LEVEL	ACTION
<b>Water Inlet System &amp; Water Level Switch</b>		
CC	Empty	Warm fill
	Full	Agitate
<b>Agitate Function</b>		
WC	n/a	Dry agitate
<b>Spin Function (All Models), Pump &amp; Brake Actuator (3-Temp Models)</b>		
HC	Empty	Pump & brake actuator operate, spin
	Full	Pump & brake actuator operate
<b>Pump &amp; Brake Actuator (4-Temp Models)</b>		
WW (This setting is only on 4-temp models)	n/a	Pump & brake actuator operate

**Table 1**

- To test the **Water Inlet System & Water Level Switch**, change TEMP SELECT to CC and press START. With the tub empty, machine should warm fill. With the water level full, the machine should agitate. Press PAUSE to stop.
- To test the **Agitate Function**, change TEMP SELECT to WC and press START. The machine should dry agitate. Press PAUSE to stop.
- To test the **Spin Function (all models), and Pump & Brake Actuator (3-temperature models)**, change TEMP SELECT to HC and press START. With the tub empty, the machine should pump, spin, and the brake actuator operate. With the water level full, the machine should pump and the brake actuator operate. Press PAUSE to stop.
- To test the **Pump and Brake Actuator on 4-temperature models**, change TEMP SELECT to WW and press START. The machine should pump and brake actuator operate. Press PAUSE to stop.

**NOTE:** CYCLE SELECT setting has no effect upon Actuator and Switch Test after the test has started.

**To end this diagnostic test and return to normal machine operation, unplug machine power cord from outlet for more than 5 seconds, then plug back in.**

**Interface Test** (only on 4-temp models)

The Interface Test tests the Rotary Switches. During this test, every position of each **Rotary Switch** is read and decoded by the controller. The cycle/status indicator LEDs display test results.

1. Set TEMP SELECT switch to Warm/Warm (WW). Note flat of shaft position in relation to knob pointer position. See Figure 1A.
2. See Figure 1B and set the CYCLE SELECT switch so the flat on the shaft faces position 1 (3 o'clock).
3. Unplug machine power cord from outlet for more than 5 seconds, then plug back in (lights may blink on and off) and wait 5 seconds before proceeding.
4. Press and hold the START/PAUSE button.
5. Turn the CYCLE SELECT switch one step clockwise (position 2 or 3 depending on model), and release the START/PAUSE button.
6. Referring to Figure 1 and Table 2, turn the CYCLE SELECT switch clockwise to all positions, starting with position 1 (3 o'clock), noting the corresponding LED indicators.

**NOTE:** For models without position 2, test will cycle from position 1 to 3.

CYCLE POSITION NO. (Turn Clockwise)	LED INDICATOR
1	Spin
2	Wash
3	Rinse
4	Wash/Rinse
5	Spin
6	Wash/Spin
7	Rinse/Spin
8	Wash/Rinse/Spin

**Table 2**

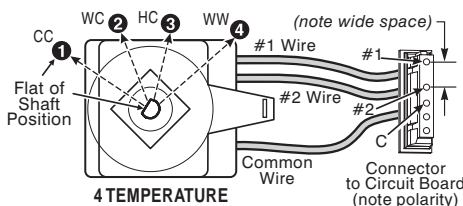
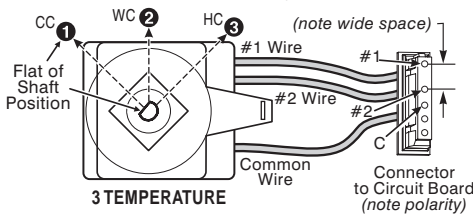
TEMP SELECT POSITION	LED INDICATOR
Warm/Warm (WW)	Spin
Hot/Cold (HC)	Rinse
Warm/Cold (WC)	Wash
Cold/Cold (CC)	All Off

**Table 3**

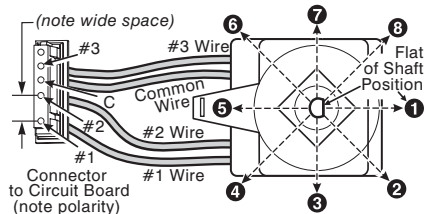
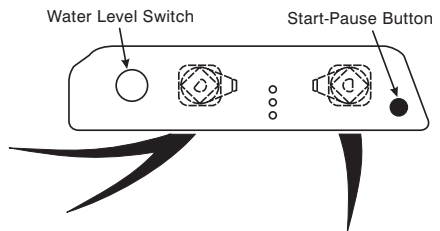
7. See Figure 1 and continue by testing the **Temperature Switch**: Turn the CYCLE SELECT switch so the flat on the shaft faces position 1 (3 o'clock). Set the TEMP SELECT to all positions, noting corresponding LED indicators. See Table 3.

**To end this diagnostic test and return to normal machine operation, unplug machine power cord from outlet for more than 5 seconds, then plug back in.**

**NOTE:** Remove switch knob to verify flat of shaft.



**A** TEMPERATURE SELECT (Switch shown in position 1)



**B** CYCLE SELECT (Switch shown in position 1)

**Figure 1**

**CYCLE CHART** (Cycle/interval times, in minutes, are shown in parentheses)

7 CYCLES		COTTONS:		PERMANENT PRESS (10)	DELICATES (8)	SOAK (30)	DRAIN & SPIN ONLY	SUPER WASH (18)
		HEAVY (14)	NORMAL (10)					
5 CYCLES - W		COTTONS:		PERMANENT PRESS (10)	DELICATES (8)	SOAK (30)	DRAIN & SPIN ONLY	N/A
		NORMAL (14)	N/A					
5 CYCLES - C		NORMAL:		PERMANENT PRESS REGULAR (10)			DRAIN & SPIN	
		N/A	REGULAR (10)					
WASH	Fill Until Full	yes	yes	yes	yes	yes	—	yes
	Agitate Normal	(14)	(10)	(10)	—	(2)	—	(4)
	Agitate Delicate	—	—	—	(8)	—	—	—
	Soak	—	—	—	—	(8)	—	—
	1/2 Tub Drain	—	—	yes	—	—	—	—
	Fill	—	—	yes	—	—	—	—
	Agitate Normal	—	—	(2)	—	(2)	—	(14)
	Soak	—	—	—	—	(8)	—	—
	Drain	(4)	(4)	(4)	(4)	—	—	(4)
	Subinterval Spin (See Fig. 2)	1 time	1 time	1 time	1 time	—	—	1 time
Spin	(2)	(2)	—	—	—	—	(2)	
RINSE	Fill	yes	yes	yes	yes	—	—	yes
	Agitate Normal	(4)	(4)	(4)	—	(2)	—	(4)
	Agitate Delicate	—	—	—	(4)	—	—	—
	Soak	—	—	—	—	(8)	—	—
SPIN	Drain	(4)	(4)	(4)	(4)	(4)	—	(4)
	Subinterval Spin (See Fig. 2)	1 time	1 time	2 times	2 times	1 time	—	1 time
	Subinterval Spin Special (See Fig. 2A)	—	—	—	—	—	1 time	—
	Spin	(4)	(4)	—	—	(2)	(4)	(4)

Table 4

**NORMAL OPERATIONS MODE**

The normal operation mode sets the control to be used in the Normal washing machine mode. This implies that the washer can execute any cycle according to the selected model. Figures 2, 2A and Table 4 show the operating times of the various programs available in the control.

The control does not allow the washer to agitate, pump or spin with the lid open. Filling is possible with the lid open or closed. Opening the lid during a cycle will interrupt power to the machine. Once the lid is closed again, the cycle will resume from the point of interruption.

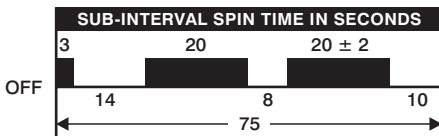


Figure 2 Spin Only S.I.S. Function

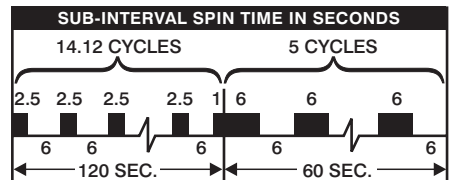


Figure 2A Spin Only S.I.S. Special Function

RESISTANCE VALUES		
Part Tested	Harness Pin Nos. or Part I.D. (Wire color code in parentheses)	Resistance Reading $\Omega$
Harness/Power Cord	10 (G) to Power Cord - Gnd	< 5
Harness/Power Cord	1 (W) to Power Cord - N	< 5
Harness/Power Cord	6 (BK) to Power Cord - L1	< 5
Hot Valve *	5 (P) to 9 (BR)	800-1200
Cold Valve *	5 (P) to 8 (Y/R)	800-1200
Across motor windings *	7 (Y) to 3 (R)	10-20
Counterclockwise motor agitate *	4 (BK/W) to 7 (Y)	5-10
Clockwise motor agitate & spin *	4 (BK/W) to 3 (R)	5-10
Pump and Brake Actuator *	4 (BK/W) to 2 (BU)	18-25
Pump	At component terminals	20-25
Brake Actuator	At component terminals	450-850

\* Resistance measurement same at component terminals.

Table 5

## MANUAL TESTS

### Ohmmeter Resistance Check

To check resistance using an ohmmeter, make sure unit is unplugged from supply. See Figure 3 and Table 5. If any connection is out of range and is not operating properly, check connection nearest the component. If component is out of range, replace suspect component.

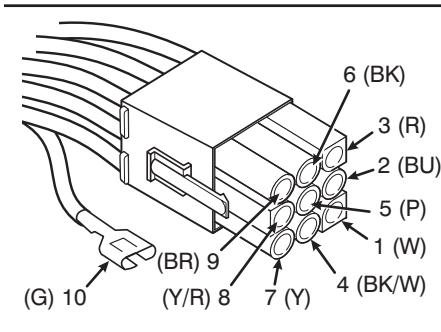


Figure 3

### Rotary Switch Test

The rotary switches can also be checked using an ohmmeter. Both CYCLE SELECT and TEMP SELECT switches are low voltage switches using 5 VDC. The switches must be removed to perform an ohmmeter check. See Figure 1 and Table 6 for switch positions and wire terminal connections.

**NOTE:** All resistance readings must read under 5000 ohms to be considered connected. Over 5000 ohms is considered not connected.

CYCLE & TEMPERATURE SELECTOR SWITCH LOGIC								
Wire Lead No.	Position No./Shaft Flat Location Clockwise							
	1	2	3	4	5	6	7	8
1	-	X	X	-	-	X	X	-
2	-	-	X	X	X	X	-	-
3	-	-	-	-	X	X	X	X

X = Connection To Common

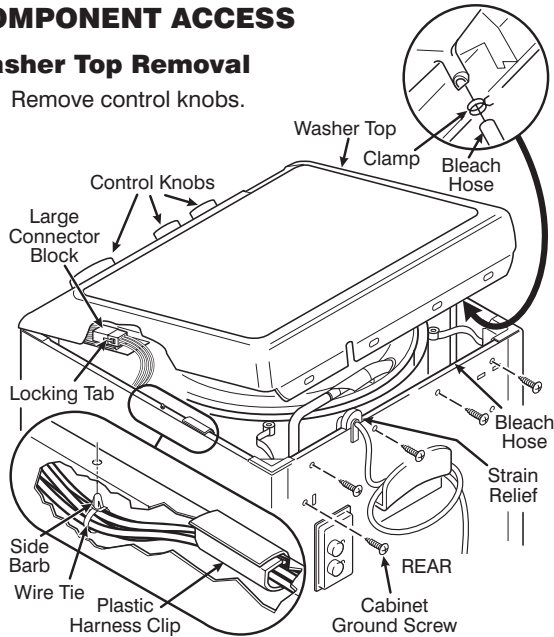
Table 6



## COMPONENT ACCESS

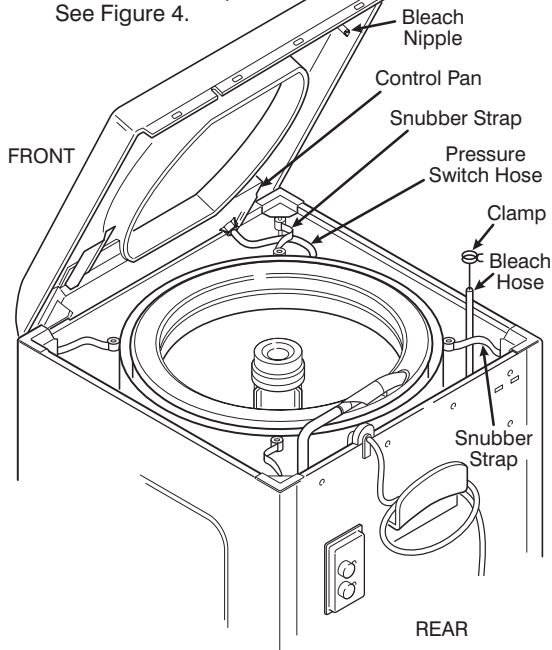
### Washer Top Removal

1. Remove control knobs.



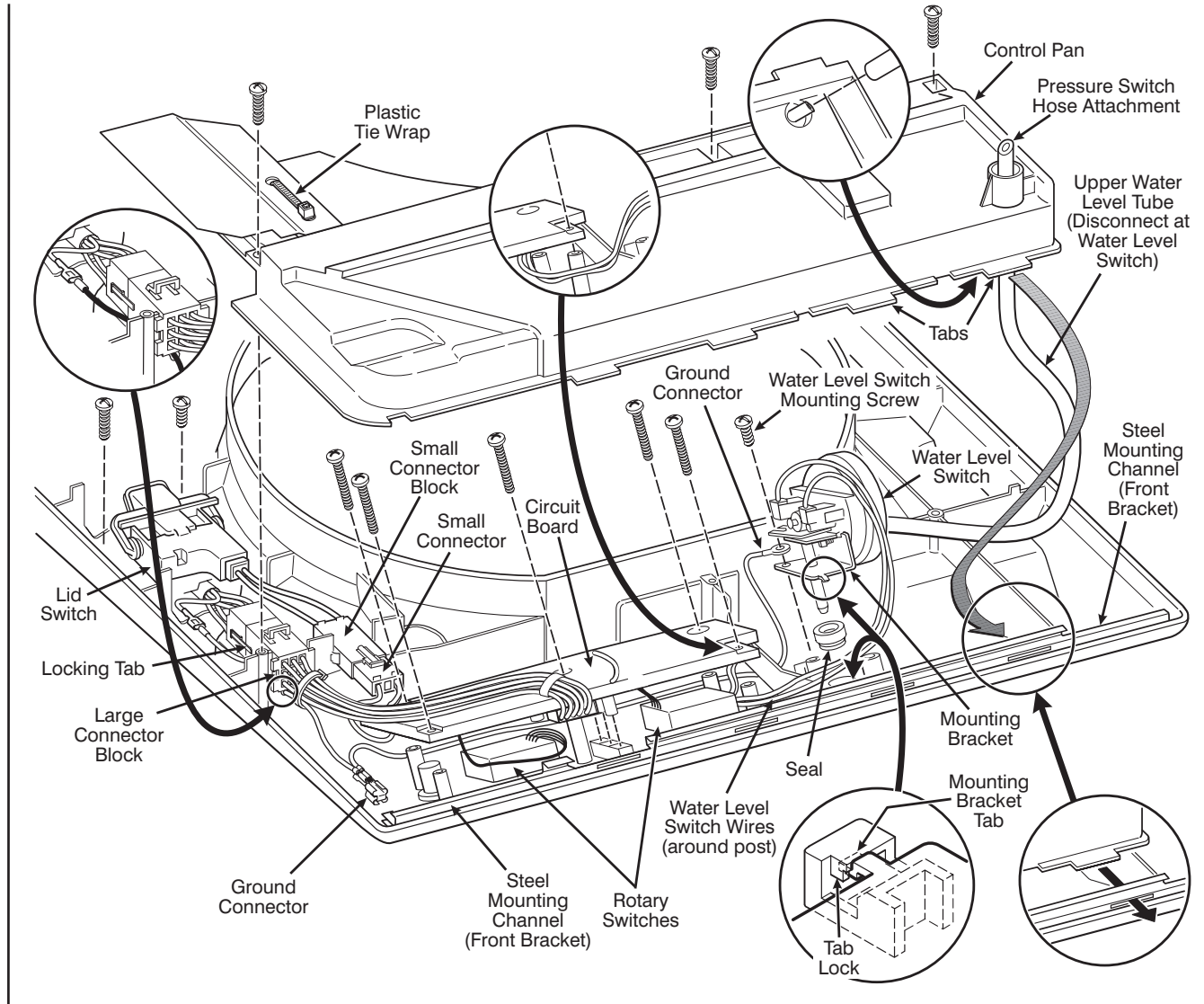
**Figure 4**

2. Remove (4) screws at rear of washer top. See Figure 4.



**Figure 5**

3. Lift rear edge of top about 4". At same time, hold down strain relief and slide from slot in washer top, so it remains on top edge of cabinet. See inset in Figure 4, and dismount wire tie. Squeeze (2) side barbs together and push wire tie out of hole. Unclasp harness from plastic harness clip.
4. Pull bleach hose from bleach nipple in top.



**Figure 6**

5. Reach under top and unplug large connector from large connector block, then unplug ground terminal.

6. Referring to Figure 5, lift edge of washer top farther and carefully pull pressure switch hose from control pan nipple. **NOTE:** Nipple may break upon hose removal.

7. Lay washer top upside down on a soft surface to protect finish.

### Circuit Board and Rotary Switch Removal

1. Remove washer top. See Washer Top Removal, at left.
2. Turn top so control panel edge is near you. See Figure 6. Remove (3) stainless steel control pan screws. Turn control pan over and lay it toward right side. Leave upper water level tube connected to control pan nipple.



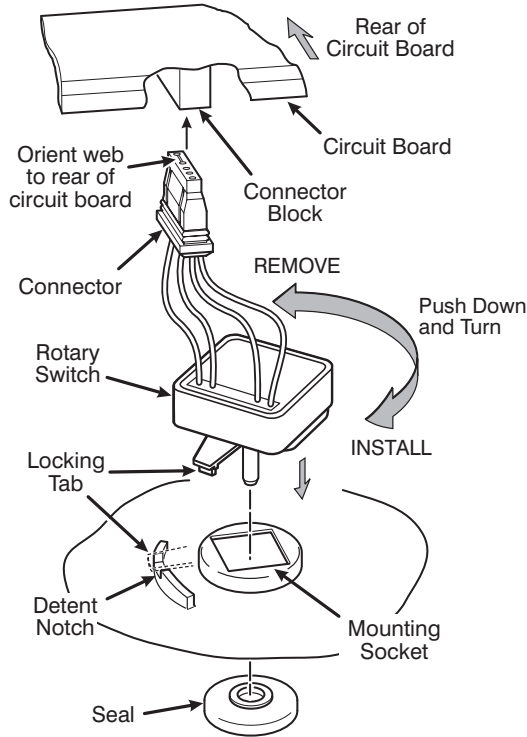


Figure 7

3. Unplug small connector from small connector block.
4. Slide both connector blocks out of mounting slots.
5. Pull connectors from terminals on water level switch.
6. Remove water level switch mounting screw, freeing ground connector and water level switch.
7. Pull other ground connector from terminal on steel mounting channel.
8. Remove (5) circuit board mounting screws. Raise near edge of circuit board. See Figure 7 and lift locking tab on each rotary switch, turning switch 45° counterclockwise, and

remove it from control panel. If necessary, pull the connector of each rotary switch from the connector block on the circuit board.

### Water Level Switch Removal

1. Remove washer top. See Washer Top Removal, page 8.
2. Remove (3) control pan screws. See Figure 6. Turn control pan over and lay it to one side. Pull upper water level tube from nipple on water level switch.
3. Pull connectors from terminals on water level switch.
4. Remove water level switch mounting screw, freeing ground connector and water level switch.

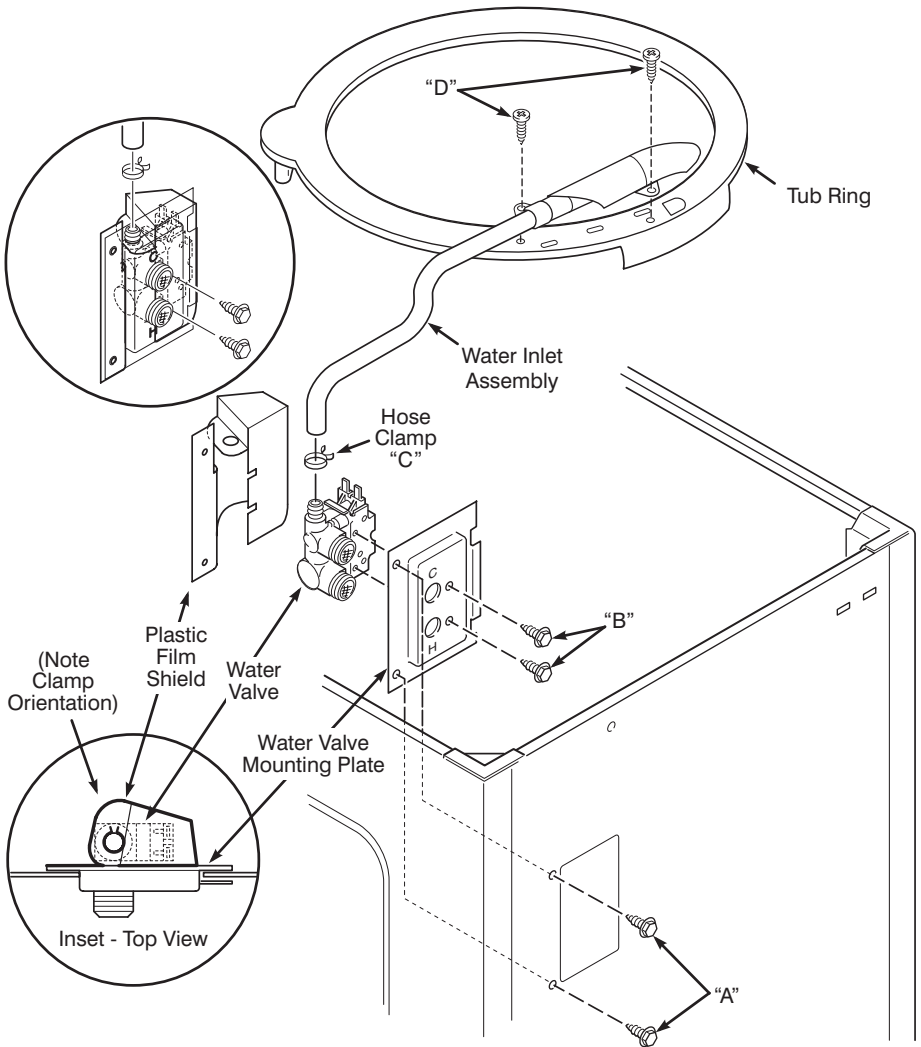


Figure 8

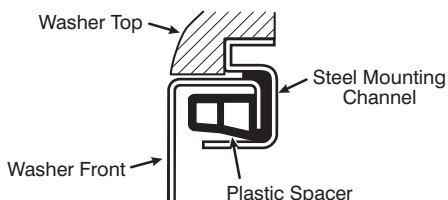
### Water Inlet Components Removal

1. Remove washer top. See Washer Top Removal, page 8.
2. Referring to Figure 8, first remove (2) water inlet screws (labeled "D"), then remove water inlet hose clamp (labeled "C"), and set hose aside.
3. Remove wiring connectors from solenoid valve terminals.
4. Remove (2) water valve mounting plate screws (labeled "A").
5. Rotate mounting plate toward inside of cabinet and remove assembly, including plastic film shield.
6. Remove (2) valve mounting screws (labeled "B") from plate. Remove valve.

## COMPONENT INSTALLATION

### Washer Top Installation

1. Lift rear edge of top and place slot of steel mounting channel over plastic spacers on top front lip of washer cabinet. See Figure 9.



**Figure 9**

2. Route pressure switch hose so it passes to washer-front side of snubber strap, and push it onto control pan nipple. See Figure 5.
3. Slide clamp over bleach hose. Route hose so it passes to washer-front side of snubber strap, and push onto bleach nipple in washer top. Install clamp. See Figure 5.
4. Plug in ground terminal, and plug large connector into large connector block. See far left inset in Figure 6.
5. Fasten harness in harness clip and push barbed end of wire tie up into hole in top flange of cabinet side. See inset in Figure 4.
6. Lower washer top and guide strain relief so it enters slot in top. Install (4) screws at rear of washer top. See Figure 4.
7. Replace control knobs.

### Circuit Board and Rotary Switch Installation

1. Install each rotary switch by first orienting switch as shown in Figure 7. Insert switch into mounting socket in control panel, then turn it clockwise until locking tab engages detent notch.

2. Push the connector of each rotary switch onto its connector block on the circuit board, orienting connector web to rear of circuit board.
3. Push ground connector onto terminal on steel mounting channel. See Figure 6.
4. Install water level switch mounting screw through other ground connector and water level switch.
5. Route (2) water level switch wires around circuit board mounting post. See Figure 6.
6. Install (5) circuit board mounting screws.
7. Push connectors onto correct terminals on water level switch (pink to "P", violet to "V").
8. Slide both connector blocks into their mounting slots.
9. Plug small connector into small connector block.
10. Slide control pan tabs into slot in steel mounting channel. Install (3) control pan screws.
11. Replace control knobs.

### Water Level Switch Installation

1. Slide water level switch mounting bracket tab into mounting slot.
2. Install mounting screw through ground connector and water level switch bracket. See Figure 6.
3. Route (2) water level switch wires around circuit board mounting post as shown in Figure 6.
4. Push upper water level tube onto nipple on water level switch.
5. Install (3) control pan screws.

## Water Inlet Components Replacement

1. Install (2) mounting screws (labeled "B") through water valve mounting plate into valve. See Figure 8.
2. Wrap plastic film shield around water valve as shown in inset of Figure 8. Assemble with film shield into position in cabinet hole.
3. Install (2) mounting screws (labeled "A") through cabinet, film and mounting plate.
4. Push wiring connectors onto water valve terminals (red double connector onto top terminals, white double connector onto bottom terminals).
5. Install water inlet assembly by first installing hose clamp (labeled "C"), then (2) water inlet screws (labeled "D").

## Related Components

- Console Assembly (Figure 10)
- Tub Ring (Figure 11)
- Overflow Tube (Figure 11)
- Water Inlet Assembly (Figure 11)

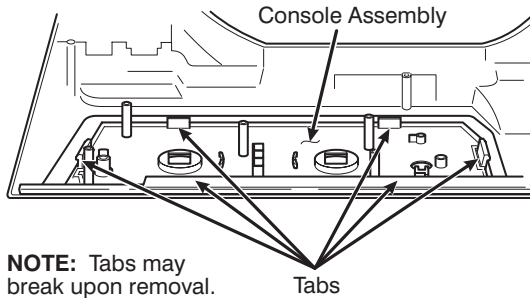


Figure 10

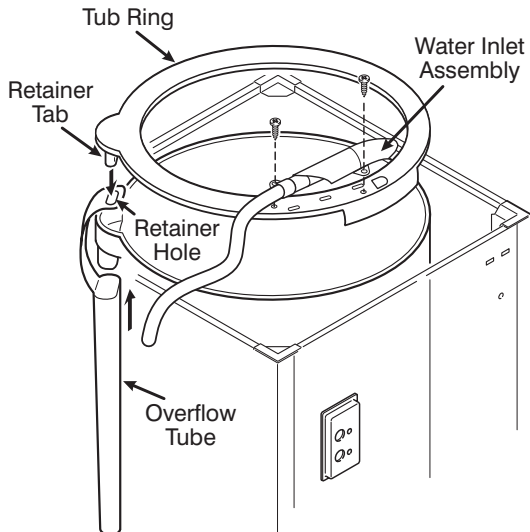
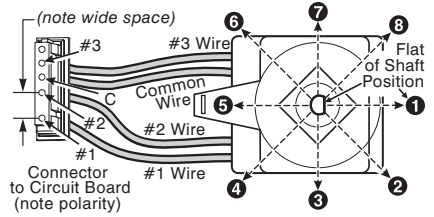
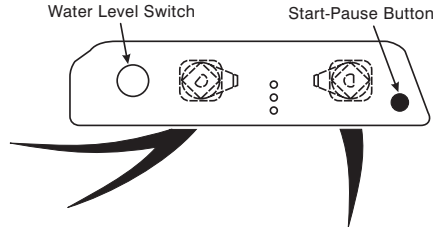
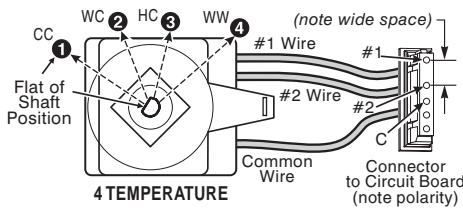
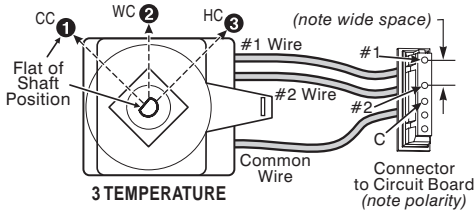


Figure 11

NOTE: Remove switch knob to verify flat of shaft.



**A TEMPERATURE SELECT** (Switch shown in position 1)

**B CYCLE SELECT** (Switch shown in position 1)

TEMPERATURE SELECTOR	
Position No.	Temperature
1	CC (Cold Wash and Cold Rinse)
2	WC (Warm Wash and Cold Rinse)
3	HC (Hot Wash and Cold Rinse)
4	WW (Warm Wash and Warm Rinse)

CYCLE & TEMPERATURE SELECTOR SWITCH LOGIC								
Wire Lead No.	Position No./Shaft Flat Location Clockwise							
	1	2	3	4	5	6	7	8
1	-	X	X	-	-	X	X	-
2	-	-	X	X	X	X	-	-
3	-	-	-	-	X	X	X	X

X = Connection To Common

SELECTOR DESCRIPTION			
	# of Positions	Separation Angle	Usable Position
Cycle Selector	8	45°	1, 2, 3, 4, 5, 6, 7, 8
	6	2-90°, 4-45°	1, 3, 5, 6, 7, 8
Temperature Selector	4	45°	1, 2, 3, 4
	3	45°	1, 2, 3

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U. S. PATENTS:

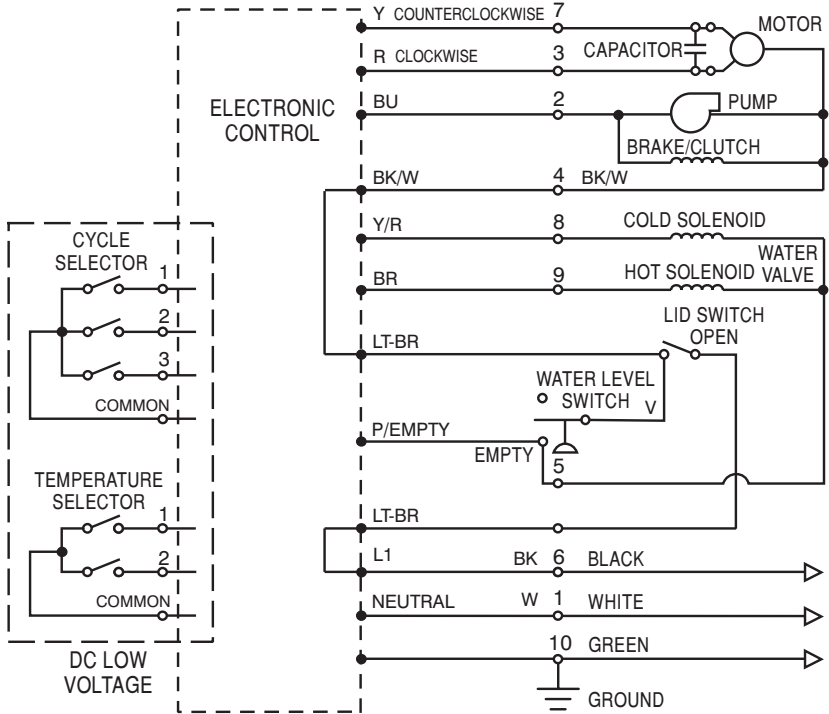
D 268,183	3,854,308	4,003,613	4,254,640	4,432,528
3,576,117	3,856,036	4,005,882	4,254,641	4,452,054
3,636,734	3,863,467	4,068,503	4,262,870	4,491,210
3,678,714	3,880,188	4,118,957	4,268,098	4,495,960
3,681,947	3,884,493	4,129,018	4,288,671	4,520,638
3,696,970	3,939,674	4,137,736	4,291,556	4,545,947
3,774,418	3,953,146	4,137,737	4,306,841	4,566,295
3,798,931	3,987,508	4,155,228	4,324,035	4,715,401
3,798,932	3,987,651	4,163,457	4,357,813	4,715,402
3,818,729	3,987,652	4,164,130	4,366,902	4,719,770
3,847,812	4,000,631	4,174,622	4,430,871	

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING CANADIAN PATENTS:

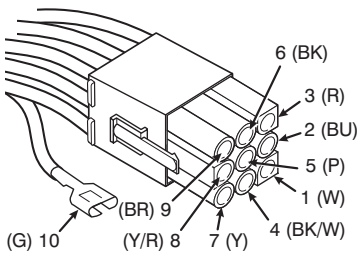
1,022,764	1,126,536	1,244,255
1,125,045	1,160,855	1,287,338
1,131,928	1,237,291	1,121,789
1,199,202	1,275,820	1,128,597
1,274,701	1,117,778	1,199,201
1,298,988	1,128,596	1,264,080
1,115,977	1,162,757	1,290,161

AND RELATED FOREIGN PATENTS. ADDITIONAL APPLICATIONS PENDING.

WIRING DIAGRAM



Harness Pin Connector



ELECTRICAL COMPONENTS KEY

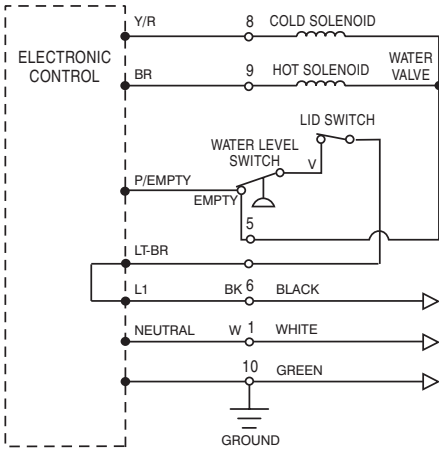
Electrical Component	Part No.
CONTROL BOARD	3968305
CAPACITOR	3429938
MOTOR	3934201
PUMP	3967956
CLUTCH/BRAKE ACTUATOR	3970266
WATER LEVEL SWITCH	4 Levels 3966789 2 Levels 3966786
WATER VALVE Hot & Cold	Portable Model 3967755 Stationary Model 3360396
TEMP SELECT	4 Temperature 3966208 3 Temperature 3966209
CYCLE SELECTOR	8 Position 3966202 6 Position, Skip at positions 2 & 4 3966207
HARNESS	3970349
HARNESS, WATER LEVEL	3970204
HARNESS, LID SWITCH	3970203
HARNESS, CONTROL BOARD	3970202



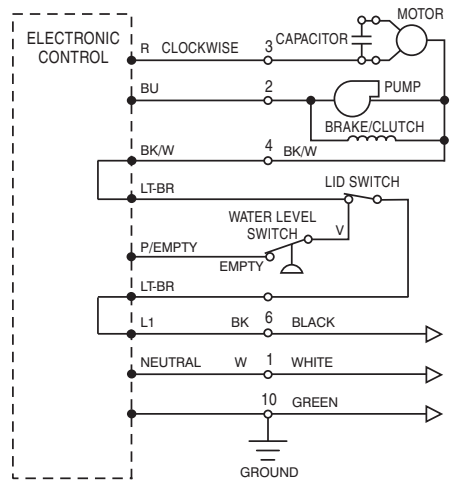
# STRIP CIRCUITS

The following individual circuits are for use in diagnosis.

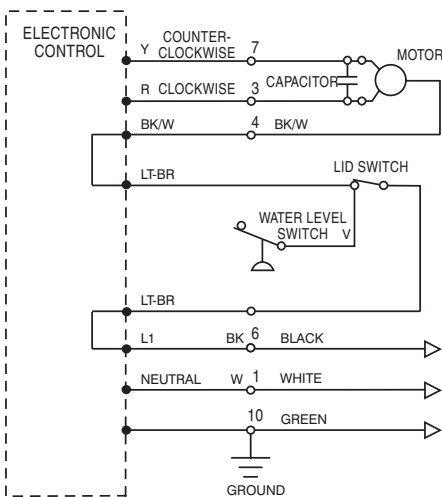
## FILL



## SPIN



## AGITATE



## DRAIN

