



MAYTAG

Maytag

**Dishwasher
Service Manual**

16008243
Issued 9/96
Revised 7/98

Contents

SECTION 1. ELECTRICAL EQUIPMENT & TESTING

ELECTRICAL TEST EQUIPMENT	1-1
APPLIANCE TEST METER	1-1
CLAMP-ON AMMETER	1-3
MOTOR TEST CORD	1-3
ELECTRICAL TESTS	1-4
WATER VALVE TEST	1-4
WAX MOTOR CHECK - Detergent and Rinse Aid Dispensers	1-4
DRIVE MOTOR TEST	1-4
VOLTAGE CHECKS	1-6
GROUNDING AND POLARITY	1-6

SECTION 2. MICROPROCESSOR CYCLES/OPTIONS

DWU9962	2-1
KEY PADS	2-1
VACUUM FLUORESCENT DISPLAY	2-3
Cycle Progression Indicators	2-3
Special Indicators	2-4
DWU9922 & DWU9902	2-5
OPTION DESCRIPTIONS	2-6
VFD DISPLAY - DWU9922	2-7
LED DISPLAY - DWU9902	2-7

SECTION 3. ELECTRICAL-MECHANICAL TROUBLESHOOTING

ELECTRICAL-MECHANICAL CHECKS	3-1
ALL MODELS	3-1
DWU9962	3-6
DWU9922 & DWU9902	3-8
TROUBLESHOOTING MICROPROCESSOR MODELS	3-10
DWU9962 - FIELD SERVICE TESTS	3-10
Error Fault Code	3-10
Manual Test	3-12
Functional Test	3-12
Diagnostic Chart	3-13
DWU9922 & DWU9902 - FIELD SERVICE TESTS	3-14
Rapid Time- Down Mode	3-14
Quick Test - DWU9922 Only	3-14
Manual Function Test	3-15
Automatic Function Test	3-15

SECTION 4. SERVICE PROCEDURES

OUTER DOOR PANEL	4-1
ACCESS AND TOE PANELS	4-1
INNER DOOR PANEL	4-2
DETERGENT & RINSE DISPENSER MECHANISM AND RESERVOIR	4-2

WIRE COVER	4-4
DOOR LATCH HOLDER ASSEMBLY	4-4
CONTROL PANEL BARRIER	4-5
CONTROL SWITCH	4-6
TIMER	4-6
MICROPROCESSOR BOARD (On Select Models)	4-7
MICROPROCESSOR BOARD FOR DWU9962	4-7
TRANSFORMER FOR DWU9962	4-8
SENSOR CLUSTER FOR DWU9962	4-9
CONTROL PANEL FACIA	4-11
DOOR GASKET	4-12
DOOR HINGES	4-12
DOOR LATCH STRIKE	4-13
HINGE SPRINGS	4-13
UPPER WASH ARM	4-14
UPPER WASH ARM HOSE	4-14
FLOAT ASSEMBLY	4-15
VENT COVER	4-16
BLOWER ASSEMBLY	4-16
START RELAY	4-17
HEATING ELEMENT	4-18
THERMOSTATS	4-19
WATER VALVE	4-20
WATER INJECTOR	4-21
POWER MODULE	4-22
POWER MODULE DISASSEMBLY	4-25
WASH TOWER ASSEMBLY	4-27
UPPER RACK REMOVAL	4-28
RACK ROLLERS - Tub Wall	4-28
PORTABLE DISHWASHERS	4-29
WOOD TOP	4-29
CABINET	4-29
CASTERS	4-30
FAUCET COUPLER	4-30
RETAINER FOR FAUCET COUPLER	4-31
SECTION 5. GENERAL INFORMATION	
SPECIFICATIONS	5-1
WARRANTY	5-2
MODELS	5-4
CYCLES AND OPTIONS	5-7
SCHEMATICS	5-10

INTRODUCTION

MAYTAG models covered in this manual:

BUILT-IN Models DWU9962 DWU9922 DWU9902 DWU9502 DWU9202
 DWU7802 DWU7702 DWU7502 DWU7402 DWU7202

PORTABLE Models DWC7602 DWC7302

For additional information on issues encompassed in this manual, including safety issues, contact:

Maytag Customer Service
240 Edwards Street S E
Cleveland TN 37311

Phone: 423-472-3333
Fax: 423-478-6722

The first and most important step of any service call is to accurately determine what the complaint is. This is best accomplished by questioning the customer, finding out what the product is or isn't doing and why they feel a problem exists.

SECTION 1 covers **Electrical Test Equipment** for use on the dishwasher. This section also covers general use of the equipment, in addition to providing specific information on amperage, wattage and resistance readings which should be seen.

SECTION 2 covers **Microprocessor Cycles/Options**. This section provides information on the cycles and options for the microprocessor models.

SECTION 3 covers **Electrical-Mechanical Troubleshooting** and provides a list of possible complaints. Find the complaint which you feel best matches that provided by the customer and turn to the appropriate page(s). You will find a list of possible electrical and mechanical problems for the complaint, which have been listed in order of: 1] Ease in checking and 2] Probability. Systematically eliminating these possibilities will allow you to find and correct the problem.

SECTION 4 covers **Service Procedures**. This section will provide information on location of components, disassembly and/or reassembly procedures, the purpose and/or function of the part and in some instances specific checks to be made.

SECTION 5 covers **General Information** such as brief specifications, cycle descriptions and schematics.

GENERAL SAFETY PRECAUTIONS

Information contained in this manual is intended for use by a qualified technician familiar with proper and safe procedures to be followed when repairing an electrical appliance. All tests and repairs should be performed by a qualified service technician equipped with proper tools and measuring devices. All component replacements should be made by a qualified service technician using only factory approved replacement parts.

Improper assembly or adjustment may occur if service or repair is attempted by persons other than qualified service technicians or if parts other than approved replacement parts are used. Improper assembly or adjustment can create hazardous conditions.

There can be risks of injury or electrical shock while performing services or repairs. Injury or electrical shock can be serious or even fatal. Consequently, extreme caution should be taken when performing voltage checks on individual components of a product. Except as necessary to perform a particular step in servicing a product, the electrical power supply should **always** be disconnected when servicing a product.

Further, this appliance **must** be properly grounded. Never plug the appliance into a receptacle that is not properly grounded and in accordance with all local and national codes. See installation instructions for grounding this appliance.

IMPORTANT SAFETY NOTICE AND WARNING

The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) requires the Governor of California to publish a list of substances known to the State of California to cause cancer or reproductive harm, and requires business to warn customers of potential exposures to such substances.

SECTION 1. ELECTRICAL EQUIPMENT & TESTING

ELECTRICAL TEST EQUIPMENT

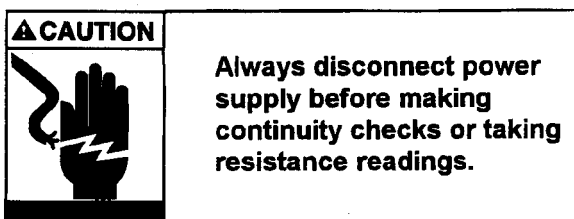
The equipment required to service these products depends largely upon the condition encountered. Locating a malfunction will often require the use of electrical testing equipment such as:

- Appliance Test Meter
- Clamp-On Ammeter
- Motor Test Cord

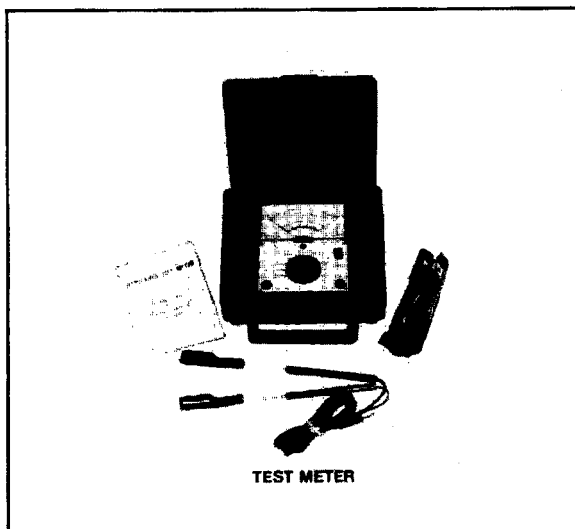
Probably the easiest means of testing electrical components is "continuity testing" with an appliance test meter. Continuity is a complete or continuous path from one point in an electrical circuit to another.

The obvious advantages of being able to check electrical components and circuits without power applied is one of the features of the ohmmeter. Multiple ranges allow accurate determination of resistances of both single components and entire circuit paths. Resistance is measured in "ohms".

APPLIANCE TEST METER

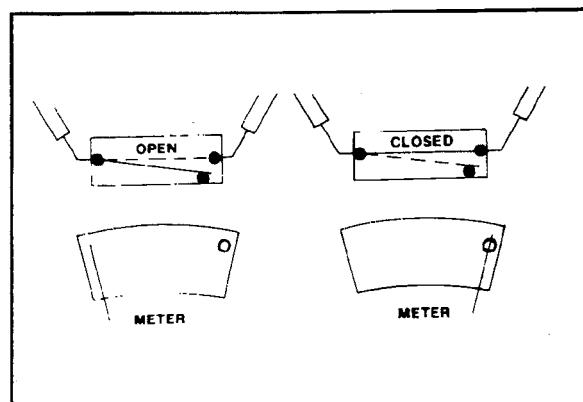


An Appliance Test Meter is a multi-purpose tester combining an AC-DC voltage tester with a multi-range ohmmeter.



Set Meter For Use As Follows:

1. Calibrate meter by touching test probes together and turning adjusting dial until meter reads "0" on the ohm scale. Recheck calibration whenever adjusting dial for ohms settings is changed. (Replace battery if adjustment will not bring meter reading to "0".)
2. Select the scale most easily read and place test probes on respective terminals. When checking a switch, the reading would normally be either open or closed. A reading of 70 on the R x 10 scale would for example be 700 ohms resistance.



CAUTION

Always be sure the power has been disconnected before making resistance measurements. Failure to do so will result in damage to your meter! Internal batteries provide all the power needed to make resistance checks. They should be checked at least once a year and replaced as needed.

For the most part, we will only be concerned with continuity. Is there a path or not? References made between a "closed" (continuity) reading and an "open" (no continuity) reading. One note, when you get an "open" reading, try a higher resistance range (setting). A very high resistance appears as an "open" on the lower ranges. For best accuracy always "re-zero" meter when changing ranges and/or the physical position of the meter.

Electrical components fall into two general categories:

1. **Loads-** Devices that **use** or consume electricity. Examples would include drive motor, heating elements, lamps, timer and solenoid coils.

Continuity tests of "load" devices will show varying levels of resistance from very low for some transformer and motor windings to very high for some timer motors and components on electronic control boards. Usually it is more important to know if there is a path for current flow through a device (continuity) than to know the exact resistance (ohms) of the device.

2. **Switches-** Devices that **control** the supply of electricity to the load or loads in a circuit. Examples include door switches, timer contacts, selector switch and relay contacts.

Continuity tests of switches will show virtually no resistance across closed contacts. Resistance, even low values, indicate burned or dirty contacts in a switch.

Continuity testing is a process of eliminating electrical components involved in a given function of the appliance, until the inoperative part is found. By reviewing the list of possible electrical problems under a given condition, and then performing appropriate continuity checks of the parts involved, you should be able to locate the electrical component which is inoperative.

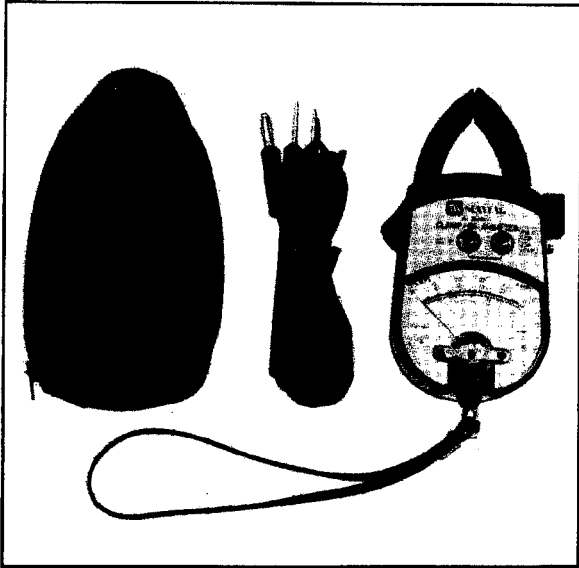
Note: When checking components or circuit paths for continuity, external wiring should be disconnected to eliminate false readings through external paths. Isolate what you want to test.

RESISTANCE CHART

COMPONENT	APPROX. OHMS
Cycle Extender	5400
Heating Element	22
Timer Motor	2700-3000
Solenoid - Pull (Pump)	34
Solenoid - Water Valve	900
Wax Motor-Dispenser Assembly	1900

These values are provided so that you may have an idea of the resistance that you can see in testing. These resistances are not meant to be used as the exact value to determine whether a component should be replaced.

CLAMP-ON AMMETER



Each circuit in an appliance has a "normal" current draw which is an indication of the performance of that circuit. Current draw levels, less than or more than normal, give clues to malfunctions. The clamp-on ammeter measures these currents without breaking the circuit by measuring the strength of the magnetic field developed around each conductor. Current is read by separating the conductors and clamping the jaws of the ammeter around each conductor on which current is read. Low amperage readings indicate problems such as damaged heating elements, etc. High amperage readings indicate the unit being tested is operating under an increased mechanical or electrical load.

Note: Overloads on a circuit breaker or fuse can be traced to the product being tested or the circuit breaker (or fuse) by checking the product's current draw. If the amperage reading is less than the breaker reading, the breaker or fuse box is at fault.

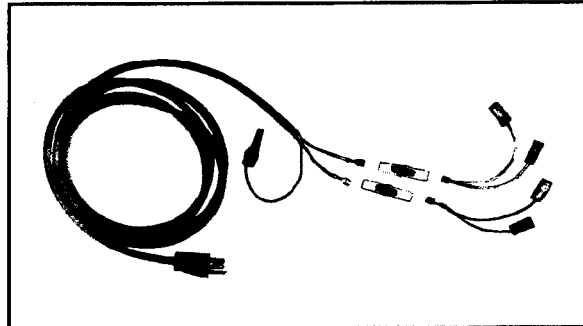
Use Of Ammeter On Dishwasher:

1. **Motor Current-** The reading can be taken at the leads on the motor start relay or at the molex connector.
2. **Heating Element Current-** The reading can be taken using either lead to the element.

AMPERAGE CHART

CYCLE	AMPS
Wash	5.5
Drain (Start)	6.5
Circulate Heat	11.0
Heat Only	5.0 - 5.4
Heater and Blower	5.5

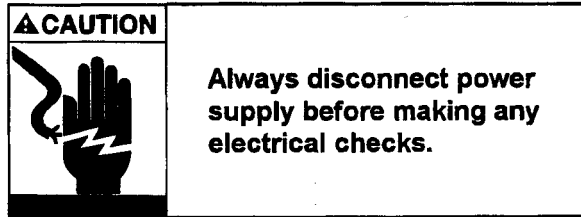
MOTOR TEST CORD



NOTE: Always plug test cord into a grounded receptacle.

A motor test cord may be used to electrically check operation of the various electrical components without removing them from the unit. Testing in this manner merely determines whether or not the part will function independently of other electrical components. In order to make accurate tests, proper connection of the motor test cord is important. With the aid of the drawings under Drive Motor Test, installation of the motor test cord may be done quickly and accurately.

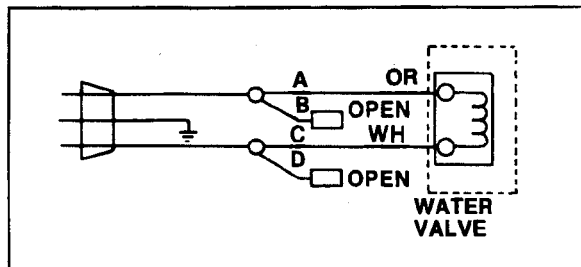
ELECTRICAL TESTS



WATER VALVE TEST

The water valve may be checked without removing it from the dishwasher.

To check the water valve for operation, hook up the test cord as follows:



WAX MOTOR CHECK - Detergent and Rinse Aid Dispensers

A Single Wax Motor Dispenser comprised of a single wax motor to activate both the releasing of the detergent cup cover and rinse aid from the reservoir.

To check the operation of the wax motor, removal from the dispenser retainer or inner door is not necessary.

First snap the detergent cup door shut. Then connect a power test cord across the two terminals of the wax motor. Plug the power test cord into a 120 volt AC recep-

tacle. The plunger in center of wax motor should "push out" and actuate the dispenser in approximately 45 - 60 seconds. Remove voltage to the wax motor and allow the plunger to retract into the wax motor. Apply voltage to the plunger again and observe for proper lifting of the rinse aid plunger.

DRIVE MOTOR TEST

An external start relay and a connector is used to couple the wire harness to the motor wires.

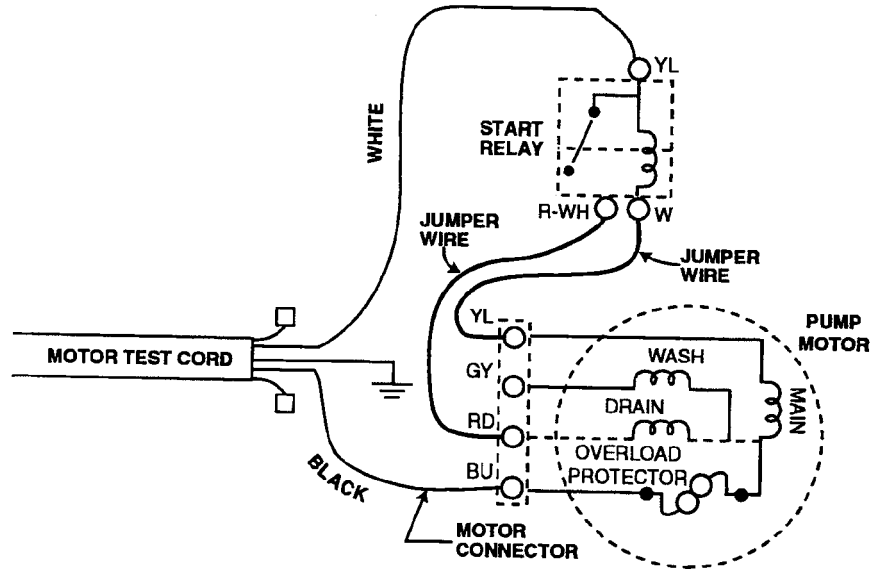
The start relay is mounted on the side of the blower assembly and consists of a coil and a switch. The coil is in series with the main winding in the motor. When the motor is first energized, the current draw in this series circuit is enough to close the switch in the start relay. This closed switch provides a path for neutral for the start winding and the motor starts. Once the motor is up to speed, the current draw decreases and the coil can no longer hold the switch closed. When the switch opens, the start winding drops out of the circuit.

Note: The relay has to be in an upright position to work properly.

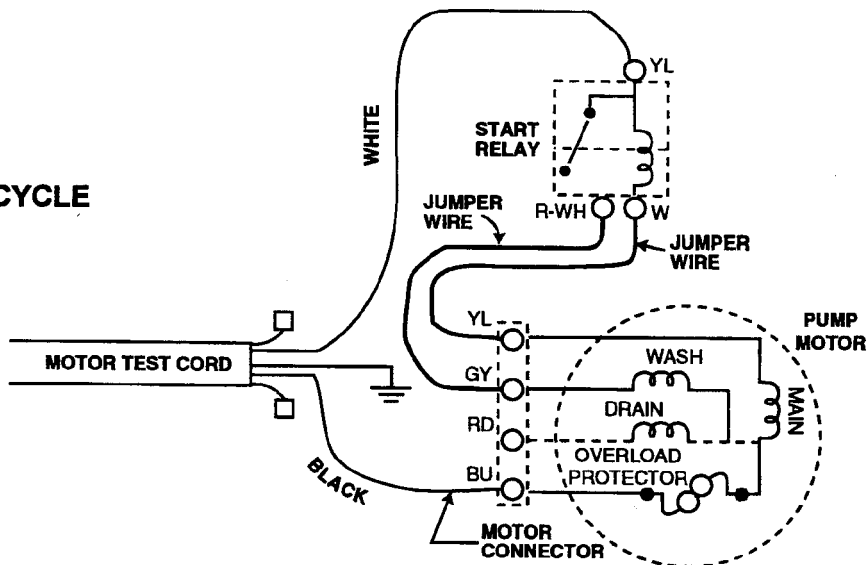
To test the motor we need to separate the connector. This can be done by pushing out the latches on each end of the motor connector and pulling at the same time. The following drawings will help in making the proper connections for testing.

Plug test cord into properly polarized and grounded receptacle.

DRAIN CYCLE



WASH CYCLE



NOTE: DAMAGE TO THE MOTOR WILL RESULT IF THE START RELAY IS BYPASSED AND THE TEST CORD IS CONNECTED DIRECTLY TO THE MOTOR CONNECTOR.

Extreme caution should be taken when performing voltage checks due to danger of possible electrical shock. Except as necessary to perform a particular step in servicing a product, the electrical power supply should ALWAYS be disconnected when servicing a product.

VOLTAGE CHECKS

For the most part these checks will consist of taking readings at the wall receptacle in order to determine the availability of voltage to the product. Voltage checks on individual components of a product are not recommended due to the possibility of electrical shock. Component part testing is best accomplished through continuity checks with an **Appliance Test Meter** (page 1-1).

Note: Use of the meter on voltage higher than the indicated range may cause permanent damage to the meter. To prevent damage, first select highest range and then lower the range for readings which fall within the lower scale.

Set Up Meter For Use As Follows:

1. Turn selector knob to desired meter function and appropriate range.
2. Plug black lead into socket marked black (-).
3. Plug red lead into socket marked red (+).
4. Place test leads into receptacle in order to determine voltage available.

WATTAGES

Cycle	Wattage
Circulate (Wash)	500 - 560
Drain	700 dropping to 200
Dry	620 - 680
Heavy (Wash)	1100 - 1250

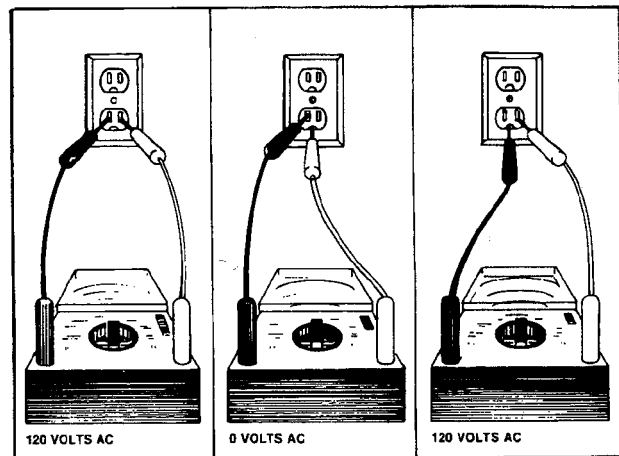
GROUNDING AND POLARITY

The receptacle used for all Maytag products operating on 120 Volts AC must be properly grounded and polarized.

The power cord used on the appliances should be equipped with a three (3) prong polarized grounding plug for protection against shock hazard and should be plugged directly into a properly grounded and polarized receptacle.

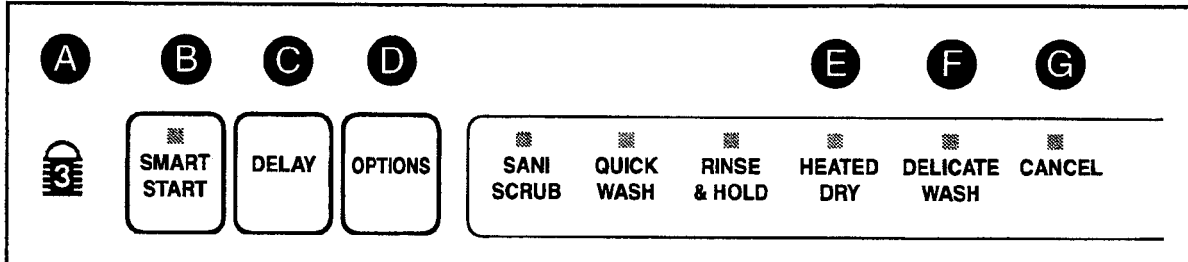
Do not cut or remove the grounding prong from this plug.

It is the responsibility of the person installing the appliance to assure it is adequately grounded and polarized at the point of installation taking into consideration local conditions and requirements. In cases where only a two (2) prong receptacle is available, it is the personal responsibility of the customer to have it replaced with a properly grounded and polarized three (3) prong receptacle. All grounding and wiring should be done in accordance with national and local codes. **USE OF ADAPTERS IS NOT RECOMMENDED.**



SECTION 2. MICROPROCESSOR CYCLES/OPTIONS

DWU9962



KEY PADS

- A. Child-Lock This key will activate a control lockout feature. All keys will remain inactive till the control lock is deselected. To activate, press the key 3 times within 3 seconds. LOCKED will be displayed in the display area. To deactivate, press the key 3 times within 3 seconds.
- B. Smart Start This key will activate the smart cycle. The indicator on the pad will light and a tone will sound when the pad is pressed.

By using a variety of sensors the dishwasher will judge the water temperature, soil level and detergent, as well as the wash arm speed and rotation. It then develops an optimum cycle based on the information gathered. Continuously throughout the cycle the dishwasher will check the conditions. **Note: The consumer may notice the time display will change (either up or down) as the unit adjusts to the conditions.** This is normal operation.

When Smart Start is selected, all other selected cycles are cancelled. However, the Smart Start key must be selected before the end of the first fill. WASH and wash droplets will be displayed in the display area at the beginning of the cycle.

CYCLE SETTING	PRE-WASHES	MAIN WASHES	RINSES	FILLS	WATER USAGE
NO SOIL	0	1	2	3	3
LITE	1	1	2	4	7
LITE PLUS	1	1	2	4	7
NORMAL	2	1	2	5	9
HEAVY	3	1	2	6	11

- C. Delay This key will activate the delay mode. When pressed, 10 minutes will be displayed. Delay time can be increased by 10 minute increments with each touch of the key pad. It will increase to 60 minutes and continue to increase in one hour increments until 12 hours is displayed. To cancel, press the DELAY key pad again. The dishwasher will automatically start as soon as delay time ends.
- D. Options This key will display six additional pads for a minimum of 30 seconds, when depress (SANI SCRUB, QUICK WASH, RINSE & HOLD, HEATED DRY, DELICATE WASH and CANCEL.)

CYCLE SETTING	SEQUENCE	APPROX. CYCLE TIME	WATER USAGE
RINSE & HOLD	RINSE	6 MINUTES	2 GALLONS
QUICK WASH	WASH AND 2 RINSES DRY	17 MINUTES 35 MINUTES (OPTIONAL)*	5 GALLONS
SANI SCRUB	PRE-WASH 2 RINSES MAIN WASH 2 RINSES DRY	75 MINUTES 35 MINUTES 110 MINUTES (+ HEATING DELAY)**	11 GALLONS

*Occurs if HEATED DRY is selected.

**The FINAL RINSE is heated to approximately 150° F. The time required will vary depending on the water temperature at beginning of the rinse.

- E. Heated Dry This key will activate the heating element during the dry cycle. When depressed, HEATED DRY will display in the display area. If depressed again, the element will be deactivated and only the blower will operate during the Dry cycle. If activated in the Smart Start cycle, the control board will sense the water temperature of the last rinse cycle and lengthen the heater on appropriately.
- F. Delicate Wash This key will activate the delicate wash mode. To activate, select another cycle (Smart Start, Quick Wash or Sani Scrub) then depress this key pad. Any cycle, including Smart Start, can become a gentle wash and dry cycle for china and crystal. This wash provides a

a reduced water velocity during washes and rinses by reducing the water fill by one quart. To accomplish this, the fill time is reduced to 70 seconds.

- G. Cancel Pressing this key once will cancel any cycle before it is finished. The unit will drain, if needed, then shut off. Pressing the key twice will turn off all backlighting and VFD displays.

VACUUM FLUORESCENT DISPLAY



Cycle Progression Indicators

- Wash The estimated cycle time remaining for the wash portion of each cycle will be displayed in minutes. The wash symbols will display during the fill portion and alternate to have the appearance of wash action after the motor has started.
- Rinse The estimated cycle time remaining for the rinse portion of each cycle will be displayed in minutes. The rinse symbols will display during the fill portion and alternate to have the appearance of rinse action to increase in one hour increments until 12 hours is displayed.
- Clean Dry When the wash cycle is over CLEAN will be displayed in the VFD.

Special Indicators

<u>Blocked Drain</u>	A restriction is indicated in the dishwasher drainage system.
<u>Blocked Wash Arm</u>	An indication something may be blocking the lower spray arm or restricting the center spray nozzle.
<u>Clean</u>	Displays at the end of a complete wash cycle. CLEAN will remain lit until the door has been unlatched for over 30 seconds.
<u>Delay</u>	Displays when the DELAY key pad is pressed.
<u>Delicate Wash</u>	Displays when this option has been chosen with any wash cycle.
<u>Heated Dry</u>	Displays if HEATED DRY is selected.
<u>Heating</u>	Displays when the water temperature is low and heating element is on during washing or rinsing portions of the cycle. Is not lit during the DRY cycle.
<u>Locked</u>	Displays when the CHILD LOCK has been activated.
<u>Low Rinse Aid</u>	Indicates rinse aid level in reservoir is low. Displays at the end of the cycle as a reminder to add more rinse aid to the dispenser in the door. Will shut off after the door is opened.
<u>PF</u>	Indicates a power failure occurred. Any option selected before the power failure will need to be re-selected. Otherwise, the dishwasher will continue the cycle it was in at the time of the failure.
<u>Rinsed</u>	Displays after a RINSE & HOLD cycle.
<u>Wash Arm</u>	Indicates a possible foaming or starvation of the pump. Dishwasher will fill and drain to correct condition; if corrected, unit will finish wash cycle and not display CLEAN light.

DWU9922 & DWU9902

The dishwasher is activated by pressing any cycle pad on the menu display. All cycles begin with a 5 second pause to allow the consumer to select DELAY feature. When a cycle has been selected, an indicator light above the pad will glow and a short beep will sound. This indicates the dishwasher control has responded to the selection. Also, the cycle length in minutes will appear in the display.

A cycle will not time out if the door is not latched and all keys will be dead. The exception would be if the unit experiences a power failure. This is acknowledged by the display of a blinking "PF" on the control panel. For more information on this see FIELD SERVICE TESTS in Section 3.

CYCLE	CYCLE SEQUENCE	CYCLE TIME	BAR DISPLAY	WATER USAGE
Rinse & Hold	Rinse	6 minutes	1	2 Gal. 8 Liters
Quick Wash	Main Wash & 2 Rinses	17 minutes 52 minutes ¹	2 3 ¹	5 Gal. 19 Liters
Light /China	Pre-Wash, Main Wash ² & 2 Rinses ³	74 minutes	4	7 Gal. 26 Liters
Normal	2 Pre-Washes, Main Wash ² & 2 Rinses ³	82 minutes	5	9 Gal. 34 Liters
Power Scrub	3 Pre-Washes, Extended Main Wash ² & 2 Rinses ³	99 minutes	6	11 Gal. 42 Liters

¹ With Heated Dry option.

² Indicates TempSense water heating option.

³ Indicates final Rinse has TempSense water heating option.

Power Scrub, Normal, Light/China, Quick Wash or Rinse & Hold

initiates the selected cycle including the options that were selected upon completion or termination of that cycle the last time it was run if options have not been pre-selected. The cycle selection may be changed only within the first 60 seconds of the initial cycle selection. After this time the cycle keys are locked out until the cycles completed or terminated.

A pre-drain can be selected by pressing the DRAIN/OFF key, before selecting the wash cycle. The selected cycle will run automatically at the end of the pre-drain function.

OPTION DESCRIPTIONS for MICROPROCESSOR MODELS

TempSense

The water must satisfy the TempSense thermostat during the Main Wash and the last Rinse. If the thermostat is not satisfied after 20 minutes of delaying, the cycle will proceed into the next segment of the cycle. This option may be selected or deselected at any time in the normal washes, however, it is not available with the Quick Wash or Rinse & Hold cycles.

Heated Dry

Pulses the heater on and off during the first 13 minutes of the dry cycle. This option may be selected or deselected at any time in the normal washes, however, it is not available with the Rinse & Hold cycle. In the Quick Wash cycle, this option can not be changed after the first minute of operation.

Sani Heat

Heats the water during all rinses and washes. Acts as if Temp Boost was selected also. This option can be selected or deselected at anytime.

Drain/Off

Cancels any cycle and initiates a 58 second drain after a 2 second pause. Pressing the key pad a second time will terminate all functions immediately. A pre-drain function before a cycle begins, can be achieved by selecting Drain/Off followed by pressing the selected wash cycle.

Delay

To select Delay, press the Delay key until the desired delay time is showing in the display. If the key is released for 2 seconds, then pressed again, the delay will end and cycle will continue.

During a delay period the Delay LED and segment will light and the time remaining in the delay will appear in the display. If the delay is in hours, the number shown will change after 1 hour, then every hour until 90 minutes remain. For example, if 1 hour of delay was selected the display will indicate 59 minutes left after one minute has elapsed. (10-59 minutes or 1-9 hours of delay are available.)

The delay will not time out with the door unlatched.

If delay is chosen without first choosing a cycle, the last cycle ran (either Power Scrub, Normal or Light/China) will run when the delay times out.

Memory Recall (Power Outage Memory)

The cycle options memory may revert to the defaults if a power outage of longer than approximately 5 seconds has occurred. A cycle in progress should continue if this time is not exceeded. The indication of a power outage is a "PF" blinking in the display until a key is selected or the door is opened. Memory retention of options could be as long as 48 hours.

VFD DISPLAY for DWU9922

Heating

This word will be displayed whenever the heater is on, except not in the Main Wash in a Normal or Light/China cycle. Only with the Sani Rinse option will the light be on in the Main Wash.

Heating Delay

These words will be displayed when the machine is waiting for the water to heat up to the Temp Sense thermostat temperature.

Delay

This word will be displayed whenever a delay count down is in progress.

Min, Hour

These words will be displayed as appropriate to indicate proper time in the display lights.

Bar Display

This six segment vertical bar and words represent the length of the cycle and cycle phase; PREWASH, WASH (Main), RINSE or DRY. The appropriate number of segments is on when a cycle is selected. They will go out from top to bottom as the cycle progresses.

CYCLE PHASE	DISPLAY	BAR SEGMENT
Prewash	PREWASH	4 - 6
Main Wash	WASH	3 ¹
Rinse	RINSE	2 ²
Dry	DRY	1

¹ For Quick Wash cycle, 2 segments are displayed then 1 for Rinse.

² For Rinse & Hold cycle, only 1 segment is on.

Rinse Only

This is displayed from the end of a Rinse &

Hold cycle until the next cycle is selected or the door has been open continuously for approximately 30 seconds.

Clean

This is displayed from the end of a cycle until the next cycle is selected or the door has been open continuously for approximately 30 seconds.

Power Scrub, Normal, Light, Quick Wash, Rinse & Hold

Displayed when corresponding cycle is in progress.

Sani Rinse, TempSense, Heated Dry

Displayed when option is selected.

Drain/Off

Displayed only when drain has been initiated using the Drain/Off key pad.

Delay/Resume

Displayed whenever a delay has been selected and is in progress.

LED DISPLAY for DWU9902

Clean

LED will be on from the end of the dry cycle until the door has been open continuously for approximately 30 seconds. The Drain/Off key pad will also turn off the Clean LED.

Delay/Resume

LED is on whenever a delay has been selected and a delay count down is in progress.

Drain/Off

LED will be on only when drain has been initiated using the Drain/Off key pad.

Dry

LED will be on throughout the dry cycle.

Heating Delay

LED will be on when the machine is waiting for the water to heat up to the TempSense thermostat temperature.

Power Scrub, Normal, Light, Quick Wash, Rinse & Hold

LED is on when corresponding cycle is in progress.

Rinse

LED will be on during the Rinse & Hold cycle or from the end of the Main Wash until the beginning of the dry cycle.

Sani Rinse, TempSense, Heated Dry

LED is on when option is selected.

SECTION 3. ELECTRICAL-MECHANICAL TROUBLESHOOTING

ELECTRICAL-MECHANICAL CHECKS

ALL MODELS

The following are electrical and mechanical checks for all dishwashers, except for the unique microprocessor controlled systems. For microprocessor models see respective section: DWUA9962 OR DWUA9922 & DWUA9902".

CAUTION

Always disconnect power supply before making any electrical checks.

WILL NOT FILL

Water Access Valve

Check to determine if valve is turned on and water is available to dishwasher. Check water pressure. Normal pressure is 15 - 120 psi.

Circuit Breaker / Fuse

Check if tripped or blown; reset or replace.

Float

Check whether stuck in the up position or disengaged from the arm of the switch below.

Water Valve

Check solenoid for continuity. No continuity, replace water valve. Check inlet screen for restrictions. Clean screen by flushing or replace valve if necessary.

Door Latch

Check latch adjustment and door switches for continuity. With door switches engaged, check for continuity. No continuity, replace door switch.

Float Switch

Check switch for continuity. No continuity with float in down position, replace float switch.

Selector Switch

Check per electrical schematic. Replace if necessary.

Timer

Check for continuity per electrical schematic. Replace if necessary.

Wiring / Electrical Connections

Check for loose or frayed wire terminal connections. Replace and/or repair all electrical connections.

OVERFLOWS

Float

Check whether stuck in down position. Check for sediment build up. Clean and/or replace float.

Float Switch

Check continuity of float switch with float in up position. If continuity present and float not sticking, replace float switch.

Float Switch Actuator Lever

Check and determine if actuator on bracket is sticking. Clean or replace if necessary.

Water Valve

Check whether water continues to flow when electrical power is turned off. If water continues to flow without electrical power,

replace water valve. **Note:** Low water pressure can also result in failure of the valve to close properly.

SLOW FILL

Water Valve Inlet Screen

Check screen for sediment build up. Flush screen or replace valve.

Fill Hose

Check to determine if hose is kinked or pinched. Straighten hose or remove obstruction in dishwasher enclosure area.

Low Water Pressure

Check water pressure. Normal pressure should be 15- 120 psi.

SIPHONING

Drain Hose

Check proper elevation of drain hose. Must be 32 inches high. Reposition hose to correct elevation. Check if air gap was installed.

POOR CIRCULATION

Water Level - Too Low

Water level should be half way up the side of the heating element.

Drive Motor

Check motor. If motor does not run when timer is between "start" and "dry", replace motor.

Pump Assembly

Check assembly for obstructions or restricted parts. Repair assembly.

Timer

Check for continuity between the timer terminals per electrical schematic. No continuity, replace timer.

Wiring and Electrical Connections

Check for loose or frayed wires and terminal connections. Replace and/or repair all electrical connections.

Seal Ring

Check seal between lower spray arm support and pump assembly. If out of position or damaged, reposition or replace.

POOR WASHABILITY

Spray Arms

Check upper and lower arms for blockage of water ports. Check proper rack loading to avoid spray arm interference during wash action and to make sure the center spray tower is not blocked.

Filter Screen (Select Models)

Check for blocked or clogged pump filter or strainer. (e.g. jar labels)

Detergent Cup Cover

Check spring hinge operation of detergent cup cover.

Wax Motor

Check linkage of actuator brackets and spring positioned correctly. Use motor test cord to check wax motor. (Full extension in 45 - 60 seconds.) Check wire harness to wax motor. Perform continuity checks of harness leading from timer to wax motor.

Rinse Dispenser

Check level of rinse aid in reservoir. Check plunger for proper alignment and mating to the top of the reservoir. Check the rinse

dispenser cap for residue build up on end of stem. Clean or replace required parts if necessary.

Timer

Check for closure of dispenser contact per schematic.

WILL NOT DRAIN

Wiring and Electrical Connections

Check for loose or frayed wire and terminal connections. Replace and/or repair all electrical connections.

Drain Hose

Kinked or restricted. Reroute drain hose and remove any restrictions.

Drive Motor

Check motor. If motor runs when energized, but stops when drain is initiated, check for voltage drop. If voltage is below 105 volts AC, have house wiring checked.

Pump Assembly

Check assembly for obstructions or restricted parts. Repair assembly.

Selector Switches

Check continuity between switch terminals per electrical schematic. No continuity, replace switch.

Timer

Check for continuity between the timer terminals per electrical schematic. No continuity, replace timer.

Inadequate Drainage

Check the drain pipe the drain hose connects to and have repairs done as recommended. If draining to disposer, check for unprocessed food waste. Run disposer if necessary.

CONTINUES TO DRAIN

Siphoning

Check for proper elevation of drain hose. Must have a loop 32 inches above the floor. Reposition hose to correct elevation if needed. Check if air gap was installed.

Timer

Check for timer advancement. Timer motor running and timer not advancing, replace timer. Timer motor not running, replace timer motor. Check closure of drain contact per schematic.

POOR DRYING

Wiring and Electrical Connections

Check for loose or frayed wires and terminals connections. Replace and/or repair all electrical connections.

Water Temperature

Check for low water temperature. Temperature should be between 120° and 150° F. If not, advise customer to adjust water heater and to purge water lines to the dishwasher area prior to starting dishwasher.

Water Level - Too High

Water level should be half way up the side of the heating element. See section on "WILL NOT DRAIN".

Detergent Cup Cover

Check spring hinge operation of detergent cup cover. Check for proper amount of detergent usage. Check for water hardness. Use one teaspoon of detergent per one grain of water hardness.

Rinse Dispenser

Check level of rinse aid in reservoir. Check plunger for proper alignment and mating to the top of the reservoir. Check the rinse

dispenser cap for residue build up on end of stem. Clean or replace required parts if necessary.

Wax Motors

Check actuator linkage brackets and spring positioned correctly. Use motor test cord to check wax motors. (Full extension in 45 - 60 seconds.) Resistance reading of approximately 1900 ohms. Check wire harness to wax motors. Perform continuity checks of harness leading from timer to wax motors.

Heating Element

Check for continuity of element. Check terminal to terminal for continuity. No continuity, replace element. Check terminal to element sheath, continuity found, replace element.

Thermostat

Check proper placement of thermostats. Check mating surface of thermostat face to surface of tub enclosure, must be flat. Adjust thermostat if necessary. Check continuity of thermostats. Temp Boost thermostat is normally CLOSED at normal room temperature.

Blower Assembly

Check for blower motor operation using motor test cord. Look for blower obstructions. Check for unsnapped blower cover. Check for bent blower motor mounting bracket.

Low Ambient Temperature

Check for under-counter drafts due to house insulation voids, cold air returns and air conditioning ducts. Blower will draw this air into the tub in DRY cycle. If necessary, add insulation along back of dishwasher. Maintain clearance of wiring, hoses and blower assembly.

Improper Rack Loading

Check how customer loads dishes into rack. Improper loading can hinder air circulation inside of dishwasher.

Selector Switches

Check continuity between switch terminals per electrical schematic. No continuity, replace switch. (Heater and blower circuit.)

Timer

Check for closure of heater, blower and rinse aid dispenser per schematic.

WATER LEAKS

Installation

Check unit for proper leveling and squareness of door opening.

Door Alignment

Check proper alignment of door liner to door gasket. Use chalk rubbed onto rib of liner, close then open door. Observe chalk markings on door gasket. Adjust door hinges or leveling legs to align door into center of gasket. Screws should be tightened to 75 in. lbs.

Door Gasket

Check door latch adjustment. If correct, check for torn or damaged gasket. Replace gasket if torn or damaged.

Hoses

Check for loose hose clamps or hoses that leak. Tighten clamps and replace leaking hoses.

Spray Arm - Upper & Lower

Check for cracks and replace if necessary.

Lid Latch Grommet

Detergent cup cover area. Check for positioning or cracking. Replace if necessary.

O-Ring Seal

Check positioning of rinse dispenser seal to inner door liner. Reposition or replace if necessary.

Pump Gasket

Check for leak between pump assembly and tub. If gasket is leaking, adjust locking ring to increase tension of pump assembly to tub. Replace gasket if necessary.

Pump Housing

Check for holes or cracks in housing. Replace if necessary.

Water Seal Assembly

Check seal and seat assembly in lower pump assembly.

Water Valve

Check valve body for damage and leaks. Replace if necessary. Also check plumbing connections.

NOISE PROBLEMS

Before servicing unit, check to be sure noise is not normal operating sound. (See User's Guide.)

Banging

Check loose spray arms or nozzle. Check fastener holding upper spray arm to support. Check load for interference with wash arm.

Buzzing

Check and tighten timer mounting screws. Check timer motor for noise; if severe, replace timer or timer motor. Check water valve mounting screws.

Chattering

Check water valve for noise. Replace if necessary.

Grinding

Check for obstructions in pump assembly.

Hammering

Check water valve. Check for low voltage or high coil resistance readings. Check for loose water lines. **Note:** Some noise is normal. Replace water valve if necessary.

Snap

Detergent cup cover noise is normal when door is first opened after a cycle.

Thumping

Check for object in path of spray arms. Remove objects in path. Check for obstructions in pump assembly and remove. Check for damage to pump assembly and repair if necessary.

Vibration

Check for loose screws and tighten. Insert panels may need adjusting and additional pads can be added.

Popping and Clicking

Normal timer noise.

DWU9962

WILL NOT START OR PROGRAM

With the door unlatched, the key pads cannot be activated. When the door is latched, depress any cycle key pad. A display of minutes will appear in the window.

Varistor

If visual inspection shows damage, transformer should also be checked. If transformer checks okay, the VARISTOR only should be replaced.

Water Valve

Check coil (**blue to white**) terminals for continuity. No continuity, replace the water valve. If continuity present, check valve inlet for debris.

Microprocessor

Check microprocessor board wire harness connector at microprocessor terminals PS1-1 to PS1-3. Should show continuity at the harness connection. Check output voltage of board terminals PS1-1 to PS1-3, should see approximately 120 volts AC present. If not, replace the microprocessor board.

OVERFLOWS

Float Switch

With float in raised position check continuity across switch terminals. Should show NO continuity. If continuity found, replace the float switch.

Water Valve

With no continuity across the float switch terminals, examine the water valve diaphragm for blocked bleeder holes. Clean and return diaphragm to the valve. Change valve if necessary.

Microprocessor

Check for output voltage from the microprocessor board at terminals PS1-1 and PS1-3. Should not see any voltage present. If voltage is present, replace microprocessor board.

WILL NOT DRAIN

Drive Motor

Perform continuity check of the motor windings. Check DRAIN start winding (**blue to red**), WASH start winding (**blue to gray**) and the MAIN winding (**blue to yellow**). If no continuity found, replace pump and motor assembly. If continuity present, hook up motor test cord, see Section 1 ELECTRICAL TESTING EQUIPMENT. If motor will not operate with test cord, check for obstructions in the pump.

Start Relay

Perform continuity check for the start relay. With the **yellow** terminal in the UP position, check for continuity across the **yellow** and **white** terminals. No continuity should be present across the **white** and **pink** terminals. Rotate the switch 180° and check across **white** and **pink** terminals. They should now show continuity. If continuity checks do not match the aforementioned descriptions, replace the Start Relay.

Microprocessor

Check the Motor Direction Relay on the board by performing a continuity check across terminals **pink to red** and **pink to gray**. If continuity is not found in either circuit, replace the microprocessor board.

Note: Only one circuit can be activated at a time.

WILL NOT DRY

Microprocessor

Perform continuity check across PS1-1 terminal of connector and the **orange** wire terminal. Should show continuity across the wire harnesses. Check for board voltage output across the corresponding microprocessor board terminals, for Heating Element. (See Diagnostic Chart, page 3-13.) Should show approximately 120 volts AC when the heater relay is activated. If no voltage is present, replace microprocessor.

POOR WASHABILITY

If the consumer is not satisfied with the cycle selected by the computer, the servicer can "Bump" up the cycle normally selected by the computer during the Smart Start. This feature is called "Intelli-Bump" and is activated by pressing **OPTIONS - CANCEL - CANCEL - SANI SCRUB**. To "Bump" up to another cycle, press the SANI SCRUB key pad again. The VFD will display "A0" initially. Each time Sani Scrub is depressed the unit will bump up and display A1, A2, A3. After A3 the unit will reset to original factory pre-set mode.

DWU9922 & DWU9902

The following electrical-mechanical checks are unique to microprocessor models. Prior to following any of the diagnostics listed in this section, follow troubleshooting steps beginning on page 3-14.

WILL NOT START OR PROGRAM

With the door unlatched, the key pads cannot be activated. When the door is latched, depress any cycle key pad. A display of minutes will appear in the window. If not, check the following:

Microprocessor

Check for 120 volts AC input voltage to the board. Check **black** wire to the **white** wire on the terminal connector located along the center portion of the board. No voltage, check **black** and **white** wire harnesses from door switches. If voltage is correct leading to the board, check terminal connectors to board for good contact.

WILL NOT FILL

Make sure unit is programmed. See "Will Not Start or Program". Close door switch on Neutral side (**white** wires). Check for continuity from terminal 5 to **white** terminal on the board to verify complete circuit through water valve and float.

Microprocessor

Check for 120 volts AC input voltage to the board. Check **black** wire to the **white** wire on the terminal connector located along the center portion of the board. No voltage, check **black** and **white** wire harnesses

from door switches. If voltage is correct leading to the board, check terminal connectors to board for good contact.

WILL NOT WASH/DRAIN

Start Relay

Perform continuity check for the start relay. With the **yellow** terminal in the UP position, check for continuity across the **yellow** and **white** terminals. If no continuity found, replace relay. Check for no continuity across **white** and **pink** terminals. If continuity present, replace start relay.

Drive Motor

Perform continuity check of the motor windings. Check Drain start windings (**red** to **blue**), Wash start windings (**gray** to **blue**) and the Main windings (**yellow** to **blue**). If no continuity found, replace pump/motor assembly with start relay. If continuity present, hook up motor test cord. (See section on ELECTRICAL TEST EQUIPMENT page 1-1.)

Microprocessor

Check the internal motor direction relay on the board by performing a continuity check across terminals **pink** to **red** (drain) and **pink** to **gray** (wash). Note: Only one circuit may be activated at a time. If continuity is found in either circuit, replace the microprocessor.

WILL NOT DRY

Microprocessor

Check board **Heater circuit** - implement Manual Function Test and press HEATED DRY. Should see line voltage across heating element terminals. If not check output voltage from board, by measuring voltage across **orange** wire to **white**. Also check

harness connection of **orange** wire to board, hi-limit thermostat and heating element.

Check board **Blower circuit**- implement Manual Function Test and press SANI HEAT. Should see line voltage across blower motor terminals. If not, check output voltage from board, by measuring voltage across **purple** to **white**. Also check harness connection of **purple** wire to board, blower motor.

Check board **Dispenser circuit**- implement Manual Function Test and press QUICK CYCLE. Should see line voltage across wax motor terminals. If not, check output voltage from board, by measuring voltage across NO. 4 to **white**. Should see line voltage of 110 - 120 volts AC. Also check harness connection of No. 4 wire from board to wax motor for continuity.

TROUBLESHOOTING MICROPROCESSOR MODELS DWU9962, DWU9922 & DWU9902

The dishwasher is controlled through the microprocessor board in conjunction with a transformer, board mounted relays and sensor cluster mounted in the pump housing. The transformer provides the necessary voltage(s) to the microprocessor board and the sensors. The board mounted relays function as switches to give the microprocessor board control of the individual components (motor, heater, detergent dispenser, water valve, blower and rinse dispenser).

The sensor cluster consists of a turbidity sensor, a conductivity sensor, a wash arm rotation sensor and a temperature sensor. During the SMART START cycle the control board communicates the sensor cluster to monitor dishwasher performance and selects appropriate cycles to achieve optimum washer performance.

FIELD SERVICE TESTS for DWU9962

The microprocessor board incorporates three test display modes to aid the servicer in diagnosing any problems with the dishwasher. The tests comprise of the Error Fault Code listing, Manual test and the Functional test.

Initial Key Pad Sequence:

All of the following test modes are started by pressing the **Initial Sequence** of key pads (shown below) followed by specific key pads that start the selected test.

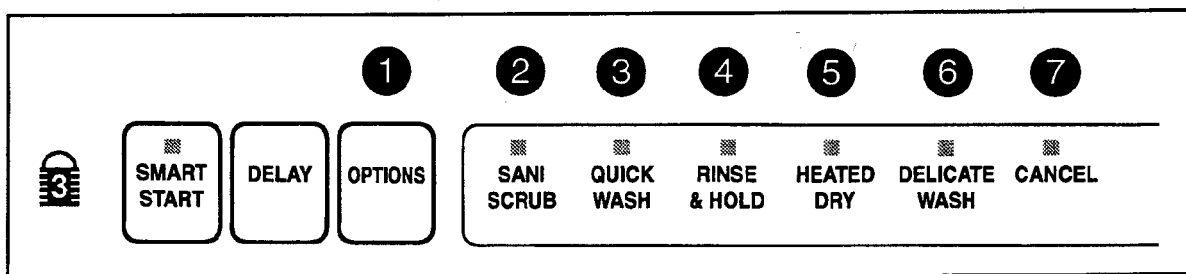
The next key pad depressed determines selected test mode. To end any of the following test modes, press the **CANCEL** key pad.

Error Fault Code

This mode should be run prior to performing any other test modes or tests.

To start, press the **initial sequence** of keys, press **Options** then **Sani Scrub**. The function of this display mode is to list all fault codes that are present. With a list of the fault codes displayed, the servicer can now determine which individual function needs further testing.

The chart on the following page is the Error Fault Code listing of potential codes which may display. When the display begins, '00' will display to indicate the beginning of the display mode.



Each fault code will be shown in alpha/numeric order and displayed for 2 seconds before displaying the remaining codes. The display will continue to repeat the code displays till **CANCEL** is depressed. **Note:** When **CANCEL** is depressed, all codes are cleared from memory.

ERROR FAULT CODE LISTING

CODES	FAULT TYPE	DESCRIPTION	TROUBLESHOOTING
00	Beginning of Error Display Mode.	If only this symbol is displayed, the controller did not detect any errors.	Non required, all is working properly.
F0	Control Board Error.	An error with the controller has been sensed.	Control board door circuit does not appear to be operating properly, check control board.
F1	Motor Fault - motor current not changing.	An error with the motor has been sensed.	Check wiring to motor from control board. Check for bad motor.
F2	Heater Fault - heater current not changing.	An error with the heater has been sensed.	Check wiring to heater from control board. Check for bad heater, open high limit thermostat.
F3	High Current Error.	An error has been sensed with the electrical current within the machine. The current is higher than normal.	This error is probably caused by the heater or motor being energized when they should not be. This could be due to faulty wiring (shorts) or a welded relay. This error could also be caused by line current surges seen by the current sensor.
F4	Detergent Fault - no conductivity change.	No detergent has been detected in the main wash for 10 cycles. Either the consumer is not using detergent in the main wash or an error with the detergent cup may be present.	Check that consumer is using detergent in the main cup. Check the detergent cup wax motor and the wiring to and from the wax motor.
F5	Rinse Aid Fault.	An error with the rinse aid dispensing has been sensed. This may be shown after the RS functional test if the Rinse Aid does not go from full to low.	Check connector from control board to rinse dispenser. Check for bad rinse aid dispenser.
F7	Turbidity Sensor Fault.	An error with the turbidity sensor has been sensed.	A bad turbidity sensor reading has occurred. Check connections to Wash Process Sensor from control board. Also check for properly operating Wash Process Sensor. Finally check control board.
F8	Wash Arm Fault.	An error with the wash arm rotation system has been sensed.	A bad wash arm reading has occurred. Check connections to Wash Process Sensor from control board. Check pump for the correct back wash arms and alignment of sensor. Check for properly operating Wash Process Sensor. Finally check control board.
F9	Thermistor Fault.	An error with the thermistor has been sensed.	A bad temperature sensor reading has occurred. Check connections to Wash Process Sensor from control board. Also check for properly operating Wash Process Sensor. Finally check control board.
1F0	Washer Arm Sensor Error.	An error has been detected sensing the wash arm rotation. Five cycles in a row have concluded with a blocked wash arm present. A reset of the fault codes is necessary to clear this fault.	Check magnet in back rinse arms in pump. Check for operational sensor cluster. Check user loading pattern.
1F1	Conductivity Fault.	An error with the conductivity sensor has been sensed.	A bad conductivity sensor reading has occurred. Check connections to Wash Process Sensor from control board. Also check for properly operating Wash Processor Sensor. Finally check control board.
1F2	High Limit Thermostat.	A temperature above 155° has been detected and the heater will still turn on.	Check the high limit thermostat for operation.
1F3	Communication Problem.	Control and sensor pack communications is not operating properly.	A bad communication to the sensor has occurred. Check connections to Wash Process Sensor from control board. Also check for properly operating Wash Process Sensor. Finally check control board.
1F4	Cold Water Problem.	Water below 90° is being detected at the temperature sensor of the dishwasher from the inlet valve.	Check with the consumer to make sure the inlet water temperature is near 120° F. If necessary suggest that the kitchen faucet be started before the cycle is to get hotter water to the dishwasher from the start.
1F5	Current Sensor Bad.	The controller has sensed that the current sensor is not changing with any loads in the machine.	A bad current sensor on the control board has been detected. Check to make sure connections to board are correct and the black power line is properly connected to the 1/4" spade terminal on the board.

When test is finished and/or the repair completed, run the **Error Fault Code** display listing again. This confirms whether any other part is malfunctioning and the service call is complete.

Manual Test

This test will enable the servicer to manually turn on individual functions. Such as the motor, water valve, detergent dispenser, rinse aid dispenser, heating element and blower.

To start, press the **initial sequence** of key pads, press **Options** then **Delay**.

After this mode is entered the following table indicates which keys will start the relays. The display will show 1 minute and keys will toggle individual functions ON and OFF as follows:

KEY PAD	RELAY ENERGIZED
Sani Scrub	Motor
Smart Start	Water Valve (Fill)
Quick Cycle	Detergent Dispenser
Rinse & Hold	Rinse Aid Dispenser
Heated Dry	Heating Element
Delicate Wash	Blower Motor

The machine will shut off 59 seconds after the last actuation of a key.

When the test is finished and/or the repair completed, run the **ERROR FAULT CODE** display listing again. This confirms whether any other part is malfunctioning and the repair is completed.

Functional Test

This is a longer test mode, lasting 14 minutes and 30 seconds; the display will show 14 minutes. In this mode the dishwasher is allowed to fill, wash, drain and activate the dispensers. Upon completion of this test, the unit will have checked the motor, heater and sensor circuits. The unit will then

display fault codes at the end of the test. (NOTE: Fault codes F3, F4, 1F0, 1F2 and 1F4 will not be displayed in this test mode.)

The servicer must still verify the operation of the blower, water valve, dispensers, VFD segments and LED displays during the test.

To start, press the **initial sequence** of key pads, press **Delay**, **Smart Start** and **Cancel**.

The following is a scenario of the functions to be displayed and their time sequence.

Test Cycle

14 minutes in the display (actual 14 minutes and 30 second test)	
5 seconds pause	all LED's and VFD on
"LOW RINSE AID"	segments should be on entire cycle
5 seconds of blower	DELAY, HOURS turned on in VFD
100 seconds fill	WASH, HEATED DRY segments in VFD
200 seconds motor	WASH, HEATED DRY, wash droplets active
100 seconds drain conditioner	DRAIN, HEATED DRY segments turned on
110 seconds fill	RINSE, DELICATE WASH, HEATED DRY segments on
180 seconds of motor, detergent, heater	RINSE, HEATED DRY, HEATING segments, rinse droplets
100 seconds drain, rinse conditioner	BLOCKED WASH ARM, HEATED DRY segments on
50 seconds heater, blower	DRY, BLOWER FAN, CLEAN segments on

Diagnostic Chart

Following is a chart listing the output and input voltages for the microprocessor board along with their function. This chart should prove beneficial in checking the sensors and other related components. To perform continuity checks of the individual circuits

away from the microprocessor, you must remove power to the dishwasher.

Note: When the door latch opens, the microprocessor shuts off all relays. Thus, no continuity checks through the board can be made.

FUNCTION	BOARD TERMINAL/WIRE	BOARD TERMINAL/WIRE	VOLTAGE-APPROX. (WHEN ACTIVATED)
Blower	PS1-1 (White)	PS1-2 (Purple)	120 volts AC
Water Valve*	PS1-1 (White)	PS1-3 (Blue)	120 volts AC
Detergent Dispenser	PS1-1 (White)	PS1-4 (Blue)	120 volts AC
Rinse Aid Dispenser	PS1-1 (White)	PS1-5 (Pink)	120 volts AC
Heating Element	PS1-1 (White)	Orange Wire	120 volts AC
Sensor Cluster Input Voltage Output Voltage	PS3-3 (#12) PS3-3 (#12)	PS3-6 (#21) PS3-2 (#22)	15 volts DC 15 volts DC
Rinse Aid Sensor Input Output	PS3-3 (#12) PS3-3 (#12)	PS3-5 (#11) PS3-1 (#13)	15 volts DC 0 volts DC (empty) 7 volts DC (full)
Motor Main Winding	PS1-1 (White)	Blue Wire	120 volts AC
Wash Start Winding**	PS1-1 (White)	Gray Wire	120 volts AC
Drain Start Winding**	PS1-1 (White)	Red Wire	120 volts AC

* Float switch must be closed.

** Start windings only. Note: Brief voltage present till start relay drops out of circuit.

FIELD SERVICE TESTS for DWU9922 & DWU9902

The microprocessor board incorporates two functional tests and one diagnostic mode. The test comprise of the Manual Function Test, Automatic Function Test and Rapid Time-Down Mode.

Rapid Time-Down Mode

Select a cycle then within one minute, press the cycle key pad again and Delay key pad simultaneously. As long as the cycle and Delay key pad are held down, the control will advance through the cycle at a rate of one minute per second. The cycle will discontinue when the pads are released.

Initial Key Pad Sequence:

All of the following test modes are started by pressing the following *initial sequence* of key pads followed by specific key pads that start the selected test.

- Rinse & Hold
- Quick Cycle
- Light/China
- Normal Cycle
- Power Scrub
- Delay/Resume
- Temp Sense
- Sani Heat
- Heated Dry
- Drain/Off

The next key depressed determines the specific test mode.

Quick Test - DWU9922 Only

This is a Quick Test program which will turn on the relays and LED lights for 1/2 second, one at a time. This will repeat indefinitely until the Drain/Off key pad is pressed.

To start, press the *initial sequence* of keys, then press **Heated Dry**.

DISPLAY	LED ON	FUNCTION
90 DELAY	LIGHT/CHINA	FILL
81 DRY	DRY	DETERGENT/ RINSE AID DISPENSER
72	SANI RINSE	HEATER
63 RINSE	WASH BLOWER	BLOWER
54 WASH	TEMP BOOST	MOTOR-DRAIN
36 MIN	CLEAN	MOTOR-WASH
27	POWER SCRUB	
18 CLEAN	NORMAL WASH	
9 1 BAR	QUICK CYCLE	
2 BARS	ALL OFF	
3 BARS	HEATED DRY	
4 BARS	RINSE	
6 BARS	DRAIN	
5 BARS	HEATING DELAY	
RINSED	DELAY	
ONLY	RINSE & HOLD	

Manual Function Test

This test will enable the servicer to manually turn on individual functions, such as the blower, heater, motor, water valve and dispensers. The display will show 1 minute and keys will toggle individual functions on and off.

To start, press the **initial sequence** of keys, then **Light/China**.

KEY PRESSED	FUNCTION
POWER SCRUB or POTS & PANS	MOTOR
NORMAL CYCLE	FILL
QUICK CYCLE	DETERGENT/RINSE AID DISPENSER
SANI HEAT	BLOWER
HEATED DRY	HEATER

A key pad must be pressed within 75 seconds or the test mode will discontinue.

Automatic Function Test

This is a longer test lasting approximately 15 minutes. The test will automatically turn on and off the water valve, detergent/rinse aid dispenser, heater, blower and motor. The relays and LED's will turn on one at a time for 1/2 second.

To start, press the **initial sequence** of keys, then press **Power Scrub** or **Pots & Pans**. Sequence chart is on the next page.

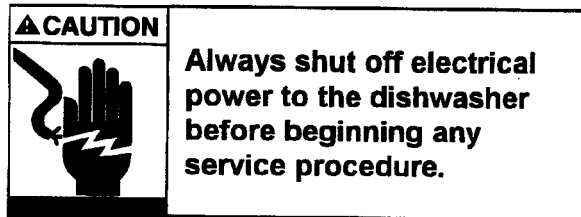
AUTOMATIC FUNCTION TEST SEQUENCE

TIME	LEDs ON	DISPLAY ¹	FUNCTION
5	All	All Except Hour	Pause
5	Power Scrub Clean ²	Pre-Wash 6 Bars	Blower
100	Power Scrub Clean ²	Pre-Wash 6 Bars	Fill
200	Normal Wash Wash ²	Wash 5 Bars	Motor - Wash
100	Normal Wash Wash ²	Wash 5 Bars	Motor - Drain
100	Normal Wash Wash ²	Wash 5 Bars	Fill
30	Light/China Rinse ²	Rinse 4 Bars	Fill
180	Delay Dry ²	Dry 2 Bars	Motor - Wash Dispenser Heater
100	Delay Dry ²	Dry 2 Bars	Motor - Drain
50	Heat Heating ²	Delay 1 Bar	Heater

¹ DWU9922 only

² DWU9902 only

SECTION 4. SERVICE PROCEDURES

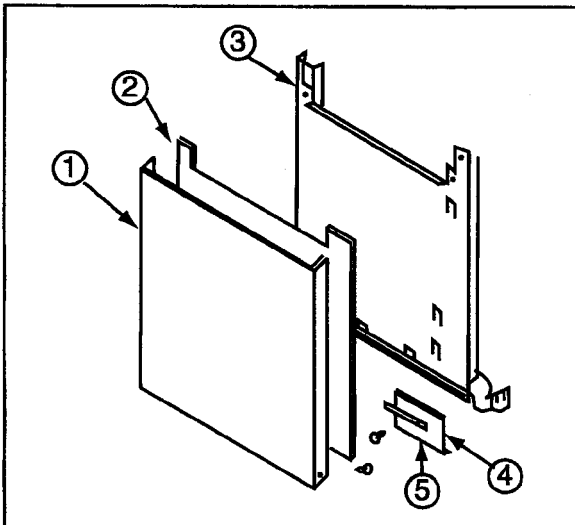


Extreme caution should be taken when performing voltage checks due to danger of possible electrical shock. Except as necessary to perform a particular step in servicing a product, the electrical power supply should *always* be disconnected when servicing a product.

To Change Panels:

1. Disconnect the power supply to the dishwasher.
2. Remove the lower access panel and toe plate by removing 4 screws above and below the panel.
3. Remove the door panel by removing two cross head screws on sides of front panel.
4. Grasp the lower two sides of the door panel then pull down and out from behind the control panel to remove.
5. To reinstall the front panel, place the panel against the outer door 1/4 inch below the control panel. Slide the left side of the front panel up behind the control panel, then the right side assuring the top edge slides under the control panel.
6. Align the front panel side mounting holes with the outer door panel. Then secure the front panel with the color matched screws.
7. Replace the toe panel and access panel.

OUTER DOOR PANEL



<u>NO.</u>	<u>DESCRIPTION</u>
------------	--------------------

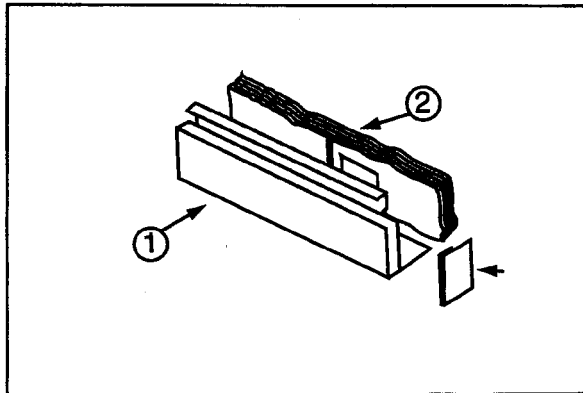
- | | |
|---|------------------|
| 1 | Front Panel |
| 2 | Front Filler |
| 3 | Outer Door Panel |
| 4 | Tub Shield |
| 5 | Harness Strap |

ACCESS AND TOE PANELS

Removal of access and toe panel will allow access to water valve, blower assembly, start relay, door spring adjustment screws, float switch assembly, hoses, electrical junction box and pump assembly.

To Remove:

1. Disconnect the power supply to the dishwasher.
2. The lower access panel is held by 4 screws. (Two above the panel and two below.) Remove all four screws.
3. Toe panel can now be removed by sliding out from between tub support legs.

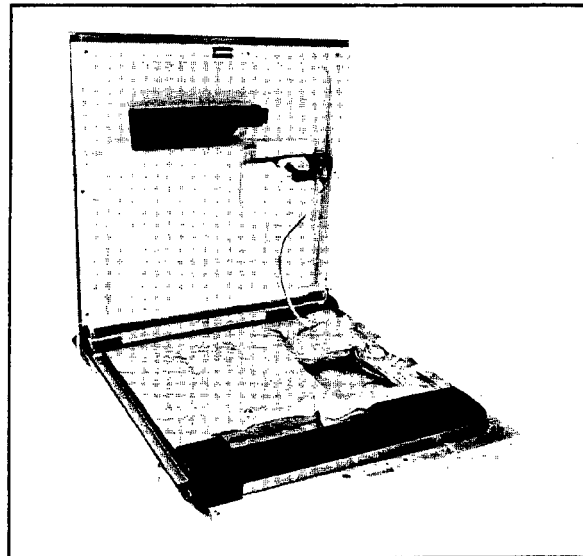


<u>NO.</u>	<u>DESCRIPTION</u>
1	Access Panel
2	Insulation
3	Barrier

Note: When replacing top access panel mounting screws, be sure to use the original screws. Using the wrong screw can result in a damaged tub.

INNER DOOR PANEL

For access to dispensers, switches, timer or microprocessor board and wiring, removal of inner door panel is necessary.

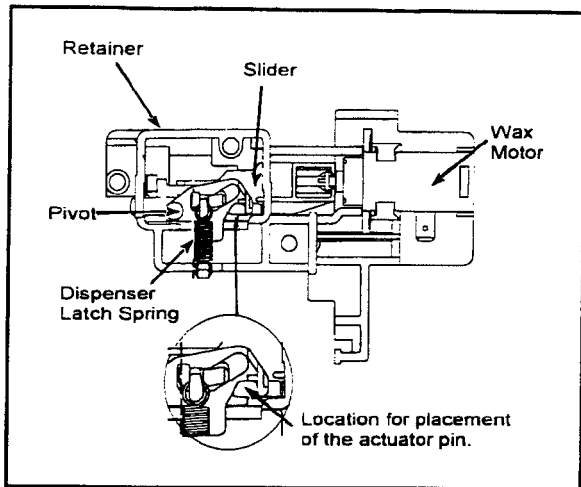


To Remove:

1. Disconnect the power supply to the dishwasher.
2. Open the dishwasher door.
3. Remove the 7 torx® screws along the lip of the inner door.
4. Separate inner door panel from the door assembly.
5. Disconnect wires from dispenser wax motor before pulling inner door away from dishwasher.

DETERGENT & RINSE DISPENSER MECHANISM AND RESERVOIR

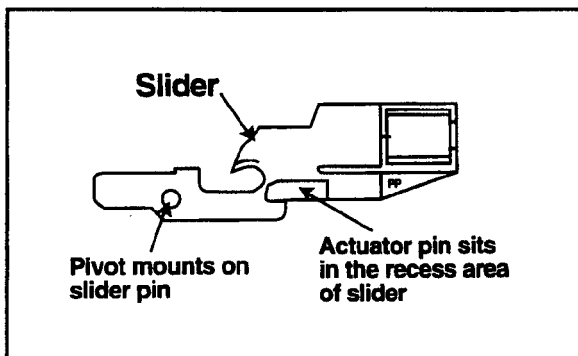
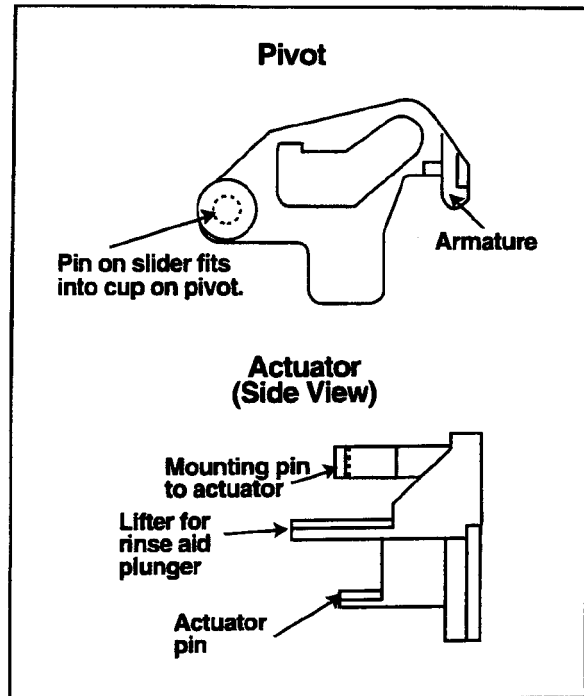
For access to detergent latch/boot, spring, wax motor, rinse dispenser plunger and reservoir.



6. Examine the linkage of the actuator pin to the pivot and slider.
Note: When reassembling, the pin on the actuator should be engaged on the left side of the armature of the pivot and into the recessed slot on the slider.

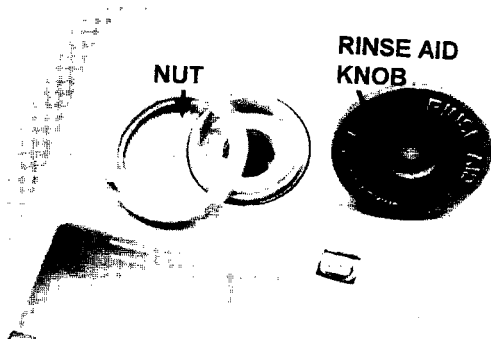
To Check Operation:

1. Disconnect the power supply to the dishwashers.
2. Remove the inner door panel. (See section on INNER DOOR PANEL.)
3. Remove the wax motor and snap the detergent door shut.
4. Gently move the slider of the dispenser mechanism to the left till the detergent door releases. Release the slider.
5. Slide the slider to the left again. Now the actuator will lift the rinse aid plunger. If not, proceed to the next step.



To Remove Mechanism:

1. Disconnect the power supply to the dishwasher.
2. Remove the inner door panel. (See section on INNER DOOR PANEL.)
3. Remove the mounting screw securing the mechanism to the inner door and slide the mechanism off of the reservoir.
4. To remove the wax motor, expand the retainer tabs and slide the motor from the mechanism. When replacing the wax motor, insure the piston is securely clipped onto the dispenser actuator arm.



To Remove Reservoir:

1. Disconnect the power supply to the dishwasher.
2. Remove the inner door panel.
(See section on INNER DOOR PANEL.)
3. Remove the rinse aid knob and rinse aid nut securing the reservoir to the inner door liner.
4. The plunger assembly is located on the top of the reservoir. To remove, twist the plunger so the exposed tabs are clear of the retaining tabs.

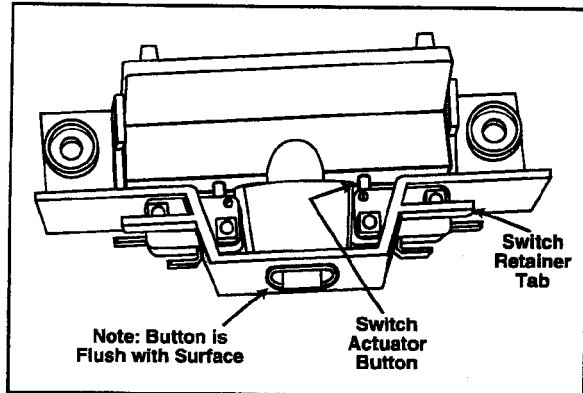
WIRE COVER

Retains the wire harness within the door assembly, located at the lower right hand portion of the door.

To Remove:

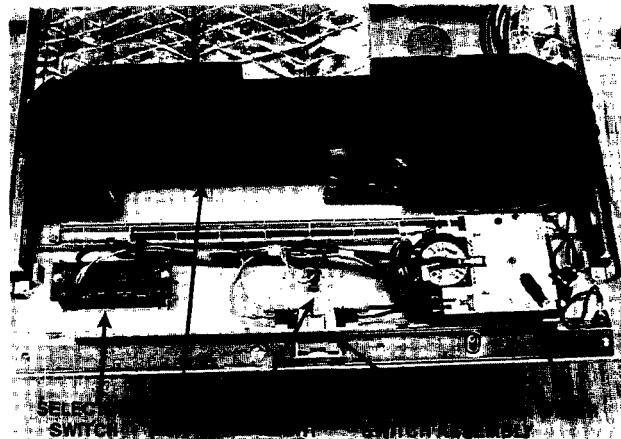
Remove the mounting screw, then slide the strap to one side to disengage from the slot in the outer door frame.

DOOR LATCH SWITCH HOLDER ASSEMBLY



Two door switches are used in the latch assembly. Both switches are normally OPEN and will CLOSE only when engaged by the door latch hook mechanism. Each switch is in series with respective *hot* or *neutral* line operations. Failure of either or both switches will result in dishwasher non-operation

Door switches require no field adjustment.



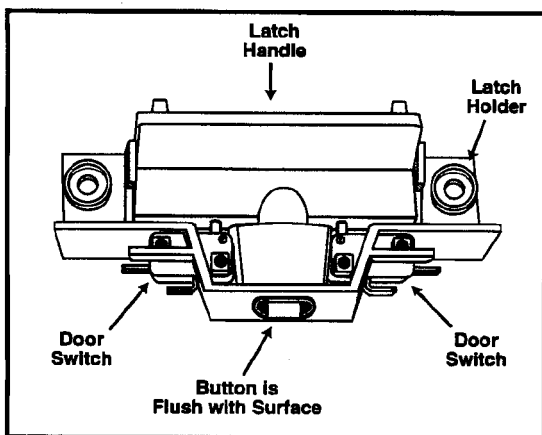
To Remove:

1. Disconnect the power supply to the dishwasher.
2. Remove inner door liner.
(See section on INNER DOOR PANEL.)

3. Remove or set aside metal reinforcement strip.
4. Remove plastic barrier covering the control panel components.
5. To remove door latch switch assembly, remove mounting screw holding assembly to back of control panel. Note screw replacement for door reassembling.

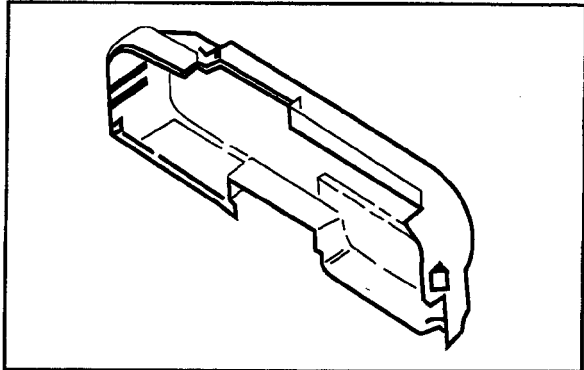
To Disassemble:

1. Disconnect the power supply to the dishwasher.
2. To remove switch, lift retainer tab behind the switch and depress the actuator button on switch. While lifting the tab, pull switch from holder. To reassemble, lift retainer tab and insert switch into holder.
3. To remove latch handle, depress two retainer tabs on switch holder then lift handle.



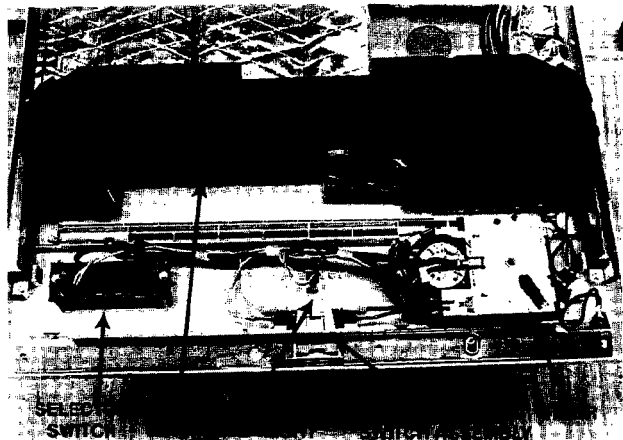
CONTROL PANEL BARRIER

Shields the control components within the control console.



To Remove:

1. Disconnect the power supply to the dishwasher.
2. Depress retainer tab on left side of barrier.
3. Then lift barrier up, left side first and disengage solid tab on right side of barrier from control panel.



CONTROL SWITCH

To Remove:

Disconnect the power supply to the dishwasher.

Disconnect wire leads. (Refer to electrical schematic for proper ohm checks.) Remove hex head screw on each end of the switch.

TIMER

The timer circuits are illustrated in the electrical schematics included in this manual. (Refer to schematic for Electrical Testing Procedures before attempting to replace timer.) *Timer must be replaced as a complete assembly.*

The dishwasher schematic is located behind the access panel. (See Access and Toe Panel section.) The schematic diagram is unique to each model and contains the following:

- Timer Sequence Chart
- Harness Connector Identification
- Electrical Connection Diagram

Using The Timer Sequence Chart:

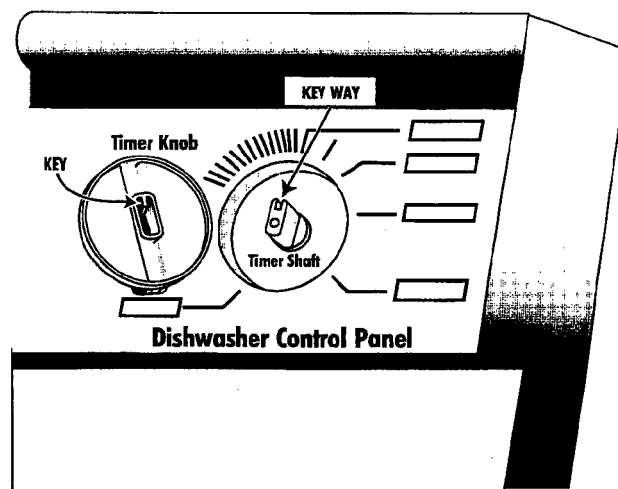
The sequence chart used in conjunction with an ohmmeter can be quite effective when attempting to verify or diagnose problems in the timer, wiring or other electrical components.

1. Identify cycle on chart where problem occurs.

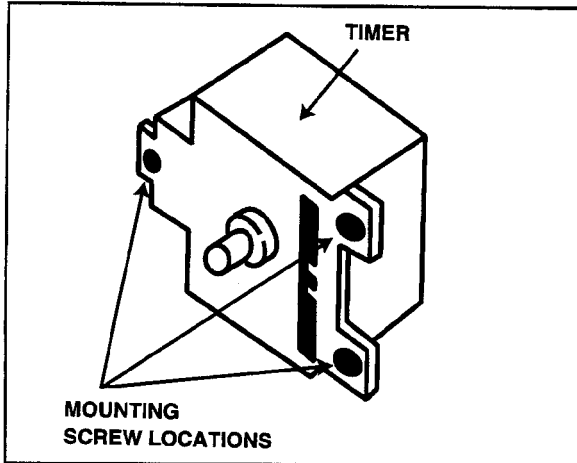
2. Trace down on the chart the timer contacts indicated CLOSED to identify the electrical circuits involved.
3. Perform a "point to point" continuity check of the timer terminals to verify whether corresponding contacts are CLOSED or OPEN when advanced to this cycle position. If contacts do not correspond to Sequence Chart, replace timer.
4. If timer checks out good, perform a "point to point" continuity check of the timer's electrical connector. This will isolate the trouble in the wiring or the components.

To Remove Timer:

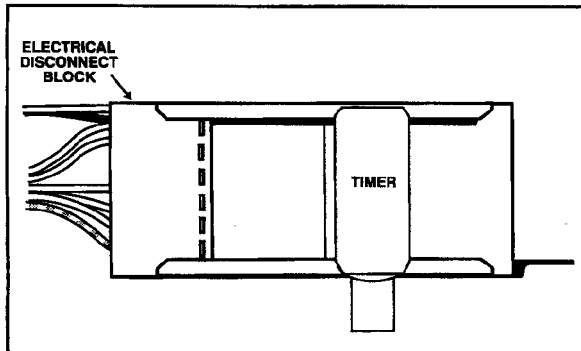
1. Disconnect the power supply to the dishwasher.
2. Remove timer knob by grasping knob and sliding off "D" shaft of timer.



3. Remove 3 hex head screws holding timer to control panel facia.



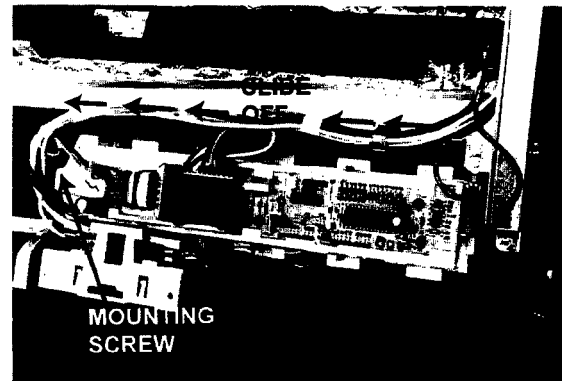
4. Remove the electrical disconnect block from the timer. Retainer tabs are located on each end. Squeeze the tabs while pulling to disengage from timer. Check wiring terminals in disconnect block to insure they are positioned securely.



MICROPROCESSOR BOARD (On Select Models)

To Remove:

1. Disconnect the power supply to the dishwasher.
2. Disconnect wire harness connector from board.
3. Remove hex head screw securing board retainer assembly to control panel.
4. Slide assembly toward screw just removed.



MICROPROCESSOR BOARD FOR DWU9962 MODEL

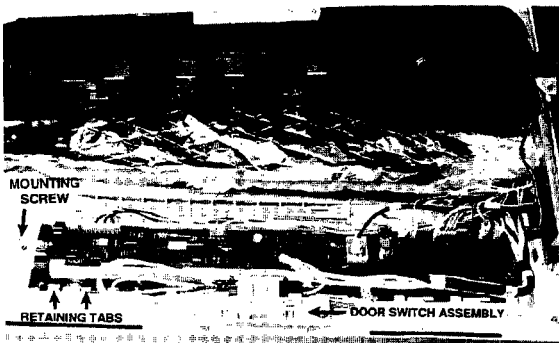
The microprocessor board is a one piece circuit board assembly. The control relays are mounted on the backside of the board as opposed to being mounted separately on earlier models.

To Remove:

1. Disconnect the power supply to the dishwasher.

2. Open the dishwasher door and remove the 7 torx® screws securing the door liner to the door assembly.
3. Remove or relocate the inner door liner to gain access to the microprocessor board assembly.
4. Remove the control barrier by depressing the left retainer tab on the barrier. Then lift the barrier to gain access to the microprocessor board assembly.
5. Disconnect the wire harness connectors to the board and the miscellaneous wires attached. Note the wire locations for reattachment to the replacement board.

CONTROL PANEL AREA EXPOSED



6. Remove and relocate the door latch switch assembly.
7. Remove the hex head screw securing the microprocessor board assembly to the control panel.
8. Slide the microprocessor board assembly to the left, toward the direction of the mounting screw location. Disengage the retainer tabs from the control board tabs. Then lift the board assembly off of the control panel.

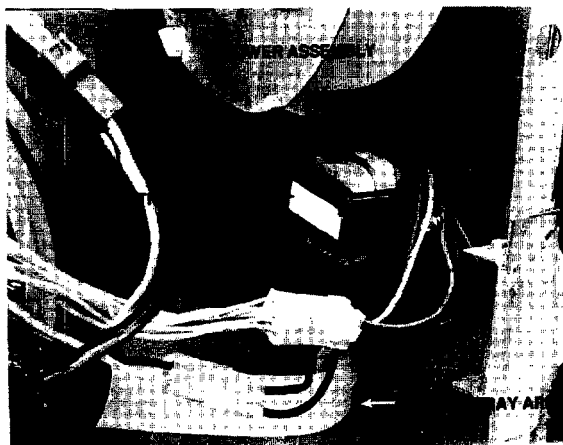
TRANSFORMER for DWU9962

The transformer is used to provide the proper operating voltages to the microprocessor board. The transformer is mounted to the tub support wall behind the blower assembly. Removal of the blower assembly is necessary to service the transformer.

To Remove:

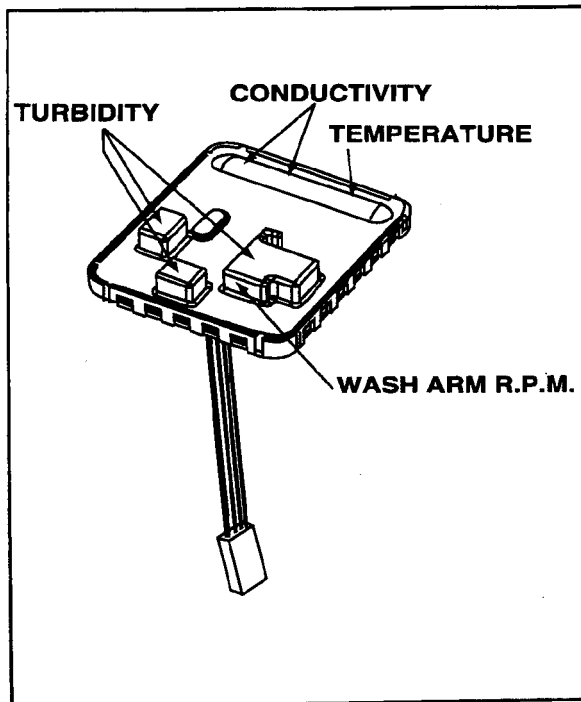
1. Disconnect the power supply to the dishwasher.
2. Remove the access and toe panels of the dishwasher.
3. Remove the hex screw securing the blower assembly to the tub support ceiling. Move the blower assembly aside to access the transformer mounting screws and wiring harnesses.
4. Disconnect wiring harness from the transformer.

To check the transformer, see **ELECTRICAL TROUBLESHOOTING, WILL NOT START/ PROGRAM.**

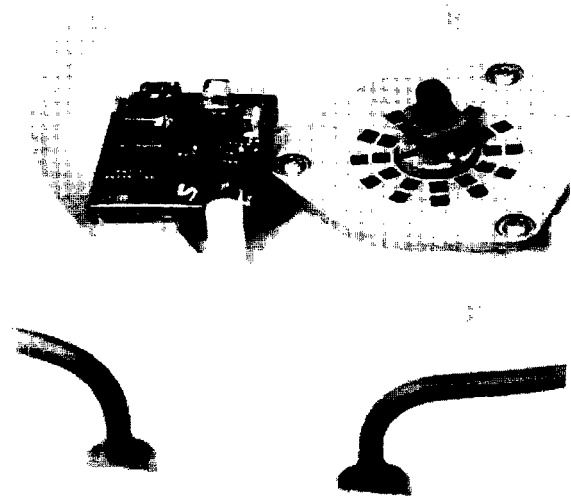


SENSOR CLUSTER for DWU9962

The sensor cluster is equipped with four sensors in the pump housing. The sensor cluster consists of a turbidity sensor, a conductivity sensor, a wash arm rotation sensor and a temperature sensor. These sensors inform the control board on the conditions present in the dishwasher. From this information, the control board will determine the number of washes and rinses required to obtain maximum washability.

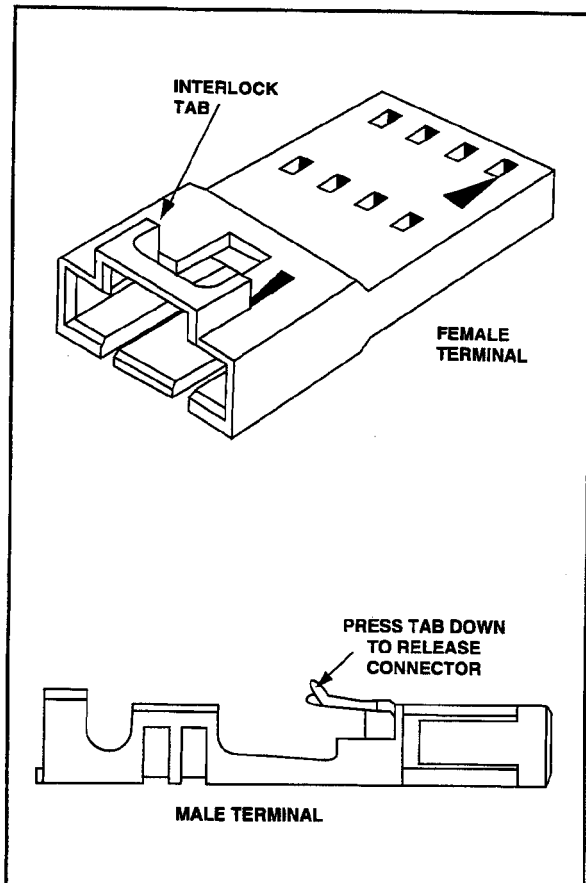


The sensor cluster is mounted inside of the power module assembly, through the lower half of the pump housing. Removal of the pump and motor assembly is necessary to service this area.

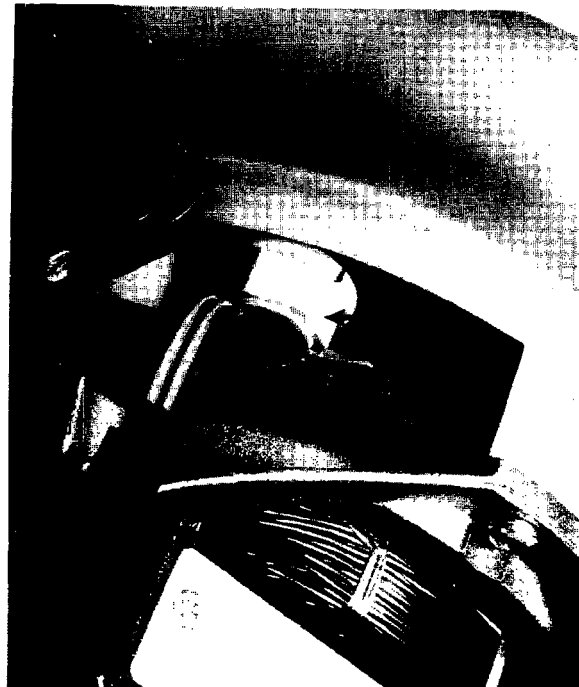


To Remove:

1. Disconnect power supply to the dishwasher.
2. Remove the access and toe panels to gain access to the pump locking ring and pump module wiring harnesses.
3. Disconnect wiring harnesses to the motor and the sensor cluster. To disconnect the sensor harness connector, depress the center tab and separate the connectors. Remove the ground wire from the motor.

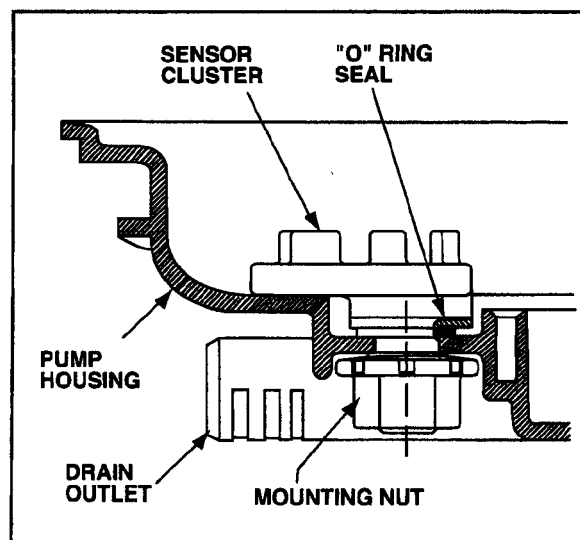


For information on how to disassemble the power module, see pages 4-25 through 4-27.



4. Disconnect the drain hose and upper spray arm hose. Have a towel handy in case of water spillage.
5. Loosen the locking ring from the pump and motor assembly.
6. Open the door and remove the lower rack.
7. Remove the pump module assembly by lifting upward.
8. Disassemble the pump module by removing the center spray nozzle, lower spray arm, strainer, pump filter, rinse arm assembly with magnets, wash arm support, recirculating impeller cover, recirculating impeller, lower pump cover and filter base.

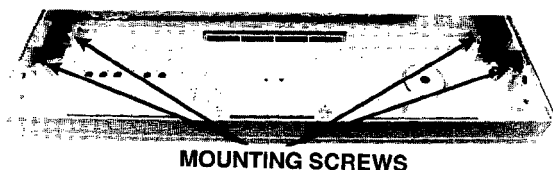
9. Remove the nut securing the sensor cluster to the pump housing. Then lift the sensor cluster from the housing.



10. Examine the O-ring recessed into the sensor cluster for good seal integrity; replace if necessary.
11. To reassemble, reverse the aforementioned procedure. **NOTE:** The sensor cluster has an alignment rib on the underside to aid in positioning.

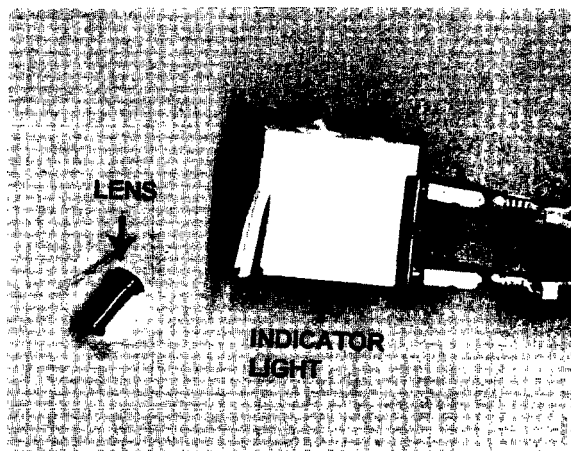
CONTROL PANEL FACIA

The inner door panel must be removed to obtain access to screws securing control panel to door panel. (See previous sections on removal of console components to gain access.)

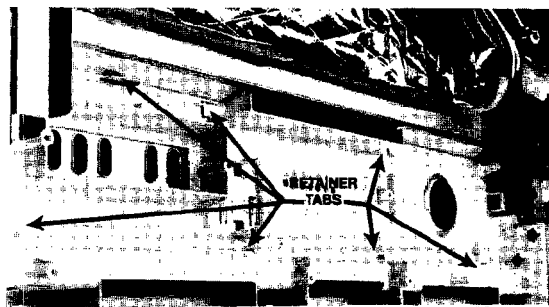


To Remove:

1. Remove 4 hex head screws securing the control panel to the outer door.
2. Disconnect wiring to electrical components in the control panel area.
3. Remove electrical components. (e.g. Control Switch, Cycle Extender, Microprocessor and etc.)



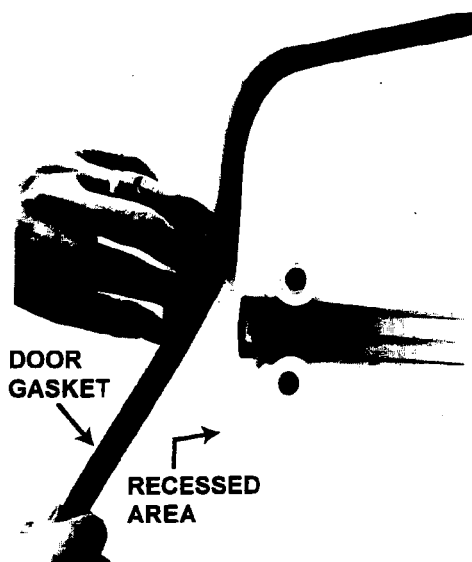
4. Remove *indicator lights* from their lenses by sliding the body of the light assembly away until it disengages from the lens. Remove lens from front of facia.



5. Bend up retainer tabs which hold the facia to the control panel.
6. Carefully separate facia from panel by pushing tabs through slots in control panel. **CAUTION:** Panel is susceptible to being scratched or bent easily during disassembly or reassembly.

DOOR GASKET

The door gasket provides a seal between the door and tub.



To Remove:

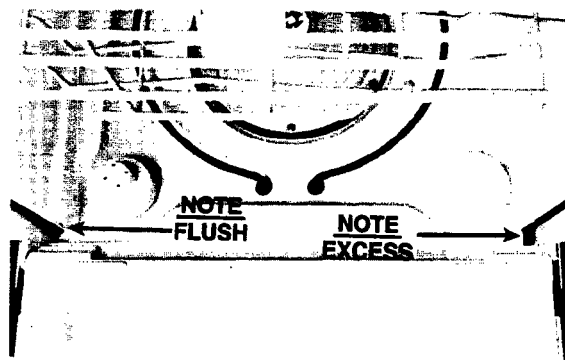
1. Open door.
2. From lower corner, pull gasket up and out of tub recess. Note bend in gasket in right hand lower corner.

To Replace:

Note: Wetting the gasket will make installation easier.

1. Start at lower right hand corner. Form a bend 1" from the end of the gasket as shown.
2. Gently work the gasket into the recess part way up the right side.
3. Begin inserting the gasket in the recess on the lower left with the end flush.

5. Check for proper door and latch adjustment to insure good seal of gasket.



DOOR HINGES

The door hinge screws are used to adjust complete door assembly to dishwasher tub front. Insures good seal of door gasket to inner door liner.

To Adjust:

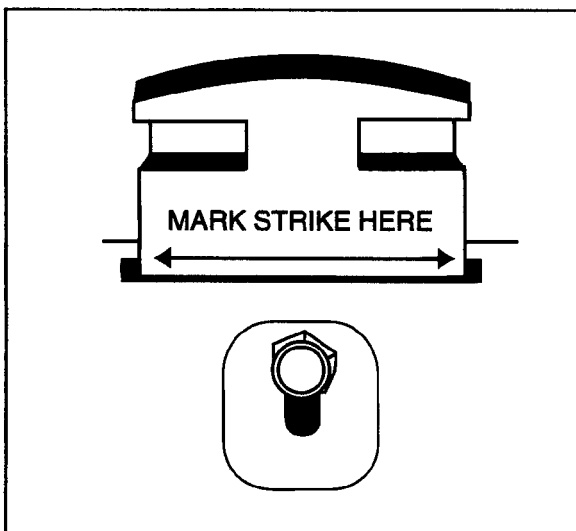
1. Remove side trim strips from door assembly and loosen hinge screws.
2. Latch the door with the hinge screws loose.



3. Pull the bottom of the door away from the tub as far as it will go.
4. Tighten the screws very tight (75 in. lb. minimum) to insure they will not loosen.
5. Adjust door latch strike for low door closure force. Check door liner placement by chalking the liner with chalk or talcum powder, then close. Upon opening, the chalk line will indicate door liner placement onto the gasket. Make necessary adjustments to door strike and door assembly for center placement on gasket.

DOOR LATCH STRIKE

The door latch serves as a "TENSION" lever for proper door seal. It also provides the mechanical actuator for door switch operation.



To Adjust Door Strike:

1. Mark "underside" of the door strike prior to adjustment. This will provide a guide

to make accurate "in" or "out" adjustment.

2. Loosen hex screw securing strike assembly to tub. Slide strike "in" to INCREASE tension on door and door seal. Moving strike "out" will DECREASE tension.

HINGE SPRINGS

The hinge springs provide a counter balance to the weight of the door.

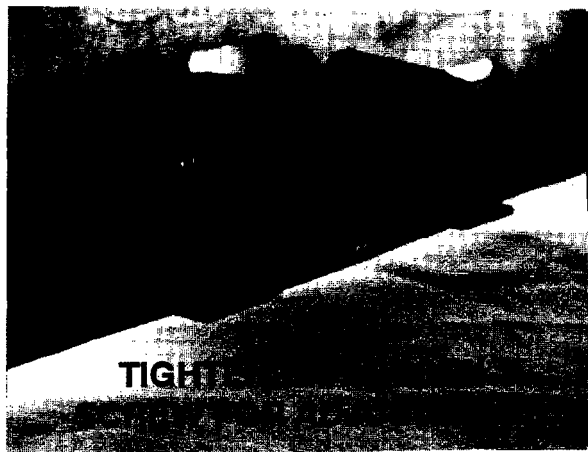
The door spring is inserted through the offset portion of the link, with the offset of the link positioned toward the dishwasher. The other end of the link is mounted into the appropriate slot of the hinge.



Timer Models The left spring link is mounted in the rear notch and the right link is mounted into the front notch of the hinge.

Microprocessor Models Both links are mounted in the front notch of the door hinge.

The bottom end of the spring is hooked in the hole of the adjustment bracket. (Always point the spring hooks toward the dishwasher.)



Door spring adjustment brackets are located behind the toe panel, on the right and left side. They stretch the springs by sliding forward and back along the dishwasher tub support. To change door spring tension, use a 1/4" hex nut driver.

To Adjust:

1. **Increase Spring Tension:** Turn the adjustment screw in a clockwise direction.
2. **Decrease Spring Tension:** Turn the adjustment screw in a counterclockwise direction.
3. Adjust the springs equally. Failure to do so may lead to a "twisted" condition of the door.

Proper Door Spring Tension:

The proper setting is when the door will remain open to a minimum of 6" (measured

from tub flange to top of door). When opened slightly farther, the door will fall at a slow rate and come to rest horizontally or up to 3" above horizontal. The door should not fall so fast as to "bounce" when fully open.

Heavy Decorator Panels may make it necessary to relocate the door spring link to the rear notch on both springs. This will enhance the spring tension. Check door again for proper tension. Auxiliary Door Spring Kit available through authorized Maytag Customer Service parts distributor.

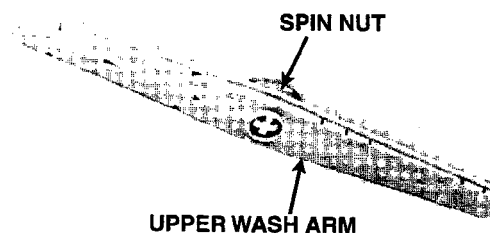
UPPER WASH ARM

To Remove:

Unscrew spin nut above the wash arm.

To Replace:

Screw spin nut onto the upper spray hose.



UPPER WASH ARM HOSE

Water is supplied to the upper wash arm through this hose via the pump assembly. The hose runs away from the pump then

vertically up the right side of the dishwasher tub and enters above the upper wash arm. The outlet of the hose is sealed to the tub with a sealing washer between the hose and the tub. The seal is compressed to the tub via the spin nut of the upper wash arm.



washer to top of tub. Insure seal washer is properly positioned between hose assembly and top opening in tub.

8. Reconnect hose assembly to pump. Insure rubber coupler of outlet assembly is fully inserted onto the outlet of pump and retighten hose clamp.

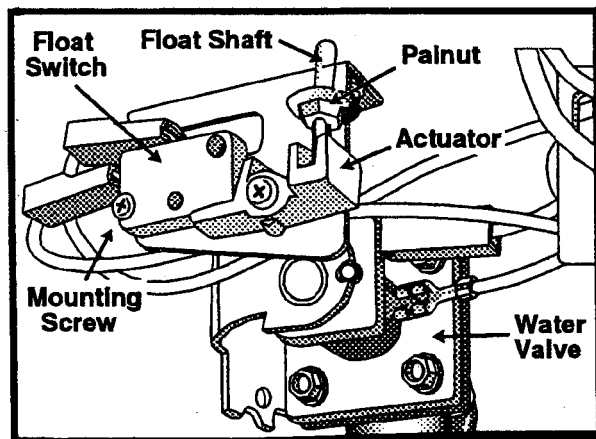
FLOAT ASSEMBLY

The float assembly controls the amount of water fill.

The float switch is wired in series with the water valve. When the float switch **OPENS**, the electrical circuit to the water valve is **OPENED** and the valve shuts off.

Normal Fill is even with the element in the basin of the tub assembly.

The float assembly consists of a float, float switch, actuator lever and a float switch bracket.



To Remove:

1. Disconnect the power supply to the dishwasher.
2. Built-In models: Remove the unit from under the counter.

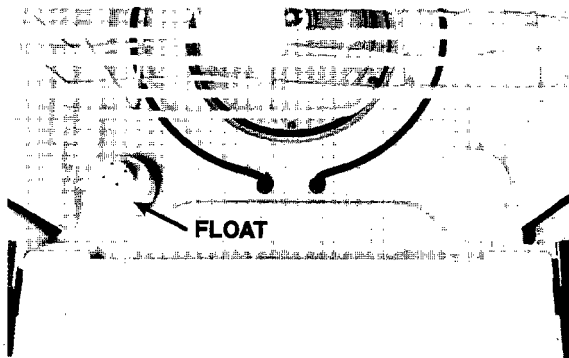
Portable models: Remove the cabinet and wood top. (See section devoted to portable models.)

3. Remove access and toe panels.
4. Loosen hose clamp securing upper wash arm hose to pump and remove hose. Use a bowl or towel to catch the water that comes out.
5. Remove upper wash arm assembly.
6. Remove upper wash arm hose from unit.
7. Reinstall hose assembly with seal

To Remove:

1. Disconnect the power supply to the dishwasher.

2. Remove access and toe panels.
(See section on ACCESS AND TOE PANELS.)
3. Within the access panel area, reach inside and remove the palnut from the float shaft. Do this by grasping palnut in one hand and turn the float counter-clockwise with the other.
CAUTION: Replace float if end of shaft twists off.
4. Lift the float up and out of the float guide.
5. To remove actuator, remove mounting screw from bracket.
6. To remove float switch, remove one screw mounting switch to bracket. Then remove wire leads to switch.
7. To remove bracket, remove two screws mounting switch assembly to tub support base.



To Check Float Switch:

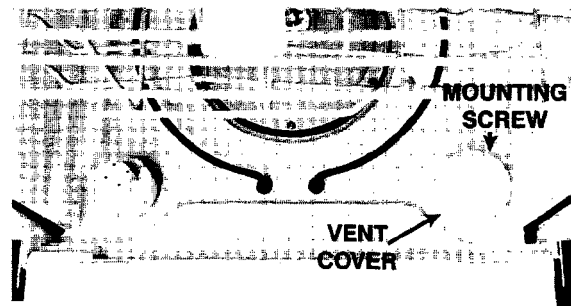
Perform continuity check of switch across wire terminals.

CLOSED - Switch actuator depressed.

OPEN - Switch actuator released.

VENT COVER

The vent cover is located in the front lower right corner of the dishwasher tub.



To Remove:

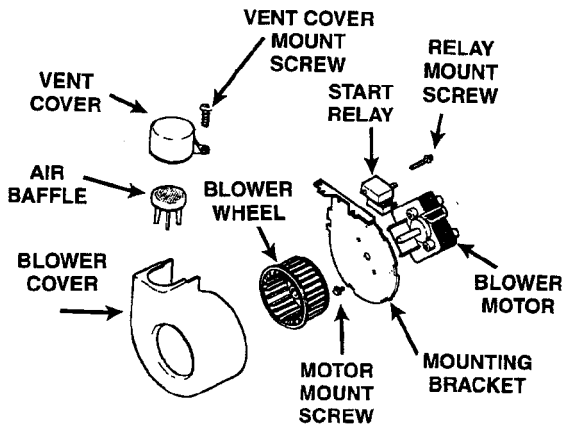
1. Remove lower rack from dishwasher.
2. Remove 1 torx® screw. Then lift cover from tub basin.

BLOWER ASSEMBLY

The blower assembly is located below the vent cover and housed below the tub within the access panel area. The purpose of this component is to circulate air through the dishwasher during the drying cycle.

To Remove:

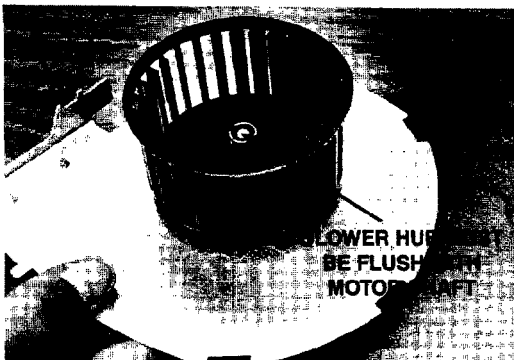
1. Disconnect the power supply to the dishwasher.
2. Disconnect wire from blower motor.
3. Remove access and toe panels.
(See section on ACCESS AND TOE PANELS.)



4. Remove mounting screw in tub base at front of blower assembly.
5. Lower front of blower assembly and pull forward. A retaining tab on the blower mounting bracket fits into a slot in the tub base behind the blower assembly.

To Remove Blower Wheel & Motor:

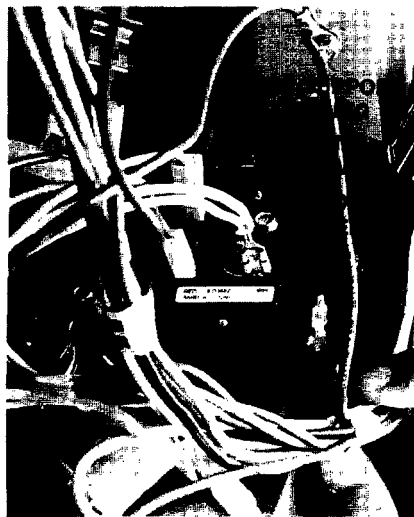
1. Disengage polypropylene blower cover from mounting bracket by pushing outward on retaining tabs.
2. Slide blower wheel off the motor shaft.
3. Remove two screws holding motor assembly to mounting bracket.
4. To reinstall blower wheel, slide the wheel on until the end of the motor shaft is flush with the blower wheel center hub.



START RELAY

Location of the start relay is in the access panel area on the front right side. The relay is mounted to the blower mounting plate with one screw.

The start relay is a mechanism used to provide a direct electrical (neutral) path to the START winding in the motor. This allows the motor to start. Once the motor gets up to operating speed, the current draw of the motor reduces. This reduction in current causes a drop in the magnetic field of the relay coil and the mechanism drops down and the switch then OPENS, thus taking the START windings out of the circuit.

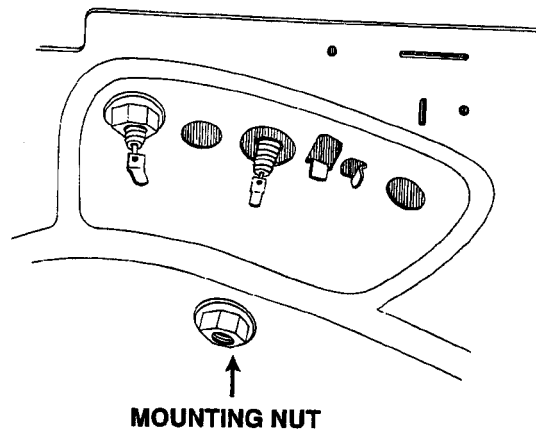


Note: The relay must be mounted in an upright vertical position. Positioning of the relay is very important. (See illustration.)

Start Relay Checks:

1. Disconnect the power supply to the dishwasher.
2. Remove relay wiring and mounting screw.

3. Hold relay in upright position and check continuity across **yellow** and **white** terminals. You should see continuity, if not replace relay switch.
4. Rotate relay switch upside down and check continuity across **red** and **yellow**, the **red** and **white**. You should see continuity across both sets of terminals, if not replace relay switch.



HEATING ELEMENT

The purpose of the element is to provide heat during the dry cycle if heated dry is selected and increase the water temperature during the wash cycle.

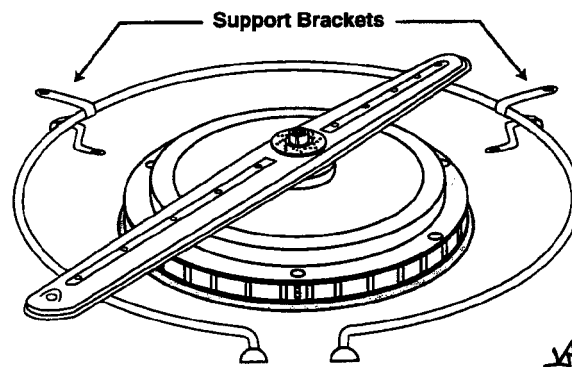
The heating element is rated at 650 watts.

To Check Heating Element:

1. Disconnect the power supply to the dishwasher.
2. Access the element wiring terminals through the access panel area. (See section on ACCESS AND TOE PANELS.)
3. Perform continuity check across the element terminals. The element should be approximately 22 ohms. If OPEN, replace the element.
4. Perform continuity check from each terminal to element sheath. Should show no continuity present. If continuity present, replace element.

To Remove:

1. Disconnect the power supply to the dishwasher.
2. Remove wires from element terminals.
3. Remove mounting nuts securing heating element to tub.



4. Release the element from the two rear heater supports. To release, top end of bracket must be pried loose from tub and push element back.
5. Then lift the element out of the tub.

- Examine condition of the sealing O-rings sandwiched between the element leads and tub basin. Replace O-rings if damaged or stressed.

Wattage Checks:

If specific wattage reading is needed, take an amperage reading at YL-BK wire of heating element. Multiply the reading by available voltage.

(Amps x Voltage = Wattage)

Normal element amperage during the dry cycle is 5.0 to 5.5 amps.

THERMOSTATS

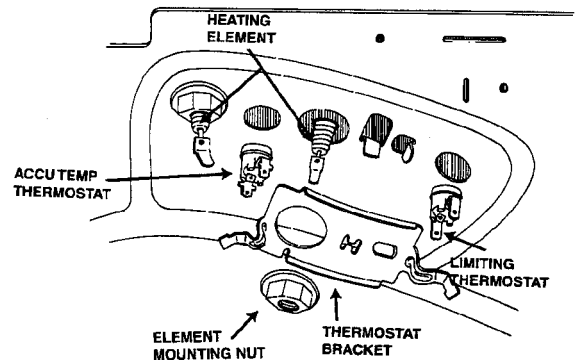
Two types of thermostats are used in the dishwasher.

One thermostat is used to sense water temperature toward the end of the wash cycle. If the water temperature is too cool, the "Heating Delay" lamp will inhibit current flow to the timer motor. This will suspend the unit in the wash cycle till the heating element brings the water temperature up to 130° - 140° F. The water temp thermostat is a normally OPEN thermostat below 125° F and has 3/16" terminals. It is located in the access panel area, mounted to the tub support between the heating element terminals.

The other thermostat is used as a protective device to sense overheating by the heating element. This thermostat is located in the access panel area mounted to the tub support ceiling, is a normally CLOSED switch up to 145° F and has 1/4" terminals. It's designed to OPEN if the water temperature exceeds 160° F.

To Remove (One Piece Bracket):

- Disconnect the power supply to the dishwasher.
- Pull down on tab and slide thermostat from recessed area in tub support ceiling.

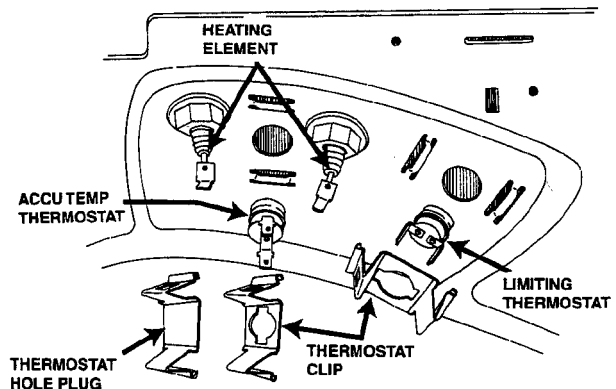


- Remove wires from terminals.

Water Temp	3/16" terminals
Hi-Limit	1/4" terminals

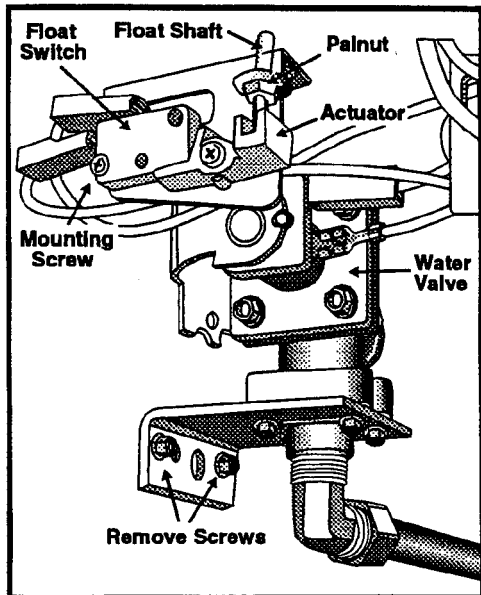
To Remove (Two Brackets):

- Pull out on spring tab to release thermostat and bracket from slots in tub ceiling.
- Remove wires from thermostat.
Note: Terminal sizes of thermostat and location of terminals.



WATER VALVE

The valve is located in the access panel area and mounted to the left side of the tub support. Inlet water supply to valve is directly below the valve. (Turn off water to the dishwasher when servicing this area.)



All models covered in this manual use a **FLOAT FILL** system. The float fill will supply approximately 1½ gallons of water. Proper water level is half way up the side of the heating element.

The valve is designed to operate at water pressures of 15 - 120 psi. Note: Low water pressure will affect the ability of water valve to fill the tub within the required length of time.

The water temperature should be a minimum 120° F. However, higher water temperatures may provide enhanced washing and drying results.

To Remove:

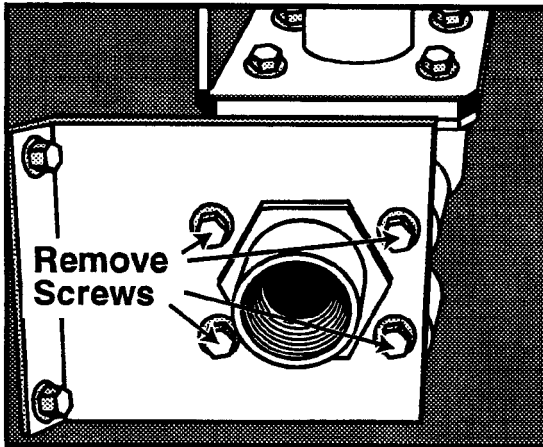
1. Disconnect the power supply to the dishwasher.
2. Remove access and toe panels. (See section on **ACCESS AND TOE PANELS**.)
3. Shut off water supply to dishwasher.
4. Remove wires from water valve solenoid.
5. Remove two mounting screws securing water valve to the tub support.
6. Disconnect injector hose at valve outlet.

Note: This is a non-repairable water valve. The only servicing required is to clean the inlet screen.

To Clean Inlet Screen:

Sediment on the inlet screen can hinder water flow through the valve within the required length of time for fill.

1. Disconnect the power supply to the dishwasher.
2. Remove water valve from dishwasher.
3. Remove four screws securing valve body to water inlet mounting bracket.



4. Clean screen.
5. Reassemble valve body to mounting plate and reattach ground wire to mounting bracket.

Check Valve Operation:

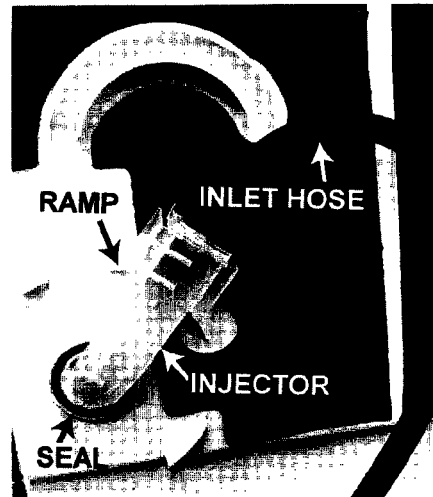
1. **NO FILL:** Perform continuity check across the valve solenoid. (Proper resistance reading will be approximately 900 ohms.) If OPEN, replace valve.
Alternate Test: Use motor test cord hooked directly to the water valve. Turn on water supply and plug in test cord. Still no water - replace water valve.
2. **OVERFILL:** If valve allows water flow without power to solenoid, replace valve.

WATER INJECTOR

The injector is located in left rear corner of the tub and mounted to the exterior of the tub. Removal requires removal of the dishwasher from installation or cabinet removal on portable units.

To Remove:

1. On select models carefully peel insulation from the left exterior rear corner area of tub. Then gently lift insulation to expose the injector.
2. Untuck the injector hose from the recess on side of tub assembly.
3. Grasp the upper portion of injector and pull away from tub, while rotating the injector in a clockwise direction to the two-o'clock position. (This will allow passage over the "ramp" protruding from the tub wall.) Note: Examine seal washer between injector and tub wall.



To Reinstall:

1. Position injector at two-o'clock and rotate counterclockwise while pressing inward. Injector will slide "up the ramp" then snap into position.
2. Return injector hose to recess in tub wall.
3. Return insulation wrap over area and tape down.

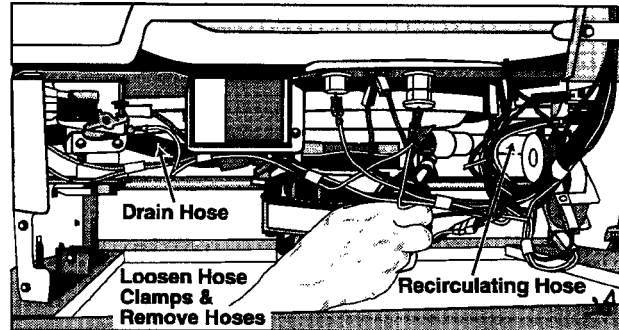
POWER MODULE

The power module consists of a "pump" and electric "motor" combined to provide drain and recirculating functions for the dishwasher cycles. If a failure is suspected inside the pump assembly, individual parts in the pump may be replaced. However, if the housing or an electrical failure of the motor needs attention, the **COMPLETE PUMP AND MOTOR (MODULE)** must be replaced.

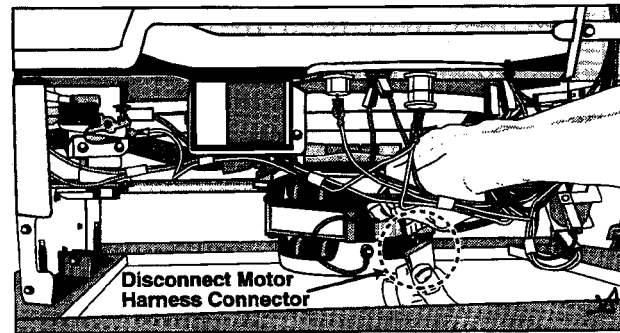
To repair the pump portion of the power module, it is **NOT NECESSARY** to remove it from the dishwasher.

To Remove:

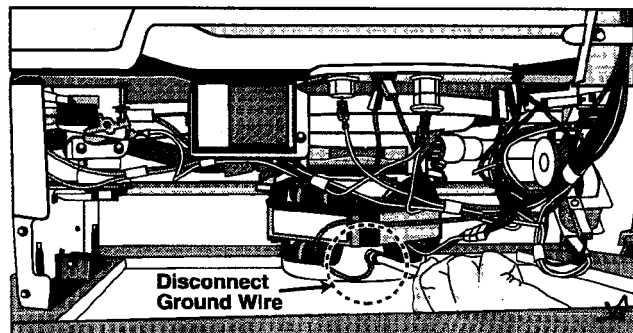
1. Disconnect the power supply to the dishwasher.
2. Remove the lower access and toe panels. (See section on **ACCESS AND TOE PANELS**.)
3. Loosen drain hose clamp (left side of module) and disconnect drain hose from the pump housing.
4. Loosen the recirculating (upper spray arm) hose located on right hand side of pump housing. Disconnect the hose from the pump housing.



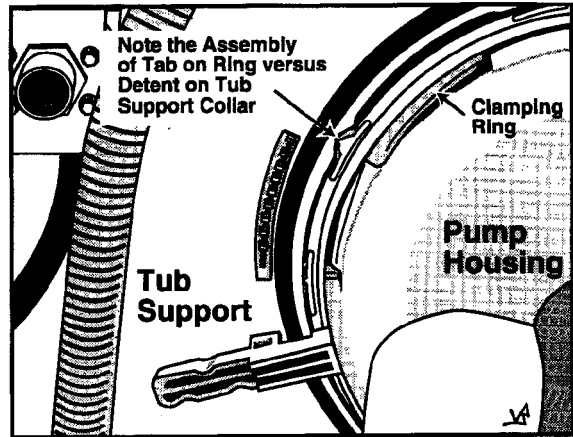
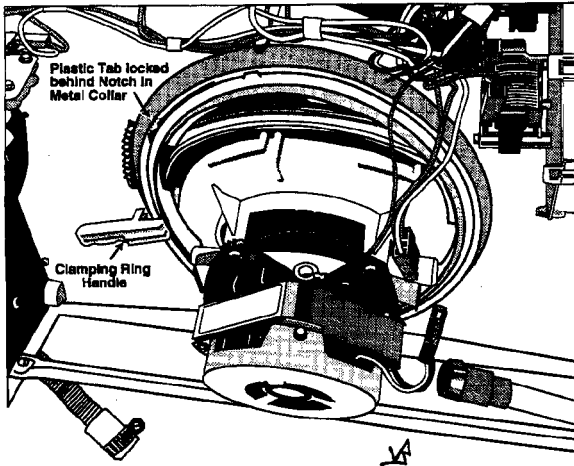
5. Disconnect the motor harness from the main wire harness connector.



6. Remove the hex screw securing the **GREEN** ground wire to the motor frame.

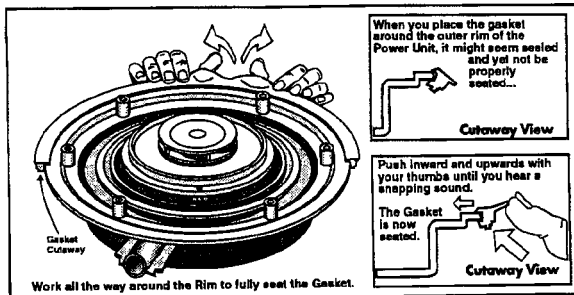


7. Grasp the clamp ring handle and carefully pull the handle down, while pushing the handle toward the rear of the dishwasher into an 11:00 position. This will disengage the pump/motor module from the clamp ring.

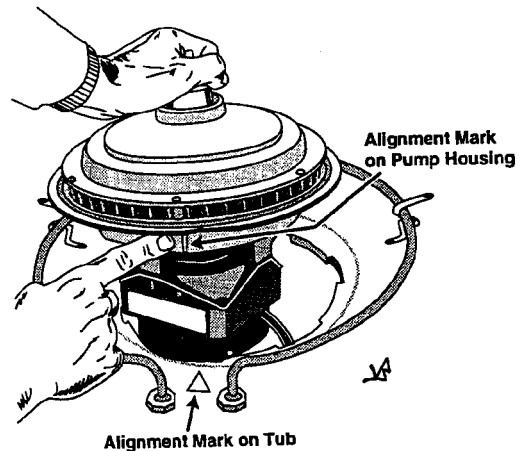


To Reinstall Pump Assembly:

1. Check proper engagement of gasket to pump housing prior to reinstallation of pump assembly to dishwasher. With the gasket in place on the outer lip of the pump housing, roll the outside edge of the gasket upward while pressing toward the center of the pump module. Do this around the perimeter of the housing.



3. Lower the pump assembly into the tub opening with the alignment rib on the pump housing aligned with the cut out in the tub floor.

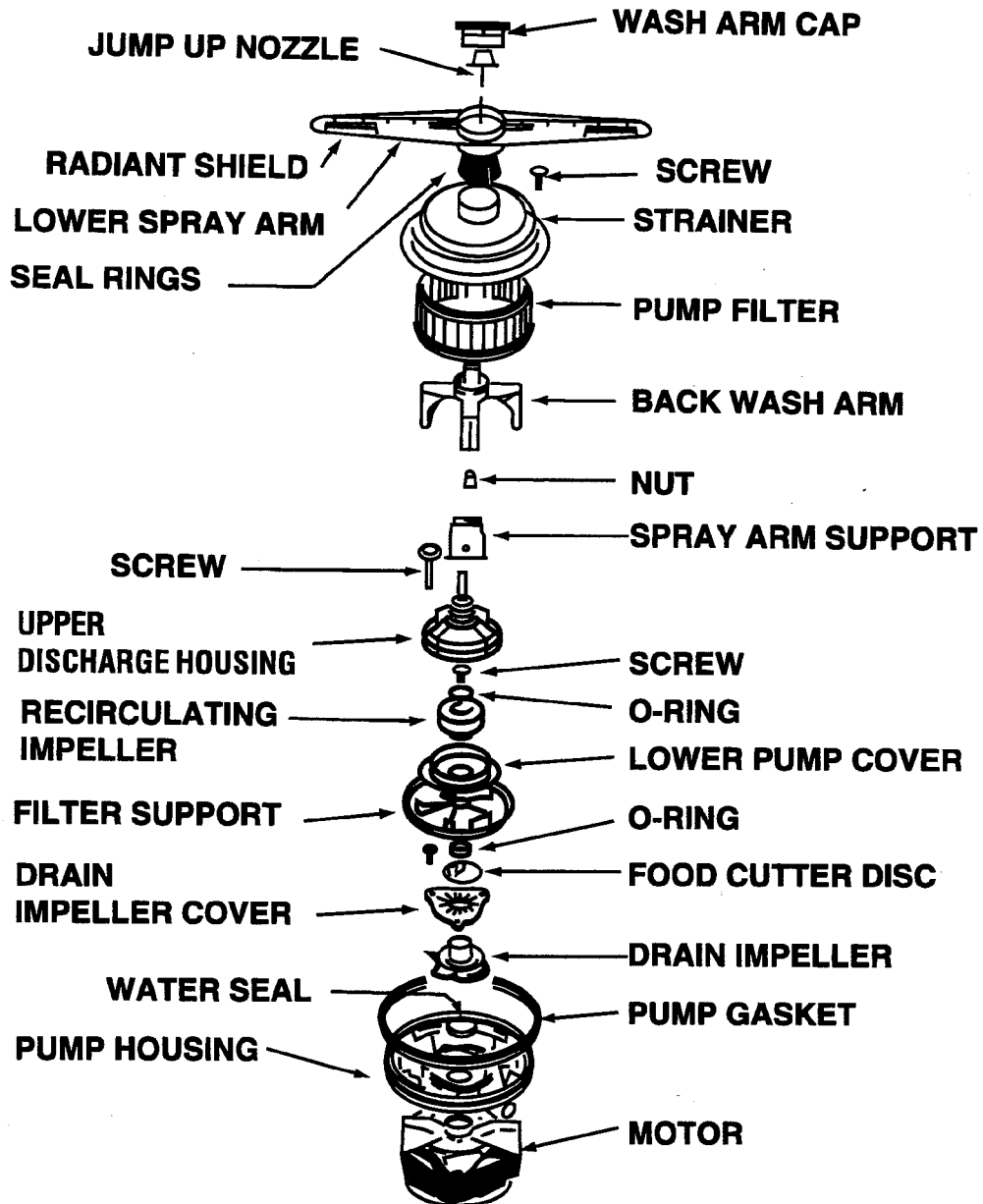


2. Check the positioning of clamping ring. Move ring forward between the tub and tub support to allow alignment rib on housing to clear. Position tab on ring to align with the detent on the support ceiling.

4. With the pump module lowered into the tub opening, grasp the top of the pump module checking for firm position into the tub.
5. Check the positioning of the holding tabs of the clamp ring, positioned between the tub support and the tub. Sometimes these can be dislodged, making it difficult to lock the pump/motor module into position.

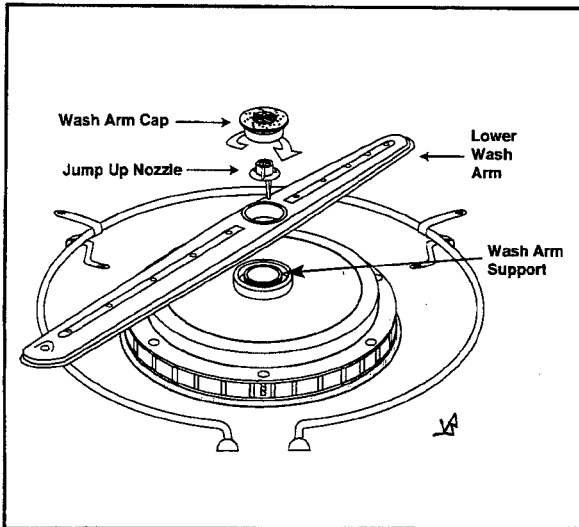
6. Grasp the clamp ring handle and carefully pull the handle toward the front to engage the exposed teeth on the ceiling of the tub support.
7. Reverse items 1 through 5 under section titled **POWER MODULE - To Remove**, to reconnect hoses, wire connections and panel replacements.

POWER MODULE DISASSEMBLY

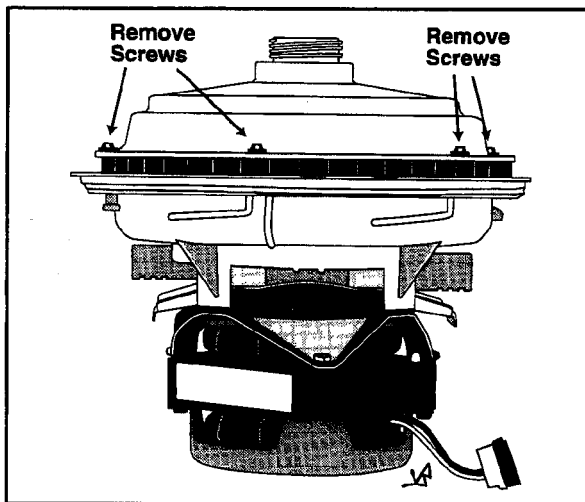


Disassembly Procedure:

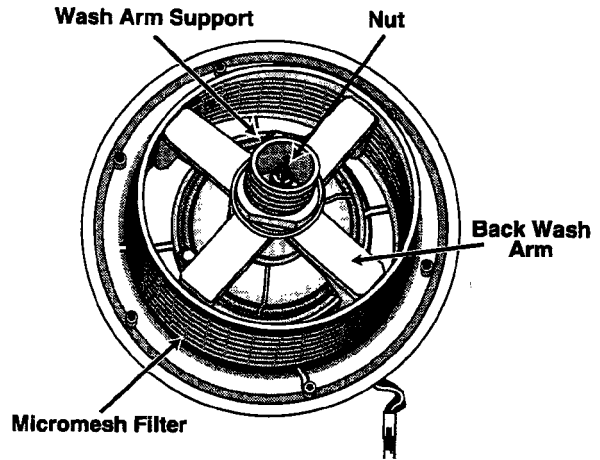
1. Unscrew the wash arm cap located in the center of the lower spray arm and lift the lower spray arm off the spray arm support.



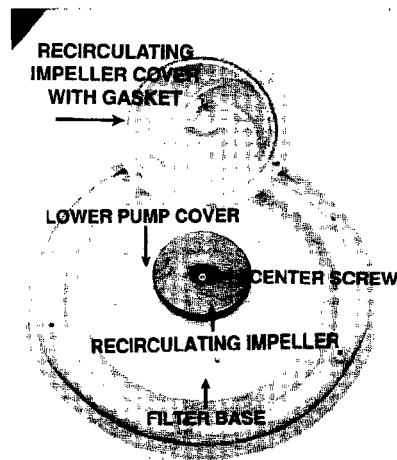
2. Remove the 6 screws securing strainer to pump housing. **NOTE:** Two seal rings are in the upper opening of the strainer. Lift the strainer off the module. When reassembling the strainer to the pump, do not tighten all the mounting screws till the strainer has been centered on the housing. Check for binding of the lower spray arm, if spray arm spins freely, tighten all 6 mounting screws.



3. Lift the back wash arm off the spray arm support.



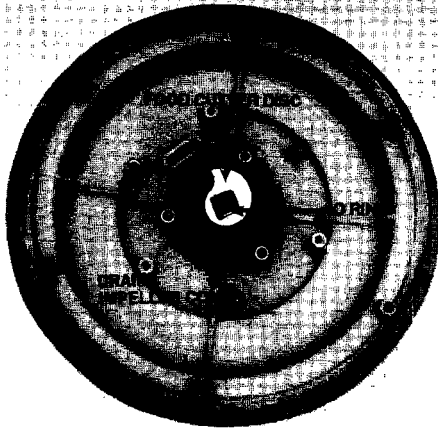
4. Unscrew the nylon nut located in the center of the spray arm support. Lift the spray arm support from the module.
5. Remove the micromesh filter.
6. Remove three screws holding the recirculation impeller cover in position. Lift the cover from the module.



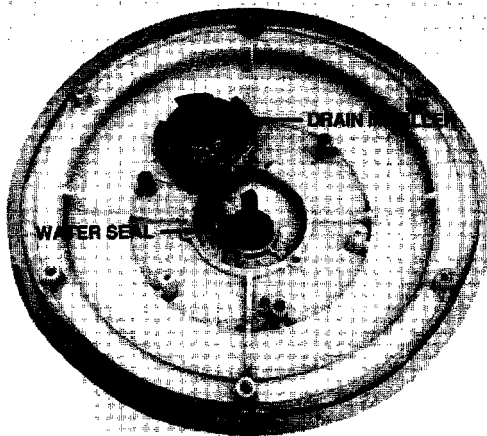
7. Grasp the recirculating impeller and remove center screw securing the impeller

to the motor shaft. Examine the O-ring under the screw for any damage.

8. Lift off recirculating impeller, lower pump cover and filter base.



9. Lift off food cutter disc.
10. Carefully remove O-ring from top of motor shaft and examine for any damage.
11. Remove 3 screws from the drain impeller cover, then lift and remove the cover.



12. Carefully pull the drain impeller off the motor shaft.

13. Carefully pry out the water seal along the edges. Do not use oil on the carbon face. To do so, will contaminate the surface and contribute to creating noise. The seal is normally lubricated by the water in the pump and hydroplanes on the face of the seal seat of the drain impeller.

This is the extent of tear down recommended. Replace complete power module assembly if pump housing must be repaired/replaced or there is a seal leak of the polypropylene seal on the motor shaft.

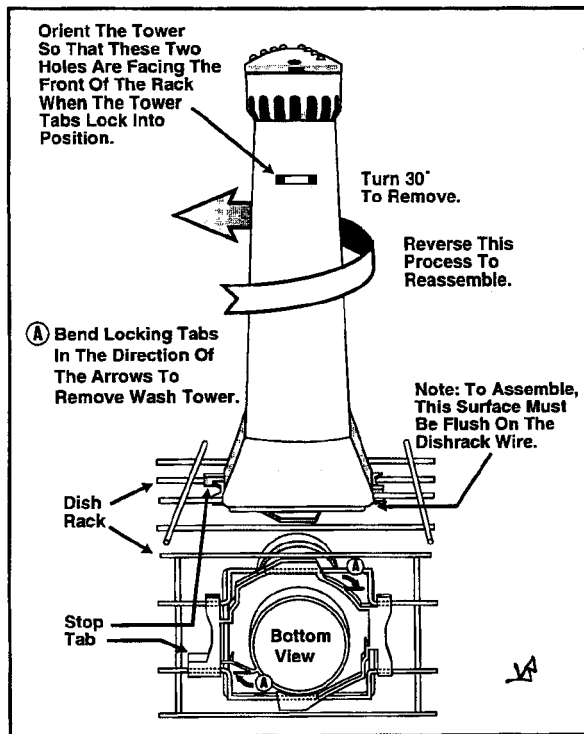
WASH TOWER ASSEMBLY

Located in the center of the lower rack. Water is injected into the wash tower by the pump assembly through the jump up nozzle located in the center of the lower wash arm support.

The water enters the bottom of the wash tower and travels up the interior ribs to the spray diverter on top of the wash tower. The spray diverter directs water to the upper rack. The hole in the top of the diverter covers the center of the upper rack and the two additional holes in the side of the wash tower direct water to the silverware basket.

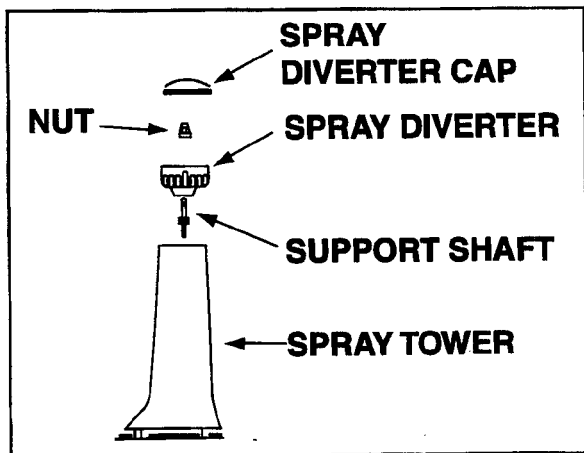
To Remove Spray Tower:

1. Remove the lower rack from the dishwasher.
2. Grasp the wash tower and rotate 30°.



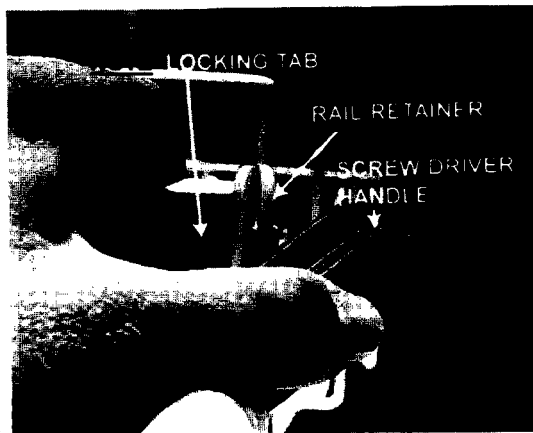
To Disassemble Wash Tower:

1. Unsnap the diverter cap from the spray diverter.
2. Unscrew the nylon nut securing the spray diverter to the wash tower support shaft.



UPPER RACK REMOVAL

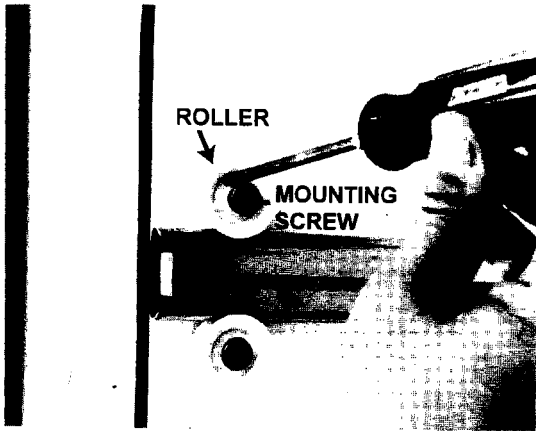
1. To remove the front rack rail retainer, use the handle of a screwdriver and press the handle on the outside edge of the retainer.



2. Then roll inward toward the rack while pressing on the retainer. This will disengage the locking tab from the rail. Slide the retainer from the rail. Do this for both rails.
3. Remove upper rack.

RACK ROLLERS - Tub Wall

1. To remove, partially unscrew roller mounting screw. Use end of torx driver against side wall of roller and press roller back against tub wall. This will disengage steel washer from shoulder on mounting screw behind roller.



2. Finish removing roller mounting screw.
NOTE: Use caution when removing screw so as not to lose the steel washer behind the roller.

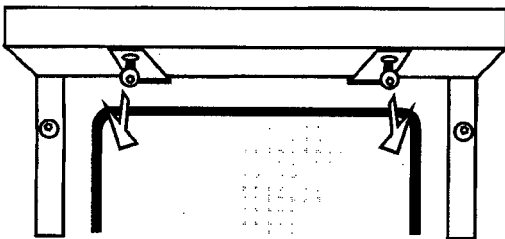
PORTABLE DISHWASHERS

WOOD TOP

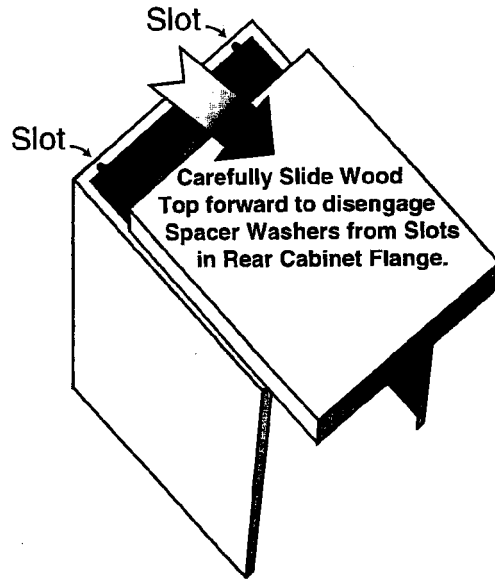
These models use a top made of wood composition core with hardwood laminated strips permanently bonded to the top and edges. Periodic treating of the laminated top with a non-toxic mineral oil is recommended.

To Remove:

1. Remove two screws securing wood top to mounting flanges positioned under the top in front of tub.



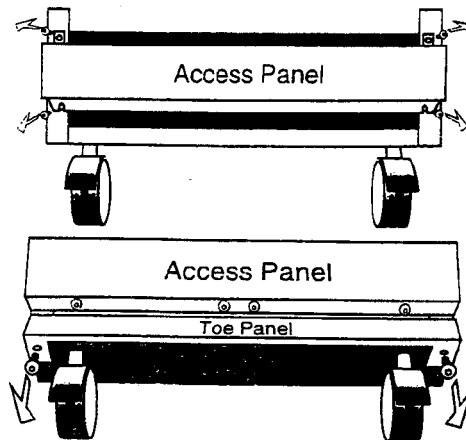
2. Carefully slide wood top forward to disengage spacer washers from slots in rear cabinet flange.



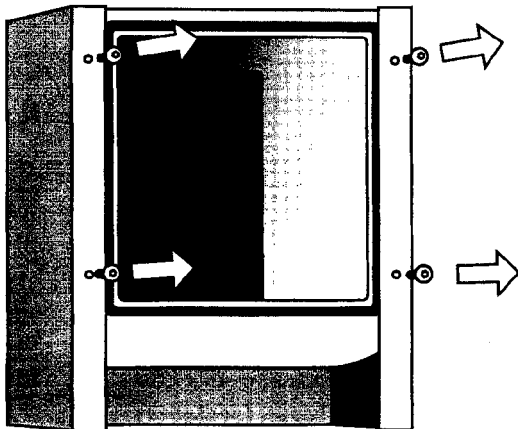
CABINET

To Remove:

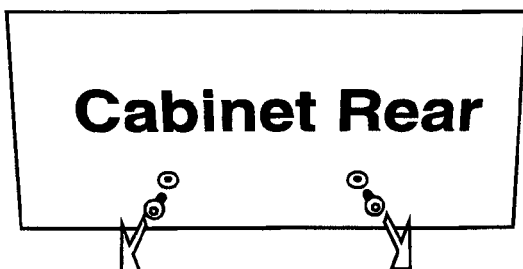
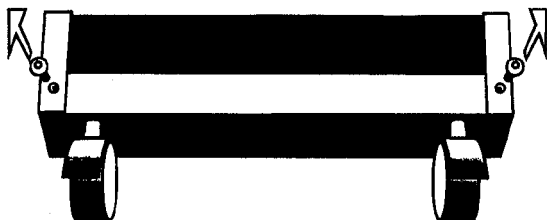
1. Remove wood top. (See section on Wood Top.)
2. Remove access and toe panels. (See section on Access and Toe Panels.)



- Remove 4 screws securing front flange of cabinet to tub.



- Remove front and rear cabinet screws securing cabinet to tub and base supports.



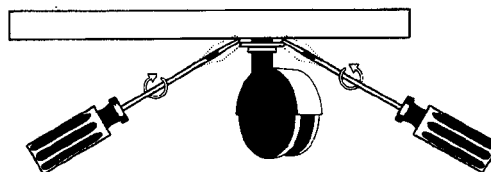
- Disconnect the power cord from the wire leads in the terminal box, the fill hose from the water valve and drain hose from the pump module.
- Remove wire tie securing drain and fill hoses to "U" shaped bracket.

- Carefully spread the front cabinet sides for clearance around the tub flange. **CAUTION: Do not bend excessively** as this will damage the metal cabinet at the rear corners.
- Pull the cabinet away from the dishwasher.
- Remove the 5 palnuts securing the retainer for the faucet coupler on the back of the cabinet.
- Cabinet removal is complete.

CASTERS

To Remove:

- Remove access and toe panels. (Refer to Access and Toe Panels as needed.)
- Lift or block dishwasher up to access the casters.
- With a screw driver pry caster from socket.



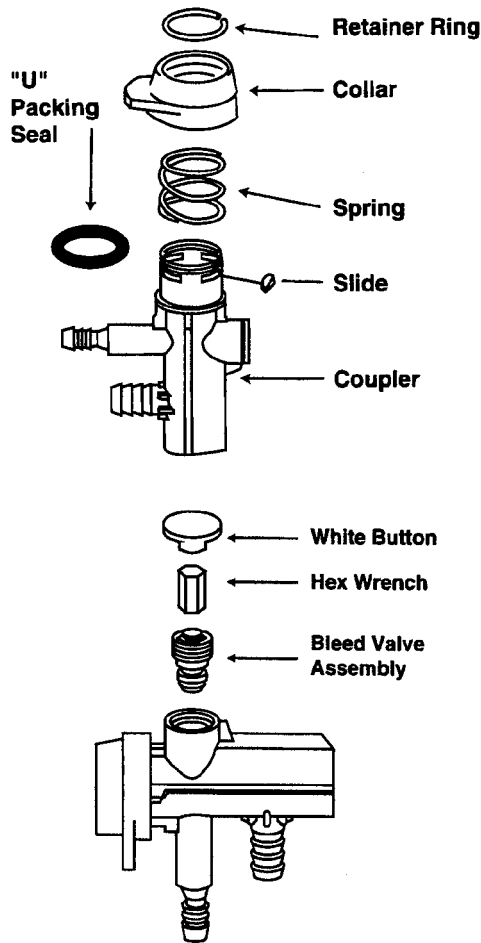
FAUCET COUPLER

The faucet coupler provides a means for filling and draining the portable dishwasher. It connects to a special adapter attached to the faucet at the sink. When not in use, the

faucet coupler stores in the retainer on the back of the dishwasher.

To Remove:

1. Remove access and toe panels. (See section on Access and Toe Panels.)
2. Remove fill hose from water valve and drain hose from the pump module.
3. Remove the wood top. (See section on Wood Top.)
4. Cut plastic wire tie securing the hoses to hose support "U" bracket on rear wall of cabinet.



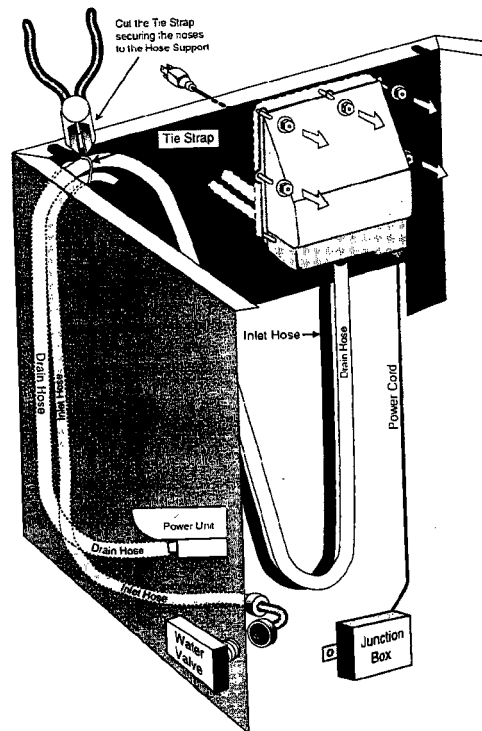
Note: A Coupler Repair Kit is available to rebuild the coupler assembly. The kit contains a collar, spring, sliders, "U" packing washer, bleed valve and button. Contact your dealer or parts distributor for this kit.

Repair of the coupler can be done without removing the hose assembly from the dishwasher.

RETAINER FOR FAUCET COUPLER

The retainer provides a storage area for the faucet coupler and power cord when the dishwasher is not in use.

1. Remove cabinet. (See section on Cabinet.)
2. Remove the 5 palnuts securing the retainer to the rear cabinet wall.



SECTION 5. GENERAL INFORMATION

Information covered in this section includes:

Specifications
Warranty
Models
Cycles and Options
Schematics

SPECIFICATIONS

BASIC DIMENSIONS

Built-In Models.....24" W x 33 ¾" - 35" H x 22 ¾" D
Portable.....28 ¼" W x 33 ¾" H x 24 ¼" D

ELECTRICAL SUPPLY

120 Volts AC/60 HZ All models require 15 amp fuse.
On portable models, 3-prong plug must be connected to properly grounded outlet.

WATER SUPPLY

Water pressure should be 15 - 120 P.S.I. (1.06 - 8.44 kg/cm).
Water temperature should be minimum of 120° F when it enters the dishwasher.

DRAIN

(Built-In Models)

¾" (.6 cm) I.D. flexible drain hose furnished. High drain loop positioned on side of dishwasher. Must maintain minimum 32" height.

MOTOR AND PUMP

½ horsepower motor, two-stage pump for circulation and draining.

POWER CORD LENGTH

6½ ft. (198.1 cm) (Portable Models Only.)

HOSE LENGTH

3 ft. (91.4 cm) (Portable Models Only.)

WEIGHT

(CRATED/UNCRATED)

EQ™ Plus Models.....118 lbs. (54kg.) / 103 lbs. (47 kg.)
Quiet™ Plus Models.....117 lbs. (53 kg.) / 100 lbs. (45 kg.)
Quiet Pack and Dependably Quiet™ Models
Built-In.....100 lbs. (45 kg.) / 85 lbs. (39 kg.)
Portable.....190 lbs. (86 kg.) / 170 lbs. (77 kg.)

CUSTOM PANEL DIMENSIONS

Decorative Door Panel Insert.....¼" x 18 3/16" x 23 9/16"
(.64 cm x 46.2 cm x 59.8 cm)
Decorative Access Panel Insert.....¼" x 5 5/8" x 23 11/16"
(.64 cm x 11.7 cm x 60.2 cm)

DISHWASHER WARRANTY

MAYTAG - INTELLISENSE DISHWASHER WARRANTY

FULL THREE-YEAR WARRANTY

3RD
YEAR

FOR THREE (3) YEARS FROM THE DATE OF ORIGINAL RETAIL PURCHASE, ANY PART WHICH FAILS IN NORMAL HOME USE WILL BE REPAIRED OR REPLACED FREE OF CHARGE.

LIMITED WARRANTY

4TH
-
5TH
YEAR

FOURTH THROUGH FIFTH YEAR

AFTER THE THIRD YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE THROUGH THE FIFTH YEAR, ALL OF THE FOLLOWING COMPONENTS WHICH FAIL IN NORMAL HOME USE WILL BE REPAIRED OR REPLACED FREE OF CHARGE FOR THE PART ITSELF, WITH THE OWNER PAYING ALL OTHER COSTS, INCLUDING LABOR, MILEAGE AND TRANSPORTATION.

THESE COMPONENTS INCLUDE:

ANY PARTS OF THE JETCLEAN SYSTEM FOR ALL MODELS, INCLUDING THE COMPLETE POWER MODULE ASSEMBLY, CENTER SPRAY NOZZLE, SPRAY ARMS, WASH PROCESS SENSOR, TOP WASH ARM HOSE, AND MOTOR.

COMPUTER TOUCH CONTROLS - ANY MICROPROCESSOR AND TOUCH PAD ASSEMBLIES.

ALL MODELS AGAINST RUST, INCLUDING EXTERIOR CABINET AND FRONT PANELS OF CONVERTIBLE MODELS; THE EXTERIOR FRONT PANELS AND ACCESSORY SIDE PANELS OF BUILT-IN MODELS, AND NYLON COATED RACKS (AVAILABLE ON SELECTED MODELS).

FULL WARRANTY

LIFE
TIME

FOURTH THROUGH LIFETIME

AFTER THE THIRD YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE THROUGH THE LIFETIME OF THE PRODUCT, SHOULD THE TUB OR DOOR LINER DEVELOP A WATER LEAK IN NORMAL HOME USE, REPAIR OR REPLACEMENT OF THE TUB AND/OR DOOR LINER WILL BE MADE FREE OF CHARGE.

PLEASE NOTE: THESE FULL WARRANTIES AND THE LIMITED WARRANTY APPLY WHEN THE DISHWASHER IS LOCATED IN THE UNITED STATES OR CANADA. DISHWASHERS LOCATED ELSEWHERE ARE COVERED BY THE LIMITED WARRANTY ONLY, INCLUDING PARTS WHICH FAIL DURING THE FIRST THREE YEARS.

CANADIAN RESIDENTS

THIS WARRANTY COVERS ONLY THOSE DISHWASHERS INSTALLED IN CANADA THAT HAVE BEEN LISTED WITH CANADIAN STANDARDS ASSOCIATION UNLESS THE DISHWASHER IS BROUGHT INTO CANADA DUE TO TRANSFER OF RESIDENCE FROM THE UNITED STATES TO CANADA.

TO RECEIVE WARRANTY SERVICE

TO LOCATE AN AUTHORIZED SERVICE COMPANY IN YOUR AREA CONTACT THE MAYTAG DEALER FROM WHOM YOUR APPLIANCE WAS PURCHASED; OR CALL MAYTAG CUSTOMER SERVICE AT THE NUMBER LISTED BELOW. SHOULD YOU NOT RECEIVE SATISFACTORY WARRANTY SERVICE, PLEASE CALL OR WRITE:

MAYTAG CUSTOMER ASSISTANCE
C/O MAYTAG CUSTOMER SERVICE
P.O. Box 2370
CLEVELAND, TN 37320-2370
US 1-800-888-9900
CANADA 1-800-888-2002

WHEN CONTACTING MAYTAG CUSTOMER SERVICE BE SURE TO PROVIDE THE MODEL AND SERIAL NUMBER OF YOUR APPLIANCE, THE NAME AND ADDRESS OF THE DEALER FROM WHOM YOU PURCHASED THE APPLIANCE AND THE DATE OF PURCHASE.

THE SPECIFIC WARRANTIES EXPRESSED ABOVE ARE THE ONLY WARRANTIES PROVIDED BY THE MANUFACTURER. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

MAYTAG - DISHWASHER WARRANTY

FULL ONE-YEAR WARRANTY

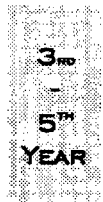


FOR ONE (1) YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE, ANY PART WHICH FAILS IN NORMAL HOME USE WILL BE REPAIRED OR REPLACED FREE OF CHARGE.

LIMITED WARRANTY



AFTER THE FIRST YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE, THROUGH THE SECOND YEAR, PARTS WHICH FAIL IN NORMAL HOME USE WILL BE REPAIRED OR REPLACED FREE OF CHARGE FOR THE PART ITSELF, WITH THE OWNER PAYING ALL OTHER COSTS, INCLUDING LABOR, MILEAGE AND TRANSPORTATION.



THIRD THROUGH FIFTH YEAR

AFTER THE SECOND YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE, THROUGH THE FIFTH YEAR, ALL OF THE FOLLOWING COMPONENTS WHICH FAIL IN NORMAL HOME USE WILL BE REPAIRED OR REPLACED FREE OF CHARGE FOR THE PART ITSELF, WITH THE OWNER PAYING ALL OTHER COSTS, INCLUDING LABOR, MILEAGE AND TRANSPORTATION.

THESE COMPONENTS INCLUDE:

ANY PARTS OF THE JETCLEAN SYSTEM FOR ALL MODELS, INCLUDING THE COMPLETE POWER MODULE ASSEMBLY, CENTER SPRAY NOZZLE, SPRAY ARMS, TOP WASH ARM HOSE, AND MOTOR.

COMPUTER TOUCH CONTROL MODELS ONLY - ANY MICROPROCESSOR AND TOUCH PAD ASSEMBLIES.

ALL MODELS AGAINST RUST, INCLUDING EXTERIOR CABINET AND FRONT PANELS OF CONVERTIBLE MODELS, THE EXTERIOR FRONT PANELS AND ACCESSORY SIDE PANELS OF BUILT-IN MODELS, AND NYLON COATED RACKS (AVAILABLE ON SELECTED MODELS).

FULL TWENTY-YEAR WARRANTY



FIRST THROUGH TWENTIETH YEAR

FROM THE DATE OF ORIGINAL RETAIL PURCHASE THROUGH THE TWENTIETH YEAR, SHOULD THE TUB DEVELOP A WATER LEAK IN NORMAL HOME USE, THE DISHWASHER ITSELF WILL BE REPLACED FREE OF CHARGE.

FIRST THROUGH TWENTIETH YEAR

FROM THE DATE OF ORIGINAL RETAIL PURCHASE THROUGH THE TWENTIETH YEAR, SHOULD THE DOOR LINER DEVELOP A WATER LEAK IN NORMAL HOME USE, REPAIR OR REPLACEMENT OF THE DOOR LINER WILL BE MADE FREE OF CHARGE.

PLEASE NOTE: THESE FULL WARRANTIES AND THE LIMITED WARRANTY APPLY WHEN THE DISHWASHER IS LOCATED IN THE UNITED STATES OR CANADA. DISHWASHERS LOCATED ELSEWHERE ARE COVERED BY THE LIMITED WARRANTY ONLY, INCLUDING PARTS WHICH FAIL DURING THE FIRST YEAR.

CANADIAN RESIDENTS

THIS WARRANTY COVERS ONLY THOSE DISHWASHERS INSTALLED IN CANADA THAT HAVE BEEN LISTED WITH CANADIAN STANDARDS ASSOCIATION UNLESS THE DISHWASHERS ARE BROUGHT INTO CANADA DUE TO TRANSFER OF RESIDENCE FROM THE UNITED STATES TO CANADA.

TO RECEIVE WARRANTY SERVICE

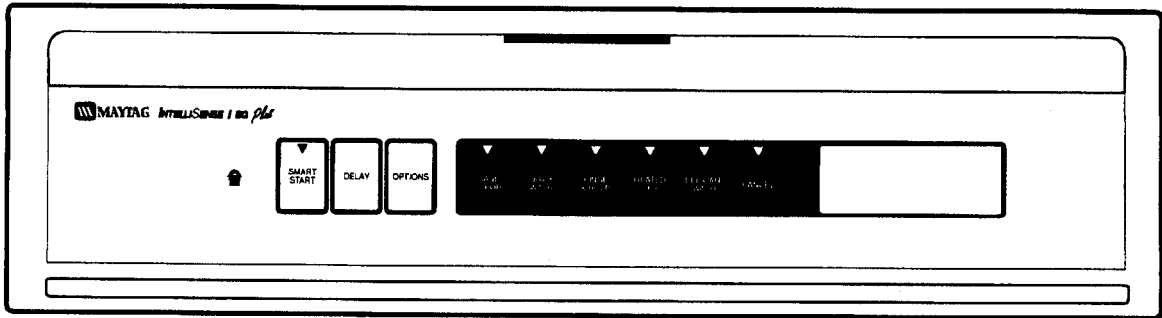
TO LOCATE AN AUTHORIZED SERVICE COMPANY IN YOUR AREA CONTACT THE MAYTAG DEALER FROM WHOM YOUR APPLIANCE WAS PURCHASED; OR CALL MAYTAG CUSTOMER SERVICE AT THE NUMBER LISTED BELOW. SHOULD YOU NOT RECEIVE SATISFACTORY WARRANTY SERVICE, PLEASE CALL OR WRITE:

MAYTAG CUSTOMER ASSISTANCE
c/o MAYTAG CUSTOMER SERVICE
P.O. Box 2370
CLEVELAND, TN 37320-2370
US 1-800-688-9900
CANADA 1-800-688-2002

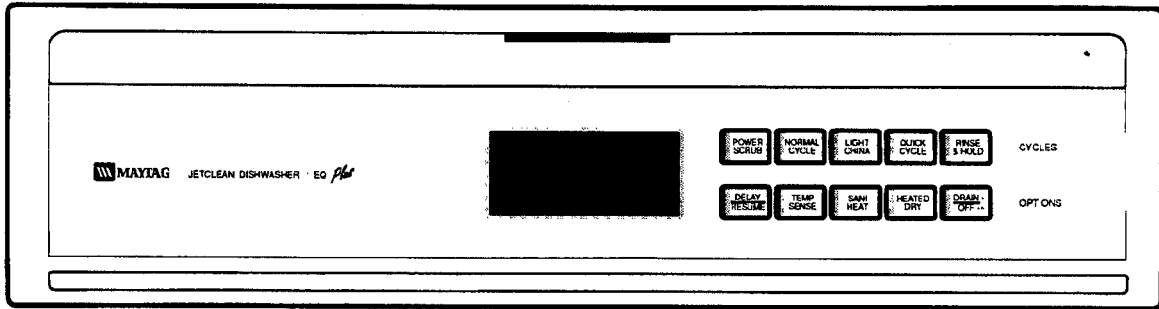
WHEN CONTACTING MAYTAG CUSTOMER SERVICE BE SURE TO PROVIDE THE MODEL AND SERIAL NUMBER OF YOUR APPLIANCE, THE NAME AND ADDRESS OF THE DEALER FROM WHOM YOU PURCHASED THE APPLIANCE AND THE DATE OF PURCHASE.

THE SPECIFIC WARRANTIES EXPRESSED ABOVE ARE THE ONLY WARRANTIES PROVIDED BY THE MANUFACTURER. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

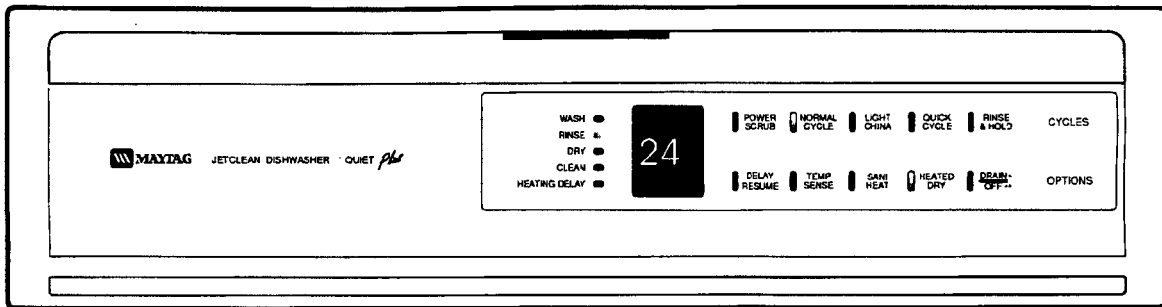
MODELS



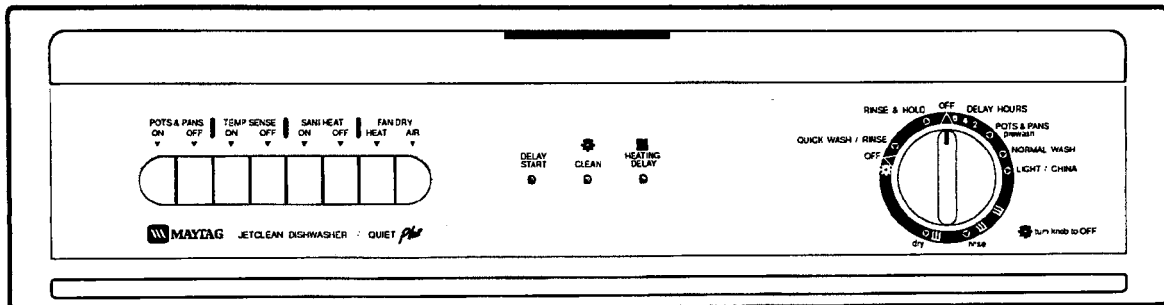
DWU9962 IntelliSense™



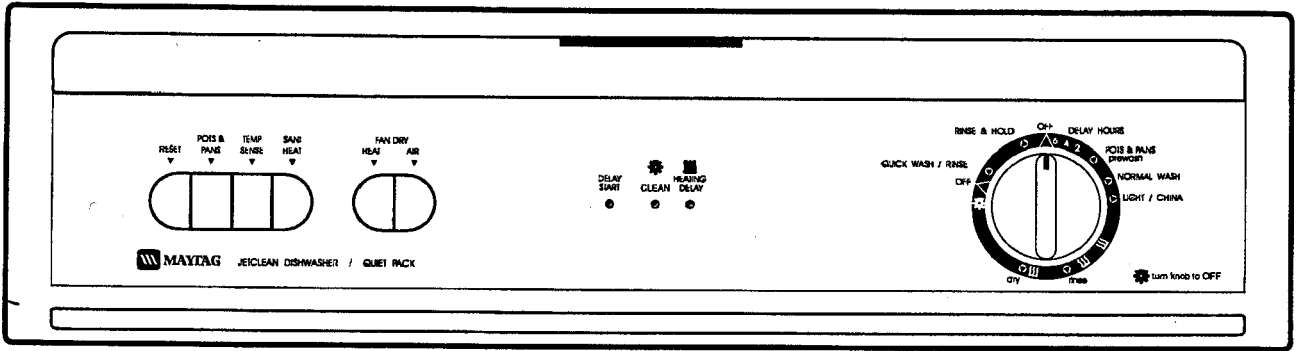
DWU9922



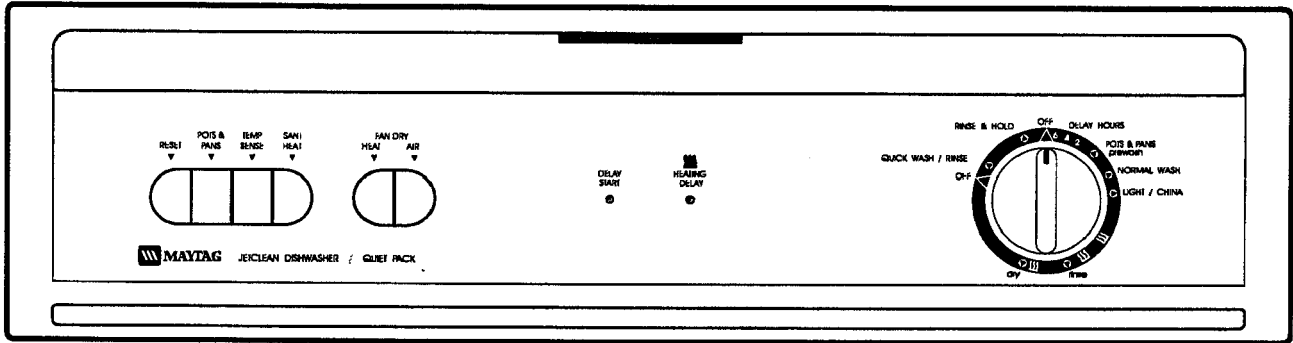
DWU9902



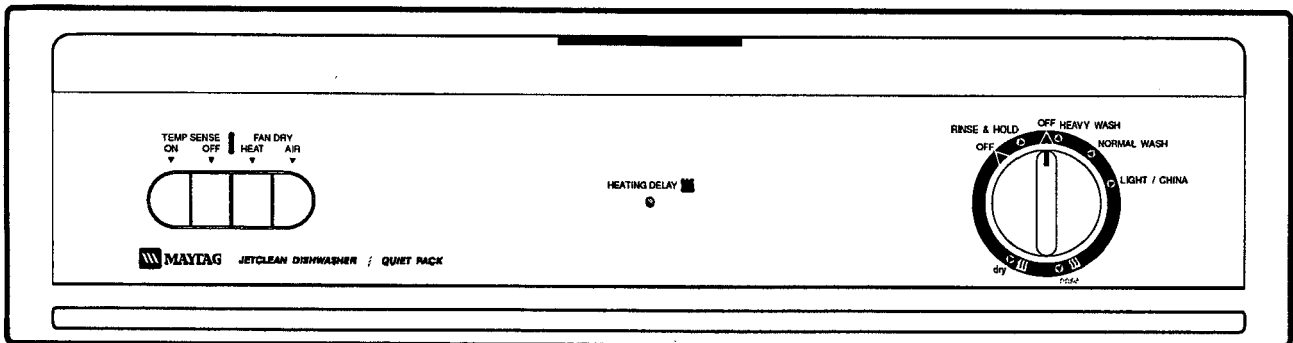
DWU9202 / 9502



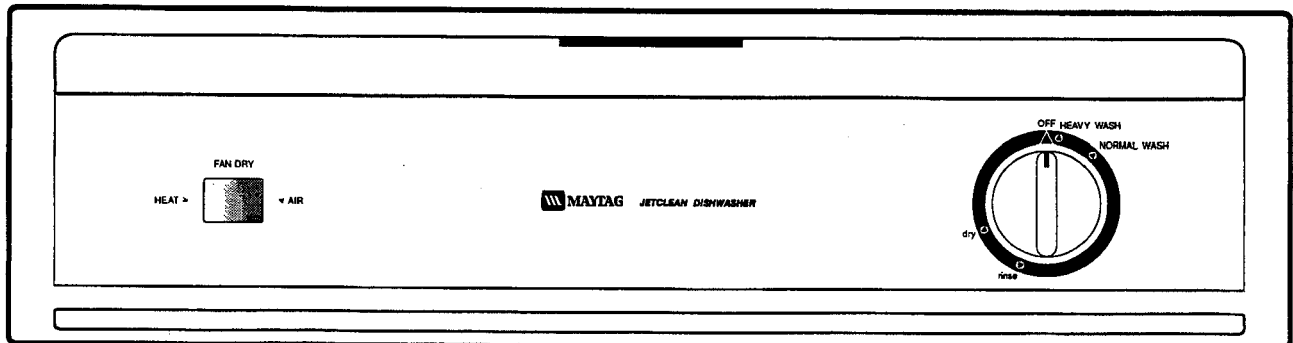
DWU7802



DWU7702



DWU7402 / 7502 / DWC7602



DWU7202 / DWC7302

JetClean™ '96 Maytag Dishwasher Line

MODELS:	EQ™ PLUS		QUIET PLUS			QUIET PACK				DEPENDABLY QUIET™
	DWU9962	DWU9922	DWU9902	DWU9502	DWU9202	DWU7802	DWU7702	DWU7502	DWU7402 DWC7602	
Built-In Portable										DWU7202 DWC7302*
FEATURES:										
CYCLES										
Smart Start™	X									X
Sani Scrub/Power Scrub	X									X
Pots & Pans/Heavy	X									
Normal	X									
Light/China	X									
Quick Wash	X									
Rinse & Hold	X									
Delicate Option For Any Cycle	X									
WATER HEATING OPTIONS										
TempSense										
Sani Heat										
FAN DRYING OPTIONS										
Air Dry										
Heat Dry										
OTHER OPTIONS										
Rinse Aid Dispenser										
Delay Start										
Indicator Lights										
Control Type										
COLOR										
Monochromatic White										
Monochromatic Almond										
Monochromatic Black										

ETC = Electronic Touch Control

PB = Push Button

* DWU7302 - Available Only In Monochromatic Black

All models listed here may not be available from every Maytag dealer. Because of continuing product improvement, Maytag reserves the right to change specifications without notice.

CYCLES AND OPTIONS

CYCLE CHART

CYCLE	CYCLE SEQUENCE							CYCLE TIME*	WATER USAGE
Sani Scrub/ Power Scrub	Pre-Wash	Rinse	Rinse	Extended Main Wash**	Rinse	Rinse**	Dry	99 Minutes	11 (9 Imp.) Gallons 42 Liters
Pots & Pans/ Heavy	Pre-Wash	Rinse	Rinse	Main Wash**	Rinse	Rinse**	Dry	99 Minutes	11 (9 Imp.) Gallons 42 Liters
Normal	Pre-Wash	Rinse	Main Wash**	Rinse	Rinse**	Dry		82 Minutes	9 (7.5 Imp.) Gallons 34 Liters
Light/China		Rinse	Main Wash**	Rinse	Rinse**	Dry		74 Minutes	7 (5.5 Imp) Gallons 26 Liters
Quick Wash			Wash	Rinse	Rinse			17 Minutes	5 (4 Imp.) Gallons 19 Liters
Rinse & Hold				Rinse				5 Minutes	2 (1.5 Imp.) Gallons 8 Liters

* Times may vary depending on water inlet temperature. ** Indicates TempSense water heating option.

OPTIONS

FAN DRY HEAT improves drying results by turning the heating element on during a portion of FAN DRY.

FAN DRY AIR turns the heating element off during the fan dry portion of the cycle. Towel drying of some items may be necessary.

NOTE: With either dry option, it is normal to notice vapor coming out of the vent area.

**TEMP SENSE and
TEMP SENSE ON** checks the main wash and final rinse water temperatures and will extend the heating and water circulation until proper water temperature is reached.

TEMP SENSE OFF cancels the water temperature checks in the main wash and final rinse.

SANI HEAT

turns the heating element on during all wash and rinse portions of the cycle. It checks the main wash and final rinse water temperatures and will extend the heating and water circulation until proper water temperature is reached. It also turns the heating element on for a longer portion of the dry cycle. *This option does not sanitize the dishes.*

DELAY START

allows you to program the dishwasher to operate at a more convenient time during off-peak energy rate hours.

Simply turn the cycle selector knob to the desired number of delay hours and select the POTS & PANS option for a longer wash cycle with water temperature checks throughout the cycle or deselect POTS & PANS for a shorter cycle.

DELAY/RESUME

can delay or interrupt any wash cycle from 10 minutes to 12 hours on some models and on other from 1 hour to 9 hours.

To set up a delay, first select the appropriate cycle and options for the load. Then, quickly press and hold the Delay/Resume pad until the desired amount of delay time appears in the display. The DELAY indicator will remain lit until the clock has counted down. The cycle will automatically start as soon as the delay time expires.

If you wish to cancel the delay start simply press the Delay/Resume pad again. The indicator light will go out and the cycle will start immediately.

NOTE: If delay is chosen without first selecting a cycle and options, the dishwasher will select the last wash cycle used in the delay mode.

This pad can also be pressed to temporarily interrupt a cycle. The cycle will resume from the point of interruption when the delay time runs out or when the Delay/Resume pad is pressed again.

NOTE: It is normal to notice vapor coming out of the vent area.

HEATED DRY

improves drying results by turning the heating element on during fan dry. A small indicator light will glow when it is selected. Cancelling Heated Dry turns the heating element off during the fan dry portion of the cycle. Towel drying of some items may be necessary.

NOTE: It is normal to notice vapor coming out of the vent area.

On select models an option recall feature memorizes the options selected with a cycle. For example, if Temp Sense, Sani Heat or Heated Dry is selected with a cycle, it will be automatically recalled the next time that cycle is selected.

DRAIN/OFF Pressing the pad once will drain the dishwasher and then turn it off. Pressing the pad twice will turn it off without draining.

The following options are for the MAYTAG INTELLISENSE™ Dishwasher only.

SANI SCRUB is designed for loads with heavy or dried-on soils. It checks the water temperature of the main wash and final rinse to improve cleaning and drying results. (HEATED DRY may or may not be selected with this cycle.)

QUICK WASH is a short cycle for use on dusty or very lightly soiled items.

RINSE & HOLD is a cycle designed to rinse a few soiled dishes being held until the dishwasher is full. It helps to minimize any potential food odors. A dry cycle is not available with this cycle since the dishes are not yet washed.

HEATED DRY improves drying by adding heat to the dry cycle. When selected, the indicator on the pad will light and HEATED DRY will appear in the display.

If you choose not to use this option, press the HEATING DRY pad to turn the light off and the dishes will be fan dried only. Towel drying of some items may be necessary.

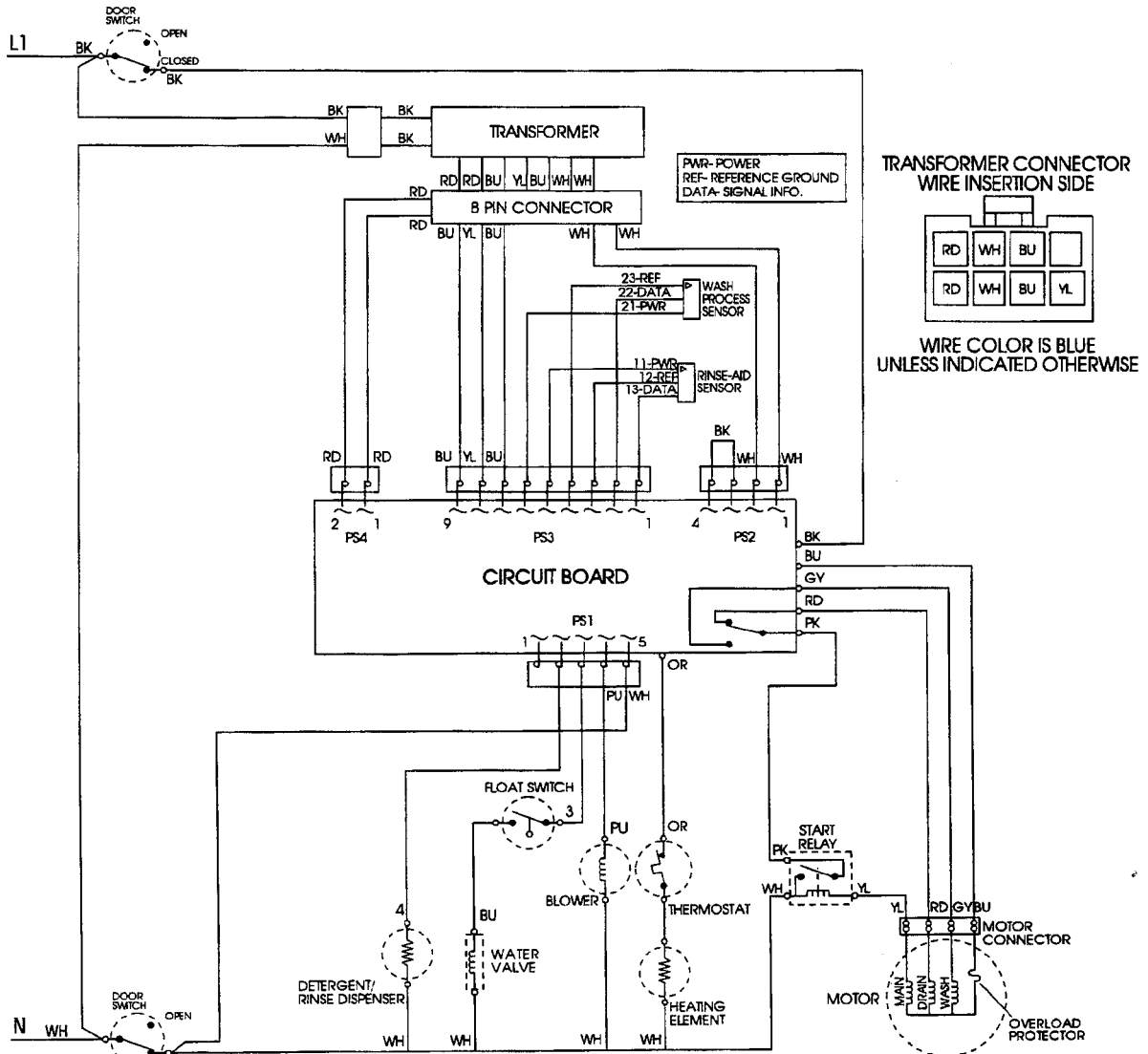
With either dry option (using or not using HEATED DRY) you may notice moist air being released from the dishwasher through the vent located below the controls.

DELICATE WASH can be used with any cycle, including Smart Start to create a gentle wash and dry cycle for china and crystal. Press the Delicate Wash pad after selecting a cycle. Use half as much detergent as normally required.

CANCEL any cycle before it's finished by pressing this pad. The dishwasher will drain, if needed, and shut off.

SCHEMATICS

DWU9962

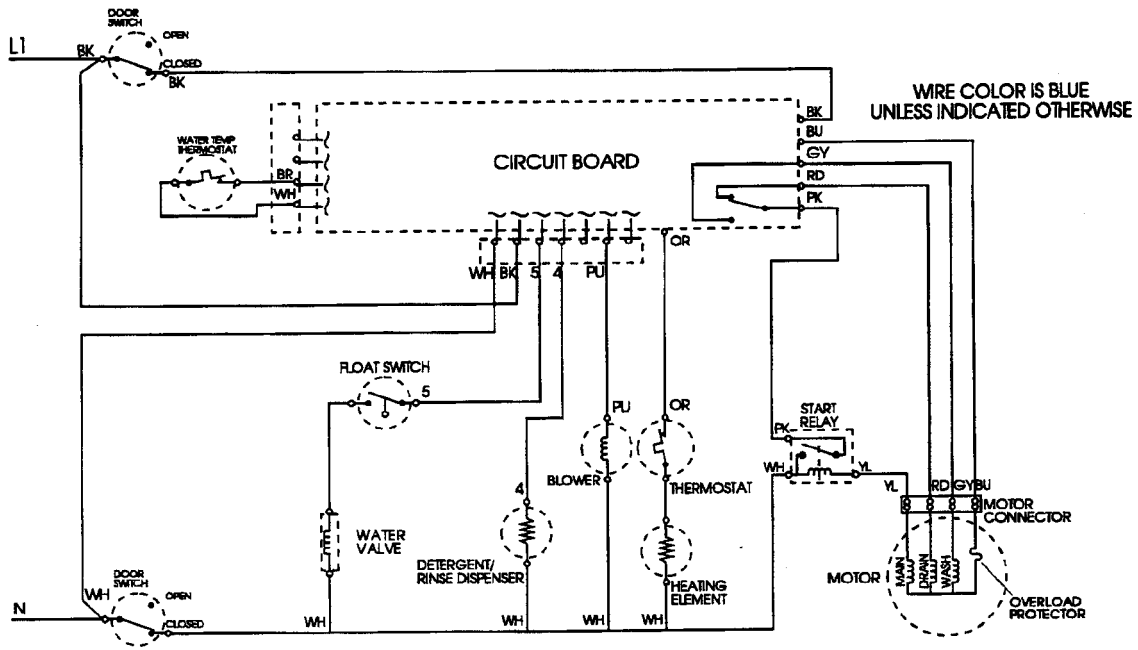


22AWG WIRE HARNESS
VOLTAGES AT CIRCUIT BOARD

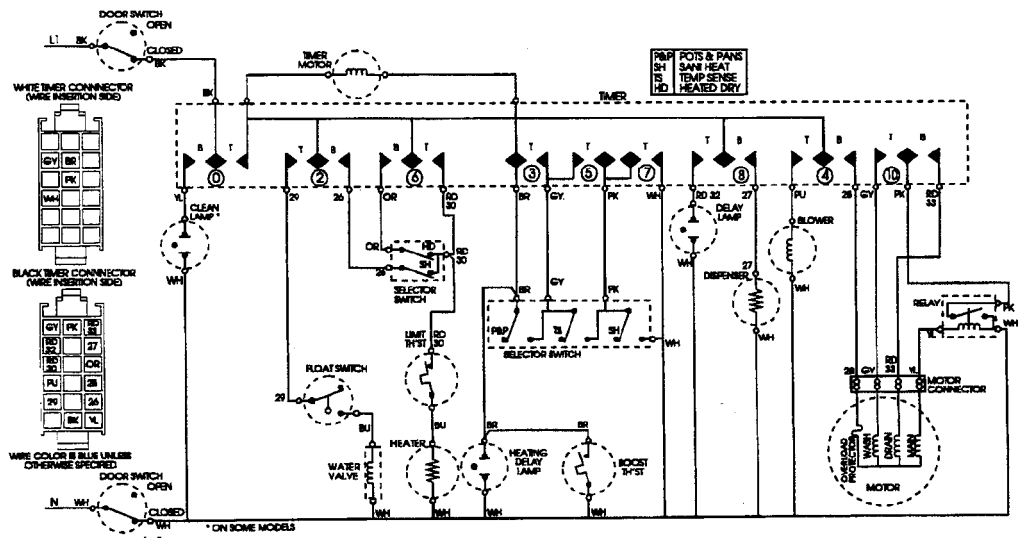
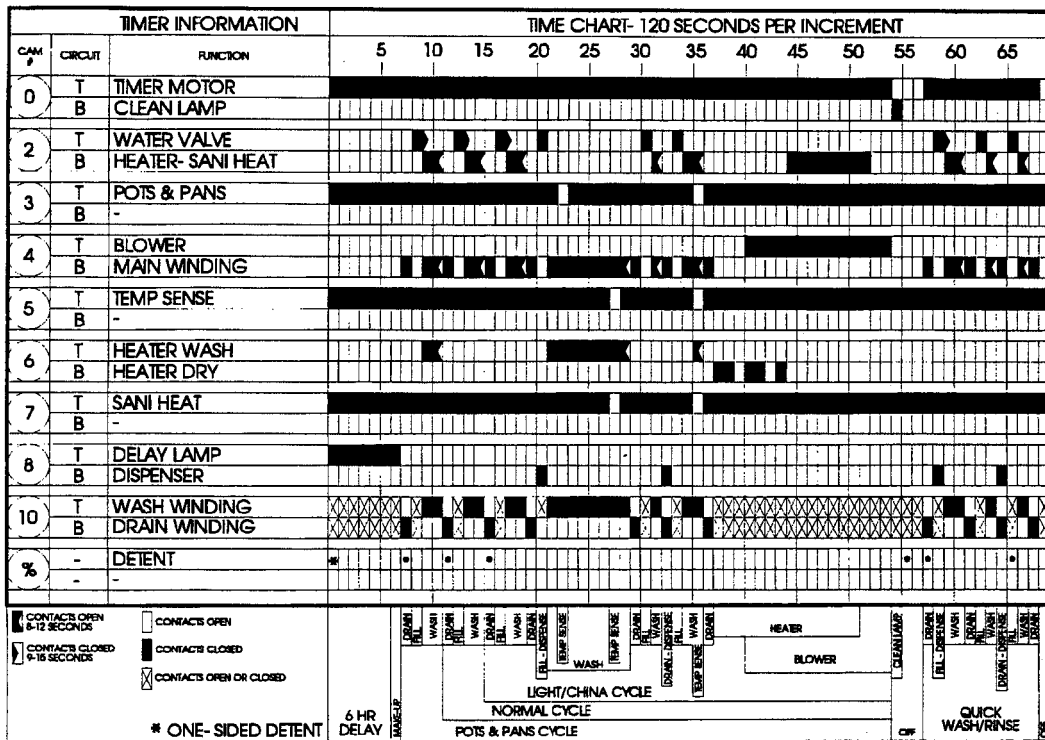
DESCRIPTION	WIRE 1	WIRE 2	VOLTAGE
VFD- INPUT	BU	BU	4.1VAC
VFD- INPUT	BU	YL	2.0VAC
BACKLIGHT-INPUT	RD	RD	5.85VAC
POWER SUPPLY-INPUT	WH	WH	19.2VAC
RINSE AID- OUTPUT	PS3.1	PS3.3	0VDC OR 7VDC
RINSE AID- INPUT	PS3.5	PS3.3	15VDC
SENSOR- INPUT	PS3.6	PS3.3	15VDC
SENSOR- OUTPUT	PS3.2	PS3.3	15VDC
BACKLIGHT-INPUT	PS3.1	PS3.3	25VDC

PSx REFERS TO CONNECTOR.
PSx,y REFERS TO POSITION "y" IN CONNECTOR *PSx.*

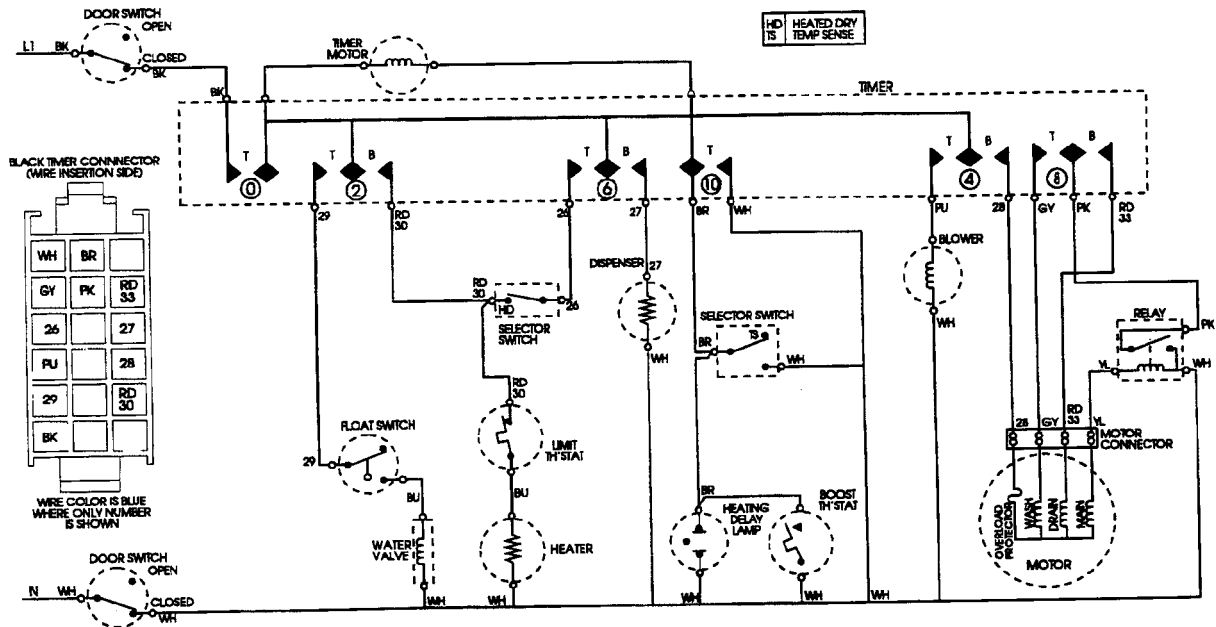
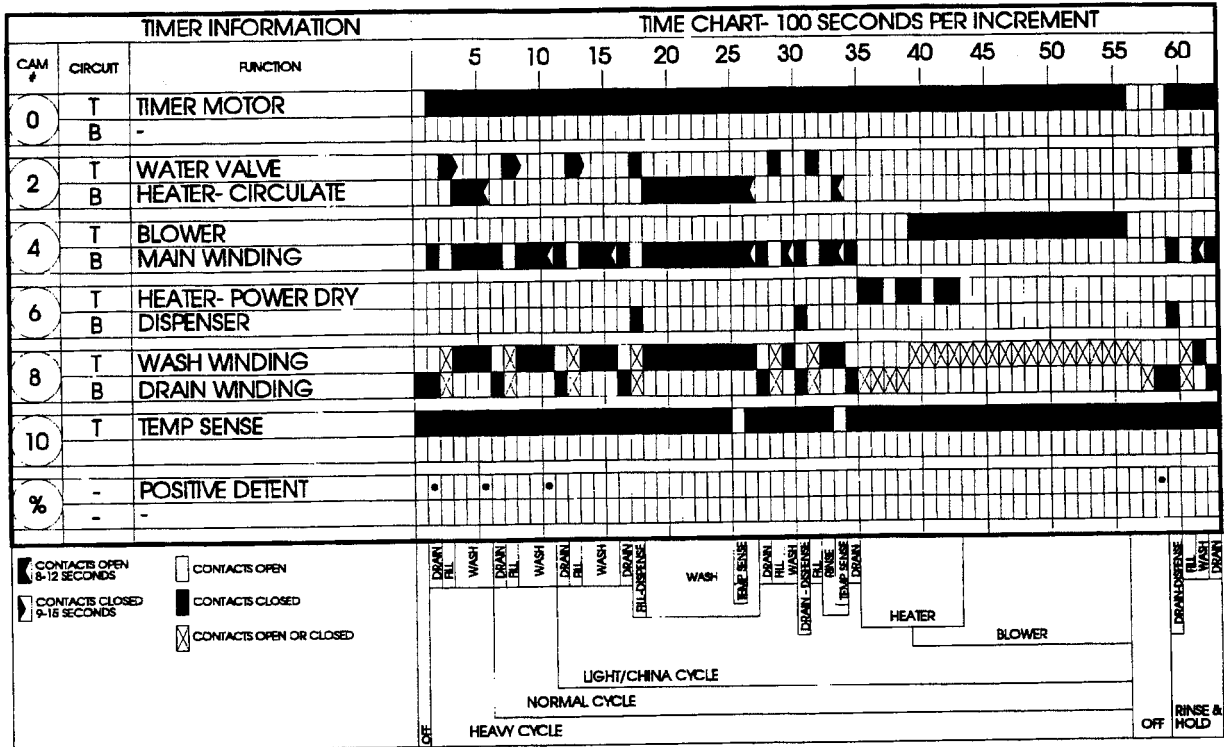
DWU9922 - DWU9902



DWU9502 - DWU9202 - DWU7802 - DWU7702



DWC7602 - DWU7502 - DWU7402



MAYTAG

Maytag Appliances Sales Company

Customer Service
240 Edwards Street, S.E.
Cleveland, Tennessee 37311