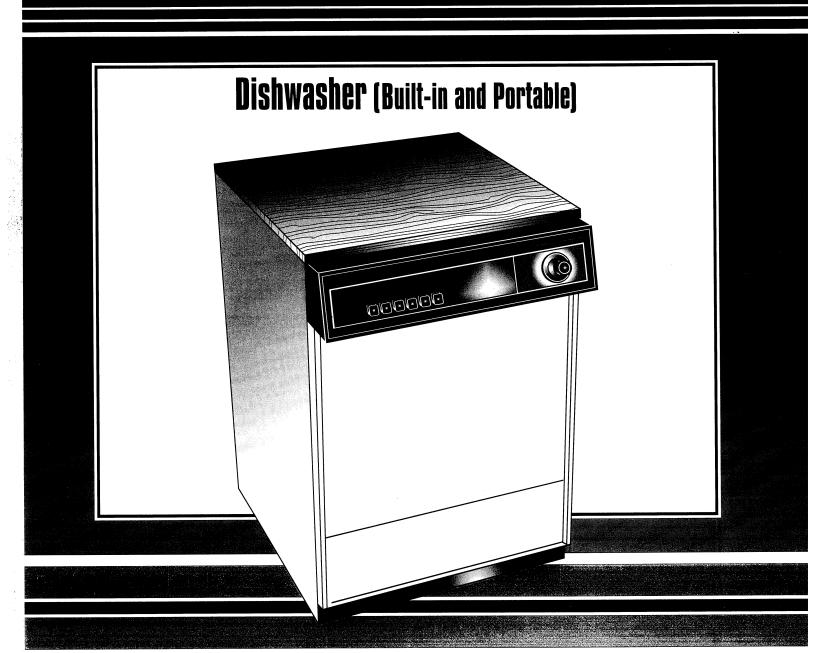
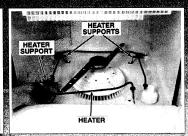
Whirlpool Dishwasher

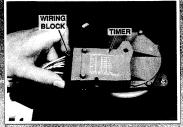
DO-IT-YOURSELF REPAIR MANUAL

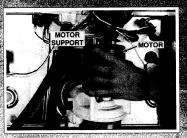


athre Emplorants and Step by Step Repair: Procedures









WHIRLPOOL CORPORATION does not assume any responsibility or any liability in connection with the use of this manual.

NOTICE: IF THE FULL WARRANTY PERIOD IS STILL IN EFFECT, ANY SELF-REPAIR OF YOUR DISHWASHER MAY VOID THIS WARRANTY.

REFER ANY WARRANTY SERVICE TO AN AUTHORIZED WHIRLPOOL FACTORY SERVICE BRANCH.

© 1984, 1988, 1991, 1996, 1999 WHIRLPOOL CORPORATION

All rights reserved. No portion of this book may be reproduced in any form without written permission from WHIRLPOOL CORPORATION.

 $\hbox{\it @ The trademarks $WHIRLPOOL$, $ $Whirlpool$, $ $Whirlpool$, and FSP are registered trademarks of Whirlpool Corporation. }$

SAFETY FIRST

Your safety and the safety of others is very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to hazards that can kill or hurt you and others. All safety messages will be preceded by the safety alert symbol and the word "DANGER" or "WARNING." These words mean:

A DANGER

WARNING

You <u>will</u> be killed or seriously injured if you don't follow instructions.

You <u>can</u> be killed or seriously injured if you don't follow instructions.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

INTRODUCTION

This Do-It-Yourself Repair Manual should provide you with a basic understanding of the operation of your WHIRLPOOL® dishwasher. The repairs covered in this manual require mechanical skills and the ability to follow written instructions. This manual includes step-by-step procedures which are color-coded for your convenience. A "Blue Procedure" is a (Basic Skills) level and requires basic tools. A "Black Procedure" is an (Advanced Skills) level and requires basic tools plus an ohmmeter for testing electrical parts. You MUST read the section in this manual entitled "How to Read Wiring Diagrams and Timer Sequence Charts" (section B) to make many of the repairs. Although this manual covers most repair procedures for Whirlpool dishwashers built over the past fifteen years, it does NOT cover any procedures for the electronic solid-state controls. This manual will cover "Porcelain liner models - 1986 and older" and "Plastic liner models - 1986 and newer."

Only the original parts of the Whirlpool dishwasher are talked about in the step-by-step procedures. It is your responsibility to read the additional instructions packed with any replacement part. When replacing any part, always use FSP® (Factory Specification Parts) replacement parts as specified for your Whirlpool dishwasher. This FSP trademark is shown on the parts carton and is a registered trademark of WHIRLPOOL CORPORATION identifying quality-tested replacement parts.

The pictures of the Whirlpool dishwasher used in this manual may or may not look exactly like your model; however, the repair procedures will be the same. In some pictures, parts were removed to show better detail. Unless the repair procedures specifically instruct you to do so, DO NOT remove these parts.

TABLE OF CONTENTS

A "Blue Procedure" is (Basic Skills) level and a "Black Procedure" is (Advanced Skills) level.

PAGE	3
SECTION A - Electrical Power Supply Connections Procedure 1 (Service Outlet)	;
SECTION B - How to Read Wiring Diagrams and Timer Sequence Charts)
SECTION C - Replacement Parts Information	2
SECTION D - Tools and Testing Equipment	}
SECTION E - How Your Dishwasher Works 14	£
SECTION F - Fuses and Circuit Breakers Procedure 1 (Fuses)	5
SECTION G - Preventive Maintenance Procedure 1 (Preventive Maintenance)	7
SECTION H - Problem Solving Charts 19	}
SECTION I - Console Area	
Procedure 1 (Timer Knob) 25	3
Procedure 2 (Timer Dial) 24	
Procedure 3 (Push-Button Control Knob)	1
Procedure 4 (Bezel)	
Procedure 5 (End Cap)	6
Procedure 6 (Console Escutcheon)	
Procedure 7 (Start Relay) 32	
Procedure 8 (Rocker Switch)) 7
Procedure 9 (Push-Button Switch)	1 Da
Procedure 10 (Indicator Light)	<i>ງ</i> 1
Procedure 11 (Indicator Light Lens)	2
Procedure 13 (Timer)	
I IUOOUUIO IU (IIIIOI/ ++++++++++++++++++++++++++++++++	_

		nsole Area (Continued)
		14 (Timer Motor) $\dots \dots \dots$
		15 (Delay Timer)
F	Procedure	16 (Delay Timer Dial) 55
F	Procedure	17 (Indicator Lights and Parts)
F	Procedure	18 (Vent Grille) 58
· P	Procedure	19 (Timer Cover)
P	Procedure	20 (Cam and Cam Follower) 61
		binet Area
P	Procedure	1 (Top) 65
P	Procedure	2 (Door Strike)
P	Procedure	$f 3$ (Swivel Caster and Socket) $\dots \dots \dots$
P	Procedure	4 (Front Leveling Feet)
		5 (Rear Leveling Wheel)
		6 (Toeplate)
P	Procedure	7 (Power Cord)
		8 (Power Cord Housing)
		9 (Faucet Coupler and Parts)
		0 (Hose Coupler Housing)
		1 (Power Cord and Hose Coupler Housing) 89
		2 (Hose Coupler-Inlet and Drain) 90
		3 (Wiring Harnesses and Terminals) 95
SECTI	ON K-D	oor Area
		1 (Release Lever) 101
		2 (Door Latch Bracket)
		3 (Door Switch)
		$4 \text{ (Vent Screen)} \dots 109$
		5 (Silverware Basket)
		6 (Utensil Basket)
		7 (Door Trim)
		8 (Door Gasket)
		·
		9 (Front Panel)
		.0 (Wetting Agent Dispenser)
		1 (Retainer Button)
		2 (Lower Panel Edging)
		3 (Door Spring and Retainer)
		4 (Door Support)
		5 (Detergent Dispenser Lid)
		6 (Detergent Dispenser Parts)
P	rocedure	7 (Inner Door Panel/Door Liner)

	PAGE
SECTION L - Tub and Below the Tub Area	
Procedure 1 (Access to Parts for Built-In Models)	149
Procedure 2 (Access Panel/Toe Panel and Parts)	151
Procedure 3 (Coverplate and Parts)	156
Procedure 4 (Shroud)	158
Procedure 5 (Drain Hose)	158
Procedure 6 (Check Valve)	160
Procedure 7 (Heater)	163
Procedure 8 (Heater Support)	168
Procedure 9 (Thermostat)	173
Procedure 10 (Water Inlet Valve)	176
Procedure 11 (Water Inlet)	179
Procedure 12 (Water Inlet Hose)	183
Procedure 13 (Thermal Fuse)	187
Procedure 14 (Microswitch, Float, and Parts)	188
Procedure 15 (Nozzle Cap and Bearing)	193
Procedure 16 (Lower Spray Arm)	194
Procedure 17 (Sump Guard)	197
Procedure 18 (Sump Screen or Grate)	198
Procedure 19 (Rapid Advance Timer)	199
Procedure 20 (Motor for Rapid Advance Timer)	203
Procedure 21 (Clock Motor for Rapid Advance Timer)	205
Procedure 22 (Soil Settler-Collector)	$\dots 207$
SECTION M - Dishracks and Related Parts	
Procedure 1 (Upper Dishrack)	213
Procedure 2 (Upper Spray Arm)	213
Procedure 3 (Upper Dishrack Wheel and Parts)	214
Procedure 4 (End Cap for Upper Track)	216
Procedure 5 (Upper Track)	
Procedure 6 (Upper Track Wheel)	220
Procedure 7 (Lower Dishrack)	
Procedure 8 (Lower Dishrack Wheel)	
Procedure 9 (Lower Dishrack Bumper)	226
Procedure 10 (Tower)	$\dots 227$
SECTION N - Pump and Motor Area	
Procedure 1 (Access to Pump and Motor Parts)	229
Procedure 2 (Pump and Parts)	
Procedure 3 (Motor)	
Procedure 4 (Pump Gasket)	258
CDCTON O D' land han Accounting	001
SECTION O - Dishwasher Accessories	26
TYPICAL PARTS LISTS	265
III TOTAL I MILLO LICEO	
INDEX	283

Electrical Power Supply Connections

Read This Section Carefully Before Any Repair or Testing Procedures Are Attempted.

Dishwashers may be disconnected from the electrical power in one of the following three ways.

PORTABLE MODELS — use PROCEDURE 1 or 3 BUILT-IN MODELS — use PROCEDURE 2 or 3

PROCEDURE 1

AWARNING



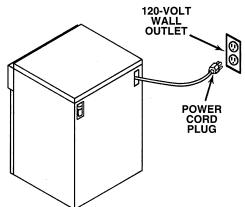
Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

AWARNING



Electrical Shock Hazard
Plug into a grounded 3 prong outlet.
Do not remove ground prong.
Do not use an adapter.
Do not use an extension cord.
Failure to follow these instructions can result in death, fire, or electrical shock.

Service Outlet



To Disconnect Power

• Unplug dishwasher or disconnect power.

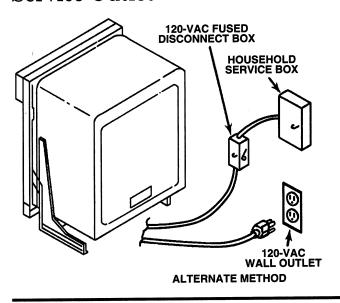
To Connect Power

• Plug in dishwasher or reconnect power.



PROCEDURE 2

Disconnect Box or Service Outlet



FUSED DISCONNECT BOX

To Disconnect Power

- Turn handle on fused disconnect box to the OFF position.
- ALTERNATE METHOD: Disconnect power or unplug dishwasher.

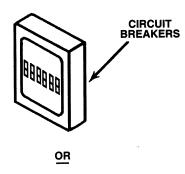
To Connect Power

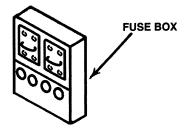
- Turn handle on fused disconnect box to the ON position.
- ALTERNATE METHOD: Reconnect power or plug in dishwasher.

PROCEDURE 3

Circuit Breakers and Fuses

HOUSEHOLD SERVICE BOX





CIRCUIT BREAKER BOX

To Disconnect Power

• Turn the switch to the OFF position.

To Connect Power

• Turn the switch to the ON position.

FUSE BOX

To Disconnect Power

 Pull dishwasher fuse block out of fuse box.

To Connect Power

• Replace dishwasher fuse block into fuse box.

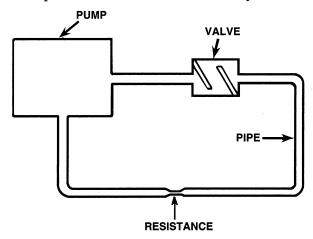
SECTION B

How to Read Wiring Diagrams and Timer Sequence Charts, Wiring Diagram Symbols, and Terminal Codes

Knowing and understanding your wiring diagram and timer sequence chart takes a special skill. Before attempting any ohmmeter checks, you must know how and where electricity flows and how the operating controls work.

Before we explain how to read these wiring diagrams and timer sequence charts, think of electricity as water moving through pipes in your home.

Starting with a water pump (Wall Outlet), water (Electricity) is forced through pipes (Wires) into valves (Switches), some causing a resistance or pressure (Voltage), then back through the pump (Wall Outlet) to complete the flow of water (Electricity).



The wiring diagram and timer sequence chart for your model is located behind the access panel/toe panel.

On pages 8-9 are typical examples of a wiring diagram and a timer sequence chart. These diagrams vary from model to model, but a basic knowledge of one diagram will enable you to understand any WHIRLPOOL® dishwasher wiring chart.

This detailed chart shows how the timer motor and timer switch operation control machine functions. When the timer switch sequence chart information is compared to the wiring diagram, electrical and mechanical diagnosis can be accomplished. The top horizontal row of numbers across the top of the timer sequence chart represents timer SWITCH NUMBERS. These numbers WILL NOT be found on the actual timer. They are merely guides to be used to relate between the timer sequence chart and the wiring diagram. The timer switch functions are shown directly below the timer switch numbers. These relate to the function controlled by that switch contact.

The letters below the timer switch functions, such as LBU, R, YR, BR-O, etc. represent the actual timer terminal markings and wiring color code.

The vertical column at the right of the timer sequence chart shows the cycles of machine operation. As you can see, this particular chart has two wash cycles, four rinse cycles, and a dry cycle. To the right of each cycle are the machine functions for that cycle.

Even-numbered timer steps are shown to the left of the machine functions. The odd-number steps are not shown to avoid confusion and an overcrowded appearance. Each timer space represents a definite period of time.

Closed (energized) switches for the components of each timer step are represented by the HEAVY UP AND DOWN BARS in the timer switch sequence chart.

The timer switch sequence chart explains the when, what, why, and how of machine function at any selected point of operation.

To properly diagnose a problem, the electrical circuitry and the wiring diagram attached to the product must be thoroughly understood. Let's first study each part of the wiring diagram.



The symbol shown at the top by the letters BK and W represents the line cord attachment plug. The line marked W extends down the right side of the diagram and is known as the "neutral side" of the electrical system. Note that this line connects directly to one side of each energy converting (electrical to mechanical) component of the dishwasher, without any controlling switch.

The line shown as BK extends to the left and is known as the "hot side" of the electrical system. It provides a circuit to the master switch and to all electrically operated components through the timer switches.

The heavy black lines connected to numbered switches represent circuits and switches within the timer assembly.

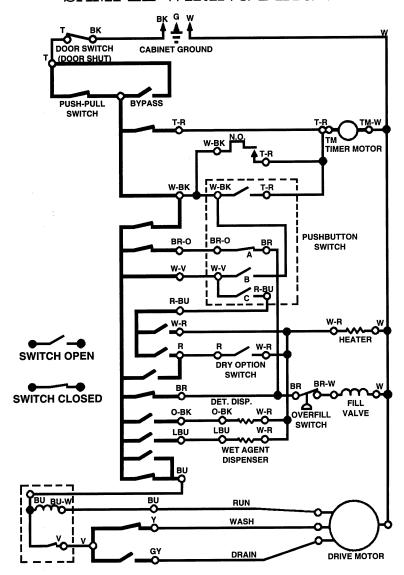
The pull-on, push-off timer knob switch controls all circuits. This switch starts dishwasher (door closed) operation when the timer knob is pulled out and stops when it is pushed in.

All timer switches are numbered to correspond with the timer sequence chart. A given machine component is always controlled by the same timer switch number, regardless of the model. For example: Five (5) is always the fill valve; six (6) is always the heater.

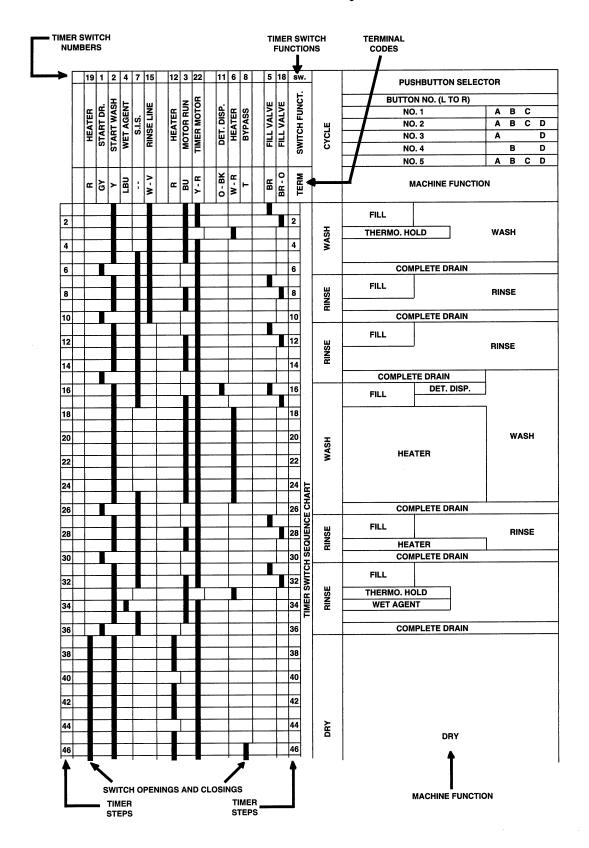
Wiring harnesses are color coded, to match the colorcoded lettering imprinted on the wires of the timerterminal connections. A given dishwasher component always uses the same wiring harness color and color code lettering, regardless of model.

Example: BR (brown) is always used for the fill valve; W-R (white/red) is always used for the heater.

SAMPLE WIRING DIAGRAM



SAMPLE TIMER SEQUENCE CHART



WIRING DIAGRAM SYMBOLS

GROUND (EARTH)	<u></u>	THERMOSTAT N.O. or N.C.	~
GROUND (CHASSIS)		WATER LEVEL SWITCH	
3-PRONG PLUG	111	RELAY or VALVE	owno
AUTOMATIC or MANUAL SWITCH	00	COIL and SWITCHES (Separate in circuit)	00
DOUBLE THROW SWITCH	00	CENTRIFUGAL SWITCH	$\stackrel{\uparrow}{\sim}$
INTERNAL CONNECTOR		TIMER MOTOR	○
HARNESS WIRE		DRIVE MOTOR (Multi-Speed)	○
PERMANENT CONNECTION		HEATER	0-W-0
TIMER SWITCH	~	FUSE	oo
CROSSOVER		CIRCUIT BREAKER	o - ^-o
TERMINAL	0	PLUG CONNECTOR	→

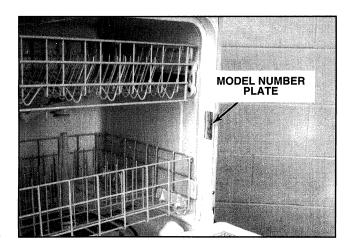
TERMINAL CODES

Terminal Color Codes	Harness Wire Color
BKBK-Y	Black with Yellow Tracer
BR-O or BR-OR BR-R BR-W	Brown with Orange Tracer Brown with Red Tracer
BL or BU BL-BK or BU-BK BL or BU-G or BL or BU-GN BL or BU-O or BL or BU-OR BL-Y or BU-Y	Blue with Black Tracer Blue with Green Tracer Blue with Orange Tracer
G or GN	Green with Black Tracer
GY-P or GY-PK	Gray with Pink Tracer
LBU	Light Blue
O or OR O-BK or OR-BK	Orange .Orange with Black Tracer
P or PK	Pink
P or PR P-BK or PR-BK	PurplePurple with Black Tracer
R	Red with Black Tracer
T or TN T-R or TN-R	Tan with Red Tracer
V	Violet
W	White with Black Tracer White with Blue Tracer White with Green Tracer White with Orange Tracer White with Red Tracer White with Violet Tracer
Y	Yellow with Black Tracer Yellow with Green Tracer

SECTION C

Replacement Parts Information

Model Number Plate



Write In Your Complete Model Number Here

Open the door and locate the metal or foil plate attached to the right side of the door opening. This plate will give you the stock number, complete model number, serial number and other electrical information. The first four positions of the serial number will indicate where and when the dishwasher was manufactured. The first position indicates the place of manufacture. The second position indicates the year of manufacture (8-1988; 9-1989; X-1990; A-1991). The next two positions indicate the week of manufacture.

Always Use Your Complete Model Number When Ordering Parts!

Typical Model Number Plate

Whirlpool®

DU8300X STOCK NUMBER

HEATER MOTORS 4.2 AMPS 3.4 AMPS 6.5 TOTAL AMPS FA 10 31000 SERIAL NUMBER DU8300XX-0

WHIRLPOOL CORPORATION BENTON HARBOR, MICHIGAN, U.S.A. 49022

If You Need FSP® Replacement Parts

FSP is a registered trademark of Whirlpool Corporation for quality parts. Look for this symbol of quality whenever you need a replacement part for your WHIRLPOOL® appliance. FSP replacement parts will fit right and work right, because they are made to the same exacting specifications used to build every new Whirlpool appliance. Ask for them by name - FSP!

Whirlpool has a nationwide network of authorized Whirlpool service companies. To find the telephone number, look in the yellow pages of your phone directory under: Appliances — Household — Major, Service & Repair or Whirlpool Appliances or Authorized Whirlpool Service.

You can also purchase parts through the Whirlpool Consumer Assistance Center. See below for the toll-free telephone number.

.......... Call the toll-free WHIRLPOOL CONSUMER ASSISTANCE CENTER telephone number:

..... or if you prefer, write to:

Whirlpool Brand Home Appliances Consumer Assistance Center c/o Correspondence Dept. 2000 North M-63 Benton Harbor, MI 49022-2692 Inglis Limited Administration Centre 1901 Minnesota Court Mississauga, Ontario L5N 3A7

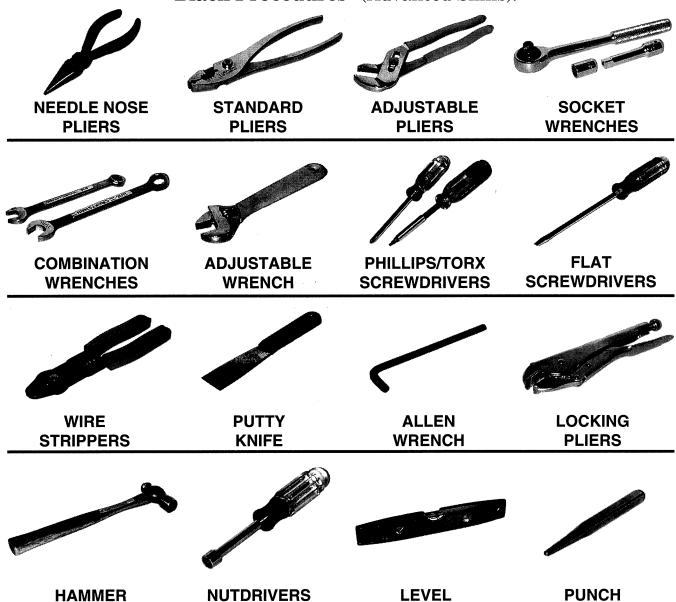
...... Please include a daytime phone number in your correspondence.



SECTION D

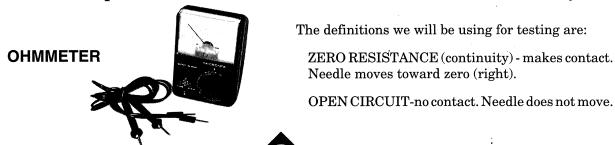
Tools and Testing Equipment

These tools are required for "Blue Procedures" (Basic Skills) and "Black Procedures" (Advanced Skills).



This tool is required for "Black Procedures" (Advanced Skills) only.

PARTS



SECTION E

How Your Dishwasher Works

Many people like yourself wash dishes, putting them in the dishwasher, pushing push-buttons and turning the control knob to set the timer for the operation they want. But how many people know what is happening inside the dishwasher? Now let us look at how your dishwasher works.

After placing the dishes properly in the dishracks, the detergent is placed in the dispenser and the rinse conditioner is checked for proper level. The door is shut and the type of wash cycle is selected.

Water enters through the inlet hose, water inlet valve and into the tub. A dishwasher tub does not fill with water the way an automatic washer does. It is designed so that there are never more than two gallons of water in the dishwasher tub at any one time.

During a typical wash or rinse portion of a cycle, the heater heats the water (on some models) to at least 140°F. The water is pumped through the lower spray arm, jet streamed to the upper spray arm, onto the dishes, over and over again.

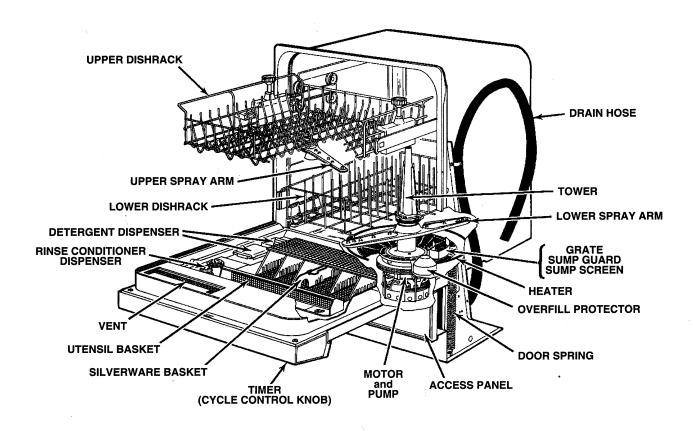
As the water runs off the dishes and back to the pump, it flows through a filtering system. On some models the filter is designed to separate most food particles from the water so they won't be sprayed back onto the dishes.

At the end of a wash or rinse cycle, the water is pumped out of the dishwasher, flushing the filter of any small food particles.

Large pieces of food are trapped on the removable pump guard which must be cleaned before the next use.

On some models the POWER CLEAN® MODULE, pump and motor (with screws on top) removes food particles from the water, stores them, then grinds up the food particles as they are washed down the drain. During grinding, some sounds will be heard.

The heater (if this is selected) comes on and helps dry the dishes in the drying portion of the cycle.



SECTION F

Fuses and Circuit Breakers

PROCEDURE 1

AWARNING

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

Fuses

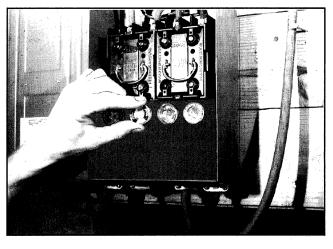
Plug fuses have a round screw base with a glass window. When the plug fuse has blown, the glass window appears burned or smoky. The fuse must be replaced.

Time-delay plug fuses may not appear burned or smoky. This type must be checked with an ohmmeter (See TESTING, steps 3-6).

It is recommended that a separate grounded 120-volt electrical circuit with a 15-amp. time-delayed plug fuse be used for the appliance.

NOTE: The following procedures assume that the electrical circuit for the appliance does not operate any other electrical devices.

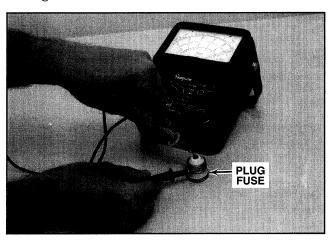
Step 1 Disconnect power or unplug dishwasher.



Step 2 Remove the plug fuse from the panel and test or replace it with a new 15-amp. time-delayed plug fuse.

TESTING

Step 3 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 4 Touch and hold one ohmmeter probe to the side threads.

Step 5 Touch the other ohmmeter probe to the tip, on the bottom of the plug fuse.

Step 6 The ohmmeter should show ZERO resistance (continuity). If not, the plug fuse is bad and needs replacing.

Step 7 Replace the plug fuse and if it still blows, the circuit is still overloaded or there is a short circuit in your household wiring somewhere. Call a qualified electrician for this repair.

Step 8 After replacing the plug fuse and it does not blow, reconnect power or plug in dishwasher. If the plug fuse blows now, the problem is in your appliance. An authorized service technician may be needed to isolate the problem or check problem 1 in the Problem Solving Charts, section H.

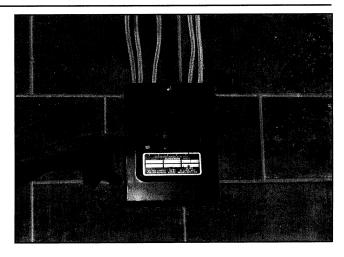
PROCEDURE 2



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

Circuit Breakers

A circuit breaker panel is made up of rows of contacts. Circuit breakers can be snapped in place on this panel.



It is recommended that a separate grounded 120-volt electrical circuit with a 15-amp. circuit breaker be used for the appliance.

NOTE: The following procedures assume that the electrical circuit for the appliance does not operate any other electrical devices.

Step 1 Disconnect power or unplug dishwasher.

Step 2 When this type of breaker trips, the switch moves to a position between ON and OFF. To turn the electrical power back on, move the switch to the OFF position then back to ON.

Step 3 If the circuit breaker still trips, the circuit is still overloaded or there is a short circuit in your household wiring somewhere, or the circuit breaker is weak. Call a qualified electrician for this repair.

Step 4 After resetting the circuit breaker and it does not trip, reconnect power or plug in dishwasher. If the circuit breaker trips now, the problem is in your appliance. An authorized service technician may be needed to isolate the problem, or check problem 1 in the Problem Solving Charts, section H.

SECTION G

Preventive Maintenance

PROCEDURE 1

Preventive Maintenance

WHIRLPOOL® dishwashers are designed and built to rigid specifications which require a minimum of service. Preventive maintenance will even further reduce the amount of service required.

NOTE: When cleaning, always wear rubber gloves.

CLEAN OUTSIDE SURFACES:

- Wipe with warm, sudsy water and a damp cloth. Rinse and then dry with a soft cloth.
- Wipe up spills right away. Some foods can mar the finish if left on the top.

CLEAN INSIDE SURFACES:

 Prolonged use of hard water may cause a white, yellow or brown film to build up on the inside of the tub.

Temporary remedy:

- A. Set empty dishwasher for a "one wash" cycle.
- B. Start the dishwasher and then unlatch the door to stop it when it has filled for the wash part of the cycle.
- C. Add 1/4 to 1/2 cup (120 to 240 ml) of citric acid crystals (usually available in drugstores).
- D. Close and latch the door to complete cycle.

Permanent solution:

A. Install an iron or manganese filter to home water supply.

NOTES

-	 		
		•	
			·····
The state of the s	**************************************		
	· · · · · · · · · · · · · · · · · · ·		
•	 		
		17.1444.	

$egin{aligned} SECTION & H \ \\ Problem Solving Charts \end{aligned}$

SEE PAGES 14 AND 265-281 FOR LOCATION OF PARTS.

READ SECTION E — "HOW YOUR DISHWASHER WORKS" FIRST. THIS IS TO HELP YOU UNDERSTAND AND POSSIBLY DIAGNOSE THE PROBLEM. THEN REFER TO THE FOLLOWING PROBLEM SOLVING CHARTS.

	PROBLEM		POSSIBLE CAUSE		REPAIR PROCEDURE
1.	Dishwasher will not operate.	1a.	No electrical power.	1a.	Check electrical power. See section A, procedures 1-3, p. 5 or 6.
		1b.	Door switch.	1b.	Check door switch. See section K, procedure 3, p. 106.
		1c.	Open circuit in timer.	1c.	Check timer. See section I, procedure 13, p. 43.
		1d.	Short (bare wire touching metal).	1d.	Check all wiring for bare wire or terminal touching metal.
		1e.	Loose terminal.	1e.	Check all terminal connections. See section J, procedure 13, p. 95.
		1f.	Broken wire in wiring harness.	1f.	Check for broken wire. See section J, procedure 13, p. 95.
		1g.	•	1g.	Check thermal fuse. See section L, procedure 13, p. 187.
2.	Dishwasher does	2a.	No electrical power.	2a.	Check electrical power.
	not make a complete cycle.	2b.	Drive motor.	2b.	See section A, procedures 1-3, p. 5 or 6. Check drive motor. See section N, procedure 3, p. 253.
		2c.	Thermostat.	2c.	Check thermostat. See section L, procedure 9, p. 173.
		2d.	Push-button switch.	2d.	Check push-button switch. See section I, procedure 9, p. 37.
		2e.	Start relay.	2e.	Check start relay. See section I, procedure 7, p. 32.
		2f.	Open circuit in timer.	2f.	Check timer. See section I, procedure 13, p. 43.
		2g.	Short (bare wire touching metal).	2g.	Check all wiring for bare wire or terminal touching metal.
		2h.	Loose terminal.	2h.	Check all terminal connections. See section J, procedure 13, p. 95.
		2i.	Broken wire in wiring harness.	2i.	Check for broken wire. See section J, procedure 13, p. 95.

	PROBLEM		POSSIBLE CAUSE		REPAIR PROCEDURE
3.	Water does not	3a.	Water faucet closed.	3a.	-
	enter dishwasher.	3b.	Overfill switch.	3b.	
		0	****	0	See section L, procedure 14, p. 188.
		3c.	Water inlet valve.	3c.	Check water inlet valve.
		24	Push-button switch.	24	See section L, procedure 10, p. 176.
		ou.	i usii-puttoii switcii.	ou.	Check push-button switch. See section I, procedure 9, p. 37.
		3e.	Open circuit in timer.	3e.	
		00.	open en eart in timer.	J.	See section I, procedure 13, p. 43.
		3f.	Short (bare wire	3f.	Check all wiring for bare wire or
			touching metal).		terminal touching metal.
		3g.	Loose terminal.	3g.	Check all terminal connections.
					See section J, procedure 13, p. 95.
	•	3h.	Broken wire in wiring	3h.	Check for broken wire.
		0.	harness.	٥.	See section J, procedure 13, p. 95.
		3i.	Water supply line or	3i.	Move supply line or hoses to
			hoses kinked.		prevent kinking.
ŀ.	Water does not drain	4a.	Drain line or hose	4a.	Move drain line or hoses to
	from dishwasher.		kinked.		prevent kinking.
		4b.	Pump.	4b.	Check pump.
		,	D .		See section N, procedure 2, p. 234.
		4c.	Drive motor.	4c.	Check drive motor.
		44	Start relev	4.3	See section N, procedure 3, p. 253.
		4d.	Start relay.	4 a.	Check start relay. See section I, procedure 7, p. 32.
		4e.	Open circuit in timer.	4e.	Check timer.
		10.	open eneure in enner.	10.	See section I, procedure 13, p. 43.
		4f.	Short (bare wire	4f.	Check all wiring for bare wire or
			touching metal).		terminal touching metal.
		4g.	Loose terminal.	4g.	Check all terminal connections.
					See section J, procedure 13, p. 95.
		4h.	Broken wire in wiring	4h.	Check for broken wire.
			harness.		See section J, procedure 13, p. 95.
5 .	Too much water in	5a.	Water inlet valve.	5a.	Check water inlet valve.
	dishwasher.				See section L, procedure 10, p. 176.
		5b.	Open circuit in timer.	5b.	Check timer.
		_	0 011 11 1	_	See section I, procedure 13, p. 43.
		5c.	Overfill switch.	5c.	Check overfill switch.
		۲J	Water did not drain	7. 1	See section L, procedure 14, p. 188.
		5d.	from dishwasher.	ad.	Refer to problem 4.
		5e.	Water inlet valve	5e.	Check water inlet valve flow washer
		JE.	flow washer.	Je.	for correct size. See your customer
		The state of	ino w washor.		repair parts list for part number.
		100			
:	Dighwashov loaks	60	Door gaskot	60	
	Dishwasher leaks	6a.	Door gasket.	6a.	Check door gasket.
·.	Dishwasher leaks water.	6a. 6b.	Door gasket. Door latch.		

nuts re 8, p 168. re 2, p. 234. re 4, p. 258. re 14, p. 188. ps. re 12, p. 90,
re 2, p. 234. re 4, p. 258. re 14, p. 188. ps. re 12, p. 90, e 5, p. 158.
re 4, p. 258. re 14, p. 188. ps. re 12, p. 90, e 5, p. 158.
re 4, p. 258. re 14, p. 188. ps. re 12, p. 90, e 5, p. 158.
ps. re 12, p. 90, e 5, p. 158.
re 12, p. 90, e 5, p. 158.
nose. res 11 and 12,
ch Kit r pump boot er hitting front re 15, p. 193.
ch Kit.
ng dishes plus aring.
re 16, p. 194. es, hard
ımp. ıre 2, p. 234.
ear feet. res 4 and 5,
er the water. re 14, p. 188.
re 14, p. 100.
are Guide."
re 7, p. 163.
or hotter ast rinse.
are Guide."
nections. re 13, p. 95.
re 13, p. 95.

PROBLEM :		POSSIBLE CAUSE		REPAIR PROCEDURE
10. Low water level (proper water level	10a.	Overfill switch.	10a.	Check overfill switch. See section L, procedure 14, p. 188.
is when the heater is under the water).	10b.	Water inlet valve flow washer.	10b.	Check water inlet valve flow washer for correct size. See your customer repair parts list.
	10c.	Water inlet valve screen.	10c.	Check screen in inlet valve. See section L, procedure 10, p. 176.
	10d.	Water supply line or hoses kinked.	10d.	Move supply line or hoses to prevent kinking.
	10e.	Low water pressure.	10e.	Check with your water department or check your own well pump. Rate should be with flowing water. Minimum of 15 P.S.I. to a maximum of 20 P.S.I. (pounds per square inch).
1. Motor overload keeps shutting	11a.	Drive motor (start	11a.	Check drive motor.
off dishwasher.	11b.	winding and ground). Locked rotor (drive motor).	11b.	See section N, procedure 3, p. 253. Check for any obstructions and remove. See section N, procedure 3, p. 253.
	11c.	Start relay.	11c.	Check start relay. See section I, procedure 7, p. 32.
	11d.	Tight drive motor bearing.	11d.	· · · · · · · · · · · · · · · · · · ·

SECTION I

Console Area

PROCEDURE 1

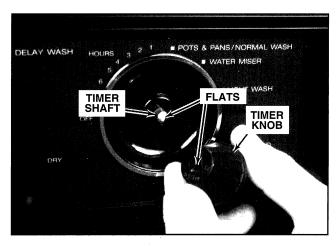
Timer Knob Replacement

This part is located on the front of the door, in the upper right corner and is used for turning the timer to the function you want.

See page 265, illus. no. 15 or page 279, illus. no. 17 for location of part.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

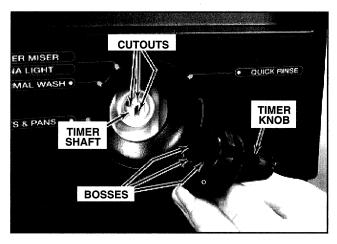


Step 1 To remove your timer knob, pull straight off. NOTICE the flat on the shaft of the timer and the flat in the back of the timer knob.

REPLACEMENT

Step 2 Line up the flat on the timer shaft with the flat on the timer knob and then push on.

TYPE B



Step 1 To remove your timer knob, pull straight off.

REPLACEMENT

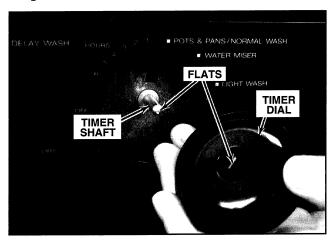
Step 2 Line up the bosses in the knob with the cutouts in the timer shaft and then push on.

PROCEDURE 2

Timer Dial Replacement

This part is located on the front of the door, on the right side, behind the timer knob. This dial has a pointer showing you the function you have selected.

Step 1 Remove the timer knob.



Step 2 Pull the timer dial straight off. NOTICE the flat on the shaft of the timer and the flat in the back of the timer dial.

REPLACEMENT

Step 3 Place the timer dial on by lining up the flat of the timer shaft with the flat of the dial and then push on.

Step 4 Replace the timer knob.

PROCEDURE 3



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

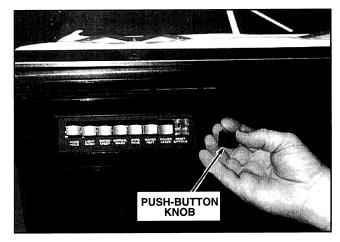
Push-Button Control Knob Replacement

This part is located on the front of the door in the left corner and is used to select the function you want.

See page 265, illus. no. 2 for location of part.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A



Step 1 To replace any push-button control knob, just pull it straight off.

REPLACEMENT

Step 2 Place the push-button control knob on by lining up the switch shaft with the slot in the back of the knob and then push on.

TYPE B

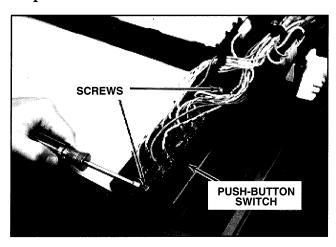
Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 3 Remove the inner door panel.

Step 4 Remove the timer cover.

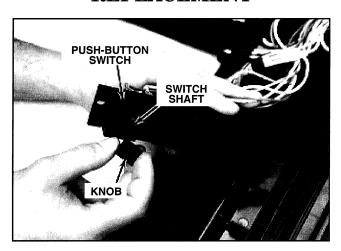


Step 5 Using a screwdriver or nutdriver, remove the screws which hold the push-button switch to the console escutcheon.

Step 6 Carefully remove the push-button switch.

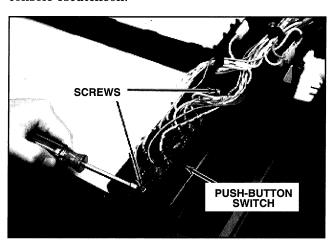
Step 7 To remove any push-button control knob, pull straight off.

REPLACEMENT



Step 8 Place the push-button control knob on by lining up the switch shaft with the slot in the back of the knob then push on.

Step 9 Place the push-button switch back on the console escutcheon.



Step 10 Using a screwdriver or nutdriver, insert the screws through the push-button switch into the console escutcheon and tighten.

Step 11 Replace the timer cover.

Step 12 Replace the inner door panel.

Step 13 Close the door.

Step 14 Reconnect power or plug in dishwasher.

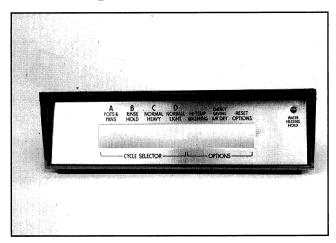
PROCEDURE 4

AWARNING



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

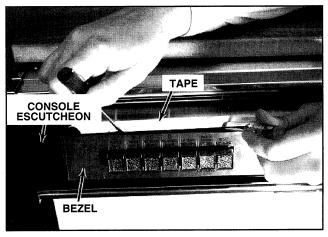
Bezel Replacement



This part is located on the console escutcheon on some porcelain liner models (1986 and older). It has the different cycles printed on it so you can push the proper push-button.

Step 1 Disconnect power or unplug dishwasher.

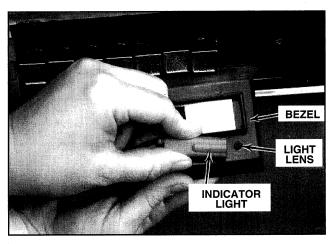
NOTE: Place tape or use a cloth just above the bezel on the console escutcheon to protect its finish.



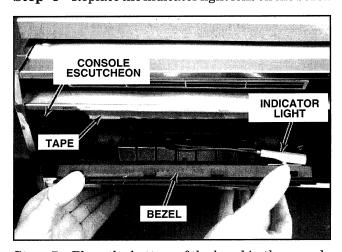
Step 2 Insert small blade screwdrivers between the upper part of the bezel and console escutcheon and pry.

Step 3 Remove the indicator light lens.

REPLACEMENT



Step 4 Replace the indicator light lens on the bezel.



Step 5 Place the bottom of the bezel in the console escutcheon.

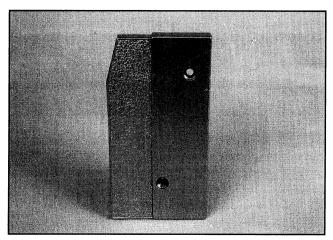
Step 6 Push the top of the bezel until it snaps in place.

NOTE: Remove the tape or cloth.

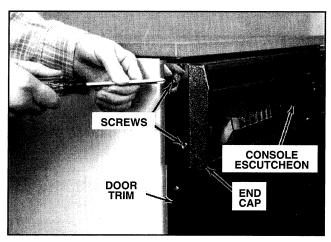
Step 7 Reconnect power or plug in dishwasher.

PROCEDURE 5

End Cap (Console Escutcheon) Replacement

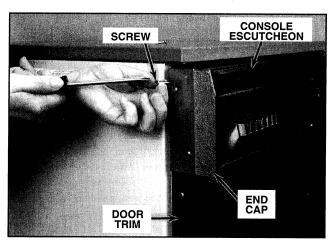


This part is located on both sides of the front door on some porcelain liner models (1986 and older) and is used to cover the controls.



Step 1 Using a screwdriver, remove the screws which hold the end cap to the door.

REPLACEMENT



Step 2 Place the end cap on the side of the door.

Step 3 Using a screwdriver, insert the screws through the end cap into the door and tighten.

PROCEDURE 6



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

Console Escutcheon Replacement

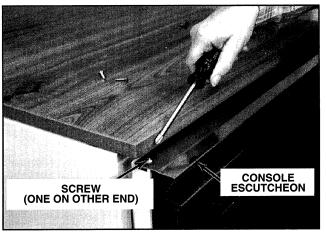
This part is located on the front of the door and has information printed on it for the different cycles and optional air or heat selections.

See page 265, illus. no. 12, or page 279, illus. no. 1 for location of part.

See Type A for models using a porcelain liner (1986 and older) with end caps, or see Type B for models using a porcelain liner (1986 and older) without end caps, or see Type C for models using a plastic liner (1986 and newer).

TYPE A

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the timer knob, if used.
- Step 3 Remove the timer dial, if used.
- Step 4 Remove the end caps.
- Step 5 Open the door.



Step 6 Using a screwdriver, remove the two top screws and one bottom screw which hold the console escutcheon to the door.

NOTE: Some models had a plastic console escutcheon which used three bottom screws.

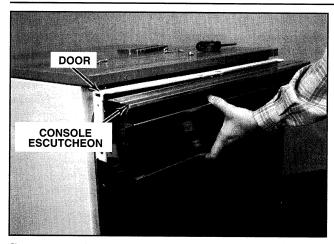
Step 7 Remove the indicator light/lens, if used.

NOTE: If there are any other wires keeping the console escutcheon from being removed, remove one wire at a time, carefully labeling each wire according to the terminal marking for that part. This procedure should assure that the right wire is reconnected to the right terminal.

- **Step 8** Remove the rocker switch, if used.
- **Step 9** Remove the push-button bezel, if used.
- **Step 10** Remove the vent grille, if used.
- Step 11 Remove the light bezel, if used.

REPLACEMENT

- **Step 12** Replace the light bezel, if used.
- **Step 13** Replace the vent grille, if used.
- **Step 14** Replace the push-button bezel, if used.
- Step 15 Replace the rocker switch, if used.
- Step 16 Replace the light/lens, if used.
- **Step 17** Reconnect the wires to the proper terminals as previously marked.



Step 18 Place the console escutcheon on the door.

Step 19 Using a screwdriver, insert the screws through the console escutcheon into the door and tighten.

Step 20 Close the door.

Step 21 Replace the end caps.

Step 22 Replace the timer dial, if used.

Step 23 Replace the timer knob, if used.

Step 24 Reconnect power or plug in dishwasher.

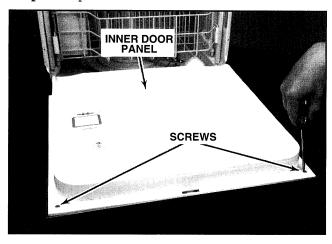
TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the timer knob, if used.

Step 3 Remove the timer dial, if used.

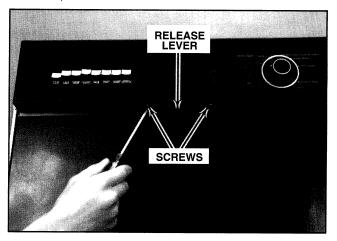
Step 4 Open the door.



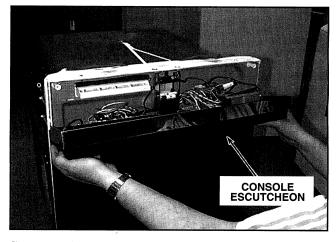
Step 5 Using a screwdriver, remove the two top screws (one on each side) which hold the console escutcheon to the door.

Step 6 Close the door.

Step 7 Using a screwdriver, loosen the two top screws (one on each side) which hold the side trims to the door, if used.



Step 8 Using a screwdriver, remove the two screws, one on each side of the release lever.



Step 9 Carefully roll the console escutcheon toward you to remove from the door.

NOTE: It is not necessary to disconnect the wiring from the electrical parts.

Step 10 Remove the indicator light, if used.

Step 11 Remove the push-button switch, if used.

Step 12 Remove the rocker switch, if used.

Step 13 Remove the timer, if used.

Step 14 Remove the vent grille, if used.

Step 15 Remove the start relay, if used.

Step 16 Remove the console escutcheon trim, if used.

REPLACEMENT

Step 17 Replace the console escutcheon trim, if used.

Step 18 Replace the start relay, if used.

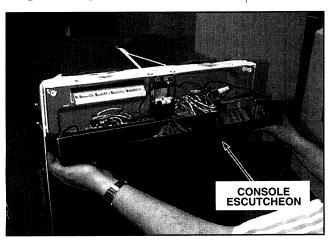
Step 19 Replace the vent grille, if used.

Step 20 Replace the timer, if used.

Step 21 Replace the rocker switch, if used.

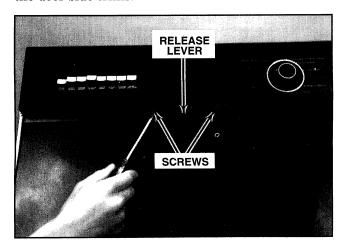
Step 22 Replace the push-button switch, if used.

Step 23 Replace the indicator light, if used.



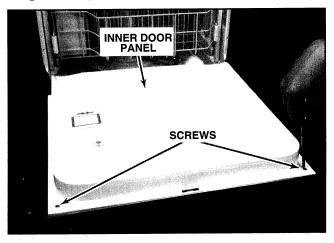
Step 24 Roll the console escutcheon back on the door so the screw holes on the bottom of the console are under the holes in the door latch bracket.

NOTE: The side tabs on the console trim must fit in the door side trims.



Step 25 Using a screwdriver, insert the screws (one on each side of the release lever) through the console escutcheon into the door latch bracket and tighten.

Step 26 Open the door.



Step 27 Using a screwdriver, insert the two top screws (one on each side) through the door into the console escutcheon and tighten.

Step 28 Close the door.

Step 29 Using a screwdriver, tighten the two top screws (one on each side) which hold the side trim to the door and tighten, if used.

Step 30 Replace the timer dial, if used.

Step 31 Replace the timer knob, if used.

Step 32 Reconnect power or plug in dishwasher.

TYPE C

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the timer knob, if used.

Step 3 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 4 Remove the inner door panel.

Step 5 Remove the timer cover.

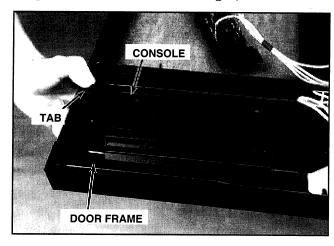
NOTE: It is not necessary to disconnect the wiring from the electrical parts.

Step 6 Remove the timer.

Step 7 Remove the cam and cam follower.

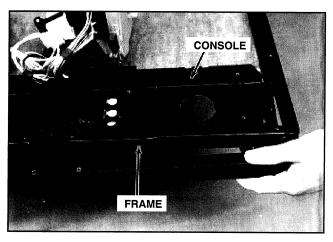
Step 8 Remove the push-button switch.

Step 9 Remove the indicator light, if used.



Step 10 Push in on the tab on each end of the console escutcheon to remove it from the door frame.

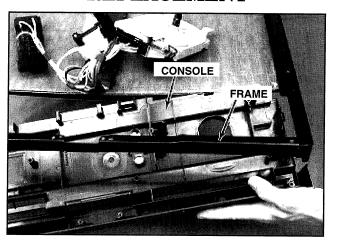
Step 11 Move the lever/bolt and door switches out of the way.



Step 12 Drop the front edge of the console escutcheon, then slide away from the front panel.

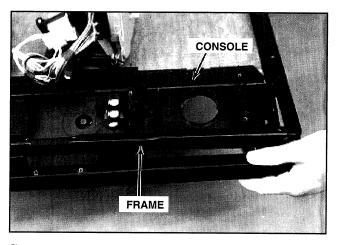
This causes the end of the wiring protector to slide out of the console escutcheon.

REPLACEMENT



Step 13 Replace the console escutcheon by tilting the bottom edge, lining up the wiring protector tabs with the studs in the console escutcheon, and then sliding on.

NOTE: The bottom edge of the console escutcheon has a channel where the front panel(s) fit into.



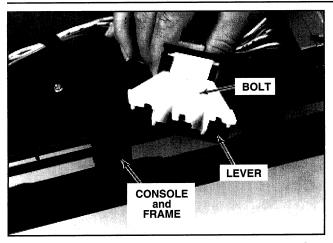
Step 14 Roll the top of the console escutcheon into the door frame.

Step 15 Push on each end of the console escutcheon until the tabs snap onto the door frame.

NOTE: Make sure the active lights line up with the holes in the console escutcheon.

Step 16 Replace the indicator light, if used.

Step 17 Replace the push-button switch.



Step 18 Replace the lever/bolt and door switches on the door frame so the lever is through the opening in the console escutcheon.

Step 19 Replace the cam follower and cam.

Step 20 Replace the timer.

Step 21 Replace the timer cover.

Step 22 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 23 Replace the timer knob.

Step 24 Close the detergent dispenser lid.

Step 25 Slowly turn the timer knob all the way around until the detergent dispenser lid opens.

NOTE: If the detergent dispenser lid opens, the cam and cam follower were mounted correctly and mesh with the draw bar on the inner door panel.

Step 26 If the detergent dispenser lid does not open, you will have to repeat this procedure.

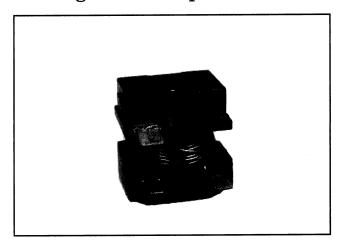
Step 27 Reconnect power or plug in dishwasher.

PROCEDURE 7



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

Start Relay Testing and/or Replacement



See page 265, illus. no. 10, or page 276, illus. no. 24 for location of part.

OHMMETER REQUIRED

The start relay is used in getting voltage to the start wash winding or the start drain winding. As the drive motor increases in speed, the voltage drops out of the start relay and now goes through the run or drain winding.

This start relay could be located in one of two places. See Type A for behind the access panel/toe panel on BUILT-IN MODELS, or behind the access panel and coverplate (or shroud) on PORTABLE MODELS, or see Type B for in the console area. We recommend looking at the bottom first (Type A).

TYPE A

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

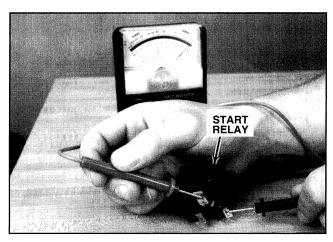
PORTABLE MODELS • Remove the access panel and coverplate (or shroud).

Step 3 Using a nutdriver or screwdriver, remove the screw(s) which hold the start relay to the bracket.

TESTING

Step 4 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the start relay. This procedure should assure that the right wire is reconnected to the right terminal.

Step 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 6 Touch and hold one ohmmeter probe to the terminal marked M, BU, or 3.

Step 7 Touch the other ohmmeter probe to the terminal marked M, BU-W, BU (different terminal), or 4.

Step 8 The ohmmeter should show ZERO resistance (continuity). If not, the start relay is bad and needs replacing.

OR

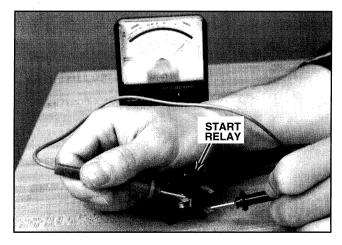
Step 9 Touch and hold one ohmmeter probe to any terminal marked M, BU, 3, or 4.

Step 10 Touch the other ohmmeter probe to the terminal marked S, V, or 2.

Step 11 The ohmmeter should show an open circuit. If not, the start relay is bad and needs replacing.

OR

Step 12 Turn the start relay upside down.



Step 13 Touch and hold one ohmmeter probe to the terminal marked M, BU, or 3.

Step 14 Touch the other ohmmeter probe to the terminal marked M, BU (different terminal), or 4.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the start relay is bad and needs replacing.

OR

Step 16 Touch and hold one ohmmeter probe to the terminal marked S, V, or 2.

Step 17 Touch the other ohmmeter probe to each terminal marked M, BU, 3, and 4.

Step 18 The ohmmeter should show ZERO resistance (continuity). If not, the start relay is bad and needs replacing.

REPLACEMENT

Step 19 Place the start relay (top up) on the bracket.

Step 20 Using a nutdriver or screwdriver, insert the screw(s) through the start relay into the bracket and tighten.

Step 21 Reconnect the wires to the proper terminals as previously marked.

Step 22 Replace the access panel/toe panel.

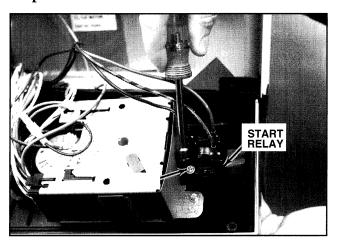
PORTABLE MODELS • Replace the access panel and coverplate (or shroud).

Step 23 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the console escutcheon.

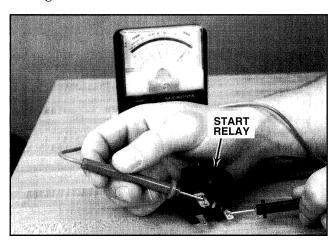


Step 3 Using a nutdriver or screwdriver, remove the screw(s) which hold the start relay to the console escutcheon.

TESTING

Step 4 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the start relay. This procedure should assure that the right wire is reconnected to the right terminal.

Step 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 6 Touch and hold one ohmmeter probe to the terminal marked M, BU, or 3.

Step 7 Touch the other ohmmeter probe to the terminal marked M, BU (different terminal), or 4.

Step 8 The ohmmeter should show ZERO resistance (continuity). If not, the start relay is bad and needs replacing.

OR

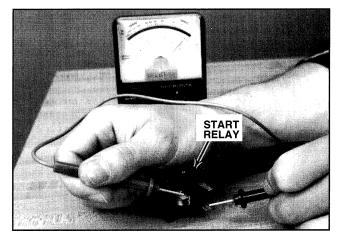
Step 9 Touch and hold one ohmmeter probe to the terminal marked M, BU, 3, or 4.

Step 10 Touch the other ohmmeter probe to the terminal marked S, V, or 2.

Step 11 The ohmmeter should show an open circuit. If not, the start relay is bad and needs replacing.

OR

Step 12 Turn the start relay upside down.



Step 13 Touch and hold one ohmmeter probe to the terminal marked M, BU, or 3.

Step 14 Touch the other ohmmeter probe to the terminal marked M, BU (different terminal), or 4.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the start relay is bad and needs replacing.

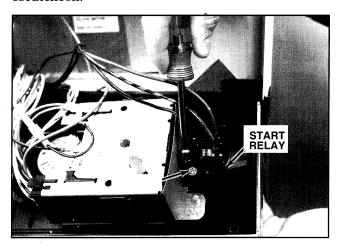
OR

Step 16 Touch and hold one ohmmeter probe to the terminal marked S, V, or 2.

Step 17 Touch the other ohmmeter probe to each terminal marked M, BU, 3, and 4.

Step 18 The ohmmeter should show ZERO resistance (continuity). If not, the start relay is bad and needs replacing.

Step 19 Place the start relay (top up) on the console escutcheon.



Step 20 Using a nutdriver or screwdriver, insert the screw(s) through the start relay into the console escutcheon and tighten.

Step 21 Reconnect the wires to the proper terminals as previously marked.

Step 22 Replace the console escutcheon.

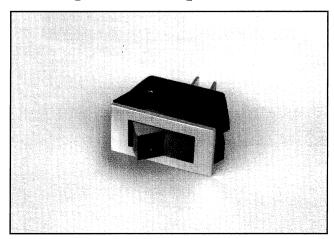
Step 23 Reconnect power or plug in dishwasher.

PROCEDURE 8



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

Rocker Switch Testing and/or Replacement



This part is located in the console and is used to select the type of drying you prefer. Either the energy saving AIR DRY or HEAT DRY.

OHMMETER REQUIRED

Step 1 Disconnect power or unplug dishwasher.

NOTE: Use steps 2-4 for plastic liner models only and then skip to step 6.

Step 2 Open the door.

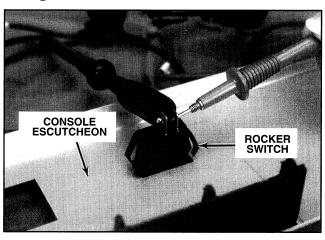
NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 3 Remove the inner door panel.

- **Step 4** Remove the timer cover.
- **Step 5** Remove the console escutcheon.

TESTING

- **Step 6** Remove one wire at a time, carefully labeling each wire according to the terminal marking on the rocker switch. This procedure should assure that the right wire is reconnected to the right terminal.
- **Step 7** Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.
- **Step 8** Move the rocker switch to the "AIR DRY" setting.

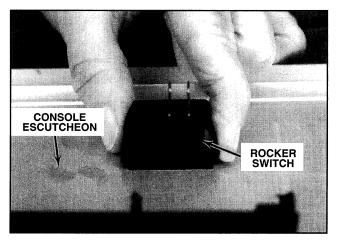


- **Step 9** Touch and hold one ohmmeter probe to one of the terminals.
- **Step 10** Touch the other ohmmeter probe to the other terminal.
- **Step 11** The ohmmeter should show an open circuit. If not, the rocker switch is bad and needs replacing.

OR

- **Step 12** Move the rocker switch to the "HEAT DRY" setting.
- **Step 13** Touch and hold one ohmmeter probe to one of the terminals.
- **Step 14** Touch the other ohmmeter probe to the other terminal.
- **Step 15** The ohmmeter should show ZERO resistance (continuity). If not, the rocker switch is bad and needs replacing.

REPLACEMENT



- **Step 16** Press the tabs on the side of the rocker switch and push out.
- **Step 17** Push the new rocker switch through the square opening in the front of console escutcheon until it snaps in place.
- **Step 18** Reconnect the wires to the proper terminals as previously marked.

NOTE: Use steps 19-21 for plastic liner models only and then skip to step 23.

- **Step 19** Replace the timer cover.
- **Step 20** Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

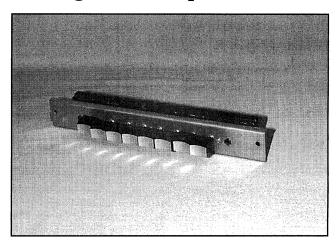
- Step 21 Close the door.
- **Step 22** Replace the console escutcheon.
- **Step 23** Reconnect power or plug in dishwasher.

AWARNING



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

Push-Button Switch Testing and/or Replacement



This part located in the console is used in selecting the type of wash and dry cycles.

See page 265, illus. no. 1 for location of part.

OHMMETER REQUIRED

Step 1 Disconnect power or unplug dishwasher.

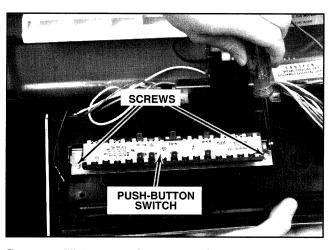
NOTE: Use steps 2-4 for plastic liner models only and then skip to step 6.

Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

- **Step 3** Remove the inner door panel.
- Step 4 Remove the timer cover.
- **Step 5** Remove the console escutcheon.

TESTING



Step 6 Using a nutdriver or socket wrench, remove the two screws which hold the push-button switch to the console escutcheon.

Step 7 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the push-button switch. This procedure should assure that the right wire is reconnected to the right terminal.

Step 8 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

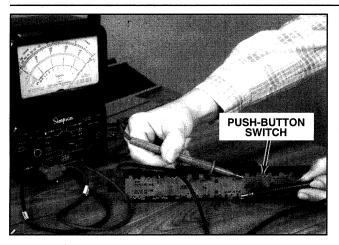
Step 9 Check each circuit by pushing in on the push-button for each setting and checking the proper terminals.

Use the following chart. Your push-button switch may not have all the settings shown. The terminals shown in each setting must show ZERO resistance (continuity).

This is a typical diagram; refer to your own wiring diagram for proper terminal markings.

PUSH-BU NO	
1	W-BK to P-BK, W-BK to T-R
2	W-BK to P-BK, W-BK to T-R, W-R to R
3	W-BK to P-BK, W-BK to T-R, W-R to R
4	W-BK to P-BK, W-BK to T-R, W-R to R,
	Y-BU to W-BU
5	W-BK to P-BK, W-R to R, Y-BU to W-BU
6	MUST BE OPEN W-BK to P-BK
7	MUST BE OPEN W-R to R
8	W-BK to P-BK, W-R to R

Step 10 EXAMPLE: Push the number 2 button (from the left). This closes contacts inside the switch, W-BK to P-BK, W-BK to T-R, and W-R to R.



Step 11 Touch and hold one ohmmeter probe to the terminal W-BK.

Step 12 Touch the other ohmmeter probe to the terminal P-BK.

Step 13 The ohmmeter should show ZERO resistance (continuity). If not, the push-button switch is bad and needs replacing.

OR

Step 14 Touch and hold one ohmmeter probe to the terminal W-BK.

Step 15 Touch the other ohmmeter probe to the terminal T-R.

Step 16 The ohmmeter should show ZERO resistance (continuity). If not, the push-button switch is bad and needs replacing.

OR

Step 17 Touch and hold one ohmmeter probe to the terminal W-R.

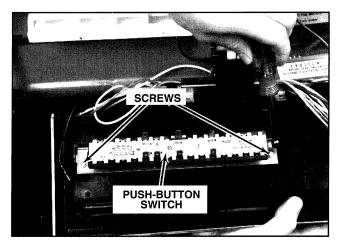
Step 18 Touch the other ohmmeter probe to the terminal R.

Step 19 The ohmmeter should show ZERO resistance (continuity). If not, the push-button switch is bad and needs replacing.

REPLACEMENT

Step 20 Reconnect the wires to the proper terminals as previously marked.

Step 21 Place the push-button switch on the console escutcheon.



Step 22 Using a nutdriver or screwdriver, insert the screws through the push-button switch into the console escutcheon and tighten.

NOTE: Use steps 23-25 for plastic liner models only and then skip to step 27.

Step 23 Replace the timer cover.

Step 24 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 25 Close the door.

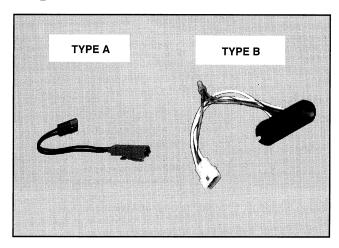
Step 26 Replace the console escutcheon.

Step 27 Reconnect power or plug in dishwasher.

AWARNING

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

Indicator Light Replacement



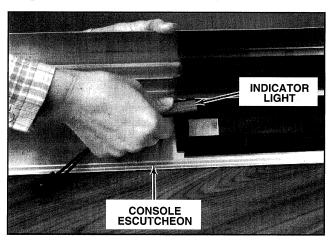
See page 265, illus. no. 5 for location of part.

This light is used to tell the customer either the water is heating to the proper temperature or the dishwasher has finished its drying cycle and the clean dishes should be removed.

See Type A for models using a porcelain liner (1986 and older) with end caps, or see Type B for models using a porcelain or plastic liner.

TYPE A

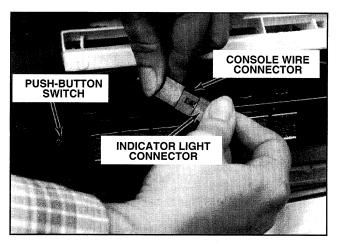
- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the bezel, if used.
- **Step 3** Remove the timer knob, if used.
- Step 4 Remove the timer dial, if used.
- Step 5 Remove the end caps.
- Step 6 Remove the console escutcheon.



Step 7 Hold the light lens located on the front of the console escutcheon.

Step 8 Slide the indicator light on the back of the console escutcheon off the light lens.

Step 9 Place the light lens and console escutcheon to one side.

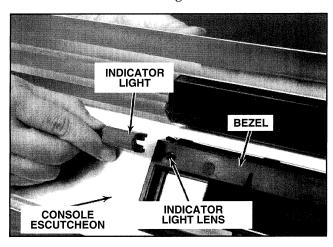


Step 10 Pull the two connectors apart or remove one wire at a time, carefully labeling each wire according to the terminal marking on the indicator light. This procedure should assure that the right wire is reconnected to the right terminal.

Step 11 Reconnect the wires to the proper terminals as previously marked.

OR

Push the two connectors together.



Step 12 Place the light lens from the front of the console escutcheon through the hole.

Step 13 Slide the indicator light from the back of the console escutcheon over the light lens until the parts snap together.

Step 14 Replace the bezel, if used.

Step 15 Replace the console escutcheon.

Step 16 Replace the end caps.

Step 17 Replace the timer dial, if used.

Step 18 Replace the timer knob, if used.

Step 19 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

NOTE: Use steps 2-4 for plastic liner models only and then skip to step 6.

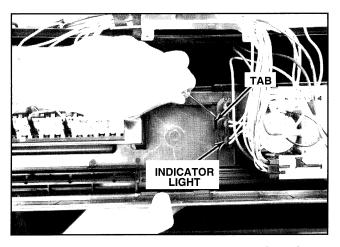
Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

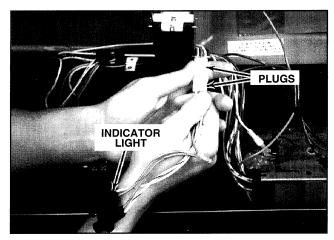
Step 3 Remove the inner door panel.

Step 4 Remove the timer cover.

Step 5 Remove the console escutcheon.



Step 6 Using a screwdriver, pry apart the tabs on the console escutcheon while pulling the indicator light from the console escutcheon.



Step 7 Pull the two plugs apart.

REPLACEMENT

Step 8 Reconnect by pushing the two wire plugs together.

NOTE: Make sure the active lights line up with the proper holes in the console escutcheon.

Step 9 Snap the indicator light into the back of the console escutcheon.

NOTE: Use steps 10-12 for plastic liner models only and then skip to step 14.

Step 10 Replace the timer cover.

Step 11 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

- Step 12 Close the door.
- Step 13 Replace the console escutcheon.
- Step 14 Reconnect power or plug in dishwasher.

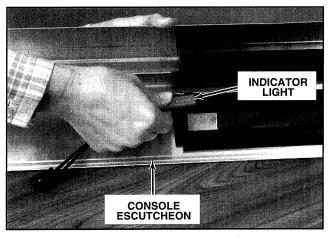


Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Indicator Light Lens Replacement

This part covers up the indicator light on some porcelain liner models (1986 and older) and is red or green in color.

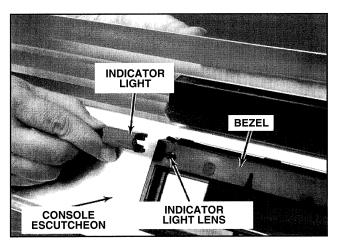
- **Step 1** Disconnect power or unplug dishwasher.
- Step 2 Remove the bezel, if used.
- **Step 3** Remove the timer knob, if used.
- Step 4 Remove the timer dial, if used.
- Step 5 Remove the end caps.
- **Step 6** Remove the console escutcheon.



Step 7 Hold the light lens located on the front of the console escutcheon.

Step 8 Slide the indicator light located on the back of the console escutcheon off the light lens.

REPLACEMENT



Step 9 Place the light lens from the front of the console escutcheon through the hole.

- **Step 10** Slide the indicator light from the back of the console escutcheon over the light lens until the parts snap together.
- **Step 11** Replace the bezel, if used.
- Step 12 Replace the console escutcheon.
- Step 13 Replace the end caps.
- **Step 14** Replace the timer dial, if used.
- **Step 15** Replace the timer knob, if used.
- **Step 16** Reconnect power or plug in dishwasher.

AWARNING

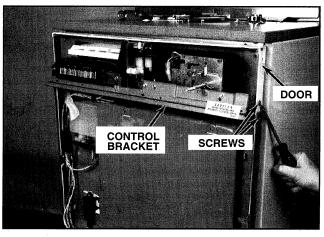


Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Control Bracket Replacement

This part is located behind the console on porcelain liner models (1986 and older) and is used to mount the console and the console components.

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the timer knob, if used.
- **Step 3** Remove the timer dial, if used.
- **Step 4** Remove the end caps, if used.
- Step 5 Remove the console escutcheon.
- **Step 6** Remove the indicator light, if used.
- Step 7 Remove the door trim.
- Step 8 Slide the front panel out of the door frame.
- **Step 9** Remove the release lever, if used.

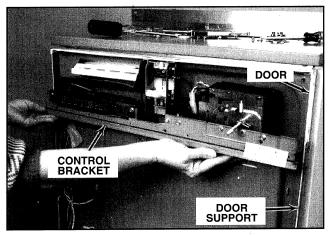


Step 10 Using a screwdriver, remove the screws on each side which hold the control bracket to the door support.

- **Step 11** Remove one wire at a time, carefully labeling each wire according to the terminal markings on the different parts. This procedure should assure that the right wire is reconnected to the right terminal.
- **Step 12** Remove the push-button switch, if used.
- **Step 13** Remove the timer, if used in this area.
- **Step 14** Remove the start relay, if used in this area.
- **Step 15** Remove the delay timer, if used.

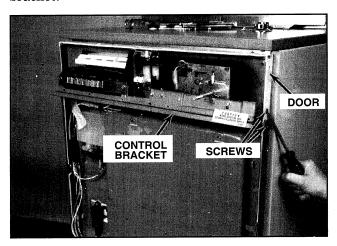
REPLACEMENT

- Step 16 Replace the delay timer, if used.
- **Step 17** Replace the start relay, if used in this area.
- **Step 18** Replace the timer, if used in this area.
- **Step 19** Replace the push-button switch, if used.
- **Step 20** Reconnect the wires to the proper terminals as previously marked.



Step 21 Place the control bracket in the door support.

NOTE: If you have the release latch, make sure the two tabs on the latch fit in the two slots on the control bracket.



Step 22 Using a screwdriver, insert the screws through the door support into the control bracket and tighten.

Step 23 Replace the release lever, if used.

Step 24 Slide the front panel back in the door frame.

Step 25 Replace the door trim.

Step 26 Replace the indicator light, if used.

Step 27 Replace the console escutcheon.

Step 28 Replace the end caps, if used.

Step 29 Replace the timer dial, if used.

Step 30 Replace the timer knob, if used.

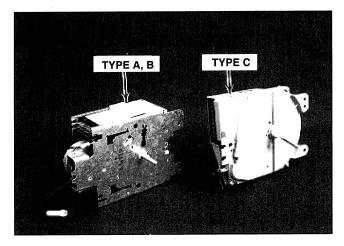
Step 31 Reconnect power or plug in dishwasher.

PROCEDURE 13

AWARNING

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

Timer Testing and/or Replacement



The timer is located in the console and is the heart of the dishwasher. Its function is to control the timing of the dishwasher.

See page 265, illus. no. 8, or page 279, illus. no. 5 for location of part.

OHMMETER REQUIRED

All timers used on dishwashers operate the same but are somewhat different in looks. Due to functions or features of different models, some timers have more terminals and internal switches (contacts) than others.

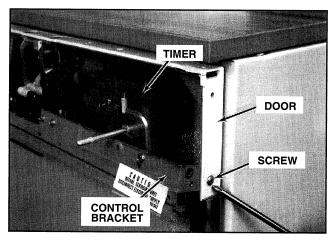
These quick-disconnect timers have different colored harness wires that are placed inside either a black or white block which then plugs into the timer. These blocks are colored to match the words BLACK or WHITE stamped on the timer. The possibility of wiring the timer wrong is greatly reduced.

Before attempting any checks on the timer, you must read and understand the Wiring Diagram and Timer Sequence Chart (section B).

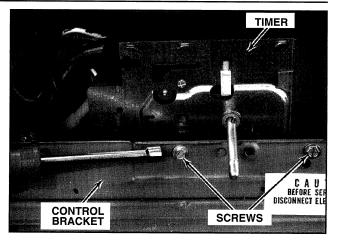
See Type A for models using a porcelain liner (1986 and older) with a control bracket, or see Type B for models using a porcelain liner (1986 and older), or see Type C for models using a plastic liner (1986 and newer).

TYPE A

- **Step 1** Disconnect power or unplug dishwasher.
- **Step 2** Remove the timer knob.
- **Step 3** Remove the timer dial, if used.
- **Step 4** Remove the end caps, if used.
- **Step 5** Remove the console escutcheon.
- **Step 6** In some cases the door trim has to be removed.



Step 7 Using a screwdriver, remove the screws which hold the control bracket to the door frame.

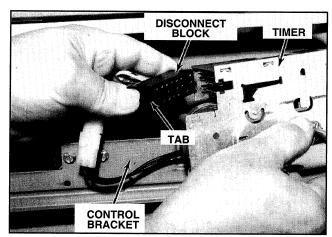


Step 8 Using a nutdriver or screwdriver, remove the screws which hold the timer to the control bracket.

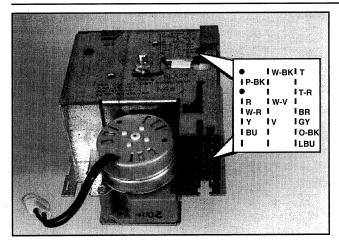
Step 9 Carefully pull the control bracket away from the door while removing the timer.

TESTING

Step 10 Pull the connectors apart from the timer motor to the wiring harness.

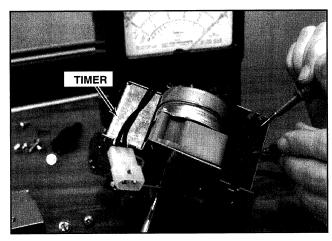


Step 11 Remove both the white and black disconnect blocks. Some models only have the one (black) disconnect block. The blocks have tabs on each end which must be pressed while pulling on the block.



Instead of coding timer terminals like the standard frame timers, a chart of each wiring block is printed on the back of the timer. The line through the chart separates the two blocks. Letters indicate active terminals while the black dots identify blank terminals.

Step 12 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 13 Touch and hold one ohmmeter probe to the terminal specified for this function.

Step 14 Touch the other ohmmeter probe to the other terminal specified for this function.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the timer is bad and needs replacing.

OR

Step 16 EXAMPLE: Move the timer dial to the start of NORMAL WASH. **PROBLEM:** Dishwasher does not fill.

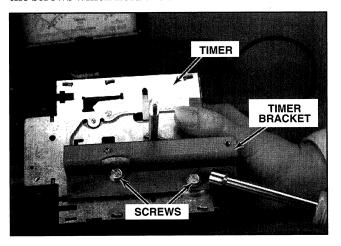
Step 17 Touch and hold one ohmmeter probe to the terminal T.

Step 18 Touch the other ohmmeter probe to the terminal BR.

Step 19 The ohmmeter should show ZERO resistance (continuity). If not, the timer is bad and needs replacing.

REPLACEMENT

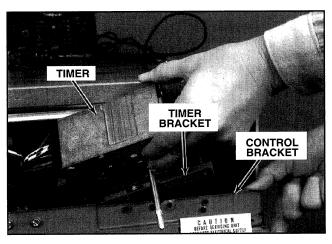
Step 20 Using a nutdriver or screwdriver, remove the screws which hold the timer bracket to the timer.



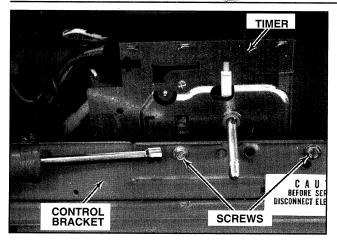
Step 21 Using a nutdriver or screwdriver, place the timer bracket on the new timer, insert the screws and tighten.

Step 22 Reconnect the plug from the wiring harness to the plug from the new timer motor.

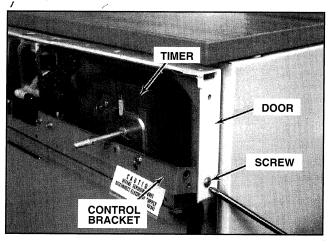
Step 23 Replace the colored block(s) by snapping it, in the proper end marked BLACK or WHITE, on the new timer.



Step 24 Place the timer behind the control bracket.



Step 25 Using a nutdriver or screwdriver, insert the screws through the control bracket into the timer and tighten.



Step 26 Using a screwdriver, insert the screws which hold the control bracket to the door frame and tighten.

Step 27 Replace the door trim, if this was removed.

Step 28 Replace the console escutcheon.

Step 29 Replace the end caps, if used.

Step 30 Replace the timer dial, if used.

Step 31 Replace the timer knob.

Step 32 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the timer knob.

Step 3 Remove the timer dial, if used.

Step 4 Remove the console escutcheon.

TESTING

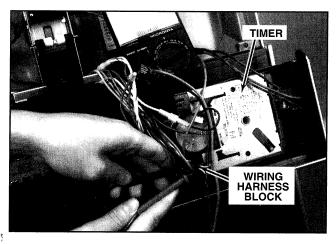
NOTE: We will be testing the timer with the harness blocks plugged in the timer.

NOTE: What you will have to do is remove the wire(s) from the part which you think is causing the problem.

EXAMPLE: NO FILL • Remove the wires on the fill valve.

EXAMPLE: NO HEAT • Remove the wires on the heat element.

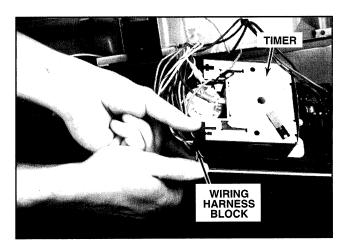
Step 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 6 Stick one ohmmeter probe (in the back of the harness block) in the terminal wire hole specified for this function.

Step 7 Stick the other ohmmeter probe (in the back of the harness block) in the terminal wire hole specified for this function.

Step 8 The ohmmeter should show ZERO resistance (continuity). If not, the timer is bad and needs replacing.



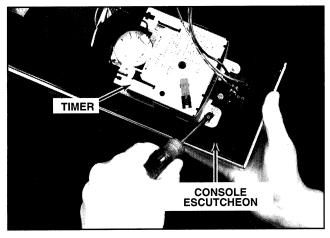
Step 9 Remove the wiring block(s), marking as to which way it was on. This procedure should assure that the block(s) is reconnected to the proper side of the timer.

NOTE: The block(s) have tabs on each end which must be pressed while pulling on the block(s).

Step 10 Pull the connectors apart on one of the timer motor wires to the wiring harness.

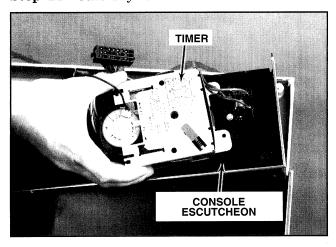
Step 11 Remove the other timer motor wire from the timer, carefully labeling which terminal or its location on the timer. This procedure should assure that the right wire is reconnected to the right terminal.

Step 12 Remove the green ground wire, if used.

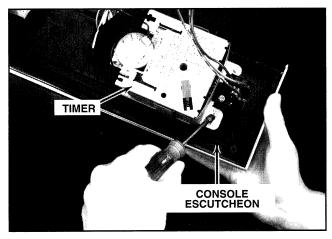


Step 13 Using a screwdriver or nutdriver, remove the screws which hold the timer to the console escutcheon.

Step 14 Carefully remove the timer.



Step 15 Place the timer on the console escutcheon.



Step 16 Using a screwdriver or nutdriver, insert the screws through the timer into the console escutcheon and tighten.

Step 17 Reconnect the wire connector from the wiring harness to the wire connector from the timer motor by pushing them together.

Step 18 Reconnect the other timer motor wire to the proper timer terminal as previously marked. This may already be done on the new timer.

Step 19 Replace the colored block(s) by snapping it, in the proper end marked BLACK or WHITE, on the timer.

AWARNING



Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions
can result in death or electrical shock.

- **Step 20** Reconnect the green ground wire, if used.
- Step 21 Replace the console escutcheon.
- **Step 22** Replace the timer dial, if used.
- Step 23 Replace the timer knob.
- Step 24 Reconnect power or plug in dishwasher.

TYPE C

- Step 1. Disconnect power or unplug dishwasher.
- **Step 2** Remove the timer knob.
- **Step 3** Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

- **Step 4** Remove the inner door panel.
- **Step 5** Remove the timer cover.

TESTING

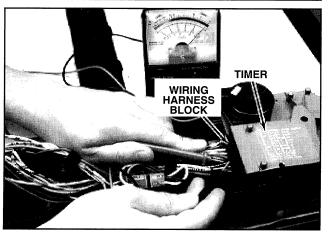
NOTE: We will be testing the timer with the harness blocks plugged in the timer.

NOTE: What you will have to do is remove the wire(s) from the part which you think is causing the problem.

EXAMPLE: NO FILL • Remove the wires on the fill valve.

EXAMPLE: NO HEAT • Remove the wires on the heat element.

Step 6 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

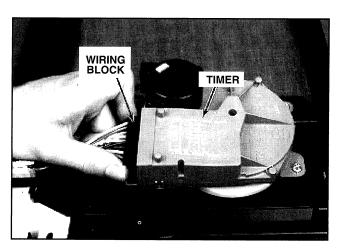


Step 7 Stick one ohmmeter probe (in the back of the harness block) in the terminal wire hole specified for this function.

Step 8 Stick the other ohmmeter probe (in the back of the harness block) in the terminal wire hole specified for this function.

Step 9 The ohmmeter should show ZERO resistance (continuity). If not, the timer is bad and needs replacing.

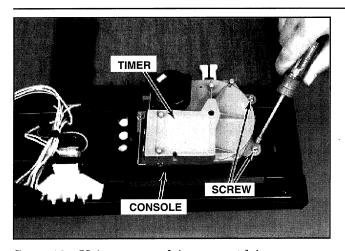
REPLACEMENT



Step 10 Remove the wiring block(s), marking as to which way it was connected. This procedure should assure that the block(s) is reconnected to the proper side of the timer.

NOTE: The block(s) have tabs on each end which must be pressed while pulling on the block(s).

Step 11 Remove the green ground wire, if used.



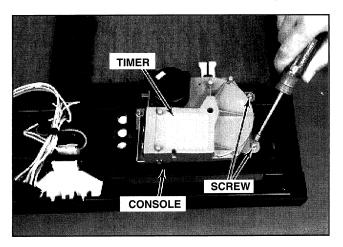
Step 12 Using a screwdriver or nutdriver, remove the screws which hold the timer to the console escutcheon.

Step 13 Carefully remove the timer. The cam may or may not come off the timer shaft when removing. This cam will be reused.

Step 14 Remove the cam and cam follower.

Step 15 Replace the cam and cam follower.

Step 16 Carefully place the timer on the console escutcheon.



Step 17 Using a screwdriver or nutdriver, insert the screws through the timer into the console escutcheon and tighten.

Step 18 Replace the colored block(s) by snapping it, in the proper end marked BLACK or WHITE, on the timer.

AWARNING

Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 19 Replace the green ground wire, if used.

Step 20 Replace the timer cover.

Step 21 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 22 Replace the timer knob.

Step 23 Close the detergent dispenser lid.

Step 24 Slowly turn the timer knob all the way around until the detergent dispenser lid opens.

NOTE: If the detergent dispenser lid opens, the cam and cam follower were mounted correctly and mesh with the draw bar on the inner door panel.

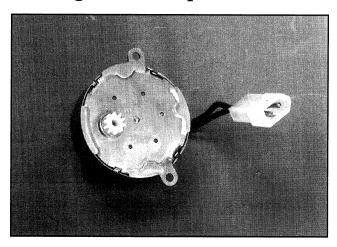
Step 25 If the detergent dispenser lid does not open, you will have to repeat this procedure.

Step 26 Reconnect power or plug in dishwasher.

AWARNING

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

Timer Motor Testing and/or Replacement

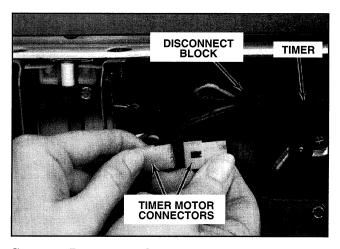


This part is located on the timer assembly and is used to advance the timer through the cycles. It can only be replaced on some porcelain liner models (1986 and older).

OHMMETER REQUIRED

- **Step 1** Disconnect power or unplug dishwasher.
- Step 2 Remove the timer knob.
- Step 3 Remove the timer dial, if used.
- **Step 4** Remove the end caps, if used.
- **Step 5** Remove the console escutcheon.

TESTING

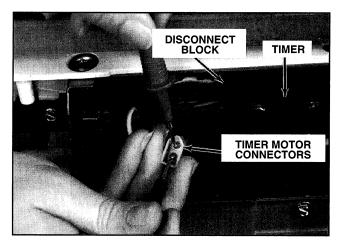


Step 6 Disconnect the two wires coming from the motor, marking them as to what terminals they were on.

OR

Pull apart the two connectors.

Step 7 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 1,500 to 3,000 ohms. Set the ohms scale and ZERO the meter.

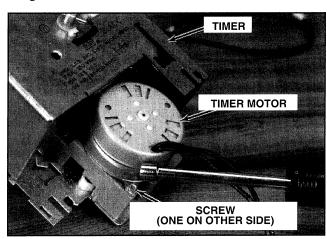


Step 8 Touch and hold one ohmmeter probe to one of the timer motor wire terminals.

Step 9 Touch the other ohmmeter probe to the other timer motor wire terminal.

Step 10 The ohmmeter should show a reading between 1,500 to 3,000 ohms on the ohms scale. If not, the timer motor is bad and needs replacing.

Step 11 Remove the timer.



Step 12 Using a small screwdriver or nutdriver, remove the two screws which hold the motor to the timer.

Step 13 Place the new timer motor on the timer.

NOTE: Be sure the gears mesh together. You may have to rock the new motor back and forth.

Step 14 Using a small screwdriver or nutdriver, insert the two screws through the new motor into the timer and tighten.

Step 15 Reconnect the wires to the proper terminals as previously marked.

OR

Push together the two connectors.

Step 16 Replace the timer.

Step 17 Replace the console escutcheon.

Step 18 Replace the end caps, if used.

Step 19 Replace the timer dial, if used.

Step 20 Replace the timer knob.

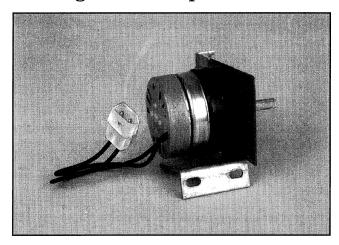
Step 21 Reconnect power or plug in dishwasher.

PROCEDURE 15



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

Delay Timer Testing and/or Replacement



This part is located in the console escutcheon on some porcelain liner models (1986 and older). Its purpose, when selected, is to delay the start-up of the dishwasher up to eight hours.

OHMMETER REQUIRED

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the end caps.

Step 3 Open the door.

Step 4 Remove the console escutcheon.

Step 5 Using a screwdriver or nutdriver, remove the screws which hold the delay timer to the control bracket.

TESTING

Step 6 Using your fingers, press the tab on the connector from the motor while pulling them apart.

Step 7 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the delay timer. This procedure should assure that the right wire is reconnected to the right terminal.

Step 8 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

Step 9 Rotate the delay timer dial to the OFF position.



 $\begin{tabular}{ll} \bf Step \ 10 & Touch and hold one ohmmeter probe to the \\ terminal \ T. \end{tabular}$

Step 11 Touch the other ohmmeter probe to the terminal W-O.

Step 12 The ohmmeter should show ZERO resistance (continuity). If not, the delay timer is bad and needs replacing.

OR

 $\begin{tabular}{ll} \bf Step \ 13 & Touch and hold one ohmmeter probe to the terminal W-G. \end{tabular}$

Step 14 Touch the other ohmmeter probe to the terminal W-O.

Step 15 The ohmmeter should show an open circuit. If not, the delay timer is bad and needs replacing.

OR

Step 16 Touch and hold one ohmmeter probe to the terminal W-G.

Step 17 Touch the other ohmmeter probe to the terminal T.

Step 18 The ohmmeter should show an open circuit. If not, the delay timer is bad and needs replacing.

OR

Step 19 Rotate the delay timer dial so that a TIME is shown on the dial.

Step 20 Touch and hold one ohmmeter probe to the terminal T.

Step 21 Touch the other ohmmeter probe to the terminal W-G.

Step 22 The ohmmeter should show ZERO resistance (continuity). If not, the delay timer is bad and needs replacing.

OR

Step 23 Touch and hold one ohmmeter probe to the terminal W-O.

Step 24 Touch the other ohmmeter probe to the terminal W-G.

Step 25 The ohmmeter should show an open circuit. If not, the delay timer is bad and needs replacing.

OR

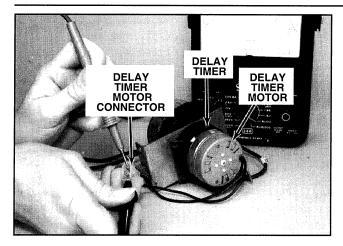
 $\textbf{Step 26} \quad \text{Touch and hold one ohmmeter probe to the terminal W-O}.$

Step 27 Touch the other ohmmeter probe to the terminal T.

Step 28 The ohmmeter should show an open circuit. If not, the delay timer is bad and needs replacing.

OR.

Step 29 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 1,500 to 2,500 ohms. Set the ohms scale and ZERO the meter.

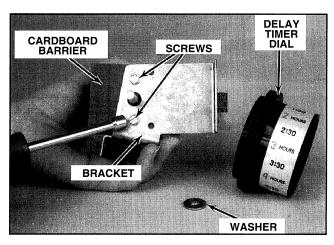


Step 30 Touch and hold one ohmmeter probe to one of the bullet-like terminals in the motor connector.

Step 31 Touch the other ohmmeter probe to the other bullet-like terminal in the motor connector.

Step 32 The ohmmeter should show a reading between 1,500 to 2,500 ohms. If not, the timer motor is bad and the complete delay timer needs replacing.

REPLACEMENT

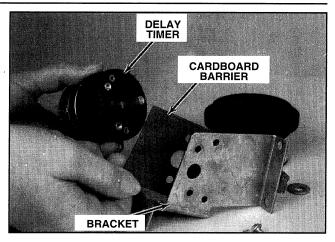


Step 33 Remove the dial by pulling off.

Step 34 Remove the washer.

Step 35 Using a nutdriver or screwdriver, remove the screws which hold the delay timer to the bracket.

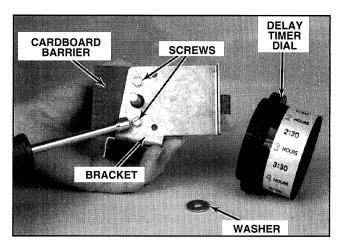
Step 36 Remove the cardboard barrier.



Step 37 Place the cardboard barrier on the delay timer.

Step 38 Insert the barrier and delay timer through the bracket. Face the terminals on the delay timer toward the back.

Step 39 Line up the mounting holes.

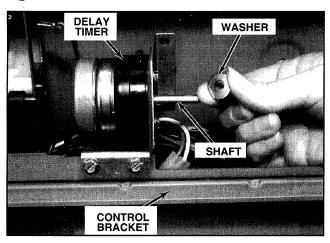


Step 40 Using a nutdriver or screwdriver, insert the screws through the bracket, barrier, and into the delay timer and tighten.

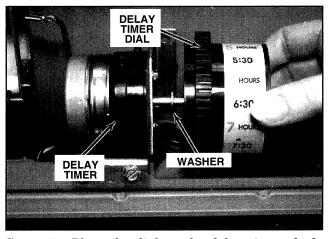


Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 41 Reconnect the wires to the proper terminals as previously marked and push the two connectors together.



Step 42 Place the metal washer on the shaft on the delay timer.



Step 43 Place the dial on the delay timer shaft, lining up the flat on the shaft and the flat on the dial and push on.

Step 44 Using a screwdriver or nutdriver, insert the screws through the bracket into the control bracket and tighten.

Step 45 Replace the console escutcheon.

Step 46 Close the door.

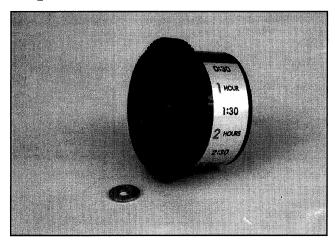
Step 47 Replace the end caps.

Step 48 Reconnect power or plug in dishwasher.

AWARNING

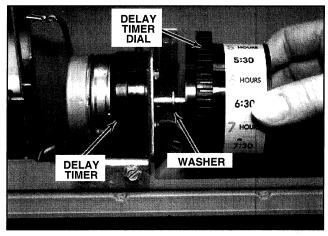
Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Delay Timer Dial Replacement



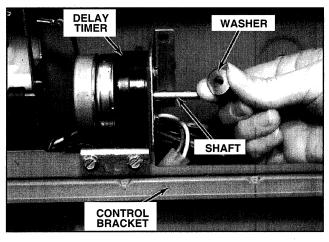
This part is located in the console escutcheon on some porcelain liner models (1986 and older) and is used in setting the number of hours for the delay timer (eight hours maximum), before the dishwasher starts.

- **Step 1** Disconnect power or unplug dishwasher.
- Step 2 Remove the end caps.
- **Step 3** Remove the console escutcheon.



Step 4 Pull the dial off the shaft of the delay timer.

REPLACEMENT



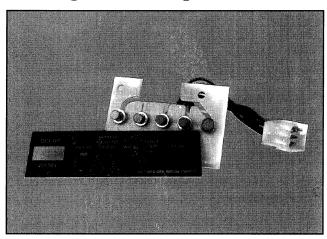
Step 5 Be sure the metal washer is on the shaft of the delay timer.

- **Step 6** Place the new dial on the delay timer shaft lining up the flat on the shaft and the flat on the dial, and push on.
- **Step 7** Replace the console escutcheon.
- Step 8 Replace the end caps.
- **Step 9** Reconnect power or plug in dishwasher.

AWARNING

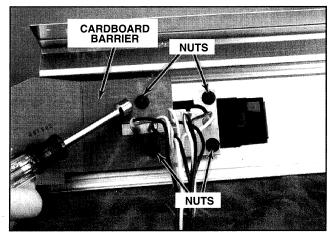
Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Indicator Lights and Parts Testing and/or Replacement



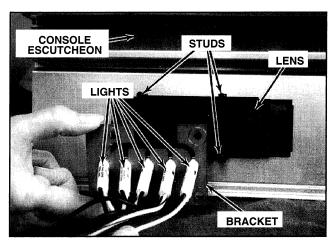
This part is located in the console escutcheon on some porcelain liner models (1986 and older). Any one of the five lights will light up telling you what is happening in the cycle you have selected.

- **Step 1** Disconnect power or unplug dishwasher.
- Step 2 Remove the end caps.
- **Step 3** Remove the console escutcheon.
- **Step 4** Using your hands, press the tab on the connector while pulling them apart.



Step 5 Using a nutdriver, remove the four nuts.

Step 6 Remove the cardboard barrier.



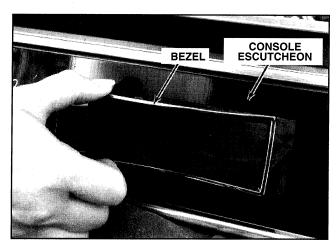
Step 7 Remove the bracket and lights from the studs of the bezel.

Step 8 Slide the lights out of the bracket.

Step 9 Lift the lens out of the bezel.



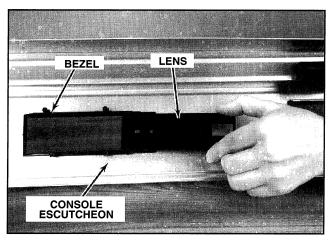
Step 10 Press the sides together and snap the bezel out the front of the console escutcheon.



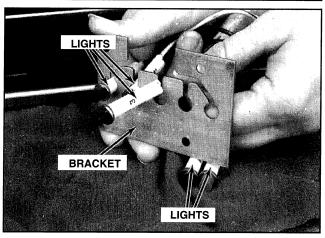
Step 11 Place the new bezel through the front of the console escutcheon.

Step 12 Slide the new bezel so the slot fits into the console escutcheon.

Step 13 Push the sides together (DO NOT crack plastic) and snap in place.

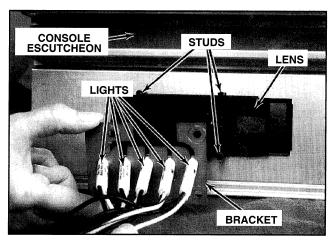


Step 14 Lay the new lens, with the printing toward the front, in the cutout on the new bezel.

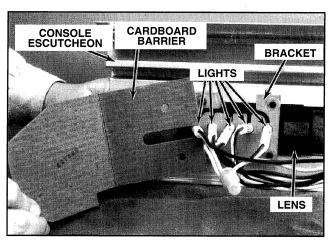


Step 15 Place the new lights in the slots on the new bracket.

NOTE: The lights and the slots on the new bracket are numbered. Be sure you put the right light in the right slot on the bracket.



Step 16 Place the new bracket (cutout facing up) and lights on the four studs of the bezel.



Step 17 Place the new cardboard barrier on the two studs of the bezel.

Step 18 Using a nutdriver, place the four nuts on the studs of the bezel and tighten.

Step 19 Push the two connectors together until they snap.

Step 20 Replace the console escutcheon.

Step 21 Replace the end caps.

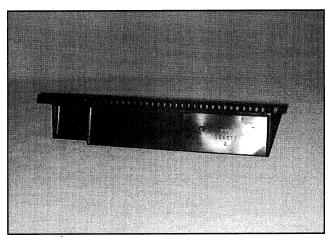
Step 22 Reconnect power or plug in dishwasher.

PROCEDURE 18



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

Vent Grille Replacement



This part is located in the upper left corner of the console escutcheon. During the wash and dry cycles, hot air comes out this opening.

See page 265, illus. no. 20 for location of part.

Step 1 Disconnect power or unplug dishwasher.

NOTE: Use steps 2-4 for plastic liner models only and then skip to step 6.

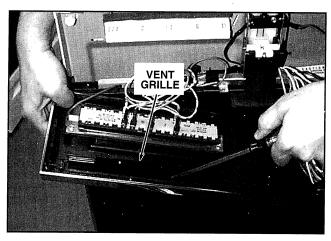
Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 3 Remove the inner door panel.

Step 4 Remove the timer cover.

Step 5 Remove the console escutcheon.



Step 6 Insert a small blade screwdriver between the upper part of the vent (by the tabs) and console escutcheon and pry.

Step 7 Carefully remove the vent grille out the front of the console escutcheon.

REPLACEMENT

Step 8 Place the vent grille in the opening with the tabs down and facing toward you.

Step 9 Snap the top edge of the new vent grille in the console escutcheon.

NOTE: Use steps 10-12 for plastic liner models only and then skip to step 14.

Step 10 Replace the timer cover.

Step 11 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 12 Close the door.

Step 13 Replace the console escutcheon.

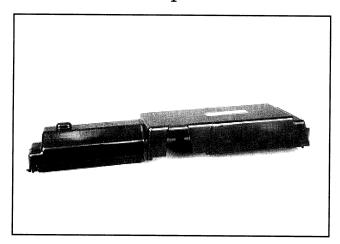
Step 14 Reconnect power or plug in dishwasher.

PROCEDURE 19

AWARNING

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

Timer Cover Replacement



See page 279, illus. no. 16 for location of part.

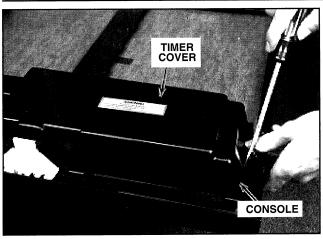
This part is used to cover the timer and other electrical parts on plastic liner models (1986 and newer).

Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

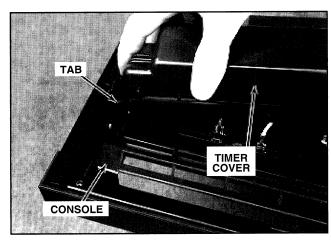
Step 3 Remove the inner door panel.



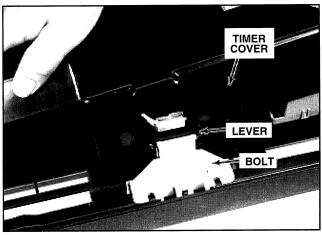
Step 4 Insert a flat blade screwdriver (timer side) between the side of the cover and the tab on the console, then pry and lift at the same time.

Step 5 Slide the other tab on the other end of the cover out the slot in the console.

REPLACEMENT



Step 6 Slide the tab on the cover (opposite timer) into the slot in the console.



Step 7 Slowly lower the cover making sure the edge of the timer cover fits between the lever/bolt and door switches.

Step 8 Push in on the side of the cover (timer end) and down until the tab on the cover slips or snaps into the console.

Step 9 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 10 Close the door.

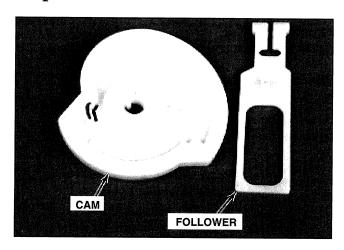
Step 11 Reconnect power or plug in dishwasher.

.)

AWARNING

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

Cam and Cam Follower Replacement



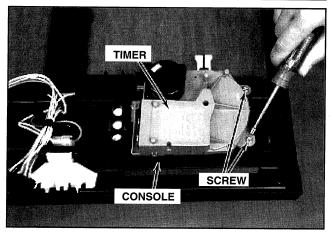
See page 279, illus. nos. 4 and 6 for location of parts.

These parts fit on the timer shaft and are used with the draw bars and actuator to open the detergent dispenser lid on plastic liner models (1986 and newer).

- Step 1 Disconnect power or unplug dishwasher.
- **Step 2** Open the door.

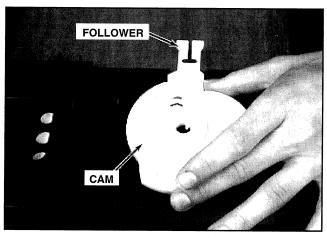
NOTE: Hold onto the door. With the inner door panel removed, it could close.

- Step 3 Remove the inner door panel.
- **Step 4** Remove the timer cover.

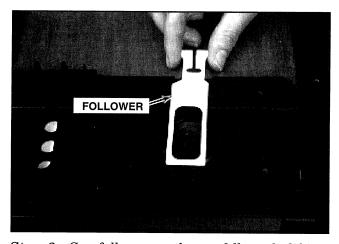


Step 5 Using a screwdriver or nutdriver, remove the screws which hold the timer to the console.

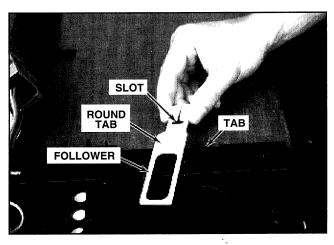
Step 6 Carefully move the timer out of the way.



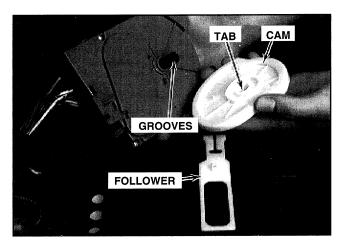
Step 7 Carefully remove the cam by lifting. This cam may be stuck on the timer shaft when removing the timer.



Step 8 Carefully remove the cam follower by lifting.

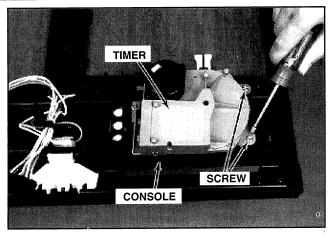


Step 9 Lay the cam follower (with round tab facing timer) over the timer knob hole with the slot in the cam over the tab on the console.



Step 10 Place the cam on the timer shaft lining up the grooves, and then push on.

Step 11 Carefully replace the timer by lining up the flat on the timer shaft with the flat on the timer knob.



Step 12 Using a screwdriver or nutdriver, insert the screws through the timer into the console and tighten.

Step 13 Replace the timer cover.

Step 14 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 15 Close the detergent dispenser lid.

Step 16 Slowly turn the timer knob all the way around until the detergent dispenser lid opens.

NOTE: If the detergent dispenser lid opens, the cam and cam follower were mounted correctly and mesh with the draw bar on the inner door panel.

Step 17 If the detergent dispenser lid does not open, you will have to repeat this procedure.

Step 18 Reconnect power or plug in dishwasher.

'n

NOTES

			_
			_
			_

			_
			_
			_
			_
			_
			_
		Sec.	
			_
			_
			-
	·		-
			-
			-
			_
		*	_
			_
			_

NOTES

,

SECTION J

Cabinet Area

PROCEDURE 1

AWARNING

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

Top Replacement

This part is located on the top of the dishwasher cabinet.

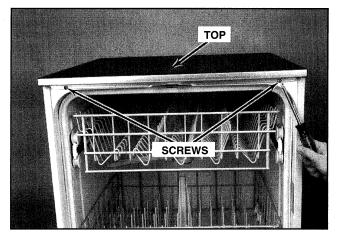
See page 266, illus. no. 34 for location of part.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

Step 1 Unplug dishwasher or disconnect power.

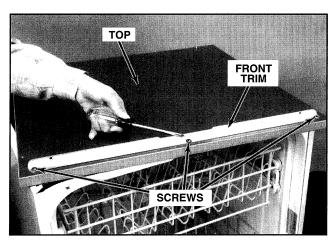
Step 2 Open the door.



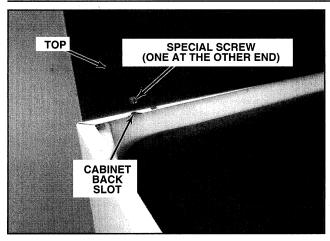
Step 3 Using a screwdriver, remove the two screws which hold the front trim to the cabinet.

Step 4 Lift up and pull the top toward you.

NOTE: This will release the special screws in the back of the top, out of the slots in the cabinet.

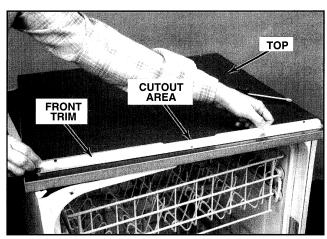


Step 5 Using a nutdriver or socket wrench, remove the screws which hold the front trim to the underneath side of the top.

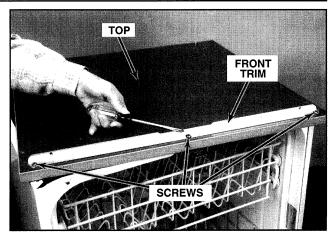


Step 6 Using a nutdriver or socket wrench, remove the two special screws in the back on the underneath side of the top.

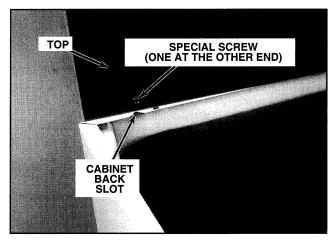
Step 7 Using a nutdriver or socket wrench, insert the two special screws in the back on the underneath side of the new top and tighten to the shoulder of the screw head.



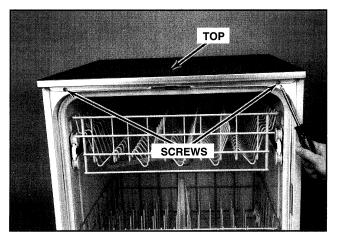
Step 8 Place the front trim on the underneath side of the new top with the cutout up and toward the back.



Step 9 Using a nutdriver or socket wrench, insert the screws through the front trim into the new top and tighten.



Step 10 Push the special screws in the back slots of the cabinet, then lower the front of the new top.



Step 11 Using a screwdriver, insert the screws through the front trim into the tub and tighten.

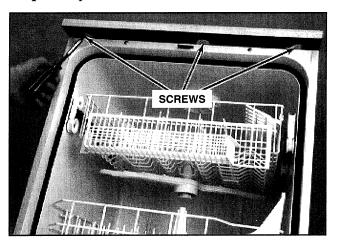
Step 12 Close the door.

Step 13 Plug in dishwasher or reconnect power.

TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Open the door.



Step 3 Using a screwdriver, remove the screws which hold the top to the cabinet frame.

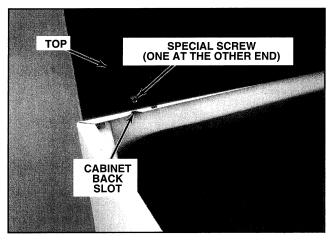
Step 4 Lift up and pull the top toward you.

NOTE: This will release the special screws in the back of the top from the slots in the cabinet.

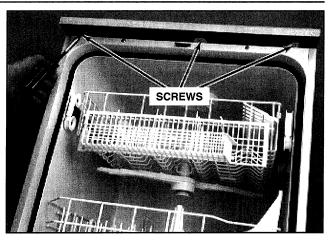
Step 5 Using a nutdriver or socket wrench, remove the two special screws in the back on the underneath side of the top.

REPLACEMENT

Step 6 Using a nutdriver or socket wrench, insert the two special screws in the back on the underneath side of the top and tighten to the shoulder of the screw head.



Step 7 Slide the top back so the special screws fit in the back slots of the cabinet flange, and then lower the front of the top.



Step 8 Using a screwdriver, insert the screws through the cabinet frame into the top and tighten.

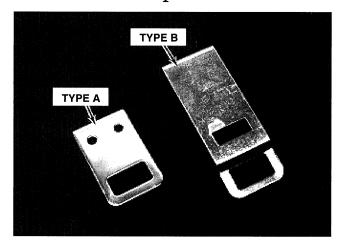
Step 9 Close the door.

Step 10 Plug in dishwasher or reconnect power.



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

Door Strike Replacement



This part is located on the top, inside the tub, and is used to keep the door closed.

See page 270, illus. nos. 44 and 45, or page 276, illus. no. 8 for location of parts.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

Step 1 Disconnect power or unplug dishwasher.



Tip Over Hazard

Do not use dishwasher until completely installed.

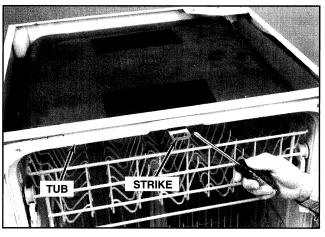
Do not push down on open door.

Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter.

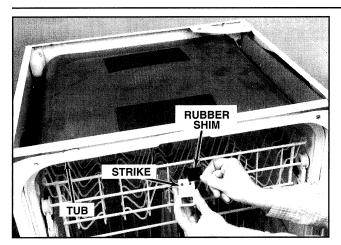
PORTABLE MODELS • Remove the top.

REPLACEMENT

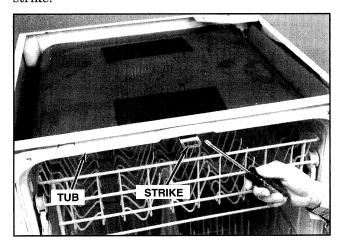


Step 3 Using a screwdriver, remove the screws which hold the strike to the tub.

NOTE: When the strike is removed, the spring nut will lay on the top flange of the dishwasher.



Step 4 Place the new rubber shim on top of the new strike.



Step 5 Using a screwdriver, insert the screws through the new strike, new shim, the tub into the spring nut and tighten.

Step 6 Replace the dishwasher under the counter.

PORTABLE MODELS • Replace the top.

Step 7 Reconnect power or plug in dishwasher.

TYPE B

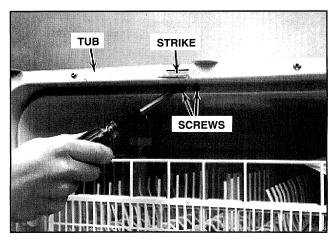
Step 1 Disconnect power or unplug dishwasher.



Step 2 Pull the dishwasher out from under the counter slightly.

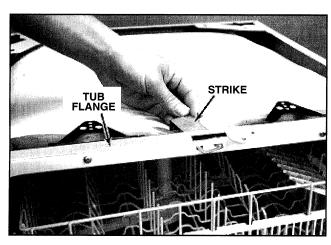
PORTABLE MODELS • Remove the top.

Step 3 Remove the door gasket.

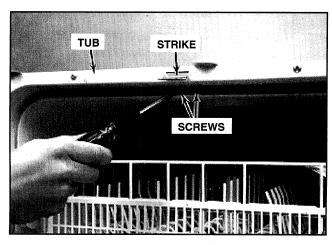


Step 4 Using a screwdriver, remove the screws which hold the strike to the tub.

Step 5 Slide the strike towards the back and out the hole in the cabinet flange.



Step 6 Replace the strike from the back of the cabinet flange by sliding it towards the front.



Step 7 Using a screwdriver, insert the screws through the tub into the strike and tighten.

Step 8 Replace the door gasket.

Step 9 Replace the dishwasher under the counter.

PORTABLE MODELS • Replace the top.

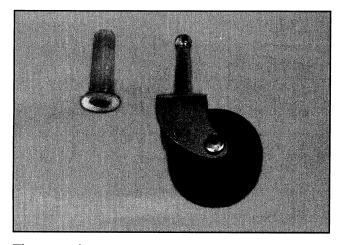
Step 10 Reconnect power or plug in dishwasher.

PROCEDURE 3



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

Swivel Caster and Socket Replacement



There are four casters, one located in each corner.

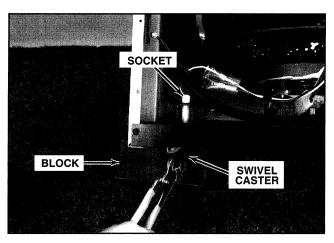
See page 266, illus. nos. 43 and 44 for location of parts.

The casters make it easy to move the dishwasher around to different areas.

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the access panel and coverplate (or shroud).

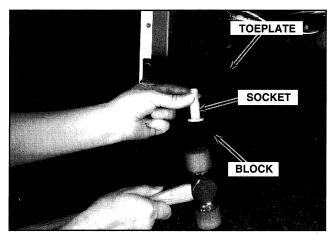
Step 3 Place a 4-inch square by 8-inch long block under the front or rear edge of the cabinet (whichever caster you are changing).



Step 4 Using adjustable pliers, grab the swivel caster and pull down to remove.

Step 5 Using a screwdriver, pry the socket out of the front toeplate or back bracket.

REPLACEMENT



Step 6 Using a hammer, tap the new socket in the hole of the toeplate or back bracket.

Step 7 Place the new caster in the new socket and push up until it snaps into place.

Step 8 Remove the block.

Step 9 Replace the access panel and coverplate (or shroud).

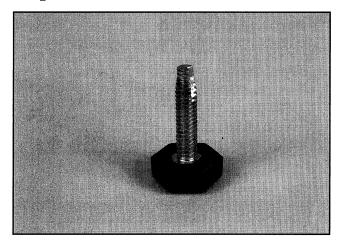
Step 10 Plug in dishwasher or reconnect power.

PROCEDURE 4



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

Front Leveling Feet Replacement



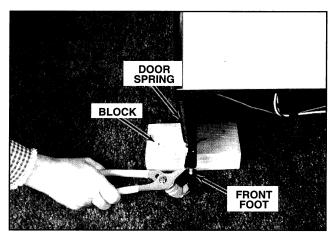
See page 270, illus. no. 23 or page 276, illus. no. 4 for location of part.

Step 1 Disconnect power or unplug dishwasher.

Tip Over Hazard Do not use dishwasher until completely installed. Do not push down on open door. Doing so can result in serious injury or cuts.

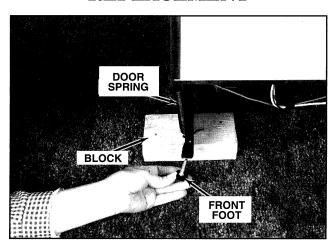
Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

Step 3 Place a 3-inch square by 6-inch long block of wood under the edge of the leg.



Step 4 Using adjustable pliers or an open-end wrench, remove the front foot.

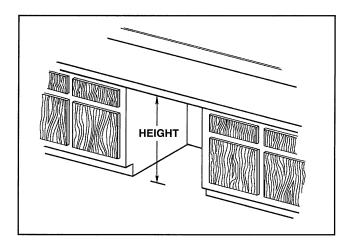
REPLACEMENT



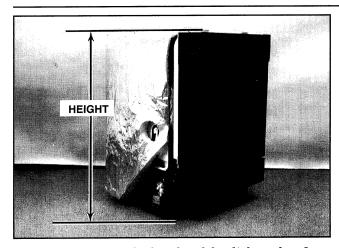
Step 5 Using adjustable pliers or an open-end wrench, insert the new front foot into the leg and turn.

Step 6 Remove the block of wood.

NOTE: It is recommended that the dishwasher be reinstalled so that it is as level as possible from front to back.



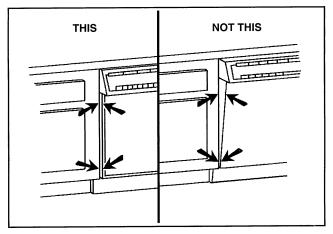
Step 7 Measure the height of the cutout.



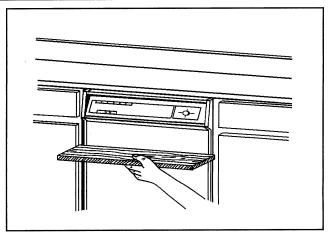
Step 8 Measure the height of the dishwasher from the floor to the top of the console escutcheon.

Step 9 Adjust the feet up or down so the dishwasher fits in the cutout.

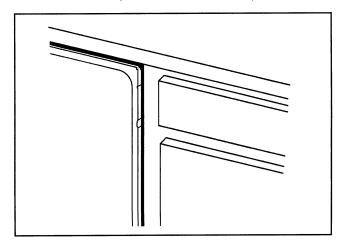
Step 10 Push the dishwasher back under the counter.



Step 11 Adjust the feet up or down so the dishwasher door is straight with the cabinet.



Step 12 Make sure the dishwasher door is even with the cabinet (not the cabinet doors).



Step 13 Make sure the spacing on each side, between the dishwasher and the cabinet, is the same.

Step 14 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

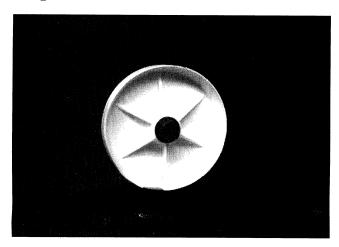
Step 15 Reconnect power or plug in dishwasher.

AWARNING



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

Rear Leveling Wheel Replacement



See page 270, illus. no. 24 or page 276, illus. no. 6 for location of part.

Step 1 Disconnect power or unplug dishwasher.

AWARNING



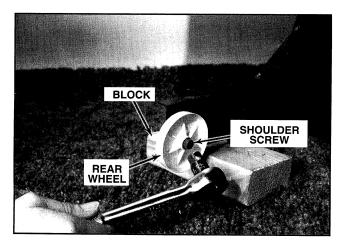
Tip Over Hazard Do not use dishwasher until completely installed.

Do not push down on open door. Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In models."

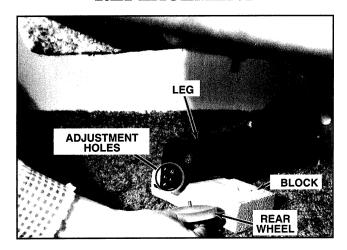
Step 3 Place a 3-inch square by 6-inch long block of wood under the edge of the leg.

NOTE: Mark the hole you removed the screw from, so when replacing the screw you will put it back in the same hole.



Step 4 Using a nutdriver or socket wrench, remove the shoulder screw and rear wheel.

REPLACEMENT

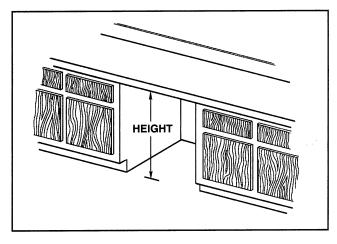


Step 5 Insert the shoulder screw through the new wheel.

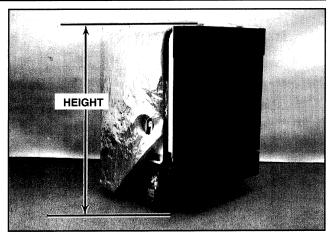
Step 6 Place the new rear wheel on the inside of the leg. Insert the shoulder screw in the same hole it came out of and tighten.

Step 7 Remove the block.

NOTE: It is recommended that the dishwasher be reinstalled so that it is as level as possible from front to back.



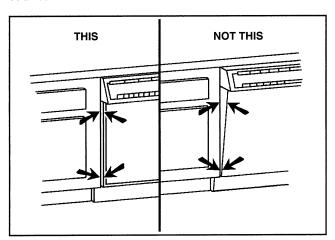
Step 8 Measure the height of the cutout.



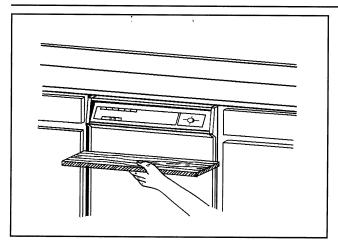
Step 9 Measure the height of the dishwasher from the floor to the top of the console escutcheon.

Step 10 Adjust the feet up or down so the dishwasher fits in the cutout.

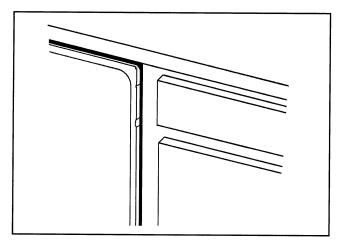
Step 11 Push the dishwasher back under the counter.



Step 12 Adjust the feet up or down so the dishwasher door is straight with the cabinet.



Step 13 Make sure the dishwasher door is even with the cabinet (not the cabinet doors).



Step 14 Make sure the spacing on each side, between the dishwasher and the cabinet, is the same.

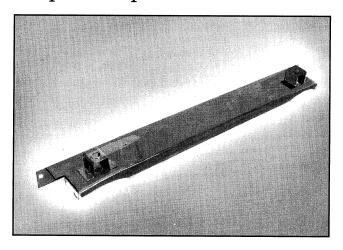
Step 15 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 16 Reconnect power or plug in dishwasher.



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

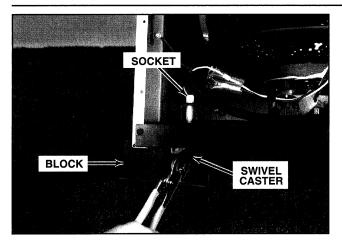
Toeplate Replacement



This part is located in the front bottom, behind the coverplate. The swivel casters are mounted to this. It also supports the bottom front sides of the cabinet.

See page 266, illus. no. 29 for location of part.

- **Step 1** Unplug dishwasher or disconnect power.
- **Step 2** Remove the access panel and coverplate (or shroud).
- **Step 3** Place a 3-inch square by 6-inch long block of wood under the edge of the cabinet.



Step 4 Using adjustable pliers, grab the swivel caster and pull to remove.

Step 5 Using a screwdriver, pry the socket out of the toeplate.

Step 6 Remove the water inlet valve.

Step 7 Remove the start relay, if used in this area.

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

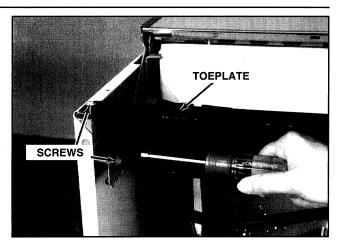
Excessive Weight Hazard

Use two or more people to move and install dishwasher.

Failure to do so can result in back or other injury.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

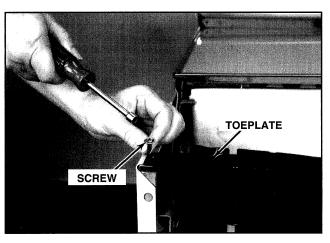
Step 8 Lay the dishwasher on its back.



Step 9 Using a nutdriver or socket wrench, remove the two screws, one on each end, in the front and the two screws, one on each end, by the casters.

REPLACEMENT

Step 10 Place the new toeplate on the brackets.



Step 11 Using a nutdriver or socket wrench, insert the screws, two on each side, through the new toeplate into the brackets and tighten.

Step 12 Using a hammer, tap the sockets into the holes in the new toeplate.

Step 13 Place the casters in the sockets and push until they snap into place.

Step 14 Replace the start relay, if used in this area.

Step 15 Replace the water inlet valve.

Step 16 Set the dishwasher upright.

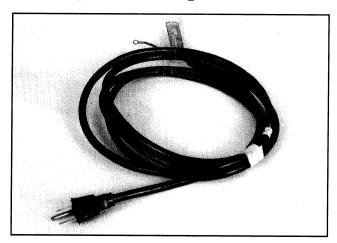
Step 17 Replace the access panel and coverplate (or shroud).

Step 18 Plug in dishwasher or reconnect power.

AWARNING

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

Power Cord Testing and/or Replacement



See page 266, illus. no. 21 for location of part.

OHMMETER REQUIRED

Your Portable dishwasher and some Built-In dishwashers are supplied with a power cord having a 3-prong grounding plug.

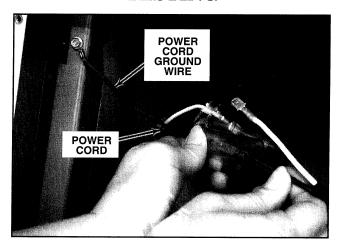
NOTE: Look at the terminals and the plug. If they are discolored the power cord must be replaced.

See Type A for Portable models using a porcelain liner (1986 and older), or see Type B for Portable models using a plastic liner (1986 and newer), or see Type C for Built-In models.

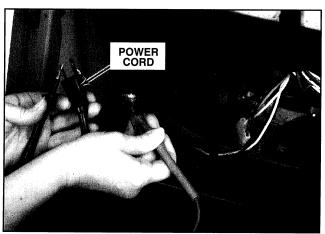
TYPE A

- Step 1 Unplug dishwasher or disconnect power.
- **Step 2** Remove the access panel and coverplate.

TESTING



- **Step 3** Pull apart the white wire from the power cord and the white wire from the harness.
- **Step 4** Pull apart the black wire from the power cord and the black wire from the harness.
- **Step 5** Using a nutdriver or screwdriver, remove the screw holding the green ground wire from the power cord to the frame.
- **Step 6** Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 7 As you look at the end of the plug (round terminal on bottom), touch and hold one ohmmeter probe to the terminal (prong) on the left side of the plug.

Step 8 Touch the other ohmmeter probe to the terminal on the black wire at the other end of the cord.

Step 9 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

OR

Step 10 As you look at the end of the plug (round terminal on bottom), touch and hold one ohmmeter probe to the terminal (prong) on the right side of the plug.

Step 11 Touch the other ohmmeter probe to the terminal on the white wire at the other end of the cord.

Step 12 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

OR

Step 13 Touch and hold one ohmmeter probe to the round prong on the plug.

Step 14 Touch the other ohmmeter probe to the terminal on the green wire at the other end of the cord.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

REPLACEMENT

Step 16 Remove the top.

Step 17 Using a screwdriver, remove the screw at the lower right which holds the strain relief to the cabinet.

Step 18 Using a nutdriver or screwdriver, remove the screws which hold the cord housing to the dishwasher.

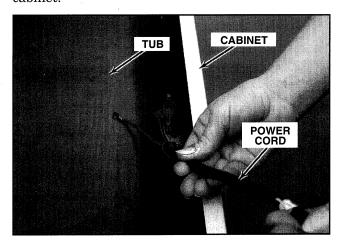
Step 19 Pull the housing and power cord out of the dishwasher.

Step 20 Remove the strain relief from the power cord.

Step 21 Pull the power cord out of the housing.

Step 22 Place the new power cord in the housing.

Step 23 Place the housing in the opening in the cabinet.



Step 24 Reach in the top area and push the new power cord down between the foam blocks (if used).

Step 25 Reconnect the black wire from the new power cord to the black wire from the harness.

Step 26 Reconnect the white wire from the new power cord to the white wire from the harness.



Step 27 Using a nutdriver or screwdriver, insert the screw through the green ground wire on the new power cord into the frame and tighten.

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

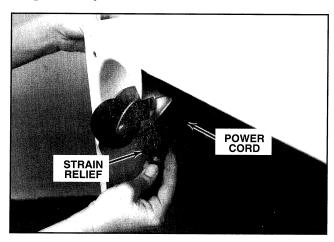
Excessive Weight Hazard

Use two or more people to move and install dishwasher.

Failure to do so can result in back or other injury.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

Step 28 Lay the dishwasher on its side.



NOTE: Be sure you carefully place the power cord in the strain relief and attach the strain relief to the cabinet.

Step 29 Place the strain relief on the new power cord 24 inches from the terminals.

Step 30 Using a screwdriver, insert the screw through the hole in the cabinet into the strain relief and tighten.

Step 31 Set the dishwasher upright.

Step 32 Replace the top.

Step 33 Replace the access panel and coverplate.

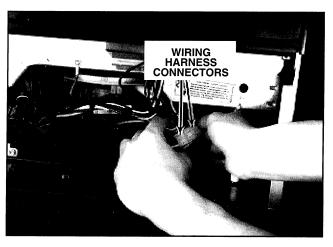
Step 34 Plug in dishwasher or reconnect power.

TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the shroud.

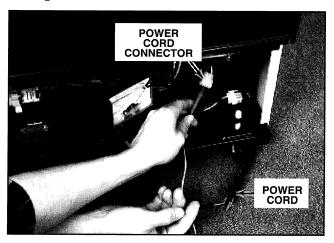
TESTING



Step 3 Pull apart the wiring connectors (power cord and wiring harness) by pressing the two tabs.

Step 4 Using a nutdriver or screwdriver, remove the screw which holds the green ground wire from the power cord to the frame.

Step 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 6 As you look at the end of the plug (round terminal on bottom), touch and hold one ohmmeter probe to the terminal (prong) on the left side of the plug.

Step 7 Touch the other ohmmeter probe to the terminal on the black wire in the connector.

Step 8 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

OR

- **Step 9** As you look at the end of the plug (round terminal on bottom), touch and hold one ohmmeter probe to the terminal (prong) on the right side of the plug.
- **Step 10** Touch the other ohmmeter probe to the terminal on the white wire in the connector.
- **Step 11** The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

OR

- **Step 12** Touch and hold one ohmmeter probe to the round prong on the plug.
- **Step 13** Touch the other ohmmeter probe to the terminal on the green wire in the connector.
- **Step 14** The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.
- Step 15 Remove the top.

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

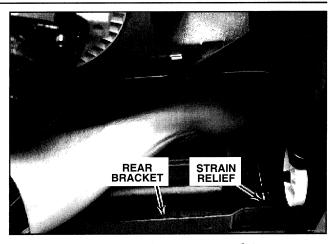
Excessive Weight Hazard

Use two or more people to move and install dishwasher.

Failure to do so can result in back or other injury.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

- **Step 16** Lay the dishwasher on its back.
- **Step 17** Remove the right rear caster and socket.



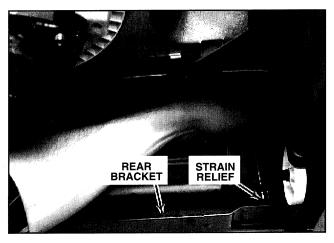
Step 18 Using a nutdriver or screwdriver, remove the screw which holds the strain relief on the power cord to the rear bracket.

- **Step 19** Move the power cord over to the side of the dishwasher.
- Step 20 Set the dishwasher upright.
- **Step 21** Pull the power cord out of the housing.

REPLACEMENT

Step 22 Push the connector end of the power cord through the housing and all the way down until the plug is in the housing.

Step 23 Lay the dishwasher on its back.



Step 24 Using a nutdriver or screwdriver, insert the screw through the strain relief on the power cord, into the rear bracket and tighten.

Step 25 Replace the right rear caster and socket.



Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 26 Using a nutdriver or screwdriver, insert the screw through the green ground wire from the power cord into the frame and tighten.

Step 27 Replace the shroud.

Step 28 Set the dishwasher upright.

Step 29 Replace the top.

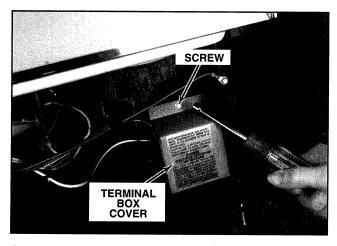
Step 30 Plug in dishwasher or reconnect power.

TYPE C

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

TESTING



Step 3 Using a nutdriver or screwdriver, remove the screw which holds the terminal box cover to the box.

Step 4 Twist the wire connector off the black wires and pull them apart.

Step 5 Twist the wire connector off the white wires and pull them apart.

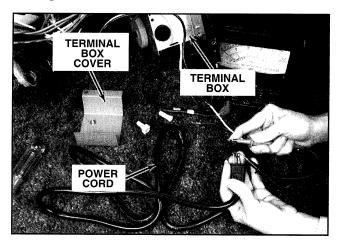
Step 6 Using a nutdriver or screwdriver, remove the screw going through the green ground wire from the power cord to the box.

Step 7 Using a nutdriver, remove the screw which holds the clamp and power cord to the side of the frame.

NOTE: This clamp is located behind the box.

Step 8 Remove the clamp.

Step 9 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 10 As you look at the end of the plug (round terminal on bottom), touch and hold one ohmmeter probe to the terminal (prong) on the left side of the plug.

Step 11 Touch the other ohmmeter probe to the terminal on the black wire at the other end of the cord.

Step 12 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

OR

Step 13 As you look at the end of the plug (round terminal on bottom), touch and hold one ohmmeter probe to the terminal (prong) on the right side of the plug.

Step 14 Touch the other ohmmeter probe to the terminal on the white wire at the other end of the cord.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

OR

Step 16 Touch and hold one ohmmeter probe to the round prong on the plug.

Step 17 Touch the other ohmmeter probe to the terminal on the green wire at the other end of the cord.

Step 18 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

REPLACEMENT

Step 19 Place the clamp on the new power cord about 10 inches up from the bare wires.

Step 20 Using a nutdriver, insert the screw through the clamp into the frame and tighten.

Step 21 Place the bare wires from the new power cord through the big hole in the back of the terminal box.

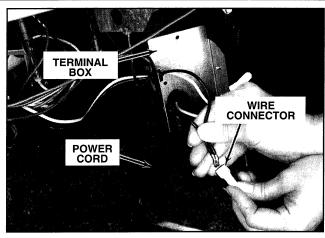
NOTE: Be sure you attach the green ground wire to the side of the terminal box.



Failure to follow these instructions can result in death or electrical shock.

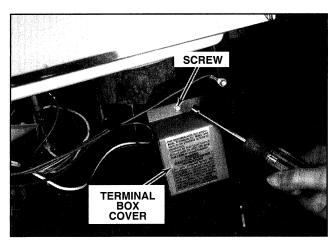
Step 22 Using a nutdriver or screwdriver, insert the screw through the green ground wire into the side of the terminal box and tighten.

NOTE: Use only a wire connector for splicing wires together. DO NOT use tape.



Step 23 Hold the two black wires together, screwing the wire connector down on the bare wires.

Step 24 Hold the two white wires together, screwing the wire connector down on the bare wires.



Step 25 Using a nutdriver or screwdriver, replace the screw which holds the terminal box cover to the box and tighten.

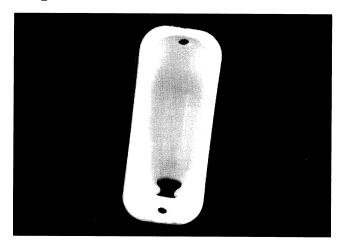
Step 26 Replace the access panel/toe panel.

Step 27 Reconnect power or plug in dishwasher.



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

Power Cord Housing Replacement



This part, looking at the back, is located in the upper right-hand corner.

See page 266, illus. no. 15 for location of part.

It is used on porcelain liner models (1986 and older) to house the power cord when it is not being used.

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the top.

- **Step 3** Remove the access panel and coverplate.
- **Step 4** Remove the power cord.

Step 5 Using a screwdriver, remove the screws which hold the power cord housing.

REPLACEMENT

- **Step 6** Using a screwdriver, replace the screws which hold the power cord housing.
- **Step 7** Replace the power cord.

Step 8 Replace the top.



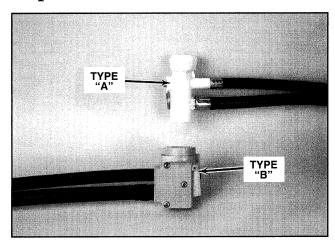
Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

- **Step 9** Replace the access panel and coverplate.
- **Step 10** Plug in dishwasher or reconnect power.

AWARNING

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

Faucet Coupler and Parts Replacement



See page 266, illus. nos. 3, 4, and 6 for location of parts.

This faucet coupler snaps onto the sink faucet. The water from the sink faucet flows through the top hose and into the dishwasher. As the water is pumped from the dishwasher, the water flows through the bottom hose and into the sink.

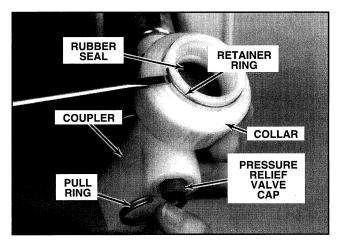
There are two types of faucet couplers that were used on porcelain liner models (1986 and older). One was a plain white coupler, the other was gray and had three screws holding it together.

See Type A for the plain one, or see Type B for the one held together with screws.

TYPE A

Step 1 Unplug dishwasher or disconnect power.

NOTE: When removing the collar, there is a spring underneath which may force the collar out of your hands. Also, there are four slides which may fall out of their slots when the collar is removed. Be careful not to lose these slides.



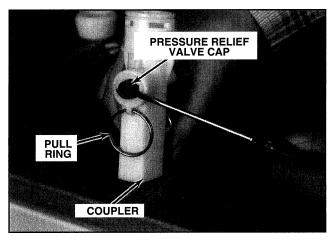
Step 2 Using a small screwdriver, push down on the collar ring with your hand and pry with the screwdriver to remove the retainer ring.

Step 3 Remove the collar.

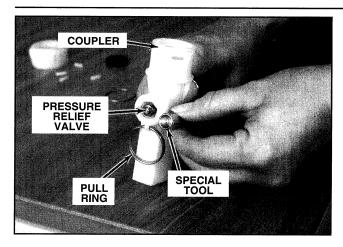
Step 4 Remove the spring.

Step 5 Remove the four slides.

Step 6 Using a small screwdriver, remove the rubber seal down inside the coupler.

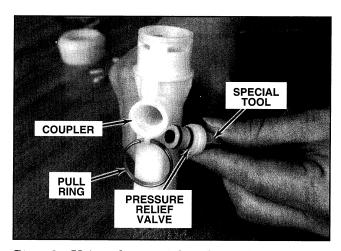


Step 7 Using a screwdriver, pry the red button off the pressure relief valve.

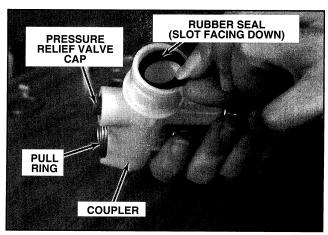


Step 8 Using the special tool supplied with the replacement valve, unscrew the pressure relief valve from the coupler.

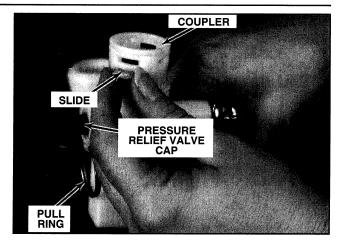
REPLACEMENT



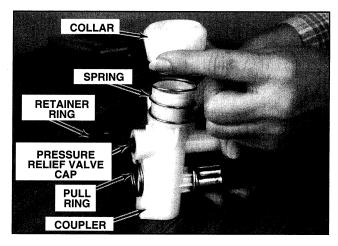
Step 9 Using the special tool supplied with the replacement valve, insert the new pressure relief valve into the coupler and tighten.



Step 10 Place the new rubber seal, with the slot facing down, in the groove in the coupler.

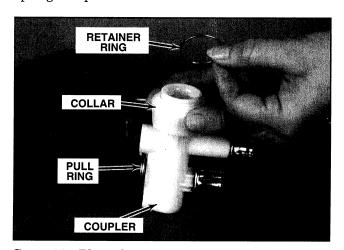


Step 11 Place the four new slides in the slots in the coupler.



Step 12 Place the new spring on the coupler.

Step 13 Place the new collar on top of the new spring and push down.



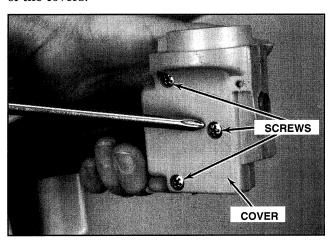
Step 14 Place the new retainer ring in the groove in the coupler.

Step 15 Plug in dishwasher or reconnect power.

TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Pull the pull ring out of the hole on each side of the covers.



Step 3 Using a screwdriver, remove the screws which hold both covers together.

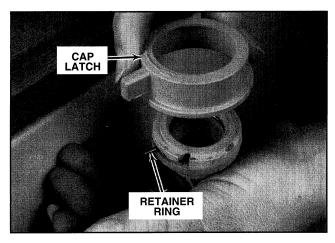
Step 4 Remove one cover.

Step 5 Remove the drain hose (bottom) from the groove in the cover.

 $\textbf{Step 6} \quad \textbf{Slide the inlet hose (top) out of the groove in the cover.}$

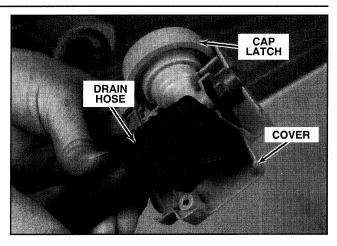
Step 7 Pull the cap latch off the top of the inlet hose.

REPLACEMENT

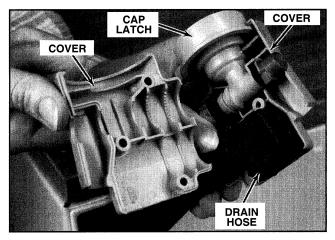


Step 8 Place the new cap latch on the inlet hose with the retainer ring in the slot on the new cap latch.

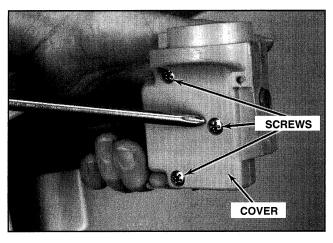
Step 9 Slide the inlet hose in the new side cover.



Step 10 Slide the drain hose (opening down) in the same new side cover.



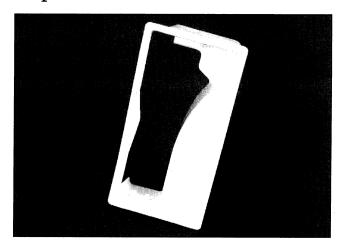
Step 11 Place the other new cover over the inlet and drain hose plus the ridge on the cap latch.



Step 12 Using a screwdriver, insert the screws in the side cover and tighten.

Step 13 Plug in dishwasher or reconnect power.

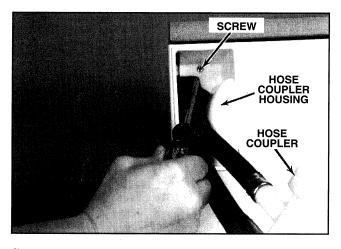
Hose Coupler Housing Replacement



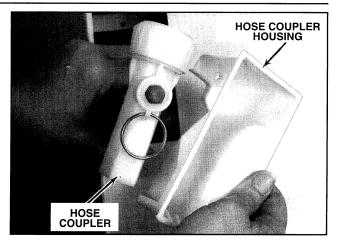
See page 266, illus. no. 12 for location of part.

This part is used on porcelain liner models (1986 and older).

Step 1 Pull the faucet coupler out of the housing somewhat.



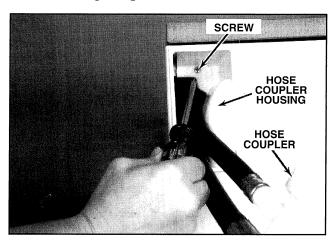
Step 2 Using a screwdriver, remove the screw which holds the housing to the dishwasher.



Step 3 Pull the housing out and over the hose coupler.

REPLACEMENT

Step 4 Place the new housing over the hose coupler and into the opening in the cabinet.



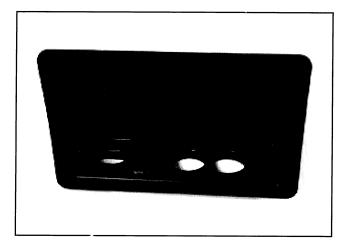
Step 5 Using a screwdriver, insert the screw through the new housing into the dishwasher and tighten.

Step 6 Push the faucet coupler back into the housing.

AWARNING

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

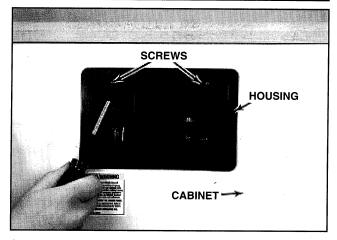
Power Cord and Hose Coupler Housing Replacement



This part, looking at the back, is located in the upper middle of the cabinet on plastic liner models (1986 and newer). The power cord and hoses fit into this.

See page 266, illus. no. 51 for location of part.

- **Step 1** Unplug dishwasher or disconnect power.
- **Step 2** Remove the top.
- **Step 3** Remove the shroud.

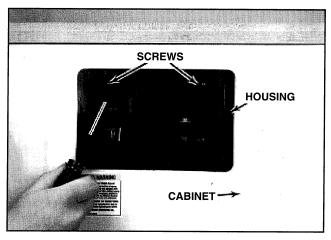


Step 4 Using a screwdriver, remove the screws which hold the housing to the back of the cabinet.

- Step 5 Carefully remove the housing out of the cabinet.
- **Step 6** Remove the power cord.
- Step 7 Remove the hoses.
- **Step 8** Slide the power cord and hoses out of the housing.

REPLACEMENT

Step 9 Place the housing back into the opening in the cabinet.



Step 10 Using a screwdriver, insert the screws through the housing, into the cabinet and tighten.

- **Step 11** Replace the power cord.
- **Step 12** Replace the hoses.
- **Step 13** Replace the top.
- Step 14 Replace the shroud.
- Step 15 Plug in dishwasher or reconnect power.



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

Hose Coupler (Inlet and Drain) Replacement

This part (looking at the back) is located in the upper left-hand corner on porcelain liner models (1986 and older), is located (looking at the back) in the middle on plastic liner models (1986 and newer).

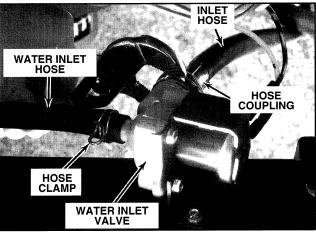
See page 266, illus. no. 2 for location of part.

This hose coupler is used on Portable Models and it connects to the faucet for incoming water, then drains out the bottom of the coupler during the drain cycle.

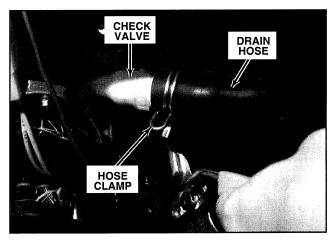
See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

- **Step 1** Unplug dishwasher or disconnect power.
- **Step 2** Remove the access panel and coverplate.
- Step 3 Remove the top.



Step 4 Using adjustable pliers, unscrew the coupling on the inlet hose connected to the water inlet valve.



Step 5 Using adjustable pliers, slide the clamp on the drain hose from the check valve located on the side of the pump and motor, then remove the hose.

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

Excessive Weight Hazard

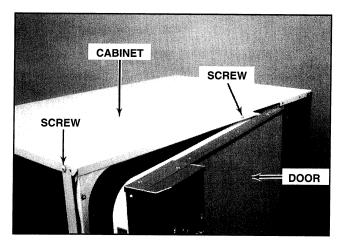
Use two or more people to move and install dishwasher.

Failure to do so can result in back or other injury.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

Step 6 Lay the dishwasher on its left side (as you look at the front).

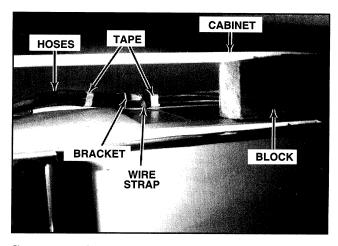
Step 7 Open the door slightly.



Step 8 Using a screwdriver, remove the screw at the top and in the middle holding the cabinet to the frame.

Step 9 Using a nutdriver or socket wrench, remove the bottom screw which holds the cabinet to the toeplate.

NOTE: Be careful not to lift the cabinet higher than 3-3/4 inches, otherwise you could bend the back of the cabinet.



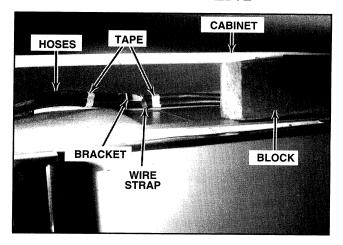
Step 10 Place a 3 to 3-1/2 inch square block, 9 inches long, between the frame and edge of the cabinet.

NOTE: Some models have foam blocks which are glued to the cabinet. Mark them where they are located as they will be reused. Use a putty knife and place it between the foam block and cabinet to remove.

Step 11 Reach in with your hand(s) and untwist the wire strap and remove it from the hoses.

Step 12 Pull the coupler and hoses out the opening in the back.

REPLACEMENT



NOTE: Wrap a piece of tape approximately 44 inches down from the coupler.

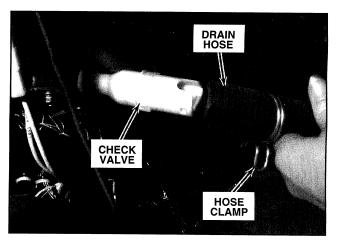
Step 13 Place the new coupler and hoses in through the opening in the back of the cabinet.

Step 14 Push the hoses down so the tape is just below the bracket.

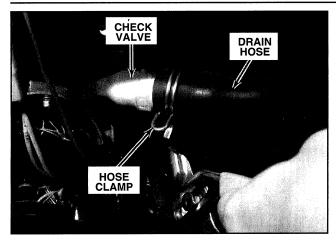
NOTE: Be sure the hoses go between the bracket and cabinet back.

Step 15 Wrap the small end of the tie wire around the hoses and stick this through the slot at the other end of the tie wire and twist.

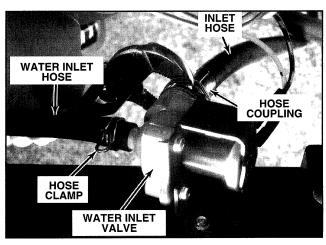
Step 16 Place the clamp over the drain hose.



Step 17 Push this drain hose on the check valve.



Step 18 Using adjustable pliers, slide the clamp on the drain hose over the check valve.



Step 19 Using adjustable pliers, screw the hose coupling on the inlet hose onto the inlet valve and tighten.

Step 20 Using glue, place some on the foam blocks and place them back in the spots they were in.

Step 21 Remove the block.

Step 22 Using a nutdriver or socket wrench, insert the bottom screw through the cabinet into the toeplate and tighten.

Step 23 Using a screwdriver, insert the middle and top screws through the cabinet into the frame and tighten.

Step 24 Close the door.

Step 25 Set the dishwasher upright.

Step 26 Replace the top.

Step 27 Replace the access panel and coverplate.

Step 28 Plug in dishwasher or reconnect power.

Step 29 Reconnect the water supply. Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply, turn the water faucet off and redo this procedure.

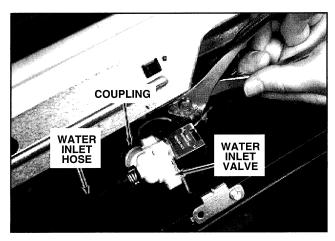
TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the top.

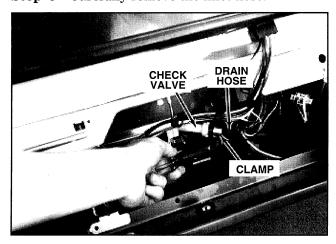
Step 3 Remove the shroud.

NOTE: Care should be taken when removing hoses as they may have water in them.



Step 4 Using adjustable pliers, unscrew the coupling on the inlet hose which is connected to the water inlet valve.

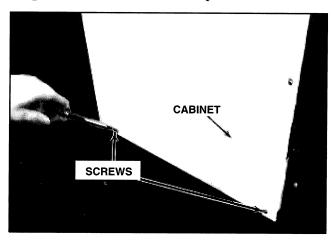
Step 5 Carefully remove the inlet hose.



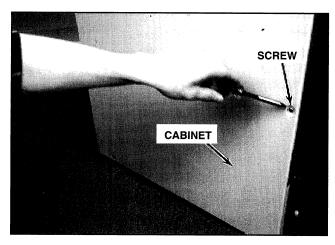
Step 6 Using adjustable pliers or a screwdriver, remove the clamp on the drain hose off of the check valve located on the side of the pump and motor.

Step 7 Carefully remove the drain hose.

Step 8 Remove the hose clamp off the drain hose.

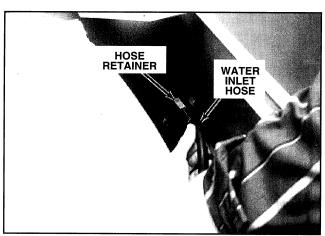


Step 9 Using a screwdriver or nutdriver, remove all the bottom screws which hold the cabinet to the frame.

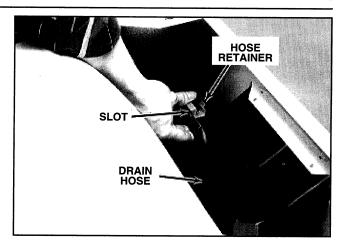


Step 10 Using a screwdriver or nutdriver, remove the screws located on both sides in the middle-front and top front corners which hold the cabinet to the tub.

Step 11 Pull the cabinet back away from the dishwasher about 7-10 inches.



Step 12 Pull the inlet hose out of the hose retainer.



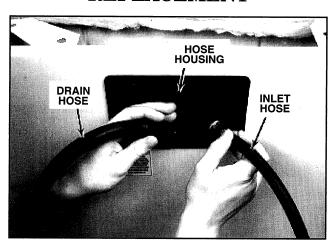
Step 13 Unsnap the top of the hose retainer from the slot in the cabinet.

Step 14 Remove the hose retainer off the drain hose.

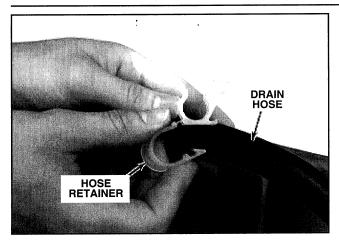
Step 15 Remove any tape which may be wrapped around the hoses.

Step 16 Pull both the inlet and drain hose out of the hose housing.

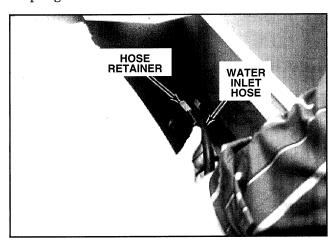
REPLACEMENT



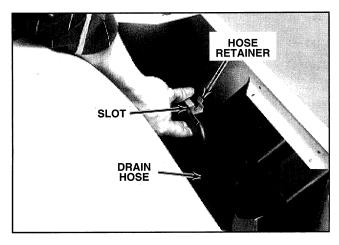
Step 17 Place both ends of the hoses (drain in the middle and inlet on the outside) in the hose housing.



Step 18 Place the bottom of the hose retainer on the drain hose, 3 feet 8 inches to 4 feet from the hose coupling.



Step 19 Place the inlet hose in the top of the hose retainer.

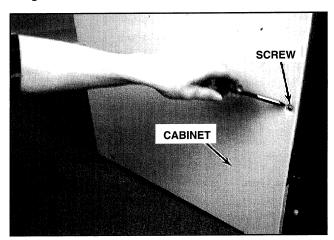


Step 20 Place the hoses and hose retainer over the cabinet bracket (hoses going between bracket and side of cabinet).

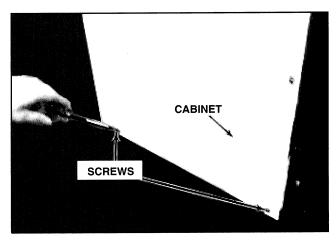
Step 21 Push down until the tab on the retainer snaps in the slot in the cabinet bracket.

Step 22 Place the ends of the hoses under the tub and on top of the frame.

Step 23 Slide the cabinet back over the frame.



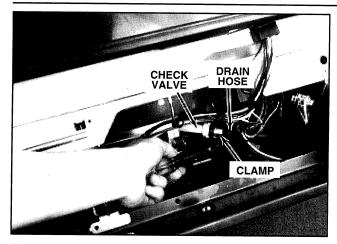
Step 24 Using a screwdriver or nutdriver, insert the top corner screws and the middle front screws through the cabinet flange into the tub and tighten.



Step 25 Using a screwdriver or nutdriver, insert all the bottom screws through the cabinet into the frame and tighten.

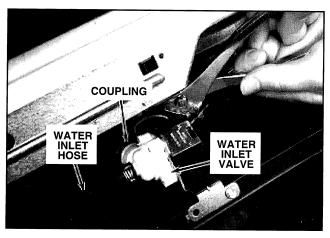
Step 26 Place the hose clamp on the drain hose.

Step 27 Slide the end of the drain hose over the check valve located on the side of the pump.



Step 28 Using adjustable pliers or a screwdriver, replace the clamp near the end of the hose to hold the hose on the check valve.

Step 29 Place the inlet hose coupling on the water inlet valve and hand tighten.



Step 30 Using adjustable pliers, snug the inlet hose coupling on the water inlet valve.

Step 31 Replace the top.

Step 32 Replace the shroud.

Step 33 Plug in dishwasher or reconnect power.

PROCEDURE 13



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

Wiring Harnesses and Terminals Testing and/or Replacement

OHMMETER REQUIRED

Wiring harnesses carry electrical current to all the different electrical parts throughout the dishwasher.

All wires are colored and have coded markings on them. These colored wires match the coded terminal markings on the parts.

NOTE: A damaged wire or discolored terminal can cause a part to operate incorrectly and must be replaced.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

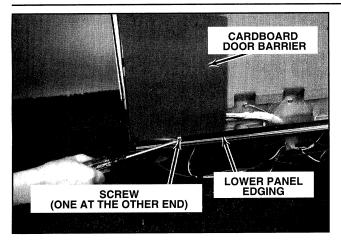
TYPE A

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the console escutcheon.

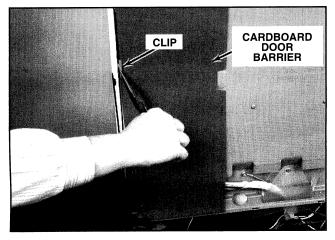
Step 3 Remove the door trim.

Step 4 Slide the front panel(s) out of the door frame.



Step 5 Using a screwdriver, remove the screws which hold the lower panel edging to the door frame.

Step 6 Remove the edging.



Step 7 Remove the clip (if used) which holds the cardboard door barrier to the inner door panel/door liner.

Step 8 Remove the cardboard door barrier.

Step 9 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the access panel and coverplate.

TESTING

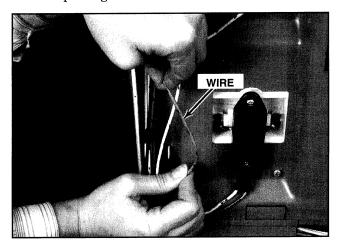
Step 10 Set the ohmmeter to the lowest ohms setting and ZERO the meter.

Step 11 Disconnect one end of the wire from the part.

Step 12 Touch and hold one ohmmeter probe to the wire terminal removed from the part.

Step 13 Touch the other ohmmeter probe to the other end of the wire.

Step 14 The ohmmeter should show ZERO resistance (continuity). If not, the wire is bad and needs replacing.



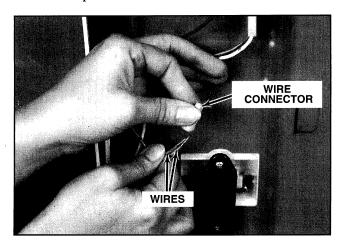
Step 15 Replace the entire wire and terminal with the same gauge wire, or locate the bad spot. To locate the bad spot, use your fingers and gently bend the wire, feeling at the same time and looking for bumps in the wire.

Step 16 Using wire cutters, cut the bad spot out of the harness.

Step 17 Strip the insulation back 1/2 inch on each cut end.

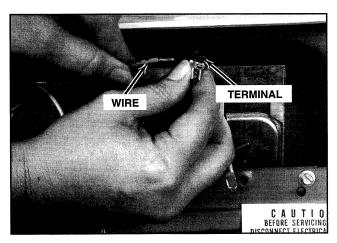
NOTE: The wires must be shiny; otherwise replace.

NOTE: Tape is not recommended.



Step 18 Use only a wire connector for splicing wires together.

Step 19 Hold the two wires together, screwing the new wire connector on the bare wires.

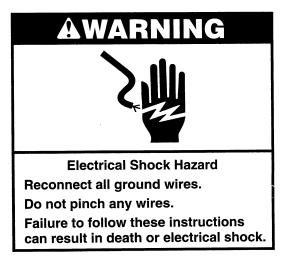


Step 20 To replace a terminal, cut the old terminal off.

Step 21 Strip the insulation back 1/4 inch and twist the wire strands together.

NOTE: The wires must be shiny; otherwise replace.

Step 22 Using a wire stripper/crimping tool, slip the new terminal over the bare wire and crimp tightly.

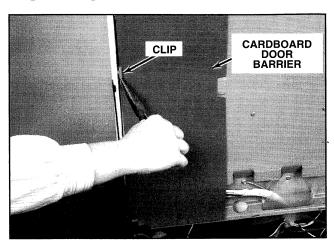


Step 23 Reconnect the wire to the proper terminal on the part.

Step 24 Replace the access panel/toe panel.

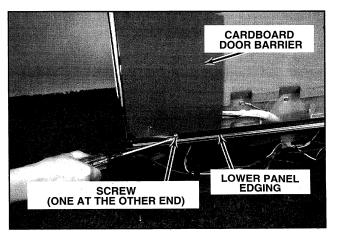
PORTABLE MODELS • Replace the access panel and coverplate.

Step 25 Replace the cardboard door barrier.



Step 26 Replace the clip (if used) between the inner door panel/door liner and cardboard barrier by pushing in.

Step 27 Replace the edging on the bottom of the door frame.



Step 28 Using a screwdriver, insert the screws through the edging, cardboard barrier and into the bottom of the door frame and tighten.

Step 29 Slide the front panel(s) back into the door frame.

Step 30 Replace the door trim.

Step 31 Replace the console escutcheon.

Step 32 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 3 Remove the inner door panel.

Step 4 Remove the timer cover.

TESTING

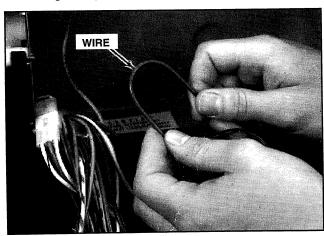
Step 5 Set the ohmmeter to the lowest ohms setting and ZERO the meter.

Step 6 Disconnect one end of the wire from the part.

Step 7 Touch and hold one ohmmeter probe to the wire terminal removed from the part.

Step 8 Touch the other ohmmeter probe to the other end of the wire.

Step 9 The ohmmeter should show ZERO resistance (continuity). If not, the wire is bad and needs replacing.



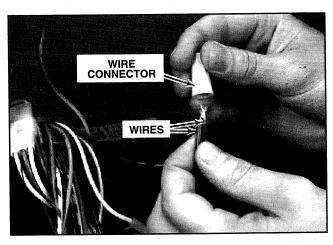
Step 10 Replace part of or the entire wire and terminal with the same gauge wire. To locate the bad spot, use your fingers and gently bend the wire, feeling at the same time and looking for bumps in the wire.

Step 11 Using wire cutters, cut the bad spot out of the harness.

Step 12 Strip the insulation back 1/2 inch on each cut end.

NOTE: The wires must be shiny, otherwise replace.

NOTE: Tape is not recommended.



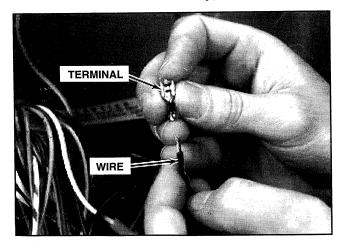
Step 13 Use only a wire connector for splicing wires together.

Step 14 Hold the two wires together, screwing the new wire connector on the bare wires.

Step 15 To replace a terminal, cut the old terminal off.

Step 16 Strip the insulation back 1/4 inch and twist the wire strands together.

NOTE: The wires must be shiny, otherwise replace.



Step 17 Using a wire stripper/crimping tool, slip the terminal over the bare wire and crimp tightly.

NOTE: If the wire moves around in the crimped area, this is not a good connection and must be redone.



Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 18 Reconnect the wire to the proper terminal on the part.

Step 19 Replace the timer cover.

Step 20 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 21 Close the door.

Step 22 Reconnect power or plug in dishwasher.

NOTES

<u> </u>	
	
-	

	·
·	
	· · · · · · · · · · · · · · · · · · ·
100	

SECTION K

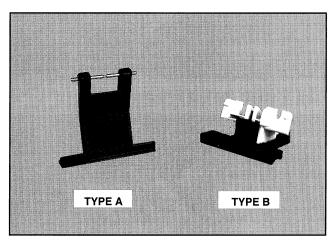
Door Area

PROCEDURE 1

AWARNING

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

Release Lever Replacement



This part is located in the middle under the console escutcheon.

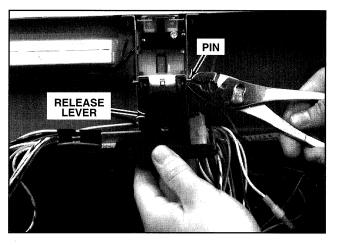
See page 268, illus. nos. 15 and 89, or page 279, illus. nos. 9, 10, and 12 for location of parts.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

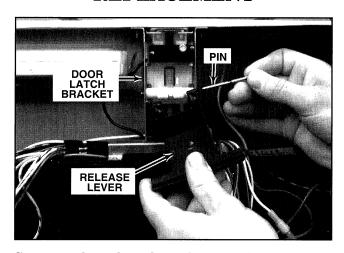
Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the console escutcheon.



Step 3 Using pliers, grab one end of the pin and pull.

REPLACEMENT



Step 4 Place the release lever in the door latch bracket.

Step 5 Push the pin through the release lever and into the latch until it snaps into place.

Step 6 Replace the console escutcheon.

Step 7 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

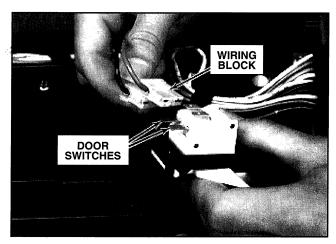
Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

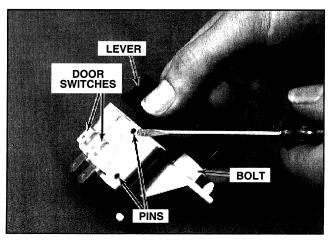
Step 3 Remove the inner door panel.

Step 4 Remove the timer cover.

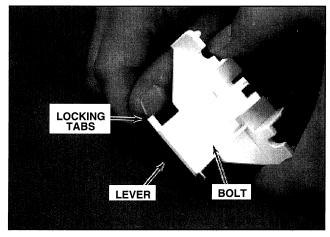
Step 5 Pull the latch lever, bolt, and switches out of the console and frame.



Step 6 Remove the wiring block, marking as to which way it was on. This procedure should assure that the block is reconnected to the right terminal.

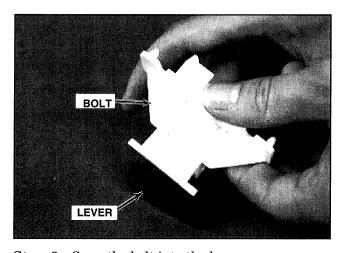


Step 7 Remove the two door switches by pushing out the two pins.

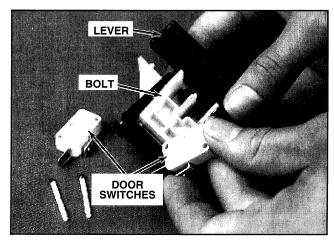


Step 8 Pull the locking tabs apart on each end of the lever to remove the bolt.

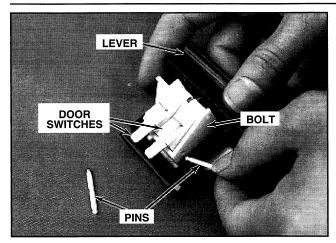
REPLACEMENT



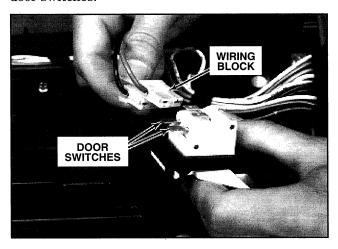
Step 9 Snap the bolt into the lever.



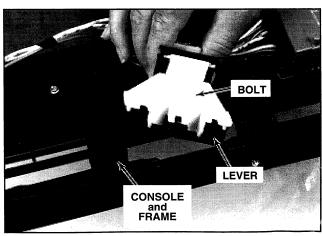
Step 10 Replace the two switches in the bolt.



Step 11 Replace the two pins through the bolt and door switches.



Step 12 Replace the wiring block on the terminals on the door switches.



Step 13 Replace the latch lever, bolt, and door switches back in the console and frame.

Step 14 Replace the timer cover.

Step 15 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 16 Close the door.

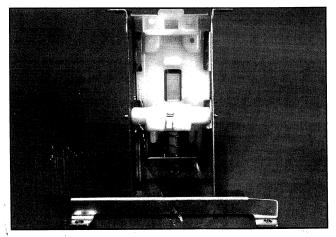
Step 17 Reconnect power or plug in dishwasher.

PROCEDURE 2



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

Door Latch Bracket Replacement

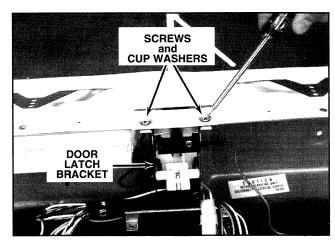


This part is located in the middle behind the console escutcheon on porcelain liner models (1986 and older). When the release lever is pushed, the latch opens the door.

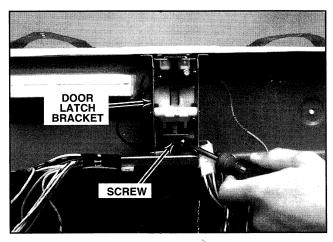
See page 268, illus. no. 12 for location of part.

- Step 1 Disconnect power or unplug dishwasher.
- **Step 2** Remove the console escutcheon.
- **Step 3** Push the release lever to open the door just a little.

Step 4 Remove the release lever.



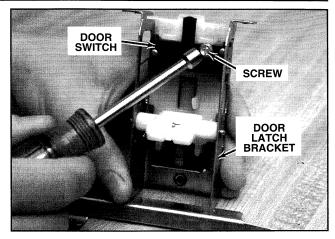
Step 5 Using a screwdriver or nutdriver, remove the two screws and cup washers which hold the door latch bracket to the inner door panel/door liner.



Step 6 Using a screwdriver or nutdriver, remove the screw which holds the bottom of the door latch bracket to the inner door panel/door liner.

Step 7 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the door switch. This procedure should assure that the right wire is reconnected to the right terminal.

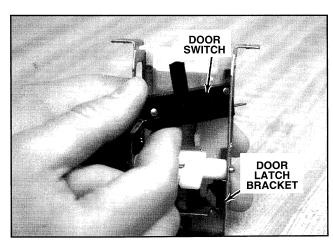
Step 8 Using a nutdriver, remove the screw which holds the green ground wire (if used) to the side of the latch.



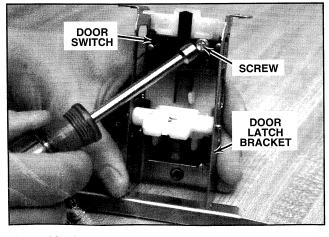
Step 9 Using a nutdriver, remove the screw which holds the door switch to the latch.

Step 10 Remove the door switch from the latch.

REPLACEMENT



Step 11 Place the door switch, with the button up and the bent terminal to the left, in the latch.



Step 12 Using a nutdriver, insert the screw through the door switch (right side hole) into the latch and tighten.

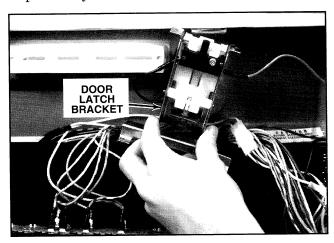
AWARNING



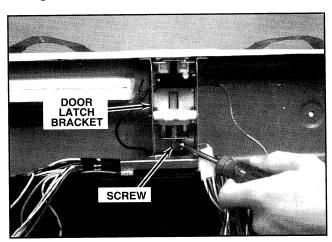
Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 13 Using a nutdriver or open-end wrench, insert the screw through the round terminal on the green ground wire (if used), into the side of the latch and tighten.

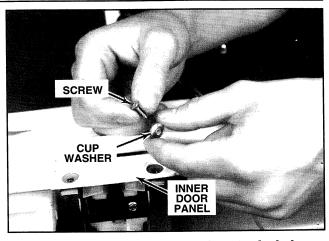
Step 14 Reconnect the wires to the proper terminals as previously marked.



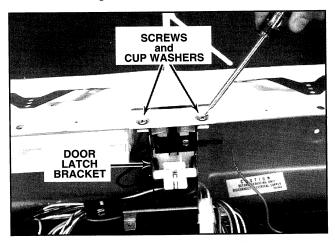
Step 15 Place the door latch bracket in front of the wiring and hold in place on the door.



Step 16 Using a screwdriver or nutdriver, insert the screw through the bottom of the door latch bracket into the inner door panel/door liner and tighten.



Step 17 Place the two cup washers in the holes on the inner door panel/door liner.



Step 18 Using a screwdriver or nutdriver, insert the screws through the cup washers, inner door panel/door liner, into the door latch bracket and tighten.

Step 19 Replace the release lever.

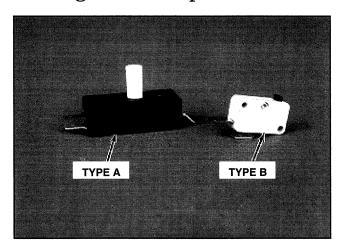
Step 20 Replace the console escutcheon.

Step 21 Reconnect power or plug in dishwasher.

AWARNING

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

Door Switch Testing and/or Replacement



See page 268, illus. no. 14, or page 279, illus. no. 11 for location of part.

OHMMETER REQUIRED

The purpose of the door switch is to stop the dishwasher when the door is opened.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

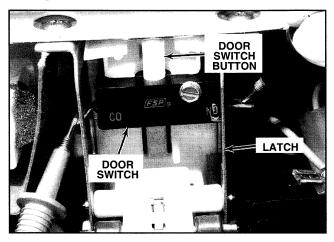
TYPE A

- **Step 1** Disconnect power or unplug dishwasher.
- Step 2 Remove the console escutcheon.

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the door switch. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

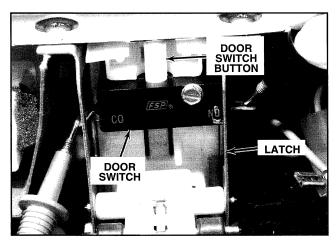


Step 5 With the door closed, touch and hold one of the ohmmeter probes to one of the terminals.

Step 6 Touch the other ohmmeter probe to the other terminal.

Step 7 The ohmmeter should show ZERO resistance (continuity) with the door closed. If not, the door switch is bad and needs replacing.

OR

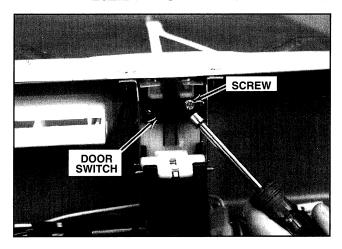


Step 8 With the door open, touch and hold one of the ohmmeter probes to one of the terminals.

Step 9 Touch the other ohmmeter probe to the other terminal.

Step 10 The ohmmeter should show an open circuit with the door open. If not, the door switch is bad and needs replacing.

REPLACEMENT



Step 11 Using a nutdriver, remove the screw which holds the door switch to the latch.

Step 12 Remove the door switch.

Step 13 Place the door switch, with the button up and the bent terminal to the left, in the latch.

Step 14 Using a nutdriver, insert the screw through the door switch, into the latch and tighten. (DO NOT crack switch.)

Step 15 Reconnect the wires to the proper terminals as previously marked.

Step 16 Replace the console escutcheon.

Step 17 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 3 Remove the inner door panel.

Step 4 Remove the timer cover.

Step 5 Pull the latch lever, bolt, and switches out of the console and frame.

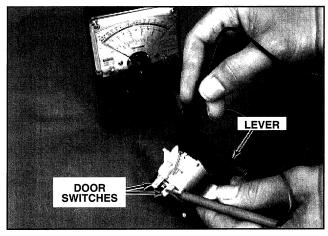
TESTING

Step 6 Remove the wiring block(s), marking as to which way it was on. This procedure should assure that the block(s) is reconnected to the right terminal.

Step 7 Carefully close the door but do not latch.

Step 8 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

NOTE: Test each switch separately.



Step 9 With the lever up (off the switch buttons), touch and hold one of the ohmmeter probes to one of the terminals.

Step 10 Touch the other ohmmeter probe to the other terminal (same switch).

Step 11 The ohmmeter should show an open circuit. If not, the door switch is bad and needs replacing.

Step 12 Now test the other switch the same way as in steps 9-11.

OR

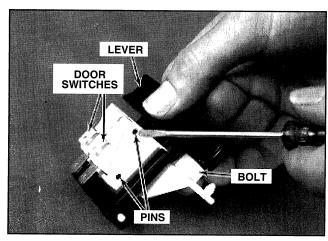
Step 13 Push the lever down, depressing the switch buttons.

Step 14 Touch and hold one of the ohmmeter probes to one of the terminals.

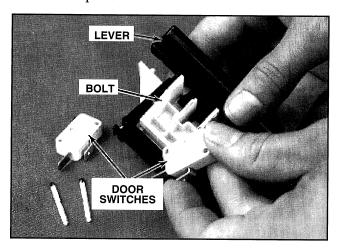
Step 15 Touch the other ohmmeter probe to the other terminal (same switch).

Step 16 The ohmmeter should show ZERO resistance (continuity) with the buttons pressed. If not, the door switch is bad and needs replacing.

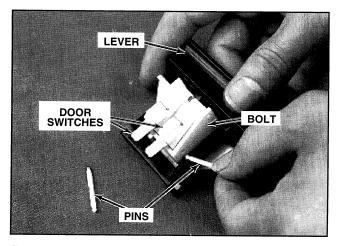
REPLACEMENT



Step 17 Remove the two door switches by pushing out the two pins.



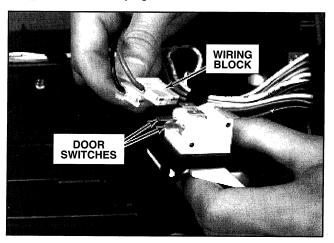
Step 18 Replace the two switches in the bolt.



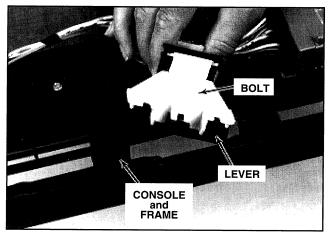
Step 19 Replace the two pins through the bolt and door switches.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 20 Carefully open and hold the door.



Step 21 Replace the wiring block(s) on the terminals on the two door switches.



Step 22 Replace the latch lever, bolt, and door switches back in the console and frame.

Step 23 Replace the timer cover.

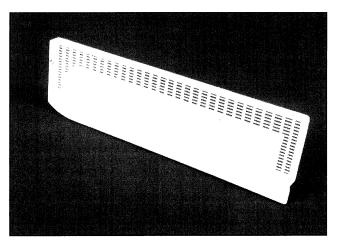
Step 24 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 25 Close the door.

Step 26 Reconnect power or plug in dishwasher.

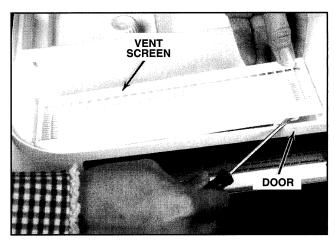
Vent Screen Replacement



This part is located in the upper left corner inside the door as you look at the dishwasher. During the wash and dry cycles, hot air comes out this opening.

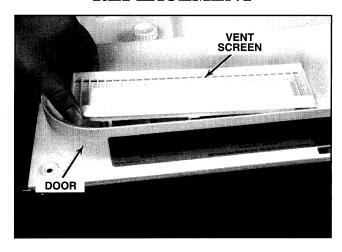
See page 268, illus. no. 11, or page 278, illus. no. 12 for location of part.

Step 1 Open the door.



Step 2 Insert a small screwdriver between the door and vent screen and carefully pry.

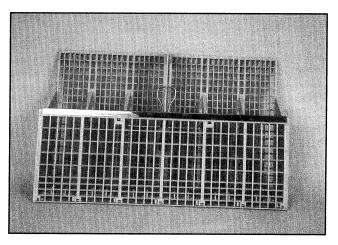
REPLACEMENT



Step 3 Place the vent screen in the hole of the door and push in until it snaps into place.

Step 4 Close the door.

Silverware Basket Replacement

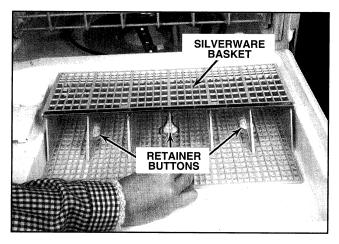


The silverware basket is located on the door and is used to hold spoons, forks, knives, etc. for cleaning.

On some models, the silverware basket is located in the middle and right side of the lower dishrack.

See page 275, illus. no. 17 for location of part.

Step 1 Open the door.



Step 2 Slide the silverware basket toward the top of the door and lift from the retainer buttons.

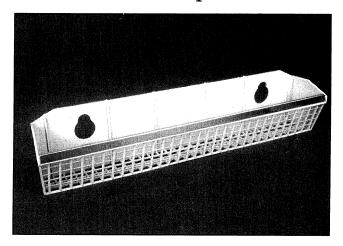
REPLACEMENT

Step 3 Place the silverware basket over the retainer buttons and slide toward the bottom of the door.

Step 4 Close the door.

PROCEDURE 6

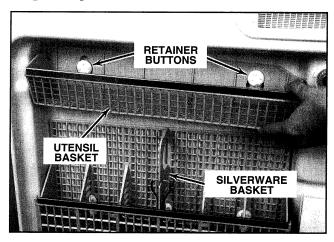
Utensil Basket Replacement



The utensil basket is located on the door and is used to hold long knives, etc., for cleaning.

See page 275, illus. no. 22 for location of part.

Step 1 Open the door.



Step 2 Slide the utensil basket toward the top of the door and lift from the retainer buttons.

REPLACEMENT

Step 3 Place the utensil basket over the retainer buttons and slide toward the bottom of the door.

Step 4 Close the door.



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

Door Trim Replacement

This part is located on each side of the door and is used to cover up the edges of the front panel(s) and the edges of the door.

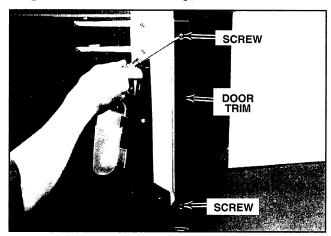
See page 268, illus. no. 49 for location of part.

See Type A for door trims using screws to hold them on, or see Type B for door trims that are snapped on.

TYPE A

Step 1 Disconnect power or unplug dishwasher.

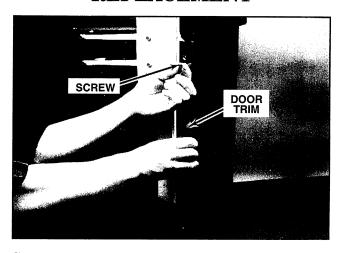
Step 2 Remove the end cap, if used.



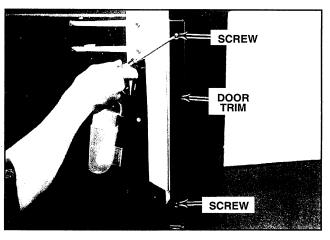
Step 3 Using a screwdriver, remove the screws which hold the door trim to the door.

Step 4 Slide the trim up and lift off.

REPLACEMENT



Step 5 Slide the door trim downward on the side of the door, with the back edge on the door frame and the front edge of the trim over the front panel and lower edging.



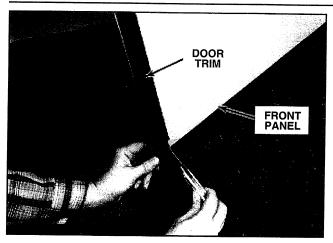
Step 6 Using a screwdriver, insert the screws through the door trim into the door and tighten.

Step 7 Replace the end cap, if used.

Step 8 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.



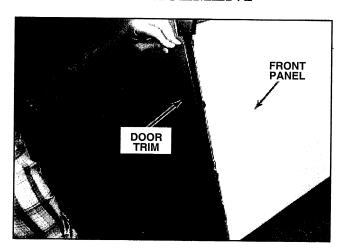
Step 2 Place the blade of a knife at the bottom between the door trim and the door frame.

Step 3 Press outward to release the stop from the hole in the frame.

Step 4 Slide the trim down from the end cap or console escutcheon until the top end of the trim is just below the notch on the door frame.

Step 5 Turn the back edge of the door trim toward the front and lift off.

REPLACEMENT



Step 6 Place the door trim on the door frame so that the top of the trim is just below the notch in the frame.

Step 7 Snap the back edge of the door trim over the back edge of the door frame.

Step 8 Slide the door trim under the end cap or console escutcheon until the stop locks into the hole in the door frame.

Step 9 Reconnect power or plug in dishwasher.

PROCEDURE 8



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

Door Gasket Replacement

This part is mounted on the tub between the front of the tub and behind the door. It acts as a seal to keep water from leaking out of the dishwasher.

See page 270, illus. nos. 20, 21, and 59, or page 276, illus. no. 10 for location of parts.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door and roll the lower dishrack out of the dishwasher.

Step 3 Remove the access panel/toe panel.

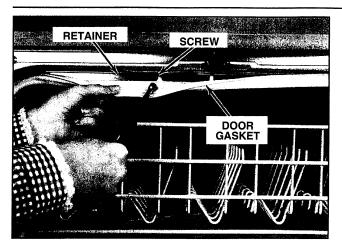
PORTABLE MODELS • Remove the access panel and coverplate.

NOTE: The tub must be supported.

Step 4 Place a block of wood under the motor to keep the tub from coming down.

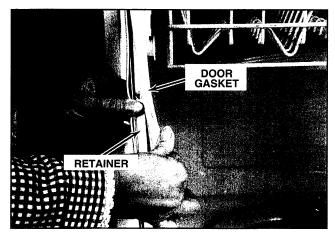
Step 5 Turn the outer lip of the gasket so you can see the screws and retainers.

NOTE: When removing the screws in each upper corner, there may be a plastic clip which might fall out. These will be put back in place when the gasket and retainer are reassembled.



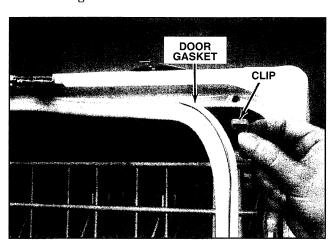
Step 6 Using a screwdriver or nutdriver, remove the screws which hold the gasket and retainers to the tub.

REPLACEMENT



Step 7 Place the retainer (L.H.) in the left side lip of the door gasket.

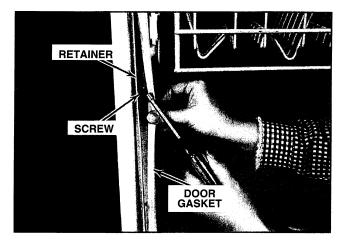
Step 8 Place the retainer (R.H.) in the right side lip of the door gasket.



Step 9 Place the clip in the curve on each side between the tub and gasket.

Step 10 Turn the outer lip of the gasket so you can see the retainers and screw holes.

NOTE: New gaskets do not have screw holes. You will have to make your own holes.



Step 11 Using a screwdriver or nutdriver, insert the screws through the retainers. Turn the screws through the gasket into the tub and tighten.

NOTE: On Built-In Models, the top screws must screw into the top mounting brackets.

Step 12 Tuck the gasket under the curled edge of the new clip.

Step 13 Roll the lower dishrack back into the dishwasher and close the door.

Step 14 Remove the block of wood from under the motor.

Step 15 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the access panel and coverplate.

Step 16 Reconnect power or plug in dishwasher.

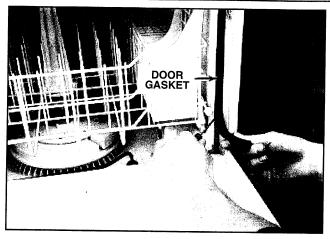
Step 17 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

Step 1 Disconnect power or unplug dishwaher.

Step 2 Open the door.



Step 3 Using a small screwdriver, pop the bottom edge of the gasket out of the retainer.

Step 4 Pull the gasket out of the retainer.

REPLACEMENT



Step 5 Replace the gasket with the small flat edge or the groove facing the back.

Step 6 Start at one end and press the gasket in the retainer until you get to the other end.

Step 7 Close the door.

Step 8 Reconnect power or plug in dishwasher.

Step 9 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

PROCEDURE 9

Front Panel Replacement

This part is located on the front of the door.

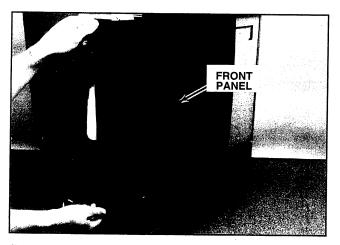
See page 268, illus. no. 48, or page 279, illus. no. 19 for location of part.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

Step 1 Remove the end cap, if used.

Step 2 Remove the door trim from either side.



Step 3 Slide the panel out of the door frame.

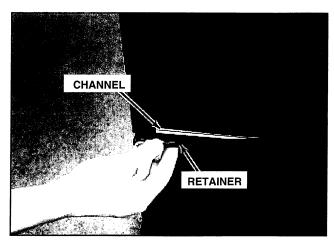
REPLACEMENT

Step 4 Slide the front panel in the door frame.

Step 5 Replace the door trim.

Step 6 Replace the end cap, if used.

TYPE B



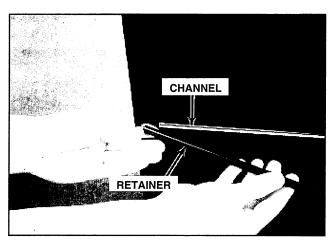
Step 1 Starting at one corner, pull the retainer off the bottom channel.

Step 2 Slide the front panel down somewhat, then push in on one side to remove it from the door frame.

REPLACEMENT

Step 3 Replace the front panel first putting the sides in the door frame.

Step 4 Slide the front panel up under the edge of the door frame then rest the bottom edge on the retainer channel.



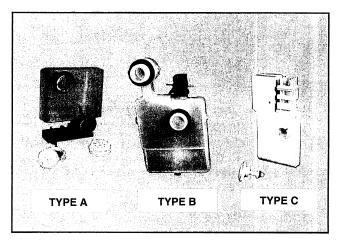
Step 5 Replace the retainer by placing the tab in the groove in the channel, then push on until it snaps in place.

PROCEDURE 10



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

Wetting Agent Dispenser Testing and/or Replacement



This part is located on the left side of the door on porcelain liner models, or on the right of the door on plastic liner models.

See page 268, illus. nos. 19, 20, 84, and 85, or page 278, illus. nos. 5, 13, and 14 for location of parts.

It dispenses a wetting agent just before the final rinse. This causes water breakdown during rinse. The water then runs off the dishes and silverware, leaving fewer or no spots.

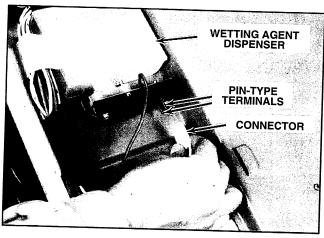
See Type A for models using a porcelain liner (1986 and older) with end caps, or see Type B for models using a porcelain liner (1986 and older) without end caps, or see Type C for models using a plastic liner (1986 and newer).

OHMMETER REQUIRED

TYPE A

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the end cap, if used.
- Step 3 Remove the door trim, if used.
- **Step 4** Slide the front panel(s) out of the door frame.
- Step 5 Bend the cardboard door barrier down.

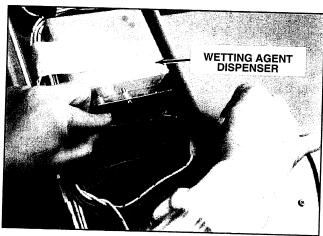
TESTING



 $\textbf{Step 6} \quad \text{Pull the connector off the pin-type terminals.} \\$

Step 7 Pull the green ground wire off the terminal on the wetting agent plate.

Step 8 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 9 Touch and hold one ohmmeter probe to one of the pin-type terminals.

Step 10 Touch the other ohmmeter probe to the other pin-type terminal.

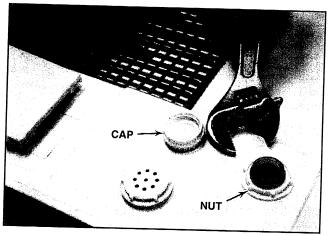
Step 11 The ohmmeter should show a reading between .100 to .500 ohms on the ohms scale. If not, the wetting agent actuator is bad and needs replacing.

If you want to change just the actuator (the wetting agent dispenser does not have to be removed), see steps 18-28.

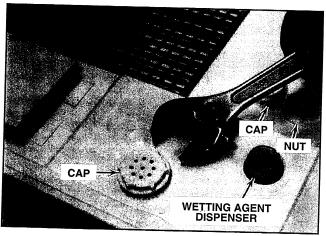
REPLACEMENT

Step 12 Open the door.

Step 13 Unscrew the top cap.



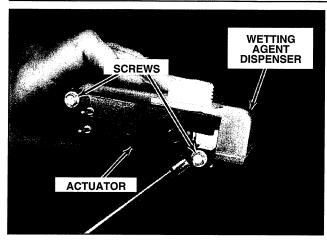
Step 14 Using an adjustable wrench, remove the nut from the top port.



Step 15 Using an adjustable wrench, remove the bottom cap (holes in face of cap) from the bottom port.

Step 16 Carefully pull the wetting agent dispenser out the holes.

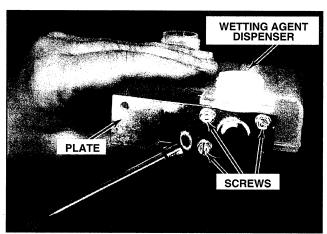
Step 17 Remove the two rubber sealing washers.



Step 18 Using a nutdriver or screwdriver, remove the two screws which hold the actuator to the wetting agent dispenser.

NOTE: Slide the actuator spring out of the groove in the diaphragm.

NOTE: Be careful when removing the plate as there is a spring behind it.

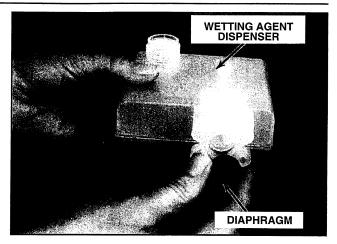


Step 19 Using a nutdriver or screwdriver, remove the three screws which hold the plate to the wetting agent dispenser.

Step 20 Remove the plate.

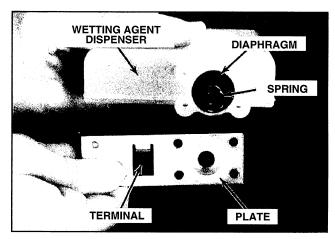
Step 21 Remove the spring.

Step 22 Remove the diaphragm.

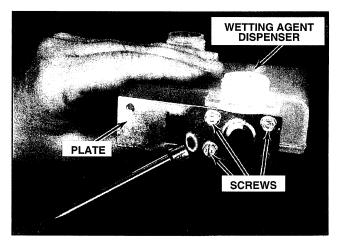


Step 23 Place the diaphragm with the point inside the wetting agent dispenser.

Step 24 Place the spring, with the small end over the shaft on the diaphragm.

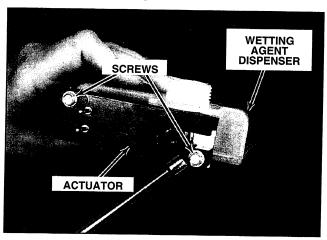


Step 25 Place the plate over the diaphragm and spring with the terminal toward the wetting agent dispenser.



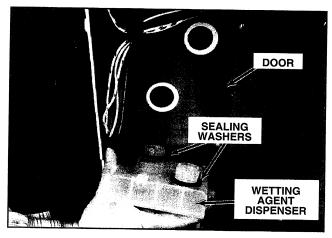
Step 26 Using a nutdriver or screwdriver, insert the three screws which hold the plate to the wetting agent dispenser and tighten.

Step 27 Slide the actuator so the spring fits in the groove on the diaphragm.



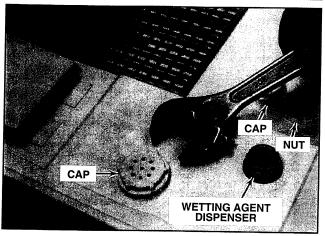
Step 28 Using a nutdriver or screwdriver, insert the two screws through the actuator into the wetting agent dispenser and tighten.

Step 29 Place the two sealing washers on the wetting agent dispenser.

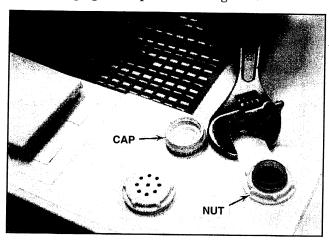


Step 30 Place the wetting agent dispenser in the holes in the door.

Step 31 Open the door.



Step 32 Using an adjustable wrench, place the bottom cap (holes in face of cap) on the bottom port of the wetting agent dispenser and tighten.



Step 33 Using an adjustable wrench, place the nut on the top port of the wetting agent dispenser and tighten.

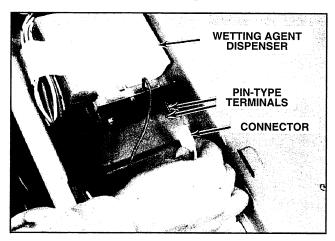
Step 34 Using your hand, screw the cap on the top port of the wetting agent dispenser.

Step 35 Close the door.



Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 36 Push the green ground wire on the terminal plate on the wetting agent dispenser.



Step 37 Push the wire connector on the pin-type terminals on the wetting agent dispenser.

Step 38 Bend the cardboard door barrier in place.

Step 39 Slide the front panel(s) back in the door frame.

Step 40 Replace the door trim, if used.

Step 41 Replace the end caps, if used.

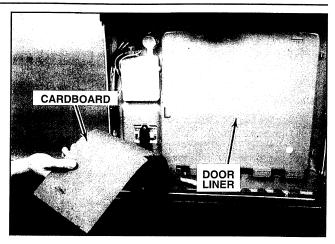
Step 42 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the door trim, if used.

Step 3 Slide the front panel(s) out of the door frame.

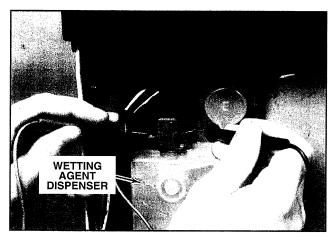


Step 4 Bend the cardboard door barrier down.

TESTING

Step 5 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the wetting agent dispenser. This procedure should assure that the right wire is reconnected to the right terminal.

Step 6 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 7 Touch and hold one ohmmeter probe to one of the terminals.

Step 8 Touch the other ohmmeter probe to the other terminal.

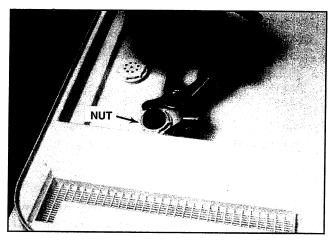
Step 9 The ohmmeter should show reading between 400 to 600 ohms on the ohms scale. If not, the wetting agent actuator is bad and needs replacing.

If you want to change just the actuator (the wetting agent dispenser does not have to be removed), see steps 16 and 17.

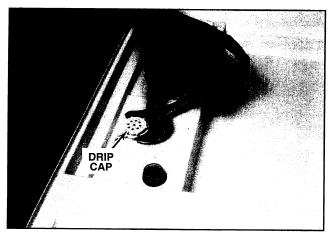
REPLACEMENT

Step 10 Open the door.

 $\begin{tabular}{ll} \bf Step \ 11 & Unscrew the wetting agent dispenser level \\ indicator \ cap. \end{tabular}$



Step 12 Using adjustable pliers, remove the nut from the top port.



Step 13 Using adjustable pliers, remove the bottom drip cap (holes in face of cap) from the bottom port.

Step 14 Carefully pull the wetting agent dispenser out the holes.

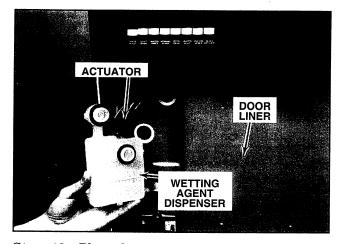
Step 15 Remove the two rubber sealing washers.



Step 16 Using an allen wrench, remove the screws which hold the actuator to the wetting agent dispenser.

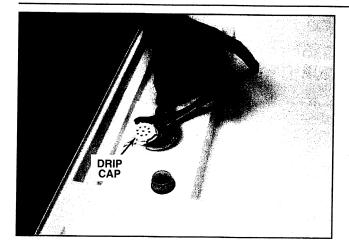
Step 17 Using an allen wrench, insert the screws through the actuator into the wetting agent dispenser and tighten.

Step 18 Place the two sealing washers on the wetting agent dispenser.

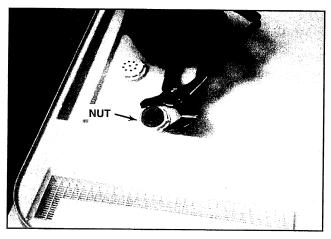


Step 19 Place the two ports on the wetting agent dispenser with the actuator up, through the holes in the inner door panel/door liner.

Step 20 Open the door.



Step 21 Using an adjustable wrench, place the drip cap (holes in face of cap) on the bottom port of the wetting agent dispenser and tighten.

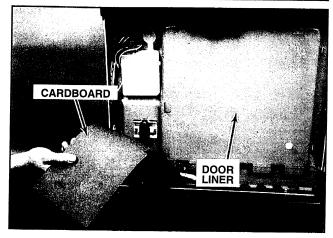


Step 22 Using an adjustable wrench, place the nut on the top port of the wetting agent dispenser and tighten.

Step 23 Using your hand, screw the wetting agent dispenser level indicator cap in the top port of the wetting agent dispenser.

Step 24 Close the door.

Step 25 Reconnect the wires to the proper terminals as previously marked.



Step 26 Bend the cardboard door barrier in place.

Step 27 Slide the front panel(s) back in the door frame.

Step 28 Replace the door trim, if used.

Step 29 Reconnect power or plug in dishwasher.

TYPE C

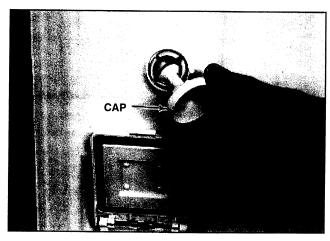
Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 3 Remove the inner door panel.

Step 4 Remove the detergent dispenser mechanism parts.



Step 5 Remove the wetting agent cap.

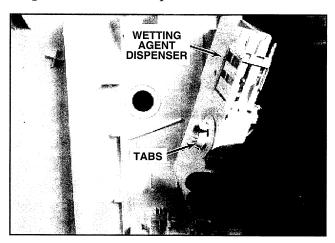


Step 6 Using a 3/4 inch socket set, insert it evenly on the tabs (4) and push while pulling on the dispenser, to release it from the door panel. You may have to wiggle the socket back and forth at the same time you're pulling on the dispenser.

Step 7 Carefully remove the wetting agent dispenser.

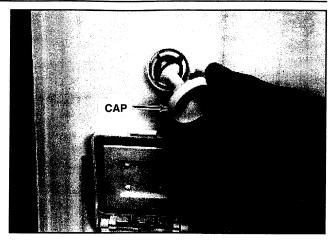
REPLACEMENT

Step 8 Place the door panel on a flat surface.



Step 9 Place the round tabs on the wetting agent dispenser over the hole in the inner door panel, then press until it snaps into place.

NOTE: The actuator on top of the wetting agent dispenser will fit between two studs in the inner door panel.



Step 10 Replace the wetting agent cap.

Step 11 Replace all of the detergent dispenser mechanism parts.

Step 12 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 13 Shut the detergent dispenser lid.

Step 14 Close the door, but do not latch.

Step 15 Very slowly, turn the timer knob all the way around until the detergent dispenser lid opens.

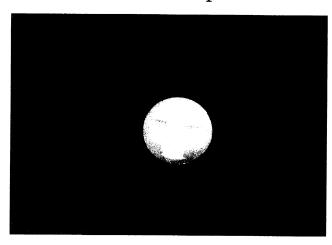
Step 16 If the detergent dispenser lid does not open, you will have to repeat Step 11.

Step 17 Reconnect power or plug in dishwasher.



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

Retainer Button Replacement



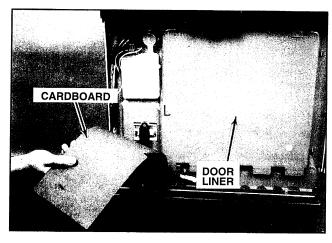
This part is located on the inside of the door and is used to hold the silverware and utensil baskets to the door. This part can only be replaced on porcelain liner models (1986 and older).

See page 268, illus. no. 6 for location of part.

Step 1 Disconnect power or unplug dishwasher.

- Step 2 Remove the end cap, if used.
- Step 3 Remove the door trim, if used.

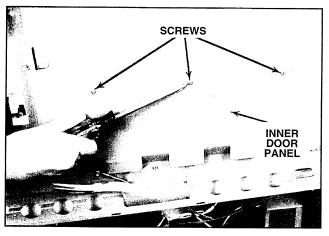
Step 4 Slide the front panel(s) out of the door frame.



Step 5 Bend the cardboard door barrier down.

Step 6 Open the door.

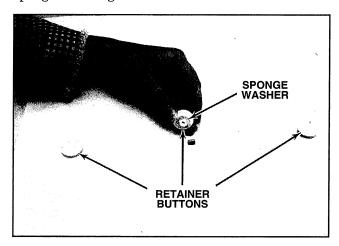
Step 7 Remove the silverware and/or utensil baskets by lifting off.



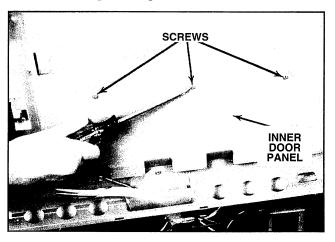
Step 8 Using a screwdriver, remove the screws which hold the retainer buttons to the door.

REPLACEMENT

NOTE: Make sure the retainer button has a clear sponge washer glued to the back.



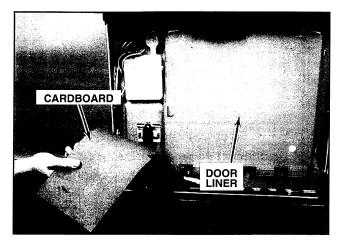
Step 9 Place the retainer button on the inside of the door through the square hole.



Step 10 Using a screwdriver, insert the screw through the inner door panel/door liner into the retainer button and tighten.

Step 11 Replace the silverware and/or utensil baskets.

Step 12 Close the door.



Step 13 Bend the cardboard door barrier back in place.

Step 14 Slide the front panel(s) back in the door frame.

Step 15 Replace the door trim, if used.

Step 16 Replace the end cap, if used.

Step 17 Reconnect power or plug in dishwasher.



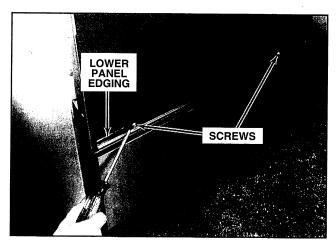
Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Lower Panel Edging Replacement

This part is located on the bottom of the front panel on porcelain liner models (1986 and older), and is used as a track for sliding the front panel in or out.

See page 268, illus. no. 45 for location of part.

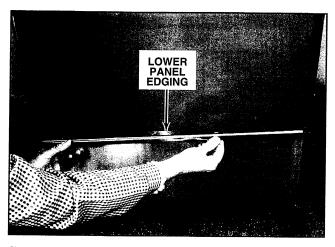
- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the end cap, if used.
- Step 3 Remove the door trim, if used.
- **Step 4** Slide the front panel(s) out of the door frame.



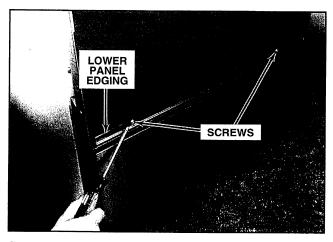
Step 5 Using a screwdriver, remove the screws which hold the lower panel edging to the door frame.

Step 6 Remove the edging.

REPLACEMENT



Step 7 Place the lower panel edging on the bottom of the door frame.



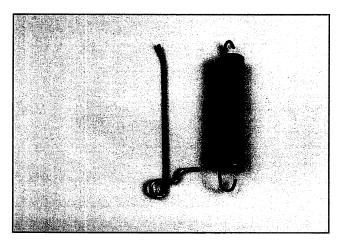
Step 8 Using a screwdriver, insert the screws through the lower panel edging into the door frame and tighten.

- **Step 9** Slide the front panel(s) back in the door frame.
- Step 10 Replace the door trim, if used.
- **Step 11** Replace the end cap, if used.
- **Step 12** Reconnect power or plug in dishwasher.



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

Door Spring and Retainer Replacement



This part is located on the outside frame on Built-In Models and behind the access panel and coverplate (or shroud) on Portable Models.

See page 268, illus. nos. 60 and 61, or page 276, illus. no. 28 for location of parts.

The retainer goes through the spring and attaches to the door support at one end and the frame at the other end. This spring and retainer supply tension to the door.

NOTE: Plastic liner models, use the spring only (no retainer).

See Type A for Built-In Models, or see Type B for Portable Models.

TYPE A

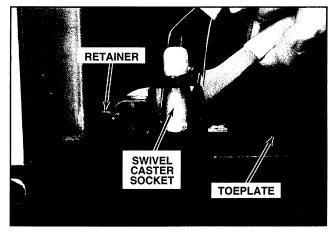
Step 1 Disconnect power or unplug dishwasher.



Do not use dishwasher until completely installed.
Do not push down on open door.
Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

NOTE: Be sure to close and latch the door when removing the springs or the door will fall down.

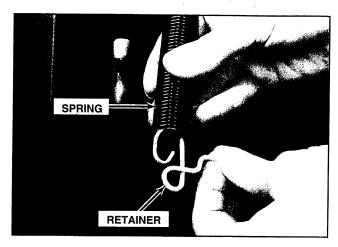


Step 3 Using adjustable pliers, grab the spring and retainer at the bottom of the frame.

Step 4 Remove the retainer out of the slot on the frame.

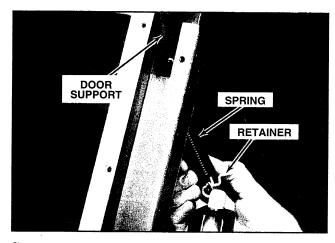
Step 5 Using your hand, grab the top of the spring and lift it off the hook on the door support.

REPLACEMENT



Step 6 Place the retainer in the spring with the end of the spring in the hole of the retainer.

Step 7 Place the spring on the hook on the door support.



Step 8 Using adjustable pliers, grab the bottom of the spring.

Step 9 Pull the spring and retainer down and insert the retainer in the same slot as the other side.

Step 10 Move the dishwasher back under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

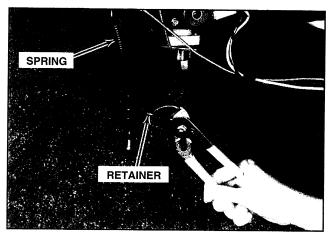
Step 11 Reconnect power or plug in dishwasher.

TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the access panel and coverplate (or shroud).

NOTE: Be sure to close and latch the door when removing the springs or the door will fall down.

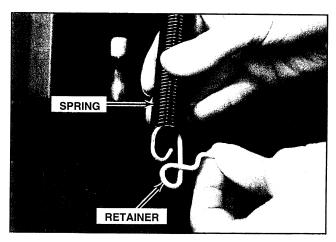


Step 3 Using adjustable pliers, grab the end of the retainer.

Step 4 Remove the retainer out of the slot on the frame.

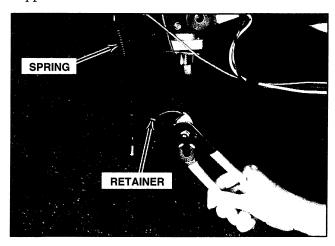
Step 5 Using your hand, grab the spring and lift it off the hook on the door support.

REPLACEMENT



Step 6 Place the retainer in the spring with the end of the spring in the hole of the retainer.

Step 7 Place the spring on the hook on the door support.



Step 8 Using adjustable pliers, grab the retainer.

Step 9 Pull the spring and retainer down and insert the retainer in the same slot as the other side.

Step 10 Replace the access panel and coverplate (or shroud).

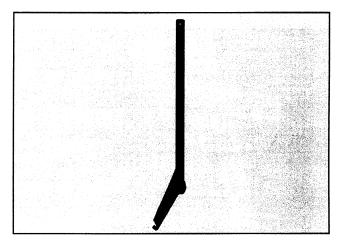
Step 11 Plug in dishwasher or reconnect power.

PROCEDURE 14



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

Door Support Replacement



This part is located on each side of the door behind the trim. It is used to support the door.

See page 268, illus. no. 2 for location of part.

See Type A for Built-In Models, or see Type B for Portable Models.

TYPE A

Step 1 Disconnect power or unplug dishwasher.



Tip Over Hazard

Do not use dishwasher until completely installed.

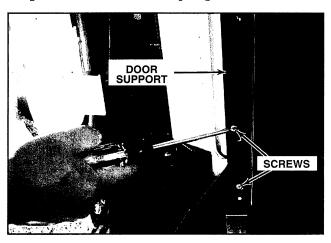
Do not push down on open d

Do not push down on open door. Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

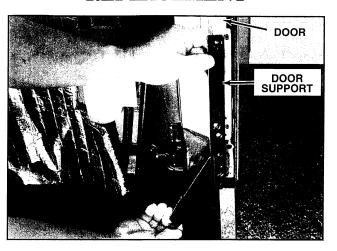
Step 3 Remove the door trim, if used.

Step 4 Remove the door spring.

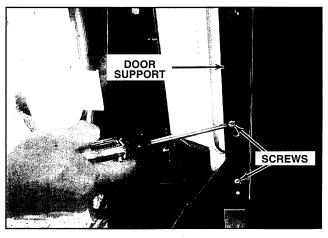


Step 5 Using a screwdriver, remove the screws which hold the door support to the door.

REPLACEMENT



Step 6 Place the door support on the side of the doors.



Step 7 Using a screwdriver, insert the screws and tighten.

Step 8 Replace the door spring.

Step 9 Replace the door trim, if used.

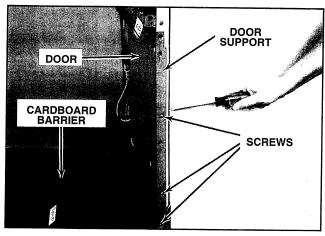
Step 10 Move the dishwasher back under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 11 Reconnect power or plug in dishwasher.

TYPE B

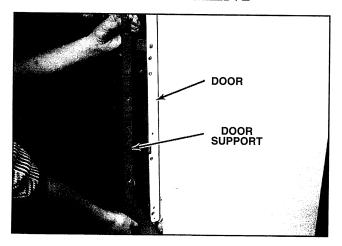
- Step 1 Unplug dishwasher or disconnect power.
- **Step 2** Remove the access panel and coverplate (or shroud).
- Step 3 Remove the door trim, if used.
- **Step 4** Slide the front panel(s) out of the door frame.

Step 5 Remove the door spring.

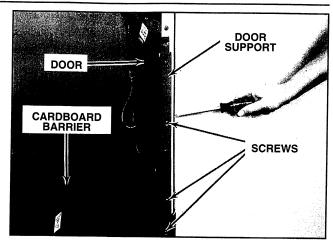


Step 6 Using a screwdriver, remove the screws which hold the door support to the door.

REPLACEMENT



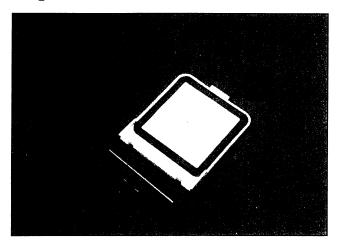
Step 7 Place the door support on the side of the doors.



Step 8 Using a screwdriver, insert the screws through the door support, into the door liner and tighten.

- Step 9 Replace the door spring.
- **Step 10** Slide the front panel(s) back in the door frame.
- Step 11 Replace the door trim, if used.
- **Step 12** Replace the access panel and coverplate (or shroud).
- **Step 13** Plug in dishwasher or reconnect power.

Detergent Dispenser Lid Replacement



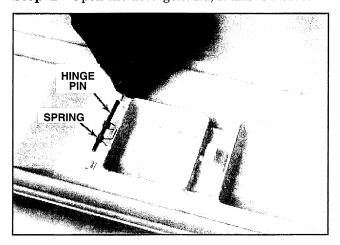
This part is located inside on the left side of the door on porcelain liner models (1986 and older), and is located inside on the right side of the door on plastic liner models (1986 and newer).

See page 268, illus. nos. 5, 26, and 27, or page 278, illus. nos. 9-11 for location of parts.

Detergent is placed in either the open compartment, the compartment with the lid, or both. The detergent dispenser door is held closed by a catch.

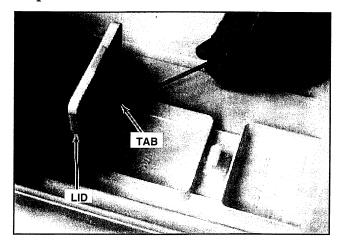
Step 1 Open the door.

Step 2 Open the detergent lid, if this is closed.



Step 3 Using a small blade screwdriver, pry one of the tabs apart on the lid to remove it from the hinge pin.

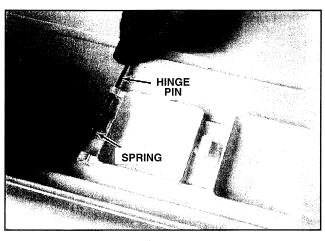
Step 4 Do this to the other side.



Step 5 Slide the hinge pin out the holes in the door panel and the spring.

Step 6 Remove the spring.

REPLACEMENT



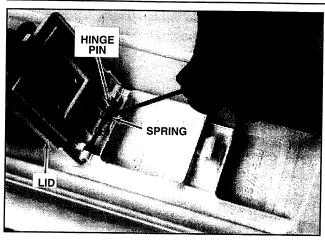
Step 7 Slide the hinge pin through the first hole on the door panel tab (for the detergent dispenser).

Step 8 Replace the spring sliding the hinge pin through the coils in the spring and then through the second hole on the door panel tab.

NOTE: The square part of the spring must be resting on top of the tab with the straight ends of the spring pointing toward the inner door panel.

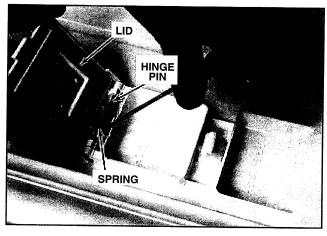
Step 9 Snap one of the tabs on the lid onto the hinge pin.

NOTE: Lid tabs must be on the inside of the tabs on the inner door panel.



Step 10 With a small blade screwdriver, push the straight end of the spring over the inside ridge of the lid.

Step 11 Snap the other tab on the lid to the hinge pin.



Step 12 Using a small blade screwdriver, push the other straight end of the spring over the inside ridge of the lid.

Step 13 Close the door.



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

Detergent Dispenser Parts Testing and/or Replacement

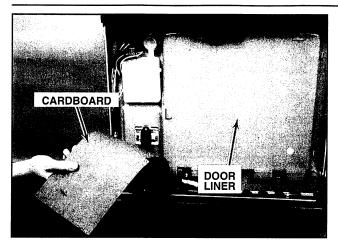
This part opens the detergent dispenser lid and is located on the left side of the door on porcelain liner models, and on the right side of the door on plastic liner models.

See page 268, illus. nos. 23, 32-35, and 38, or page 278, illus. nos. 2, 4, 6-8, and 16 for location of parts.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

OHMMETER REQUIRED TYPE A

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the door trim, if used.
- **Step 3** Slide the front panel(s) and cardboard out of the door frame.

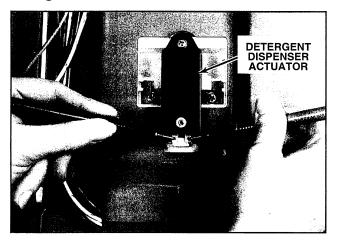


Step 4 Bend the cardboard door barrier down.

TESTING

Step 5 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the actuator. This procedure should assure that the right wire is reconnected to the right terminal.

Step 6 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

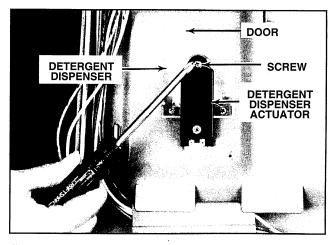


Step 7 Touch and hold one ohmmeter probe to one of the terminals.

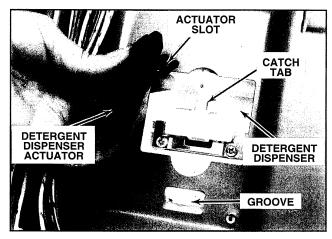
Step 8 Touch the other ohmmeter probe to the other terminal.

Step 9 The ohmmeter should show ZERO resistance (continuity), or less than one ohm. If not, the actuator is bad and needs replacing.

REPLACEMENT

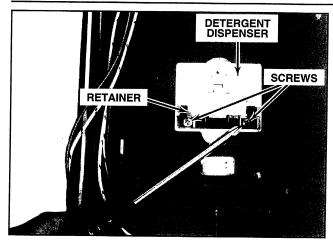


Step 10 Using a screwdriver, remove the screw which holds the actuator to the inner door panel/door liner.



Step 11 Lift the bottom of the actuator out of the groove on the tab.

Step 12 Slide the actuator to the left and lift. This will cause the tab of the catch to come out of the slot on the actuator.

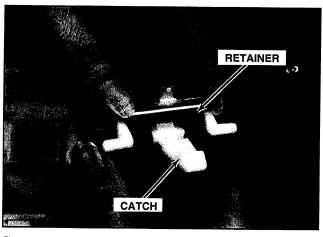


Step 13 Using a screwdriver, remove the two screws which hold the retainer to the detergent dispenser.

Step 14 Remove the retainer, catch, and seal.

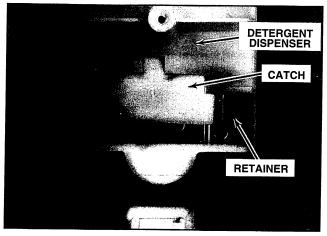
Step 15 Remove the seal from the catch.

Step 16 Remove the retainer from the catch.

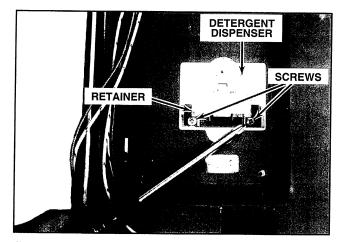


Step 17 Place the retainer on the catch so the retainer tabs are pointing up and behind the round catch tabs. The notch in the catch must be pointing up also.

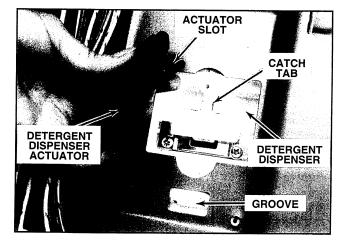
Step 18 Insert the seal over the catch and push until the seal fits in the groove of the catch.



Step 19 Place the seal, catch, and retainer (tabs up) through the back of the detergent dispenser.

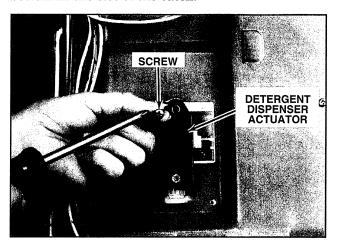


Step 20 Using a screwdriver, insert the screws and tighten.



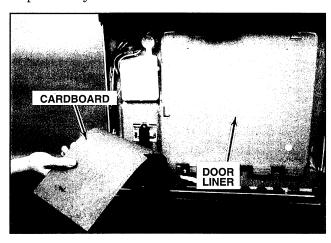
Step 21 Place the right side of the actuator arm, with the cutout over the tab with a notch on the catch.

Step 22 Lift the actuator a little and place the bottom in the slot of the catch.



Step 23 Using a screwdriver, insert the screw and tighten.

Step 24 Reconnect the wires to the proper terminals as previously marked.



Step 25 Bend the cardboard door barrier back in place.

Step 26 Slide the front panel(s) back in the door frame.

Step 27 Replace the door trim, if used.

Step 28 Reconnect power or plug in dishwasher.

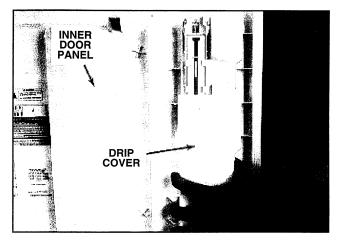
TYPE B

Step 1 Disconnect power or unplug dishwasher.

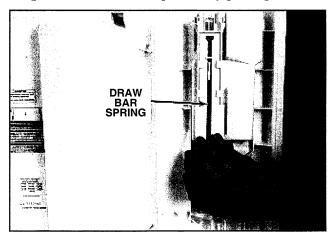
Step 2 Open the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

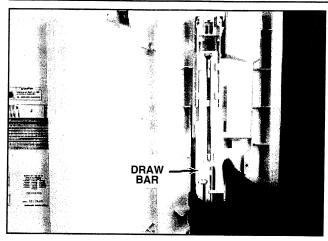
Step 3 Remove the inner door panel.



Step 4 Remove the drip cover by pulling it off.

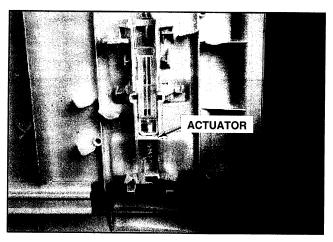


Step 5 Using your fingers, remove the draw bar spring.



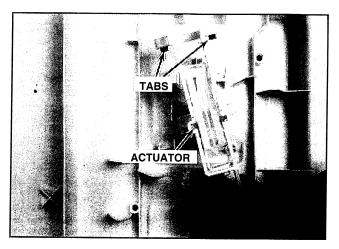
Step 6 Slide the draw bar down as far as it will go. This will cause the slots in the draw bars to align themselves with the tabs on the inner door panel, and then lift off.

Step 7 The upper and lower draw bars can now be slid apart.



Step 8 Using a small blade screwdriver, pry the bottom tab on the actuator away from the tab on the door panel, and then roll upward and remove.

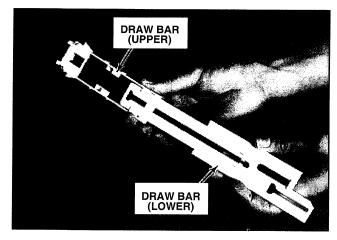
REPLACEMENT



Step 9 Place the top two tabs on the actuator behind the tabs on the inner door panel, and then roll down.

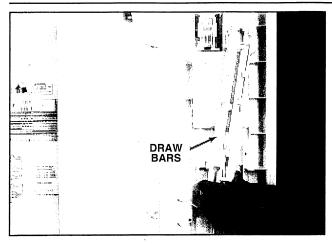
NOTE: Make sure the pointed snap fits into the bottom square hole (just above the spring).

Step 10 Snap the bottom tab on the actuator behind the tab on the door frame.



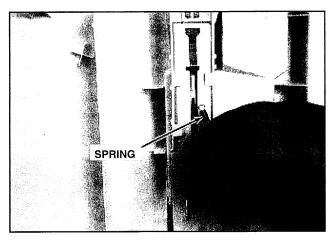
Step 11 Slide the lower draw bar (long) into the upper draw bar (short) and push together.

NOTE: Tabs on both draw bars to be facing the same way.



Step 12 Replace the draw bars with the slots matching the tabs on the inner door panel, and then push on.

NOTE: The tab on the upper draw bar must fit in the square hole in the wetting agent dispenser and the other tab on the lower draw bar must fit into a square hole in the actuator.



Step 13 Using your fingers replace the draw bar spring.

Step 14 Replace the drip cover by snapping on.

Step 15 Replace the inner door panel.

NOTE: Hold onto the door. With the inner door panel removed, it could close.

Step 16 Shut the detergent dispenser lid.

Step 17 Close the door, but do not latch.

Step 18 Slowly turn the timer knob all the way around until the detergent dispenser lid opens.

Step 19 If the detergent dispenser lid does not open, you will have to repeat this procedure.

Step 20 Reconnect power or plug in dishwasher.

PROCEDURE 17



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

Inner Door Panel/Door Liner Replacement

See page 268 or 278, illus. no. 1 for location of part.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

NOTE: This part may be referred to as inner door panel or door liner, but is replaced as one part.

TYPE A

Step 1 Disconnect power or unplug dishwasher.



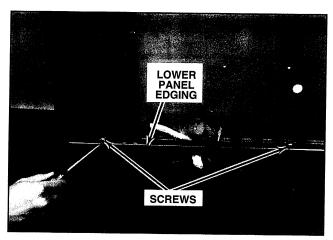
Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

Step 3 Remove the access panel/toe panel.

PORTABLE MODELS \bullet Remove the access panel and coverplate.

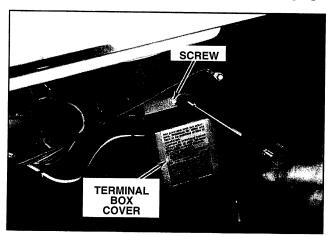
Step 4 Remove the door trims, if used.

Step 5 Slide the front panel(s) and cardboard out of the door.



Step 6 Using a screwdriver, remove the screws which hold the lower panel edging to the door liner.

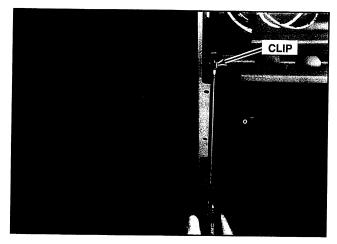
Step 7 Carefully remove the lower panel edging.



Step 8 Using a screwdriver, remove the screw which holds the terminal box cover to the terminal box.

Step 9 Remove one wire at a time (or pull apart any connectors) from all the parts under the tub, carefully labeling each wire according to the terminal markings on the parts. This procedure should assure that the right wires are reconnected to the right terminals.

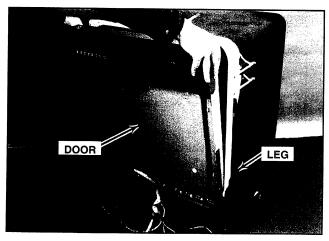
Step 10 Using a screwdriver or nutdriver, remove the screw which holds the green ground wire to the leg.



Step 11 Using a small screwdriver, pry the wire clip (one on each side) off the door support and leg.

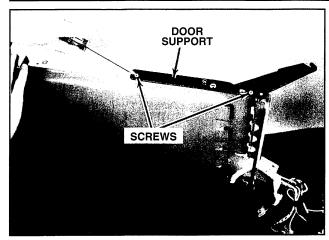
NOTE: Be sure to close and latch the door when removing the springs or the door will fall down.

Step 12 Remove the door springs and retainers.



Step 13 Standing in front of the door, unlatch, open the door and lift off the legs.

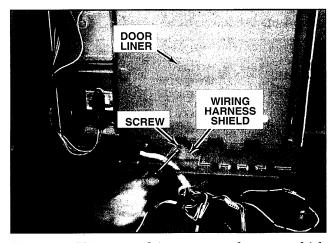
Step 14 Place the door on its side.



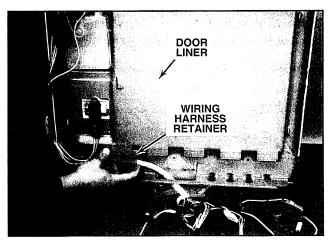
Step 15 Using a screwdriver, remove the screws which hold the door support to the inner door panel/door liner.

Step 16 Do this to the other side.

Step 17 Remove any cardboard.



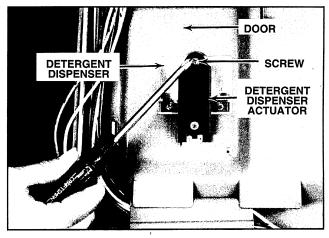
Step 18 Using a nutdriver, remove the screw which holds the wiring harness shield to the door liner.



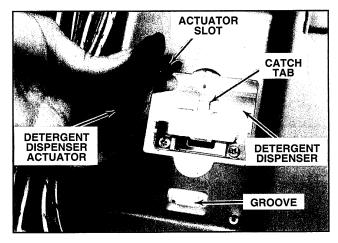
Step 19 Unsnap the wiring harness retainer off of the door liner.

Step 20 Using a screwdriver or nutdriver, remove the screw which holds the green ground wire to the inner door panel/door liner.

Step 21 Pull the wiring harness and shield out of the door liner.

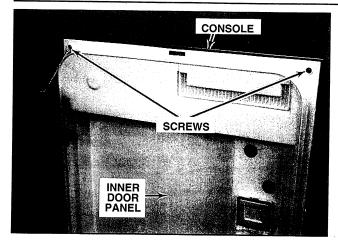


Step 22 Using a screwdriver, remove the screw which holds the detergent dispenser actuator to the inner door panel/door liner.

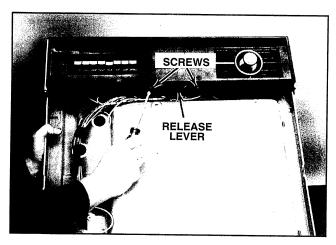


Step 23 Lift the bottom of the actuator off the tab and slide the actuator to the left and lift.

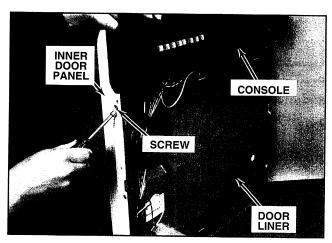
Step 24 Remove the wetting agent dispenser.



Step 25 Using a screwdriver, remove the two top screws (one on each side) which hold the console escutcheon to the door.



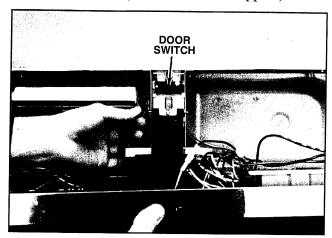
Step 26 Using a screwdriver, remove the screw on each side of the release lever.



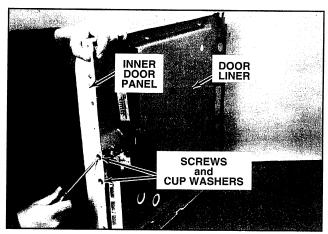
Step 27 Using a nutdriver, remove the screws (one on each side) which hold the rail support (if used) to the inner door panel/door liner.

Step 28 Carefully remove the console escutcheon from the door.

Step 29 Carefully remove the rail support, if used.

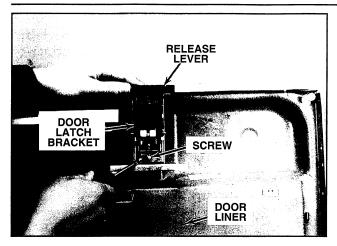


Step 30 Remove the two wires on the door switch, labeling each wire according to the terminal markings. This procedure should assure that the right wire is reconnected to the right terminal.



Step 31 Using a screwdriver or nutdriver, remove the two screws and cup washers which hold the door latch bracket to the inner door panel/door liner.

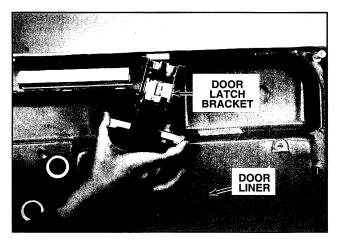
Step 32 Lift up on the release lever.



Step 33 Using a screwdriver or nutdriver, remove the screw which holds the bottom of the door latch bracket to the inner door panel/door liner.

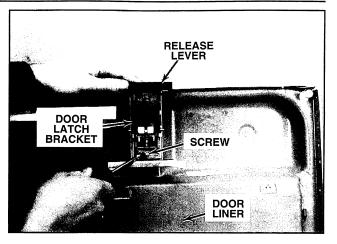
Step 34 Carefully remove the door latch bracket from the inner door panel/door liner.

REPLACEMENT

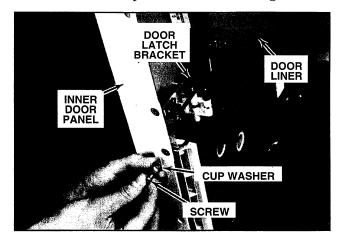


Step 35 Place the door latch bracket on the inner door panel/door liner.

Step 36 Lift up on the release lever.

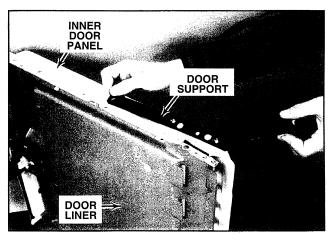


Step 37 Using a screwdriver or nutdriver, insert the screw through the bottom of the door latch bracket into the inner door panel/door liner and tighten.

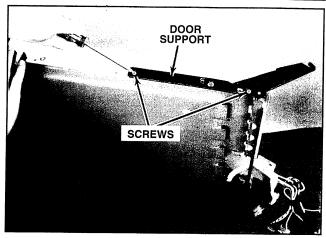


Step 38 Using a screwdriver or nutdriver, insert the screws through the cup washers, inner door panel/door liner, into the door latch bracket and tighten.

Step 39 Place the door on its side.

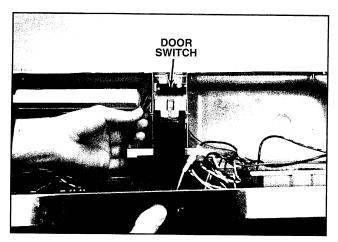


Step 40 Place the door support on the inner door panel/door liner.



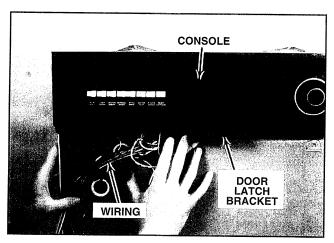
Step 41 Using a screwdriver, insert the screws through the door support into the inner door panel/door liner and tighten.

Step 42 Do this to the other side.



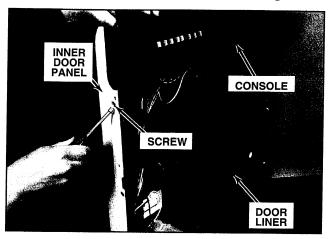
Step 43 Reconnect the two door switch wires as previously marked.

Step 44 Place the console escutcheon on the door.

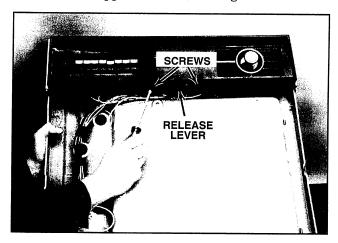


Step 45 Place the wiring up, under and behind the door latch bracket.

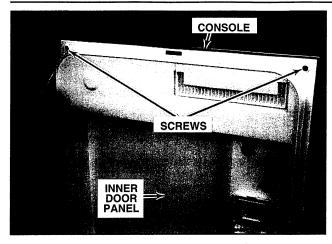
Step 46 Place the rail support (if used) in the inner door panel/door liner so the top edge is inside the console escutcheon and the channel is facing down.



Step 47 Using a screwdriver or nutdriver, insert the screws through the inner door panel/door liner, into the rail support (if used) and tighten.



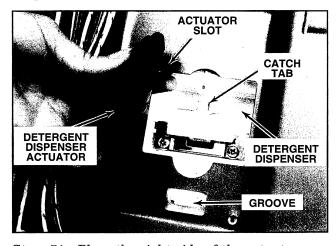
Step 48 Using a screwdriver, insert the screws (one on each side of the release lever) through the console escutcheon into the door latch bracket and tighten.



Step 49 Using a screwdriver, insert the two screws (one on each side) through the inner door panel/door liner, into the console escutcheon and tighten.

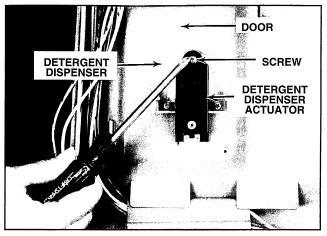
NOTE: Be sure the rubber washers are on the ports of the wetting agent dispenser.

Step 50 Replace the wetting agent dispenser.

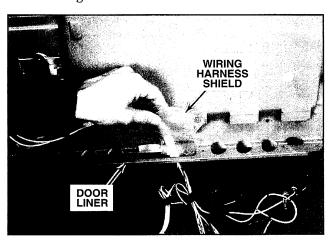


Step 51 Place the right side of the actuator arm (with the cutout in the slot) over the top tab on the catch.

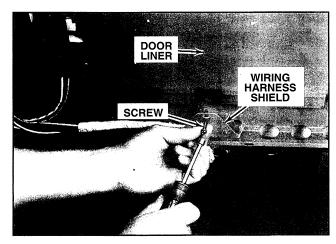
Step 52 Lift the actuator a little and place the bottom slot in the tab on the catch.



Step 53 Using a screwdriver, insert the screw through the actuator into the inner door panel/door liner and tighten.



Step 54 Place the wiring harness through the large opening in the bottom of the inner door panel/door liner.

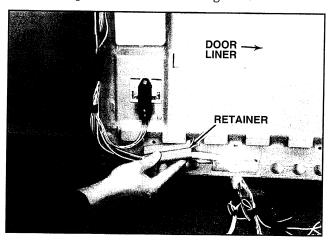


Step 55 Using a screwdriver or nutdriver, insert the screw through the wiring harness shield, into the inner door panel/door liner and tighten.

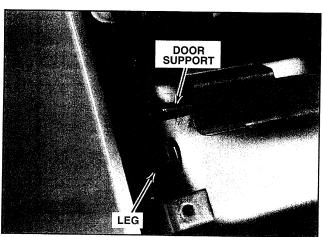


Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 56 Using a screwdriver or nutdriver, insert the screw through the ground wire terminal into the inner door panel/door liner and tighten.



Step 57 Place the wiring harness in the retainer, then snap the retainer on the inner door panel/door liner.

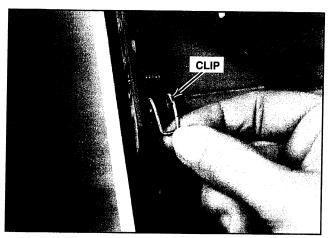


Step 58 Place the round rod (next to the supports on the bottom of the inner door panel/door liner) on the hooks on the legs.

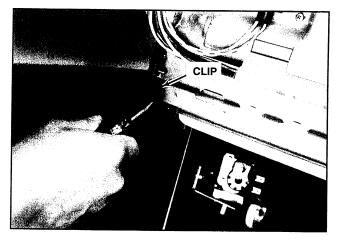
Step 59 Close and latch the door.

NOTE: Be sure to close and latch the door when removing the springs or the door will fall down.

Step 60 Replace the door springs and retainers.

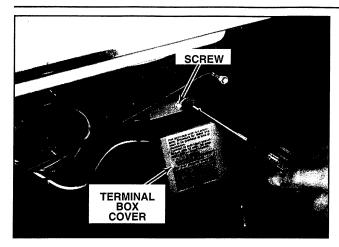


Step 61 Place the wire clip on the round rod on the bottom of the inner door panel/door liner.



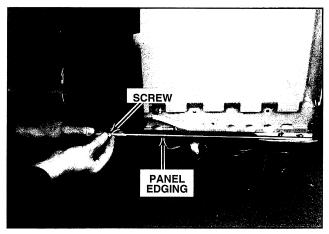
Step 62 Using a screwdriver, place the end of the wire clip under the bottom edge of the leg.

Step 63 Reconnect the wires to the proper terminals as previously marked.

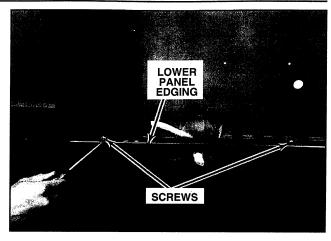


Step 64 Using a screwdriver, insert the screw through the terminal box cover into the terminal box and tighten.

Step 65 If used, place the piece of cardboard over the wiring, wetting agent dispenser, and detergent dispenser.



Step 66 Place the panel edging on the bottom of the inner door panel/door liner.



Step 67 Using a screwdriver, insert the screw through the edging and cardboard barrier (if used) into the bottom of the inner door panel/door liner and tighten.

Step 68 Slide the front panel(s) and cardboard back in the door.

Step 69 Replace the door trims, if used.

Step 70 Move the dishwasher back under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 71 Replace the access panel/toe panel.

PORTABLE MODELS \bullet Replace the access panel and coverplate.

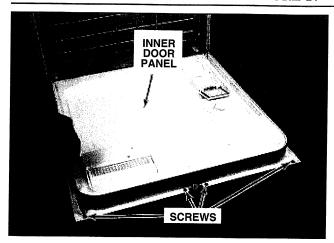
Step 72 Reconnect power or plug in dishwasher.

TYPE B

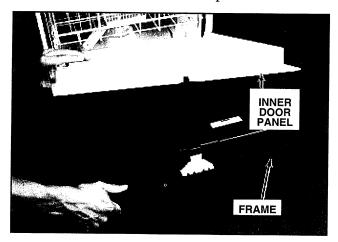
Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door

NOTE: Hold onto the door. With the inner door panel removed, it could close.



Step 3 Using a torx (T15) screwdriver, remove the screws which hold the inner door panel to the frame.



Step 4 Carefully remove the inner door panel from the door frame.

Step 5 Carefully close the door but do not latch.

Step 6 Remove the detergent dispenser mechanism parts.

Step 7 Remove the wetting agent dispenser.

Step 8 Remove the detergent dispenser lid, pin and spring.

Step 9 Remove the vent screen.

REPLACEMENT

Step 10 Replace the vent screen.

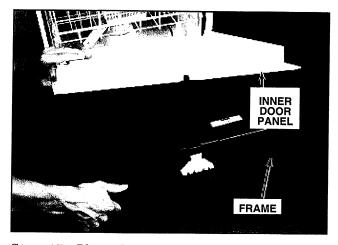
Step 11 Replace the detergent dispenser lid, pin and spring.

Step 12 Replace the wetting agent dispenser.

Step 13 Replace all of the detergent dispenser mechanism parts.

Step 14 Carefully open and hold the door.

NOTE: Hold onto the door. With the inner door panel removed, it could close.



Step 15 Place the inner door panel on the door frame.



Step 16 Using a torx (T15) screwdriver, insert the screws through the inner door panel, into the frame and tighten.

Step 17 Shut the detergent dispenser lid.

Step 18 Close the door, but do not latch.

Step 19 Slowly turn the timer knob all the way around until the detergent dispenser lid opens.

Step 20 If the detergent dispenser lid does not open, you will have to repeat Step 13.

Step 21 Reconnect power or plug in dishwasher.

NOTES

		· · · · · · · · · · · · · · · · · · ·
-		

NOTES

·	
	VI-0

SECTION L

Tub and Below the Tub Area

PROCEDURE 1

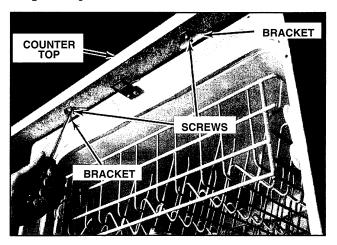


Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Access to Parts for Built-In Models

Step 1 Disconnect power or unplug dishwasher.

Step 2 Open the door.



Step 3 Using a screwdriver, remove the two screws (one on each side) going through the mounting bracket to the underneath side of the counter.

Step 4 Close the door.

Step 5 Remove the access panel/toe panel.

Step 6 Turn off the hot water faucet to the dishwasher.

NOTE: Care should be taken when removing hoses or water connections as there may be water in them.

Step 7 Using pliers or a screwdriver, loosen the clamp holding the drain hose to the check valve, trap, or disposer.

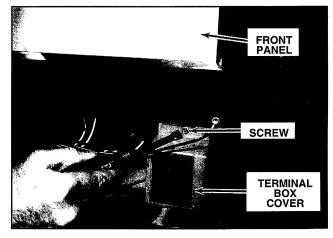
Step 8 Slide the drain hose off the check valve, trap, or disposer.

Step 9 If you have a long enough water line and electrical wiring, carefully pull the dishwasher out so you can work on it. Go to steps 27-35 for reassembly.

OR

NOTE: Care should be taken when removing hoses or water connections as there may be water in them.

Step 10 Using the proper tool, remove the water connection to the inlet valve.



Step 11 Using a nutdriver or screwdriver, remove the screw which holds the terminal box cover to the box.

Step 12 Using a screwdriver, loosen the two screws on the strain relief holding the household wiring.

Step 13 Using a nutdriver or screwdriver, remove the screw going through the green ground wire, or plain copper wire, to the terminal box.

Step 14 Disconnect the black wires.

Step 15 Disconnect the white wires.

Step 16 Pull the household wiring out of the strain relief.



Step 17 Carefully pull the dishwasher out from under the counter.

REPLACEMENT

Step 18 Carefully push the dishwasher back under the counter.

Step 19 Place the household wiring through the strain relief.

NOTE: Use only a wire connector for splicing wires together. DO NOT use tape.

Step 20 Hold the two black wires together, screwing the wire connector down on the bare wires.

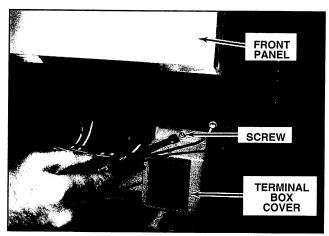
Step 21 Hold the two white wires together, screwing the wire connector down on the bare wires.



Step 22 Using a nutdriver or screwdriver, insert the screw through the green ground wire, or plain copper wire, into the side of the terminal box and tighten.

Step 23 Using a screwdriver, tighten the two screws on the strain relief holding the household wiring.

Step 24 Place the terminal box cover on the box.



Step 25 Using a nutdriver or screwdriver, insert the screw through the terminal box cover into the box and tighten.

Step 26 Using the proper tool, replace the water connection to the inlet valve.

Step 27 If you did not disconnect the water line and electrical wiring, carefully push the dishwasher back under the counter.

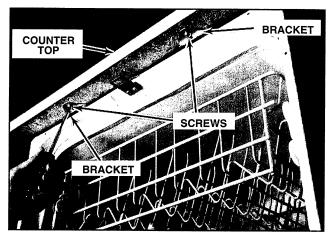
Step 28 Replace the drain hose on the check valve, trap, or disposer.

Step 29 Using pliers or a screwdriver, tighten the clamp which holds the drain hose on the trap or disposer.

Step 30 Turn on the hot water faucet to the dishwasher and check for leaks.

Step 31 Replace the access panel/toe panel.

Step 32 Open the door.



Step 33 Using a screwdriver, insert the two screws (one on each side) going through the mounting bracket to the underneath side of the counter.

Step 34 Close the door.

Step 35 Reconnect power or plug in dishwasher.

PROCEDURE 2



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

Access Panel/Toe Panel and Parts Replacement

This part is located in the front at the very bottom.

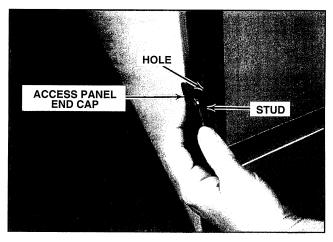
See page 268, illus. nos. 68, 70, 72, and 96-99 for location of parts.

On Portable Models, the access panel and coverplate are used to keep the dishwasher from tipping over when the door is opened and as an access to the lower parts. On all Built-In Models, the access panel/toe panel is removed to get at the lower parts.

See Type A for the Portable Models using a porcelain liner (1986 and older), or Type B for Built-In Models.

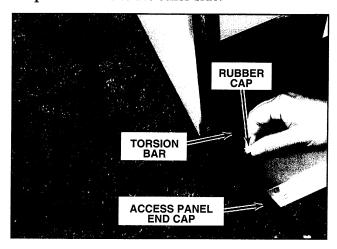
TYPE A

Step 1 Unplug dishwasher or disconnect power.



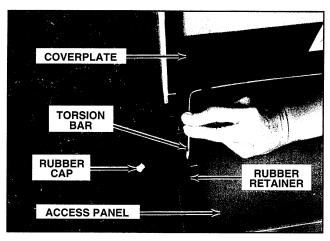
Step 2 Grab one side of the access panel end cap and pull the stud out of the hole in the door frame.

Step 3 Do this to the other side.



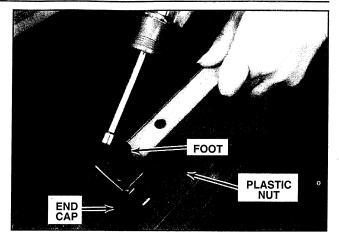
Step 4 Remove both small rubber caps on each access panel end cap.

NOTE: Be careful when removing or replacing the torsion bar as this will spring backward and possibly pinch your fingers.



Step 5 Remove the torsion bar from one stud on the access panel end cap.

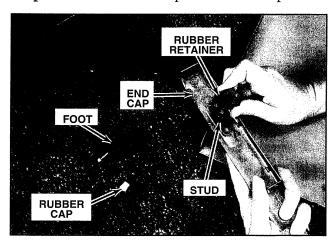
Step 6 Do this to the other side.



Step 7 Using a nutdriver or socket wrench, remove the screw which holds the foot to the bottom of the access panel end cap.

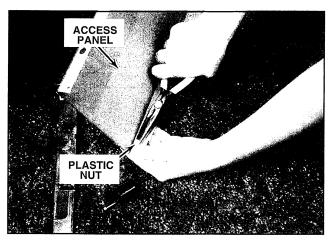
Step 8 Do this to the other side.

Step 9 Slide both end caps off the access panel.



Step 10 Pull the rubber retainer (if used) off the stud of the end cap.

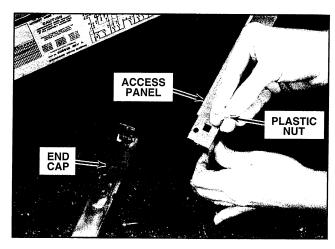
Step 11 Do this to the other end cap.



Step 12 Using needle nose pliers, squeeze the tabs on the plastic nut (if used) and remove.

Step 13 Do this to the other side.

REPLACEMENT

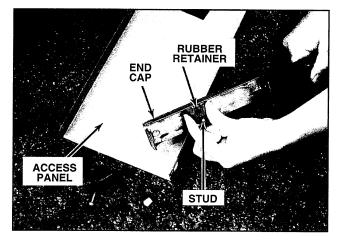


Step 14 Snap the plastic nut (if used) in the hole on the new access panel.

Step 15 Do this to the other side.

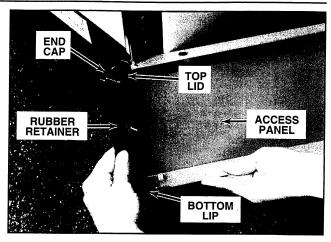
Step 16 Replace the small rubber cap on the stud of the end cap to keep the torsion bar in place.

Step 17 Do this to the other side.



Step 18 Push the rubber retainer (if used) on the stud of the end cap.

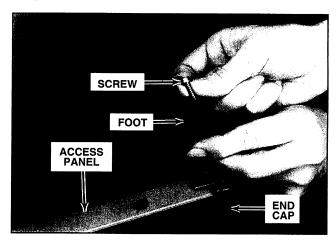
Step 19 Do this to the other end cap.



Step 20 Slide the end cap on the new access panel.

NOTE: Make sure the bottom lip of the end cap is on the bottom of the flange on the access panel. The rubber retainer is on the back side of the access panel and the top lip of the end cap is under the top flange of the access panel.

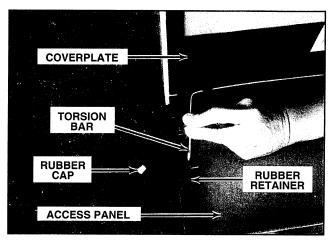
Step 21 Do this to the other side.



Step 22 Using a nutdriver or socket wrench, insert the screw through the foot into the bottom of the access panel end cap and tighten.

Step 23 Do this to the other side

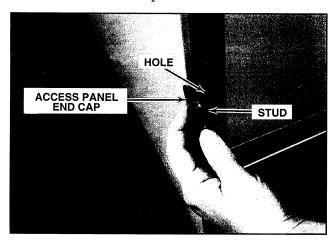
NOTE: Be careful when removing or replacing the torsion bar as this will spring backward and possibly pinch your fingers.



Step 24 Place one end of the torsion bar on the stud of the end cap.

Step 25 Do this to the other side.

Step 26 Replace the rubber caps (on each side) on the stud of each end cap.



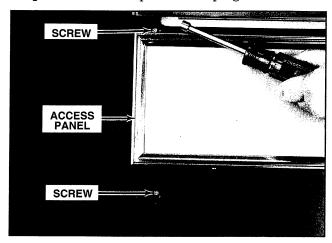
Step 27 Grab the sides of the access panel end caps and place one of the studs in the hole in the door frame.

Step 28 Do this to the other side.

Step 29 Plug in dishwasher or reconnect power.

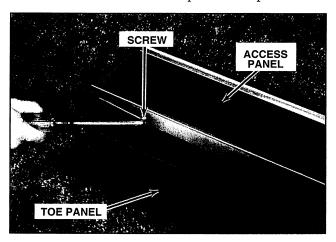
TYPE B

Step 1 Disconnect power or unplug dishwasher.



Step 2 Using a nutdriver or screwdriver, remove the screws which hold the access panel/toe panel to the dishwasher.

NOTE: Some models had clips at the top.



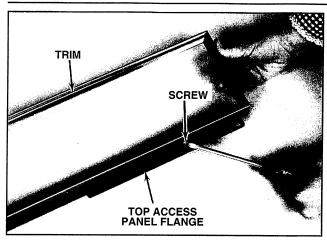
Step 3 Using a nutdriver or screwdriver, remove the two screws which hold the toe panel to the access panel.

NOTE: Some models had clips instead of screws holding the access panel/toe panel together.

NOTE: On some models, the access panel is one piece and is held to the toe panel with two screws.

Step 4 Remove the bottom access panel flange, if used.

Step 5 Remove the colored panels and cardboard backing, if these are used.



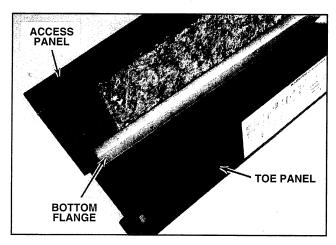
Step 6 Using a screwdriver, remove the two screws which hold the top access panel flange (if used) to the trim.

REPLACEMENT

- **Step 7** Replace the top flange (if used) under the trim with the cutout up.
- **Step 8** Using a screwdriver, insert the screws through the trim into the flange and tighten.
- **Step 9** Replace the colored panels and cardboard backing, if these are used.

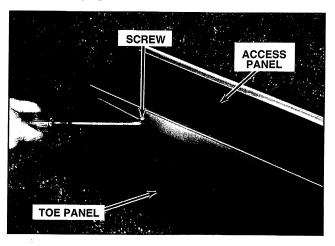
NOTE: Slide these between the trim and top flange.

NOTE: If the toe panel is replaced, remove the wiring diagram and timer sequence chart from the old part, or order from any authorized Whirlpool factory service branch.

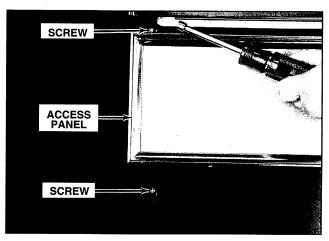


Step 10 Replace the toe panel with all the slotted holes on the inside of the trim.

Step 11 Replace the bottom flange on top of the toe panel, lining up the screw holes.



Step 12 Using a screwdriver, insert the screws through the trim and toe panel into the bottom flange and tighten.



Step 13 Using a nutdriver or screwdriver, insert the screws through the access panel/toe panel into the dishwasher and tighten.

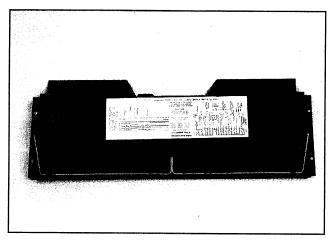
Step 14 Reconnect power or plug in dishwasher.

PROCEDURE 3



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

Coverplate and Parts Replacement

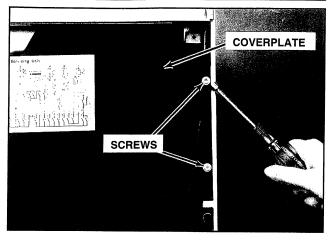


This part is located behind the access panel on Portable Models using a porcelain liner (1986 and older), and covers up the lower parts.

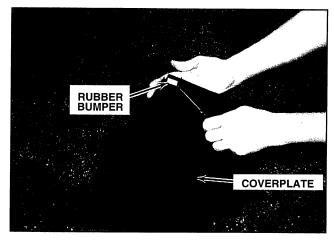
See page 266, illus. nos. 30-32, for location of parts.

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the access panel.



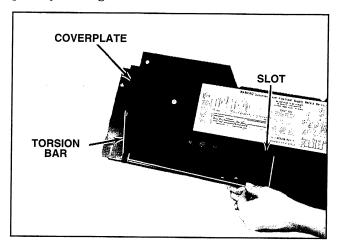
Step 3 Using a nutdriver or screwdriver, remove the screws which hold the coverplate to the frame.



Step 4 Using a small screwdriver, push the edges of the rubber bumper through the slot on the coverplate.

Step 5 Do this to the other side.

NOTE: Be careful when removing or replacing the torsion bar as this will spring backward and possibly pinch your fingers.



Step 6 Using your fingers, move the torsion bar away from the tabs on the coverplate and pull down to remove the end out of the slot.

Step 7 Do this to the other side.

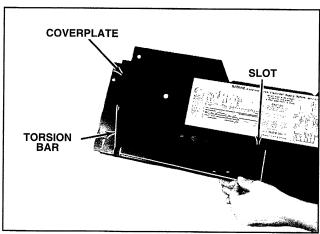
Step 8 Pull and turn to remove the torsion bar from the coverplate.

Step 9 Do this to the other side.

Step 10 Remove the wiring diagram and timer sequence chart or order from any authorized Whirlpool factory service branch.

REPLACEMENT

NOTE: Be careful when removing or replacing the torsion bar as this will spring backward and possibly pinch your fingers.

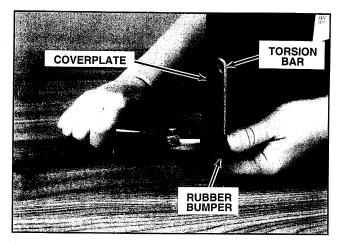


Step 11 Place the torsion bar end (without loop) through the slot by the rubber bumper on the coverplate. Push and turn at the same time.

Step 12 Place the straight end in the slot located in the middle of the coverplate.

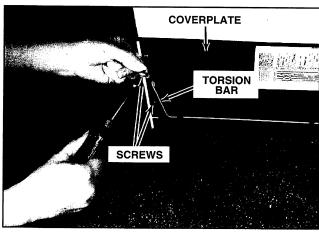
Step 13 Place the torsion bar between the two little tabs on the coverplate.

Step 14 Do this to the other side.



Step 15 Using pliers, place the rubber bumper in the hole on the coverplate. Push with your thumb and pull the other end with the pliers.

Step 16 Do this to the other side.



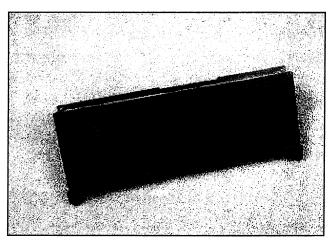
Step 17 Using a nutdriver or screwdriver, insert the screws through the coverplate into the dishwasher frame and tighten.

Step 18 Replace the access panel.

Step 19 Plug in dishwasher or reconnect power.

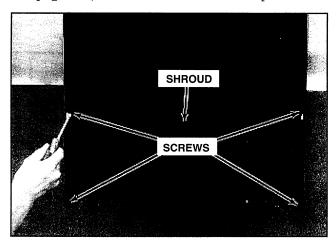
PROCEDURE 4

Shroud Replacement



This part is located in the front at the very bottom on Portable Models using a plastic liner (1986 and newer). It is used to cover up the lower parts.

See page 266, illus. no. 52 for location of part.



Step 1 Using a screwdriver or nutdriver, remove the screws which hold the shroud to the cabinet.

REPLACEMENT

Step 2 Using a screwdriver or nutdriver, insert the screws through the shroud into the cabinet and tighten.

PROCEDURE 5



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

Drain Hose Replacement

This drain hose is located on the right side on all Built-In Models. It connects to the pump and your household plumbing. During the drain cycle, the water is forced through the drain hose and out your drain.

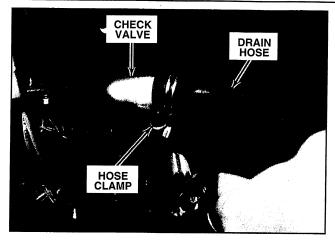
See page 270, illus no. 8 or page 276, illus. no. 43 for location of part.

Step 1 Disconnect power or unplug dishwasher.

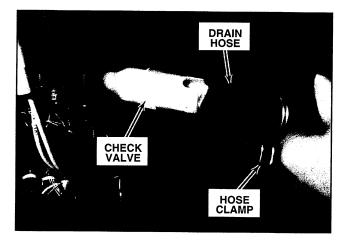
Step 2 Remove the access panel/toe panel.



Step 3 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."



Step 4 Using adjustable pliers, slide the clamp on the drain hose off of the check valve.



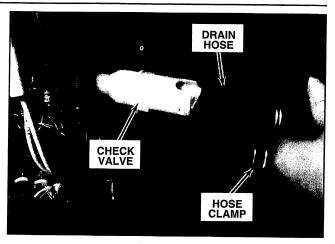
Step 5 Pull the drain hose off the check valve.

Step 6 Untwist the wire located at the top which holds the drain hose.

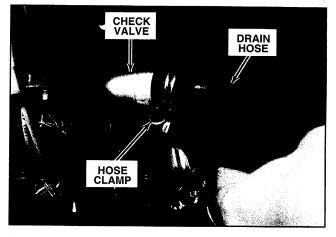
Step 7 Remove the drain hose.

REPLACEMENT

Step 8 Replace the clamp on the drain hose.



Step 9 Place the drain hose on the check valve and push on.



Step 10 Using adjustable pliers, slide the clamp on the drain hose over the check valve.

Step 11 Place the top of the drain hose in the wire located at the top of the leg and twist to hold the drain hose.

Step 12 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 13 Replace the access panel/toe panel.

Step 14 Reconnect power or plug in dishwasher.

Step 15 Turn on the dishwasher and check for leaks on the floor.

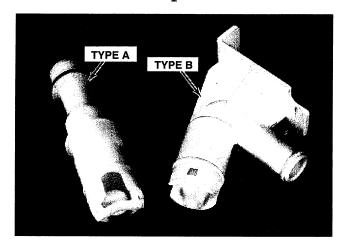
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

PROCEDURE 6

AWARNING

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

Check Valve Replacement



This part is located on the pump behind the access panel/toe panel (and/or coverplate) on porcelain liner models (1986 and older). This part is located behind the access panel/toe panel (or shroud) and screwed onto the channel just below the tub on plastic liner models (1986 and newer). It is used to keep drain water from flowing back into the pump.

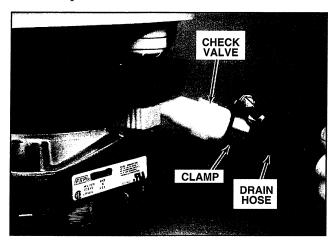
See page 272, illus. nos. 6 and 15, or page 274, illus. nos. 22 and 23, or page 276, illus no. 18 for location of parts.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

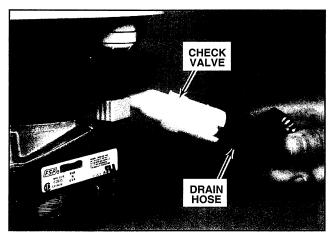
- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the access panel and coverplate.

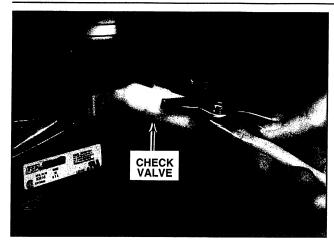


Step 3 Using adjustable pliers, nutdriver, or screwdriver, loosen the clamp on the drain hose and slide off the check valve.

NOTE: Care should be taken when removing hoses as they may have water in them.



Step 4 Pull the drain hose off the check valve.

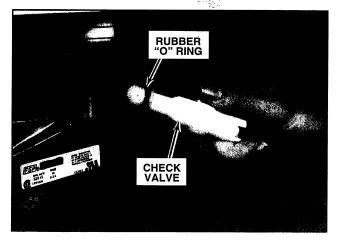


Step 5 Using adjustable pliers, unscrew the check valve from the side of the pump.

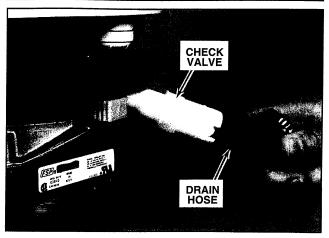
NOTE: There should be a round rubber "O" ring on the check valve when it's removed from the pump. If not, it could be stuck in the hole in the pump. It will have to be removed.

REPLACEMENT

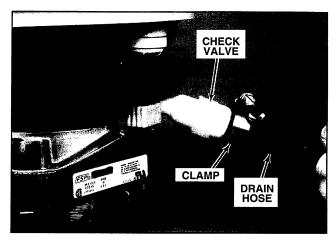
NOTE: Make sure the round rubber "O" ring is on the check valve.



Step 6 Hand turn the check valve into the pump, then snug with adjustable pliers.



Step 7 Replace the drain hose on the check valve and slide the clamp on the ckeck valve.



Step 8 Using adjustable pliers, nutdriver, or screwdriver, tighten the clamp on the drain hose.

Step 9 Replace the access panel/toe panel.

PORTABLE MODELS \bullet Replace the access panel and coverplate.

Step 10 Reconnect power or plug in dishwasher.

Step 11 Turn on the dishwasher and check for leaks on the floor.

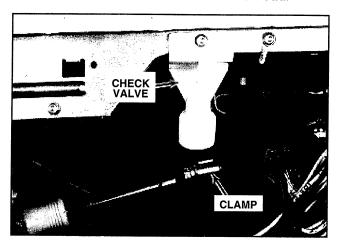
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

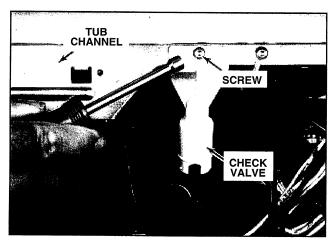
PORTABLE MODELS • Remove the shroud.



Step 3 Using a nutdriver or screwdriver, loosen both clamps which hold the hoses to the ports on the check valve.

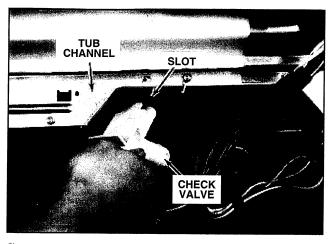
NOTE: Care should be taken when removing hoses as they may have water in them.

Step 4 Pull both hoses off the ports on the check valve.

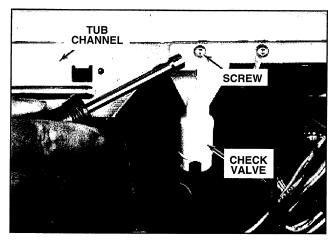


Step 5 Using a screwdriver or nutdriver, remove the screw which holds the check valve to the channel.

REPLACEMENT



Step 6 Replace the check valve with the tab placed in the slot in the channel.

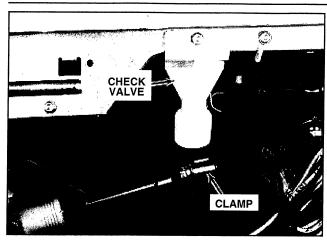


Step 7 Using a screwdriver or nutdriver, insert the screw through the check valve into the channel and tighten.

Step 8 Slide the hoses onto the ports on the check valve.

NOTE: The port facing toward the back uses the hose coming from the soil settler.

NOTE: The port facing down uses the drain hose.



Step 9 Using adjustable pliers, slide the hose clamps over the ports on the check valve.

Step 10 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

Step 11 Reconnect power or plug in dishwasher.

Step 12 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

PROCEDURE 7



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

Heater Testing and/or Replacement

This part is located in the middle inside the tub. It keeps the water temperature at 140°F during washing and rinsing and also helps dry the dishes during the dry cycle.

See page 274, illus. no. 36 or page 276, illus. no. 13 for location of part.

NOTE: We laid the dishwasher on its back to take better pictures. You do not have to lay the dishwasher down.

OHMMETER REQUIRED

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

TYPE A

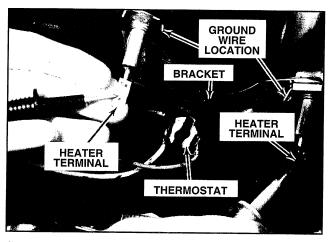
- **Step 1** Disconnect power or unplug dishwasher.
- **Step 2** Remove the access panel/toe panel.

PORTABLE MODELS • Remove the access panel and coverplate.

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the heater. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 10 to 35 ohms. Set the ohms scale and ZERO the meter.

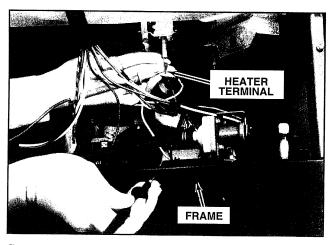


Step 5 Touch and hold one ohmmeter probe to one of the terminals.

Step 6 Touch the other ohmmeter probe to the other terminal.

Step 7 The ohmmeter should show a reading between 10 to 35 ohms on the ohms scale. If not, the heater is bad and needs replacing.

GROUNDING CHECK



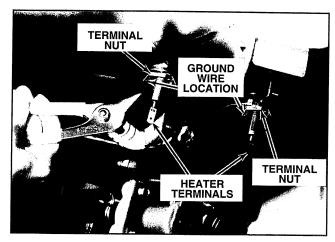
Step 8 Touch and hold one ohmmeter probe to one of the heater terminals.

Step 9 Touch the other ohmmeter probe to the frame of the dishwasher.

Step 10 The ohmmeter should show an open circuit. If not, the heater is bad and needs replacing.

REPLACEMENT

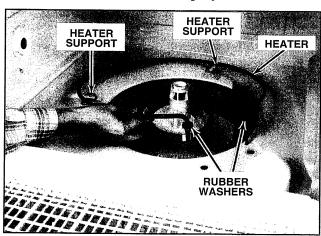
NOTE: The spring, bracket and thermostat/insulator (if used), will fall when the terminal-type nuts are removed.



Step 11 Using adjustable pliers, remove the terminal-type nut from both sides of the heater.

Step 12 Open the door and roll the lower dishrack out of the dishwasher.

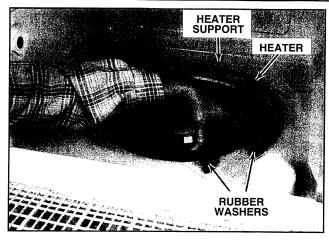
Step 13 Remove the lower spray arm.



Step 14 Tilt the heater to clear the heater supports and lift out.

Step 15 Remove the rubber washers from both sides of the heater.

Step 16 Replace the rubber washers, one on each side of the new heater.

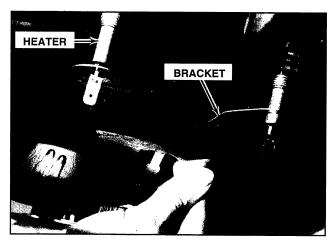


Step 17 Place the new heater in the holes in the bottom of the tub.

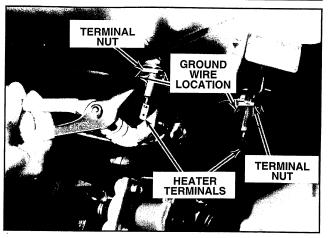
Step 18 Tilt the heater so it rests in the heater supports and push down to the rubber washers.

Step 19 Replace the lower spray arm.

Step 20 Roll the lower dishrack back into the dishwasher and close the door.



Step 21 Replace the spring bracket (if used) through the new heater.



Step 22 Using adjustable pliers, replace the terminal-type nut on each side of the heater and tighten.

Step 23 Replace the thermostat and insulator, if used.



Reconnect all ground wires.

Do not pinch any wires.

Failure to follow these instructions can result in death or electrical shock.

Step 24 Reconnect the wires to the proper terminals as previously marked.

Step 25 Replace the access panel/toe panel.

PORTABLE MODELS \bullet Replace the access panel and coverplate.

Step 26 Reconnect power or plug in dishwasher.

Step 27 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

- **Step 1** Disconnect power or unplug dishwasher.
- **Step 2** Remove the access panel/toe panel.

PORTABLE MODELS • Remove the shroud.

TESTING

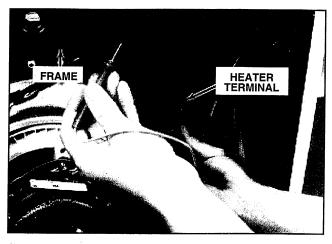
- **Step 3** Remove one wire at a time, carefully labeling each wire according to the terminal marking on the heater. This procedure should assure that the right wire is reconnected to the right terminal.
- **Step 4** Refer to the instructions that came with your ohmmeter to find the proper scale to measure 10 to 25 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one ohmmeter probe to one of the terminals.

- **Step 6** Touch the other ohmmeter probe to the other terminal.
- **Step 7** The ohmmeter should show a reading between 10 to 25 ohms on the ohms scale. If not, the heater is bad and needs replacing.

GROUNDING CHECK



Step 8 Touch and hold one ohmmeter probe to one of the heater terminals.

Step 9 Touch the other ohmmeter probe to the frame of the dishwasher.

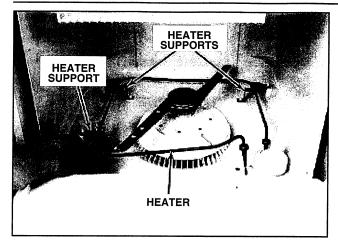
Step 10 The ohmmeter should show an open circuit. If not, the heater is bad and needs replacing.

REPLACEMENT



Step 11 Using adjustable pliers, remove the long nut or terminal-type nut from both sides of the heater.

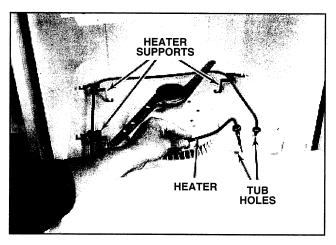
Step 12 Open the door and roll the lower dishrack out of the dishwasher.



Step 13 Tilt the heater to clear the heater supports and lower spray arm, then lift out.

Step 14 Remove the rubber washers from both sides of the heater.

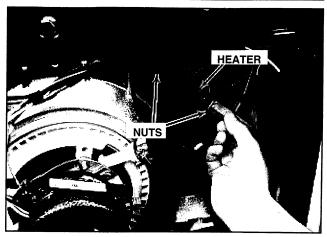
Step 15 Place the rubber washers, one on each side of the heater.



Step 16 Place the heater in the heater supports and the heater terminals going through the two holes in the bottom of the tub.

Step 17 Tilt the heater so it rests in the heater supports and push down to the rubber washers.

Step 18 Roll the lower dishrack back into the dishwasher and close the door.



Step 19 Using adjustable pliers, replace the long nut or terminal-type nut on each side of the heater and tighten.

Step 20 Reconnect the wires to the proper terminals as previously marked.

Step 21 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

Step 22 Reconnect power or plug in dishwasher.

Step 23 Turn on the dishwasher and check for leaks on the floor.

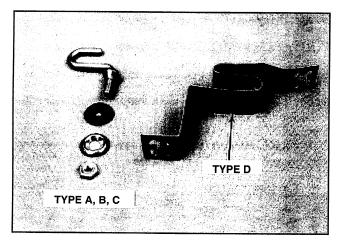
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

PROCEDURE 8



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

Heater Support Replacement



This part is located inside the tub below the lower dishrack. There are two or three of these which support the heater.

See page 274, illus. nos. 37-42, or page 276, illus. no. 45 for location of parts.

There are three ways (TYPE A, B, and C) to replace the supports on porcelain liner models (1986 and older), and one way (TYPE D) to replace the supports on plastic liner models (1986 and newer).

See Type A for the support located on the left side for both Portable and Built-In Models.

See Type B for the support located in the back for Portable Models.

See Type C for the support located in the back for Built-In Models.

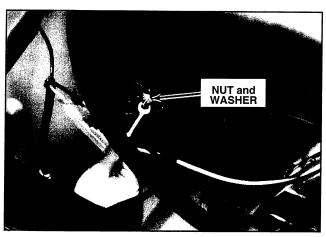
See Type D for the supports mounted on studs inside the tub for both Portable and Built-In Models.

NOTE: When replacing any heater support on porcelain liner models, the metal retainer and rubber washer MUST BE replaced.

TYPE A

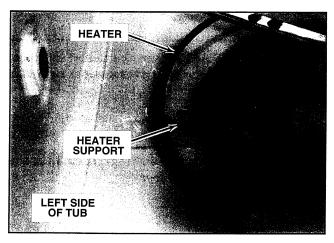
- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the access panel/toe panel.

PORTABLE MODELS \bullet Remove the access panel and coverplate.



Step 3 Using an open-end wrench, remove the nut and plastic washer from the bottom.

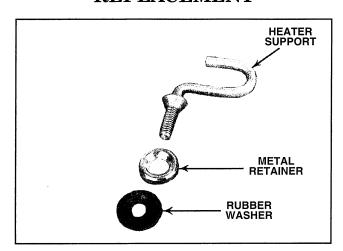
Step 4 Open the door and roll the lower dishrack out of the dishwasher.



Step 5 Pull the heater support out the hole in the tub.

- **Step 6** Remove the rubber washer.
- **Step 7** Remove the metal retainer.

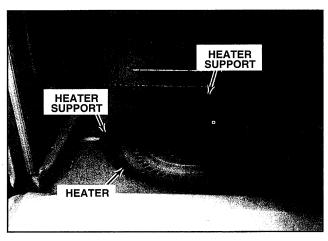
REPLACEMENT



Step 8 Place the metal retainer on the heater support.

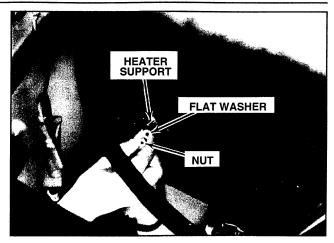
NOTE: The cone shape of the metal retainer must fit the cone shape of the heater support.

Step 9 Place the rubber washer on the heater support (flat side down).



Step 10 Place the heater support through the hole in the tub with the heater in the hook area of the support.

Step 11 Place the plastic washer on the heater support from the bottom.



Step 12 Using an open-end wrench, insert the nut and tighten.

Step 13 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the access panel and coverplate.

Step 14 Roll the lower dishrack back into the dishwasher and close the door.

Step 15 Reconnect power or plug in dishwasher.

Step 16 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Be sure the hose coupling and power cord are in the housings.

Step 3 Open the door and roll the lower dishrack out of the dishwasher.

Step 4 Close the door.

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

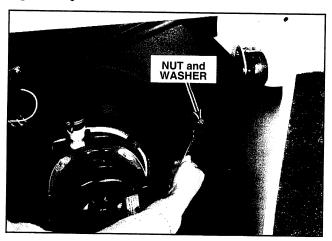
Excessive Weight Hazard

Use two or more people to move and install dishwasher.

Failure to do so can result in back or other injury.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

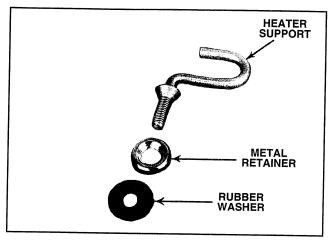
Step 5 Lay the dishwasher on either of its sides on top of the pad.



Step 6 Using an open-end wrench, remove the nut and plastic washer from the bottom.

- Step 7 Open the door.
- **Step 8** Pull the heater support out the back hole in the tub.
- Step 9 Remove the rubber washer.
- Step 10 Remove the metal retainer.

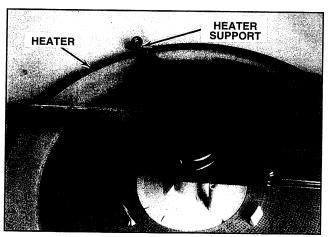
REPLACEMENT



Step 11 Place the metal retainer on the heater support.

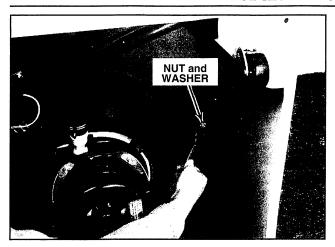
NOTE: The cone shape of the metal retainer must fit the cone shape of the heater support.

Step 12 Place the rubber washer on the heater support (flat side down).



Step 13 Place the heater support through the hole in the tub with the heater in the hook area of the support.

- Step 14 Close the door.
- **Step 15** Place the plastic washer on the heater support from the bottom.



Step 16 Using an open-end wrench, insert the nut and tighten.

Step 17 Set the dishwasher upright.

Step 18 Open the door.

Step 19 Roll the lower dishrack back into the dishwasher and close the door.

Step 20 Plug in dishwasher or reconnect power.

Step 21 Reconnect the water supply. Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE C

Step 1 Disconnect power or unplug dishwasher.



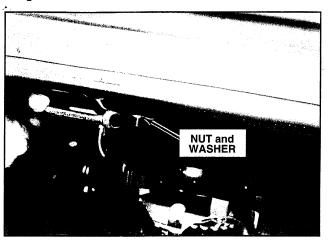
Do not use dishwasher until completely installed.

Do not push down on open door. Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

Step 3 Open the door and roll the lower dishrack out of the dishwasher.

Step 4 Close the door.



Step 5 Using an open-end wrench, remove the nut and plastic washer from the bottom in the back.

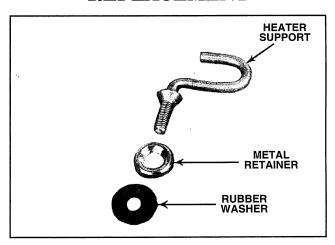
Step 6 Open the door.

 $\textbf{Step 7} \quad \text{Pull the heater support out the back hole in the tub.}$

Step 8 Remove the rubber washer.

Step 9 Remove the metal retainer.

REPLACEMENT

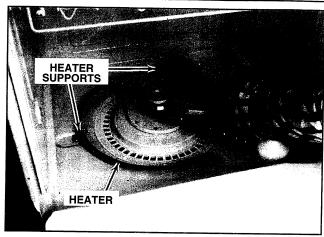


Step 10 Place the metal retainer on the heater support.

NOTE: The cone shape of the metal retainer must fit the cone shape of the heater support.

Step 11 Place the rubber washer on the heater support (flat side down).

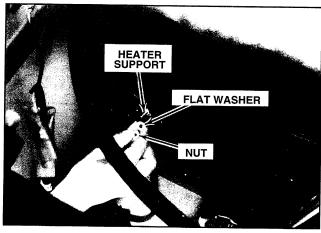
Step 12 Open the door.



Step 13 Place the heater support through the hole in the tub with the heater in the hook area of the support.

Step 14 Close the door.

Step 15 Place the plastic washer on the heater support from the bottom.



Step 16 Using an open-end wrench, insert the nut and tighten.

Step 17 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 18 Open the door.

Step 19 Roll the lower dishrack back into the dishwasher and close the door.

Step 20 Reconnect power or plug in dishwasher.

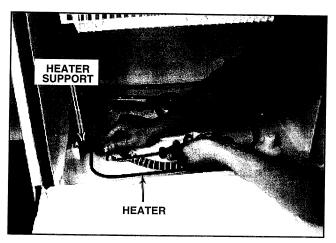
Step 21 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE D

Step 1 Disconnect power or unplug dishwasher.

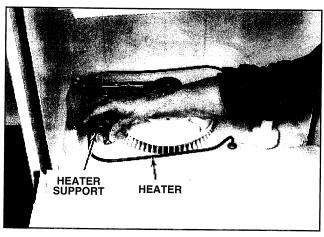
Step 2 Open the door and roll the lower dishrack out of the dishwasher.



NOTE: Do the top first.

Step 3 With one hand, tilt the heater support, then use a screwdriver, pry (one side then the other) to remove the heater support off the plastic stud.

REPLACEMENT



Step 4 Place the heater support on the studs so the heater fits between the loop in the support, then push down.

Step 5 Roll the lower dishrack back into the dishwasher and close the door.

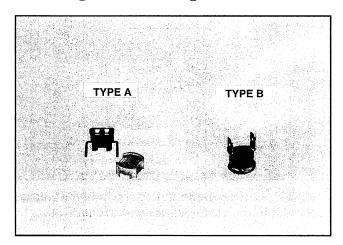
Step 6 Reconnect power or plug in dishwasher.

PROCEDURE 9

AWARNING

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

Thermostat Testing and/or Replacement



This part is located behind the access panel/toe panel on Built-In Models and behind the access panel and coverplate (or shroud) on Portable Models, and is held against the bottom of the tub by a spring-type bracket. This thermostat keeps turning the timer OFF and the heater ON to keep the water temperature at $140^{\circ}F$.

See page 274, illus. nos. 31 and 32, or page 276, illus. nos. 46-48 for location of parts.

OHMMETER REQUIRED

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

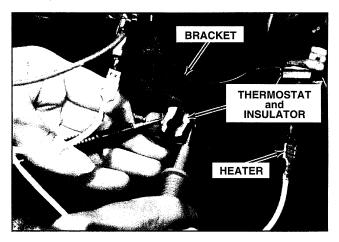
TYPE A

- **Step 1** Disconnect power or unplug dishwasher.
- **Step 2** Remove the access panel /toe panel.

PORTABLE MODELS • Remove the access panel and coverplate.

TESTING

- **Step 3** Remove one wire at a time, carefully labeling each wire according to the terminal marking on the thermostat. This procedure should assure that the right wire is reconnected to the right terminal.
- **Step 4** Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



- **Step 5** Touch and hold one ohmmeter probe to one of the terminals.
- **Step 6** Touch the other ohmmeter probe to the other terminal.
- **Step 7** The ohmmeter should show an open circuit. If not, the thermostat is bad and needs replacing.

OR

Step 8 With one hand, pull the spring-type bracket down and remove the insulator and thermostat.

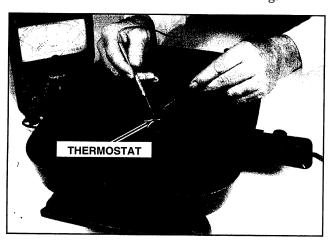
Step 9 Place the thérmostat face down (terminals up) in the electric skillet.

Step 10 Turn the electric skillet to 155°F.

Step 11 When the electric skillet reaches this temperature, we can test the thermostat.

NOTE: Be careful not to touch the thermostat and electric skillet which are very hot.

NOTE: To avoid damage to your ohmmeter, DO NOT let the wires from the ohmmeter probes touch the sides of the electric skillet when testing.



Step 12 Touch and hold one ohmmeter probe to one of the terminals.

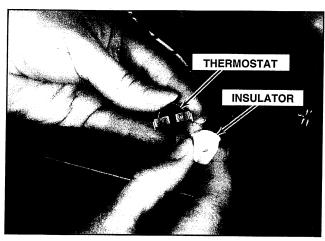
Step 13 Touch the other ohmmeter probe to the other terminal.

Step 14 The ohmmeter should show ZERO resistance (continuity). If not, the thermostat is bad and needs replacing.

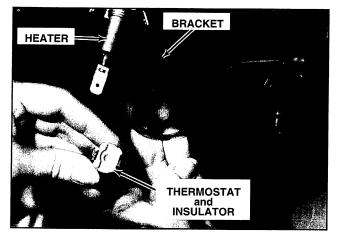
Step 15 Turn the electric skillet off.

NOTE: Let the electric skillet and thermostat cool down before removing.

REPLACEMENT



Step 16 Place the new thermostat in the insulator (flat side).



Step 17 With one hand, pull the spring-type bracket down and insert the insulator and thermostat.

NOTE: The cutout in the spring bracket must fit in the cutout of the insulator.

Step 18 Reconnect the wires to the proper terminals as previously marked.

Step 19 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the access panel and coverplate.

Step 20 Reconnect power or plug in dishwasher.

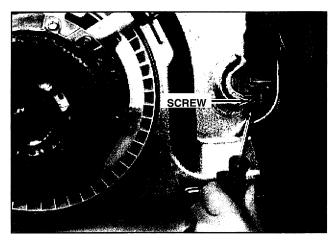
TYPE B

NOTE: We laid the dishwasher on its back to take better pictures. You do not have to lay the dishwasher down.

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the shroud.

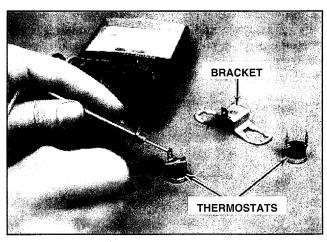


Step 3 Using a screwdriver or nutdriver, remove the screw which holds the bracket and thermostat(s) to the tub.

TESTING

Step 4 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the thermostat. This procedure should assure that the right wire is reconnected to the right terminal.

Step 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 6 Touch and hold one ohmmeter probe to one of the terminals.

Step 7 Touch the other ohmmeter probe to the other terminal.

Step 8 The ohmmeter should show an open circuit. If not, the thermostat is bad and needs replacing.

OR

Step 9 With one hand, pull the spring-type bracket down and remove the insulator and thermostat.

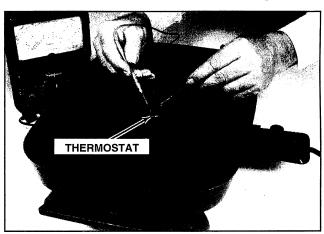
Step 10 Place the thermostat face down (terminals up) in the electric skillet.

Step 11 Turn the electric skillet to 155°F.

Step 12 When the electric skillet reaches this temperature, we can test the thermostat.

NOTE: Be careful not to touch the thermostat and electric skillet which are very hot.

NOTE: To avoid damage to your ohmmeter, DO NOT let the wires from the ohmmeter probes touch the sides of the electric skillet when testing.



Step 13 Touch and hold one ohmmeter probe to one of the terminals.

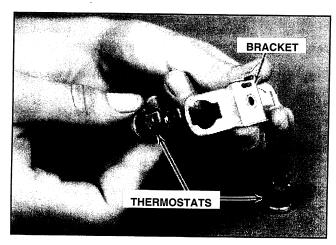
Step 14 Touch the other ohmmeter probe to the other terminal.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the thermostat is bad and needs replacing.

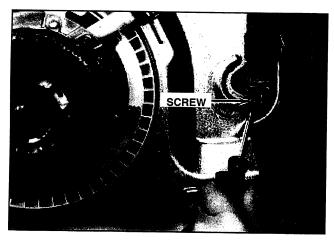
Step 16 Turn the electric skillet off.

NOTE: Let the electric skillet and thermostat cool down before removing.

REPLACEMENT



Step 17 Place the thermostat(s) in the bracket.



Step 18 Using a screwdriver or nutdriver, insert the screw through the bracket into the tub and tighten.

Step 19 Reconnect the wires to the proper terminals as previously marked.

Step 20 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

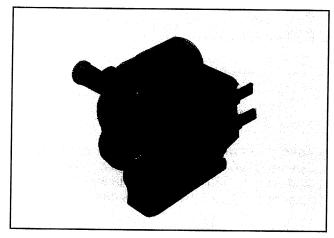
Step 21 Reconnect power or plug in dishwasher.

PROCEDURE 10



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

Water Inlet Valve Testing and/or Replacement



This part is located behind the access panel/toe panel on Built-In Models on the left side, and is located behind the access panel and coverplate (or shroud) on Portable Models on the right side. This single-coil inlet valve is mainly a shut-off valve for controlling water entering the dishwasher.

See page 270, illus. no. 26 or page 276, illus. no. 16 for location of part.

OHMMETER REQUIRED

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the access panel and coverplate (or shroud).

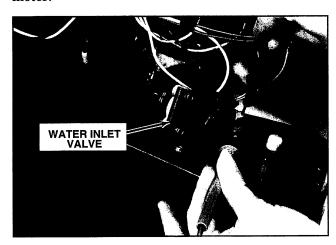
TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the water inlet valve. This procedure should assure that the right wire is reconnected to the right terminal.

OR

Pull the connectors apart.

Step 4 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 500 to 2,000 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one ohmmeter probe to one of the terminals.

Step 6 Touch the other ohmmeter probe to the other terminal.

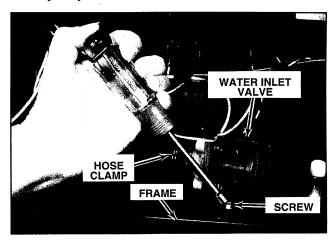
Step 7 The ohmmeter should show a reading between 500 to 2,000 ohms on the ohms scale. If not, the water inlet valve is bad and needs replacing.

REPLACEMENT

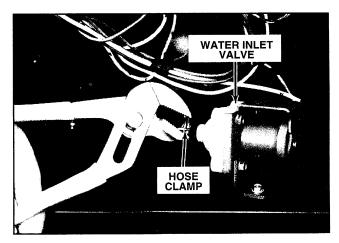
Step 8 Shut the hot water faucet off.

PORTABLE MODELS • Shut the hot water faucet off and remove the hose coupler from the sink.

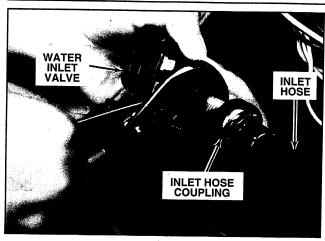
NOTE: Care should be taken when removing hoses as they may have water in them.



Step 9 Using a nutdriver or socket wrench, remove the screw(s) which hold the inlet valve to the dishwasher frame.



Step 10 Using pliers slide the clamp off the small inlet port and slide the water inlet hose off.

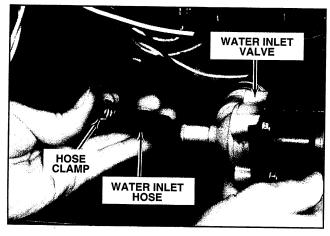


Step 11 You will have to remove the water inlet connection going to your inlet valve.

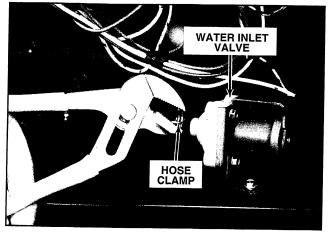
PORTABLE MODELS • Using adjustable pliers, remove the hose coupling from the large port.

Step 12 You will have to reconnect the water inlet connection going to your inlet valve.

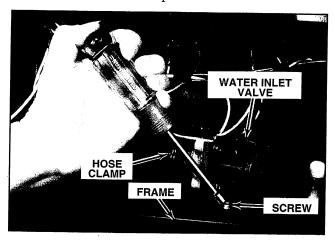
PORTABLE MODELS • Using adjustable pliers, replace the inlet coupling on the large port of the inlet valve and tighten.



Step 13 Place the inlet hose on the small port on the inlet valve.



Step 14 Using pliers, slide the clamp over the hose and onto the small inlet port.



Step 15 Using a nutdriver or socket wrench, insert the screw(s) through the inlet valve into the dishwasher frame or toeplate and tighten.

Step 16 Reconnect the wires to the proper terminals as previously marked.

OR

Push the connectors together.

Step 17 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the access panel and coverplate (or shroud).

Step 18 Reconnect power or plug in dishwasher.

Step 19 Reconnect the water supply. Turn on the dishwasher and check for leaks on the floor.

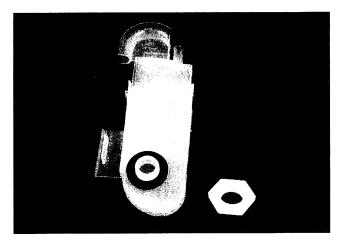
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

AWARNING



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

Water Inlet Replacement



This part is located on the left side of the dishwasher. It is used as an air gap for incoming water.

See page 270, illus. no. 4 for location of part.

NOTE: This part can only be replaced on porcelain liner models (1986 and older).

See Type A for Built-In Models, or Type B for Portable Models.

TYPE A

Step 1 Disconnect power or unplug dishwasher.

AWARNING



Tip Over Hazard

Do not use dishwasher until completely installed.

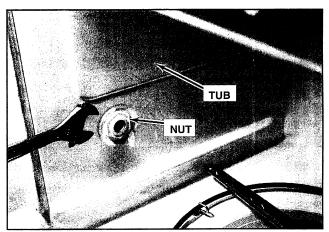
Do not push down on open door.

Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

Step 3 Open the door and roll the lower dishrack out of the dishwasher.

NOTE: Care should be taken when removing any water system parts as they may have water in them.



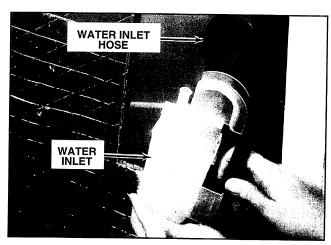
Step 4 Using an adjustable wrench, remove the nut which holds the water inlet to the tub.

Step 5 Pull the water inlet out the hole in the tub.

Step 6 Remove the gasket from the threaded port of the water inlet.

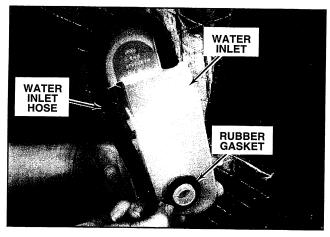
Step 7 Pull the inlet hose out of the groove and off the top port of the water inlet.

REPLACEMENT



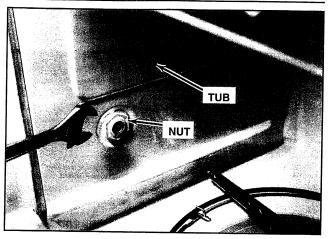
Step 8 Push the inlet hose on the top port of the water inlet and in the groove.

NOTE: Be sure the inlet hose is behind the bracket.



Step 9 Place the rubber gasket on the threaded port of the water inlet.

Step 10 Insert the threaded port of the water inlet through the hole in the side of the tub.



Step 11 Using adjustable pliers, place the nut (smooth side out) on the threaded port of the water inlet and tighten.

Step 12 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 13 Roll the lower dishrack back into the dishwasher and close the door.

Step 14 Reconnect power or plug in dishwasher.

Step 15 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

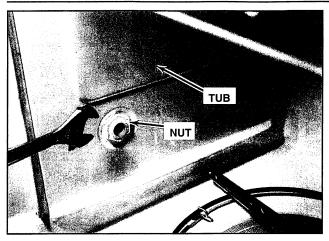
TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the access panel and coverplate.

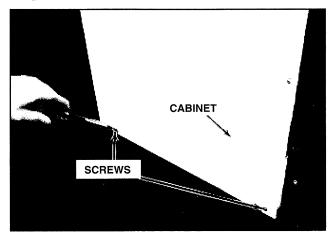
Step 3 Open the door and roll the lower dishrack out of the dishwasher.

NOTE: Care should be taken when removing any water system parts as they may have water in them.

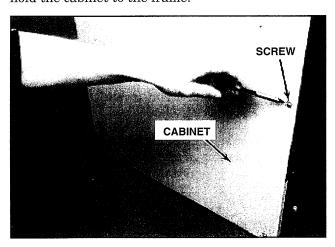


Step 4 Using an adjustable wrench, remove the nut which holds the water inlet to the tub.

Step 5 Remove the top.



Step 6 Using a screwdriver or nutdriver, remove all the bottom screws on the left and back side which hold the cabinet to the frame.



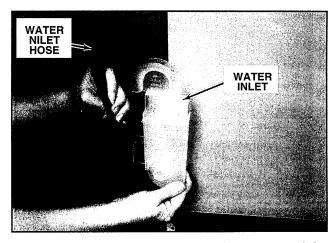
Step 7 Using a screwdriver or nutdriver, remove the screw in the middle front and the screw in the top left front corner which hold the cabinet to the tub.

Step 8 Push the threaded port of the water inlet through the hole in the tub.

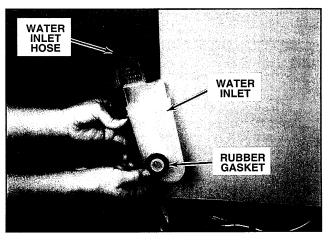
Step 9 Pull down on the inlet hose to remove the water inlet from between the cabinet and tub.

Step 10 Pull the inlet hose out of the groove and off the top port of the water inlet.

REPLACEMENT



Step 11 Push the inlet hose on the top port of the water inlet and in the groove.

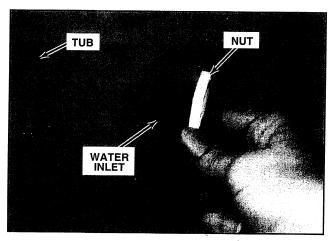


Step 12 Place the rubber gasket on the threaded port of the water inlet.

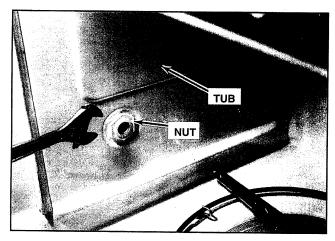
NOTE: You may need someone to help you with the next two steps.

Step 13 Hold the hose and push the water inlet up between the cabinet and tub.

Step 14 Stick your finger through the hole in the nut (smooth side toward middle of tub).

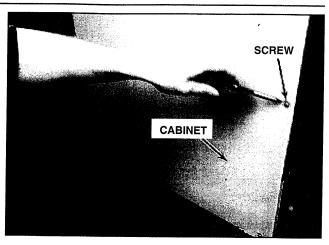


Step 15 Stick your finger through the hole in the tub and hole in the water inlet and pull the threaded port through the hole in the tub.

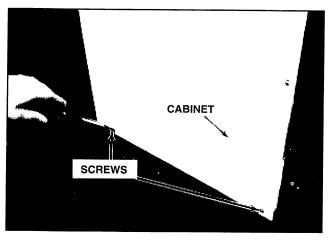


Step 16 Using adjustable pliers, place the nut (smooth side toward middle of tub) on the threaded port of the water inlet and tighten.

Step 17 Roll the lower dishrack back into the dishwasher and close the door.



Step 18 Using a screwdriver or nutdriver, replace the screw in the middle front, and the screw in the top left front corner which hold the cabinet to the tub.



Step 19 Using a screwdriver or nutdriver, replace all the bottom screws on the left and back side which hold the cabinet to the frame.

Step 20 Replace the top.

Step 21 Replace the access panel and coverplate.

Step 22 Plug in dishwasher or reconnect power.

Step 23 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

AWARNING



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

Water Inlet Hose Replacement

This part is located on the left side, connecting the water inlet to the water inlet valve.

See page 270, illus. no. 5 or page 276, illus. no. 37 for location of part.

See Type A for Built-In Models, or Type B for Portable Models.

TYPE A

Step 1 Disconnect power or unplug dishwasher.

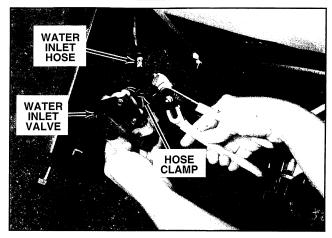


Tip Over Hazard
Do not use dishwasher until completely installed.

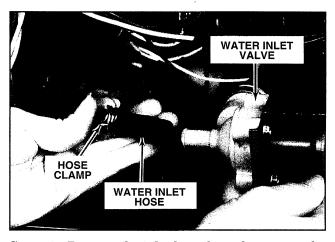
Do not push down on open door.

Doing so can result in serious injury or cuts.

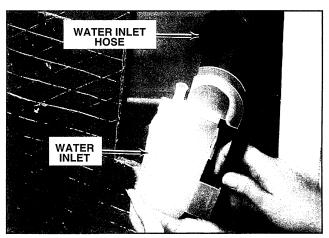
Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."



Step 3 Using adjustable pliers, slide the clamp off the port on the water inlet valve.



Step 4 Remove the inlet hose from the port on the water inlet valve.



Step 5 Pull the inlet hose out of the groove and off the top port of the water inlet.

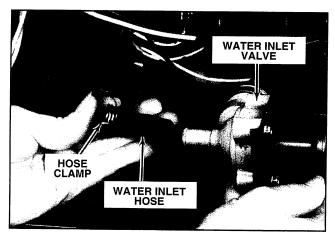
Step 6 Slide the inlet hose through the bracket in the water inlet.

REPLACEMENT

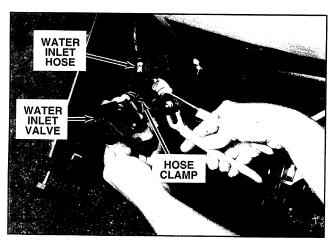
Step 7 Place the clamp on the inlet hose.



Step 8 Push the inlet hose up from the bottom, through the bracket, and then down over the top port and in the groove of the water inlet.



Step 9 Push the inlet hose on the port on the water inlet valve.



Step 10 Using adjustable pliers, slide the clamp on the port of the water inlet valve to hold the inlet hose.

Step 11 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 12 Reconnect power or plug in dishwasher.

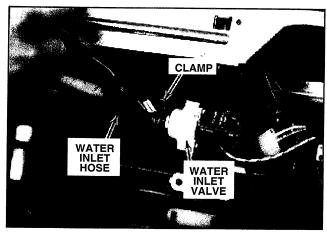
Step 13 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

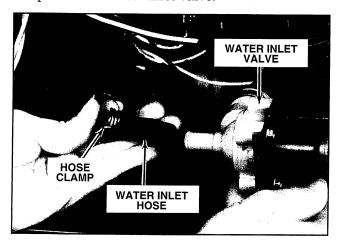
TYPE B

Step 1 Unplug dishwasher or disconnect power.

Step 2 Remove the access panel and coverplate (or shroud).

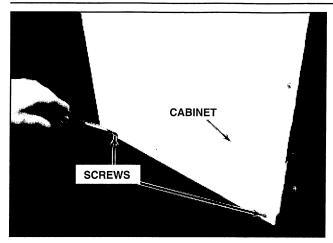


Step 3 Using adjustable pliers, slide the clamp off the port on the water inlet valve.

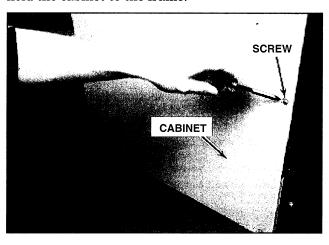


Step 4 Remove the inlet hose from the port on the water inlet valve.

Step 5 Remove the top.

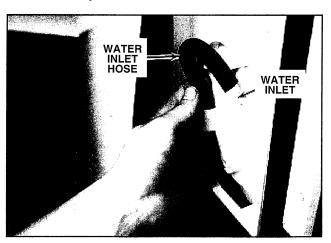


Step 6 Using a screwdriver or nutdriver, remove all the bottom screws on the left and back side which hold the cabinet to the frame.



Step 7 Using a screwdriver or nutdriver, remove the screws on the left side, in the middle front and top front corners which hold the cabinet to the tub.

Step 8 Move the cabinet away from the side somewhat so you can remove the hose.

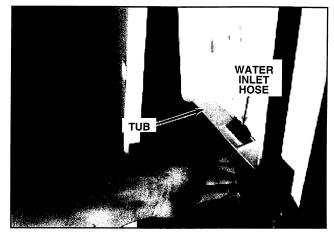


Step 9 Pull the inlet hose out of the groove and off the top port on the water inlet.

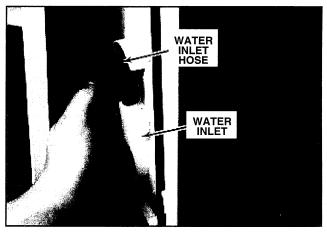
Step 10 Slide the inlet hose through the bracket in the water inlet and hole in the tub.

REPLACEMENT

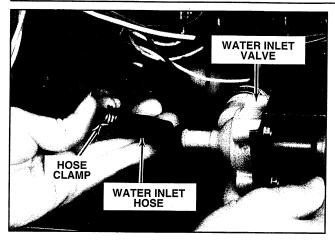
Step 11 Place the clamp on the inlet hose.



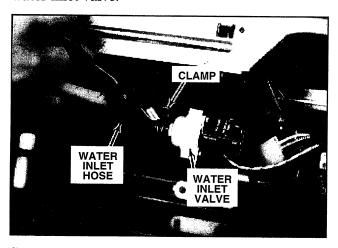
Step 12 Push the inlet hose up from the bottom through the hole in the tub, then through the bracket in the water inlet.



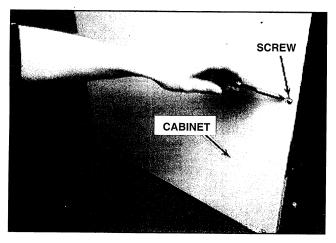
Step 13 Place the inlet hose over the top port, push down, then place the hose in the groove.



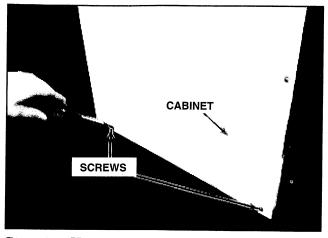
Step 14 Push the inlet hose on the port on the water inlet valve.



Step 15 Using adjustable pliers, slide the clamp over the port on the water inlet valve.



Step 16 Using a screwdriver or nutdriver, insert the screw located in the top left front corner and the middle front side, through the cabinet flange, into the tub and tighten.



Step 17 Using a screwdriver or nutdriver, insert all the bottom screws on the left side, through the cabinet, into the frame, and tighten.

Step 18 Replace the top.

Step 19 Replace the access panel and coverplate (or shroud)

Step 20 Plug in dishwasher or reconnect power.

Step 21 Turn on the dishwasher and check for leaks on the floor.

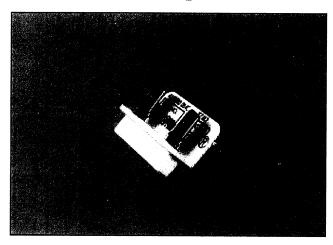
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

186

AWARNING

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

Thermal Fuse Testing and/or Replacement



This part is located behind the access panel in the right rear corner on plastic liner models (1986 and newer). Its function is to shut the dishwasher OFF if the heater gets too hot.

See page 276, illus. no. 26 for location of part.

OHMMETER REQUIRED

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

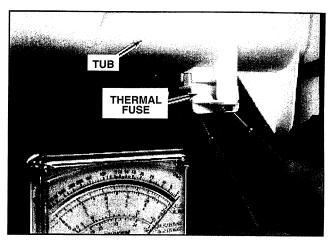
PORTABLE MODELS • Remove the shroud.

NOTE: If you cannot get to the thermal fuse this way, move the dishwasher from under the counter somewhat and work from the side. See "Access to Parts for Built-In Models."

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal markings or location on the thermal fuse. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

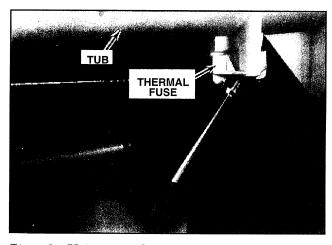


Step 5 Touch and hold one ohmmeter probe to one of the terminals.

Step 6 Touch the other ohmmeter probe to the other terminal.

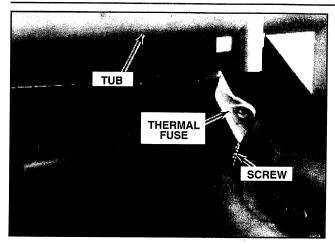
Step 7 The ohmmeter should show ZERO resistance (continuity). If not, the thermal fuse is bad and needs replacement.

REPLACEMENT



Step 8 Using a nutdriver, remove the screw which holds the thermal fuse to the bottom of the tub.

Step 9 Replace the thermal fuse in the slot in the molded part of the base.



Step 10 Using a screwdriver, insert the screw through the thermal fuse into the tub bottom and tighten.

Step 11 Reconnect the wires to the proper terminals as previously marked.

NOTE: Replace the dishwasher under the counter if you had to pull it out to work from the side. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 12 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

Step 13 Reconnect power or plug in dishwasher.

PROCEDURE 14



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

Microswitch, Float, and Parts Testing and/or Replacement

This microswitch is located on the right side underneath the tub either behind the access panel/toe panel on Built-In Models, or behind the access panel and coverplate (or shroud) on Portable Models.

See page 270, illus. nos. 22, 38-40, or page 276, illus. nos. 29-32 for location of parts.

This is used as an overfill protection safety switch only. It does not control any part of the water fill as that is time-controlled through the timer.

The float is located in the tub in the front right corner under the lower dishrack.

See Type A for models using a porcelain liner (1986 and older), or see Type B for models using a plastic liner (1986 and newer).

OHMMETER REQUIRED TYPE A

- **Step 1** Disconnect power or unplug dishwasher.
- **Step 2** Remove the access panel/toe panel.

PORTABLE MODELS • Remove the access panel and coverplate.

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the microswitch. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 5 With the button (lever) down, touch and hold one ohmmeter probe to one of the terminals.

Step 6 With the button (lever) down, touch the other ohmmeter probe to the other terminal.

Step 7 The ohmmeter should show ZERO resistance (continuity) with the button (lever) down. If not, the microswitch is bad and needs replacing.

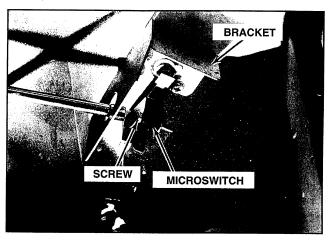
OR

Step 8 With the button (lever) up, touch and hold one ohmmeter probe to one of the terminals.

Step 9 With the button (lever) up, touch the other ohmmeter probe to the other terminal.

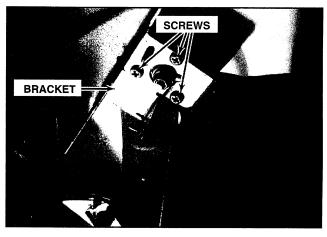
Step 10 The ohmmeter should show an open circuit with the button (lever) up. If not, the microswitch is bad and needs replacing.

REPLACEMENT



Step 11 Using a nutdriver or screwdriver, remove the screw which holds the microswitch to the bracket.

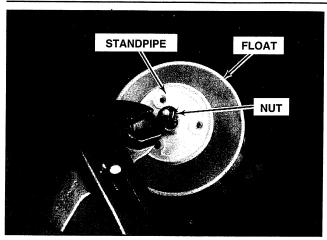
NOTE: If you do not want to replace the float and parts, go to steps 27-34.



Step 12 Using a small screwdriver, remove the three bottom screws which hold the float to the tub and bracket.

Step 13 Open the door and roll the lower dishrack out of the dishwasher.

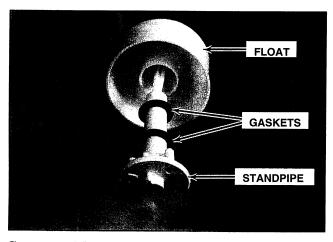
Step 14 Pull up on the float to remove the float, standpipe, and gasket.



Step 15 Using pliers, remove the nut which holds the float to the standpipe.

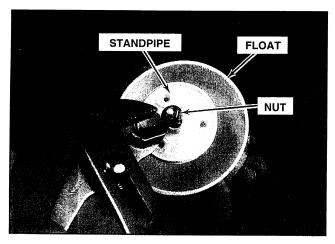
Step 16 Pull the float out of the standpipe.

Step 17 Remove the one or two gaskets from the standpipe.



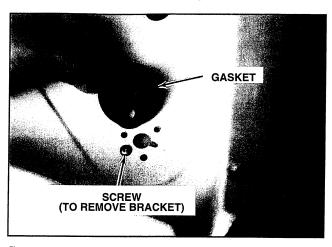
Step 18 Place the gasket(s) on the standpipe.

Step 19 Place the float through the standpipe.



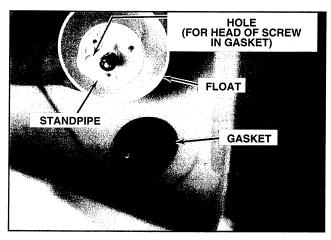
Step 20 Using pliers, place the nut on the bottom stem of the float and tighten.

Step 21 Remove the rubber gasket from the tub.



Step 22 Place the gasket on the bottom of the tub.

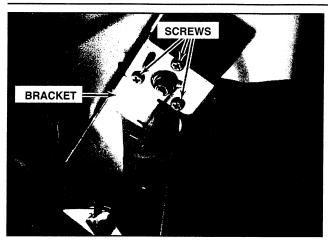
NOTE: The slots and the holes must line up on the gasket, tub, and standpipe to be properly installed.



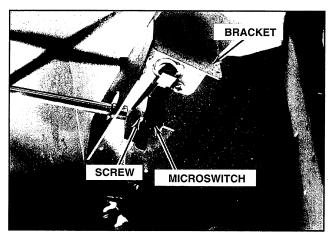
Step 23 Place the float and standpipe on the tub, lining up the slots and holes in the standpipe gasket and tub.

Step 24 Place something heavy on top of the float to keep it from lifting off the tub when the screws are installed from the bottom of the tub.

Step 25 Close the door.



Step 26 Using a screwdriver, insert the three screws from the bottom through the bracket, two gaskets, and into the standpipe.



Step 27 Using a nutdriver or screwdriver, insert the screw through the microswitch into the bracket and tighten.

Step 28 Reconnect the wires to the proper terminals as previously marked.

Step 29 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the access panel and coverplate.

Step 30 Open the door.

Step 31 Remove whatever you used to hold down the new float.

Step 32 Roll the lower dishrack back into the dishwasher and close the door.

Step 33 Reconnect power or plug in dishwasher.

Step 34 Turn on the dishwasher and check for leaks on the floor.

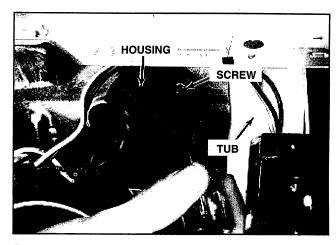
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the shroud.



Step 3 Using a screwdriver or nutdriver, remove the screw which holds the housing to the bottom of the tub.

Step 4 Slide housing toward back right corner to remove float stem from slot in housing.

Step 5 Unsnap the cover.

Step 6 Slide the float switch out of the housing.

Step 7 With the button (lever) down, touch and hold one ohmmeter probe to one of the terminals.

Step 8 With the button (lever) down, touch the other ohmmeter probe to the other terminal.

Step 9 The ohmmeter should show ZERO resistance (continuity) with the button (lever) down. If not, the microswitch is bad and needs replacing.

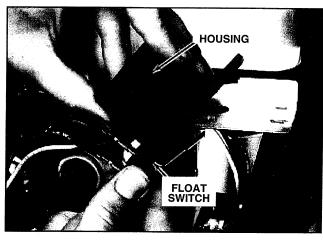
OR

Step 10 With the button (lever) up, touch and hold one ohmmeter probe to one of the terminals.

Step 11 With the button (lever) up, touch the other ohmmeter probe to the other terminal.

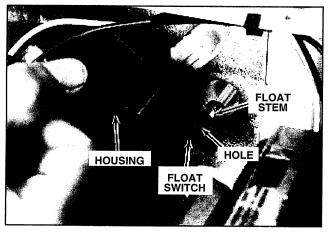
Step 12 The ohmmeter should show an open circuit with the button (lever) up. If not, the microswitch is bad and needs replacing.

REPLACEMENT



Step 13 Replace the float switch (on an angle) inside the housing with the stud on the housing going into the hole on the float switch.

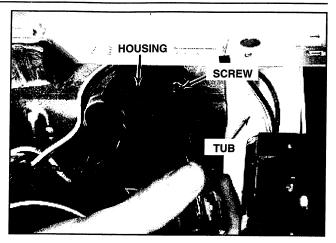
Step 14 Snap the cover over the housing.



Step 15 Place the float stem in large opening of housing, then slide forward.

NOTE: The lever on the switch must be under the float stem.

NOTE: Make sure the nut from the float stem is under housing tab.



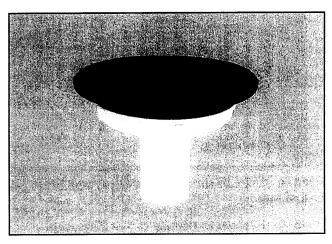
Step 16 Using a screwdriver or nutdriver, insert the screw through the housing into the bottom of the tub and tighten.

Step 17 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

Step 18 Reconnect power or plug in dishwasher.

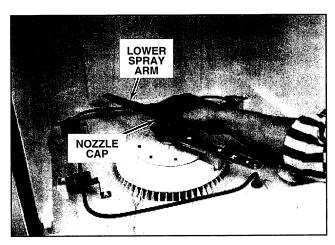
Nozzle Cap and Bearing Replacement



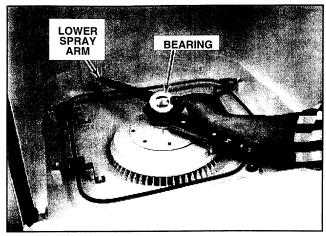
This part is located below the lower dishrack and is used to hold the lower spray arm to the pump and motor. It also seals to the bottom of the tower during the wash cycle causing a water stream up to the upper spray arm.

See page 274, illus. nos. 20 and 26 for location of parts.

Step 1 Open the door and roll the lower dishrack out of the dishwasher.



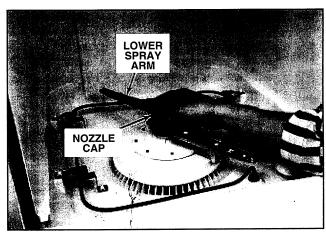
Step 2 Unscrew the nozzle cap and remove.



Step 3 Remove the plastic bearing located on top of the spray arm.

REPLACEMENT

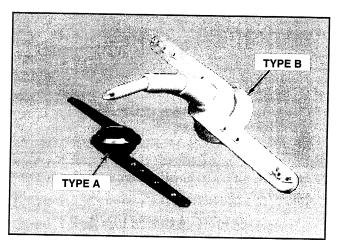
Step 4 Place the new bearing on top of the lower spray arm.



Step 5 Insert the new nozzle cap into the pump and motor and screw it on until it's tight.

Step 6 Roll the lower dishrack back into the dishwasher and close the door.

Lower Spray Arm Replacement



This part is located below the lower dishrack and is used to spray water onto the dishes.

See page 274, illus. no. 27, or see page 280, illus. nos. 8-15 for location of parts.

See Type A for the spray arm with a hole in the middle or Type B for the spray arm with a telescoping tower.

TYPE A

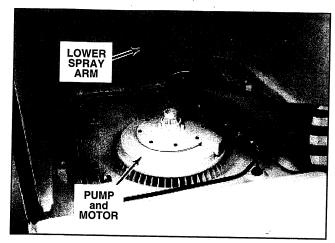
Step 1 Open the door and roll the lower dishrack out of the dishwasher.

Step 2 Remove the nozzle cap and bearing.



Step 3 Lift the lower spray arm off the pump and motor.

REPLACEMENT



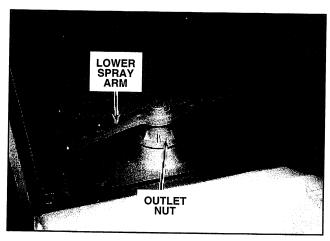
Step 4 Place the new lower spray arm on the pump and motor.

Step 5 Replace the nozzle cap and bearing.

Step 6 Roll the lower dishrack back into the dishwasher and close the door.

TYPE B

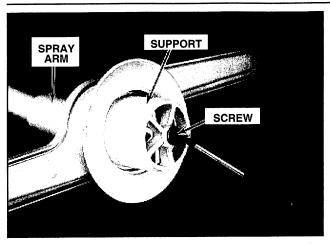
Step 1 Open the door and roll the lower dishrack out of the dishwasher.



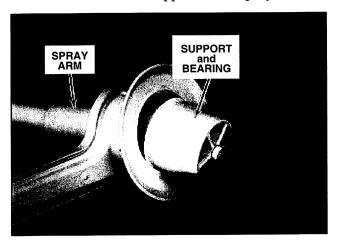
Step 2 Using a hammer and the handle of a screwdriver, loosen the outlet nut to where you can unscrew it by hand.

Step 3 Lift the spray arm to remove.

Step 4 Lift the plastic grommet washer off the pump gasket.



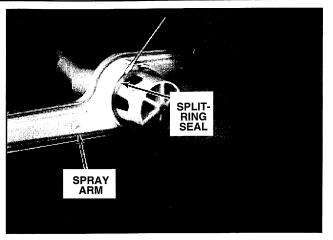
Step 5 Using a torx (T20) screwdriver, loosen the screw which holds the support to the spray arm.



Step 6 Remove the support and bearing.

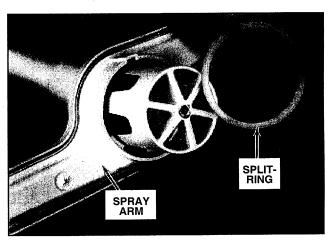


Step 7 Remove the pump outlet nut.



Step 8 Insert a small screwdriver and remove the split-ring seal.

REPLACEMENT

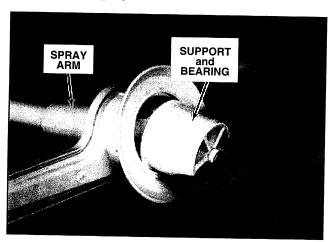


Step 9 Replace the split-ring in the groove of the lower spray arm so the opening in the split-ring is matched with the opening in the spray arm.

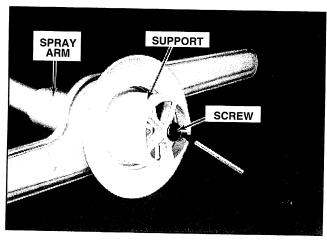
NOTE: The two tabs on the split-ring will fit in an opening in the spray arm.



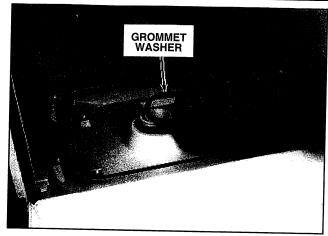
Step 10 Replace the pump outlet nut over the bottom of the spray arm.



Step 11 Replace the support and bearing over the bottom of the spray arm.

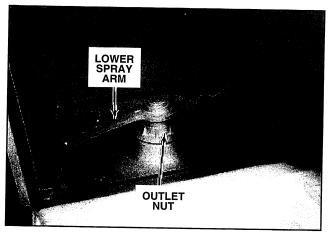


Step 12 Using a torx (T20) screwdriver, insert the screw through the bearing into the spray arm and tighten.



Step 13 Replace the plastic grommet washer over the pump gasket.

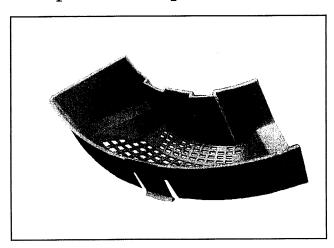
Step 14 Replace the lower spray arm over the grommet washer.



Step 15 Screw the outlet nut on, then tap with a hammer until snug.

Step 16 Roll the lower dishrack back into the dishwasher and close the door.

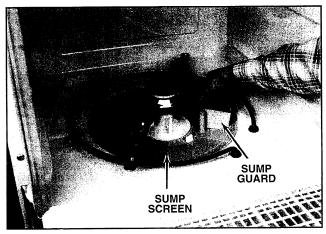
Sump Guard Replacement



This part is located on the right side below the lower dishrack and is used for catching larger pieces of food during wash.

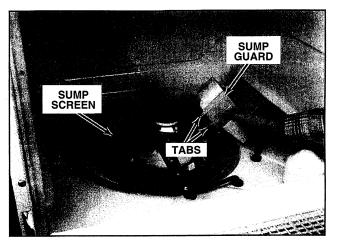
See page 274, illus. no. 28 for location of part.

Step 1 Open the door and roll the lower dishrack out of the dishwasher.

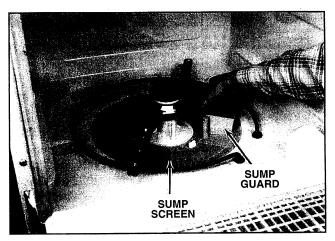


Step 2 Using your fingers, press the sides together and lift.

REPLACEMENT



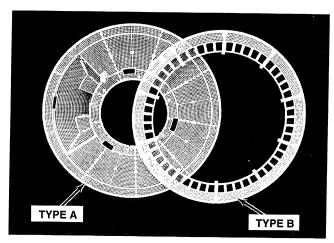
Step 3 Place the new sump guard with the two tabs in the sump screen.



Step 4 Push in on the middle of the outside tab and down at the same time, until it snaps into place.

Step 5 Roll the lower dishrack back into the dishwasher and close the door.

Sump Screen or Grate Replacement



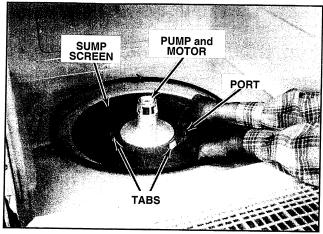
This part is located in the middle below the lower dishrack.

See page 274, illus. no. 29 for location of part.

Type A is used to catch pieces of food on the top of the screen so they are not sprayed back onto the dishes. On Type B, the food passes through the grate openings and is ground up during the DRAIN cycle. This grate is also designed to keep larger items, like bottle caps, from entering the POWER CLEAN® portion of the pump.

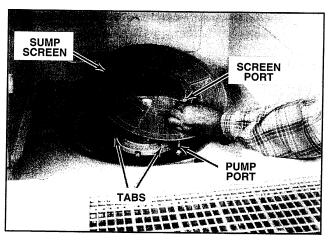
TYPE A

- **Step 1** Open the door and roll the lower dishrack out of the dishwasher.
- Step 2 Remove the nozzle cap and bearing.
- Step 3 Remove the lower spray arm.
- Step 4 Remove the sump guard.



Step 5 Using your fingers, grab the port of the sump screen, and push the tabs (3) toward the middle while lifting the screen up.

REPLACEMENT



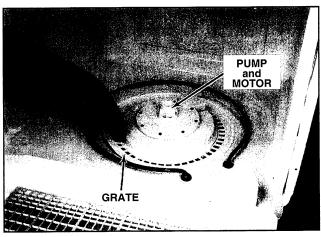
Step 6 Place the new sump screen with the port over the pump port.

- **Step 7** Push down, snapping the three tabs into place.
- Step 8 Replace the sump guard.
- Step 9 Replace the lower spray arm.
- Step 10 Replace the nozzle cap and bearing.
- **Step 11** Roll the lower dishrack back into the dishwasher and close the door.

TYPE B

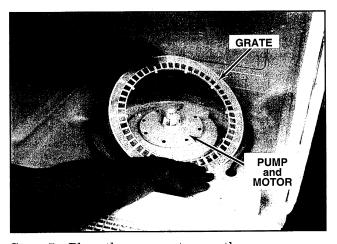
Step 1 Open the door and roll the lower dishrack out of the dishwasher.

- **Step 2** Remove the nozzle cap and bearing.
- **Step 3** Remove the lower spray arm.



Step 4 Place a finger in one of the holes (by a tab) and pull up on the grate to remove.

REPLACEMENT



Step 5 Place the new grate over the pump.

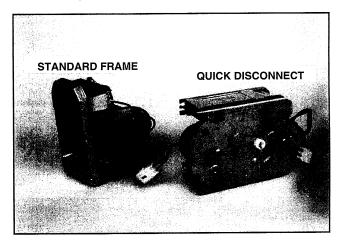
- **Step 6** Push down all the way around the grate until the tabs snap in place.
- **Step 7** Replace the lower spray arm.
- **Step 8** Replace the nozzle cap and bearing.
- **Step 9** Roll the lower dishrack back into the dishwasher and close the door.

PROCEDURE 19



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

Rapid Advance Timer Testing and/or Replacement



OHMMETER REQUIRED

This part is used with the push-button switch and has no dial or knob to turn. As the push-button is pressed for the cycle you want, the rapid advance timer motor advances the timer to the proper start-up cycle.

There are two areas in which the rapid advance timer could be located on porcelain liner models (1986 and older): either behind the access panel/toe panel on Built-In Models, behind the access panel and coverplate on Portable Models, or in the console area for both types of dishwashers.

All rapid advance timers used on dishwashers operate the same but are somewhat different in looks. Due to functions or features of different models, some rapid advance timers have more terminals and internal switches (contacts) than others. On standard frame rapid advance timers, the different colored harness wires are separate and plug onto separate terminals which are also marked.

On quick-disconnect rapid advance timers, the different colored harness wires are placed inside either a black or white block which plugs into the timer. These blocks are colored to match the words BLACK or WHITE stamped on the timer. The possibility of wiring the rapid advance timer wrong is greatly reduced.

Before attempting any checks on the rapid advance timer, you must read and understand the Wiring Diagram and Timer Sequence Chart (section B).

See Type A if located in the bottom of the dishwasher, or see Type B if located in the console area.

We recommend looking at the bottom first (Type A).

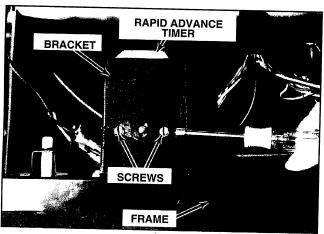
NOTE: You may have either type timer (at the bottom or in the console area).

TYPE A

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the access panel /toe panel.

PORTABLE MODELS \bullet Remove the access panel and coverplate.

Step 3 Using a screwdriver, place it in the slot on the shaft of the rapid advance timer and turn it to the cycle you suspect is bad.



Step 4 Using a screwdriver or nutdriver, remove the screws which hold the rapid advance timer to the bracket.

PORTABLE MODELS • Using a screwdriver or nutdriver, remove the screws which hold the rapid advance timer to the coverplate or bracket.

TESTING

Step 5 STANDARD FRAME RAPID ADVANCE TIMERS. Remove one wire at a time, carefully labeling each wire according to the terminal marking on the rapid advance timer. This procedure should assure that the right wire is reconnected to the right terminal.

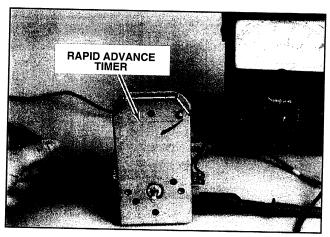
OR

FOR QUICK-DISCONNECT RAPID ADVANCE TIMERS. Remove both the white and black disconnect blocks. Some models only have the one (black) disconnect block. The blocks have tabs on each end which must be pressed while pulling on the block.

Instead of coding timer terminals like the standard frame rapid advance timers, a chart of each wiring block is printed on the back of the timer. The line through the chart separates the two blocks. Letters indicate active terminals while the black dots identify blank terminals.

Step 6 Disconnect any timer motor wires, marking them as to where they were located.

Step 7 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 8 Touch and hold one ohmmeter probe to the terminal specified for this function.

Step 9 Touch the other ohmmeter probe to the other terminal specified for this function.

Step 10 The ohmmeter should show ZERO resistance (continuity). If not, the rapid advance timer is bad and needs replacing.

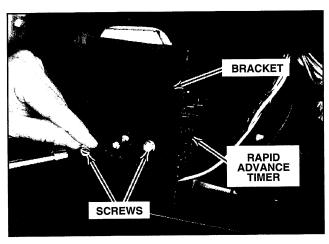
OR

Step 11 Touch and hold one ohmmeter probe to the terminal BR.

Step 12 Touch the other ohmmeter probe to the terminal W-BK.

Step 13 The ohmmeter should show ZERO resistance (continuity). If not, the rapid advance timer is bad and needs replacing.

REPLACEMENT



Step 14 Using a screwdriver or nutdriver, insert the screws through the bracket into the new rapid advance timer and tighten.

PORTABLE MODELS • Using a screwdriver or nutdriver, insert the screws through the coverplate or bracket into the new rapid advance timer and tighten.

Step 15 STANDARD FRAME RAPID ADVANCE TIMERS. Reconnect the wires to the proper terminals as previously marked.

OR

FOR QUICK-DISCONNECT RAPID ADVANCE TIMERS. Replace the colored block(s) by snapping it in the proper end marked BLACK or WHITE on the rapid advance timer.

Step 16 Reconnect any timer motor wires to the proper harness wires or terminals as previously marked.

Step 17 Replace the access panel/toe panel.

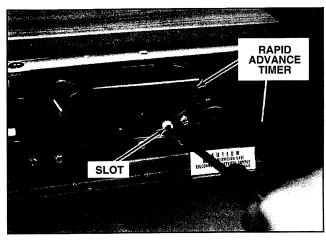
PORTABLE MODELS • Replace the access panel and coverplate.

Step 18 Reconnect power or plug in dishwasher.

TYPE B

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the end caps, if used.

Step 3 Remove the console escutcheon.



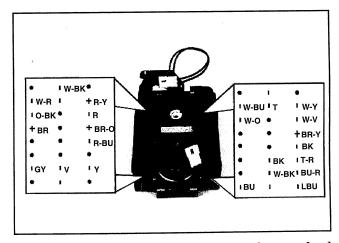
Step 4 Using a screwdriver, place it in the slot on the shaft of the rapid advance timer and turn it to the cycle you suspect is bad.

TESTING

Step 5 STANDARD FRAME RAPID ADVANCE TIMERS. Remove one wire at a time, carefully labeling each wire according to the terminal marking on the rapid advance timer. This procedure should assure that the right wire is reconnected to the right terminal.

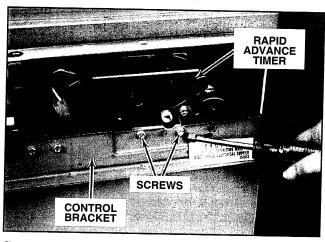
OR

FOR QUICK-DISCONNECT RAPID ADVANCE TIMERS. Remove both the white and black disconnect blocks. Some models only have the one (black) disconnect block. The blocks have tabs on each end which must be pressed while pulling on the block.



Instead of coding timer terminals like the standard frame rapid advance timers, a chart of each wiring block is printed on the back of the rapid advance timer. The line through the chart separates the two blocks. Letters indicate active terminals while the black dots identify blank terminals.

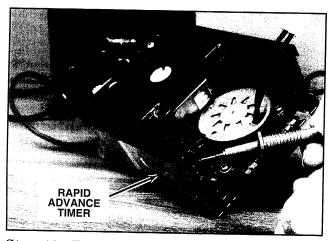
Step 6 Disconnect any timer motor wires, marking them as to where they were located.



Step 7 Using a nutdriver or socket wrench, remove the screws which hold the rapid advance timer to the control bracket.

Step 8 Carefully remove the rapid advance timer out of the console area.

Step 9 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 10 Touch and hold one ohmmeter probe to the terminal specified for this function.

Step 11 Touch the other ohmmeter probe to the other terminal specified for this function.

Step 12 The ohmmeter should show ZERO resistance (continuity). If not, the rapid advance timer is bad and needs replacing.

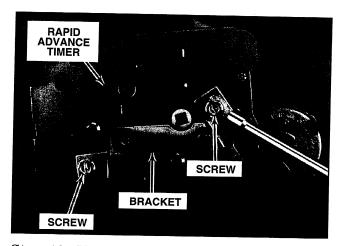
OR

 $\begin{tabular}{ll} \bf Step \ 13 & Touch and hold one ohmmeter probe to the \\ terminal \ BR. \end{tabular}$

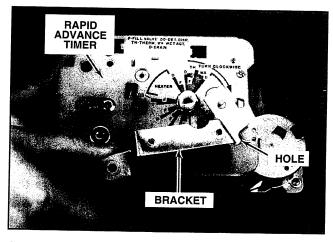
Step 14 Touch the other ohmmeter probe to the terminal W-BK.

Step 15 The ohmmeter should show ZERO resistance (continuity). If not, the rapid advance timer is bad and needs replacing.

REPLACEMENT

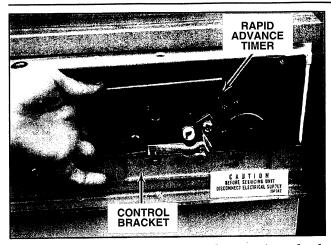


Step 16 Using a nutdriver or screwdriver, remove the screws which hold the bracket (if used) to the rapid advance timer.

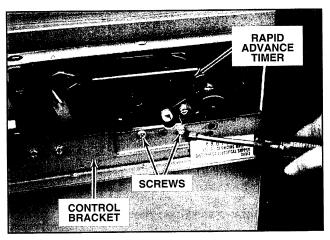


Step 17 Place the new bracket (if used), with the slot in the bracket, in the hole of the rapid advance timer.

Step 18 Using a nutdriver or screwdriver, insert the screws through the new bracket into the new rapid advance timer and tighten.



Step 19 Place the new rapid advance timer back into the console area.



Step 20 Using a nutdriver or socket wrench, insert the screws through the control bracket into the rapid advance timer and tighten.

Step 21 STANDARD FRAME RAPID ADVANCE TIMERS. Reconnect the wires to the proper terminals as previously marked.

OR

FOR QUICK-DISCONNECT RAPID ADVANCE TIMERS. Replace the colored block(s) by snapping in the proper end marked BLACK or WHITE on the rapid advance timer.

Step 22 Reconnect any timer motor wires to the proper harness wires or terminals as previously marked.

Step 23 Replace the console escutcheon.

Step 24 Replace the end caps, if used.

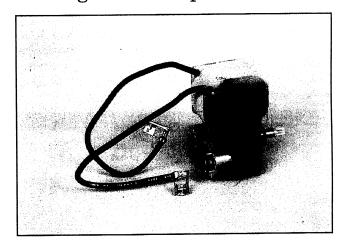
Step 25 Reconnect power or plug in dishwasher.

PROCEDURE 20



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

Motor for Rapid Advance Timer Testing and/or Replacement



This part is located on the rapid advance timer and is used to advance the timer to the proper start-up cycle.

There are two areas in which the rapid advance timer could be located on porcelain liner models (1986 and older): either behind the access panel/toe panel on Built-In Models, behind the access panel and coverplate on Portable Models, or in the console area for both types of dishwashers.

NOTE: We recommend looking at the bottom first.

OHMMETER REQUIRED

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the rapid advance timer.

TESTING

Step 3 Disconnect the two wires coming from the motor to the rapid advance timer, marking them as to what terminals they were on.

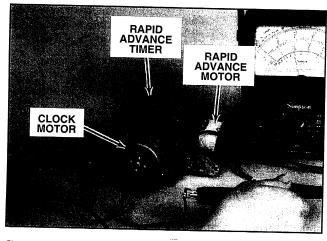
OR

Using your fingers, press the tab on the connectors while pulling them apart.

Step 4 If you have two wires with separate terminals coming out of the motor, then refer to the instructions that came with your ohmmeter to find the proper scale to measure 30 to 60 ohms. Set the ohms scale and ZERO the meter.

OR

If you have two wires going to a plastic connector from the motor, then refer to the instructions that came with your ohmmeter to find the proper scale to measure 1,500 to 2,500 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one ohmmeter probe to one of the timer motor wire terminals (either separate or in the connector).

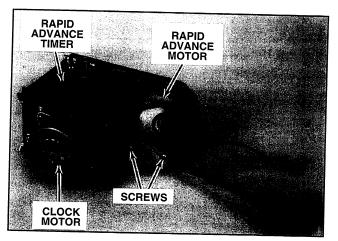
Step 6 Touch the other ohmmeter probe to the other timer motor wire terminal (either separate or in the connector).

Step 7 If you have the two separate wires, the ohmmeter should show a reading between 30 to 50 ohms. If not, the timer motor is bad and needs replacing.

OR

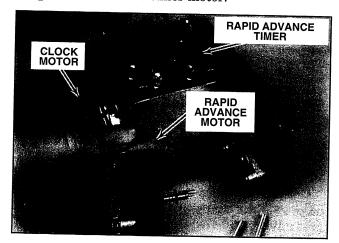
If you have the plastic connector, the ohmmeter should show a reading between 1,500 to 2,500 ohms. If not, the timer motor is bad and needs replacing.

REPLACEMENT



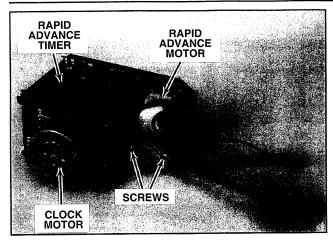
Step 8 Using a screwdriver, remove the two screws which hold the motor to the rapid advance timer.

Step 9 Remove the timer motor.



 $\begin{tabular}{ll} \bf Step \ 10 & Place the timer motor on the rapid advance \\ timer. \end{tabular}$

NOTE: Be sure the gears mesh together. You may have to rock the motor back and forth.



Step 11 Using a small screwdriver, insert the two screws through the motor into the rapid advance timer and tighten.

Step 12 Reconnect the wires to the proper terminals as previously marked.

OR

Push the two connectors together.

Step 13 Replace the rapid advance timer.

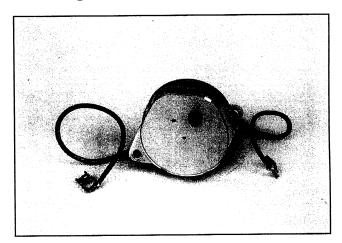
Step 14 Reconnect power or plug in dishwasher.

PROCEDURE 21



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

Clock Motor for Rapid Advance Timer Testing and/or Replacement



This part is located on the rapid advance timer and is used to advance the timer through the cycles.

There are two areas in which the rapid advance timer could be located on porcelain liner models (1986 and older): either behind the access panel/toe panel on Built-In Models, behind the access panel and coverplate on Portable Models, or in the console area for both types of dishwashers.

NOTE: We recommend looking at the bottom first.

OHMMETER REQUIRED

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the rapid advance timer.

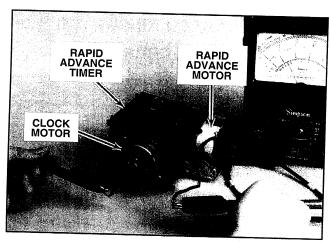
TESTING

Step 3 Disconnect the two wires coming from the motor to the rapid advance timer, marking them as to what terminals they were on.

OR

Using your fingers, press the tab on the connectors while pulling them apart.

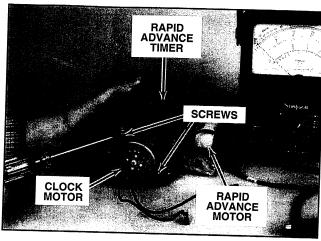
Step 4 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 2,000 to 3,000 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one ohmmeter probe to one of the timer motor wire terminals (either separate or in the connector).

- **Step 6** Touch the other ohmmeter probe to the other timer motor wire terminal (either separate or in the connector).
- **Step 7** If you have either the separate wires or the connector, the ohmmeter should show between 2,000 to 3,000 ohms. If not, the timer motor is bad and needs replacing.

REPLACEMENT



Step 8 Using a screwdriver, remove the two screws which hold the motor to the rapid advance timer.

- Step 9 Remove the timer clock motor.
- **Step 10** Place the timer clock motor on the rapid advance timer.

NOTE: Be sure the gears mesh together. You may have to rock the motor back and forth.

Step 11 Using a small screwdriver, insert the two screws through the motor into the rapid advance timer and tighten.

Step 12 Reconnect the wires to the proper terminals as previously marked.

OR

Push the two connectors together.

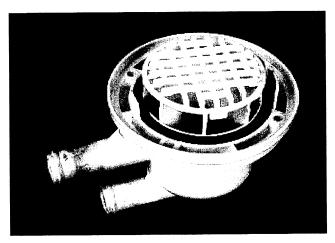
- Step 13 Replace the rapid advance timer.
- Step 14 Reconnect power or plug in dishwasher.

AWARNING



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

Soil Settler (Collector) Replacement



This part is located in the rear behind the access panel/toe panel or shroud on plastic liner models (1986 and newer). Its function is to collect all the soil from the dishes during Wash and Rinse, then flush it out during the drain cycle.

See page 280, illus. nos. 16-20 for location of parts.

Step 1 Disconnect power or unplug dishwasher.

AWARNING



Tip Over Hazard

Do not use dishwasher until completely installed.

Do not push down on open door. Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

Excessive Weight Hazard

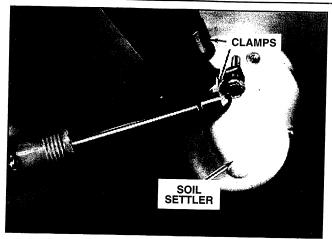
Use two or more people to move and install dishwasher.

Failure to do so can result in back or other injury.

PORTABLE MODELS • Be sure the hose coupling and power cord are in the housings.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

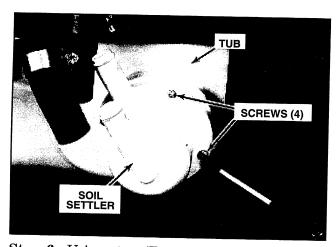
Step 3 Lay the dishwasher on its back.



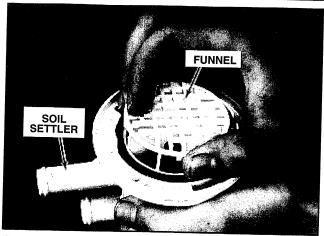
Step 4 Using a screwdriver or nutdriver, remove the clamps from both ports on the soil settler.

NOTE: Care should be taken when removing hoses as they may have water in them.

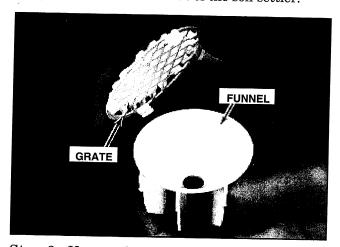
Step 5 Pull both hoses off the ports on the soil settler.



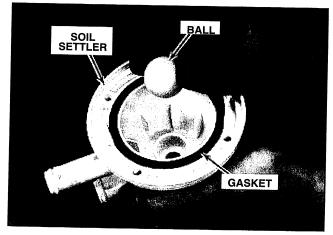
Step 6 Using a torx (T20) screwdriver, remove the four screws which hold the soil settler to the bottom of the tub.



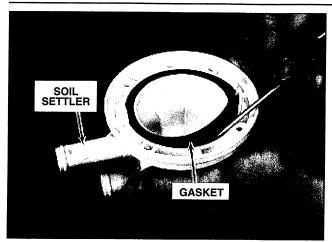
Step 7 Pull the funnel out of the soil settler.



Step 8 Unsnap the funnel grate off of the funnel.



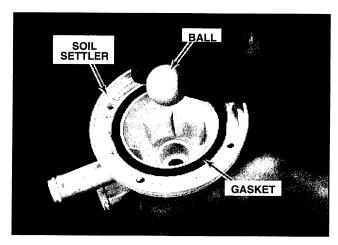
Step 9 Remove the ball.



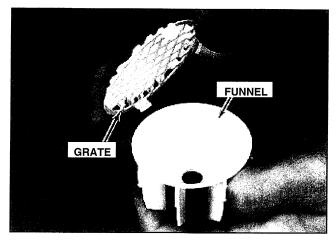
Step 10 Insert a small screwdriver and remove the rubber gasket out of the groove in the soil settler.

REPLACEMENT

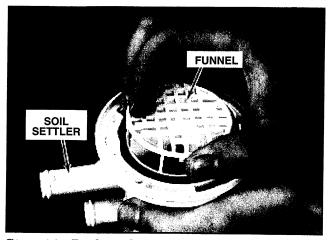
Step 11 Replace the rubber gasket in the groove in the soil settler.



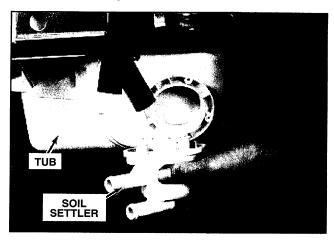
Step 12 Replace the ball.



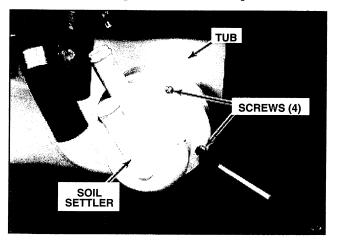
Step 13 Replace the grate on the funnel by snapping it on.



Step 14 Replace the grate and funnel in the soil settler by pushing it on.

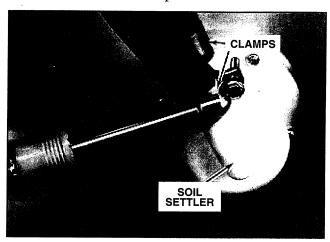


Step 15 Replace the soil settler in the back of the tub with the two ports facing the front left corner. You may have to line up the holes until it pushes on.



Step 16 Using a torx (T20) screwdriver, insert the four screws through the soil settler into the bottom of the tub and tighten.

Step 17 Slide the hoses onto the ports on the soil settler and slide the clamps on.



Step 18 Using a screwdriver or nutdriver, tighten both hose clamps on the soil settler.

Step 19 Stand the dishwasher up.

Step 20 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 21 Reconnect power or plug in dishwasher.

NOTES

_
_

NOTES

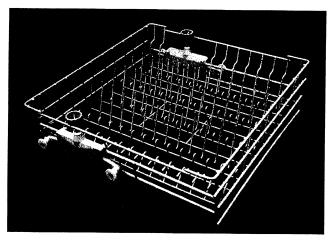
·

SECTION M

Dishracks and Related Parts

PROCEDURE 1

Upper Dishrack Replacement



This part is located on the top, inside the tub, and is used to hold dishes for cleaning.

See page 275, illus. no. 3 for location of part.

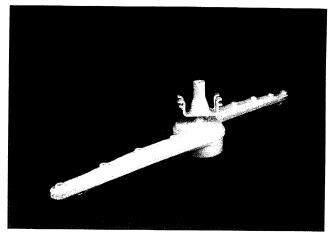
- **Step 1** Open the door.
- **Step 2** Remove the front end caps from both side tracks.
- **Step 3** Roll the upper dishrack out of the tracks.
- Step 4 Remove the upper spray arm.

REPLACEMENT

- **Step 5** Replace the upper spray arm on the new dishrack.
- Step 6 Roll the dishrack back in the tracks.
- Step 7 Replace the end caps on both side tracks.
- **Step 8** Close the door.

PROCEDURE 2

Upper Spray Arm Replacement

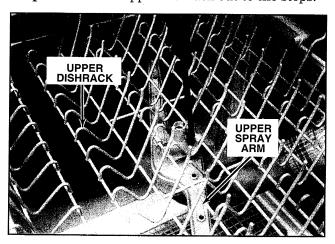


This part is located on the bottom of the upper dishrack and is used to spray water onto the dishes.

See page 275, illus. no. 9 for location of part.

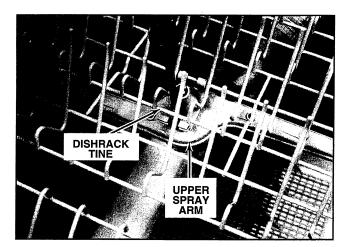
Step 1 Open the door and roll the lower dishrack out of the dishwasher.

Step 2 Pull the upper dishrack out to the stops.



Step 3 Using a screwdriver, pry the base of the upper spray arm off the tines of the upper dishrack.

REPLACEMENT



Step 4 Place the new upper spray arm up under the upper dishrack, and in the middle.

Step 5 Place one side of the base on the tines of the dishrack.

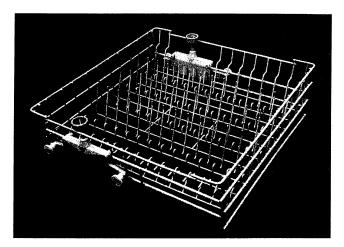
Step 6 Using a screwdriver, place it between the spray arm base and upper dishrack and push the spray arm up until it snaps onto the tines of the dishrack.

Step 7 Push the upper dishrack back into the dishwasher.

Step 8 Roll the lower dishrack back into the dishwasher and close the door.

PROCEDURE 3

Upper Dishrack Wheel and Parts Replacement



This part is located on each side of the upper dishrack and rides on the upper tracks when the dishrack is pulled out or pushed in.

See page 275, illus. nos. 1 and 4-6 for location of parts.

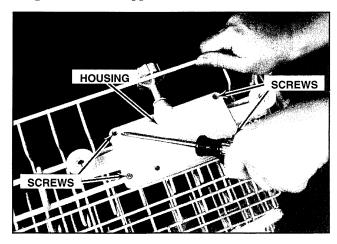
See Type A for the wheels held together with screws, or see Type B for the wheels that snap on.

TYPE A

Step 1 Open the door.

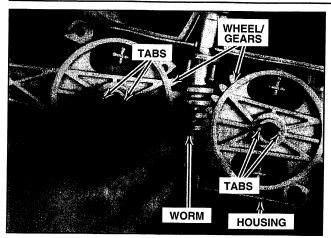
Step 2 Remove the front end caps from both side tracks.

Step 3 Roll the upper dishrack out of the tracks.



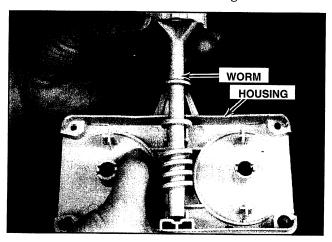
Step 4 Using a screwdriver, remove the screws which hold the housings together.

Step 5 Carefully pull the housings apart.



Step 6 Using your fingers, press the tabs together in the middle of one of the wheel/gears and lift off.

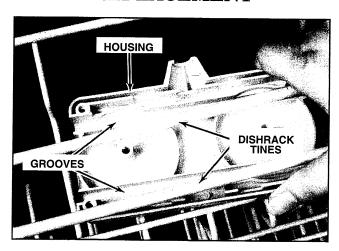
Step 7 Do this to the other wheel/gear.



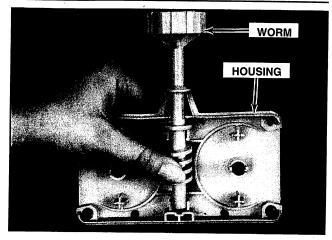
Step 8 Snap the worm out of the gear housing.

Step 9 Remove the housing cover from the dishrack.

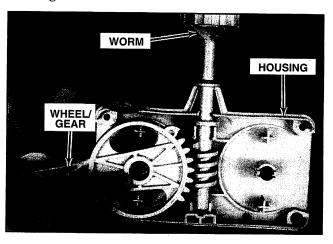
REPLACEMENT



Step 10 Place the housing cover with the grooves in the opening on the dishrack tines.



Step 11 Push the worm until it snaps into the gear housing.

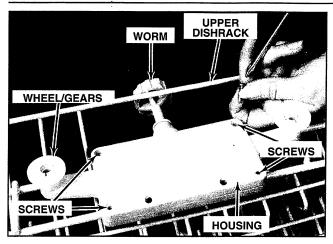


Step 12 Push one of the wheel/gears until it snaps onto the round tab of the gear housing.

Step 13 Push the other wheel/gear until it snaps onto the other round tab of the gear housing.

NOTE: Make sure both wheel/gears are in the same location and the gears fit correctly.

Step 14 Place the gear housing, worm, and wheels on the housing cover.



Step 15 Using a screwdriver, insert the screws into the housing and tighten.

Step 16 Roll the upper dishrack back in the tracks.

Step 17 Replace the front end caps on both side tracks.

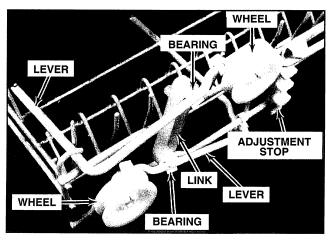
Step 18 Close the door.

TYPE B

Step 1 Open the door.

Step 2 Remove the front end caps from both side tracks.

Step 3 Roll the upper dishrack out of the tracks.



Step 4 Using a screwdriver, pry or use your fingers to unsnap the wheels, levers, links, and stops.

REPLACEMENT

Step 5 Snap these new parts together on the upper dishrack.

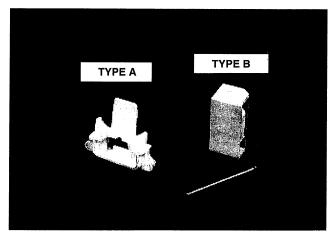
Step 6 Roll the upper dishrack back in the tracks.

Step 7 Replace the front end caps on both side tracks.

Step 8 Close the door.

PROCEDURE 4

End Cap (Upper Track) Replacement



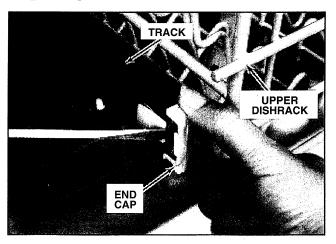
This part is located on each end of both upper tracks. It stops the upper dishrack from falling off the tracks when pulled out or pushed in.

See page 270, illus. nos. 52 and 58 for location of parts.

See Type A for the snap-out plastic end cap, or see Type B for the rubber end cap held on with a rivet.

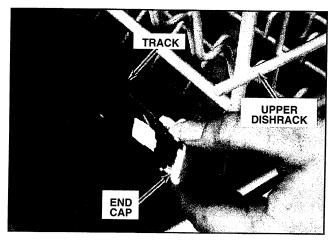
TYPE A

Step 1 Open the door.



Step 2 Insert a small screwdriver in the slot between the cap and track and pry toward the outside while pulling and rocking at the same time.

REPLACEMENT



Step 3 Place the end cap (from the inside) through the square hole in the track.

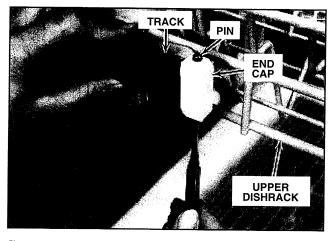
Step 4 Push toward the outside and back until the end cap snaps into place.

NOTE: The end of the track must be inside the tab on the end cap.

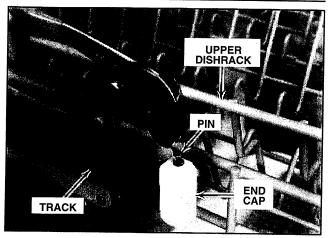
Step 5 Close the door.

TYPE B

Step 1 Open the door.



 $\begin{tabular}{ll} \bf Step \ 2 & Using a punch, push the pin from the bottom \\ upward. \end{tabular}$

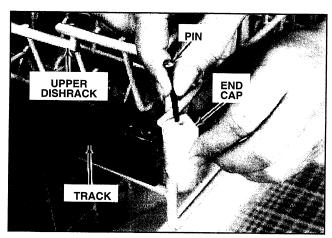


Step 3 Using adjustable pliers, pull the pin out of the cap.

Step 4 Pull the end cap off the track.

REPLACEMENT

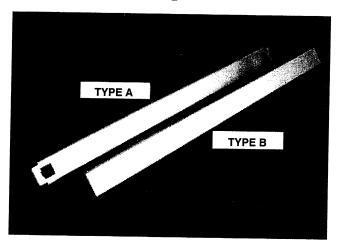
 $\begin{tabular}{ll} \bf Step \ 5 & Place the end cap on the end of the track and \\ push on. \end{tabular}$



Step 6 Push the pin through the end cap and into the track. Be sure the pin is all the way down.

Step 7 Close the door.

Upper Track Replacement



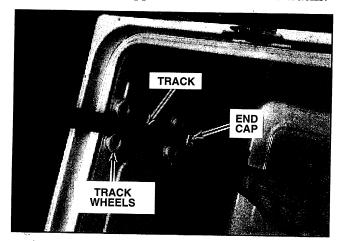
This part is located on each side, on the inside of the tub, and holds the upper dishrack.

See page 270, illus. no. 51 for location of part.

See Type A for the track which uses plastic end caps, or see Type B for the track which uses rubber end caps.

TYPE A

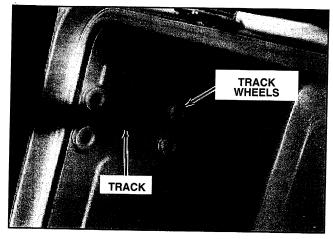
- Step 1 Open the door.
- **Step 2** Remove the front end caps from both side tracks.
- Step 3 Roll the upper dishrack out of the tracks.



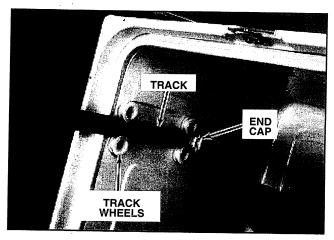
Step 4 Insert a small screwdriver in the slot between the cap and track and pry toward the outside while pulling and rocking at the same time.

Step 5 Pull the track out of the track wheels.

REPLACEMENT



Step 6 Slide the track through the middle of the track wheels.



Step 7 Place the rear end caps (from the inside) through the square hole in the track.

Step 8 Push toward the outside and toward you until the rear end cap snaps into place.

NOTE: The end of the track must be inside the tab on the rear end cap.

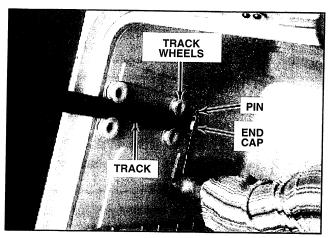
- Step 9 Roll the upper dishrack back in the tracks.
- **Step 10** Replace the front end caps on both side tracks.
- **Step 11** Close the door.

TYPE B

Step 1 Open the door.

Step 2 Remove the front end caps from both side tracks.

Step 3 Roll the upper dishrack out of the tracks.



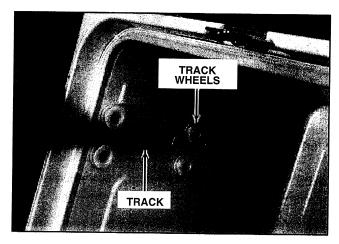
Step 4 Using a punch, push the pin from the bottom upward and out the rear end cap.

Step 5 Using adjustable pliers, pull the pin out of the rear end cap.

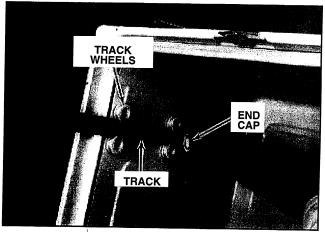
Step 6 Push the rear end cap off the track.

Step 7 Pull the track out of the track wheels.

REPLACEMENT



Step 8 Slide the track through the middle of the track wheels.



Step 9 Place the rear end cap on the end of the track and push on.

Step 10 Push the pin through the rear end cap and into the track.

NOTE: Be sure the pin is all the way down.

Step 11 Roll the upper dishrack back in the tracks.

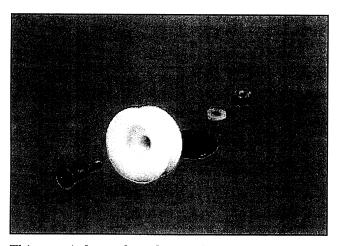
Step 12 Replace the front end caps on both side tracks.

Step 13 Close the door.

AWARNING

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

Upper Track Wheel Replacement



This part is located on the inside of the tub (four on each side). The upper dishrack and track roll in and out on these wheels.

See page 270, illus. nos. 34 and 35, and 47-50 for location of parts.

See Type A for Built-In Models or Type B for Portable Models using a porcelain liner (1986 and older), or see Type C for models using a plastic liner (1986 and newer).

TYPE A

Step 1 Disconnect power or unplug dishwasher.



Tip Over Hazard

Do not use dishwasher until completely installed.

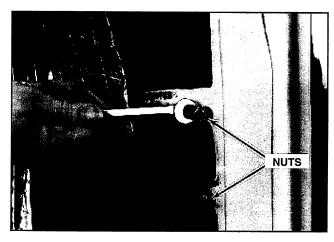
Do not push down on open door. Doing so can result in serious injury or cuts.

Step 2 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

Step 3 Open the door.

Step 4 Remove the front end caps from both side tracks.

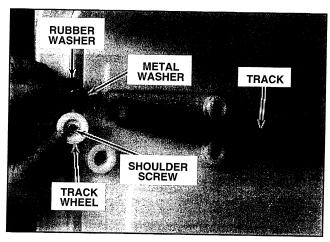
Step 5 Roll the upper dishrack out of the tracks.



Step 6 Using a screwdriver and a wrench or vice grips, remove the shoulder screw and nut.

NOTE: Be careful not to drop the plastic washer or nut located on the outside of the tub.

REPLACEMENT



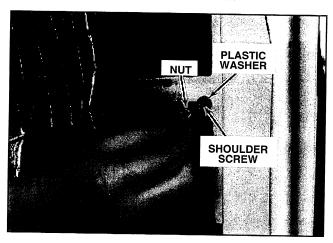
Step 7 Place the shoulder screw through the large hole in the wheel.

Step 8 Place the metal washer on the shoulder screw with the raised side toward the wheel.

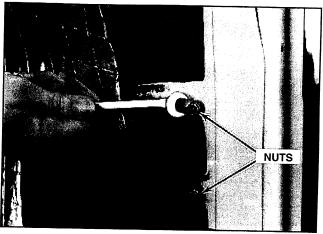
Step 9 Place the rubber washer on the shoulder screw.

Step 10 Place the shoulder screw in the hole in the tub. Be sure the track is on the new wheel.

NOTE: Be careful not to drop the plastic washer or nut located on the outside of the tub.



Step 11 Place the plastic washer on the shoulder screw from outside the tub.



Step 12 Using a screwdriver and a wrench or vice grips, place the nut on the shoulder screw and tighten.

Step 13 Roll the upper dishrack back into the tracks.

Step 14 Replace the end caps on both side tracks.

Step 15 Close the door.

Step 16 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 17 Reconnect power or plug in dishwasher.

TYPE B

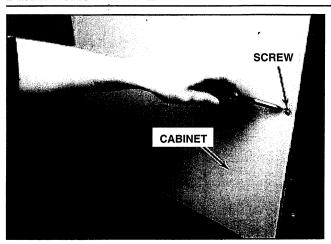
Step 1 Unplug dishwasher or disconnect power.

Step 2 Open the door.

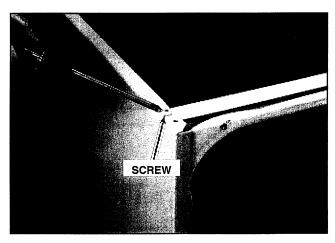
Step 3 Remove the front end caps from both side tracks.

Step 4 Roll the upper dishrack out of the tracks.

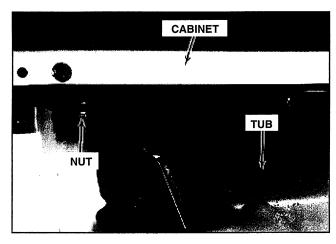
Step 5 Remove the top.



Step 6 Using a screwdriver, remove the screws in the middle front and top front corner which hold the cabinet to the frame.



Step 7 Using a screwdriver, remove the screw on the top of the cabinet.

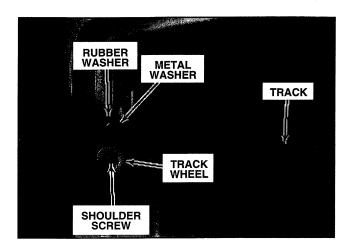


Step 8 Reach in between the tub and cabinet with a wrench or vice grips and hold the nut.

NOTE: Be careful not to drop the plastic washer or nut between the tub and cabinet.

Step 9 Using a screwdriver, remove the shoulder screw from inside the tub.

REPLACEMENT



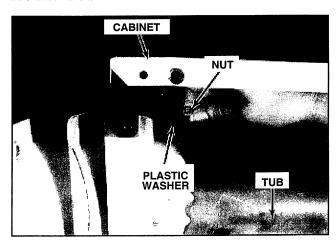
Step 10 Place the shoulder screw through the large hole in the wheel.

Step 11 Place the metal washer on the shoulder screw with the raised side toward the wheel.

Step 12 Place the rubber washer on the shoulder screw.

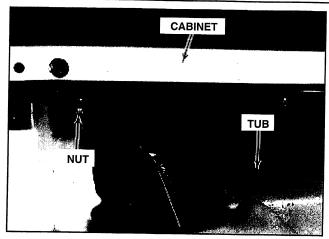
Step 13 Place the shoulder screw in the hole in the tub.

NOTE: Be sure the track is on the wheel.

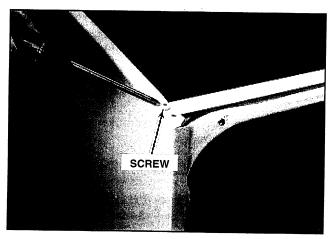


Step 14 Reach in between the tub and cabinet and place the plastic washer on the shoulder screw.

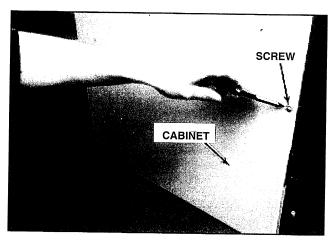
NOTE: Be careful not to drop the plastic washer or nut between the tub and cabinet.



Step 15 Using a screwdriver and a wrench or vice grips, reach in between the tub and cabinet, place the nut on the shoulder screw, and tighten.



Step 16 Using a screwdriver, replace the screw on the top of the cabinet and tighten.

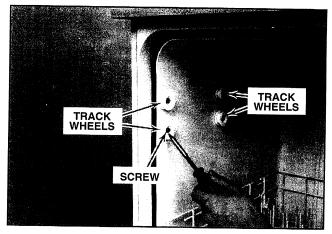


Step 17 Using a screwdriver, replace the screws in the middle front and top front corner which hold the cabinet to the frame.

- Step 18 Replace the top.
- **Step 19** Replace the front end caps on both side tracks.
- ${f Step~20}$ Roll the upper dishrack back into the tracks.
- Step 21 Close the door
- Step 22 Plug in dishwasher or reconnect power.

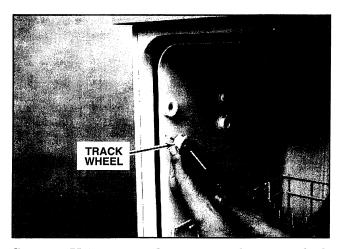
TYPE C

- Step 1 Open the door
- **Step 2** Remove the front end caps from both side tracks.
- **Step 3** Roll the upper dishrack out of the tracks.
- Step 4 Remove the rear end cap.
- **Step 5** Pull the track out of the track wheels.



Step 6 Using a screwdriver, remove the screw which holds the track wheel to the side of the tub.

RÉPLACEMENT



Step 7 Using a screwdriver, insert the screw which holds the track wheel to the side of the tub and tighten.

Step 8 Slide the track through the middle of the track wheels.

Step 9 Replace the rear end cap.

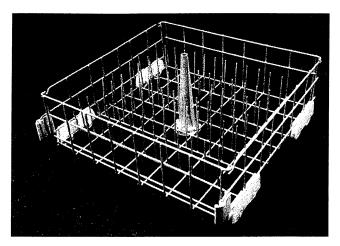
Step 10 Roll the upper dishrack back into the tracks.

Step 11 Replace the front end caps on both side tracks.

Step 12 Close the door.

PROCEDURE 7

Lower Dishrack Replacement



This lower rack is located on the bottom, inside the tub and is used for placing dishes into the dishwasher for cleaning.

See page 275, illus. no. 12 for location of part.

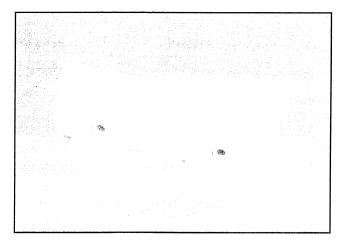
Step 1 Open the door and roll the lower dishrack out of the dishwasher.

REPLACEMENT

Step 2 Place the lower dishrack on the door with the rubber bumpers toward the front.

Step 3 Roll the lower dishrack back into the dishwasher and close the door.

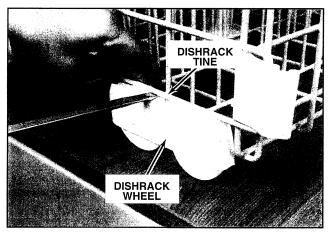
Lower Dishrack Wheel Replacement



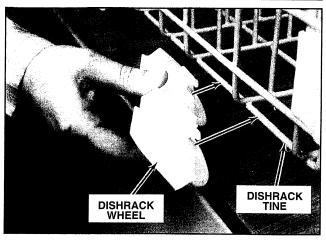
This wheel is located in each of the four corners on the side of the lower dishrack and is used for rolling the lower dishrack in and out of the dishwasher.

See page 275, illus. no. 2 for location of part.

Step 1 Open the door and roll the lower dishrack out of the dishwasher.



Step 2 Using a screwdriver, pry the top of the wheel off the tine of the dishrack.

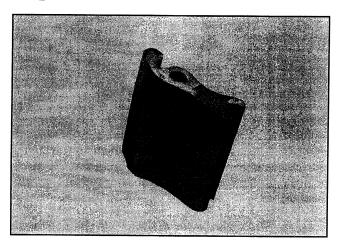


Step 3 Place the bottom of the wheel on the tine of the lower dishrack and push the top in until it snaps into place. The wheels will be slanted out at the bottom.

Step 4 Place the lower dishrack on the door with the rubber bumpers toward the front.

Step 5 Roll the lower dishrack back into the dishwasher and close the door.

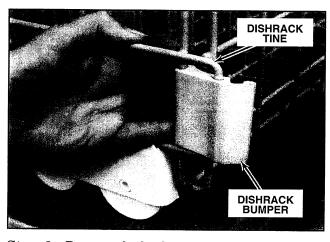
Lower Dishrack Bumper Replacement



This bumper is located on each side in the front of the lower dishrack. When the door is shut the bumpers keep the dishrack from moving.

See page 275, illus. no. 14 for location of part.

Step 1 Open the door and roll the lower dishrack out of the dishwasher.

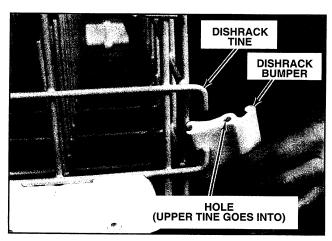


Step 2 Remove the back portion of the bumper by pushing the bumper slot out of the tine on the dishrack.



Step 3 Press in the middle of the bumper and push or pull the top part of the bumper out of the tine on the dishrack.

REPLACEMENT



Step 4 Place the hole of the bumper in the bottom tine.

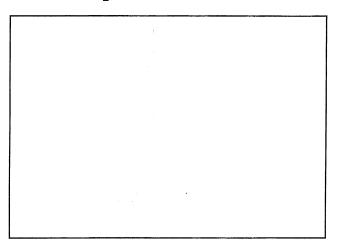
Step 5 Press in the middle of the bumper and slide the top hole in the top tine.

Step 6 Push the back portion of the bumper slot on the tine.

Step 7 Place the lower dishrack on the door with the rubber bumpers toward the front.

Step 8 Roll the lower dishrack back into the dishwasher and close the door.

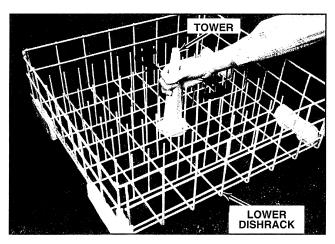
Tower Replacement



This part is located on the lower dishrack. It keeps water in a jet-like stream so the water will be forced up into the upper spray arm.

See page 275, illus. no. 15 for location of part.

Step 1 Open the door and roll the lower dishrack out of the dishwasher.

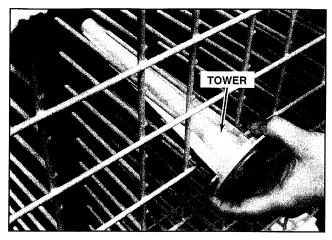


Step 2 Turn the tower counterclockwise and remove it from the bottom of the lower dishrack.

OR

Pull the tower off the top tines of the lower dishrack.

REPLACEMENT



Step 3 Place the tower up under the lower dishrack and in the middle.

Step 4 Turn the tower clockwise, locking the tower to the lower dishrack.

OR

Press or tap with a hammer the tower on the middle tines of the lower dishrack.

Step 5 Roll the lower dishrack back into the dishwasher and close the door.

NOTES

·

SECTION N

Pump and Motor Area

PROCEDURE 1



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

Access to Pump and Motor Parts

The pump and motor is located in the middle of the tub under the lower dishrack. The pump is driven by the drive motor.

See pages 272, 274, or 280 for location of parts.

See Type A for models using a vertical mounted pump and motor. One impeller spins in one direction for wash, then the drive motor reverses direction, causing the other impeller to spin in the other direction during pump out.

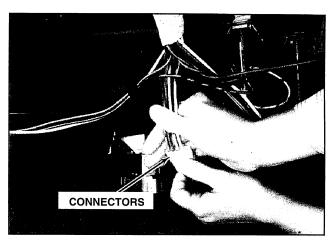
See Type B for plastic liner models (1986 and newer), using a horizontal mounted pump and motor. The drive motor and impeller spins in one direction for wash, then the drive motor reverses direction, causing the impeller to spin in the other direction during pump out.

TYPE A

Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the access panel/toe panel.

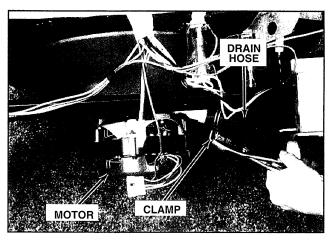
PORTABLE MODELS • Remove the access panel and coverplate (or shroud).



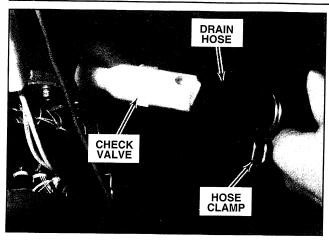
Step 3 Using your fingers, press the tabs of the connectors, one from the motor and one from the wiring harness, and pull apart.

Step 4 Pull the green ground wire (if used) off the terminal on the motor.

NOTE: Care should be taken when removing hoses, as they may have water in them.



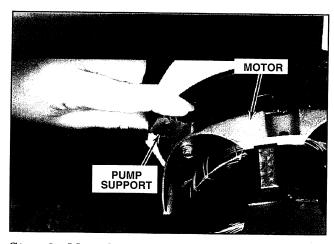
Step 5 Using adjustable pliers, slide the clamp on the drain hose off the check valve.



Step 6 Pull the drain hose off the check valve.

Step 7 Using adjustable pliers, remove the check valve from the side of the pump.

NOTE: There should be a round rubber "O" ring on the check valve when it's removed from the pump. If not, it could be stuck in the hole in the pump. It will have to be removed and put on the check valve.



Step 8 Move the rubber pump supports toward the middle.

Step 9 Open the door and roll the lower dishrack out of the dishwasher.

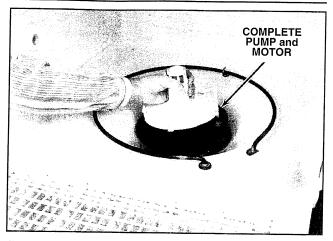
Step 10 Remove the nozzle cap and bearing.

Step 11 Remove the lower spray arm.

Step 12 Remove the sump guard, if used.

Step 13 Remove the sump screen, if used.

Step 14 Remove the grate, if used.

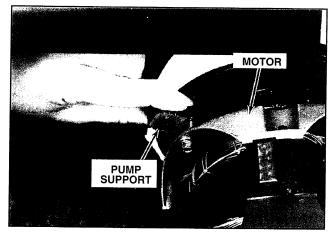


Step 15 Pull the pump and motor out of the tub.

REPLACEMENT

Step 16 Replace the pump and motor back into the tub.

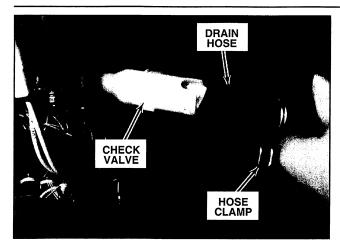
NOTE: Use water with a little liquid detergent to lubricate the pump gasket before installing the complete pump and motor in the dishwasher. Wipe the detergent all around the gasket.



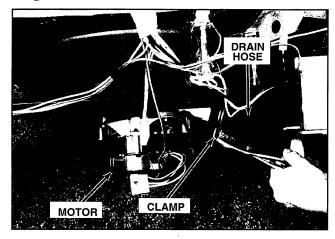
Step 17 Slide the rubber pump supports toward the outside to lock the pump and motor in place.

NOTE: Make sure the round rubber "O" ring is on the check valve.

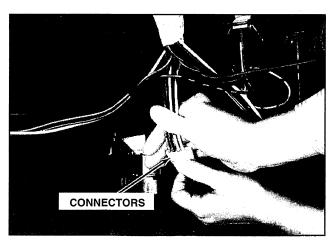
Step 18 Using an open-end wrench or vice grips, insert the check valve into the side of the pump and tighten.



Step 19 Push the drain hose on the check valve.



Step 20 Using adjustable pliers, slide the clamp on the drain hose over the check valve.



Step 21 Press the two connectors (one from the motor and one from the harness) together.



Electrical Shock Hazard
Reconnect all ground wires.
Do not pinch any wires.
Failure to follow these instructions can result in death or electrical shock.

Step 22 Push the green ground wire (if used) on the terminal on the new motor.

Step 23 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the access panel and coverplate (or shroud).

Step 24 Open the door.

Step 25 Replace the sump screen, if used.

Step 26 Replace the sump guard, if used.

Step 27 Replace the grate, if used.

Step 28 Replace the lower spray arm.

Step 29 Replace the nozzle cap and bearing.

Step 30 Roll the lower dishrack back into the dishwasher and close the door.

Step 31 Reconnect power or plug in dishwasher.

Step 32 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

- Step 1 Disconnect power or unplug dishwasher.
- Step 2 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the shroud.

- **Step 3** Open the door and roll the lower dishrack out of the dishwasher.
- Step 4 Remove the lower spray arm.
- Step 5 Close the door.



Do not use dishwasher until completely installed.

Do not push down on open door.

Doing so can result in serious injury or cuts.

Step 6 Remove the dishwasher from under the counter. See "Access to Parts for Built-In Models."

NOTE: Care should be taken when laying the dishwasher down or removing hoses, as they may have water in them.

AWARNING

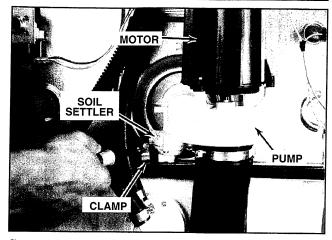
Excessive Weight Hazard

Use two or more people to move and install dishwasher.

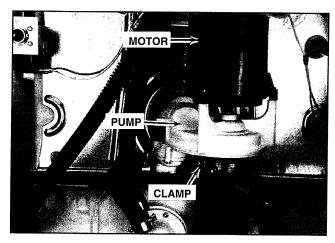
Failure to do so can result in back or other injury.

NOTE: To protect the finish of the cabinet and flooring, lay a pad (rug or blanket) on the floor before laying the dishwasher down.

Step 7 Lay the dishwasher on its back.

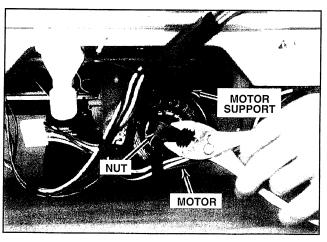


Step 8 Using a screwdriver or nutdriver, loosen the clamp at the pump on the hose going to the soil settler.



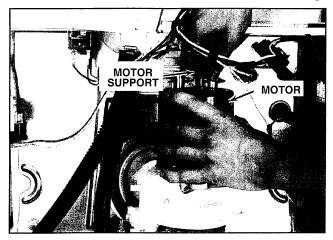
Step 9 Using a screwdriver or nutdriver, loosen the clamp at the pump on the big hose going to the tub.

Step 10 Remove the wire connector from the motor by pressing the tab, and then pulling.

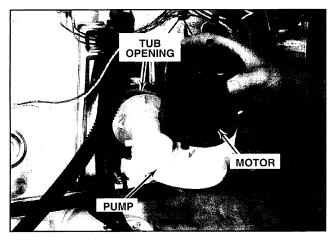


Step 11 Using pliers, slide the nut off the shaft on the motor.

NOTE: Hold onto the drive motor so it does not drop.



Step 12 Slide the motor support off the end of the motor.

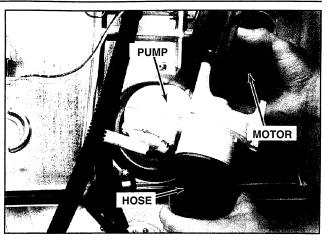


Step 13 Carefully pull the pump and motor out of the hoses and the opening in the bottom of the tub.

REPLACEMENT

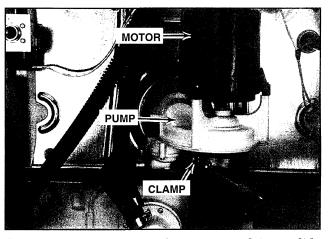
NOTE: It is recommended that the tub gasket be changed anytime the pump is removed.

Step 14 Replace the pump gasket.



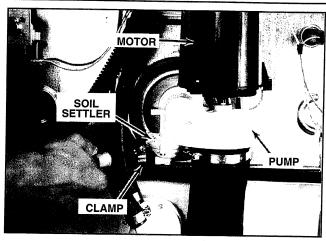
Step 15 Slide the pump and motor inside the large inlet hose, and then push the pump port up through the tub gasket.

Step 16 Slide the motor support over the end of the motor shaft.



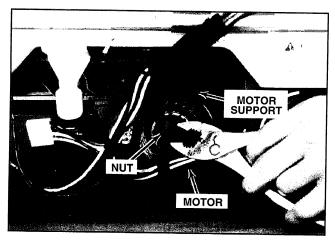
Step 17 Using a screwdriver or nutdriver, slide the large clamp over the port on the pump and tighten.

Step 18 Slide the other hose coming from the soil settler on the side port of the pump housing.



Step 19 Using a screwdriver or nutdriver, slide the clamp over the port on the pump and tighten.

Step 20 Replace the wire connector (harness) onto the motor connector and push on until it snaps into place.



Step 21 Replace the nut on the end of the motor shaft, and then push all the way on.

Step 22 Stand the dishwasher up.

Step 23 Replace the dishwasher under the counter. See REPLACEMENT in "Access to Parts for Built-In Models."

Step 24 Open the door.

Step 25 Replace the lower spray arm.

Step 26 Roll the lower dishrack back into the dishwasher and close the door.

Step 27 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

Step 28 Reconnect power or plug in dishwasher.

Step 29 Turn on the dishwasher and check for leaks on the floor.

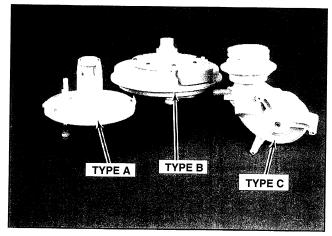
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

PROCEDURE 2



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

Pump and Parts Replacement



This part is located in the middle of the tub under the lower dishrack. This pump is driven by the drive motor.

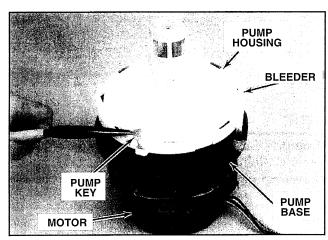
See pages 272, 274, or 281 for location of parts.

See Type A or Type B for models using a vertical mounted pump and motor, or see Type C for plastic liner models (1986 and newer), using a horizontal mounted pump and motor.

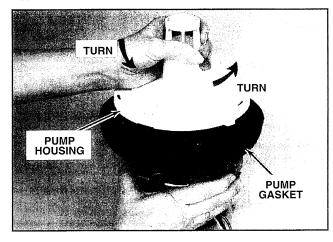
TYPE A

Step 1 Disconnect power or unplug dishwasher.

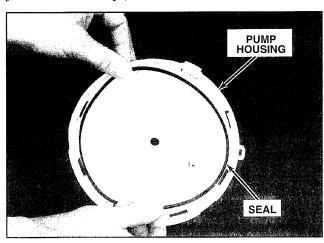
Step 2 Remove the pump and motor out of the tub. See "Access to Pump and Motor Parts."



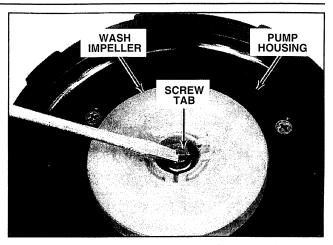
Step 3 Using pliers, pull the pump key out of the upper pump housing.



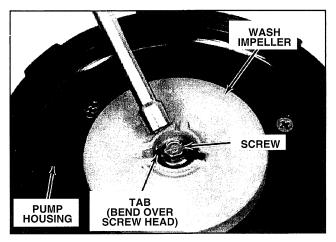
Step 4 Turn the upper pump housing to the left (as you look at the top), then lift to remove.



Step 5 Remove the round seal from inside the upper pump housing.

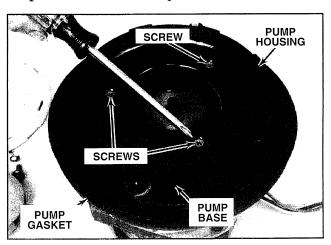


Step 6 Insert a flat-blade screwdriver and pry the tab away from the head of the screw.

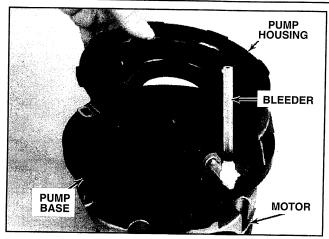


Step 7 Using a nutdriver or socket wrench, hold the wash impeller with one hand while removing the screw.

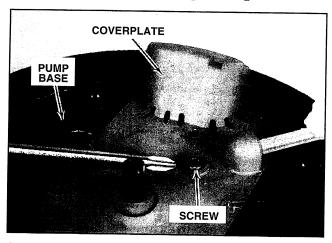
Step 8 Lift the wash impeller off the motor shaft.



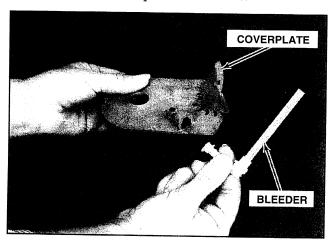
Step 9 Using a screwdriver, remove the three screws which hold the lower pump housing to the base.



 $\textbf{Step 10} \quad \text{Lift the lower pump housing off the base}. \\$



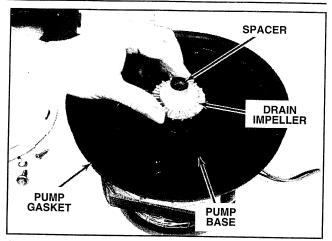
Step 11 Using a screwdriver, remove the screw which holds the coverplate to the base.



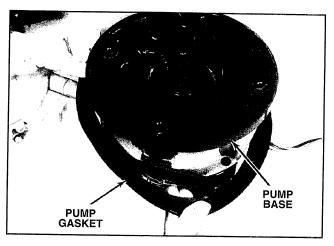
Step 12 Lift the coverplate off the base.

NOTE: The bleeder may fall out of the coverplate. Place it back in the hole in the coverplate.

NOTE: There is a spacer on top of the drain impeller.

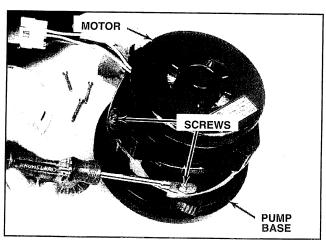


Step 13 Lift the spacer and drain impeller off the motor shaft.



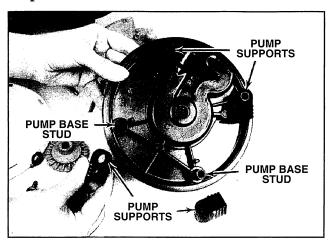
Step 14 Remove the pump gasket by sliding it down to the motor and off.

 $\begin{tabular}{ll} \bf Step \ 15 & Remove the plastic ring from the groove in the old gasket. \end{tabular}$



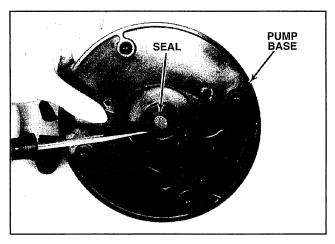
Step 16 Using a nutdriver, remove the screws located under the base which hold the base to the motor.

Step 17 Lift the motor off the base.

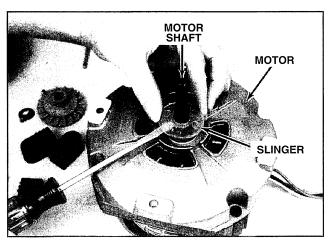


Step 18 Pull the rubber pump supports off the studs on the base.

NOTE: DO NOT damage the seal when removing it, as this will cause water leaks.



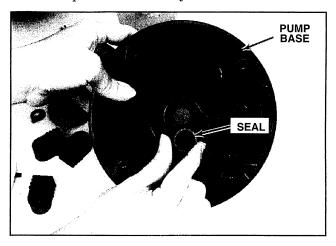
Step 19 Insert a small screwdriver and pry the seal out of the hole in the base.



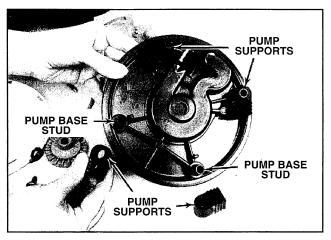
Step 20 Insert a screwdriver and pry the slinger off the motor shaft.

REPLACEMENT

Step 21 Place the new plastic slinger on the motor shaft and push it all the way down.

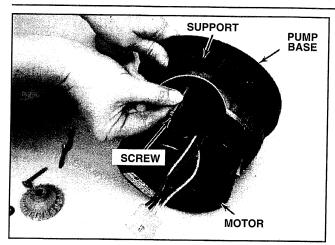


Step 22 Push the new seal into the new base.



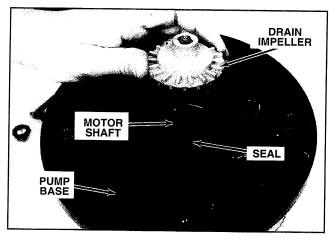
Step 23 Push the new rubber pump supports on the studs on the bottom of the new base.

Step 24 Place the new base on the motor with the opening for the coverplate to the right and the harness connector (wire) from the motor in front.



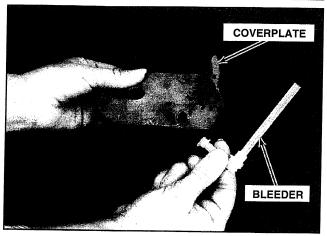
Step 25 Using a nutdriver, insert the screws through the motor, supports, and into the new base and finger tighten only.

Step 26 Center the pump base so the motor shaft is in the center of the hole, then tighten the screws, using a nutdriver.

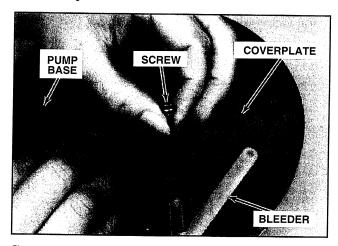


Step 27 Place the new drain impeller (seal down) over the motor shaft and push down.

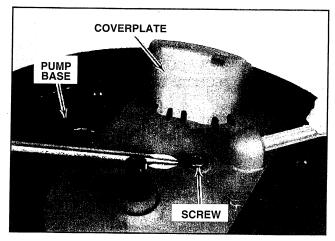
Step 28 Place the new spacer over the motor shaft and push down until it rests on top of the new drain impeller.



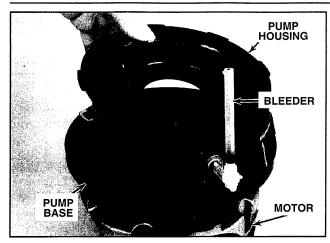
Step 29 Place the new bleeder in the hole of the new coverplate.



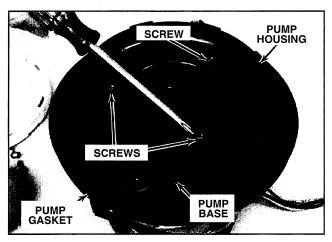
Step 30 Place the new coverplate on top of the new base in the opening.



Step 31 Using a screwdriver, insert the screw through the coverplate into the base, and tighten.



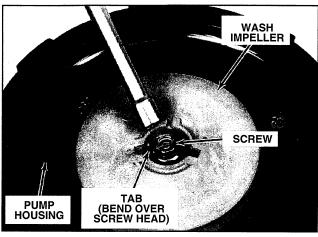
Step 32 Place the new lower pump housing on the base, with the hole on the housing sliding down over the bleeder.



Step 33 Using a screwdriver, insert the three screws through the new lower housing into the base and tighten.

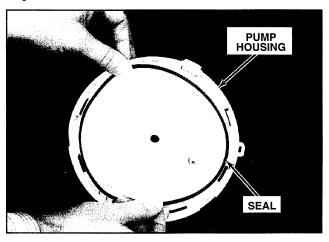
Step 34 Place the new wash impeller on the motor shaft.

NOTE: One end of the locking tab must be placed in the small slot on the wash impeller.



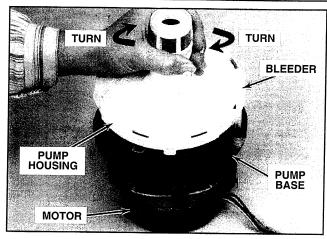
Step 35 Using a nutdriver or socket wrench, insert the screw. Hold the wash impeller with one hand and tighten the screw.

Step 36 Bend the other locking tab over the head of the screw, leaving the other in the slot of the wash impeller.



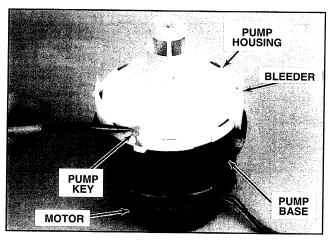
Step 37 Place the new seal on the inside of the new upper pump housing.

Step 38 Place the new upper pump housing with the slot just to the right of the slot on the lower pump housing.

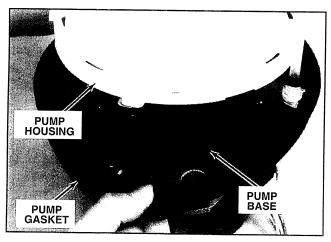


Step 39 Turn the new upper pump housing to the right (as you look at the top) to tighten. The slots in the upper and lower housings must line up.

NOTE: There are locking tabs on both housings which must fit together.



Step 40 Using pliers, press the pump key in the slots on the upper and lower pump housings.



Step 41 Place the plastic ring from the old gasket in the groove of the new gasket.

Step 42 Place the new gasket (fin side down) onto the base.

NOTE: The top lip of the gasket must fit on top of the base.

Step 43 Replace the pump and motor back into the tub. See REPLACEMENT in "Access to Pump and Motor Parts."

Step 44 Reconnect power or plug in dishwasher.

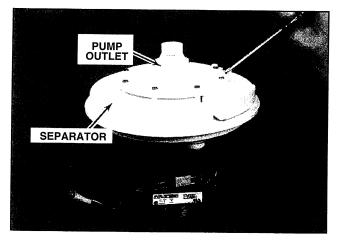
Step 45 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

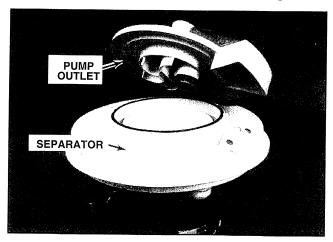
TYPE B

Step 1 Disconnect power or unplug dishwasher.

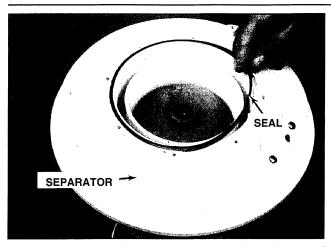
Step 2 Remove the pump and motor out of the tub. See "Access to Pump and Motor Parts."



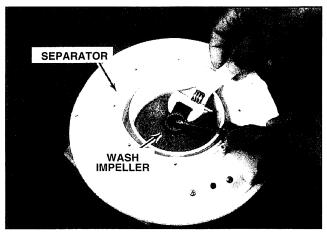
Step 3 Using a Phillips screwdriver, remove the screws which hold the pump outlet to the separator.



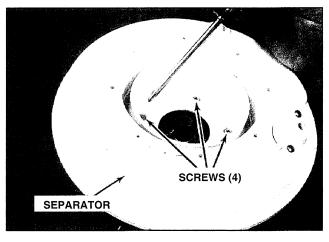
Step 4 Carefully remove the pump outlet.



Step 5 Remove the pump outlet seal from the top of the separator.

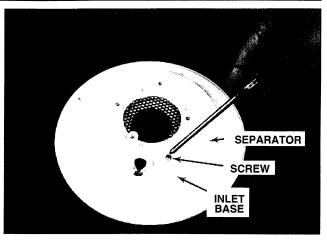


Step 6 Using a nutdriver and adjustable wrench, remove the wash impeller from the separator.

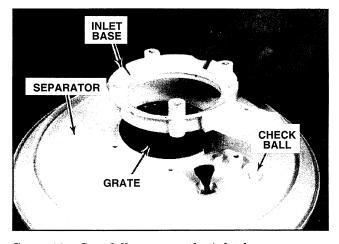


Step 7 Using a Phillips screwdriver, remove the screws which hold the separator to the pump base.

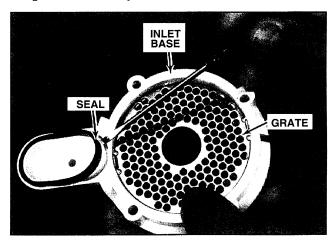
Step 8 Turn the separator over.



Step 9 Using a Phillips screwdriver, remove the screws which hold the inlet base to the separator.

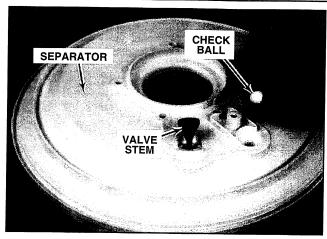


Step 10 Carefully remove the inlet base.



Step 11 Insert a small screwdriver and remove the seal from the inlet base.

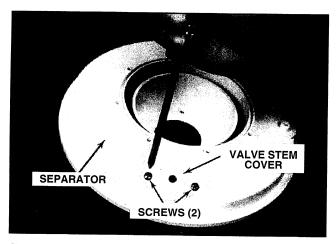
Step 12 Remove the grate from the inlet base.



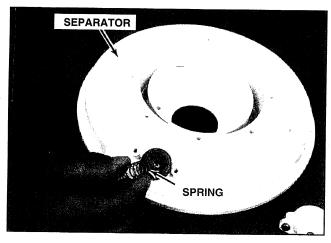
 ${\bf Step~13}~~{\bf Lift~the~check~ball~off~the~separator}.$

Step 14 Turn the separator over.

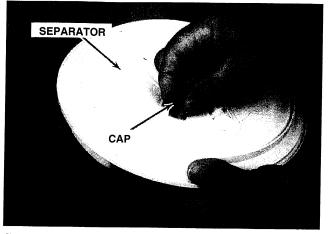
NOTE: Be careful when removing this cover. There is a spring behind it which could cause the cover to pop off.



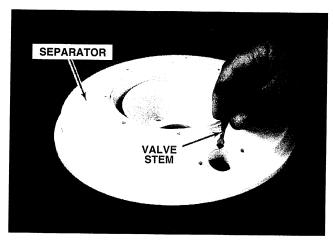
Step 15 Using a Phillips screwdriver, remove the screws which hold the valve stem cover to the separator.



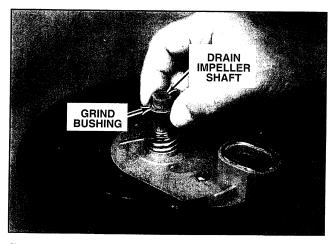
Step 16 Remove the spring.



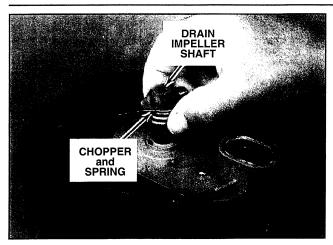
Step 17 Remove the small rubber cap by pulling it off the valve stem.



Step 18 Carefully remove the valve stem by pulling it out of the top.



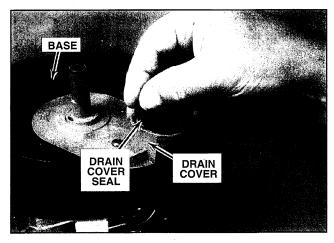
Step 19 Remove the grind bushing by lifting it off the drain impeller shaft.



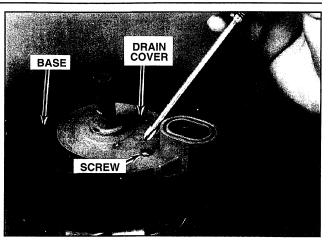
Step 20 Remove the chopper and spring by lifting them off the drain impeller shaft.



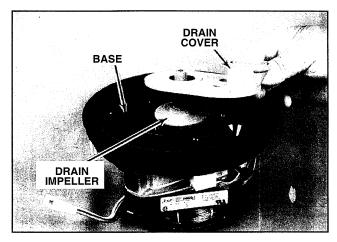
 $\begin{tabular}{ll} \bf Step \ 21 & Remove the sleeve by lifting it off the drain impeller shaft. \end{tabular}$



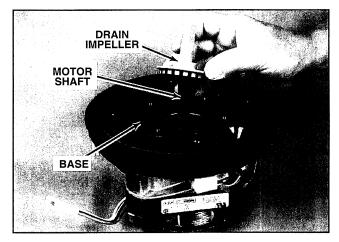
Step 22 Remove the drain cover seal.



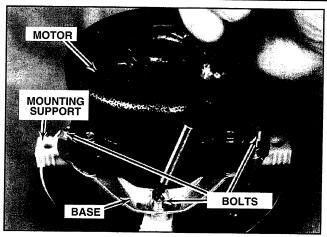
Step 23 Using a Phillips screwdriver, remove the screw which holds the drain cover to the pump base.



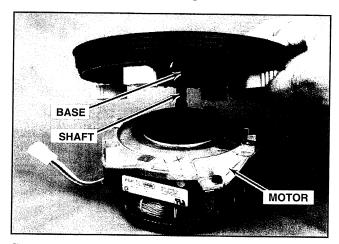
Step 24 Carefully remove the drain cover from the pump base.



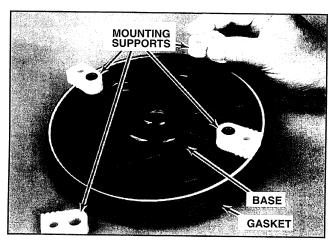
Step 25 Remove the drain impeller by lifting it off the motor shaft.



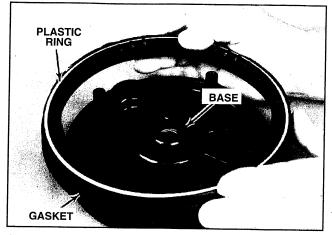
Step 26 Using a torx (T25) screwdriver, remove the bolts which hold the pump base to the motor.



Step 27 Carefully remove the pump base off the motor shaft.

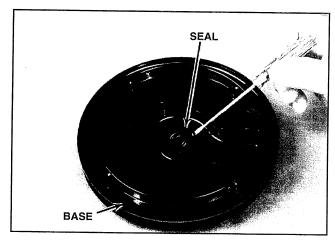


Step 28 Remove the pump mounting supports by pulling them off the pump base studs.



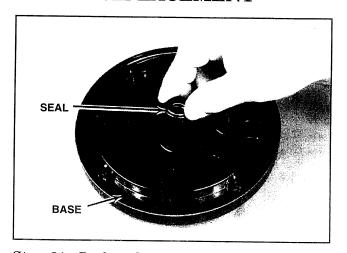
Step 29 Remove the pump gasket off the pump base.

NOTE: Do not damage the seal when removing as this will cause water leaks.



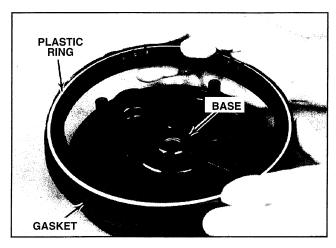
Step 30 Insert a small screwdriver and pry the seal out of the hole in the middle of the base.

REPLACEMENT



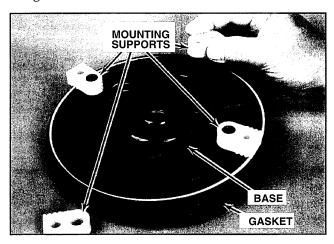
Step 31 Replace the seal by pushing this into the hole in the middle of the base.

Step 32 Turn the base over and lay it on a flat surface.

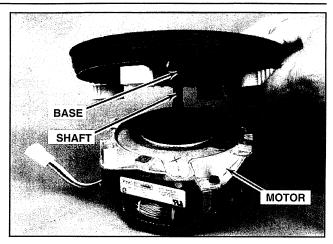


Step 33 Replace the gasket with the ribs on the gasket facing the same direction as the studs on the base.

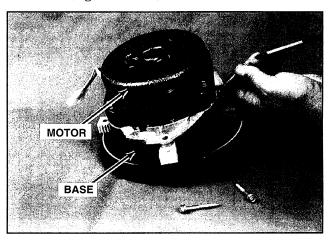
NOTE: Make sure the plastic ring is in the groove in the gasket.



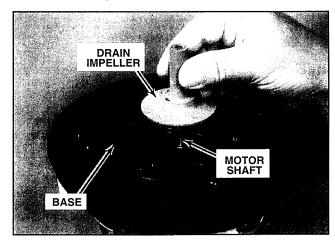
Step 34 Replace the pump mounting supports by pushing them on the studs located on the bottom of the base.



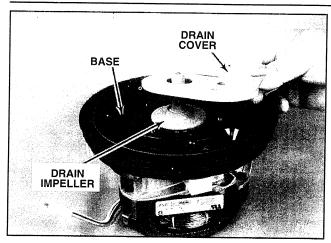
Step 35 Replace the base over the shaft on the motor, with the base drain opening over the cutout on the motor (right of wires).



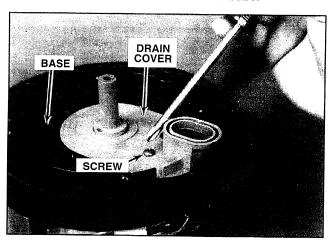
Step 36 Using a torx (T25) screwdriver, insert the screws through the motor and pump supports, into the base and tighten.



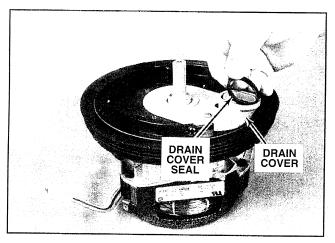
Step 37 Replace the drain impeller over the motor shaft, lining up the flats, and then pushing down.



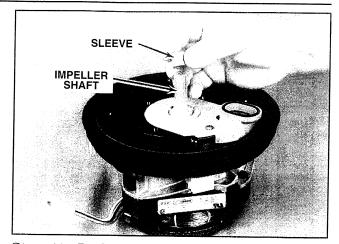
Step 38 Replace the drain cover over the impeller and down in the cutout area on the base.



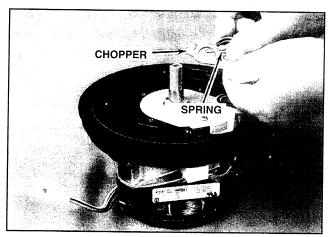
Step 39 Using a Phillips screwdriver, insert the screw through the drain cover into the base and tighten.



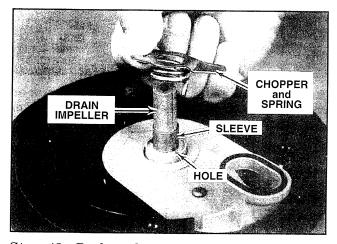
 $\begin{array}{ll} \textbf{Step 40} & \text{Replace the drain cover seal in the groove} \\ \text{in the drain cover.} \end{array}$



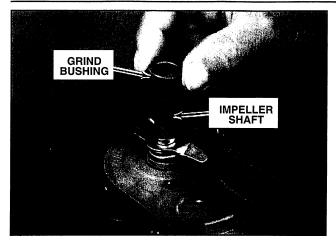
Step 41 Replace the sleeve on the impeller shaft.



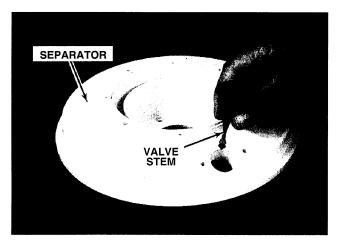
Step 42 Place the straight end of the spring into the slot in the chopper.



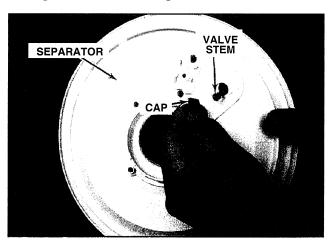
Step 43 Replace the chopper and spring on the impeller shaft over the sleeve with the end of the spring going into the hole on the top of the impeller.



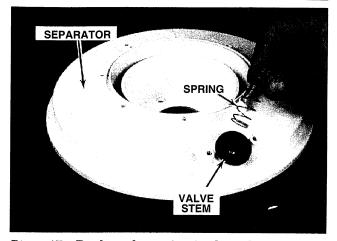
Step 44 Replace the grind bushing by lining up the flats, and then slide down on the impeller shaft.



Step 45 Replace the valve stem by inserting it through the hole in the separator.

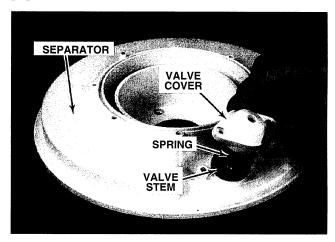


Step 46 Replace the small rubber cap on the valve stem by pushing it on.

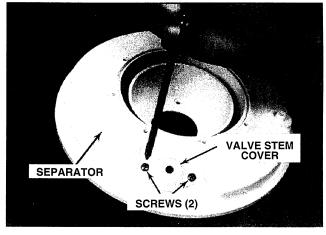


Step 47 Replace the spring in the valve stem.

NOTE: Be careful when replacing this cover. There is a spring behind it which could cause the cover to pop off.

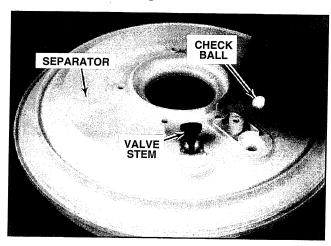


Step 48 Replace the valve cover with the tabs on the cover on the inside of the studs on the separator.

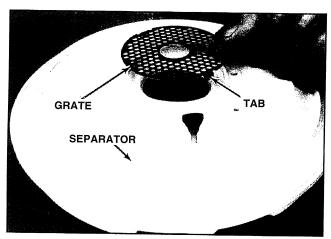


Step 49 Using a Phillips screwdriver, insert the screws through the valve stem cover into the separator and tighten.

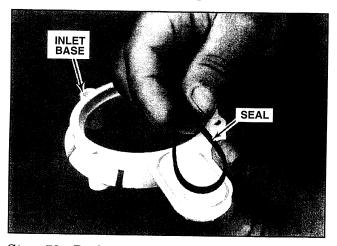
Step 50 Turn the separator over.



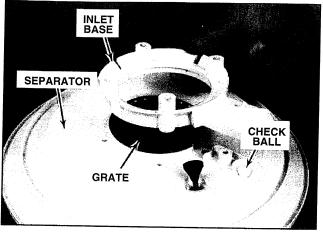
 $\begin{array}{ll} \textbf{Step 51} & \text{Replace the check ball in the small hole in} \\ \text{the separator.} \end{array}$



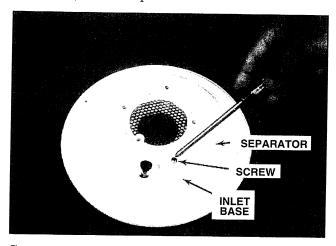
Step 52 Replace the grate with the tabs over the cutouts in the (middle hole) separator.



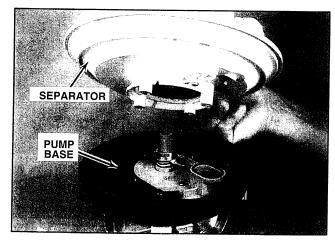
Step 53 Replace the seal in the groove in the inlet base.



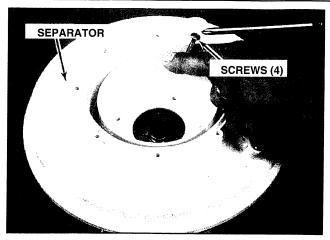
Step 54 Replace the inlet base over the grate and check ball, and then push on.



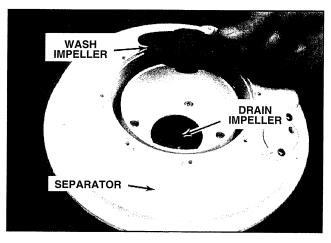
Step 55 Using a Phillips screwdriver, insert the screw through the inlet base into the separator and tighten.



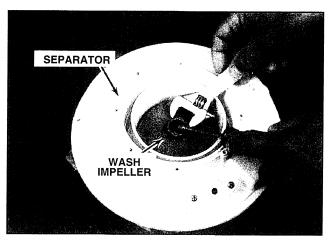
Step 56 Carefully place the separator on the pump base with the small rubber valve stem cap inserted into the oval hole in the drain cover.



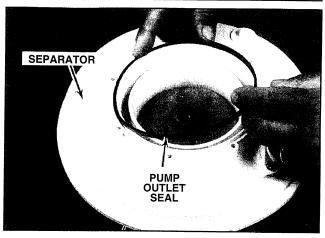
Step 57 Using a Phillips screwdriver, insert the screws through the separator into the pump base and tighten.



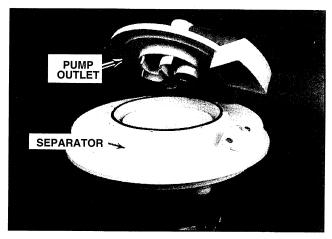
Step 58 Replace the wash impeller over the drain impeller lining up the flats, and then push down.



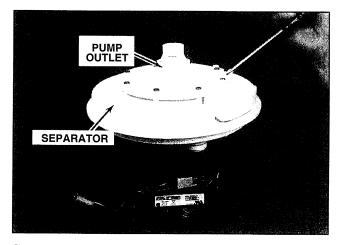
Step 59 Using a nutdriver, insert the screw through the wash impeller into the drain impeller shaft and tighten.



Step 60 Insert the pump outlet seal in the groove in the separator.



Step 61 Carefully place the pump outlet over the separator.



Step 62 Using a Phillips screwdriver, insert the screws through the pump outlet into the separator and tighten.

Step 63 Replace the pump and motor back into the tub. See REPLACEMENT in "Access to Pump and Motor Parts."

Step 64 Reconnect power or plug in dishwasher.

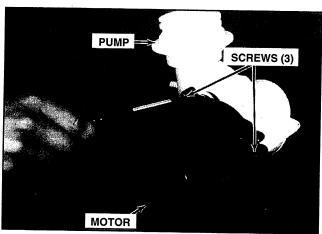
Step 65 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

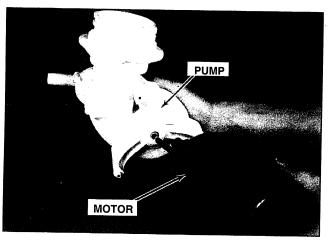
TYPE C

Step 1 Disconnect power or unplug dishwasher.

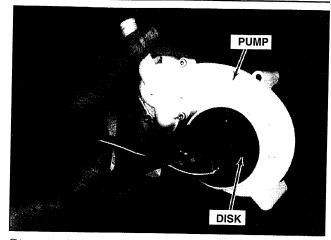
Step 2 Remove the pump and motor out of the tub. See "Access to Pump and Motor Parts."



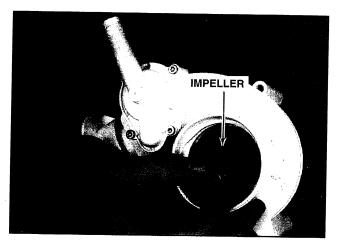
Step 3 Using a torx(T20) screwdriver, remove the three screws which hold the motor to the pump housing.



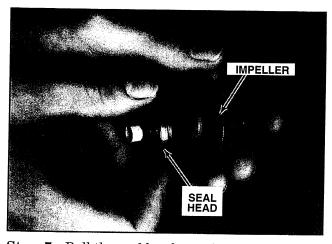
Step 4 Carefully remove the drive motor from the pump housing.



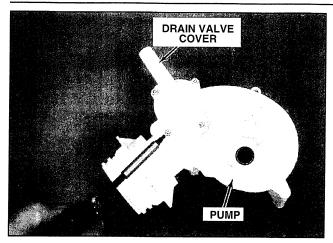
Step 5 Using pliers, remove the disk by turning counterclockwise.



Step 6 Pull the impeller out of the pump housing.

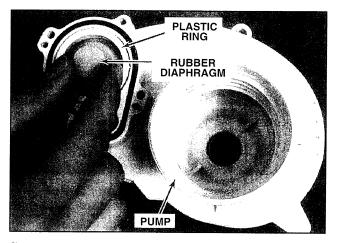


Step 7 Pull the seal head out of the impeller.

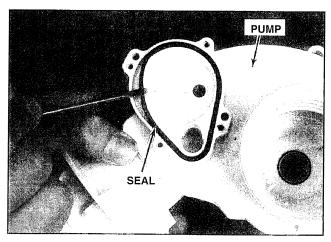


Step 8 Using a torx (T20) screwdriver, remove the four screws which hold the drain valve cover to the pump housing.

Step 9 Carefully lift the valve cover off the pump housing.

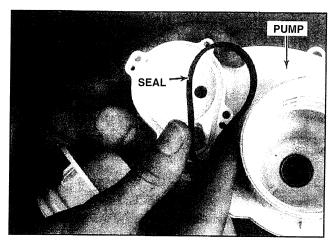


Step 10 Pull the rubber diaphragm and plastic ring out of the pump housing.

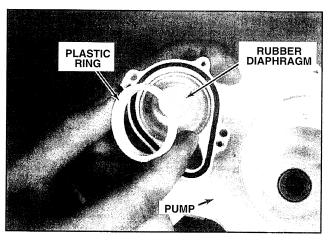


Step 11 Insert a small screwdriver and remove the drain valve cover seal from the groove in the pump housing.

REPLACEMENT

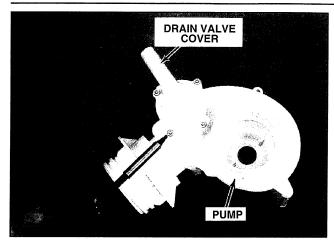


Step 12 Replace the seal in the groove in the pump housing.

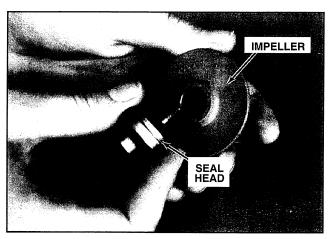


Step 13 Replace the diaphragm and the plastic ring with the smaller side facing the pump housing, and then push in.

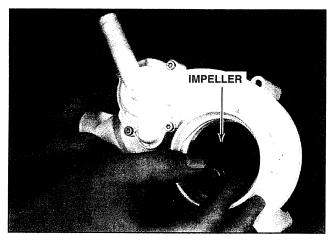
Step 14 Replace the drain valve cover on the pump housing with the two studs going into the holes.



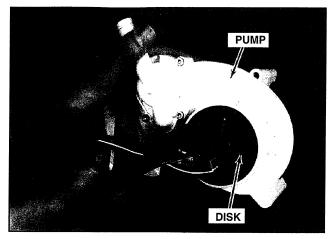
Step 15 Using a torx (T20) screwdriver, insert the four screws through the drain valve cover into the pump housing and tighten.



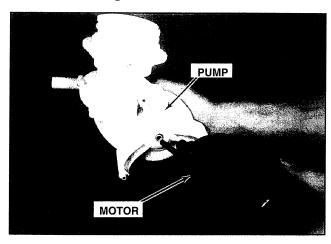
Step 16 Push the seal head all the way into the impeller.



Step 17 Replace the impeller with the seal head going into the hole in the pump housing.

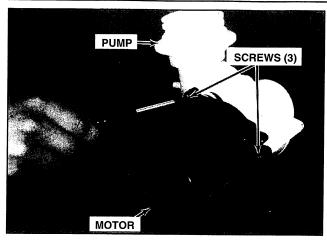


Step 18 Using pliers, replace the disk by turning clockwise until tight.



Step 19 Replace the drive motor (with wire connector on left) placing the shaft of the motor (not all the way) in the hole in the pump.

NOTE: You may have to turn the motor fan/shaft until the flats on the motor shaft match the flats on the impeller inside the pump, and then push all the way in.



Step 20 Using a torx (T20) screwdriver, insert the three screws through the motor, into the pump housing, and tighten.

NOTE: It is recommended that the tub gasket be changed anytime the pump is removed.

Step 21 Replace the pump and motor back into the tub. See REPLACEMENT in "Access to Pump and Motor Parts."

Step 22 Reconnect power or plug in dishwasher.

Step 23 Turn on the dishwasher and check for leaks on the floor.

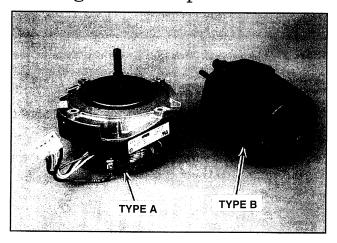
If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

PROCEDURE 3



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

Motor Testing and/or Replacement



This part is located in the middle, behind the access panel/toe panel on Built-In Models, and behind the access panel and coverplate (or shroud) on Portable Models.

See page 272, illus. no. 28, or page 274, illus. no. 16, or page 281, illus. no. 11 for location of part.

This motor drives an impeller in one direction, washing the dishes, then changes direction for the draining of the water.

OHMMETER REQUIRED

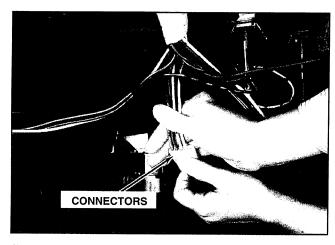
See Type A for models using a vertical mounted pump and motor, or see Type B for plastic liner models (1986 and newer), using a horizontal mounted pump and motor.

TYPE A

- **Step 1** Unplug dishwasher or disconnect power.
- **Step 2** Remove the access panel/toe panel.

PORTABLE MODELS • Remove the access panel and coverplate (or shroud).

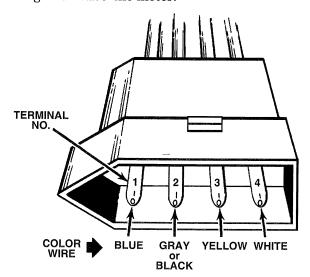
TESTING



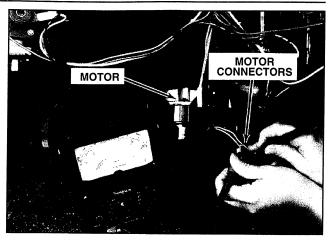
Step 3 Using your fingers, press the tabs of the connectors, one from the motor and one from the wiring harness, and pull apart.

Step 4 Pull the green ground wire (if used) off the terminal on the motor.

Step 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



END OF MOTOR PLUG WIRES



RUN WINDING

- **Step 6** Touch and hold one ohmmeter probe to the terminal no. 1.
- **Step 7** Touch the other ohmmeter probe to the terminal no. 4.
- **Step 8** The ohmmeter should show a reading between 1-5 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

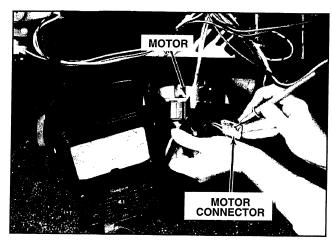
START WINDING — DRAIN

- **Step 9** Touch and hold one ohmmeter probe to the terminal no. 2.
- **Step 10** Touch the other ohmmeter probe to the terminal no 4.
- **Step 11** The ohmmeter should show a reading between 4-7 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

START WINDING - WASH

- **Step 12** Touch and hold one ohmmeter probe to the terminal no. 3.
- **Step 13** Touch the other ohmmeter probe to the terminal no. 4.
- **Step 14** The ohmmeter should show a reading between 4-7 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

GROUNDING CHECKS



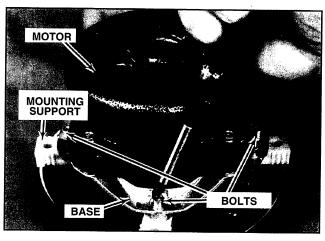
Step 15 Touch and hold one ohmmeter probe to the motor housing.

Step 16 One at a time, touch the other ohmmeter probe to terminals 1, 2, 3 and 4.

Step 17 The ohmmeter should show an open circuit when each of the terminals is checked. If not, the drive motor is bad and needs replacing.

REPLACEMENT

Step 18 Remove the pump and motor out of the tub. See "Access to Pump and Motor Parts."



Step 19 Using a torx (T25) screwdriver, remove the bolts which hold the complete pump to the motor.

Step 20 Carefully remove the complete pump off the motor shaft.

Step 21 Replace the complete pump on the new motor.

Step 22 Using a torx (T25) screwdriver, replace the bolts which hold the complete pump to the motor.

Step 23 Replace the pump and motor back into the tub. See REPLACEMENT in "Access to Pump and Motor Parts."

Step 24 Reconnect power or plug in dishwasher.

Step 25 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

Step 1 Disconnect power or unplug dishwasher.

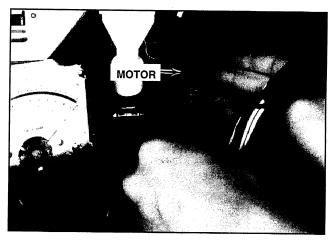
Step 2 Remove the access panel/toe panel.

PORTABLE MODELS • Remove the shroud.

TESTING

Step 3 Remove the wire connector from the motor by pressing the tab, and then pull.

Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



RUN WINDING

Step 5 Touch and hold one ohmmeter probe to the terminal W-V (white/violet stripe).

Step 6 Touch the other ohmmeter probe to the terminal BU-W (blue/white stripe).

Step 7 The ohmmeter should show a reading between 1-7 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

START WINDING - WASH

- **Step 8** Touch and hold one ohmmeter probe to the terminal W-V (white/violet stripe).
- **Step 9** Touch the other ohmmeter probe to the terminal Y (YELLOW).
- **Step 10** The ohmmeter should show a reading between 1-7 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

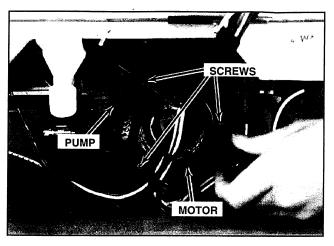
START WINDING — DRAIN

- **Step 11** Touch and hold one ohmmeter probe to the terminal W-V (white/violet stripe).
- **Step 12** Touch the other ohmmeter probe to the terminal GY (gray).
- **Step 13** The ohmmeter should show a reading between 1-7 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

GROUNDING CHECKS

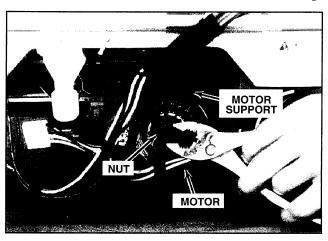
- **Step 14** Touch and hold one ohmmeter probe to the motor housing.
- **Step 15** One at a time, touch the other ohmmeter probe to terminals W-V (white/violet stripe), BU-W (blue/white), Y (yellow), and GY (gray).
- **Step 16** The ohmmeter should show an open circuit (when each of the terminals is checked). If not, the drive motor is bad and needs replacing.

REPLACEMENT

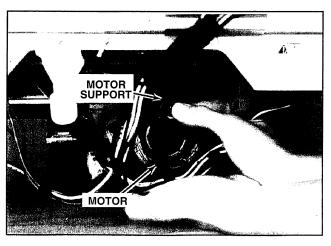


Step 17 Using a torx (T20) screwdriver, remove the three screws which hold the motor to the pump housing.

NOTE: Hold onto the drive motor so it does not drop.

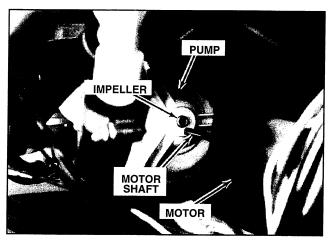


Step 18 Using pliers, slide the nut off the shaft on the motor.



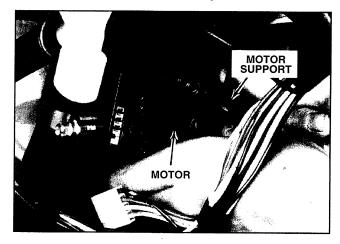
Step 19 Slide the motor support off the end of the motor shaft.

Step 20 Carefully pull the drive motor out of the pump housing.

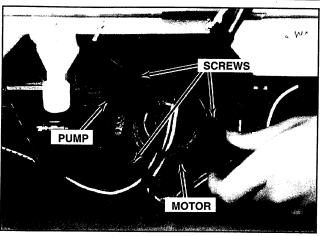


Step 21 Carefully replace the drive motor (with wire connector on left) placing the shaft of the motor (not all the way) in the hole in the pump.

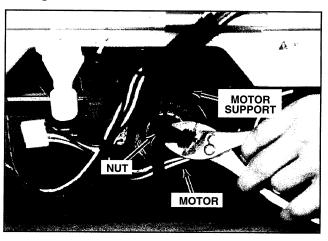
NOTE: While holding the drive motor, you may have to turn the motor fan/shaft until the flats on the motor shaft match the flats on the impeller inside the pump, and then push all the way in.



Step 22 Slide the motor support over the end of the motor shaft.



Step 23 Using a torx (T20) screwdriver, insert the three screws through the motor into the pump housing, and tighten.



Step 24 Replace the nut on the end of the motor shaft, and then push all the way on.

Step 25 Replace the wire connector (harness) onto the motor connector and push on until it snaps into place.

Step 26 Replace the access panel/toe panel.

PORTABLE MODELS • Replace the shroud.

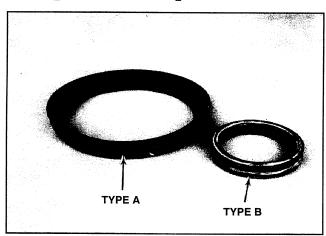
Step 27 Reconnect power or plug in dishwasher.

PROCEDURE 4

AWARNING

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

Pump Gasket Replacement



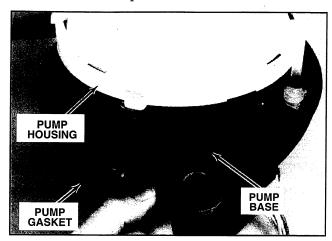
This part is located in the middle on the bottom of the tub. The pump and motor sits on this, plus the gasket is used to seal the water in the tub.

See page 272, illus. no. 16, or page 274, illus. no. 30, or page 280, illus. no. 1 for location of part.

See Type A for models using a vertical mounted pump and motor, or see Type B for plastic liner models (1986 and newer), using a horizontal mounted pump and motor.

TYPE A

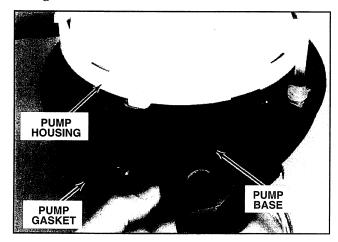
- Step 1 Disconnect power or unplug dishwasher.
- **Step 2** Remove the pump and motor out of the tub. See "Access to Pump and Motor Parts."



Step 3 Pull the gasket down and off the motor end of the complete pump and motor.

REPLACEMENT

- **Step 4** Remove the plastic ring from the groove in the old gasket.
- **Step 5** Place this plastic ring in the groove of the new gasket.



Step 6 Place the new gasket (fin side down) over the bottom end of the motor and onto the base.

NOTE: The top lip of the gasket must fit on top of the base.

Step 7 Replace the pump and motor back into the tub. See REPLACEMENT in "Access to Pump and Motor Parts."

Step 8 Reconnect power or plug in dishwasher.

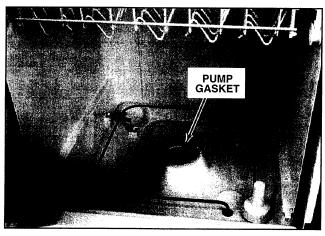
Step 9 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

TYPE B

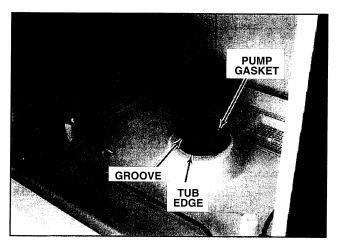
Step 1 Disconnect power or unplug dishwasher.

Step 2 Remove the pump and motor out of the tub. See "Access to Pump and Motor Parts."



Step 3 Remove the pump gasket from the hole in the tub.

REPLACEMENT



Step 4 Replace the pump gasket with the edge of the tub hole placed in the groove in the gasket.

NOTE: You may have to move the pump port back and forth while installing the gasket.

Step 5 Replace the pump and motor back into the tub. See REPLACEMENT in "Access to Pump and Motor Parts."

Step 6 Reconnect power or plug in dishwasher.

Step 7 Turn on the dishwasher and check for leaks on the floor.

If the dishwasher leaks, disconnect the electrical supply and redo this procedure.

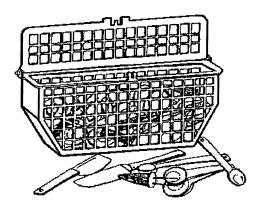
Series				
A Managarana				
A MANAGEMENT OF THE STATE OF TH			AND THE PROPERTY OF THE PROPER	
	A SAME		And the second second	
Contract of Manuary			The state of the s	
White the second	OCCUPATION OF THE PROPERTY OF			
	water and the state of the stat			
A CONTRACTOR OF THE CONTRACTOR				
			Control of the Contro	
		***************************************	WK.	
				····
		NATIONAL TO THE RESERVE TO THE RESER		
	No. 100 March 10	****		
-000cccs (pratocos)				
			THE STATE OF THE S	
			A STATE OF THE STA	
A A American				

SECTION O

Dishwasher Accessories

SMALL ITEMS BASKET

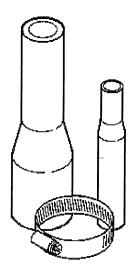
4318941



HANDLES THE SMALL ITEMS THAT NORMALLY WOULD SLIP THROUGH THE DISHWASHER RACK. FITS ALL DISHWASHERS.

CONNECTION KIT

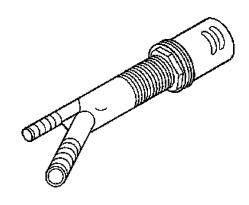
719935



A UNIVERSAL METHOD TO CONNECT THE DRAIN HOSE TO THE DISPOSER.

AIR GAP KIT

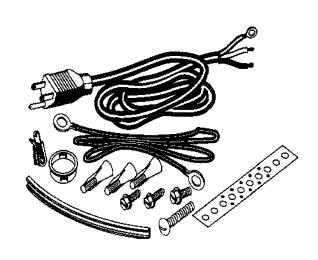
300096



PROVIDES AN AIR GAP IN THE DRAIN LINE TO PREVENT SIPHONING OF DIRTY WATER BACK INTO THE DISHWASHER.

POWER CORD KIT

4317824

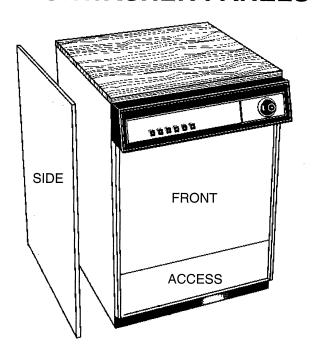


PERMITS THE INSTALLER TO CHANGE FROM DIRECT WIRING TO PLUG-IN FOR STANDARD ELECTRICAL OUTLETS.

SEE YOUR AUTHORIZED WHIRLPOOL FACTORY SERVICE BRANCH FOR ORDERING



DISHWASHER PANELS



ALLOWS YOU TO REPLACE OR SIMPLY CHANGE THE COLOR OF YOUR PANELS. THEY ARE AVAILABLE IN ALUMINUM OR PLASTIC.

RINSE AGENT

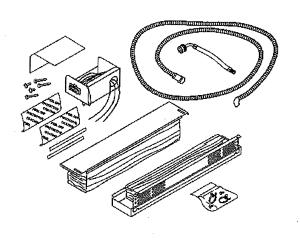
4319091



JET DRY RINSE AGENT PROVIDES SHEETING ACTION IN THE RINSE CYCLE TO PREVENT WATER SPOTTING.

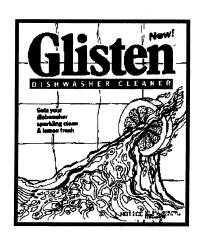
CONVERSION KITS

569056 — Porcelain liner models (1986 and older) **4317856** — Plastic liner models (1986 and newer)



THIS KIT SIMPLIFIES THE JOB OF CONVERTING A PORTABLE MODEL TO A BUILT-IN MODEL.

GLISTEN CLEANER



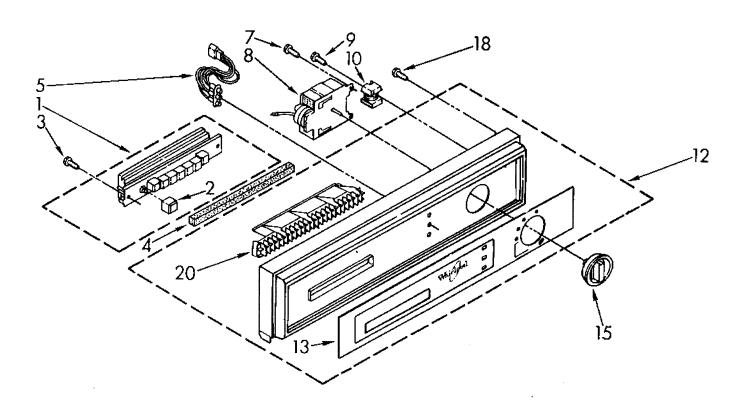
GETS DISHWASHERS SPARKLING CLEAN AND LEMON FRESH. GLISTON REMOVES BUILT-UP SOAP SCUM, FOOD STAINS AND DISCOLORATIONS DUE TO WATER IMPURITIES.

NOT RECOMMENDED FOR USE ON PORCELAIN LINER MODELS.

·	

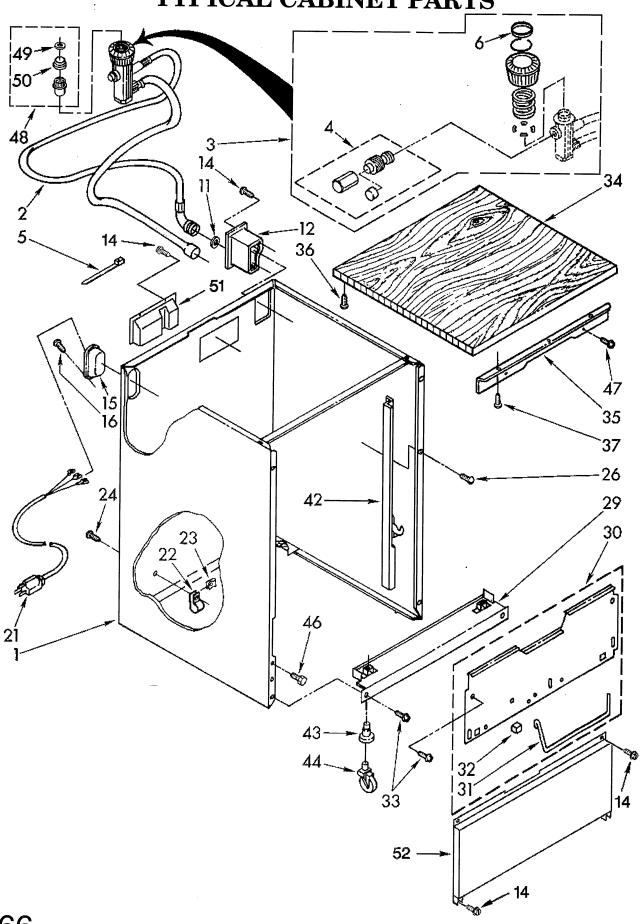
• • • • • • • • • • • • • • • • • • • •
1.42.50.50.50.50.50.50.50.50.50.50.50.50.50.

"For porcelain liner models - 1986 and older" TYPICAL CONSOLE PARTS



Illus. No.	DESCRIPTION_	Illus No.	. DESCRIPTION	Illus. No.	DESCRIPTION
1 2 3 4 5	Switch, Push-Button Push-Button Screw Seal Indicator Light and Connector	7 8 9 10 12	Screw Timer Screw Relay, Start Escutcheon, Console	13 15 16 18 18 20	Insert, Decorative Knob, Timer Screw Screw Cap, End Grille, Vent

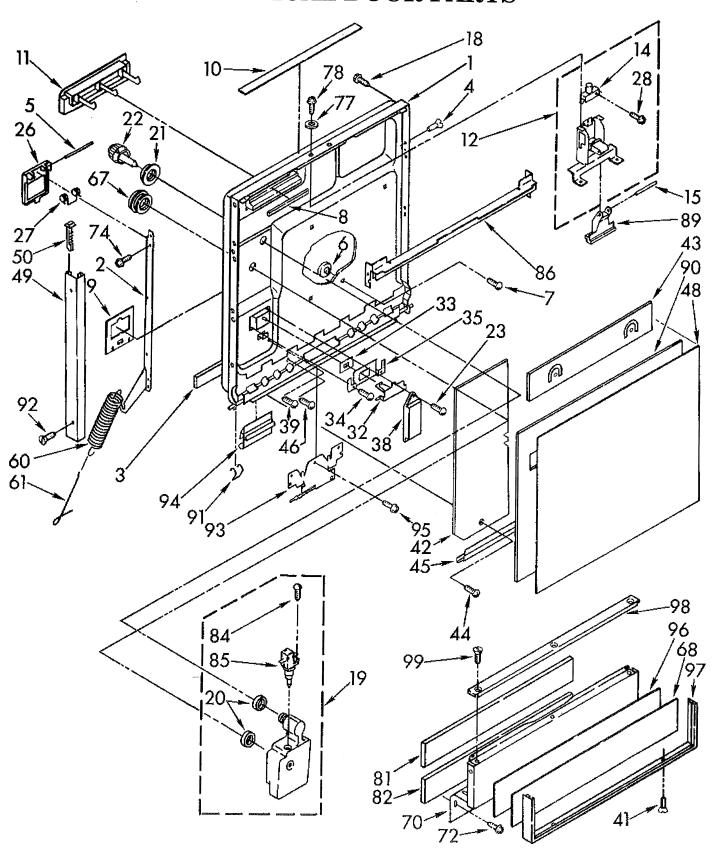
"For porcelain and plastic liner models" TYPICAL CABINET PARTS



"For porcelain and plastic liner models" TYPICAL CABINET PARTS

Illus. No.	DESCRIPTION
1	Cabinet
$\overline{2}$	Coupler Assembly
3	Collar Kit,
	Faucet Coupler
4	Valve, Pressure
	Relief
5	Clip, Strap
6	Seal
11	Washer
12	Housing, Hose Coupler
14	Screw
15	Housing, Power Cord
16	Screw
21	Cord, Power
22	Clamp, Strain
	Relief
23	Nut
24	Screw
26	Screw
29	Toeplate Assembly
0.0	(Includes Illus. 43)
30	Coverplate
31	Bar, Torsion
32	Bumper, Rubber
$\frac{33}{34}$	Screw, Tapping
3 4 35	Panel, Top Trim, Front
36	Screw
37	Screw
42	Leg Assembly
43	Socket, Caster
44	Caster
46	Screw
47	Screw
48	Adapter, Faucet
49	Washer
50	Bushing
51	Housing, Power Cord
	and Hose Coupler
52	Shroud

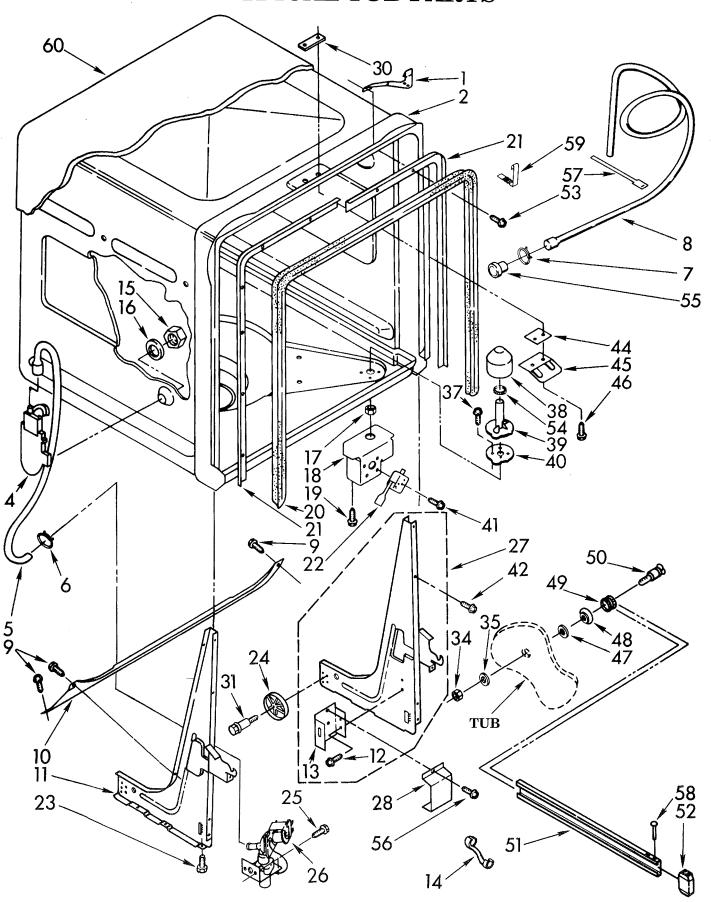
"For porcelain liner models - 1986 and older" TYPICAL DOOR PARTS



"For porcelain liner models - 1986 and older" TYPICAL DOOR PARTS

Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION
140.	DESCRIPTION		DESCRIPTION	110.	DESCRIPTION
1 2 3 4 5 6 7 8	Panel, Inner Door Support, Door Gasket, Door Screw Pin, Lid Hinge Button, Retainer Screw, Hi-Lo Baffle Baffle	26 27 28 32 33 34 35 38	Lid, Detergent Dispenser Spring, Lid Screw Lever, Catch Seal, Lever Screw Retainer, Seal Actuator	68 70 72 74 77 78 81 82 84	Panel, Access Toe Panel Screw Screw Washer Screw Shield, Sound Shield Screw
10	Label, User Guide	39	Screw	85	Actuator Assembly
11	Screen, Vent	41	Screw	86	Rail, Support
12	Latch Assembly	42	Barrier, Door	89	Lever, Release
14	Switch, Door	43	Barrier, Console	90	Spacer, Corrugated
15	Pin, Pivot	44	Screw	91	Clip, Wire
18	Screw	45	Edging, Lower Panel	92	Screw
19	Dispenser, Wetting	46	Screw, Ground	93	Shield, Harness
	Agent	48	Panel, Front	94	Retainer, Clip
20	Washer	49	Trim, Door	95	Screw
21	Nut	50	Clip, Trim	96	Spacer, Corrugated
22	Cap, Level Indicator	60	Spring, Door	97	Trim, Toe Panel
23	Screw	61	Retainer, Spring	98	Trim, Access Panel
		67	Cap, Drip	99	Screw

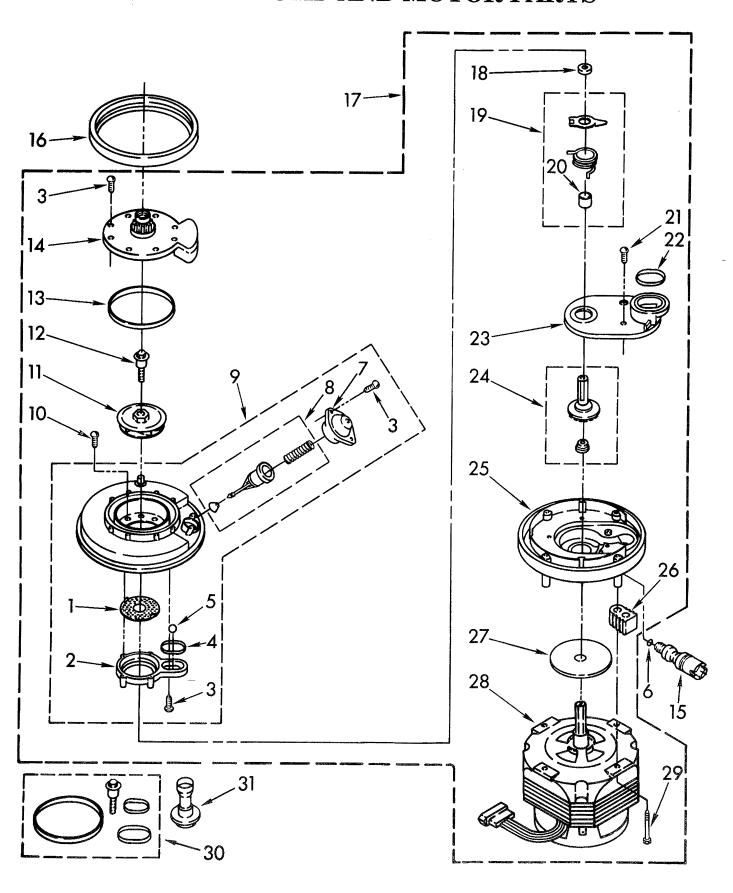
"For porcelain liner models - 1986 and older" TYPICAL TUB PARTS



"For porcelain liner models - 1986 and older" TYPICAL TUB PARTS

Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION
1	Bracket, Mounting	20	Gasket, Door	42	Screw
$\overset{1}{2}$	Tub	$\frac{20}{21}$	Retainer	$\frac{42}{44}$	Shim
$\frac{2}{4}$	Inlet, Water	22	Switch, Pressure	45	Strike
5	Hose, Water Inlet	23	Foot, Front Leveling	46	Screw
6	Clamp	$\frac{23}{24}$	Wheel, Rear Leveling	47	Washer
7	Clamp	25	Screw	48	Washer, Cup
8	Hose, Drain	26	Valve, Water Inlet	49	Wheel, Upper Track
9	Screw	27	Leg and Hinge	50	Screw, Shoulder
10	Brace	28	Cover, Terminal Box	51	Track, Upper
11	Leg and Hinge	30	Nut	52	End Cap, Track
12	Screw	31	Screw	53	Screw
13	Box, Terminal	34	Locknut	54	Gasket
14	Relief, Strain	35	Washer	55	Insert, Cup-Hose
15	Nut	37	Screw	56	Screw
16	Gasket	38	Float	57	Clip, Strap
17	Nut	39	Standpipe, Overflow	58	Pin, End Cap
18	Bracket, Overflow	40	Gasket, Overflow	59	Clip, Gasket
19	Screw	41	Screw	60	Shield, Sound

"For porcelain or plastic liner models" TYPICAL PUMP AND MOTOR PARTS



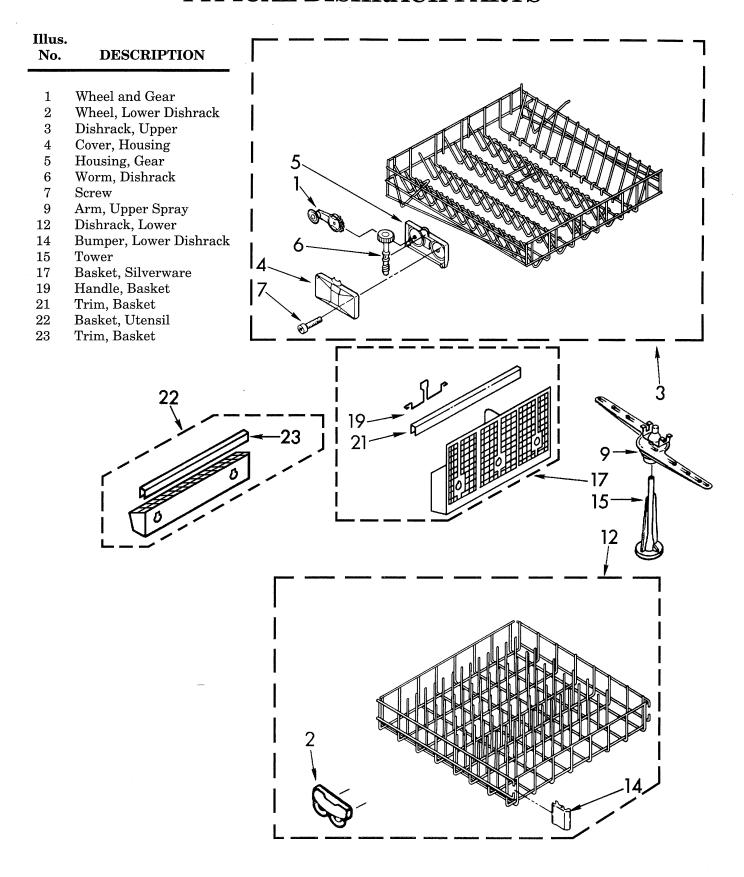
"For porcelain or plastic liner models" TYPICAL PUMP AND MOTOR PARTS

Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION	Illu No		DESCRIPTION
110.	DESCRIT TION	110.		140	у.	
1 *	Plate, Perforated	11	Impeller, Wash	23	*	Cover, Drain
	(Includes Item 5 - Also		(Includes Items 12 and			(Also Order Item 30)
	Order Item 30)		13)	24	*	Impeller, Drain Kit
2 *	Base, Inlet (Includes	12	Screw and Seal			(Also Order Item 30)
	items 1 and 5 - Also	13	Seal, Pump Outlet	25	*	Base, Pump
	Order Item 30)	14	Outlet, Pump			(Includes Item 24 - Also
3	Screw		(Includes Item 13)			Order Item 30)
4	Seal, Inlet Base	15	Check Valve (Includes	26		Support, Pump
5	Ball, Check		Item 6)			Mounting
6	"O" Ring	16	Gasket, Pump	27	*	Slinger
7	Cover, Valve	17	Pump and Motor			(Also Order Item 30)
8 *	Valve Stem Kit		(Includes Item 16)	28	*	Motor (Includes Item 27-
	(Includes Items 12, 13,	18	Bushing, Grind			Also Order Item 30)
	and 22)	19 *	Chopper Kit	29		Screw
9 *	Separator (Includes		(Also Order Item 30)	30		Pump Seal Kit (Includes
	Items 12, 13, and 22)	20	Sleeve, Drain Impeller			Items 4, 12, 13, and 22)
10	Screw	21	Screw	31	*	Tool, Pump Centering
	,	22	Seal, Drain Cover			

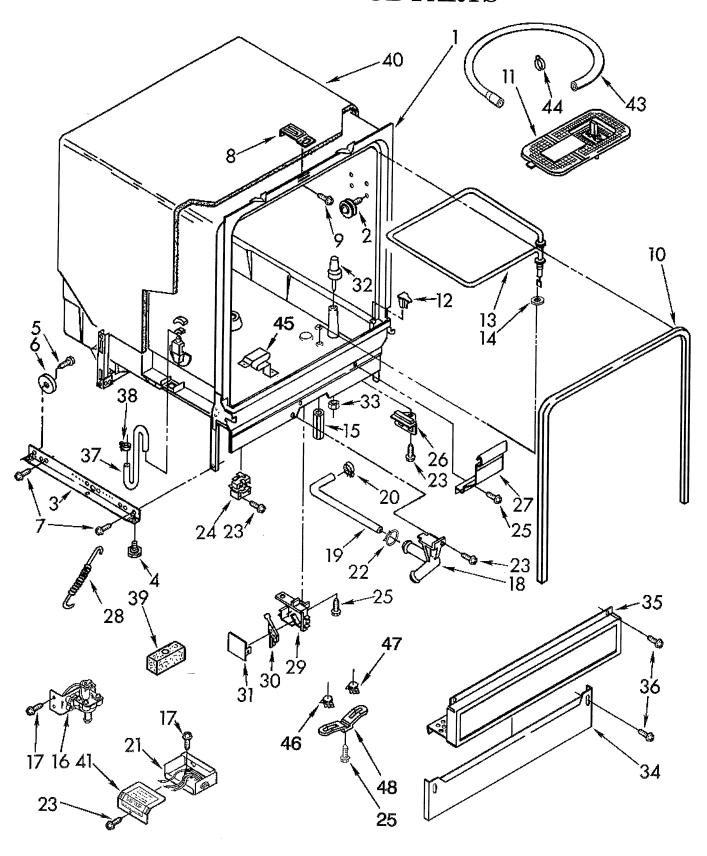
*Pump Centering Tool Required For Pump Reassembling "For porcelain liner models - 1986 and older"
TYPICAL PUMP AND MOTOR PARTS

	ITPICAL	PUMP AND MOTO	RPARTS
Illus. No.	DESCRIPTION	43	18 26 20 27
1 2 3 4	Pump Housing, Upper Seal, Ring Screw Impeller		27
6 7 8 9	Pump Housing, Lower Screw Screw Coverplate	3 4	
10 11 12 13	Spacer Drain Impeller Kit Screw		28 29
14 15 16 17	Base Pump Support, Pump Slinger Motor Bleeder	OCCUPATION OF THE PROPERTY OF	
18 20 22 23	Pump and Motor Bearing, Nozzle Valve, Check "O" Ring	7 6 8	
26 27 28 29 30	Cap, Nozzle Arm, Lower Spray Guard, Sump Screen Screen, Sump Gasket, Pump	10 17	31
31 32 33 35	Thermostat Bracket, Thermostat Washer, Rubber Nut, Terminal		30 36
36 37 38 39	Heater Support, Heater Washer, Retainer Washer		32
40 42 43	Washer Nut Key Pump Housing		33
		13 15 16	33 35 37 38 39 23 40
		14 12	39 23 40 42
			42 22

"For porcelain or plastic liner models" TYPICAL DISHRACK PARTS



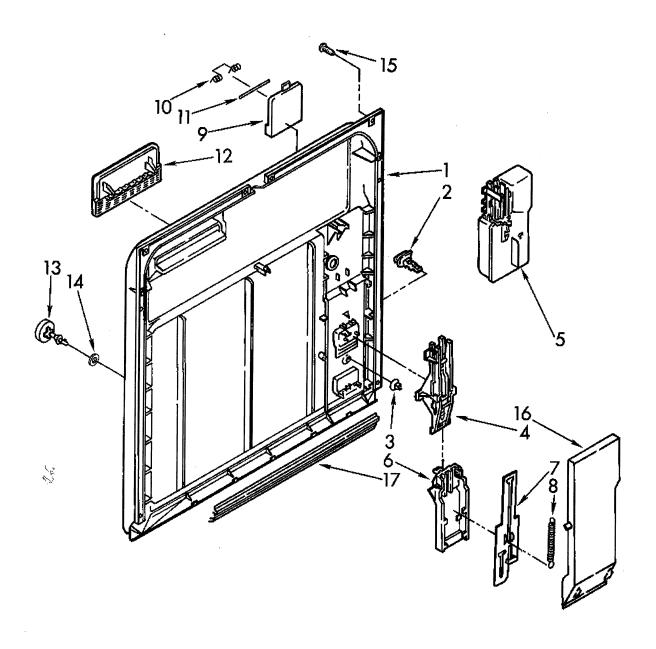
"For plastic liner models - 1986 and newer" TYPICAL TUB PARTS



"For plastic liner models - 1986 and newer" TYPICAL TUB PARTS

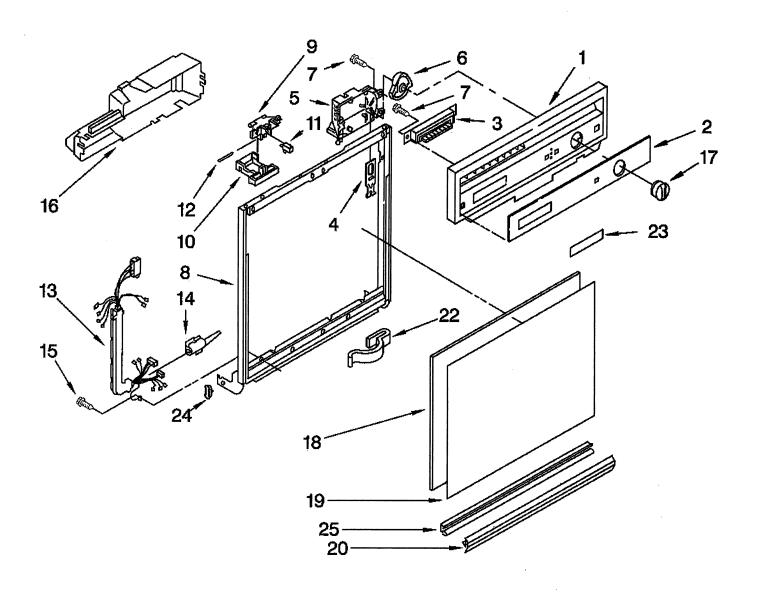
Illus. No.	DESCRIPTION
1	Tub (Not Serviceable)
2	Wheel, Upper Track
3	Runner
4	Foot, Front Leveling
5	Screw
6	Wheel, Rear Leveling
7	Screw
8	Strike, Door
9	Screw
10	Gasket, Door
11	Grate Deflector
$12\\13$	Heater
$\frac{13}{14}$	Washer, Rubber
15	Nut, Heater Terminal
16	Valve, Water Inlet
17	Screw
18	Valve, Check
19	Hose, Coupler
20	Clamp
21	Terminal Block and
	Plug
22	Clamp
23	Screw
24	Relay, Start
25	Screw
26	Fuse, Thermal
27	Shield, Harness
28	Spring and Bearing
29	Housing, Float Switch
30	Switch, Float
31	Cover, Switch Housing
$\frac{32}{2}$	Float
33	Nut
34	Panel, Access
$\frac{35}{36}$	Panel, Access Screw
37	Hose, Water Inlet
38	Clamp
39	Diverter
40	Shield, Sound
41	Cover, Terminal Box
43	Hose, Drain
44	Clamp
45	Support, Heater
46	Thermostat (Hi-Limit)
47	Thermostat
48	Bracket, Thermostat
	•

"For plastic liner models - 1986 and newer" TYPICAL INNER DOOR PARTS



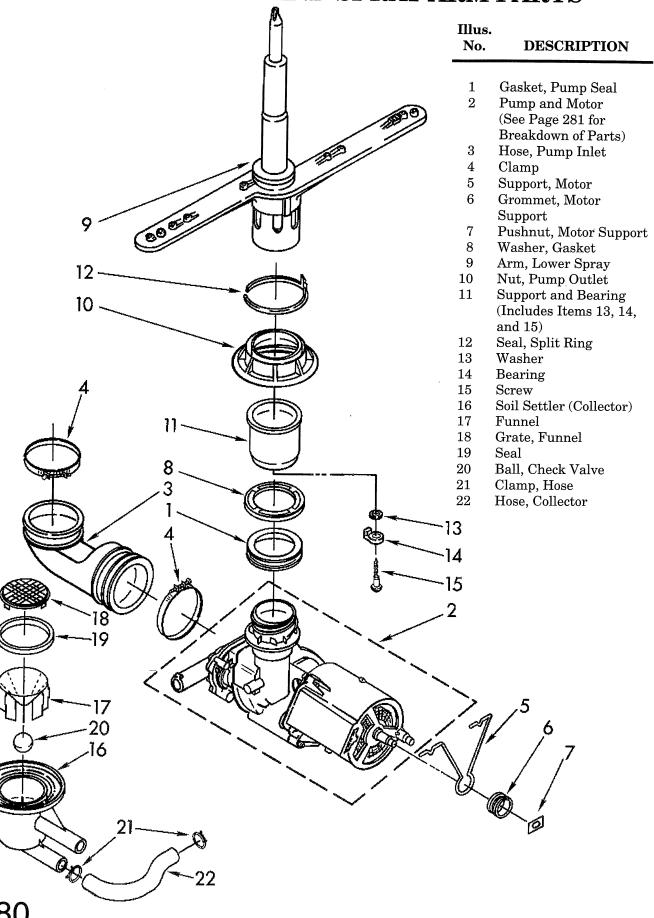
Illus. No. DESCRIPTION	Illus. No. DESCRIPTION	Illus. No. DESCRIPTION
 Panel, Inner Door Latch, Detergent Dispenser Snap, Detergent Dispenser Actuator Dispenser, Wetting Agent 	6 Bar, Draw (Upper Dispenser) 7 Bar, Draw (Lower Dispenser) 8 Spring, Draw Bar 9 Lid, Detergent Dispenser 10 Spring, Lid	11 Pin, Lid Hinge 12 Screen, Vent 13 Cap, Wetting Agent 14 Seal 15 Screw 16 Cover, Drip 17 Shield, Spatter

"For plastic liner models - 1986 and newer" TYPICAL FRAME AND CONSOLE PARTS

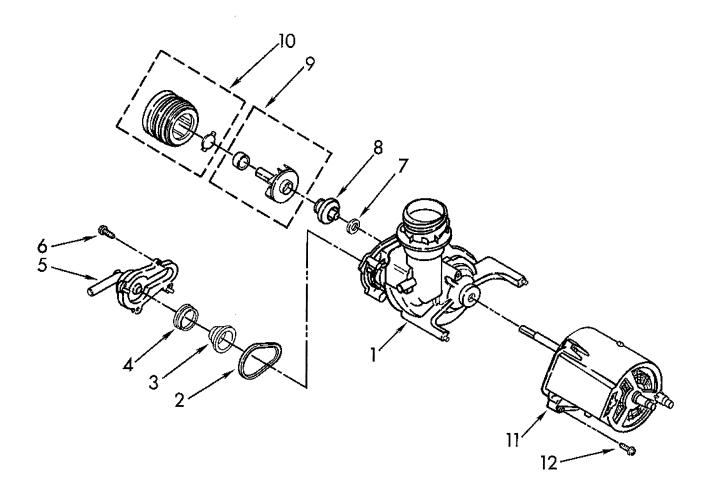


Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION	Illus. No.	DESCRIPTION
1	Escutcheon, Console	9	Bolt, Latch	17	Knob, Timer
2	Insert, Console	10	Lever, Latch	18	Spacer
3	Switch	11	Switch, Door	19	Panel, Front
4	Follower, Cam	12	Pin, Switch	20	Retainer, Panel
5	Timer	13	Protector, Harness	22	Clip, Harness
6	Cam	14	Elbow, Harness	23	Insert, Switch
7	Screw	15	Screw	24	Bearing, Spring
8	Frame, Door	16	Cover, Timer	25	Channel, Retainer
	,	•	•	•	(Also Order Item 20)

"For plastic liner models - 1986 and newer" TYPICAL PUMP AND SPRAY ARM PARTS



"For plastic liner models - 1986 and newer" TYPICAL PUMP AND MOTOR PARTS



Illus. No.	DESCRIPTION
1	Housing
2	Seal, Drain Cover
3	Diaphragm
4	Ring, Diaphragm
5	Cover, Drain Valve
6	Screw
7	Seat, Seal
8	Head Seal
9	Impeller and Bearing
10	Disk amd Mount
11	Motor
12	Screw

. •	•
	· · · · · · · · · · · · · · · · · · ·

INDEX

A	Cap, Access Panel — procedure 2, p. 151
Access, Built-In Models — procedure 1, p. 149	Cap, Access Panel End — procedure 2, p. 151
Access, Pump and Motor — procedure 1, p. 229	Cap, End (Console) — procedure 5, p. 27
Accessories – p. 261	Cap, End (Upper Track) — procedure 4, p. 216
Actuator, Detergent Dispenser	Cap, Nozzle — procedure. 15, p. 193
— procedure 16, p. 132	Cap, Pressure Relief Valve — procedure 9, p. 85
Actuator, Draw Bar — procedure 16, p. 132	Cap, Valve Stem — procedure 2, p. 234
Actuator, Wetting Agent Dispenser	Cap, Wetting Agent — procedure 10, p. 115
— procedure 10, p. 115	Caster, Swivel — procedure 3, p. 70
Area, Cabinet – p. 65	Catch, Detergent Dispenser — procedure 16, p. 132
Area, Console – p. 23	Chart, Problem Solving — p. 19
Area, Door – p. 101	Chart, Timer Sequence — p. 9
Area, Pump and Motor — p. 229	Chopper and Spring — procedure 2, p. 234
Area, Tub and Below the Tub $-$ p. 149	Clip, Door Gasket — procedure 8, p. 112
Arm, Lower Spray — procedure 16, p. 194	Codes, Terminal $-$ p. 11
Arm, Upper Spray — procedure 2, p. 213	Collar, Faucet Coupler — procedure 9, p. 85
rim, oppor opray procedure 2, p. 216	Collector, Soil Settler — procedure 22, p. 207
В	Connector, Wire — procedure 7, p. 78 and
	- procedure 13, p. 95
Ball, Pump Check — procedure 2, p. 234	Console Area — p. 23
Ball, Soil Settler — procedure 22, p. 207	Console (Escutcheon) — procedure 6, p. 28
Bar, Draw — procedure 16, p. 132	Conversion Kits (Portable to Built-In) $-$ p. 262
Bar, Torsion — procedure 3, p. 156	Cord, Power — procedure 7, p. 78 and p. 261
Base, Inlet — procedure 2, p. 234	Coupler, Faucet — procedure 9, p. 85
Base, Pump — procedure 2, p. 234	Coupler, Hose (Inlet and Drain)
Basket, Silverware — procedure 5, p. 110	— procedure 12, p. 90
Basket, Small Items — p. 261	Cover, Drain Valve — procedure 2, p. 234
Basket, Utensil — procedure 6, p. 110	Cover, Drip — procedure 16, p. 132
Bearing, Nozzle — procedure 15, p. 193	Cover, Faucet Coupler — procedure 9, p. 85
Bearing, Spray Arm — procedure 16, p. 194 Bearing, Upper Dightselve, procedure 2, p. 214	Cover, Terminal Box — procedure 7, p. 78 and
Bearing, Upper Dishrack — procedure 3, p. 214 Bezel — procedure 4, p. 26	— procedure 1, p. 149
	Cover, Timer — procedure 19, p. 59
Bleeder, Pump — procedure 2, p. 234 Bolt, Latch — procedure 1, p. 101	Cover, Valve Stem — procedure 2, p. 234
Box, Terminal — procedure 7, p. 78 and	Coverplate — procedure 3, p. 156
- · · · · · · · · · · · · · · · · · · ·	Coverplate, Pump — procedure 2, p. 234
— procedure 1, p. 149 Bracket, Control — procedure 12, p. 42	
Bracket, Float — procedure 12, p. 42 Bracket, Float — procedure 14, p. 188	D
Bracket, Heater — procedure 14, p. 168 Bracket, Heater — procedure 7, p. 163	Dial, Delay Timer — procedure 16, p. 55
Bracket, Indicator Lights — procedure 17, p. 56	Dial, Timer — procedure 2, p. 24
Bracket, Rapid Advance Timer	Diagram, Wiring — p. 8
- procedure 19, p. 199	Diaphragm, Drain Pump — procedure 2, p. 234
Bracket, Thermostat — procedure 9, p. 173	Diaphragm, Wetting Agent Dispenser
Bracket, Timer — procedure 13, p. 43	— procedure 10, p. 115
Breaker, Circuit — procedure 3, p. 6	Dishrack, Lower — procedure 7, p. 224
Bumper, Coverplate — procedure 3, p. 05	Dishrack, Upper — procedure 1, p. 213
Bumper, Lower Dishrack — procedure 9, p. 226	Dishwasher Accessories — p. 261
Bushing, Grind — procedure 2, p. 234	Disk, Pump — procedure 2, p. 234
Button, Retainer — procedure 11, p. 123	Dispenser, Detergent — procedure 16, p. 132
Davidi, revailer — procedure 11, p. 123	Dispenser, Wetting Agent — procedure 10, p. 115
\mathbf{C}	Door Area $-$ p. 101
	Door Panel, Inner — procedure 17, p. 137
Cabinet Area — p. 65	, I, F
Cam — procedure 20, p. 61	

INDEX

E

Edging, Lower Panel — procedure 12, p. 125 Electrical Power Supply Connections — p. 5 Escutcheon, Console — procedure 6, p. 28

F

Feet, Front Leveling — procedure 4, p. 71 Float — procedure. 14, p. 188 Follower, Cam — procedure 20, p. 61 Foot, Access Panel — procedure 2, p. 151 Funnel, Soil Settler — procedure. 22, p. 207 Fuse, Thermal — procedure 13, p. 187 Fuses — procedure 3, p. 6

\mathbf{G}

Gap, Air — p. 261 Gasket, Door — procedure 8, p. 112 Gasket, Pump — procedure 4, p. 258 Gasket, Water Inlet — procedure 11, p. 179 Gasket, Soil Settler — procedure 22, p. 207 Gasket, Standpipe — procedure 14, p. 188 Gear, Wheel — procedure 3, p. 214 Grate, Dishwasher — procedure 18, p. 198 Grate, Pump — procedure 2, p. 234 Grate, Soil Settler — procedure 22, p. 207 Grille, Vent — procedure 18, p. 58 Guard, Sump — procedure 17, p. 197

H

Harness, Wiring — procedure 13, p. 95 Head, Seal — procedure 2, p. 234 Heater — procedure 7, p. 163 Hose, Drain — procedure 5, p. 158 Hose, Water Inlet — procedure 12, p. 183 Housing, Power Cord — procedure 8, p. 84, or procedure 11, p. 89 Housing, Float Switch — procedure 14, p. 188 Housing, Hose Coupler — procedure 10, p. 88, or procedure 11, p. 89 Housing, Pump — procedure 2, p. 234 Housing, Upper Dishrack Wheel - procedure 3, p. 214 How to Read Wiring Diagrams and Timer Sequence Charts — p. 7 How Your Dishwasher Works - p. 14

Ι

Impeller, Drain — procedure 2, p. 234 Impeller, Wash — procedure 2, p. 234 Information, Replacement Parts — p. 12 Inlet, Water — procedure 11, p. 179 Insulator, Thermostat — procedure 9, p. 173

K

Key, Pump — procedure. 2, p. 234 Knob, Push-Button Control — procedure. 3, p. 24 Knob, Timer — procedure. 1, p. 23

\mathbf{L}

Latch, Door — procedure. 2, p. 103
Latch, Faucet Coupler Cap — procedure. 9, p. 85
Lens, Indicator Light — procedure 11, p. 41
Leveling — procedure 4, p. 71 and
— procedure 5, p. 74
Lever, Latch — procedure 1, p. 101
Lever, Release — procedure 1, p. 101
Lever, Upper Dishrack — procedure 3, p. 214
Lid, Detergent Dispenser — procedure 15, p. 131
Light, Indicator — procedure 10, p. 39
Liner, Door — procedure 17, p. 137
Link, Upper Dishrack — procedure 3, p. 214

\mathbf{M}

Maintenance, Preventive — procedure 1, p. 17

Mechanism, Detergent Dispenser
— procedure 16, p. 132

Microswitch — procedure 14, p. 188

Motor — procedure 3, p. 253

Motor and Pump Area — p. 229

Motor, Timer — procedure 14, p. 50

Motor, Timer (Rapid Advance)
— procedure 20, p. 203

Motor, Timer (Rapid Advance Clock)
— procedure 21, p. 205

N

Nut, Heater Terminal — procedure 7, p. 163 Nut, Outlet — procedure 16, p. 194 Nut, Standpipe — procedure 14, p. 188 Nut, Water Inlet — procedure 11, p. 179 Nut, Wetting Agent — procedure 10, p. 115 Nut, Wire — procedure 7, p. 78 and — procedure 13, p. 95

0

Ohmmeter — p. 13 "O" Ring, Check Valve — procedure 6, p. 160 Outlet, Pump — procedure 2, p. 234

P

Panel, Access — procedure 2, p. 151 Panel, Front — procedure 9, p. 114 Panel, Inner Door — procedure 17, p. 137 Panel, Toe — procedure 2, p. 151 Panels (Accessories) — p. 262

INDEX

Parts, If You Need Help Finding – p. 12 Support, Door — procedure 14, p. 128 Parts, Typical - p. 14 and p. 265-281 Support, Heater — procedure 8, p. 168 Parts, Where to Buy -p. 12Support, Pump — procedure 2, p. 234 Pin, Detergent Dispenser Lid - procedure 15, p. 131 Support, Spray Arm — procedure 16, p. 194 Pin, Release Lever — procedure 1, p. 101 Switch, Door — procedure 3, p. 106 Pin, Upper Dishrack End Cap — procedure 4, p. 216 Switch, Push-Button - procedure 9, p. 37 Plate, Model Number — p. 12 Switch, Rocker — procedure 8, p. 35 Plate, Wetting Agent Terminal Symbols, Wiring Diagram — p. 10 procedure 10, p. 115 Pump - procedure 2, p. 234 Pump and Motor Area - p. 229 Terminals — procedure 13, p. 95 Terminal, Detergent Dispenser \mathbf{R} procedure 16, p. 132 Relay, Start — procedure 7, p. 32 Thermal Fuse — procedure 13, p. 187 Relief, Strain — procedure 7, p. 78 Thermostat — procedure 9, p. 173 Retainer, Access Panel – procedure 2, p. 151 Timer — procedure 13, p. 43 Retainer, Detergent Dispenser Timer, Delay — procedure 15, p. 51 procedure 16, p. 132 Timer, Rapid Advance — procedure 19, p. 199 Retainer, Door Gasket — procedure 8, p. 112 Toeplate — procedure 6, p. 76 Retainer, Door Spring — procedure 13, p. 126 Tools - p. 13 Retainer, Heater Support - procedure 8, p. 168 Top — procedure 1, p. 65 Ring, Faucet Coupler Pull — procedure 9, p. 85 Tower - procedure 10, p. 227 Ring, Faucet Coupler Retainer — procedure 9, p. 85 Track, Upper Dishrack — procedure 5, p. 218 Trim, Access Panel — procedure 2, p. 151 \mathbf{S} Trim, Door — procedure 7, p. 111 Safety First — p. 1 Tub and Below the Tub Area - p. 149 Screen, Sump - procedure 18, p. 198 ${f v}$ Screen, Vent - procedure 4, p. 109 Seal, Faucet Coupler - procedure 9, p. 85 Valve, Check — procedure 6, p. 160 Seal, Pump Housing — procedure 2, p. 234 Valve, Water Inlet — procedure 10, p. 176 Seal, Spray Arm — procedure 16, p. 194 \mathbf{w} Separator, Pump — procedure 2, p. 234 Settler, Soil — procedure 22, p. 207 Washer, Delay Timer Dial — procedure 16, p. 55 Shim, Door Strike — procedure 2, p. 68 Washer, Door Latch Cup — procedure 2, p. 103 Shroud — procedure 4, p. 158 Washer, Heater — procedure 7, p. 163 Sleeve, Pump — procedure 2, p. 234 Washer, Heater Support — procedure 8, p. 168 Slides, Faucet Coupler — procedure 9, p. 85 Washer, Retainer Button Sponge Slinger, Pump — procedure 2, p. 234 — procedure 11, p. 123 Socket, Swivel Caster — procedure 3, p. 70 Washer, Spray Arm Grommet Spacer, Pump — procedure 2, p. 234 - procedure 16, p. 194 Spring, Detergent Dispenser Lid Washer, Upper Track Wheel - procedure 6, p. 220 procedure 15, p. 131 Washer, Wetting Agent Dispenser Sealing Spring, Door — procedure 13, p. 126 procedure 10, p. 115 Spring, Draw Bar — procedure 16, p. 132 Wheel, Lower Dishrack - procedure 8, p. 225 Spring, Faucet Coupler - procedure 9, p. 85 Wheel, Rear Leveling — procedure 5, p. 74 Spring, Valve Stem Cover — procedure 2, p. 234 Wheel, Upper Dishrack – procedure 3, p. 214 Spring, Wetting Agent Dispenser Wheel, Upper Track — procedure 6, p. 220 procedure 10, p. 115 Wire — procedure 13, p. 95 Standpipe — procedure 14, p. 188 Worm, Upper Dishrack Wheel Stem, Valve — procedure 2, p. 234 procedure 3, p. 214

Stop, Upper Dishrack Adjustment
— procedure 3, p. 214
Strike, Door — procedure 2, p. 68

·	

	_
	_
	_
_ ·	
	_
	_
	_
	_





PART NO. LIT677967 REV. D



PRINTED IN U.S.A.