Electrolux

ELECTROLUX HOME PRODUCTS NORTH AMERICA

SERVICE MANUAL

24" BUILT-IN DISHWASHERS ELECTRONIC CONTROL (Update)

PRECISION WASH SYSTEM

Frigidaire

TAPPAN

White-Westinghouse

Gibson

Kelvinator

5995348223

TABLE OF CONTENTS

SAFE SERVICING PRACTICES 3

WHAT'S NEW 4

MODEL TECHNICAL SPECIFICATIONS 5

Model Diagram Index 5
Electrical 5
Water Supply 5
Component Resistance (Ohms) 5
Temp Assure and Heat Delay Operation 6

CONSTRUCTION AND OPERATION

Water Distribution System 7
- Wash Pump 7
- Different Types of Precision Wash Motors 8
- Upper Spray Arm 9
- Lower Spray Arm 9
- Filter 9
- Drain Pump 9

Drying System 10
- Lower Vent Housing 10
- Vent Valve 10
- Vent Actuator 10
- Blower 10
- Upper Vent Housing 10

Dispensing System 11
- Detergent & Rinse Aid Dispenser 11

Door Latch Assembly 11
Electronic Control and Thermistor 11
- No Heat Dry 12
- Temp Assure 12
- Heat Delay 12

High Limit Thermostat 12
Dishwasher Leveling System 12
Temperature Controls With Thermister 13
- Cycles 13
- Options 13

Dirt Sensor 13
Rinse Aid Dispenser 14
Bottom View 15

DISASSEMBLY

Safety Precautions 16
Control Panel 16
Electronic Keypad - Slimline & Regular 16
Electronic Keypad - Selectronic 16
Control Board 16
Door Panel 16
Door Vent Assembly 16
Vent Valve 17

TABLE OF CONTENTS

Vent Blower 17
Door Latch Assembly 17
Detergent / Rinse Aid Dispenser 17
Inner Door Panel 17
Door Seal 17
Upper Rack 17
Upper Water Tube 18
Upper Spray Arm 18
Water Distributor 18
Kick Plate 18
Heating Element 18
Float Switch and Bracket 19
Water Valve 19
Drain Pump 19
Lower Spray Arm 20
Glass Trap 20
Lower Spray Arm Support 20
Filter 20
Pump Cover 20
Pump and Motor Assembly 20
Motor Mounting Bracket 21
Motor and Impeller 21
Thermistor 21
High Limit Thermostat 21
Indicator Lamps 21

TROUBLESHOOTING 22

Troubleshooting Tips 22
Troubleshooting Diagnostics 24

APPENDIX A - Exploded Views A-1

APPENDIX B - Wiring Diagrams & Timer Charts

Frigidaire Models - 154371501 ..... B-1
Amana Models - 154390601 ..... B-2

SAFE SERVICING PRACTICES - ALL APPLIANCES

To avoid personal injury and/or property damage, it is important that **Safe Servicing Practices** be observed. The following are some limited examples of safe practices:

1. **DO NOT** attempt a product repair if you have any doubts as to your ability to complete it in a safe and satisfactory manner.

2. Before servicing or moving an appliance:
   - Remove the power cord from the electrical outlet, trip the circuit breaker to the OFF position, or remove the fuse.
   - Turn off the gas supply.
   - Turn off the water supply.

3. Never interfere with the proper operation of any safety device.

4. **USE ONLY REPLACEMENT PARTS CATALOGED FOR THIS APPLIANCE. SUBSTITUTIONS MAY DEFEAT COMPLIANCE WITH SAFETY STANDARDS SET FOR HOME APPLIANCES.**

5. **GROUNDING**: The standard color coding for safety ground wires is **GREEN**, or **GREEN** with **YELLOW STRIPES**. Ground leads are not to be used as current carrying conductors. It is **EXTREMELY** important that the service technician reestablish all safety grounds prior to completion of service. Failure to do so will create a hazard.

6. Prior to returning the product to service, ensure that:
   - All electrical connections are correct and secure
   - All electrical leads are properly dressed and secured away from sharp edges, high-temperature components, and moving parts
   - All non-insulated electrical terminals, connectors, heaters, etc. are adequately spaced away from all metal parts and panels
   - All safety grounds (both internal and external) are correctly and securely connected
   - All panels are properly and securely reassembled

ATTENTION!!!

This service manual is intended for use by persons having electrical and mechnical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. Electrolux Home Products cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this manual.

WHAT'S NEW

√ **QUIETER OPERATION** - Possible in part because only one spray arm operates at a time. Since only one spray arm is in motion at a time, a smaller, quieter, motor can be used to recirculate the water.

√ **USES LESS WATER** - Since only one spray arm is in operation at a time, less water is needed in the sump than previous dishwashers. (EXAMPLE: 1.2 gal./ fill vs. 2.3 gal./ fill on previous Ultra-Style models.)

√ **USES LESS DETERGENT** - Because less water is used, less detergent is required. EXAMPLE: 27 ml. vs. 47 ml. on previous Ultra-Style models.

√ **SEPARATE RECIRCULATE AND DRAIN PUMPS** - The recirculate pump operates in one direction only. A smaller, separate pump is used to drain the water from the sump.

√ **FULL FLOW FILTRATION** - 100% of the water distributed to the spray arms is continually filtered.

√ **GLASS TRAP** - Removes any particles which are too large to pass through the pump.

√ **NEW DETERGENT AND RINSE AID DISPENSER** - The detergent dispenser and rinse aid dispenser are incorporated into a single dispenser that utilizes a single actuator to dispense both products.

√ **PTC HEATING ELEMENT** - This element is self regulating to provide lower wattages during the dry cycle than in the wash cycle when it is used to boost the water temperature.

√ **VENT VALVE** - Closed during water recirculation cycles for quiet operation, but opens during dry cycle to allow moist air to escape.

√ **TEMP ASSURE AND HEAT DELAY THERMISTOR** - A single thermistor located beneath the sump raises the water temperature in the wash and rinse cycles. This is accomplished by the electronic control stopping the cycle advancement (for a maximum of 10 minutes) until the element has heated the water to the required temperature.

√ **HIGH LIMIT THERMOSTAT** - Located on the left rear tub bottom, the high limit thermostat is used to prevent the tub from overheating in the event of a component failure.

√ **FAN ASSISTED DRYING** - Some models are fan assisted to speed up the drying process. Although this concept is not new, the type of fan (squirrel cage) and location (door) are.

√ **TURBIDITY SENSOR** - Checks to see how dirty water is in the 1st Wash cycle and in the 1st Rinse cycle.

√ **RINSE AID DISPENSER** - Has a small circuit board which detects when the *Rinse Aid Dispenser* is low on Jet Dry. It will display a "LO" in the display window for *Display Models Only*.

TECHNICAL SPECIFICATIONS

For Models: **GLDB957JB*** **ADW750EA***
GLDB958JB* **ADW850EA***
GPDB998JC*

* = Color Code

DIAGRAM INDEX		
MODEL NUMBER	**CYCLE CHART**	**WIRING DIAGRAM**
GLDB957JB*	B - 1	B - 1
GLDB958JB*	B - 1	B - 1
GPDB998JC*	B - 1	B - 1
ADW750EA*	B - 2	B - 2
ADW850EA*	B - 2	B - 2

ELECTRICAL	
Rating	120V 60Hz
Separate Circuit	15 Amp
Total Amps (Load Rated)	11.0
Recirculate Motor RPM Amps Thermal Cutout Temp.	3200 ccw 3.4 150° C
PTC Heating Element During Wash Cycle During Dry Cycle	 900 Watts 700 Watts
High Limit Thermostat opens at	200° F
Temp Assure All cycles except China/Crystal	136° F Water Temp
Temp Assure China/Crystal Cycle	127° F Water Temp
Hi-Temp Wash	143° F Water Temp
Hi-Temp Rinse	145° F Water Temp

WATER SUPPLY	
Suggested Min. Water Temperature	120° F
Pressure (PSI) Minimum/Maximum	20/120
Connection (NPT)	3/8"
Water Valve Flow Rate (GPM)	0.83
Water Fill Time (± 3 Seconds)	87
Water Volume Per Fill (Gal.)	1.2
Water Level in Tub	Just to bottom of element supports
Total Gallons (normal wash)	6.0
Water Recirculation Rate (GPM)	12

COMPONENT RESISTANCE - OHMS	
PTC Heating Element	9.28
Pump Motor Windings	4.3
Drain Motor Windings	28
Vent Door Actuator	1893
Dispenser Actuator	1928
Water Valve Solenoid	699
Blower Motor	214

TEMP ASSURE & HEAT DELAY OPERATION

OPTIONS SELECTED	WASH CYCLE		RINSE CYCLE	
	Temp Assure (*1st potential Delay)	Heat Delay (*2nd potential delay)	Temp Assure (*3rd potential Delay)	Heat Delay (*4thd potential delay)
High Temp Wash - OFF High Temp Rinse - OFF	136°F	Bypassed	136°F	Bypassed
High Temp Wash - OFF High Temp Rinse - OFF	136°F	143°F	136°F	145°F
High Temp Wash - OFF High Temp Rinse - ON	136°F	Bypassed	136°F	145°F
High Temp Wash - ON High Temp Rinse - ON	136°F	143°F	136°F	145°F

* Dishwasher will not delay if water is already up to temperature. Maximum delay for each Temp Assure and Heat Delay interval is 10 minutes.
(Temperatures listed are actual operating temperatures of thermistor.)

Also note that:

- Temp Assure water temperature for the China/Crystal cycle is only 127°F.
- When High Temp Wash is selected, the potential delay will occur near the end of the 3rd wash cycle.
- High Temp Rinse causes a potential delay near the end of the 2nd Rinse cycle (Hi-Temp Rinse is not used in the China/Crystal cycle) .

CONSTRUCTION & OPERATION

WATER DISTRIBUTION SYSTEM

The water distribution system consists of an upper and lower spray arm, upper (spray) arm delivery tube, filter, soil director, pump, sump, and check ball. The system is designed to operate only one spray arm at a time. During the first wash and first and second rinses, only the lower spray arm operates. In the second wash, third and fourth rinses the spray arms alternate about every 90 seconds.

This alternating of the spray arms is achieved with a check ball located on a ramp between two outlets of the pump. There is an outlet to the bottom spray arm and an outlet to the upper arm delivery tube. In the normal position the ball is at the bottom of the ramp, in front of the opening to the upper arm delivery tube.

When the pump starts, the force of the water pushes the ball to block the opening to the upper arm delivery tube.

Not all of the water is blocked however. The opening is constructed to allow a small amount of water to bypass the ball and enter the tube, and fills the tube at a rate of approximately four inches a second. At the same time, the outlet to the lower spray arm is open, so the lower spray arm operates. When the pump stops, the pressure is removed from the ball and the water flows down the tube, forcing the ball up the ramp and against the outlet to the lower spray arm. If the pump remains off for more than 3 seconds, all the water in the tube escapes and the ball returns to the bottom of the ramp. But, if the pump is started in less than .6 seconds, the water from the upper arm delivery tube is still forcing the ball up the ramp against the outlet to the lower spray arm. The force of the water from the pump continues to hold the ball against the outlet to the lower spray arm which leaves the outlet to the upper arm delivery tube open. When the ball is in this position only the upper spray arm operates. This momentary stopping of the pump is controlled by the control board.

Another unique feature of the water distribution system is the two cavities of the sump. One cavity provides filtered water to the pump for recirculation through the spray arms. The other, called a quiet water cavity, allows soil to collect in the area of the macerator blade, where it is held until the drain pump removes it.

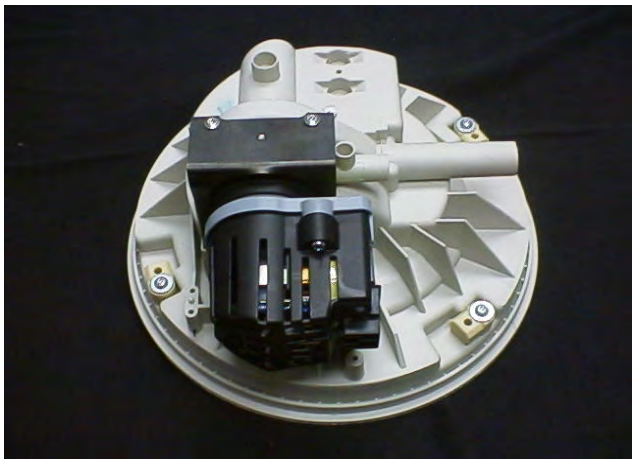
WATER DISTRIBUTION COMPONENTS

Wash Pump

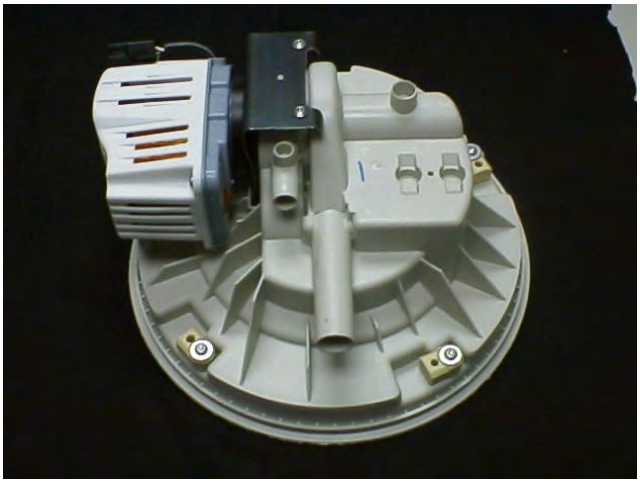
The recirculation (wash) pump has three (3) functional parts, a 1/12th HP drive motor, impeller, and macerator blade. The pump circulates water at the rate of 12 gallons per minute. This pump is used only during the wash cycle, a separate pump is used during the drain cycle. The wash pump is to be replaced as a complete assembly.

Different Types of Precision Wash Motors

Emerson Motor with Aluminum Motor Mount



ASKO Motor - Phase III



ASKO Motor - Phase II

Emerson Motor with Phase Mounting Bracket

Upper Spray Arm

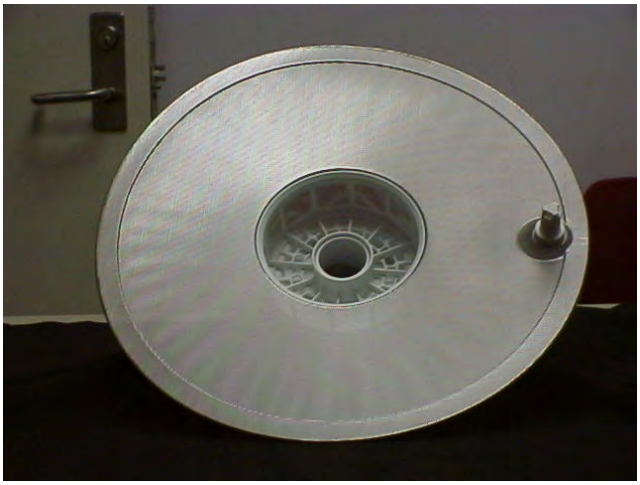
The upper spray arm hangs from a bracket that is snapped to the bottom of the upper rack. The water is supplied to the arm with a nozzle and funnel arrangement. The nozzle is located at the top of the tub and the funnel is located directly below it and directs water into the arm. All the spray jets but three (3) face up.

Lower Spray Arm

The lower spray arm rotates on the lower spray arm support. It has two functions, washing the dishes and cleaning the filter. The jets located on the top of the arm clean the dishes and propel the arm. The three (3) jets located on the bottom of the arm are aimed to flush the soil on the filter toward the glass trap and soil director.

Filter

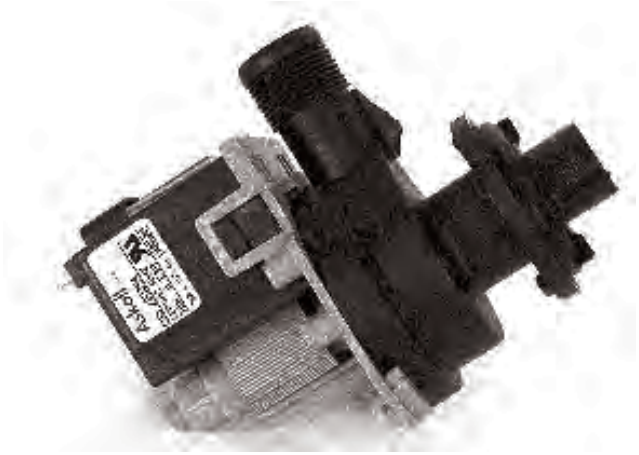
The filter consists of two parts, an inner basket constructed of fine polyester mesh, and an outer filter of stainless steel.



Drain Pump

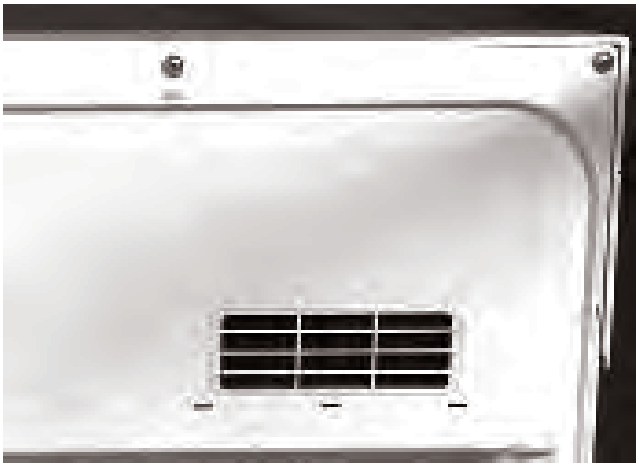
The drain pump has only one function, to remove water from the dishwasher. The drain pump is driven by a 1/25th HP drive motor. It consists of three (3) functional parts; a pump cover, impeller and armature, and stator.

The quiet cavity and impeller cavity are connected by a hose underneath the sump. This connection between the two cavities allows both cavities to be drained.



DRYING SYSTEM

At the start of the dry cycle, a vent opens at the upper left hand corner of the door allowing the warm moist air to escape out the front of the control panel. Dry room air is drawn into the dishwasher tub through an opening across the bottom of the door. If the heated dry cycle is selected, the heating element raises the temperature of the air to increase the evaporation rate and the flow rate of the air through the dishwasher. These models incorporate the use of a small motor and centrifugal blower to accelerate the movement of air through the dishwasher.



The door vent actuator opens the vent only during the dry cycle. It is closed during all other cycles to minimize heat loss and to prevent noise from being transmitted into the kitchen.

DRYING SYSTEM COMPONENTS

Lower Vent Housing

The lower vent housing is located between the inner door assembly and control housing and is mounted to the inner door panel. The lower vent housing surrounds an opening in the inner door panel. This opening is covered with a moveable vent valve.

Vent Valve

The vent valve is a rectangular rubber covered pad slightly larger than the opening. The vent valve is attached to the vent actuator which is electrically operated.

Vent Actuator

The actuator is made up of a rod, slide, wax motor and spring. The valve is attached to one end of the rod and the slide is inserted in the other. The spring pushes in on the slide forcing the rod to push the valve against the opening in the door panel.

When the timer enters the dry cycle, 120 VAC is applied to the wax motor. The wax motor is made up of a heating disk, fluid chamber and piston. When voltage is applied to the heating disk, it heats the fluid in the chamber causing the fluid to expand, driving the piston out. The piston forces the slide out and causes the vent valve to open.

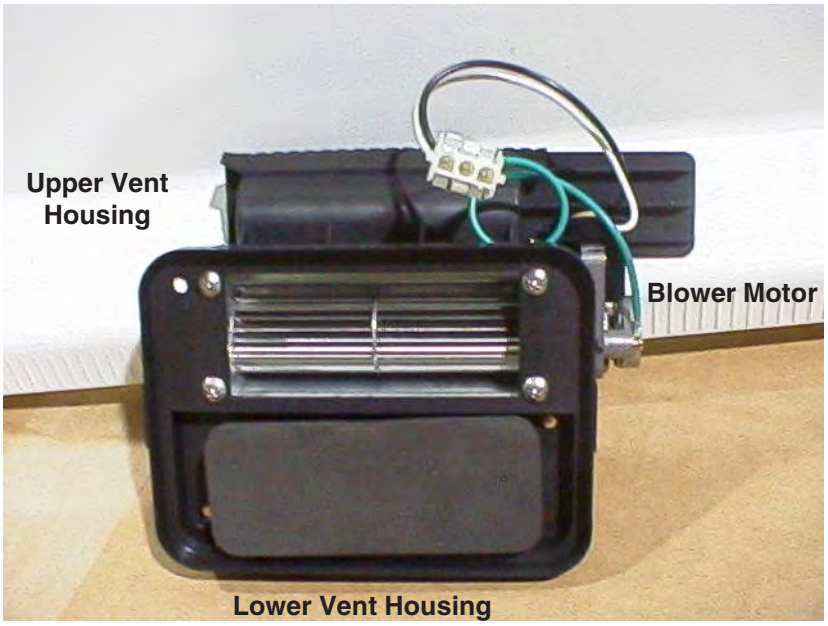
The vent actuator is replaced as a complete assembly, no replacement parts are available.

Blower

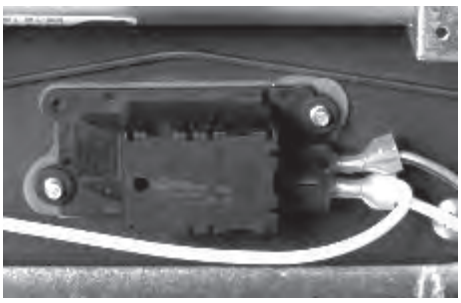
Electronic control models use a small motor and centrifugal blower assembly that is mounted to the top section of the lower vent housing.

Upper Vent Housing

The upper vent housing is screwed to the blower and directs the air from the blower to the outlet in the console.



Actuator (on rear)



DISPENSING SYSTEM

Detergent & Rinse Aid Dispenser

The detergent and rinse aid dispenser consists of two dispensers combined in one housing that are controlled with one wax motor actuator. The first time the actuator is energized in a cycle it dispenses detergent. The second time the actuator is energized it dispenses rinse aid. Using a pointer under the fill cap, the amount of rinse aid dispensed may be adjusted from one (1) to four (4) ml. The dispenser is replaced as a complete assembly, no replacement parts are available. If a more detailed explanation on how the dispenser operates is desired; continue.

The dishwasher has two detergent cups, one is the dispenser that has a spring loaded cover with a manual or automatic release latch. The other cup is formed in the inner door panel without a cover. Prior to starting the dishwasher, detergent is added to the dispenser cup and the cover is latched closed. The open cup is also filled but empties into the tub as soon as the door is lifted to the upright position.

The detergent in the covered cup is held until the start of the second wash. The timer then supplies 120 VAC to the dispenser actuator for one minute. It takes about 30 seconds for the actuator to move the pivot arm far enough to release the cover. When power is applied to the actuator, the actuator plunger pushes the end of the pivot arm down. The pivot arm rotates on the shaft of the detergent dispenser door latch. As the shaft rotates, it turns the door latch releasing the spring loaded cover.

The pivot arm is spring loaded so that when power is removed it returns to the normal (horizontal) position. The other end of the pivot arm has a pin that moves in a slot(s) of the rinse injector pump arm. The rinse injector pump arm is slotted in such a way that when the actuator pushes the lever down the first time to release the detergent cup cover, the pin moves up but does not raise the rinse injector pump arm. When the timer removes power from the actuator, the spring forces the rinse injector pump arm end of the pivot arm down. The compound slot in the rinse injector pump arm directs the pivot arm pin down the front of the rinse injector pump arm and under a shorter slot in the center of the arm. When the timer reaches the middle of the final rinse cycle, it again applies 120 VAC to the dispenser actuator which forces the pivot arm up at the rinse injector end. As the pin engages the shorter slot it raises the rinse injector pump arm which operates the pump. When the power is removed, the pivot arm spring forces the pin to the bottom of the slot. A leaf spring pushes the rinse injector pump arm to the left so that the pin returns to the original starting position.

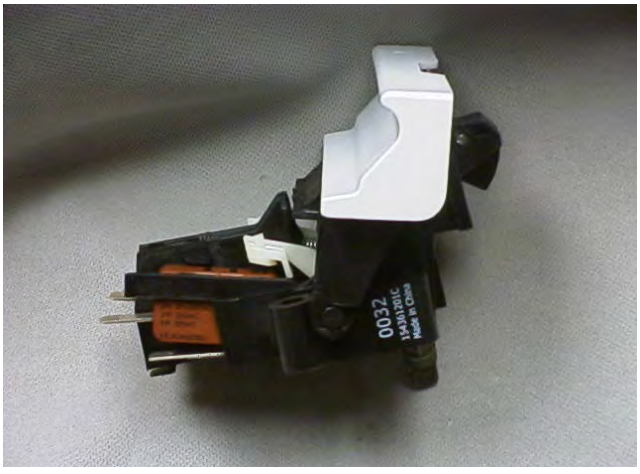
DOOR LATCH ASSEMBLY

The door latch assembly has two functions, one is to lock the door in a closed position and the other is to operate the door switches.

The door latch assembly consists of the door handle, door handle bracket, door catch, door switch bracket and door switches. The assembly is secured to the inner door panel with two locator pins and two screws. The handle is hidden by, and accessed through the control panel.

When the door is closed, the door strike, mounted on the tub, forces the spring loaded catch to rotate back until the bottom of the catch clears the door handle bracket. At that time the spring forces the door handle bracket to rotate. The bar on the top of the door handle rotates back under the door catch locking the door. The plunger on the bottom of the bracket rotates forward closing the door switches.

The door is released by lifting up on the door handle. When the handle is lifted up, the door handle bracket rotates in at the top, allowing the door catch to rotate open, and out at the bottom to open the door switches. When the catch is rotated to the open position, it holds the door handle bracket away from the door switches.



ELECTRONIC CONTROL AND THERMISTOR

There are three styles of electronic controls used in the Precision Wash System dishwashers. There is a 9 pad key, 10 pad key and a 12 pad key control. The 12 pad key is the only one that has the display window for the time display or the Code display which are:

LO	low liquid in the Rinse Aid Dispenser
PF	power failure has occurred
HO	water heating display
CL	close and latch the door
01-09	hours for delay start

The electronic control dishwashers use one thermistor (instead of two thermostats) to control water temperature during the various cycles. The thermistor is located underneath the sump and is controlled by impulses from the control board.

No Heat Dry

This selection allows the consumer to turn off the heating element for the drying cycle. If not selected the element will automatically come on for the dry cycle.

Temp Assure

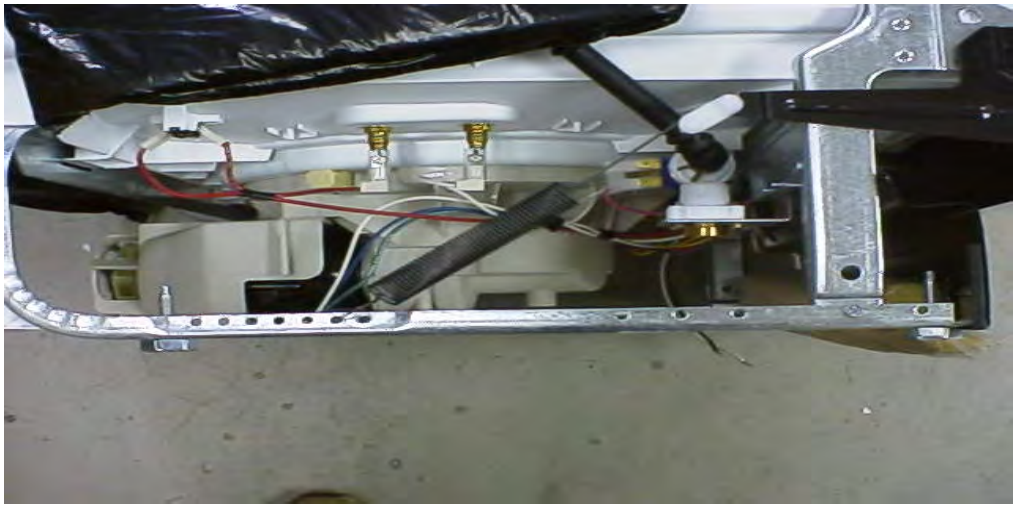
"Temp Assure" is an automatic water heating function that ensures that the water in the tub is heated to 140°F (except for the China/Crystal cycle where the water temperature 125°F in the main wash cycle and reaches 130°F in the final rinse cycle). "Temp Assure" occurs near the end of the third wash cycle and near the end of the second rinse cycle. When the thermistor senses that the water is cooler than 140°F, it will stat in this no more than 10 minutes, then the control will advance on into the cycle whether or not it reached 140°F. This is designed to keep the dishwasher from running for too long of a period trying to raise thewater temperature.

Heat Delay

"Heat Delay" is an optional function that must be selected by the consumer (bypassed for China/Crystal cycle). "Heat Delay" occurs near the end of the third wash cycle and near the end of the second rinse cycle right after the Temp Assure process. "Heat Delay" is controlled by the Hi-Temp Wash and/or Hi-Temp Rinse touchpads. When a consumer selects either one or both of these options, the thermistor stops the cycle from continuing until either the water reaches 144°F or until 10 minutes have passed. After 10 minutes the cycle automatically starts again. This allows the water to be heated and does not stop the cycle indefinitely.

HIGH LIMIT THERMOSTAT

Located on the left rear tub bottom, the high limit thermostat is used to prevent the tub from overheating in the event of a component failure. The thermostat will open at 200°F.



DISHWASHER LEVELING SYSTEM

The dishwasher is leveled with fout leveling legs and they are screwed into the bottom of the support frame. There is a 3/16" hex head on top of the leg leveler to help make adjusting of the leg leveler easier by using a socket on it.

TEMPERATURE CONTROLS WITH THERMISTER

The Thermister controls the temperature inside the dishwasher (Solid State only, depending on what cycle is selected and what other options are selected). Functional description are as follows:

CYCLES

- **Pots & Pans** - This is a cycle for heavily soiled dishes. The control automatically selects an assured water temperature of 135°F in the main wash cycle and 140°F in the final rinse. This is when there are no options selected.
- **Normal Wash** - This cycle is used for normally soiled dishes. The control automatically selects an assured water temperature of 135°F in the main wash cycle and 140°F in the final rinse. This is when there are no options selected.
- **China/Crystal** - This cycle is used for delicate china or crystal. The control automatically selects an assured water temperature of 125°F in the main wash cycle and 130°F in the final rinse. The following options are not available for this cycle: HI-TEMP WASH, HI-TEMP RINSE, SANI RINSE, or SOIL SENSING OPTIONS.
- **Both Racks** - A cycle used for lightly soiled dishes. The control automatically selects an assured water temperature of 135°F in the main wash cycle and 140°F in the final rinse. All options plus SOIL SENSING are available
- **Upper Rack** - A cycle used for small loads of glassware or cups, etc. The control automatically selects an assured water temperature of 135°F in the final rinse cycle. The following options are not available for this cycle: HI-TEMP WASH, HI-TEMP RINSE, SANI RINSE, or SOIL SENSING OPTIONS.
- **Lower Rack** - A cycle used for small loads of pans, silverware, dishes, etc. The control automatically selects an assured water temperature of 135°F in the final rinse cycle. The following options are not available for this cycle: HI-TEMP WASH, HI-TEMP RINSE, SANI RINSE, or SOIL SENSING OPTIONS.
- **Rinse & Hold** - A cycle for rinsing dishes that will be washed later. No options can be used except Delay Start.
- **Controls Locked** - The *Controls Locked* feature disables the keyboard but does not interfere with any cycle in progress. The controls may be locked or unlocked by depressing NO-HEAT DRY / COOL DRY on the touch pad for 5 seconds when the door is latched. The Controls Locked LED is illuminated only when the control is locked.

OPTIONS

- **HI-TEMP WASH** - Selects both the wash temperature delay which is 140°F and the rinse temperature delay which is 145°F. The maximum delay time is 10 minutes per delay.
- **HI-TEMP RINSE** - Selects only the rinse temperature delay which is 145°F. The maximum delay time is 10 minutes for this delay.
- **SANI-RINSE** - Selects both the wash temperature delay which is 145°F and the rinse temperature delay which is 150°F. At the end of the HI-TEMP RINSE, an additional 10 minutes of rinsing time is added to ensure sanitation. The heater will be cycled on and off to maintain the water temperature at 150°F. The maximum dalay time is 10 minutes for the wash temperature delay and 20 minutes for the rinse delay.

DIRT SENSOR

The true name of the sensor is called the Turbidity Sensor. It is located just in front of the wash impeller on the sump. The sensor is mounted by two cross point head mounting screws.There is a locating tab on the sensor and a knotch on the sump to ensure the sensor is intalled correctly. The sensor is a device that senses how dirty the water is. This is done when the customer loads the dishwasher with dirty dishes, then starts the unit. The sensor will then sense how dirty the water is. The DC output voltage of the sensor will be monitored at the end of the 30 second pause in the first wash and the first rinse. If a sufficient quantity of soil exists, the control will add two additional rinses for a total of eight fills, or 9.6 gallons of water. Should the sensor detect a light soil condition, the control will subtract two rinses for a total of four fills, or 4.8 gallons of water. The Normal cycle can either increase or decrease the time of a wash cycle. It just depends on how dirty the water is.

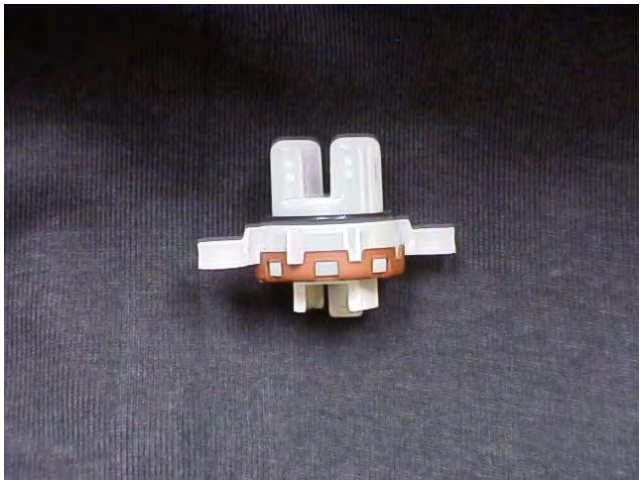
To check to see if the sensor is working properly, start the dishwasher in the *Normal* cycle, then look for a sensor light to light up on the control panel. If no light is illuminated, look at the plug on the sensor to ensure that it is plugged in. After the dishwasher has completed a wash and rinse cycle, and has filled up again with clean water, look to make sure the time clock on the control panel is counting down. If not, turn the power off to the dishwasher to make it go into the power failure mode. Then, press and hold the upper rack and start cancel pad. If any numbers come on in the display area, this means the sensor is good. If there is no display of numbers or just blank, then the sensor is bad.

If there is a leak underneath the sensor, check to see if the sensor was installed correctly. There is a locking tab on the sensor which lines up with a notch on the sump. If the sensor is mounted the opposite way, this can

cause a leak down onto the floor. Another leak possibility is an missing or damaged "O" ring that fits over top of the covered sensing light of the sensor.

The sensor will not function in the following cycles:

- Light Wash (Upper Rack)
- Light Wash (Lower Rack)
- China / Crystal.

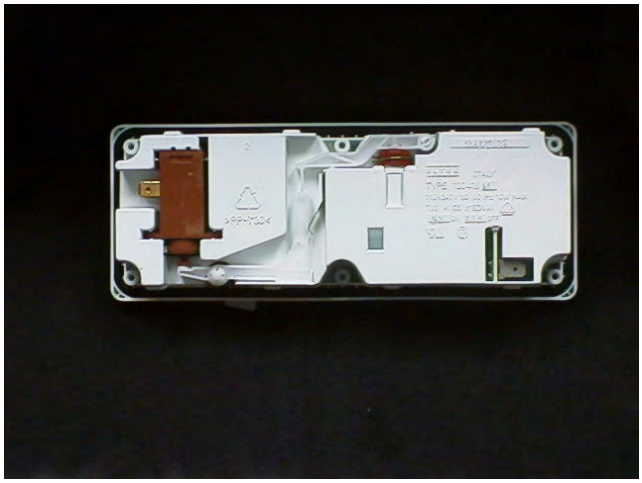


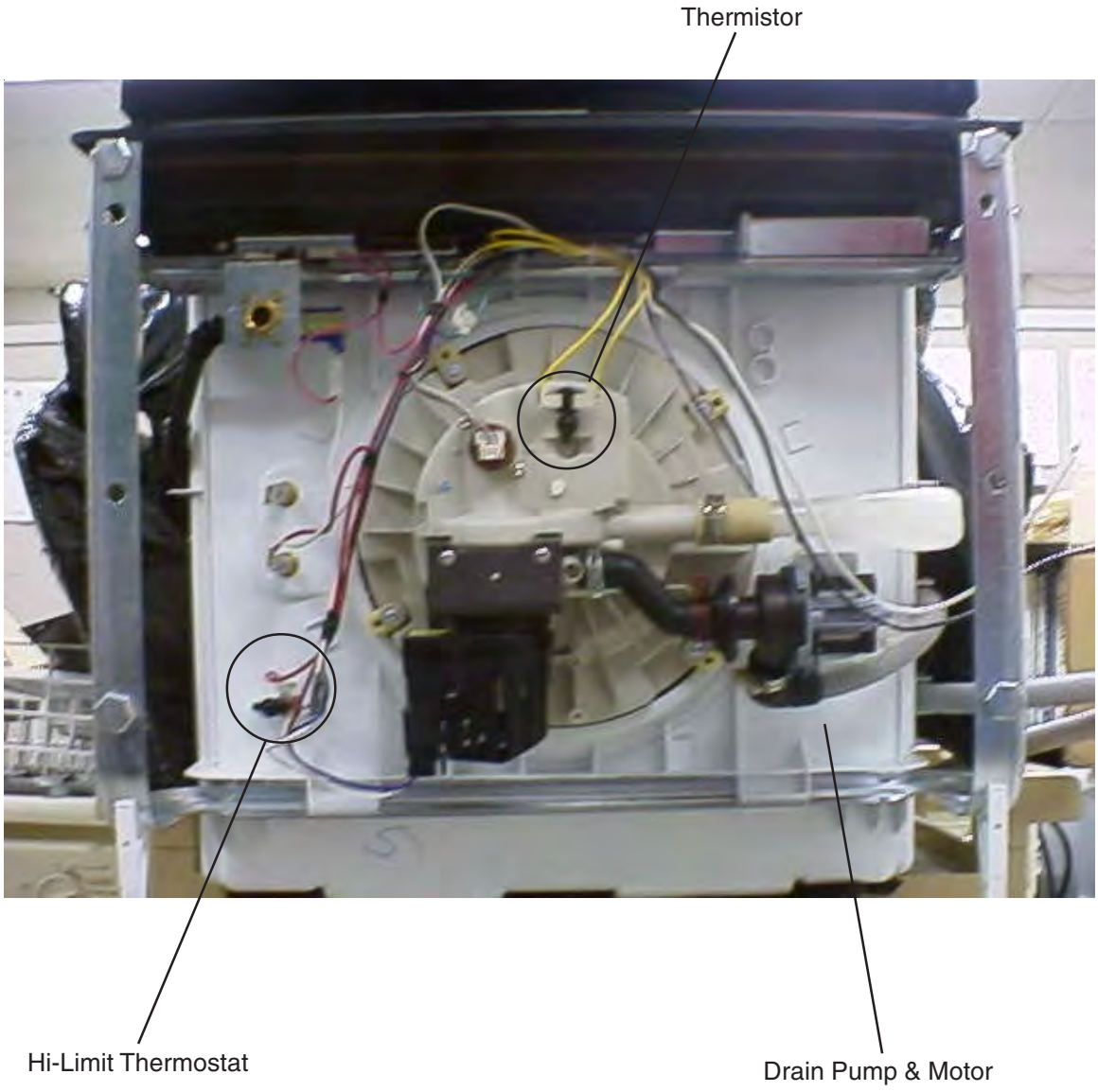
RINSE AID DISPENSER

The Rinse Aid Dispenser has a circuit board located on the dispenser to send a signal to the control board display. When the rinse aid is low with Jet Dry, the board will send a signal to the display window and will display a "LO" which indicates that the customer needs to fill the rinse aid dispenser back up with Jet Dry solution. NOTE: The "LO" is only shown on the display during the time the "Clean" light is on.

One way to check to see if you have a bad board when there is no "LO" displaying is to turn off the power supply (breaker) and pull off the two wires going to the small circuit board and use a jumper wire to jump from one wire to the other. Then, turn the power supply back on. "PF" should start flashing in the display window. Now, latch the door and the flashing "PF" should go out. This is called the "Idle Mode". To go into the "Service Test Mode", simultaneously press the HI-TEMP WASH & START/CANCEL pads for 1.5 to 2 seconds. It should display a 07 in the Display Window. Keep pushing the START/CANCEL pad until it gets down to the clean cycle. Here is where the LO should appear in the display window. When this does come on,this indicates that there is a defect in the small circuit board on the detergent assembly. If ther is not a display of "LO", then this indicates that there is a control board defect, or a loose or broken wire. Check wires first for continuity. If ok, replace Control Board.

WARNING: WHEN UNPLUGGING THE JUMPER WIRE THAT YOU USED, MAKE SURE YOU TURN OFF THE POWER SUPPLY FIRST, UNHOOK THE TWO WIRES TO THE JUMPER, THEN RECONNECT WIRE TO CIRCUIT BOARD. RESTORE POWER.





Bottom View

DISASSEMBLY

SAFETY PRECAUTIONS

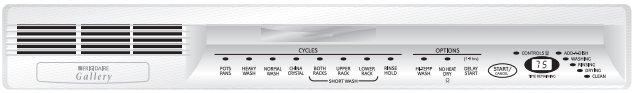
Always turn off the electric power supply before servicing any electrical component, making ohmmeter checks, or making any parts replacement. Refer to safe servicing procedures at the front of this service manual before servicing the dishwasher.

All voltage checks should be made with a voltmeter having a full scale range of 130 volts or higher.

After service is completed, be sure all safety grounding circuits are complete, all electrical connections are secure, and all access panels are in place.

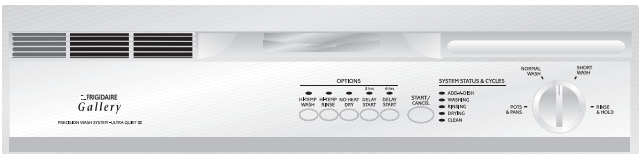
CONTROL PANEL

1. Disconnect dishwasher from electrical supply.
2. Remove six Phillips screws from top of inner door panel.



ELECTRONIC KEYPAD - SLIMLINE & REGULAR

1. Disconnect dishwasher from electrical supply.
2. Remove control panel. See "Control Panel."
3. Remove four screws securing protective cover around control board.
4. Disconnect keypad ribbon from control board.
5. Peal overlay and keypad away from front of control panel.
6. When replacing overlay and keypad, use denatured alcohol to get old glue residue off of control panel face.
7. Remove protective paper from back of new keypad exposing side with glue.
8. Line up new keypad to corners of control panel and lay down making sure its straight.
9. Connect new ribbon to control circuit board.



ELECTRONIC KEYPAD - SELECTRONIC

1. Disconnect dishwasher from electrical supply.
2. Remove control panel. See "Control Panel."
3. Remove four screws securing protective cover around control board.
4. Disconnect keypad ribbons from control board.
5. Remove cycle selector knob from face of control panel. See "Selector Switch."
6. Peal overlay and keypad away from front of control panel.
7. When replacing keypad, use denatured alcohol to get old glue residue off of control panel face.
8. Remove protective paper from back of new keypad exposing side with glue.
9. Line up new keypad to corners of control panel and lay down making sure it's straight.
10. Reconnect ribbons to control circuit board.
11. Replace cycle selector knob. See "Selector Knob."

CONTROL BOARD - All Electronic Controls

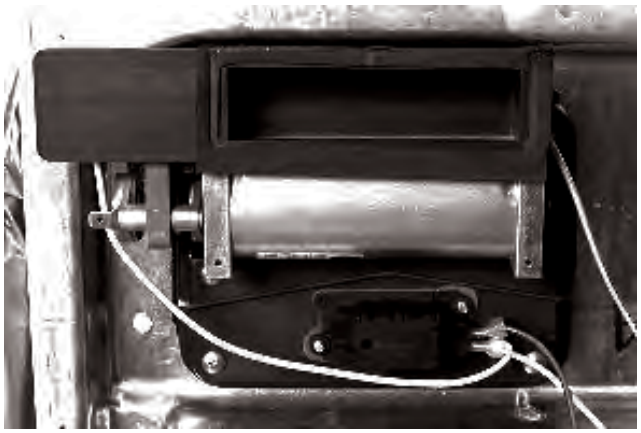
1. Disconnect dishwasher from electrical supply.
2. Remove control panel. See "Control Panel."
3. Remove four screws securing protective cover around control board.
4. Disconnect keypad ribbons from control board.
5. Disconnect four wire terminals (PT01 - PT04) from control board.
6. Disconnect large white wiring harness pin connector from control board.
7. For Selectronic models, remove pin connector from cycle selector switch.
8. Remove six screws securing control board to back of control panel.

DOOR PANEL

1. Disconnect dishwasher from electrical supply.
2. The outer door panel is held to the inner door panel with two locking tabs and two screws. Loosen the two lower screws securing the control panel.
3. Remove two screws securing door panel to door (located at lower section of inner door panel).
4. Slide door panel down and outward to remove.

DOOR VENT ASSEMBLY

1. Disconnect dishwasher from electrical supply.
2. Remove outer door panel.
3. Remove control panel.
4. Disconnect wiring to the blower motor and vent actuator.
5. Remove four Phillips screws securing vent to inner door panel.



VENT VALVE

1. Disconnect dishwasher from electrical supply.
2. Remove outer door panel.
3. Remove control panel.
4. Remove door vent assembly.
5. Slide vent valve upward to remove from actuator arm.

VENT BLOWER

1. Remove door vent assembly.
2. Remove two screws securing top vent piece.
3. Remove four screws securing lower vent to blower motor.

DOOR LATCH ASSEMBLY

1. Disconnect dishwasher from electrical supply.
2. Remove outer door panel.
3. The door latch is held to the inner door panel with two screws and two locator pins. Remove screws and pull to remove.
4. To remove door switches, push plastic bracket open and rotate bottom of switch up.

DETERGENT / RINSE AID DISPENSER

1. Disconnect dishwasher from electrical supply.
2. Remove outer door panel.
3. Disconnect wiring connections.
4. Remove six Phillips screws and carefully push dispenser into tub.

INNER DOOR PANEL

1. To replace inner door panel, remove control panel, door vent, dispenser and latch.
2. Remove two bolts (T-25 TORX®) from each hinge and lift off.

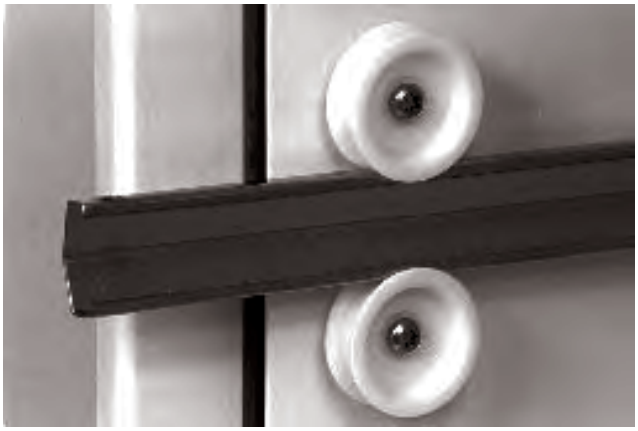
DOOR SEAL

1. To remove seal, lift one end and pull entire seal out.
2. To replace or reinstall seal, center white mark at top of seal recess and press seal in place, going left and then right from top center. Do not stretch seal while installing.

UPPER RACK

1. To remove rack, unsnap and remove retainers at end of metal track. Once retainers are removed, pull rack straight out.

2. Each rack roller is each secured with a T-25 TORX® bolt.



UPPER WATER TUBE

1. To remove upper water tube, press in on top of two clips and lift up.

UPPER SPRAY ARM

1. To remove upper spray arm, unscrew plastic nut securing it to support.

WATER DISTRIBUTOR

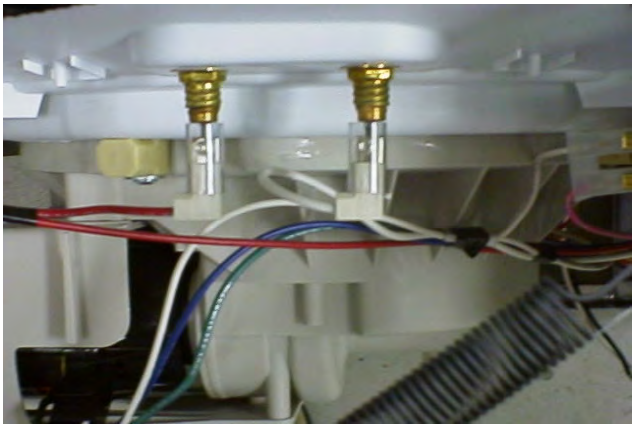
1. The water distributor is screwed to top of upper arm delivery tube. A rubber seal is used on top side of tub to eliminate leaks.

KICK PLATE

1. To remove kick plate and insulation (some models) remove two Phillips screws and pull out on bottom of kick plate.

HEATING ELEMENT

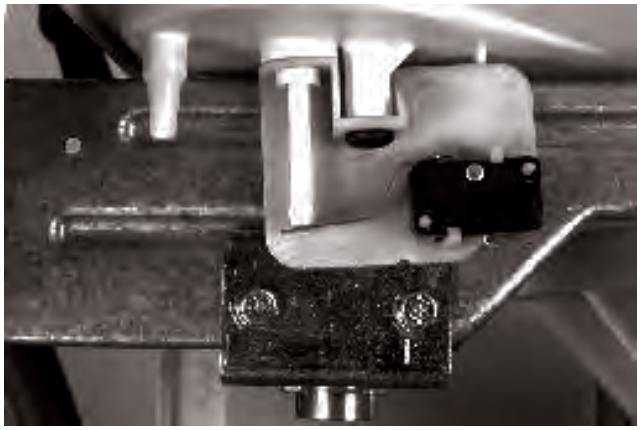
1. Disconnect dishwasher from electrical supply.
2. To remove element, disconnect wiring and remove two element mounting nuts.



3. Lift terminal ends of element into tub and rotate element sideways, out of retainers.

FLOAT SWITCH AND BRACKET

1. Disconnect dishwasher from electrical supply.
2. To remove float switch bracket, remove outer door panel, kick plate, and wires to float switch. A single Phillips screw secures bracket to tub.
3. Remove float switch by spreading mounting clips.



WATER VALVE

1. Disconnect dishwasher from electrical supply.
2. Remove outer door panel, kick plate, and wires.
3. The water valve is secured with two 5/16" hex screws.

DRAIN PUMP

1. Disconnect dishwasher from electrical supply.
2. Remove outer door panel and kick plate.
3. Remove hoses and wiring to drain pump.
4. Remove two screws securing drain pump to mounting bracket.

5. The drain pump assembly consists of three primary parts, (1) stator winding, (2) motor armature & impeller, and (3) front housing. To remove front housing, turn housing about 45° counterclockwise and lift off.
6. To remove stator winding, release plastic catches and slide stator winding off.

LOWER SPRAY ARM

1. To remove lower spray arm, pull out on retaining clips and lift up.

GLASS TRAP

1. To remove glass trap, lift handle up and raise trap up and out of sump.

LOWER SPRAY ARM SUPPORT

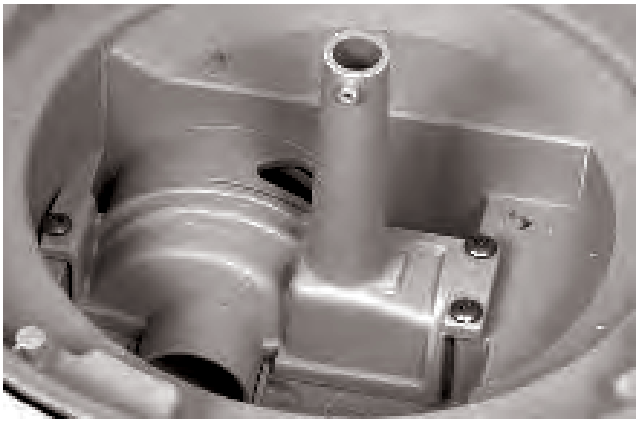
1. To remove lower spray arm support, remove spray arm and glass trap, then turn support 90° clockwise and lift up.

FILTER

1. To remove filter, remove glass trap, spray arm and spray arm support. Lift filter up to remove.

PUMP COVER

1. To remove pump cover, remove glass trap, spray arm, spray arm support and filter.
2. Remove three T-20 TORX® screws and lift cover off.



PUMP AND MOTOR ASSEMBLY

1. To remove pump and motor assembly, disconnect dishwasher from electrical supply. Remove glass trap, spray arm, spray arm support and filter.
2. Remove door panel and kick plate.
3. Disconnect upper spray arm hose, drain hose and motor wiring.
4. Disconnect wiring to thermistor or remove thermistor mounting bracket screw.
5. The pump and motor assembly is secured in place using four retainers that rotate easily. Turn retainers 90° and lift assembly from tub.

MOTOR MOUNTING BRACKET

1. Disconnect dishwasher from electrical supply.
2. To remove motor mounting bracket, remove pump and motor assembly.
3. Remove three T-20 TORX® bolts and slide motor mounting bracket off end of motor.

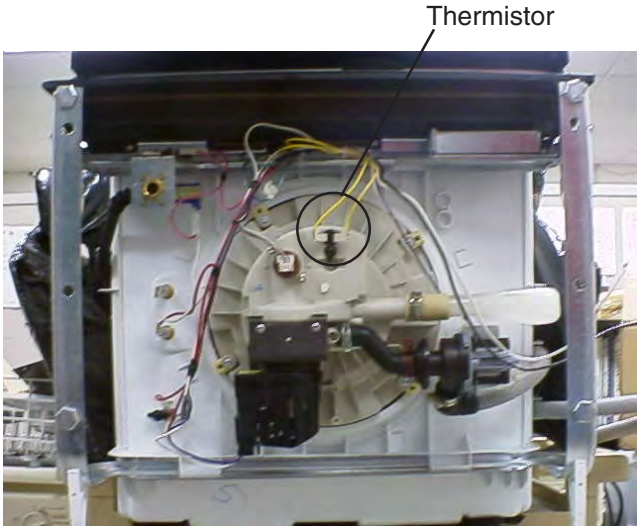
MOTOR AND IMPELLER

1. Disconnect dishwasher from electrical supply.
2. To remove motor, remove pump housing, motor mounting bracket, and pump cover.
3. Place large screwdriver between housing and impeller and force impeller and motor out of housing. DO NOT ROCK MOTOR TO RELEASE. Lubricate with Vaseline® when reinstalling.

THERMISTOR (ON SUMP)

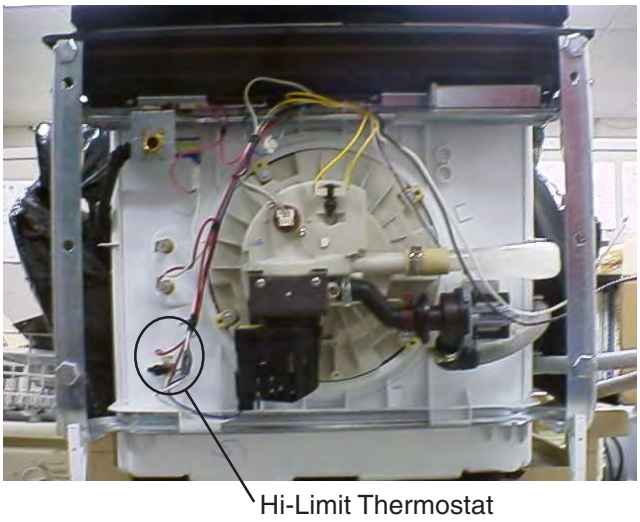
1. Disconnect dishwasher from electrical supply.
2. To gain access to thermistor, remove outer door panel and kick plate.
3. Disconnect wires from thermistor and remove single Phillips screw and retainer.

Note: When removing or replacing the thermistor, make sure to apply more thermal mastic to the face of the thermistor.



HIGH LIMIT THERMOSTAT (ON TUB BOTTOM)

1. Disconnect dishwasher from electrical supply.
2. To gain access to thermostat, remove outer door panel and kick plate.
3. Disconnect wires from thermostat and remove single Phillips screw and retainer.
4. Determine failure causing high limit thermostat to open before replacing.



INDICATOR LAMPS

1. Disconnect dishwasher from electrical supply.
2. To replace indicator lamps please see instructions for "Electronic Keypad." Use either the Slimline or Selectronic instructions, whichever one is applicable.

TROUBLESHOOTING TIPS

SYMPTOM	CHECK THE FOLLOWING	REMEDY
Dishwasher will not operate when turned on.	1. Fuse (blown or tripped). 2. 120 VAC supply wiring connection faulty. 3. Electronic control board defective. 4. No 12 VAC power to control. 5. Motor (inoperative, check resistances). 6. Door Switch (open contacts). 7. Door latch not making contact with door switch. 8. Touch pad circuit defective. 9. No indicator lamps illuminate when START or OPTIONS are pressed.	1. Replace fuse or reset breaker. 2. Repair or replace wire fasteners at dishwasher junction box. 3. Replace control board. 4. Check/replace transformer. 5. Replace motor / impeller assembly. 6. Replace door switch. 7. Replace latch assembly. 8. Replace keypad. 9. Replace keypad.
Motor hums but will not start or run.	1. Motor (bad bearings or locked rotor). 2. Motor stuck due to prolonged non-use. 3. Motor fan blocked.	1. Replace motor. 2. Rotate motor fan or impeller. 3. Check/clear fan area.
Motor trips out on internal thermal overload protector.	1. Improper voltage. 2. Seal faces binding. 3. Motor windings shorted. 4. Glass or foreign items in pump.	1. Check voltage. 2. Rotate motor fan or impeller, or replace. 3. Replace motor/pump assembly. 4. Clean and clear blockage.
Dishwasher runs but will not heat.	1. Hi-limit thermostat open. 2. Heater element (open). 3. Electronic control board defective. 4. Wiring or terminal defective.	1. Replace thermostat. 2. Replace heater element. 3. Replace control board. 4. Repair or replace.
Detergent cover will not latch or open.	1. Excess detergent on lid catch. 2. Latch mechanism defective. 3. Electronic control board defective. 4. Wiring or terminal defective. 5. Broken spring(s). 6. Defective actuator.	1. Clean catch area. 2. Replace dispenser. 3. Replace control board. 4. Repair or replace. 5. Replace dispenser. 6. Replace actuator.

SYMPTOM	CHECK THE FOLLOWING	REMEDY
Dishwasher will not pump out.	1. Drain restricted. 2. Defective drain pump. 3. Air lock in drain hose. 4. Blocked impeller. 5. Open windings. 6. Wiring or terminal defective. 7. Electronic control board defective.	1. Clear restrictions. 2. Replace pump. 3. Drain hose must slope upward to side of tub. Hose must be attached on side of tub. 4. Check for blockage and clear. 5. Replace windings. 6. Repair or replace. 7. Replace control board.
Dishwasher will not fill with water.	1. Water supply turned off. 2. Defective water inlet valve. 3. Check fill valve screen for obstructions. 4. Defective float switch. 5. Electronic control board defective. 6. Wiring or terminal defective. 7. Float stuck in "UP" position.	1. Turn water supply on. 2. Replace water inlet fill valve. 3. Disassemble and clean screen. 4. Repair or replace. 5. Check/replace control board. 6. Repair or replace. 7. Clean float.
Dishwasher water siphons out.	1. Drain hose not connected to side of tub. 2. Drain hose (high) loop too low. 3. Drain line connected to a floor drain not vented.	1. Reattach drain hose. 2. Repair to proper height. 3. Install air gap at counter top.
Detergent left in dispenser.	1. Detergent allowed to stand too long in dispenser. 2. Dispenser wet when detergent was added. 3. Detergent cover held closed or blocked by large dishes. 4. Improper incoming water temperature to properly dissolve detergent. 5. See "Detergent Cover Will Not Open."	1. Instruct customer/user. 2. Instruct customer/user. 3. Instruct customer/user on proper loading of dishes. 4. Incoming water temperature of 120°F is required to properly dissolve dishwashing detergent.

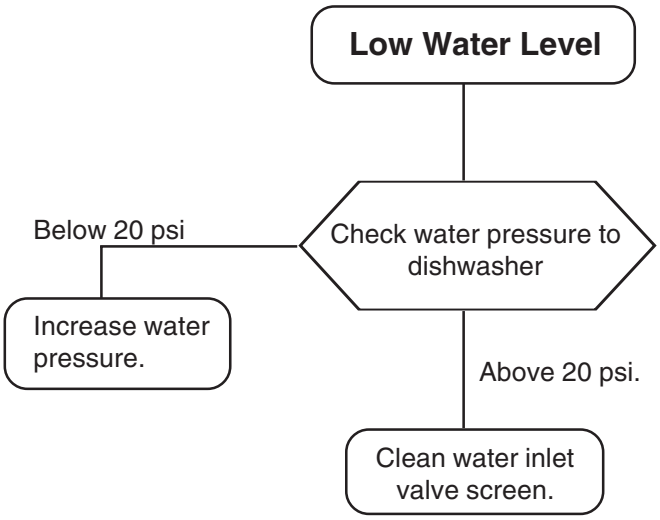
TROUBLESHOOTING DIAGNOSTICS

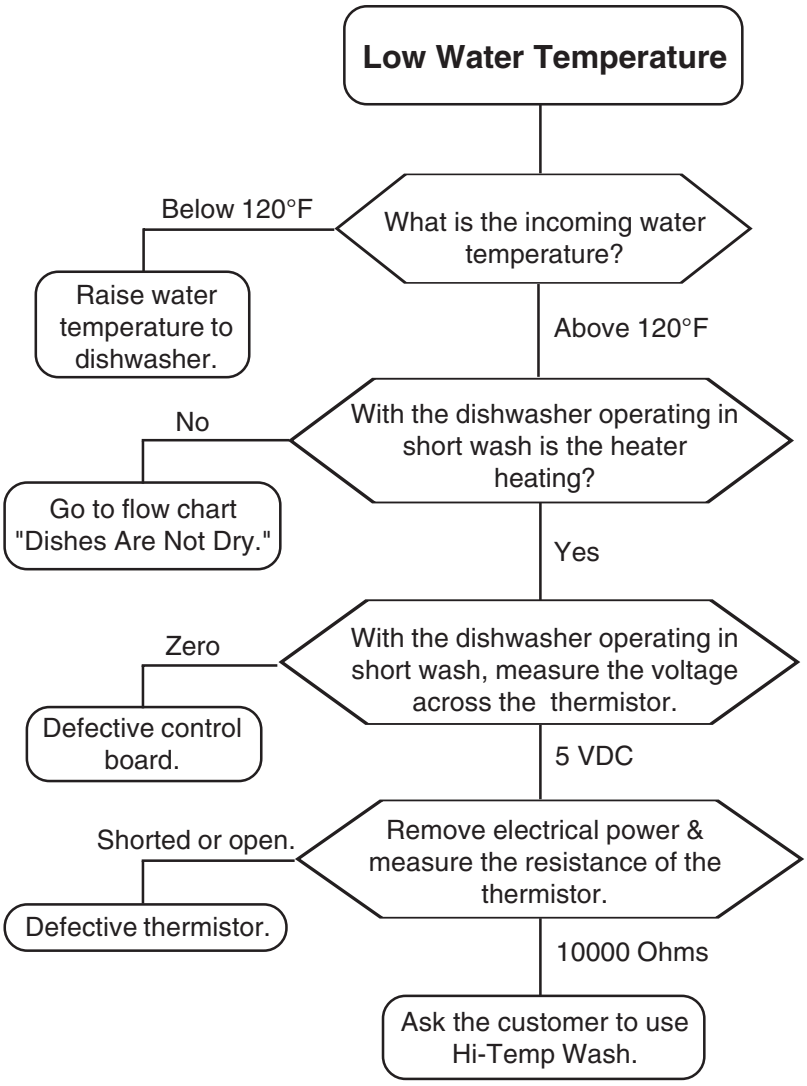
PROBLEM	PAGE
Low Water Level	25
Low Water Temperature	26
Door Leaks	27
Dishes are Not Clean	28
Steam Comes from Vent During Wash Cycle	29
Some Functions of the Control Panel Will Not Program	30
Dishwasher is Completely Inoperative	31
Display Will Not Illuminate	33
Dishwasher Operates in "Normal Wash" No Matter What Cycle is Selected (Selectronic Models Only)	34
Dishwasher Overfills	36
Dishwasher Will Not Fill	38
Dishwasher Will Not Drain	40
Dishwasher Detergent Dispenser Will Not Open	42
Dishes are Not Dry	43
Wash Pump Motor Does Not Run	45

Low Water Level

Possible component failure:

1. Low water pressure
2. Dirty inlet valve screen




Low Water Temperature
What is the incoming water temperature?
Below 120°F
Raise water temperature to dishwasher.
Above 120°F
With the dishwasher operating in short wash is the heater heating?
No
Go to flow chart "Dishes Are Not Dry."
Yes
With the dishwasher operating in short wash, measure the voltage across the thermistor.
Zero
Defective control board.
5 VDC
Remove electrical power & measure the resistance of the thermistor.
Shorted or open.
Defective thermistor.
10000 Ohms
Ask the customer to use Hi-Temp Wash.

Door Leaks

Possible component failure:

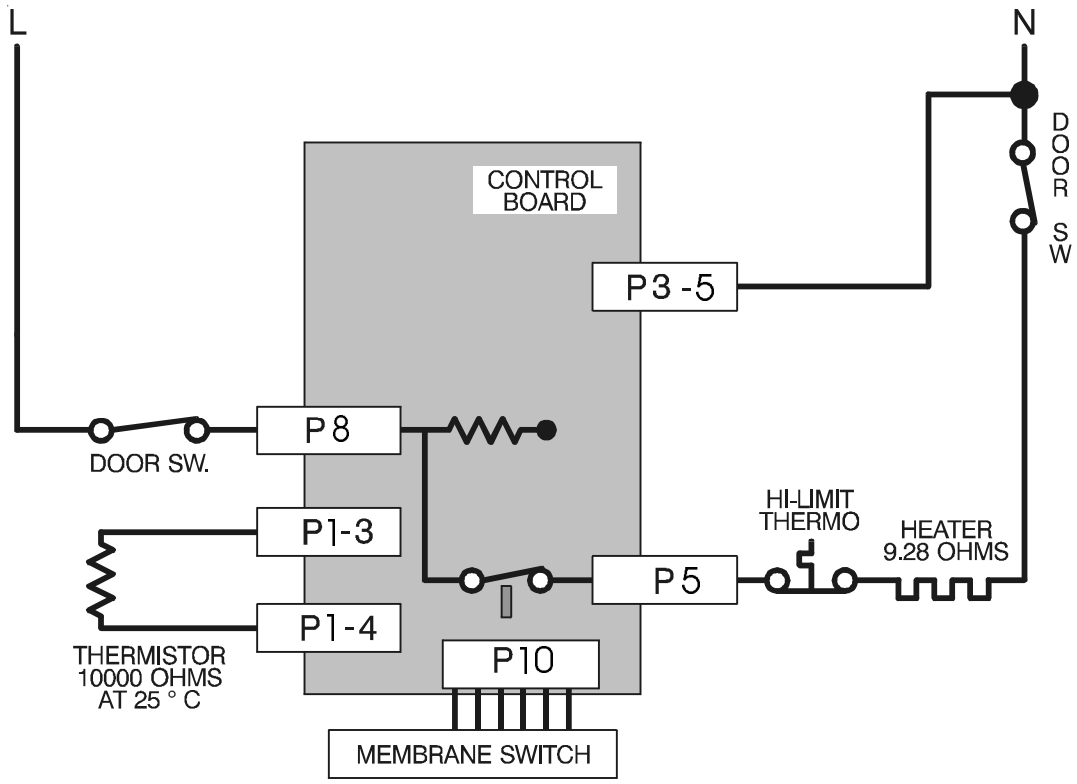
1. Door seal
2. Door latch
3. Door hinge

Note: There are no adjustments to the door or latch.

Dishes Are Not Clean

Possible component failure:

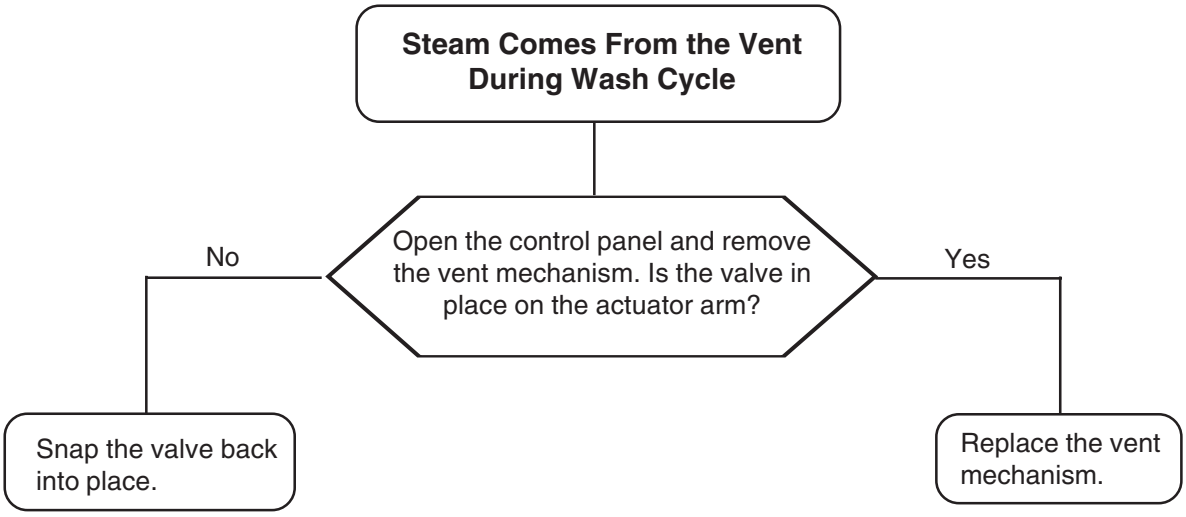
1. Low water level (see flow chart "Low Water Level")
2. Spray arms not alternating (Run diagnostic test)
3. Low water temperature
4. Blocked spray arm
5. Bad detergent
6. Hard water



Steam Comes From the Vent During Wash Cycle

Possible component failure:

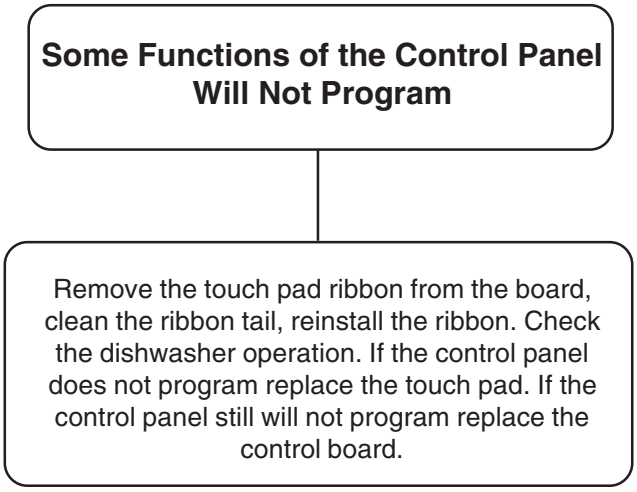
1. Vent valve
2. Vent mechanism

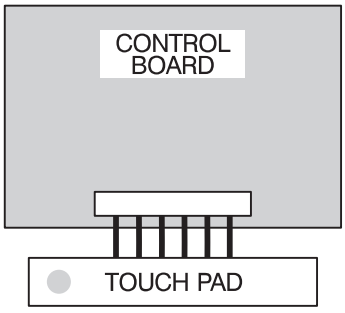


Some Functions of the Control Panel Will Not Program

Possible component failure:

1. Control board
2. Touch pad

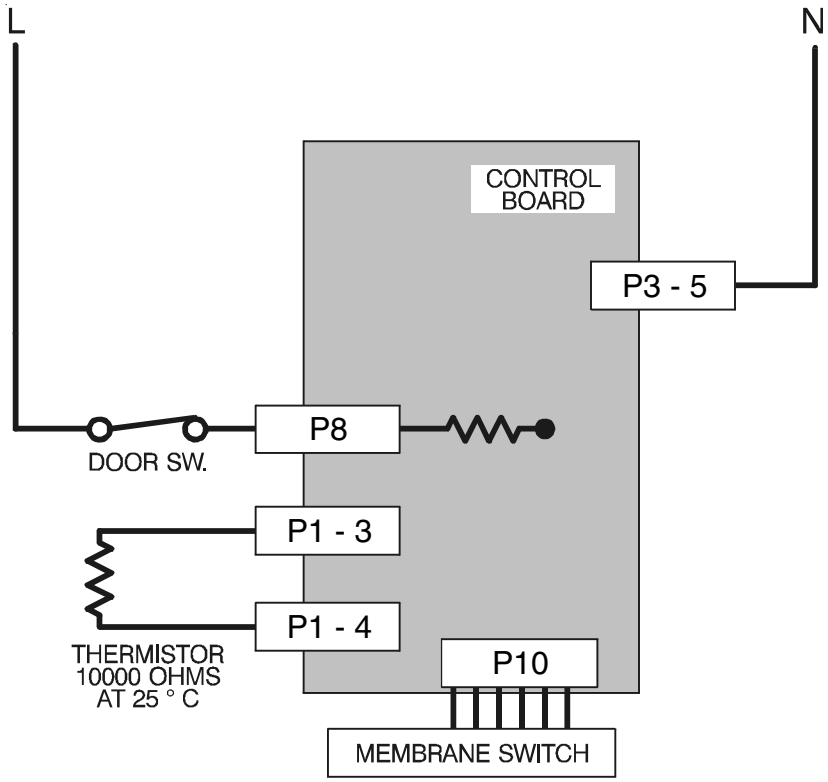


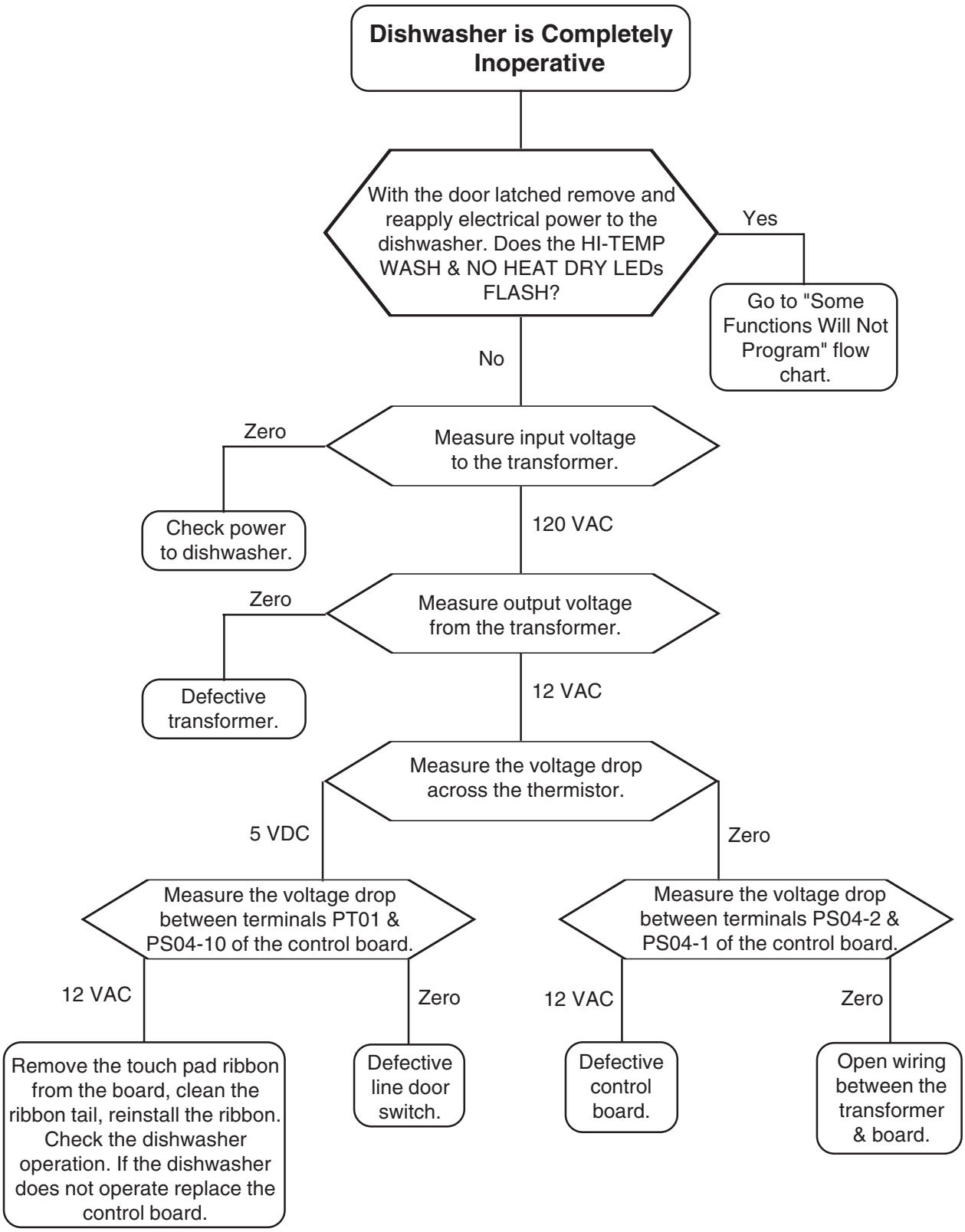


Dishwasher is Completely Inoperative

Possible component failure:

1. Power to the dishwasher
2. Transformer
3. Control board
4. Touch pad
5. Line side door switch
6. Wiring between these components

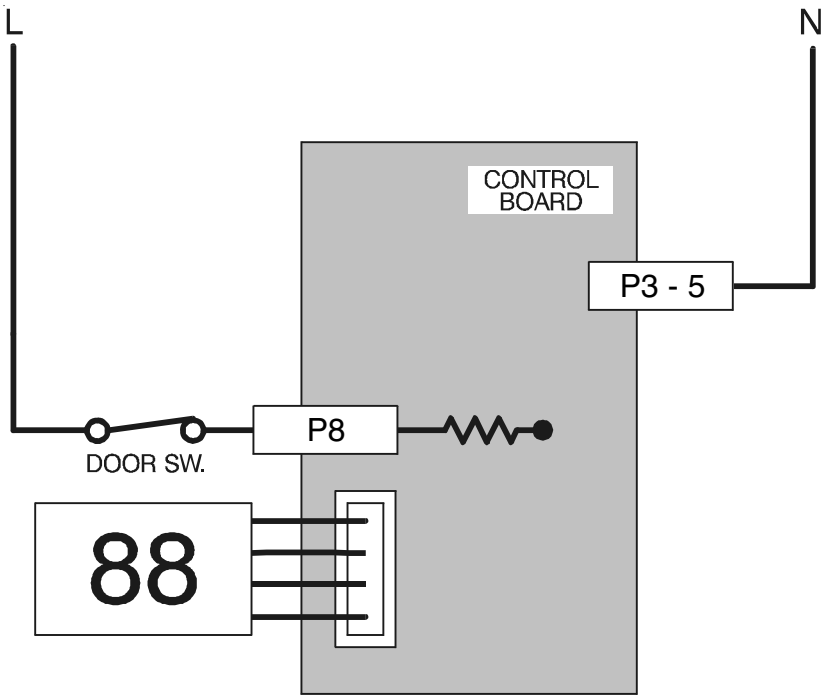


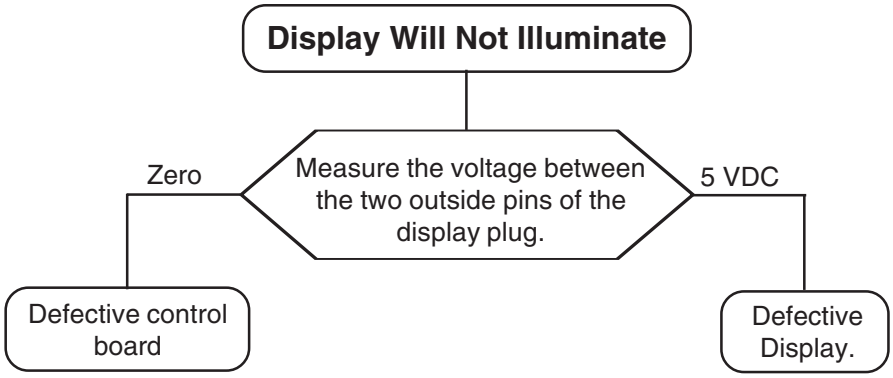

Dishwasher is Completely Inoperative
With the door latched remove and reapply electrical power to the dishwasher. Does the HI-TEMP WASH & NO HEAT DRY LEDs FLASH?
Yes
Go to "Some Functions Will Not Program" flow chart.
No
Measure input voltage to the transformer.
Zero
Check power to dishwasher.
120 VAC
Measure output voltage from the transformer.
Zero
Defective transformer.
12 VAC
Measure the voltage drop across the thermistor.
5 VDC
Zero
Measure the voltage drop between terminals PT01 & PS04-10 of the control board.
Measure the voltage drop between terminals PS04-2 & PS04-1 of the control board.
12 VAC
Zero
12 VAC
Zero
Remove the touch pad ribbon from the board, clean the ribbon tail, reinstall the ribbon. Check the dishwasher operation. If the dishwasher does not operate replace the control board.
Defective line door switch.
Defective control board.
Open wiring between the transformer & board.

Display Will Not Illuminate

Possible component failure:

1. Control Board
2. Display



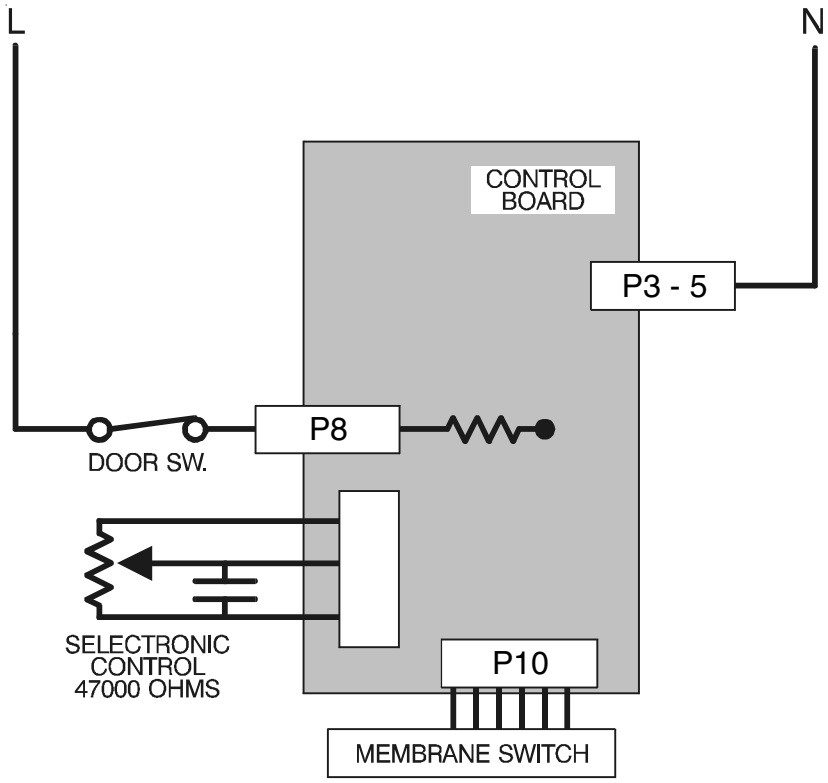


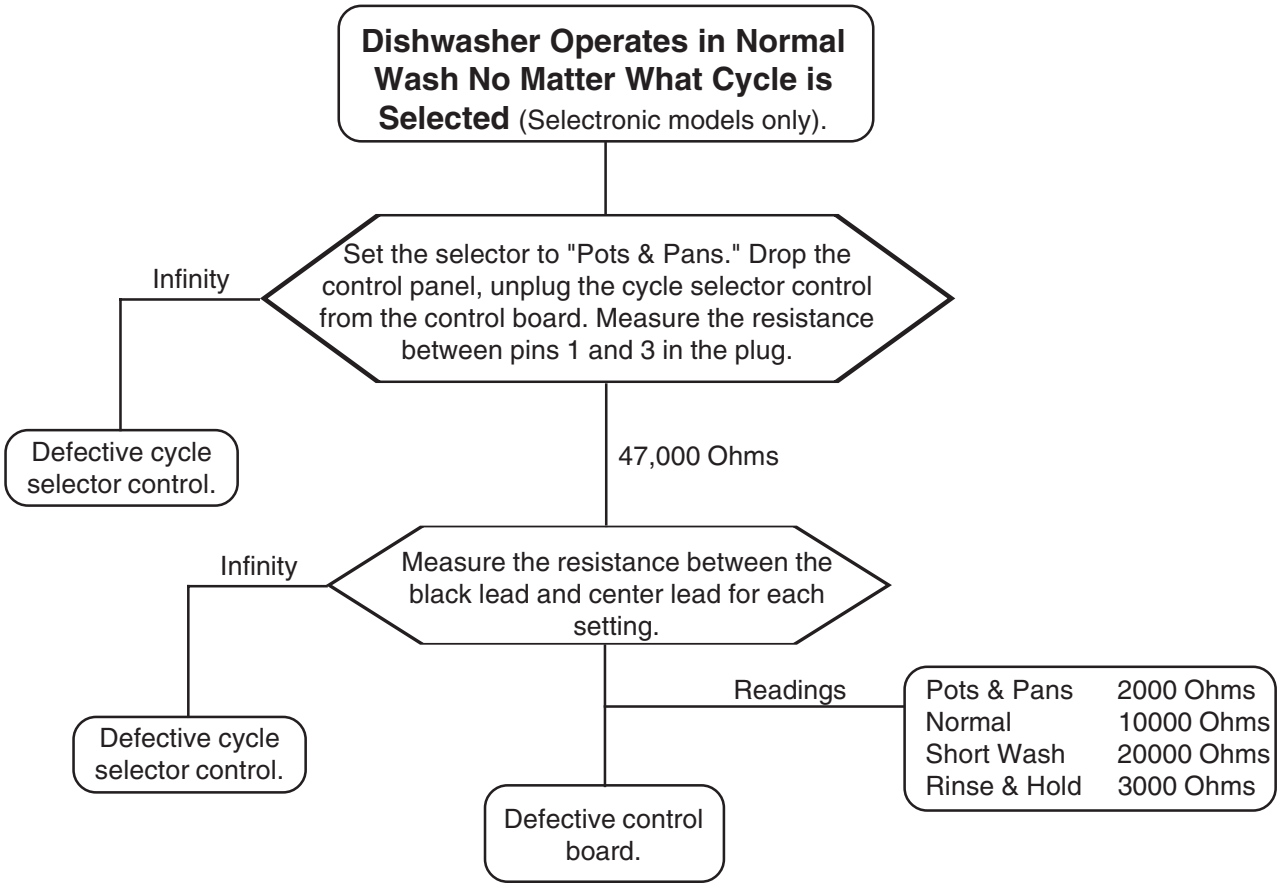
Dishwasher Operates in Normal Wash No Matter What Cycle is Selected

(Selectronic models only)

Possible component failure:

1. Control board
2. Cycle selector control

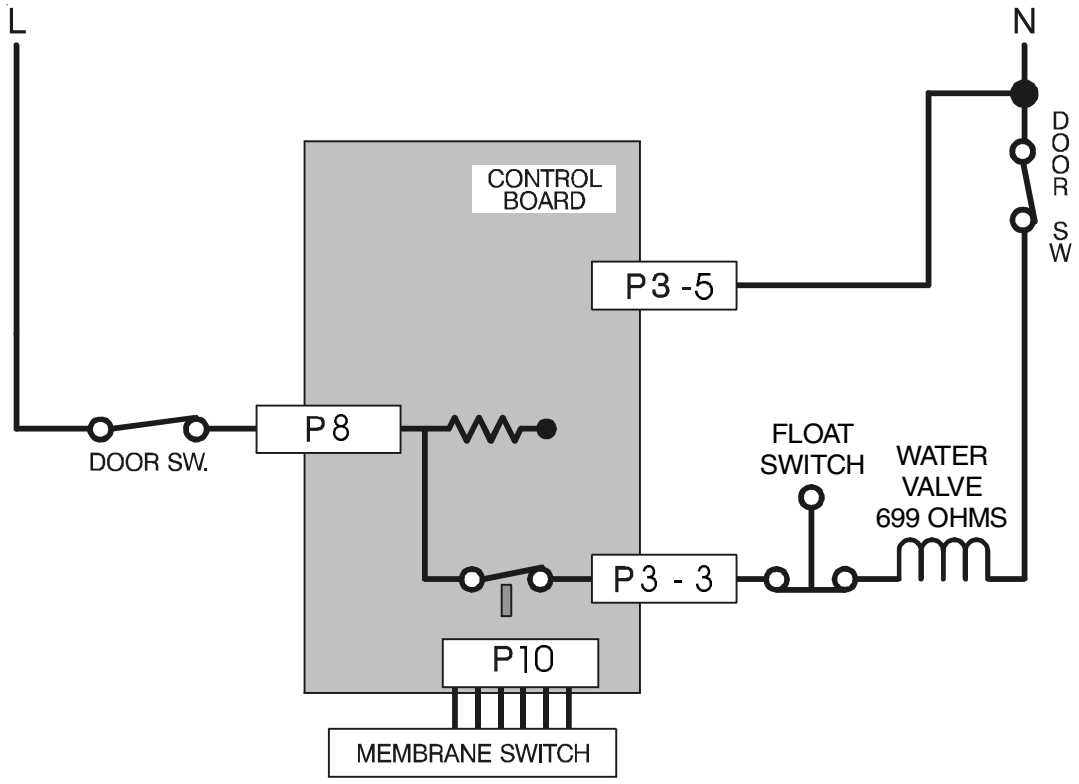


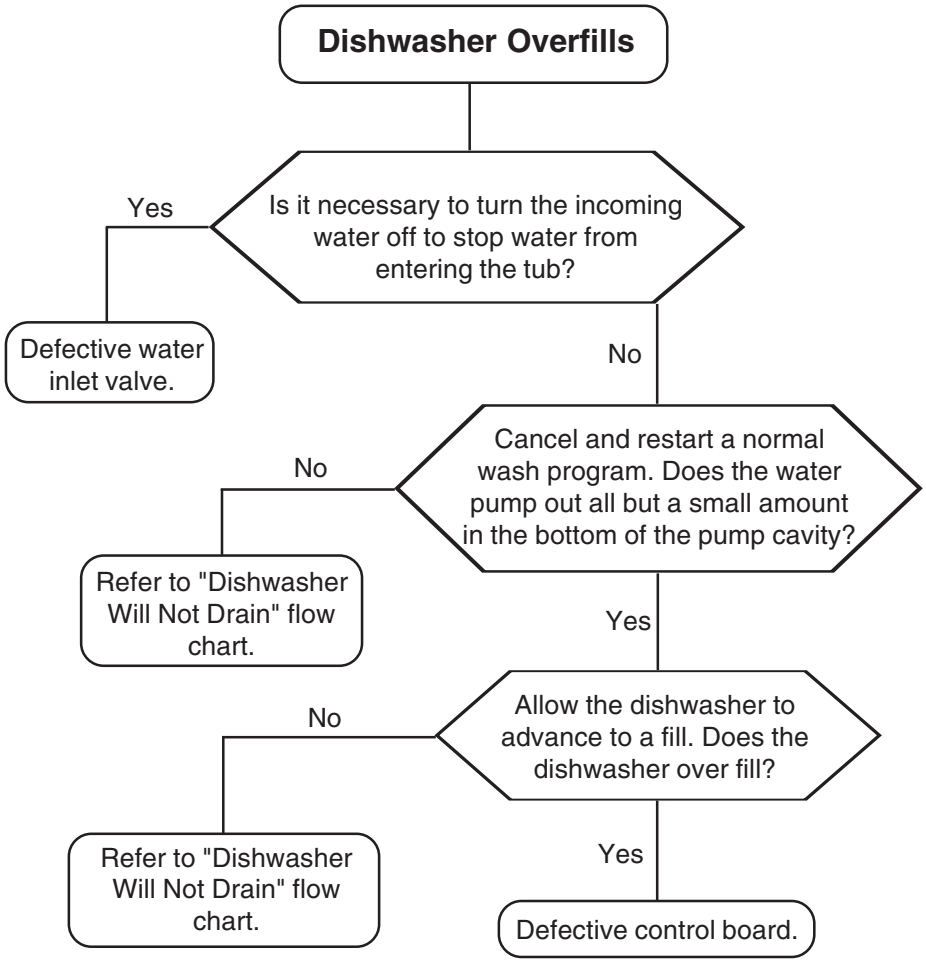

Dishwasher Operates in Normal Wash No Matter What Cycle is Selected (Selectronic models only).
Set the selector to "Pots & Pans." Drop the control panel, unplug the cycle selector control from the control board. Measure the resistance between pins 1 and 3 in the plug.
Infinity
Defective cycle selector control.
47,000 Ohms
Measure the resistance between the black lead and center lead for each setting.
Infinity
Defective cycle selector control.
Readings
Pots & Pans 2000 Ohms
Normal 10000 Ohms
Short Wash 20000 Ohms
Rinse & Hold 3000 Ohms
Defective control board.

Dishwasher Overfills

Possible component failure:

1. Control board
2. Inlet valve
3. Blocked drain hose
4. Pinched crossover hose
5. Defective drain pump

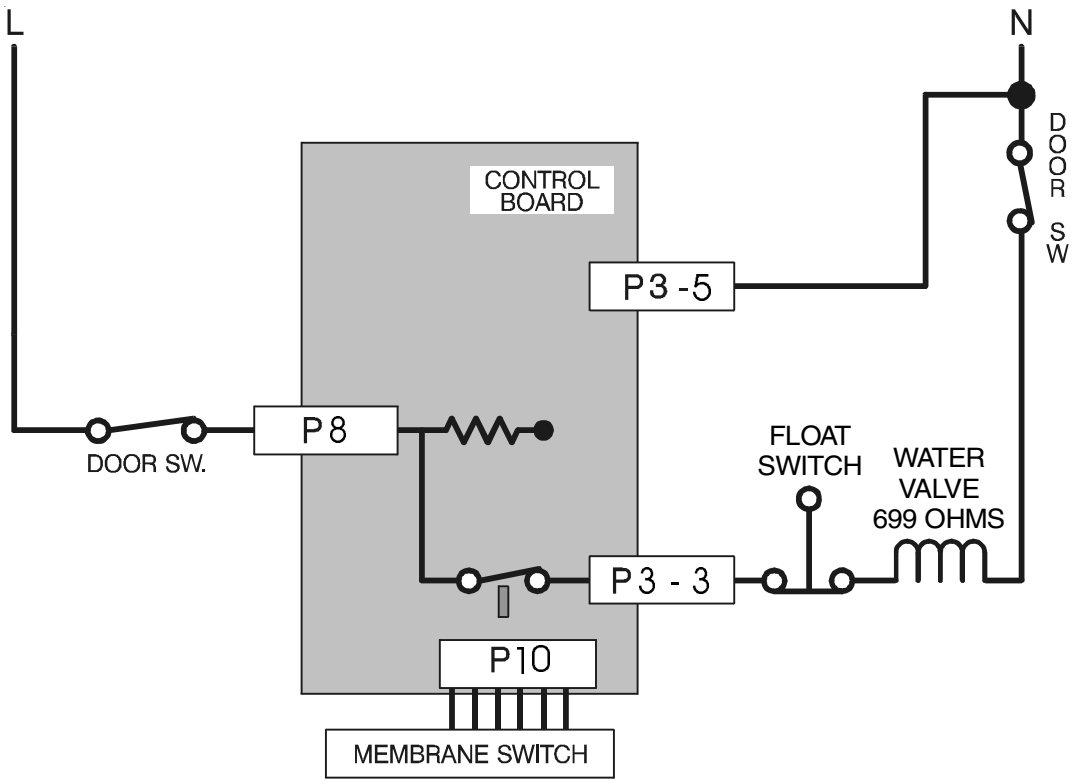


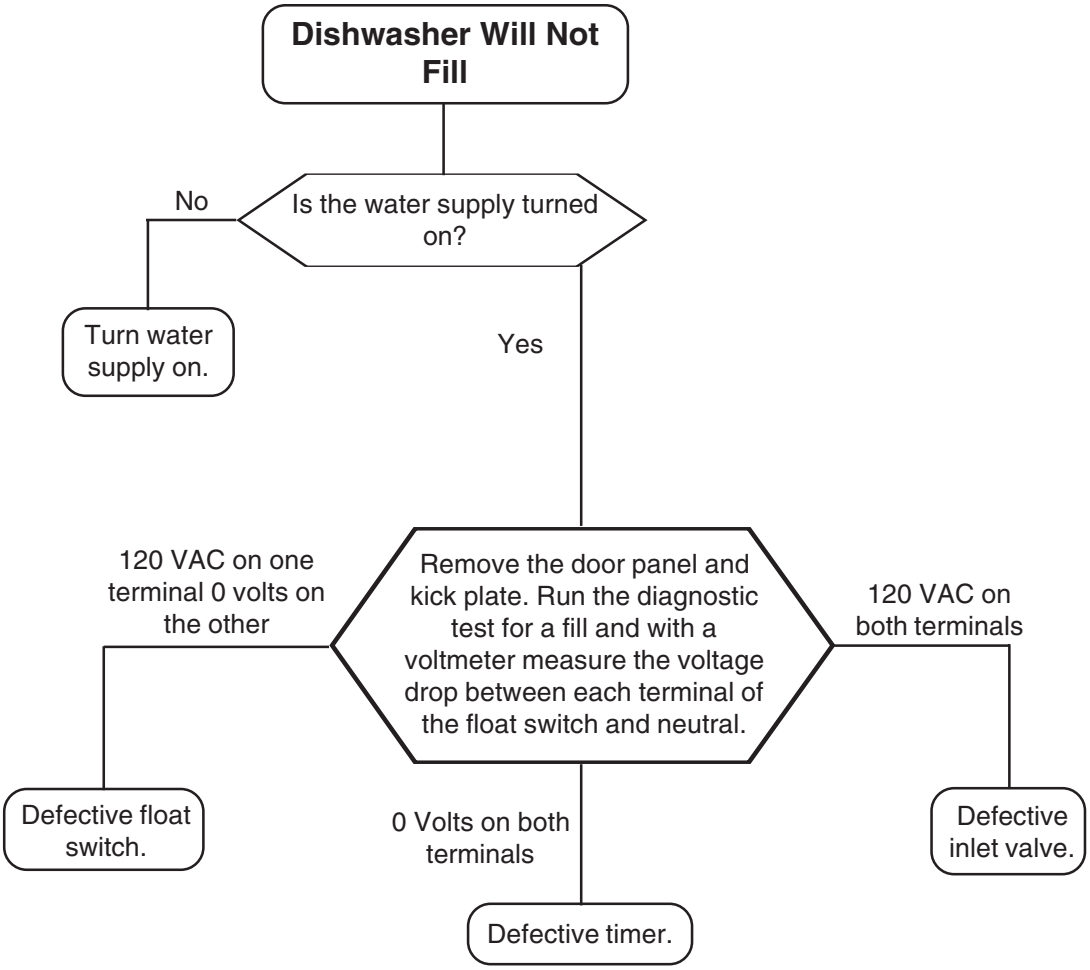

Dishwasher Overfills
Is it necessary to turn the incoming water off to stop water from entering the tub?
Yes
Defective water inlet valve.
No
Cancel and restart a normal wash program. Does the water pump out all but a small amount in the bottom of the pump cavity?
No
Refer to "Dishwasher Will Not Drain" flow chart.
Yes
Allow the dishwasher to advance to a fill. Does the dishwasher over fill?
No
Refer to "Dishwasher Will Not Drain" flow chart.
Yes
Defective control board.

Dishwasher Will Not Fill

Possible component failure:

1. Water supply
2. Control board
3. Float switch
4. Inlet valve

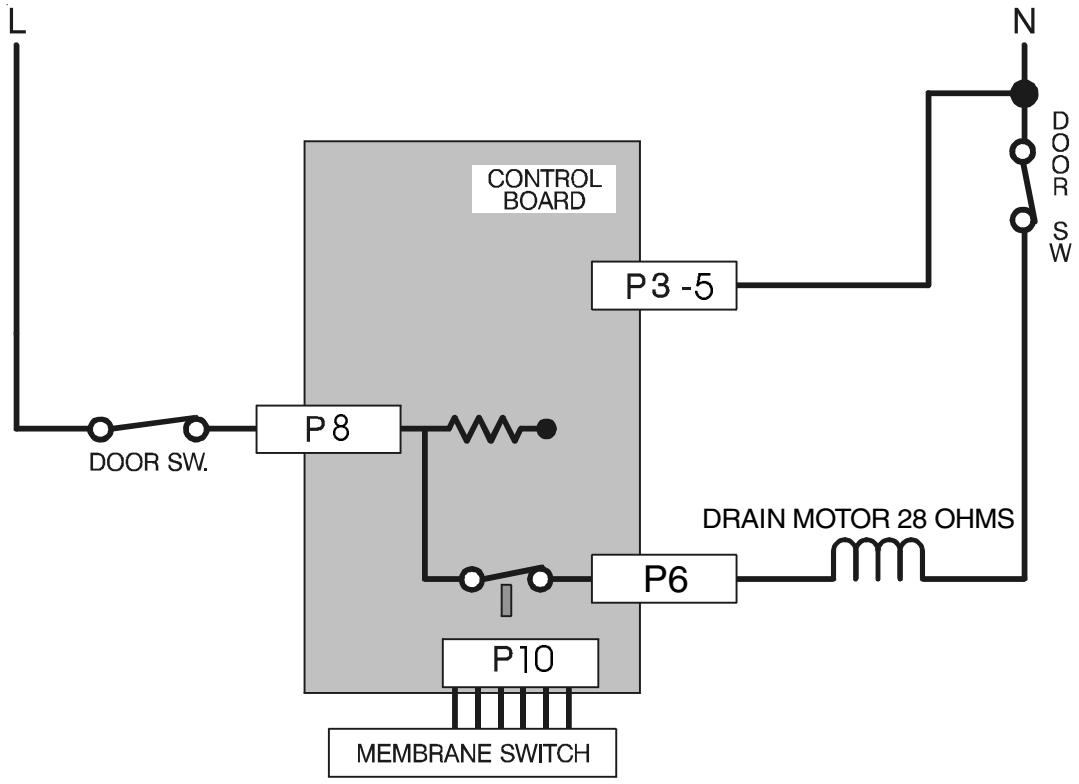


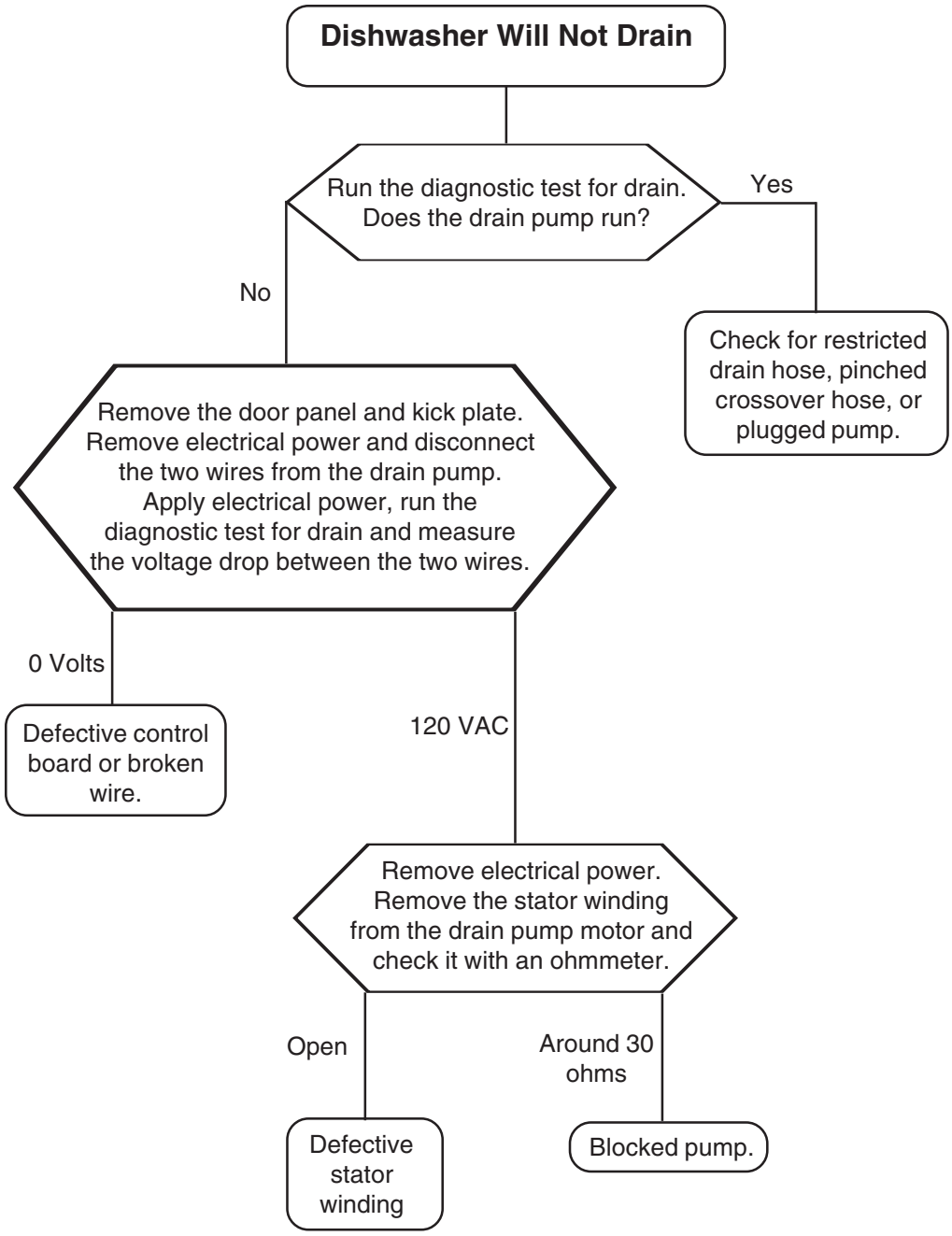

Dishwasher Will Not Fill
Is the water supply turned on?
No
Turn water supply on.
Yes
Remove the door panel and kick plate. Run the diagnostic test for a fill and with a voltmeter measure the voltage drop between each terminal of the float switch and neutral.
120 VAC on one terminal 0 volts on the other
Defective float switch.
0 Volts on both terminals
Defective timer.
120 VAC on both terminals
Defective inlet valve.

Dishwasher Will Not Drain

Possible component failure:

1. Control board
2. Drain pump
3. Drain pump stator winding
4. Crossover hose
5. Restricted drain hose

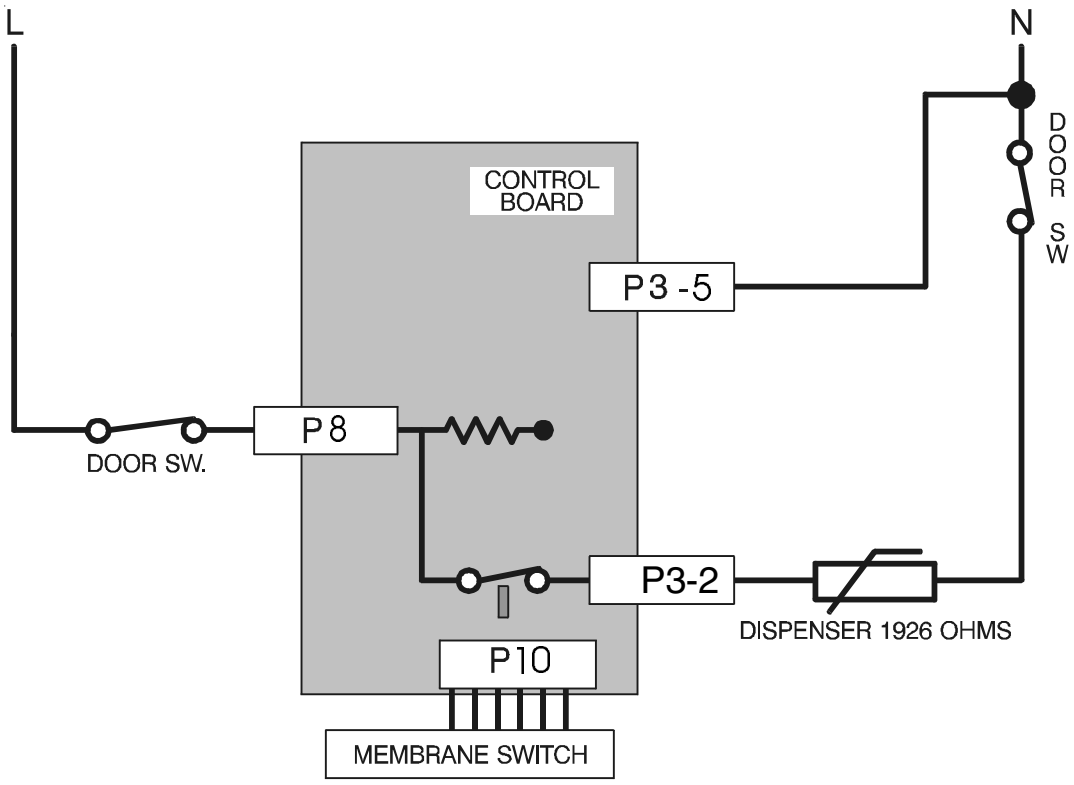


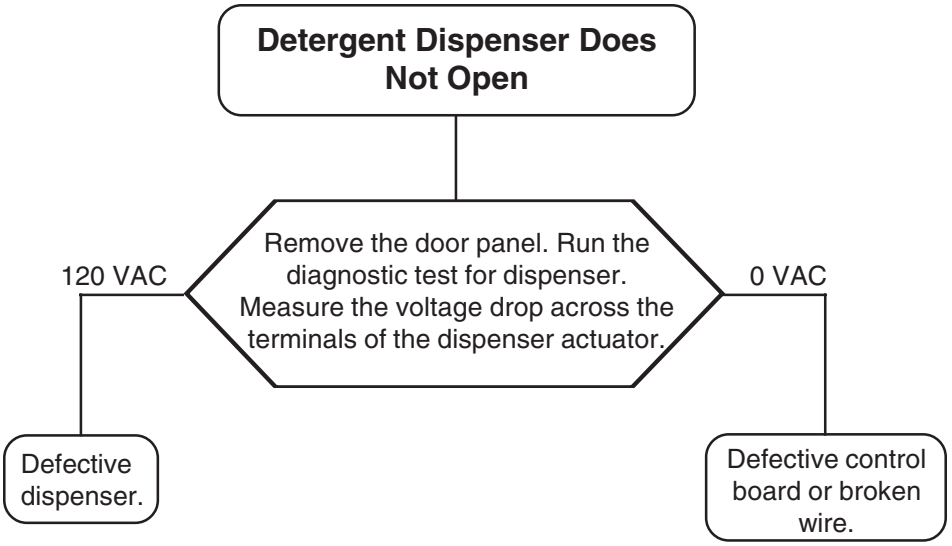

Dishwasher Will Not Drain
Run the diagnostic test for drain. Does the drain pump run?
Yes
No
Check for restricted drain hose, pinched crossover hose, or plugged pump.
Remove the door panel and kick plate. Remove electrical power and disconnect the two wires from the drain pump. Apply electrical power, run the diagnostic test for drain and measure the voltage drop between the two wires.
0 Volts
120 VAC
Defective control board or broken wire.
Remove electrical power. Remove the stator winding from the drain pump motor and check it with an ohmmeter.
Open
Around 30 ohms
Defective stator winding
Blocked pump.

Detergent Dispenser Does Not Open

Possible component failure:

1. Control board
2. Dispenser

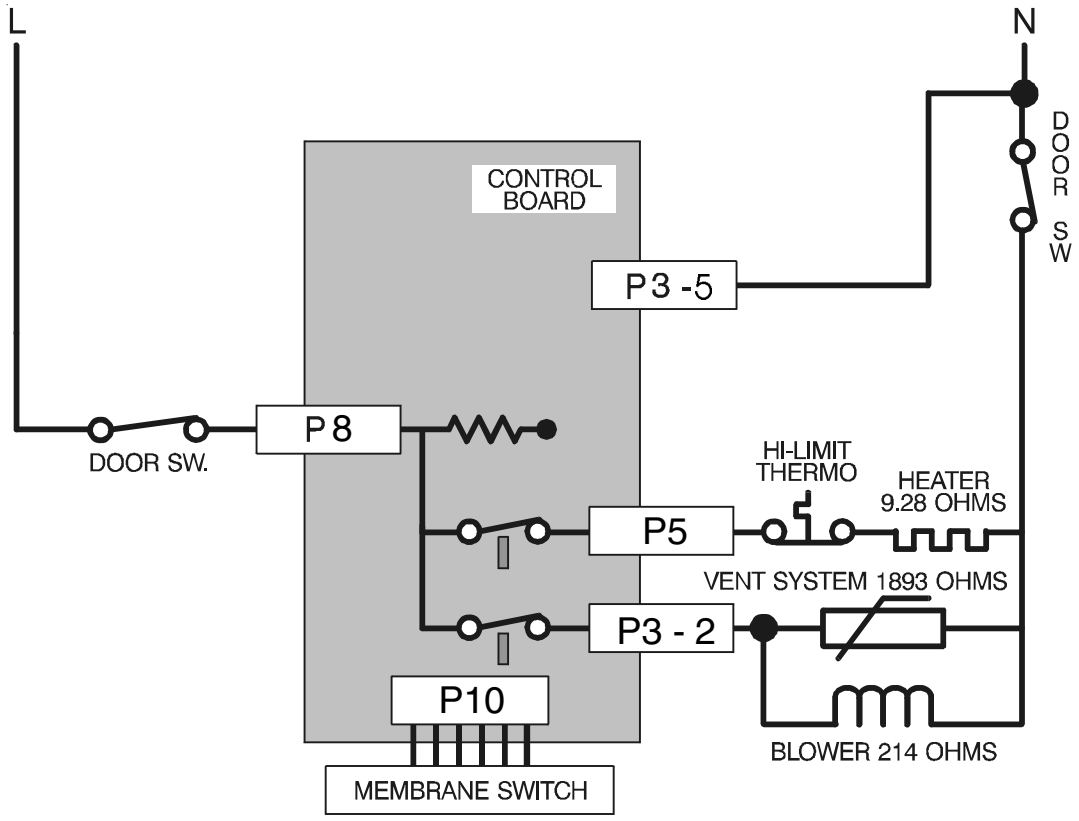




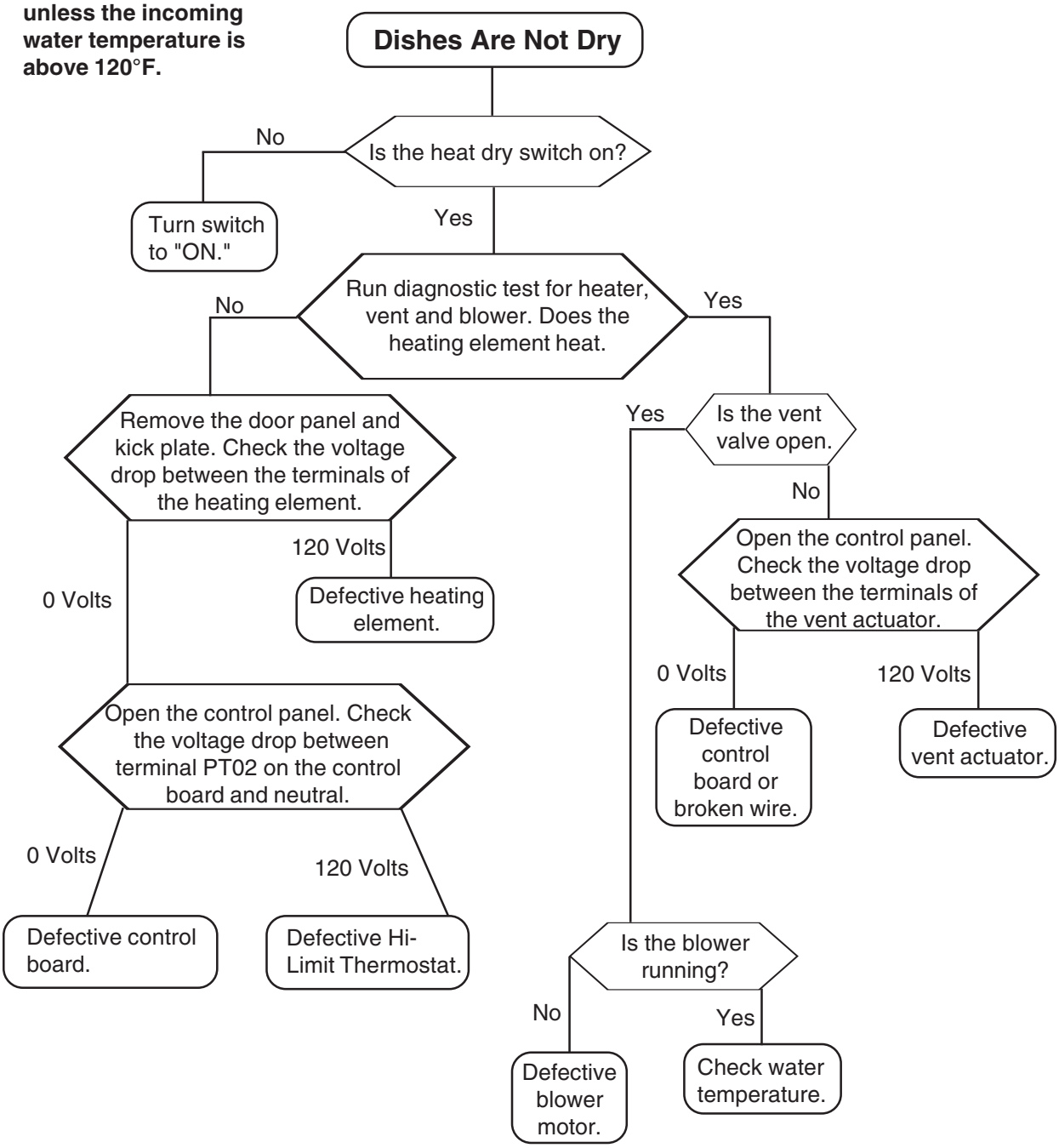
Dishes Are Not Dry

Possible component failure:

1. Heater
2. Hi-limit thermostat
3. Control board
4. Vent mechanism
5. Blower
6. Hot or cool dry switch



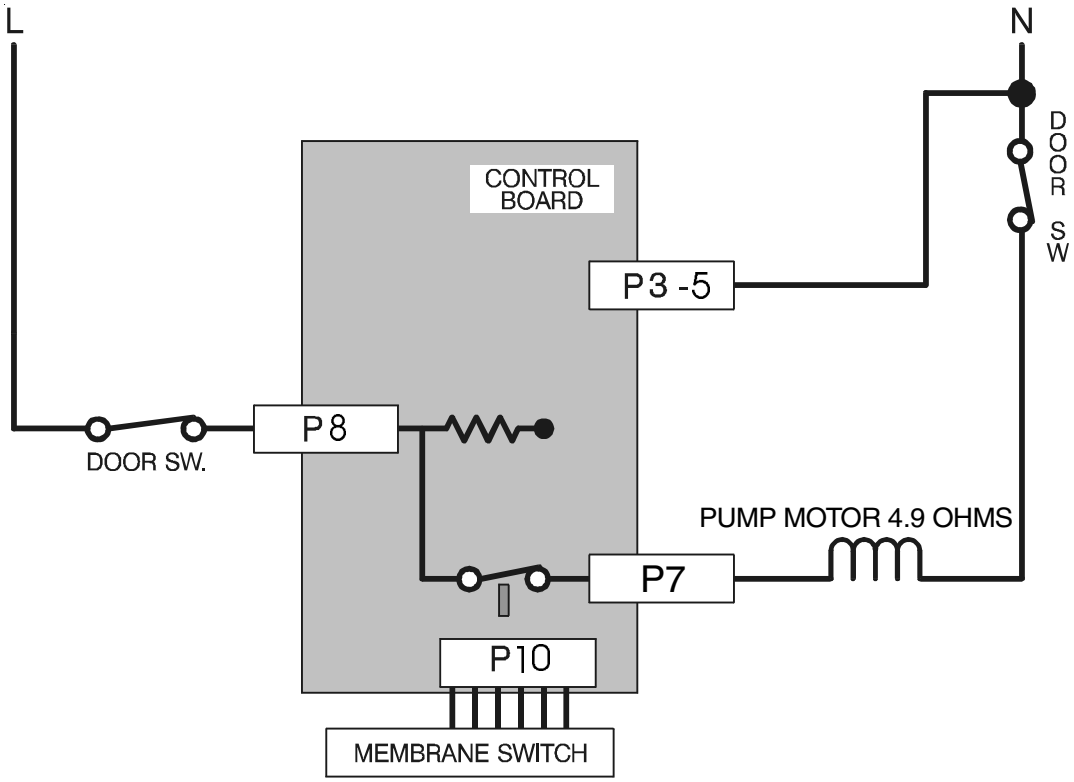
NOTE: This dishwasher will not operate properly unless the incoming water temperature is above 120°F.

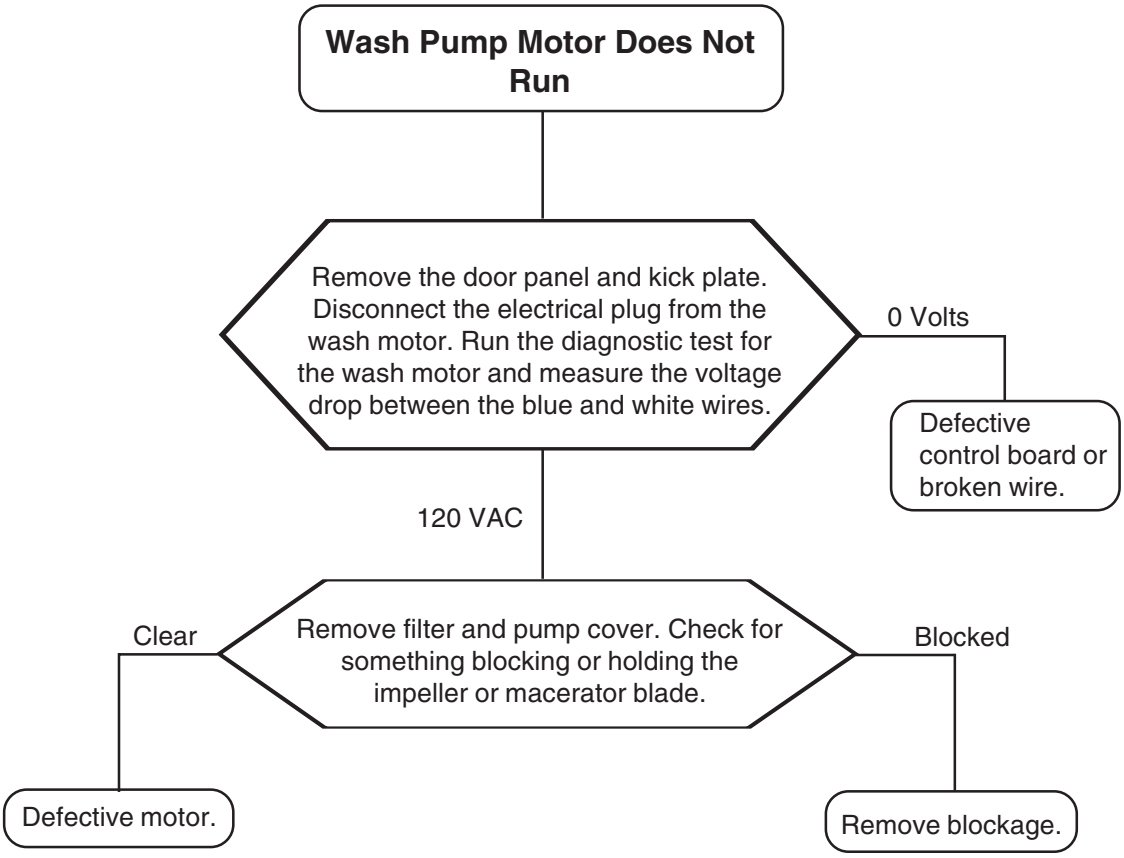


Wash Pump Motor Does Not Run

Possible component failure:

1. Control board
2. Wash pump motor



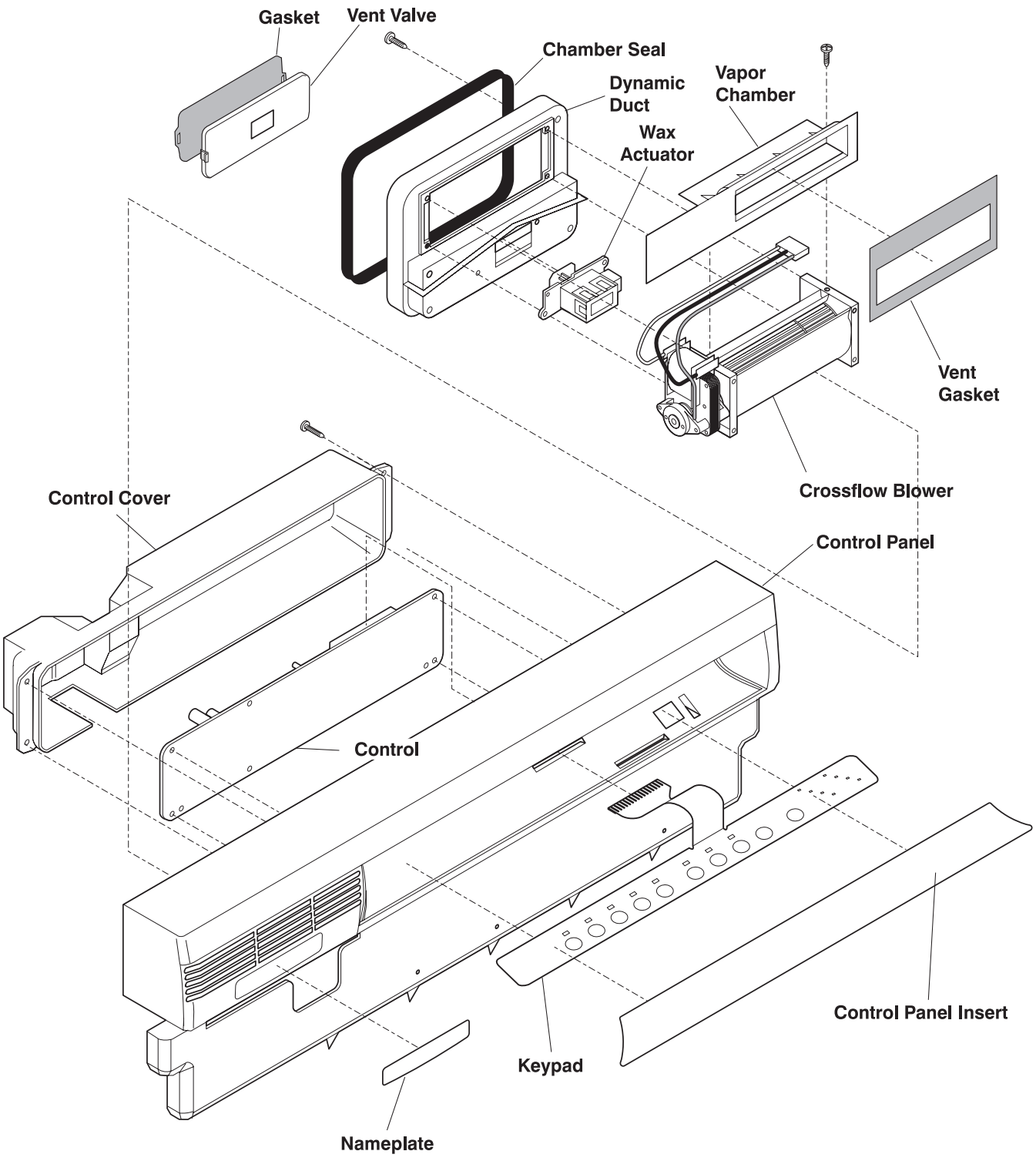

Wash Pump Motor Does Not Run
Remove the door panel and kick plate. Disconnect the electrical plug from the wash motor. Run the diagnostic test for the wash motor and measure the voltage drop between the blue and white wires.
0 Volts
Defective control board or broken wire.
120 VAC
Remove filter and pump cover. Check for something blocking or holding the impeller or macerator blade.
Clear
Blocked
Defective motor.
Remove blockage.

APPENDIX A

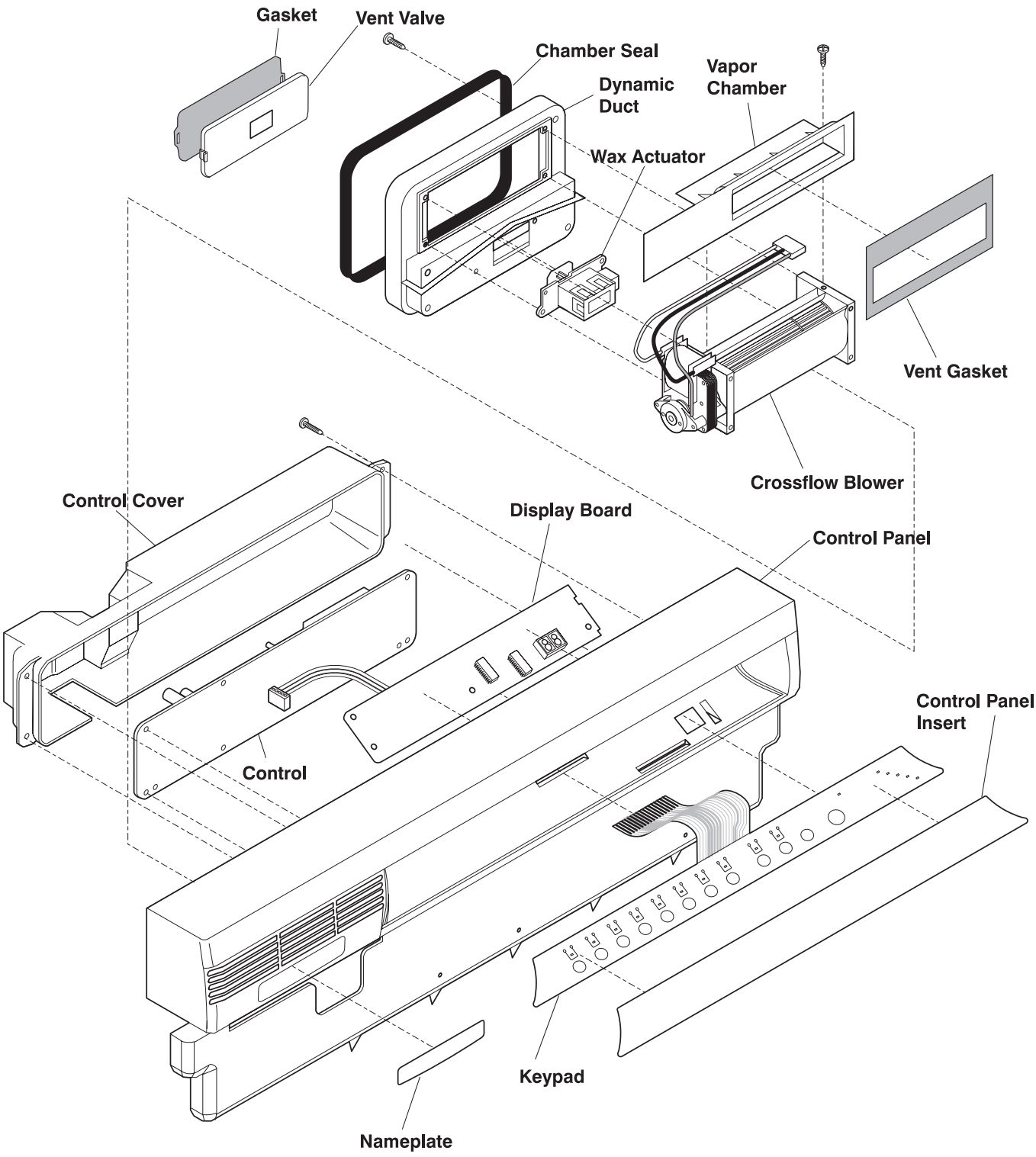
Exploded Views Location Chart

EXPLODED VIEWS	AMANA		FRIGIDAIRE		
	ADW750EA	ADW850EA	GLDB957J	GLDB958J	GPDB988J
Control Panel	A-5	A-6	A-2	A-3	A-4
Door	A-7	A-7	A-7	A-7	A-8
Tub	A-9	A-9	A-9	A-9	A-9
Motor & Pump	A-10	A-10	A-10	A-10	A-10
Frame	A-11	A-11	A-11	A-11	A-11
Racks	A-14	A-15	A-12	A-13	A-13

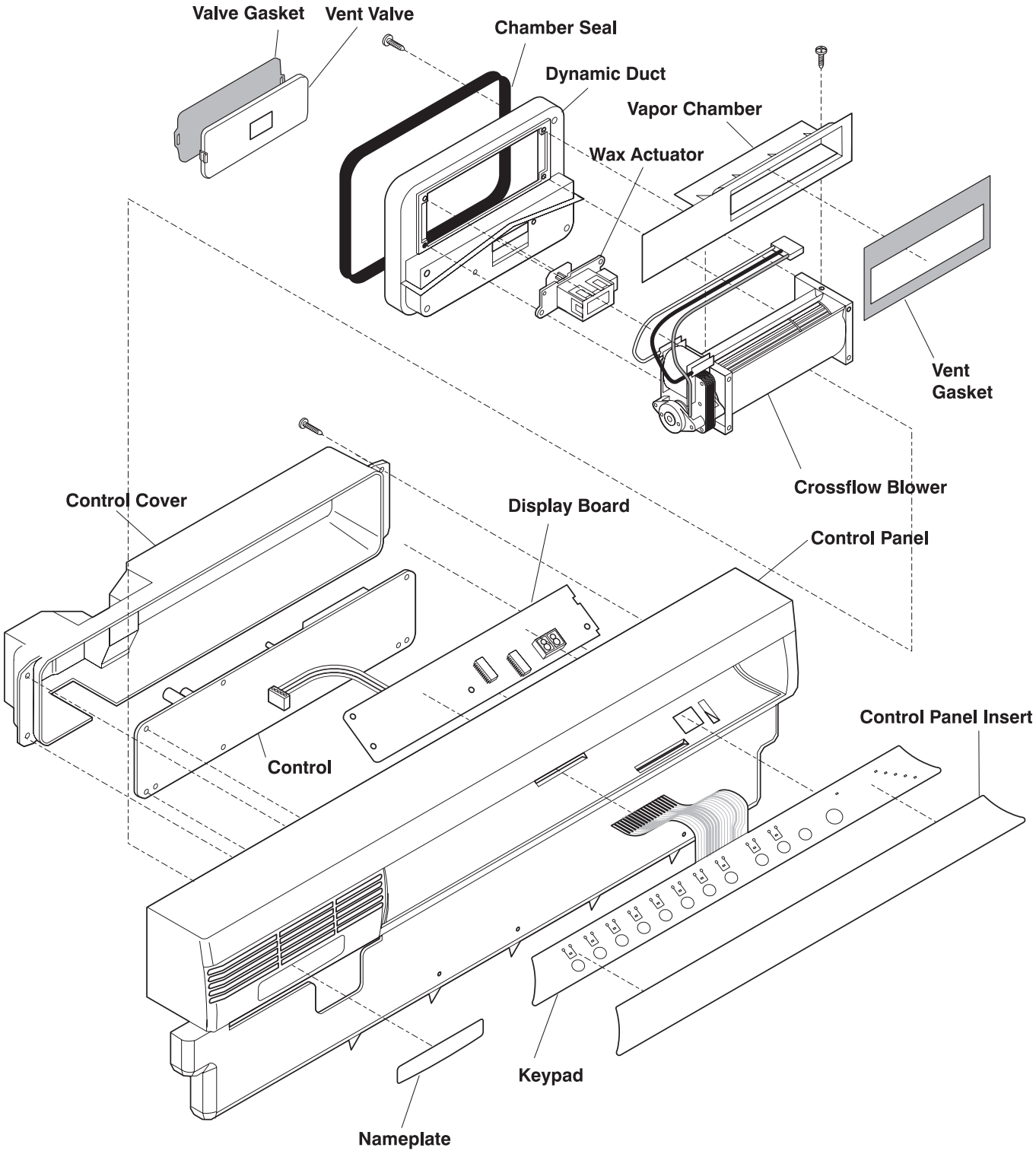
Control Panel for Model GLDB957J



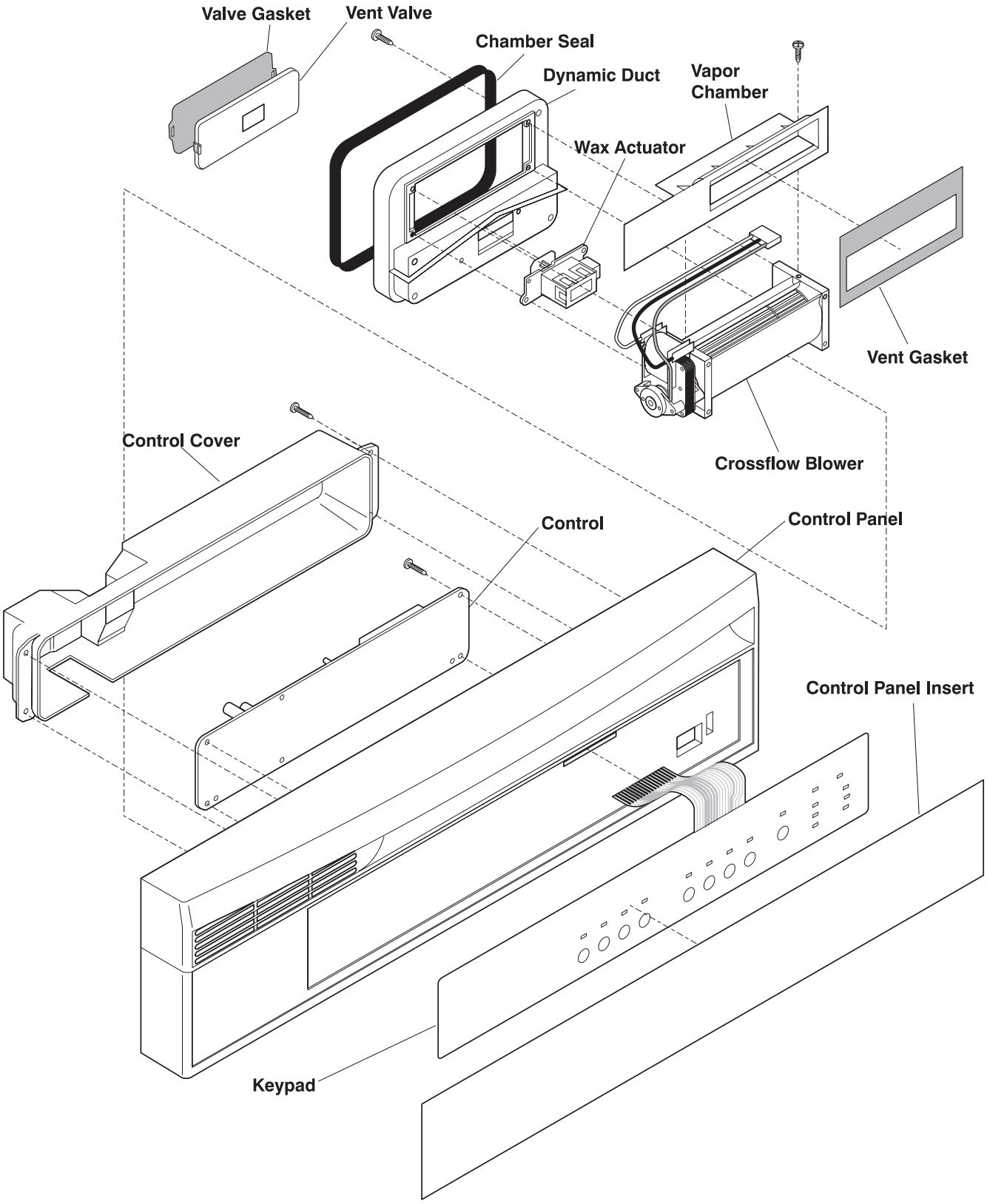
Control Panel for Model GLDB958J



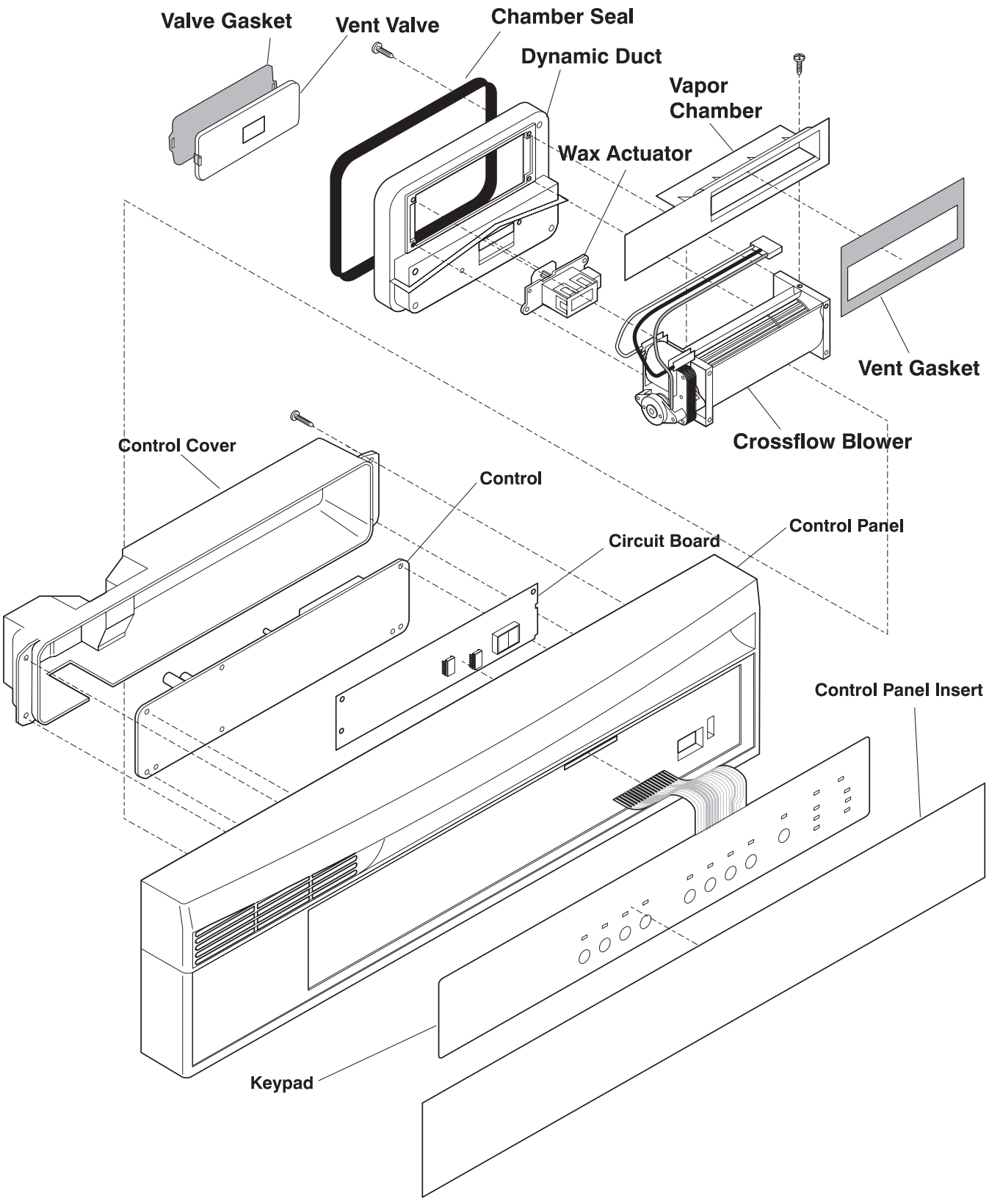
Control Panel for Model GPDB988J



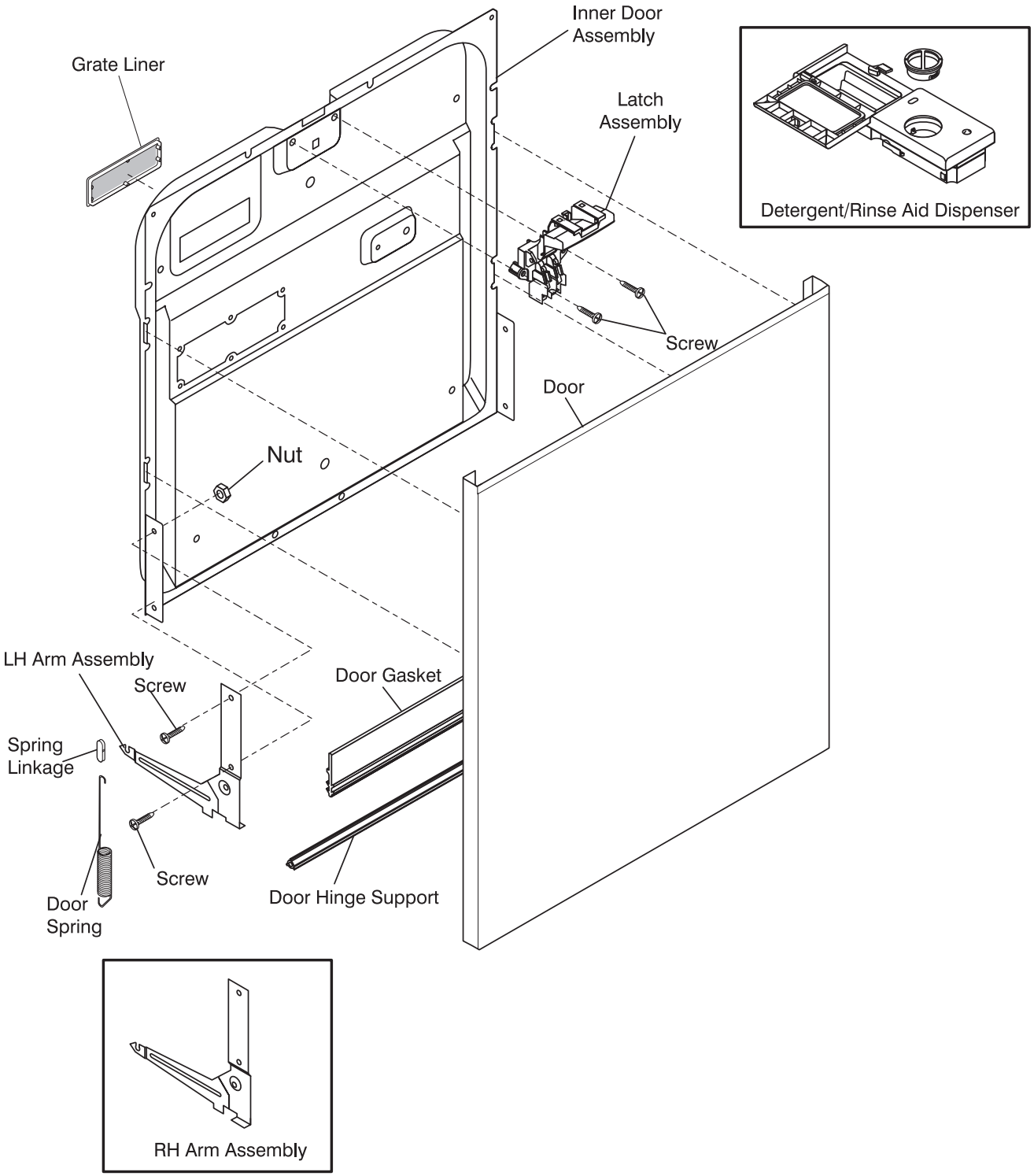
Control Panel for Model ADW750EA



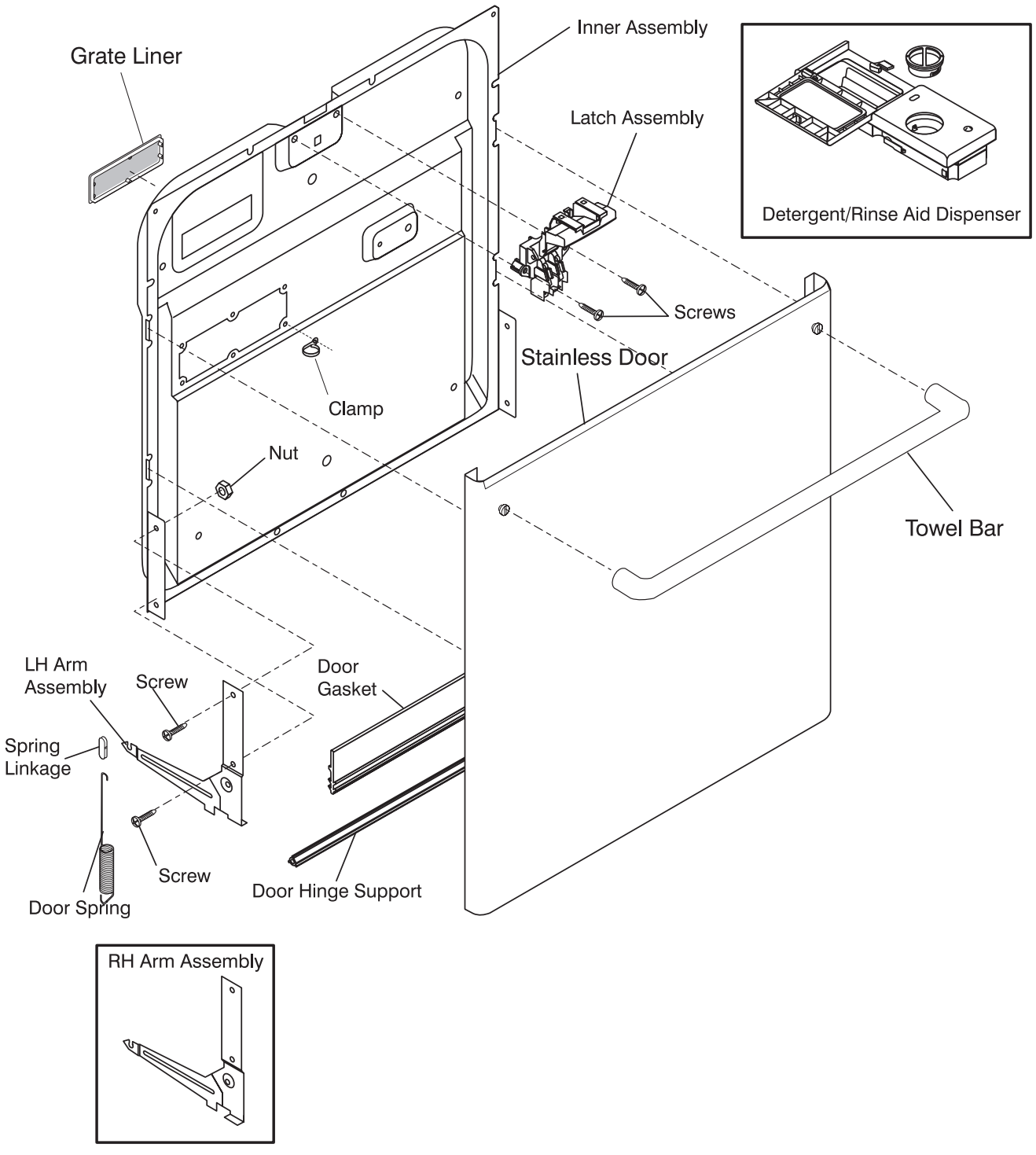
Control Panel for ADW850EA



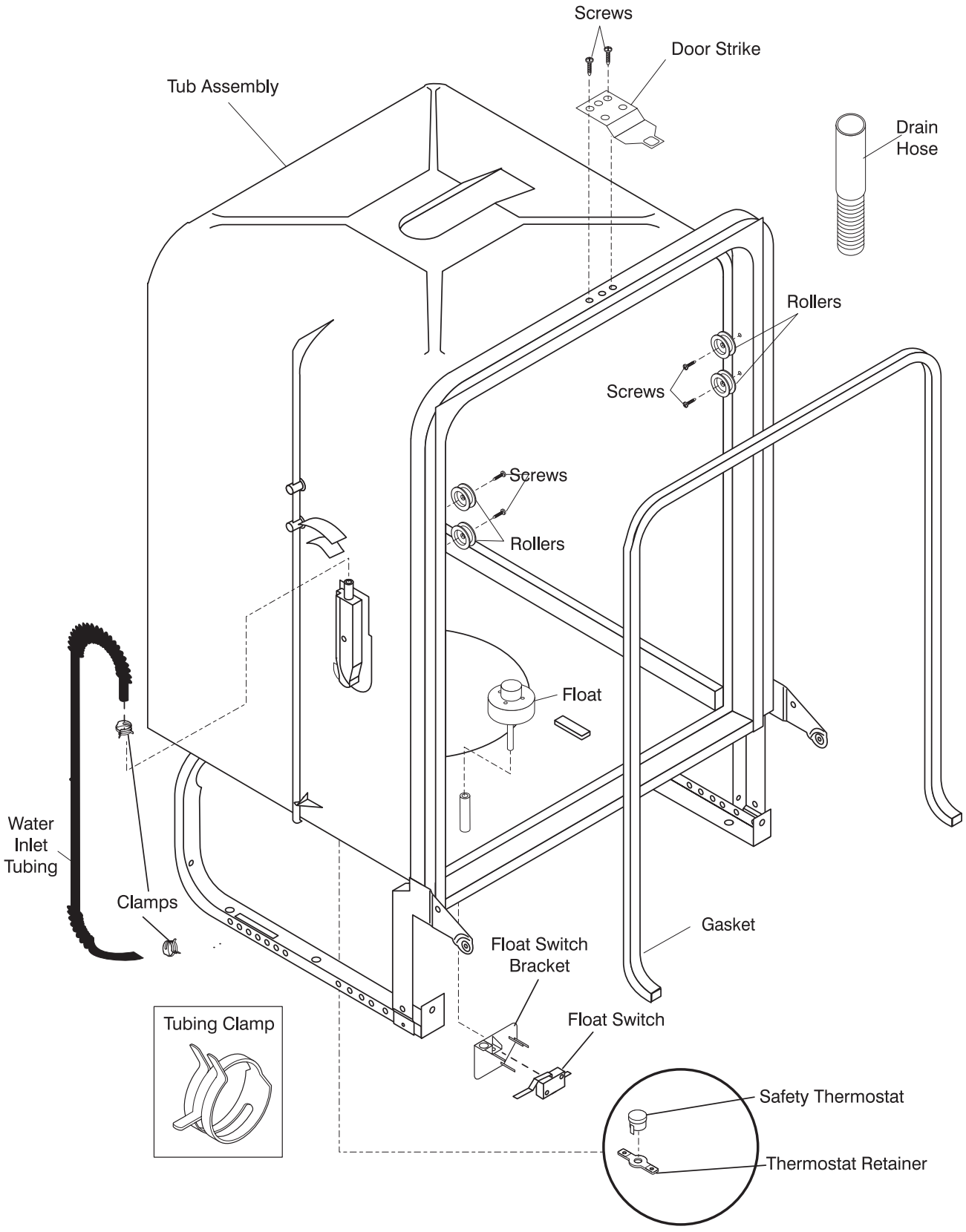
Door for Models GLDB957J, GLDB958J, ADW750EA & ADW850EA



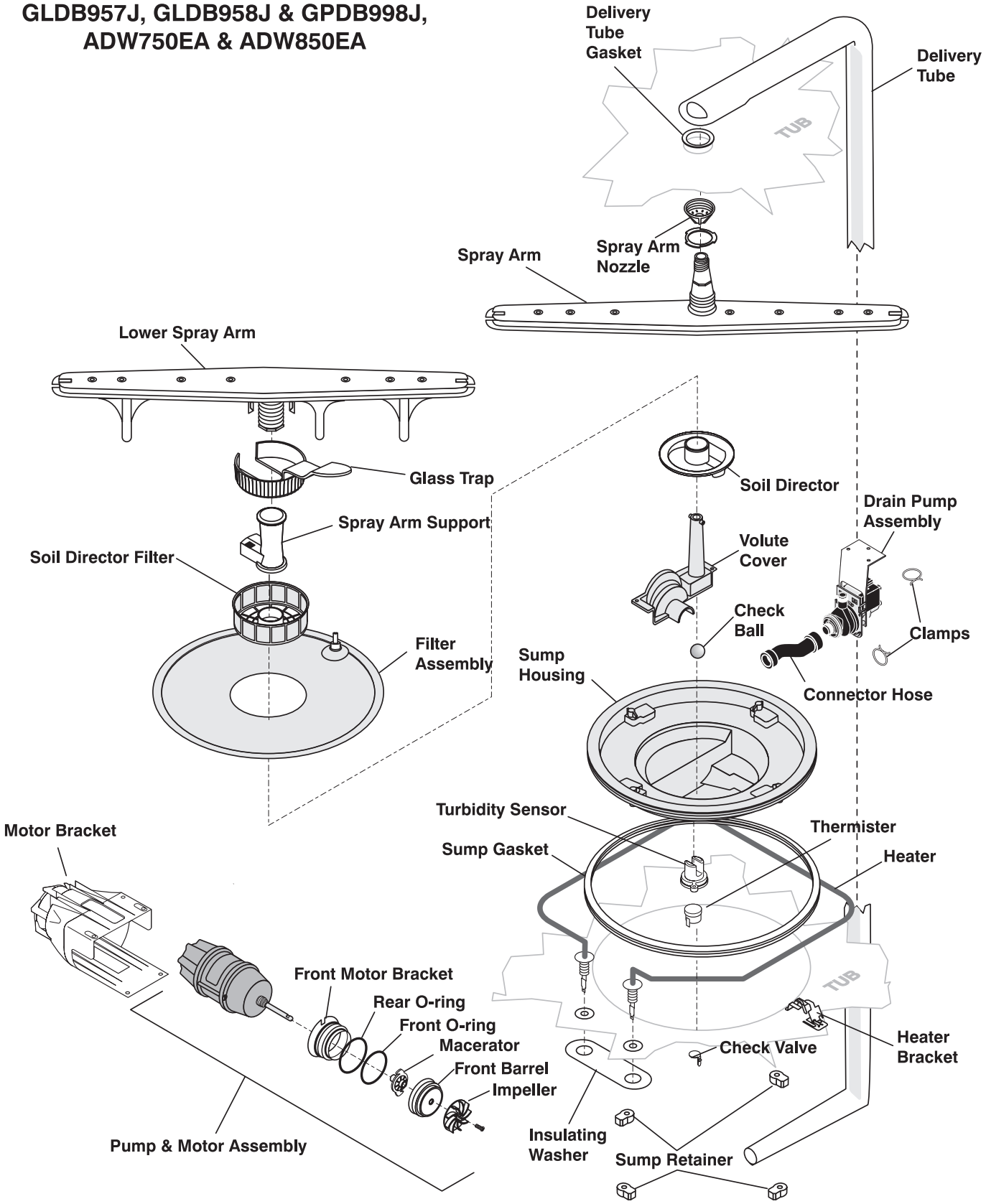
Door for Model GPDB998J



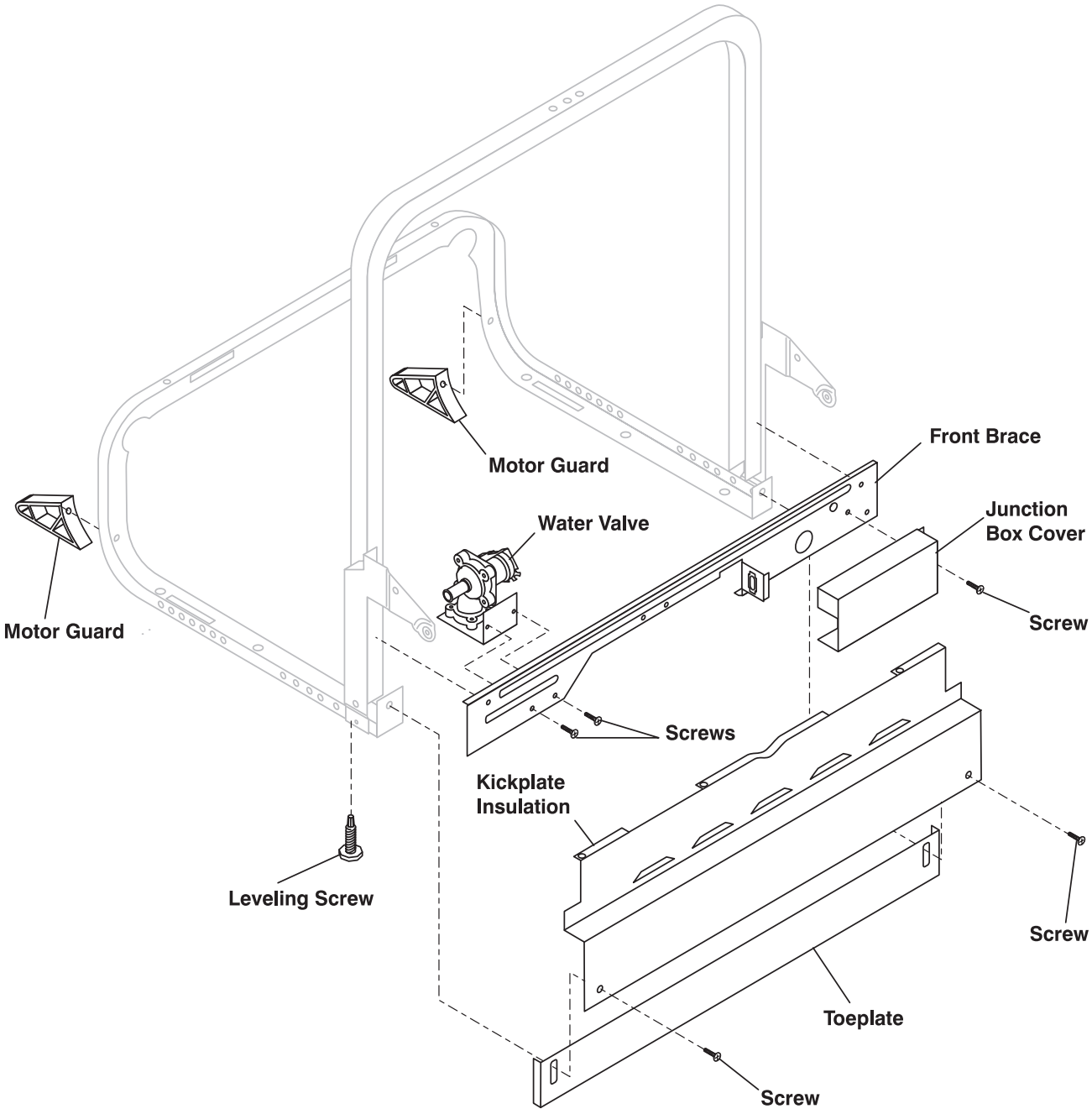
Tub for Models GLDB957J, GLDB958J, GPDB998J, ADW750EA & ADW850EA



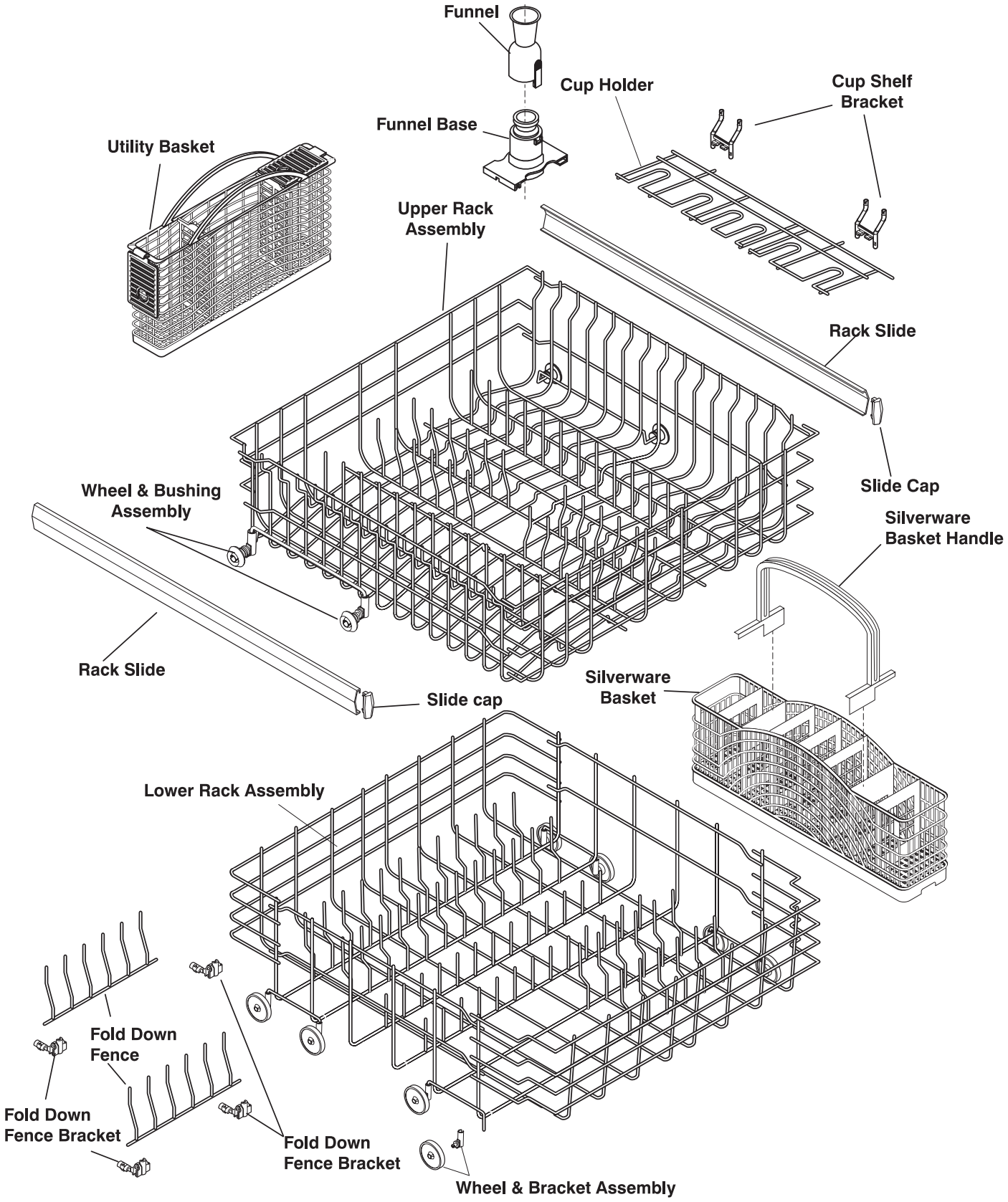
Motor & Pump for Models GLDB957J, GLDB958J & GPDB998J, ADW750EA & ADW850EA



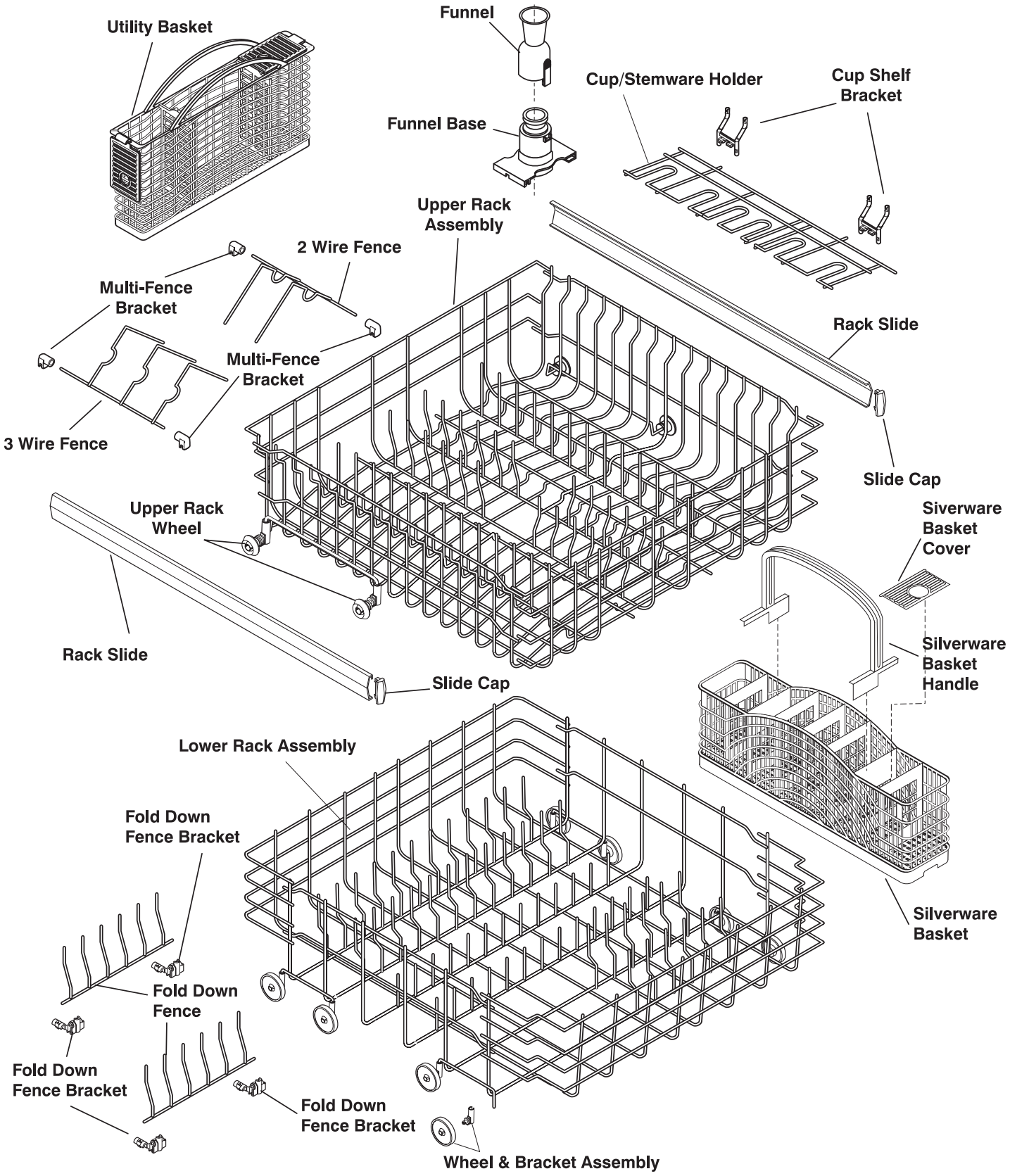
Frame for Models GLDB957J, GLDB958J, GPDB998J, ADW750EA & ADW850EA



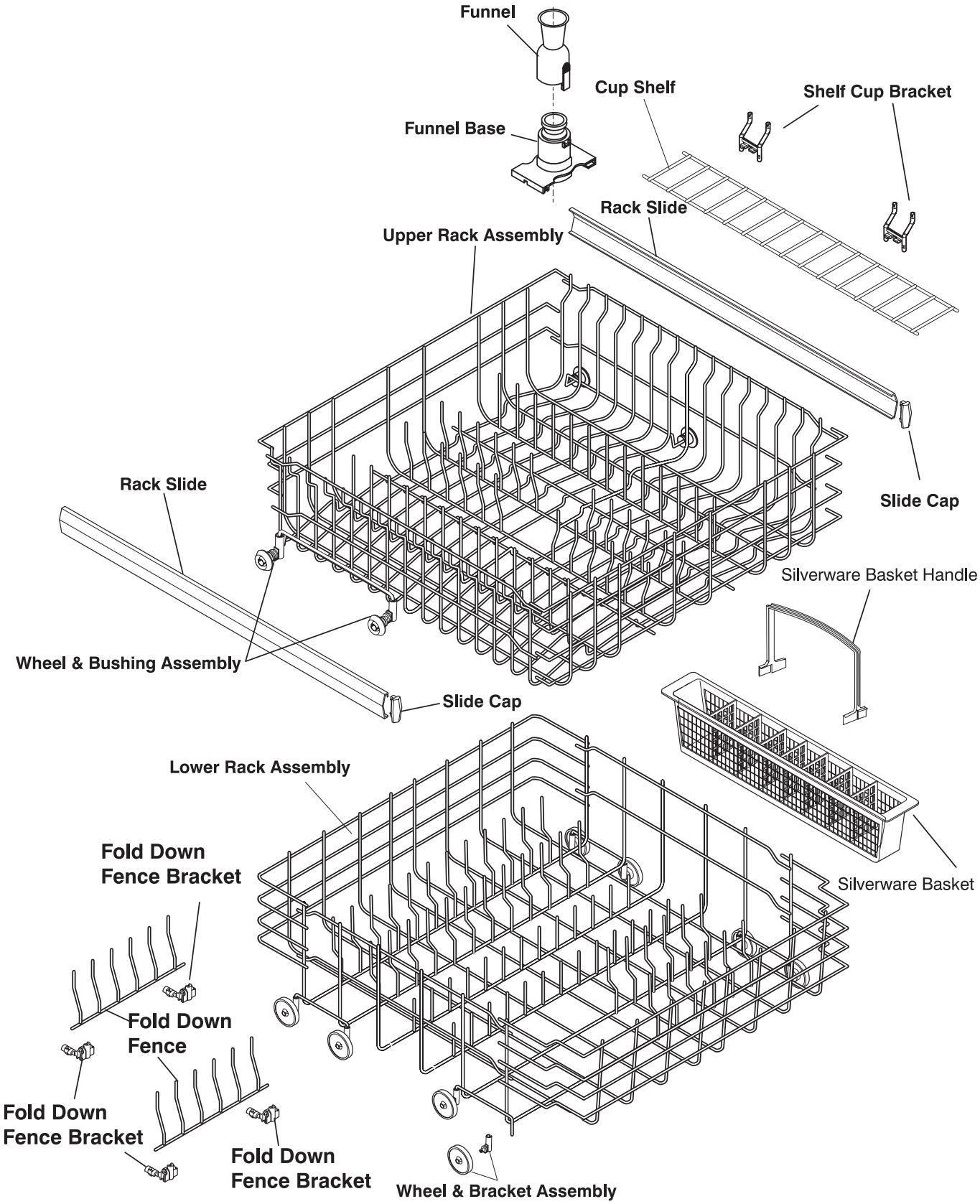
Racks for Model GLDB957J



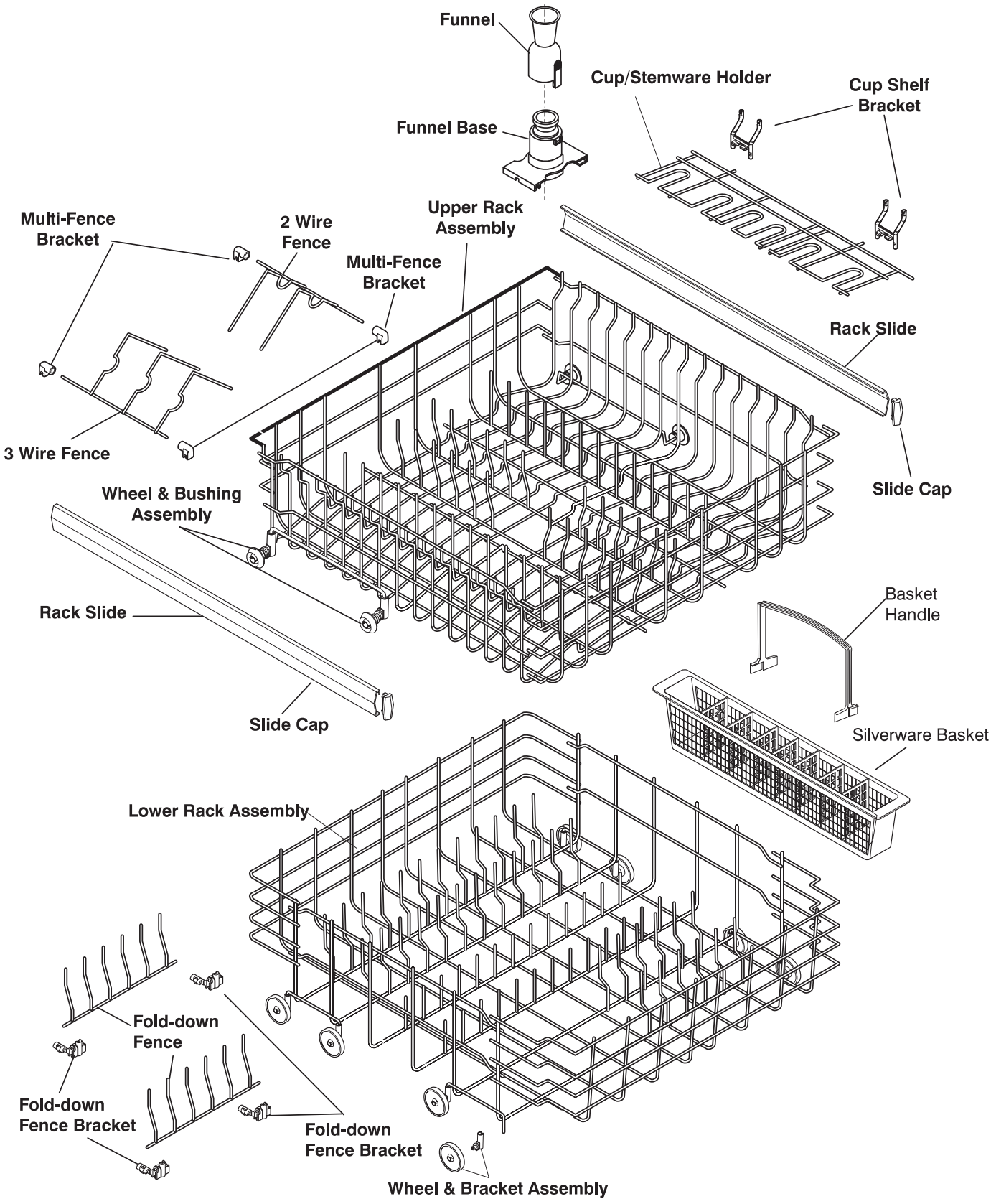
Racks for Model GLDB958J & GPBD998J



Racks for Model ADW750EA



Racks for Model ADW850EA



APPENDIX B

SERVICE DATA SHEETS

MODEL	SERVICE DATA SHEET #	PAGE
GLDB957JB*	154371501	B - 1
GLDB958JB*	154371501	B - 1
GPDB988JC*	154371501	B - 1
ADW750EA*	154390601	B - 2
ADW850EA*	154390601	B - 2

SERVICE DATA SHEET

P/N: 154371501

FRIGIDAIRE Electronic Series

This information is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. Frigidaire Company cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this Service Data Sheet.

Color Code

BK.....Black
BK-W.....Black/White
BU.....Blue
PK.....Pink
R.....Red
R-BK.....Red/Black
R-Y.....Red/Yellow
VIO.....Violet
W.....White
W-BK.....White/Black

Operation

To start . . . . . Close and latch door. Press START/CANCEL pad.

To delay start . . . . Close and latch door. Press DELAY START pad to select desired delay time.

To select a new cycle or option . . . Press desired cycle and/or option pad. The indicator lights will change. Press START/CANCEL within 15 seconds to begin cycle.

To cancel cycle . . Press START/CANCEL. Dishwasher will drain for 90 seconds, then shut off.

For controls lock . . . . . Press and release the NO HEAT DRY/POWER DRY OFF pad. Then press and hold the NO HEAT DRY/POWER DRY OFF pad for 5 seconds.

To unlock, press and hold NO HEAT DRY/POWER DRY OFF pad for 5 seconds.

Water/Service Test

The water/service test is a special function initiated from the power failure mode or idle mode.

While in power failure mode - simultaneously press the NO HEAT DRY/POWER DRY OFF and START/CANCEL pads for 1 1/2 seconds. The dishwasher will then step through the test cycle per the chart. Pushing the START/CANCEL pad will advance the dishwasher to the next step.

While in idle mode - simultaneously press HI-TEMP WASH & START/CANCEL pads for 1 1/2 seconds.

STEP		TOTAL TIME (SEC)	WATER VALVE	CIRCULATION MOTOR	DRAIN MOTOR	HEATER	DISPENSER	VENT	BLOWER	SENSING LED	WASHING LED	RINSING LED	DRYING LED	CLEAN LED
1	FILL/DISPENSER	90	1	0	0	0	1	0	0	1	1	0	0	0
2	FILL	27	1	0	0	0	0	0	0	1	1	0	0	0
3	WASH/HEAT	45	0	1	0	1	0	0	0	1	1	0	0	0
4	PAUSE	0.6	0	0	0	1	0	0	0	1	1	0	0	0
5	WASH/HEAT	75	0	1	0	1	0	0	0	0	0	1	0	0
6	WASH/HEAT/DISP.	60	0	1	0	1	1	0	0	0	0	1	0	0
7	DRAIN	90	0	0	1	0	0	0	0	0	0	1	0	0
8	DRY	90	0	0	1	0	X	0	1	1	0	0	1	0
	TOTAL	488								0	0	0	0	1

X - denotes selectable option

CLEAN LED stays on until door is opened or cycle is started.

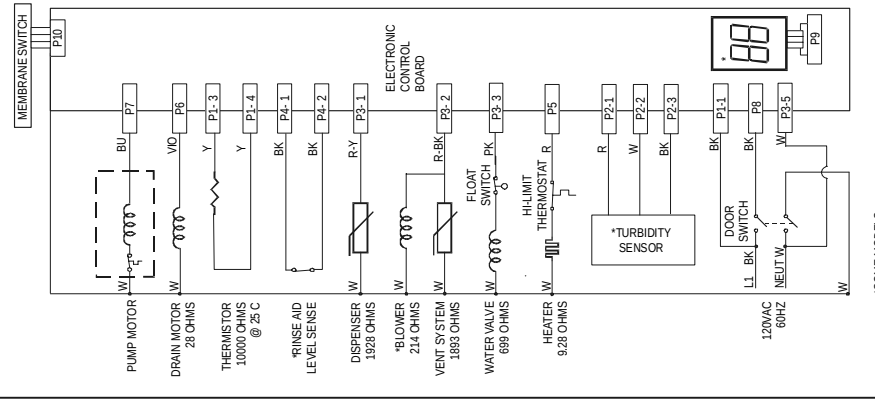
Display Codes (Readout)

LO....Low liquid in the rinse aid dispenser
PF.....A power failure has occurred
HO....Water heating delay
CL.....Close and latch the door
'01-09'....Hour(s) delay before start

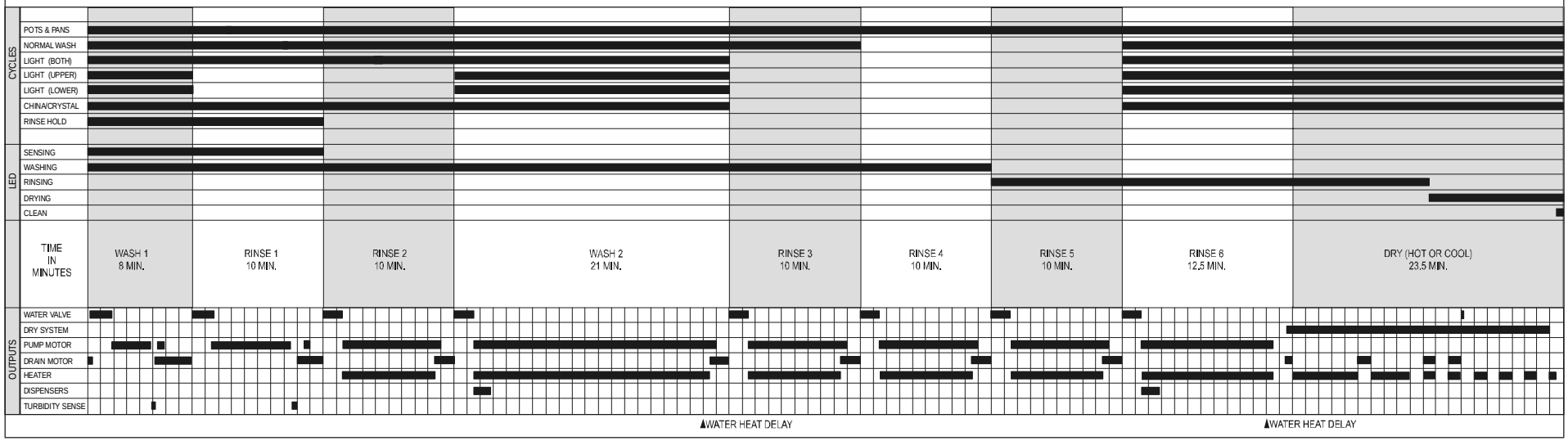
Display Codes (LED)

SENSING ---------- Turbidity sensor is checking the condition of the wash/rinse water. No sensing for LIGHT WASH (UPPER RACK), LIGHT WASH (LOWER RACK) and CHINA/CRYSTAL.
WASHING ---------- Wash portion of cycle.
RINSING ---------- Rinsing portion of cycle.
DRYING ---------- Drying portion of cycle.
CLEAN ---------- Shows completion of cycle. Indicator light will switch off when door is opened.
OPTION LED's Flashing -- HI-TEMP WASH and NO HEAT DRY/POWER DRY OFF LED's flashing indicates power failure has occurred. Press START/CANCEL pad and reselect desired options and cycle.
STATUS LED's Flashing -- The STATUS LED's that are lit when the door is opened will flash. Close door.

Wiring Diagram



Cycle Selection Options



SERVICE DATA SHEET

P/N: 154390601
Amana P/N: 12425416SP

Amana Electronic Series 000926

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To delay start. . . . Close and latch door. Press DELAY START pad to select desired delay time.

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To cancel cycle . . Press START/CANCEL. Dishwasher will drain for 90 seconds, then shut off.

For child lock . . . . . Press and release the NO HEAT DRY pad. Then press and hold the NO HEAT DRY pad for 5 seconds.

To unlock, press and hold NO HEAT DRY pad for 5 seconds.

Water/Service Test

The water/service test is a special function initiated from the power failure mode or idle mode.

While in power failure mode - simultaneously press the NO HEAT DRY and START/CANCEL pads for 1 1/2 seconds.
The dishwasher will then step through the test cycle per the chart. Pushing the START/CANCEL pad will advance the dishwasher to the next step.

While in idle mode - simultaneously press WASH BOOST & START/CANCEL pads for 1 1/2 seconds.

STEP		TOTAL TIME (SEC)	WATER VALVE	CIRCULATION MOTOR	DRAIN MOTOR	HEATER	DISPENSER	VENT	BLOWER	SENSING LED	WASHING LED	RINSING LED	DRYING LED	CLEAN LED
1	FILL/DISPENSER	60	1	0	0	0	1	0	0	1	1	0	0	0
2	FILL	27	1	0	0	0	0	0	0	1	1	0	0	0
3	WASH/HEAT	45	0	1	0	1	0	0	0	1	1	0	0	0
4	PAUSE	0,6	0	0	0	0	1	0	0	0	1	1	0	0
5	WASH/HEAT	75	0	1	0	1	0	0	0	0	0	1	0	0
6	WASH/HEAT/DISP.	60	0	1	0	1	1	0	0	0	0	1	0	0
7	DRAIN	90	0	0	1	0	0	0	0	0	0	1	0	0
8	DRY	90	0	0	1	X	0	1	1	0	0	0	1	0
	TOTAL	488								0	0	0	0	*
						X - denotes selectable option								
						CLEAN LED stays on until door is opened or cycle is started.								

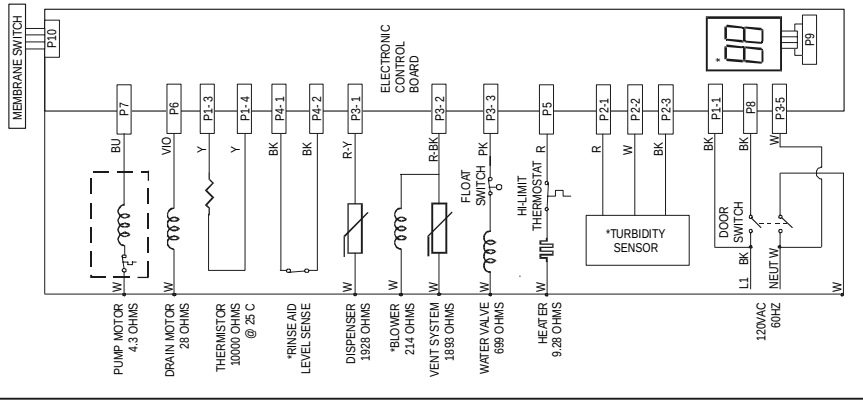
Display Codes (Readout)

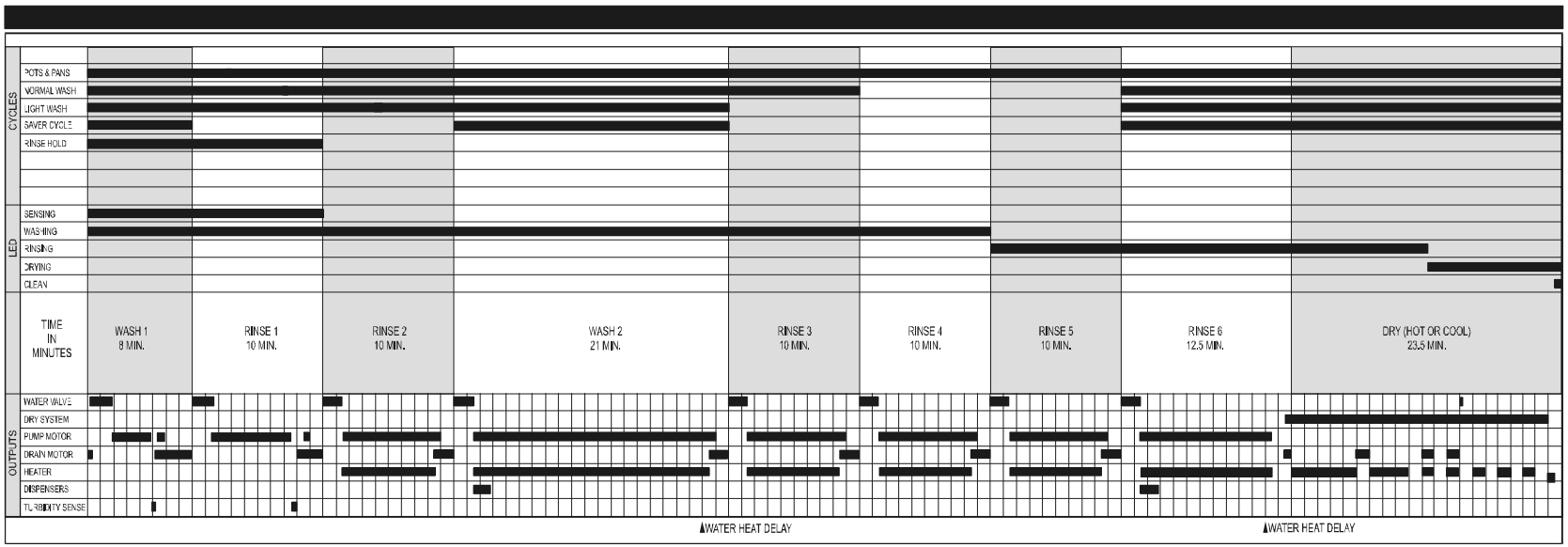
LO....Low liquid in the rinse aid dispenser
PF.....A power failure has occurred
HO....Water heating delay
CL.....Close and latch the door
'01-09'....Hour(s) delay before start

Display Codes (LED)

SENSING ---------- Turbidity sensor is checking the condition of the wash/rinse water. No sensing for SAVER CYCLE.
WASHING ---------- Wash portion of cycle.
RINSING ---------- Rinsing portion of cycle.
DRYING ---------- Drying portion of cycle.
CLEAN ---------- Shows completion of cycle. Indicator light will switch off when door is opened.
OPTION LED's Flashing -- WASH BOOST and NO HEAT DRY LED's flashing indicates power failure has occurred. Press START/CANCEL pad and reselect desired options and cycle.
STATUS LED's Flashing -- The STATUS LED's that are lit when the door is opened will flash. Close door.

Wiring Diagram





Turbidity Sensor

Check turbidity sensor at circuit board connector. Disconnect connector from PC board before testing.

Meter Lead	Wire Color	Resistance
Negative	Red	Open
Positive	Black	
Negative	Black	Photosensitive resistance value Open (no light)
Positive	Red	>= 50K ohm (increases with light intensity)
Negative	White	10 Megohm
Positive	Red	
Negative	Red	Open
Positive	White	
Negative	Black	Open
Positive	White	
Negative	White	Open
Positive	Black	