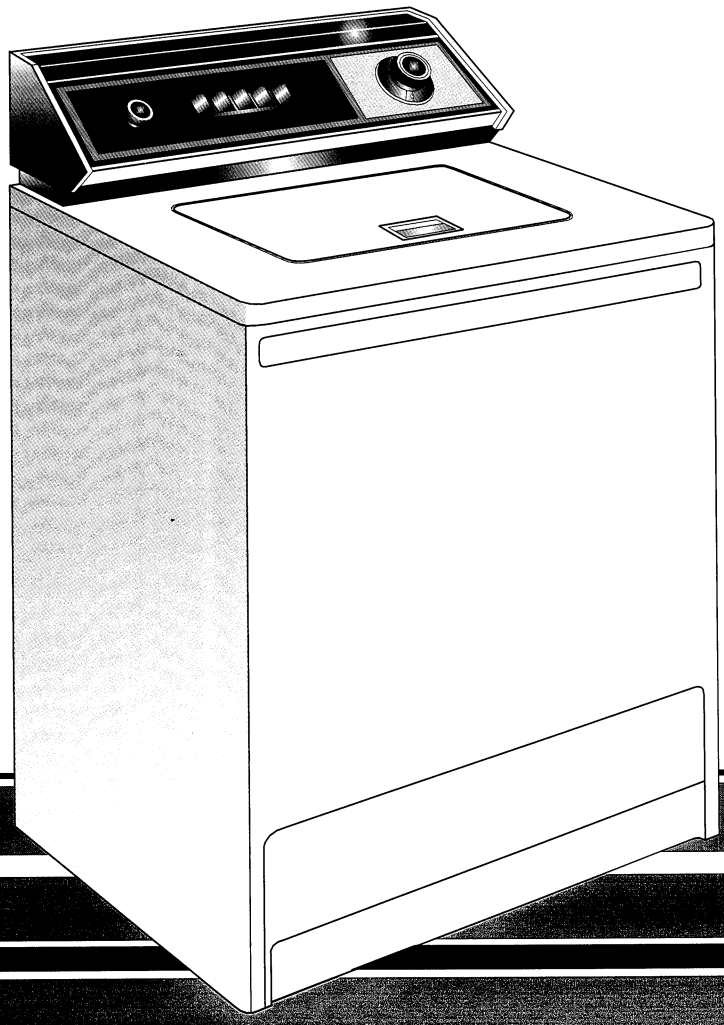
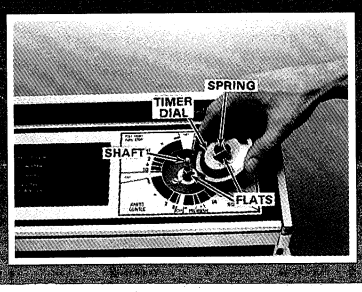
Whirlpool **Automatic Washer (Belt Drive)**

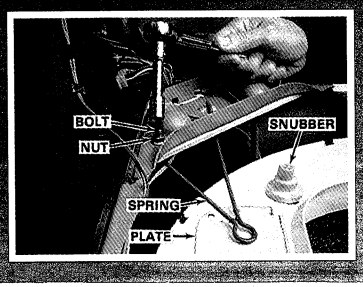
Do-It-Yourself REPAIR MANUAL

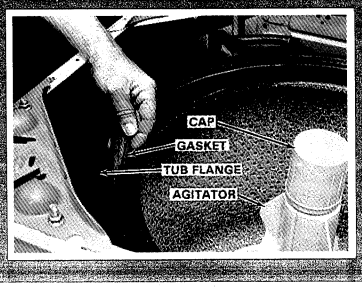
Automatic Washer (Belt Drive)

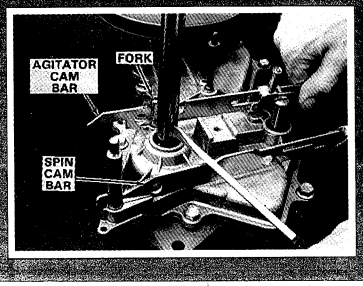


Featuring Full-Color Photographs and Step-by-Step Repair Procedures









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 AUTOMATIC WASHER MAY VOID THIS WARRANTY.

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

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:

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

⚠ WARNING — **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® automatic washer. 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 automatic washers built before 1984, it does NOT cover any procedures for the electronic solid-state controls.

Only the original parts of the Whirlpool automatic washer 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 automatic washer. 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 automatic washer 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.

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

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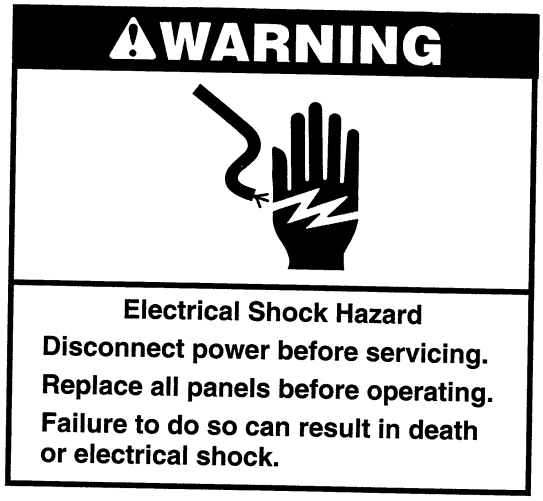
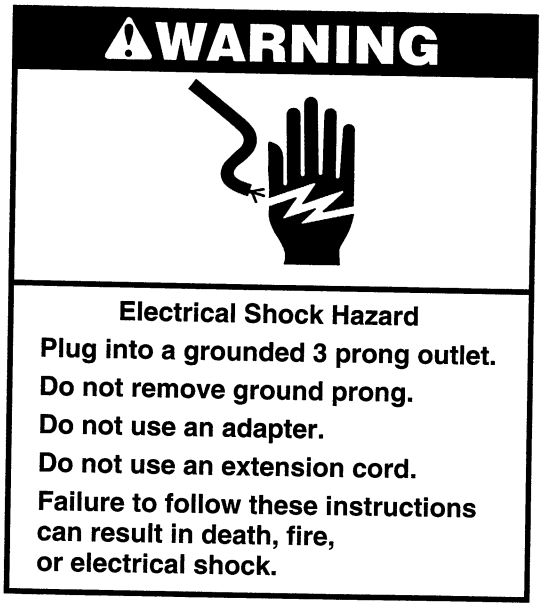
SECTION A

Electrical Power Supply Connections

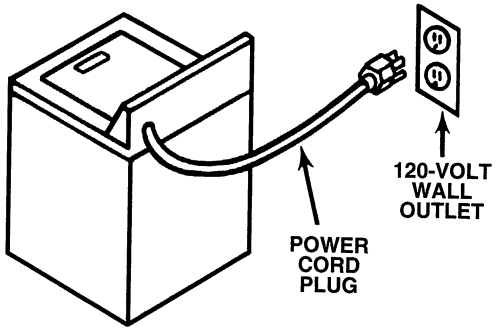
Read This Section Carefully Before Any Repair or Testing Procedures Are Attempted.

PROCEDURE 1





Service Outlet

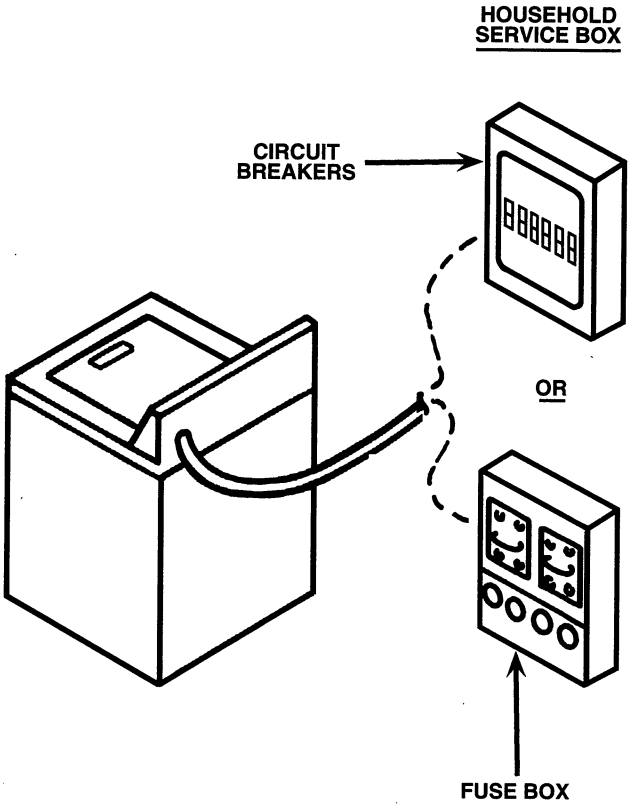


To Disconnect Power
- Unplug washer or disconnect power.

To Connect Power
- Plug in washer or reconnect power.

PROCEDURE 2

Circuit Breakers and Fuses



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 washer fuse block out of fuse box.

To Connect Power
- Replace washer fuse block into fuse box.

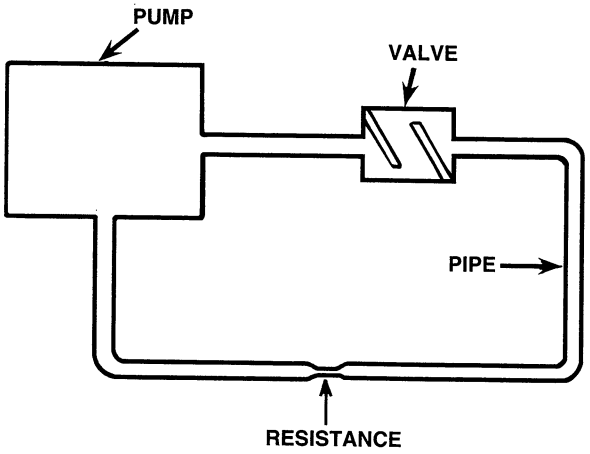
SECTION B

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 for your model is located on the rear service panel.

On pages 9-10 are typical examples of a timer sequence chart and a wiring diagram. These diagrams vary from model to model, but a basic knowledge of one diagram will enable you to understand any WHIRLPOOL® automatic washer wiring chart.

Page 9 represents a typical timer sequence chart and page 10 represents a typical wiring diagram. 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, GY, G-BK, O-BK, 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, in this particular chart we are only showing three cycles — NORMAL or REGULAR/HEAVY, GENTLE and PERMANENT PRESS as well as special cycle — SUPER WASH. To the right of each cycle are the machine functions for that cycle.

The columns under the machine function heading, give basic operation, on the left, and the supporting functions, on the right, for each timer step.

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

Closed 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 automatic washer, 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 and/or the water level and temperature switches.

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

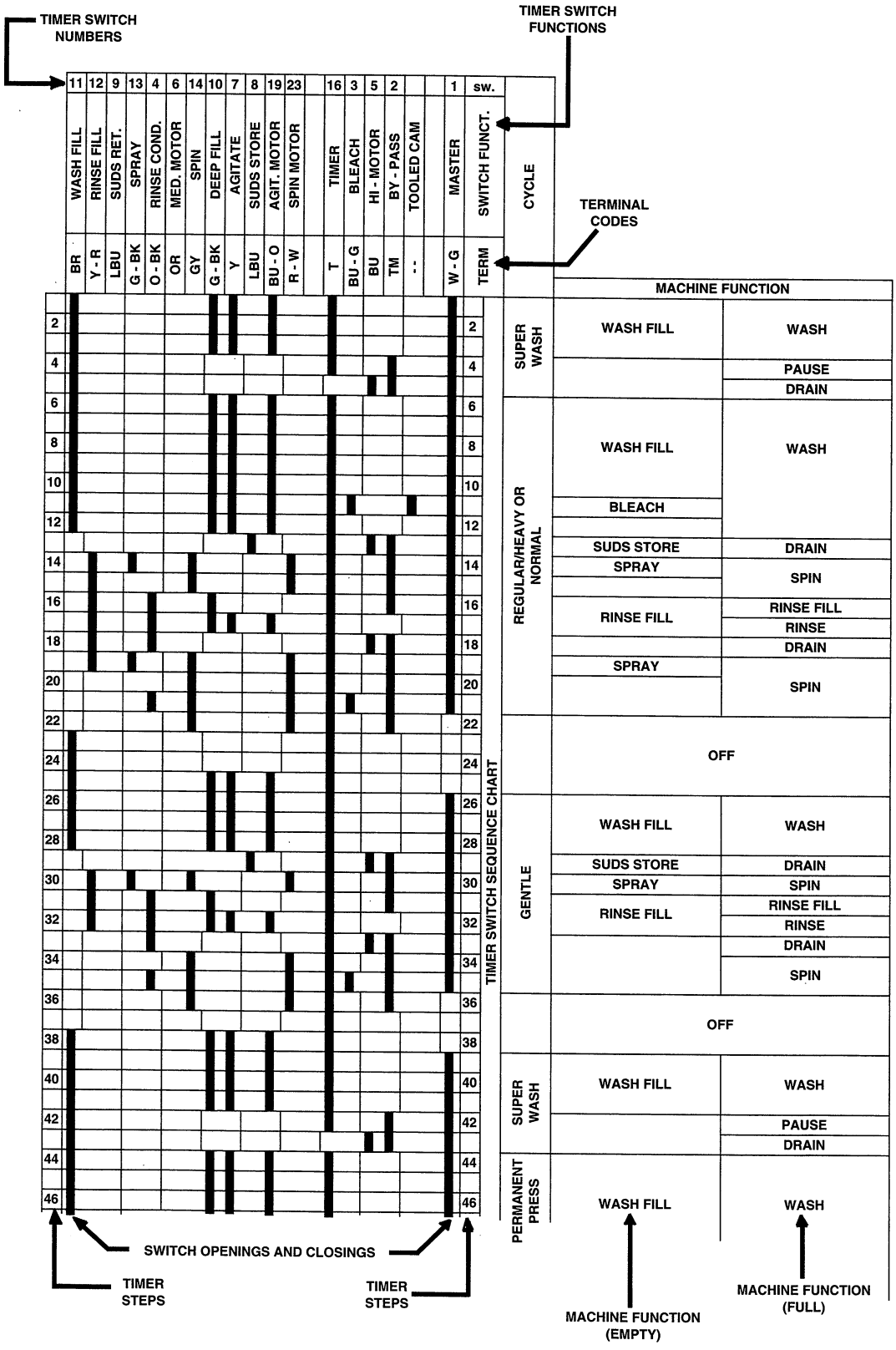
The pull-on, push-off timer knob switch controls all circuits. This switch starts automatic washer operation when the timer knob is pulled out and stops when it is pushed in.

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 reserved for high motor speed; seven (7) is always reserved for agitation, etc.

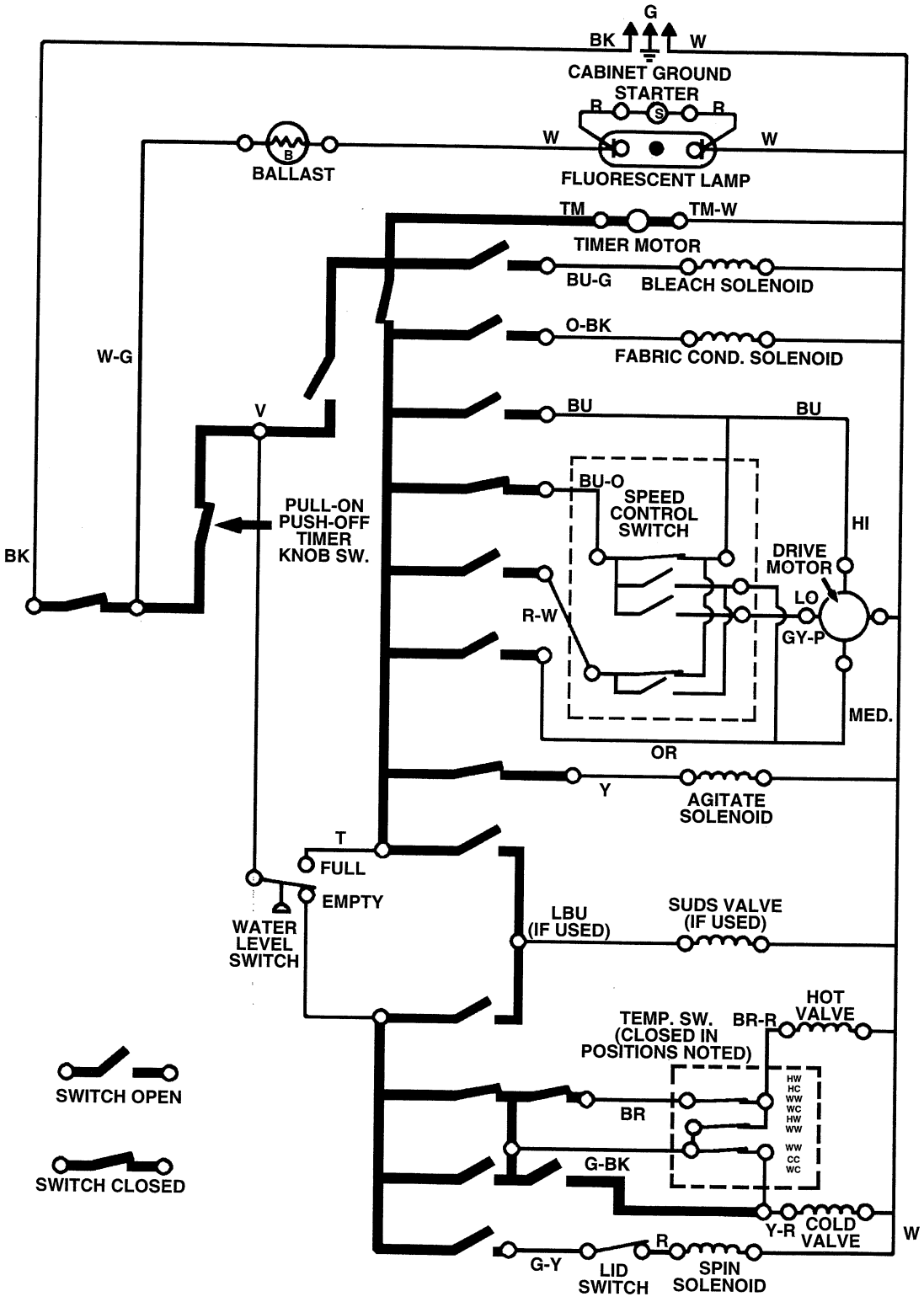
Wiring harnesses are color coded, to match the color-coded lettering imprinted on the wires of the timer-terminal connections. A given automatic washer component always uses the same wiring harness color and color code lettering, regardless of model. Example: BU (blue) is always used for high motor speed; Y (yellow) is always used for agitation.

A given component is always shown at the same position on the wiring diagram. The water temperature switch is shown within dashed lines, near the bottom of the wiring chart. The lettering at the right of the switch contacts indicates present contacts for various combinations of wash and rinse water temperature selections. The first letter represents WASH water temperature, while the second letter identifies RINSE water temperature.

SAMPLE TIMER SEQUENCE CHART



SAMPLE WIRING DIAGRAM



WIRING DIAGRAM SYMBOLS

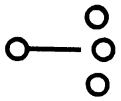
MANUAL AND MECHANICAL SWITCHES

NORMALLY CLOSED (SPST)
(Single-Pole, Single-Throw)

NORMALLY OPEN (SPST)
(Single-Pole, Single-Throw)

TRANSFER (SPDT)
(Single-Pole, Double-Throw)

MULTI-POSITION

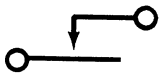


NUMBER OF TERMINALS

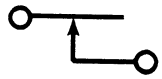
TIMER SWITCH

AUTOMATIC SWITCH

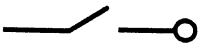
N.O.
(Normally Open)



N.C.
(Normally Closed)

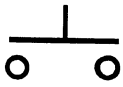


INTEGRAL SWITCH
(Timer, Clock, Etc.)



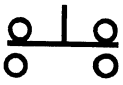
PUSHBUTTON SWITCH (Momentary or Spring Return)

N.O. (CIRCUIT CLOSING)
(Normally Open)

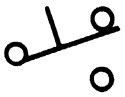


N.C. (CIRCUIT OPENING)
(Normally Closed)

TWO CIRCUIT



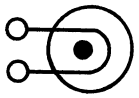
SPDT
(Single-Pole, Double-Throw)



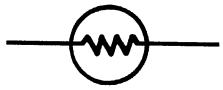
LAMPS

INCANDESCENT

GERMICIDAL



BALLAST



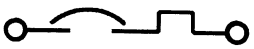
FLUORESCENT

NEON

CIRCUIT PROTECTORS

CIRCUIT BREAKER

CIRCUIT BREAKER
W/THERMAL O.L.



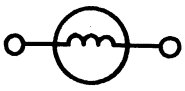
FUSE

THERMAL FUSE

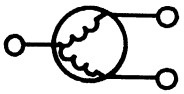
MOTORS

TIMER OR CLOCK

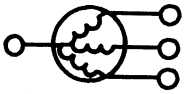
SINGLE-SPEED



TWO-SPEED



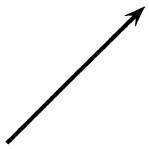
THREE-SPEED



WIRING DIAGRAM SYMBOLS

MISCELLANEOUS

ADJUSTABLE COMPONENT (Arrow Drawn thru Component at Approx. 45°)



OPERATING COIL (Solenoid Relay)

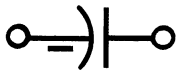
BALLAST

STARTER

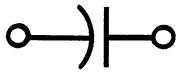
RECTIFIER (DIODE)

RESISTOR or HEATER

CAPACITOR

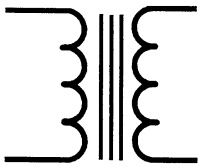


CAPACITOR (Non-Polarized)



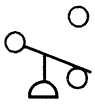
HEATER

TRANSFORMER



CENTRIFUGAL SWITCH

PRESSURE SWITCH S.P.D.T.



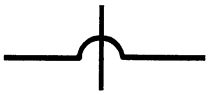
LINES AND CONNECTIONS

INTERNAL CONDUCTOR

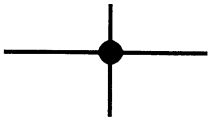
EXTERNAL or HARNESS WIRE

OPTIONAL or ALTERNATE CIRCUIT

CROSSOVER



JUNCTION



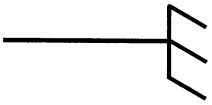
PERMANENT CONNECTION

TERMINAL

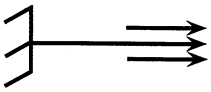
SHIELD

GROUND (EARTH)

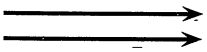
GROUND (CHASSIS)



GROUNDED SERVICE CORD (3-Prong Plug)

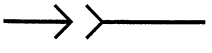


SERVICE CORD (2-Prong Plug)



MECHANICAL CONNECTION

SEPARABLE CONNECTION



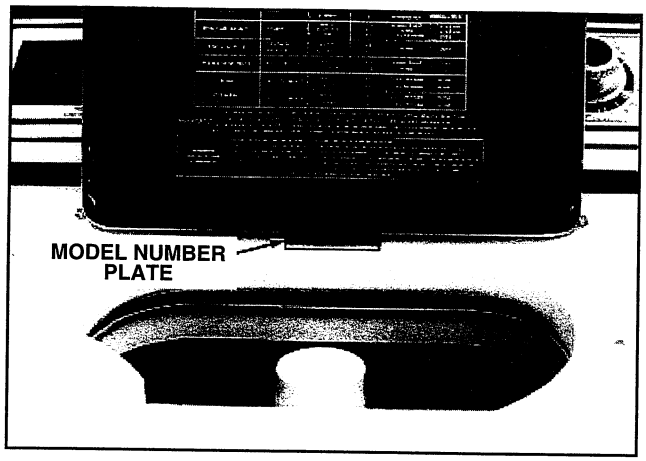
TERMINAL CODES

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

SECTION C

Replacement Parts Information

Model Number Plate

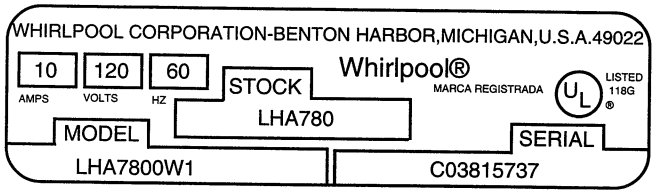


Open the lid and locate the metal or foil plate attached to the back of the lid well. On compact models, the model number plate will be located on the side. This plate will give you the stock number, complete model number, serial number, and other electrical information. The first four positions of the serial number will indicate where and when the washer 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!

Write In Your Complete Model Number Here

Typical Model Number Plate



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 and 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:

Continental U.S. - Alaska - Hawaii ..... **1 (800) 253•1301**

Canada ..... **1 (800) 461•5681**

..... 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

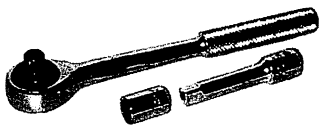
Tools and Testing Equipment

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

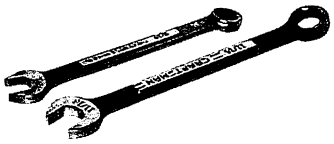
NEEDLE NOSE PLIERS

STANDARD PLIERS

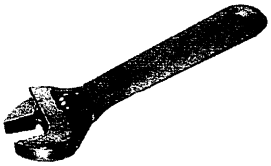
ADJUSTABLE PLIERS



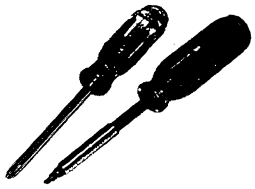
SOCKET WRENCHES



COMBINATION WRENCHES

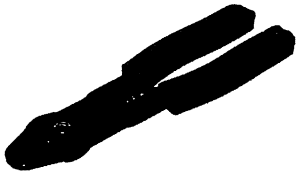


ADJUSTABLE WRENCH



PHILLIPS/TORX SCREWDRIVERS

FLAT SCREWDRIVERS



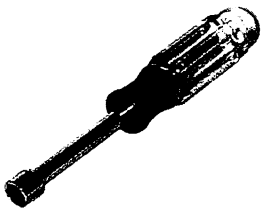
WIRE STRIPPERS

PUTTY KNIFE

ALLEN WRENCH

LOCKING PLIERS

HAMMER



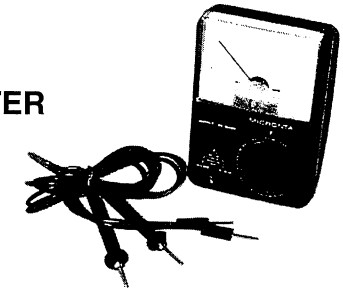
NUTDRIVERS

LEVEL

PUNCH

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

OHMMETER



The definitions we will be using for testing are:

ZERO RESISTANCE (continuity) - makes contact. Needle moves toward zero (right).

OPEN CIRCUIT-no contact. Needle does not move.

NOTES

SECTION E

Fuses and Circuit Breakers

PROCEDURE 1

⚠WARNING

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

Fuses

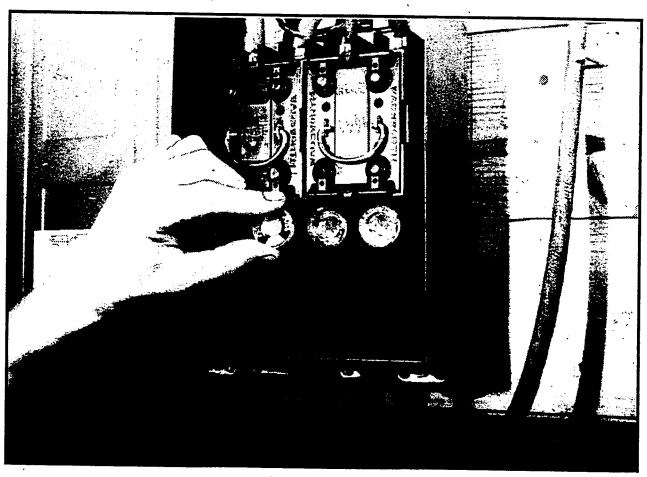
Plug fuses have a round screw base with a glass window. When the plug fuse has blown, the glass window appears burned or smoky. The fuse must be replaced.

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.

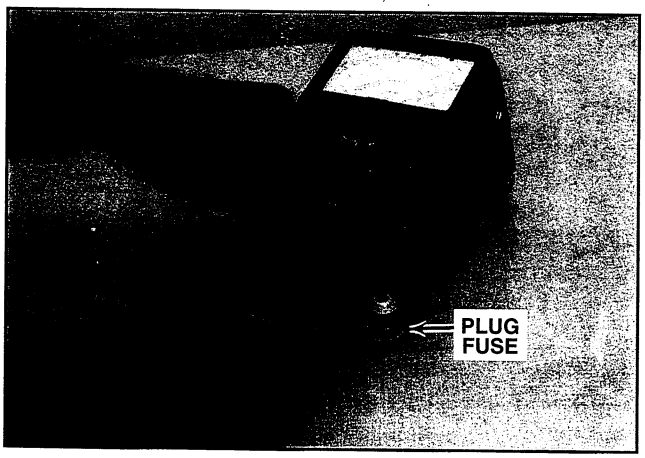
Step 1 Unplug washer or disconnect power.



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 the plug fuse does not blow, plug in washer or reconnect power. 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.

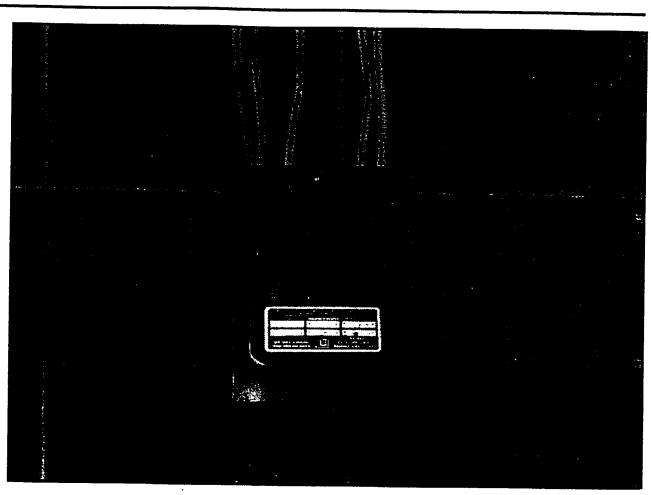
PROCEDURE 2

⚠WARNING

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 Unplug washer or disconnect power.

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 the breaker does not trip, plug in washer or reconnect power. 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 F

Preventive Maintenance and Winterizing

PROCEDURE 1

Preventive Maintenance

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

Run a cycle check, using the following procedures:

Step 1 Start washer in the WASH FILL cycle, noting timer dial alignment and checking fill hoses for leaks.

Step 2 Check mixing valve coils and temperature selector switch by selecting various temperatures during the fill cycle.

Step 3 Allow machine to fill in each of your water level selections. This is to check and see if your pressure switch is working properly.

Step 4 Allow machine to advance into AGITATION and check for recirculating flow, leaks, filter action, rattles and squeaks.

Step 5 Turn the timer OFF and then manually advance timer into pump-out. Turn timer ON and check for complete pump-out, kinked and/or leaking drain hose.

Step 6 In the SPIN cycle, turn the timer ON. Open the lid quickly; see if the basket quits spinning. This checks to see if the lid switch is working properly.

Step 7 If the machine is equipped with the suds saver system, check for operation of the two-way valve, and any leaks in the hoses.

Step 8 Drive belt — check for wear and proper tension.

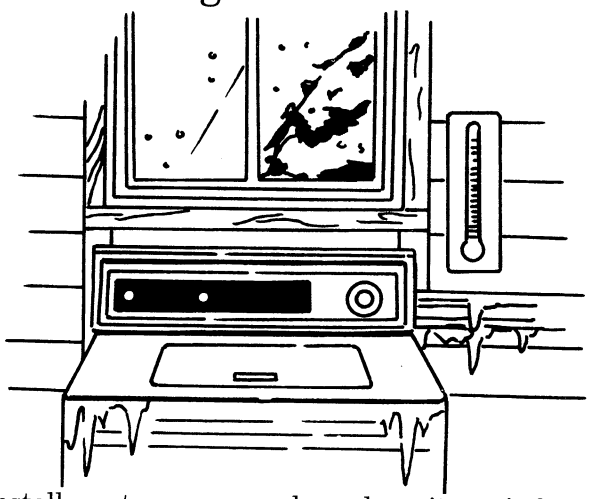
Step 9 If machine is equipped with rinse and bleach dispensers, check for clogging, leaks, and operation.

Step 10 Pump — check for leaks.

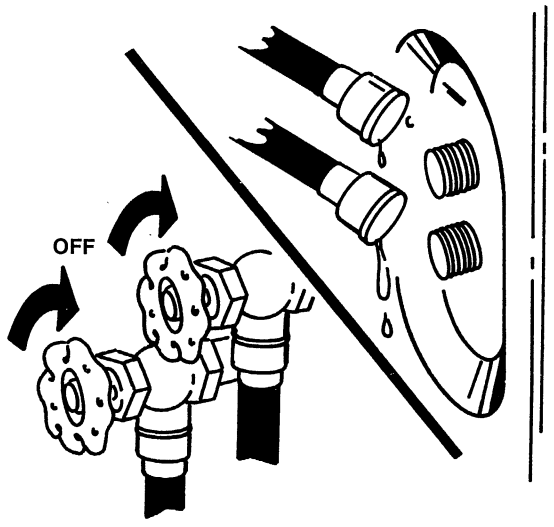
Step 11 Do not use any oil on parts unless the instructions tell you to do so.

PROCEDURE 2

Winterizing

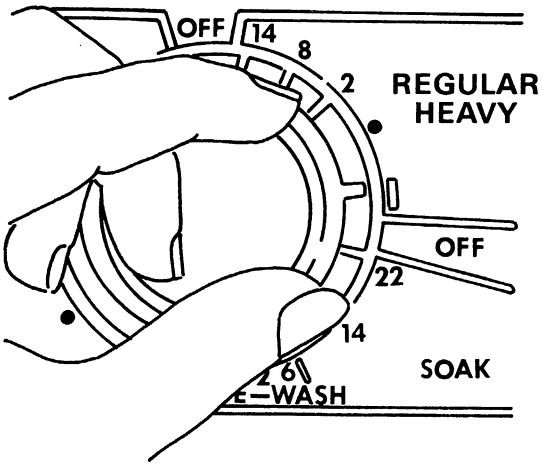


Install or store your washer where it won't freeze. Because some water stays in the washer, freezing can cause a lot of damage. If your washer is stored or moved during cold weather, it's a good idea to winterize it by following these steps:

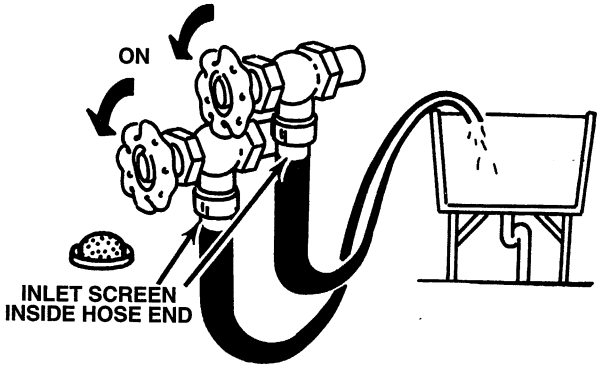


Step 1 Shut off both water faucets. Turn the timer knob to FILL with a WARM WASH, WARM RINSE selection, and turn the machine ON for 10 seconds. This will run the water out of the water inlet valve. Disconnect the end of the hoses from the washer.

Step 2 Pour a quart of propylene glycol (non-poisonous) antifreeze in the basket. This type of antifreeze is used in RV's (recreational vehicles).



Step 3 Set the washer for a DRAIN and SPIN. Let it run for about 30 seconds. This mixes the antifreeze with the water left in the washer.



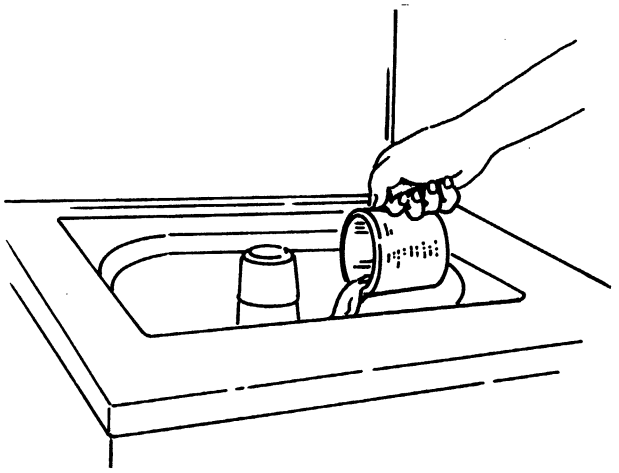
TO USE THE WASHER AGAIN

Step 1 Remove the hoses from the faucets and clean the inlet screens (if used). Replace the hoses on the faucets.

Step 2 Flush the water pipes and hoses.

Step 3 Replace the hoses on the back of the washer.

Step 4 Turn on the water faucets.



Step 5 Pour a cup of detergent in the washer basket and then run the washer through a complete cycle. It will now be ready to use.

SECTION G

How Your Automatic Washer Works

Many people like yourself wash clothes, putting them in the automatic washer, turning control knobs, and setting the timer for the operation they want. But how many people know what is happening inside the automatic washer? Let's look at how your automatic washer works.

All WHIRLPOOL® automatic washers FILL (with water), AGITATE (move the clothes), PUMP-OUT (remove the water), and SPIN (remove most water from the clothes).

Water enters the tub and basket through the inlet hoses, inlet mixing valve, and water inlet. As the water rises in the tub and basket, it forces air through the air dome and up a plastic tube to the water level switch. The air pressure then trips the water level switch from FILL to AGITATE. Agitation is accomplished by a plastic vane agitator located in the center of the basket. This agitator moves back and forth, creating a water motion that forces the clothes to move from top to bottom.

During agitation on self-clean filter models, water continuously circulates through the side check valve, filter, water pump and manifold trap. It goes through a series of water hoses, and then back into the tub and basket.

When the automatic washer goes into DRAIN on self-clean filter models, the water leaves the bottom of the tub and basket through the manifold trap, water pump, filter, side check valve, then out the drain. See pages 22-26 for your type of water circulation.

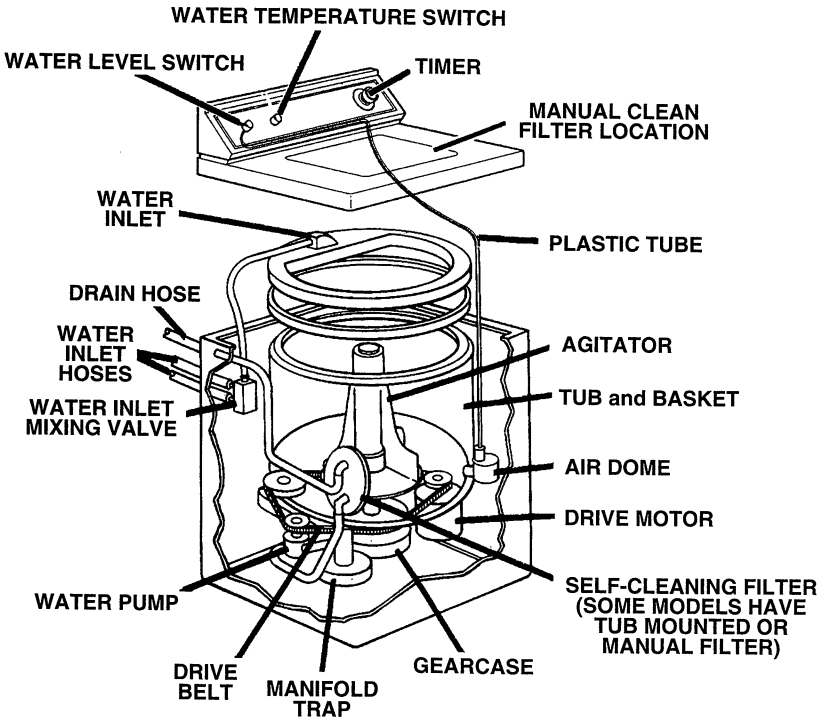
The basket is put into SPIN. The clothes are spun to remove most of the water from the clothes.

The timer is the heart of the automatic washer. It controls the timing of the different cycles.

The main drive motor supplies the power for agitation, pumping, and spinning of the automatic washer through a series of pulleys and a drive belt.

Shown below is a self-cleaning filter washer.

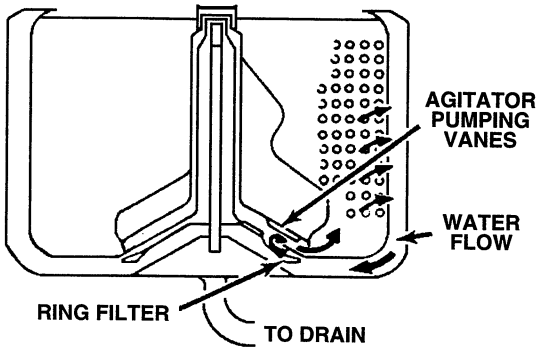
This is a typical drawing; some parts may not be in the correct position.



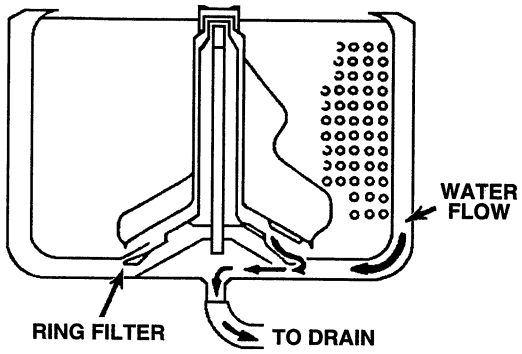
Water systems contain valves, pumps, filters, and hoses. Their function is to fill the tub with water, filter the water, send water to storage tubs, only to recall the water later, and then to drain the water from the automatic washer (suds saver models), or fill the tub with water, filter the water through recirculation, and then drain the water from the tub (non-suds saver models).

SELF-CLEANING FILTER WATER FLOW
RING FILTER
(Non-Suds Saver Models)

FILTERING

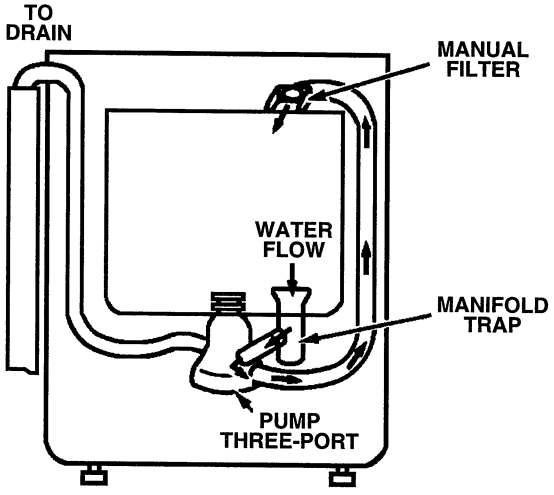


PUMP-OUT

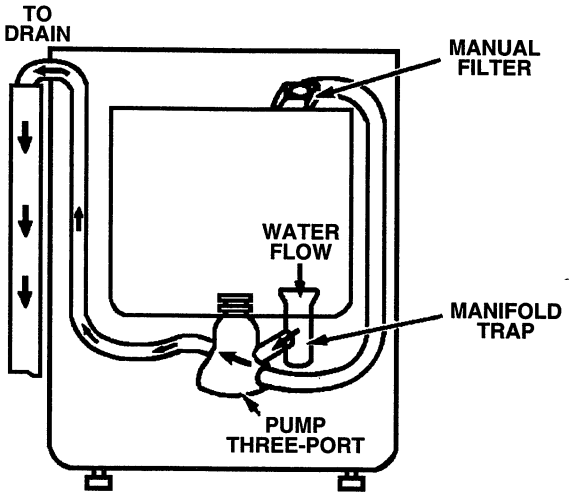


MANUAL CLEAN FILTER WATER FLOW
(Non-Suds Saver Models)

FILTERING



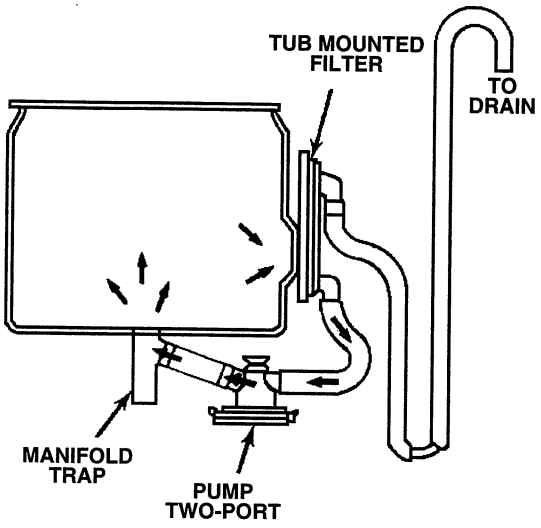
PUMP-OUT



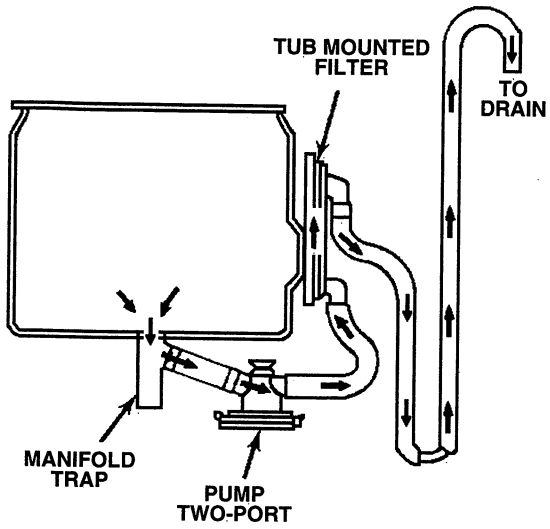
VIEWED FROM SIDE OF WASHER

SELF-CLEANING FILTER WATER FLOW
TUB MOUNTED FILTER
(Non-Suds Saver Models)

FILTERING

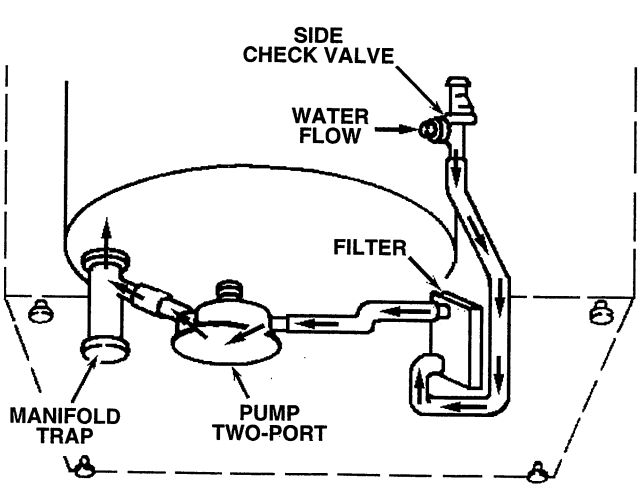


PUMP-OUT

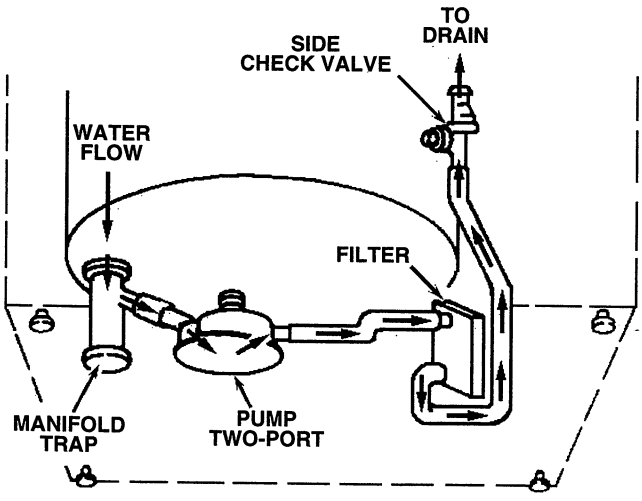


SELF-CLEANING FILTER WATER FLOW

FILTERING



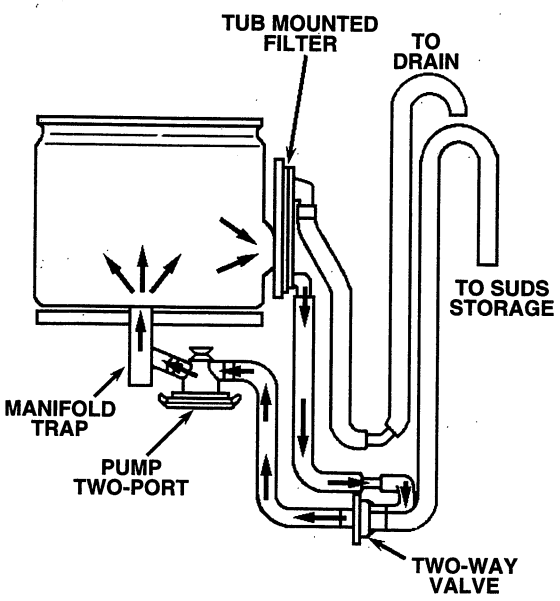
PUMP-OUT



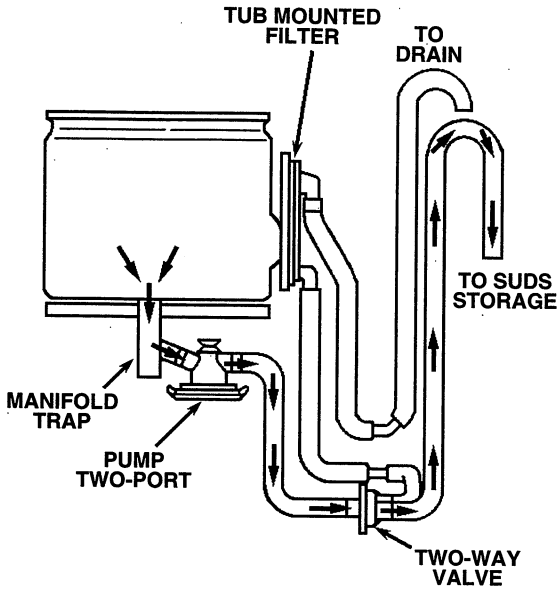
VIEWED FROM SIDE OF WASHER

SELF-CLEANING FILTER WATER FLOW
TUB MOUNTED FILTER
(Suds Saver Models)

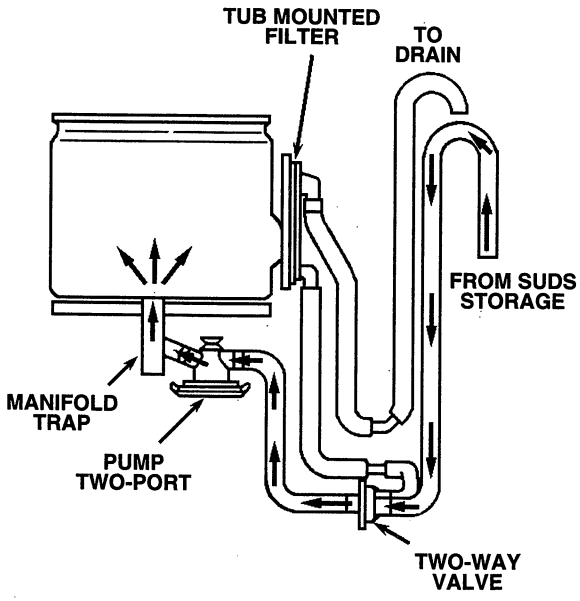
FILTERING



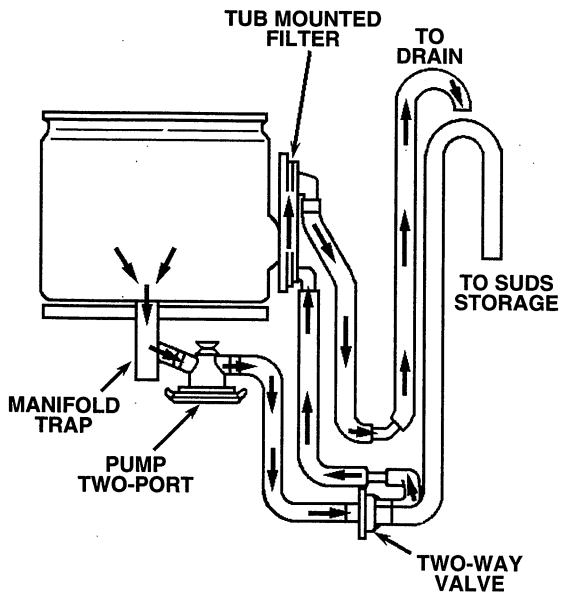
TO SUDS WATER STORAGE TUBS



FROM SUDS WATER STORAGE TUBS

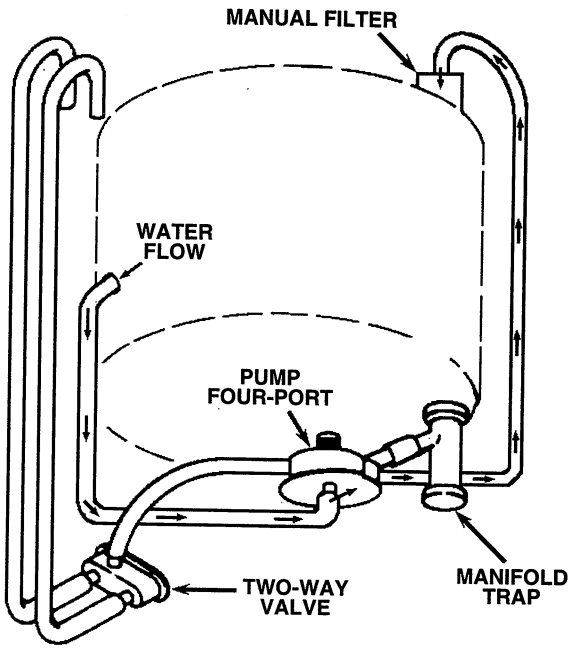


PUMP-OUT

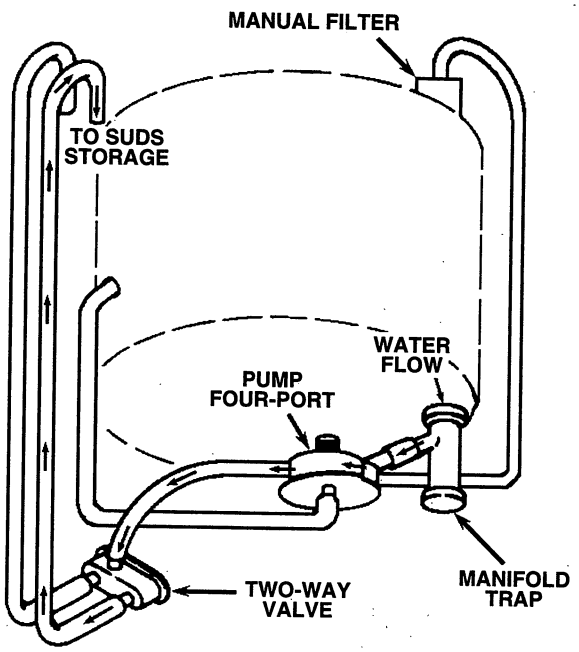


MANUAL CLEAN FILTER WATER FLOW
(Suds Saver Models)

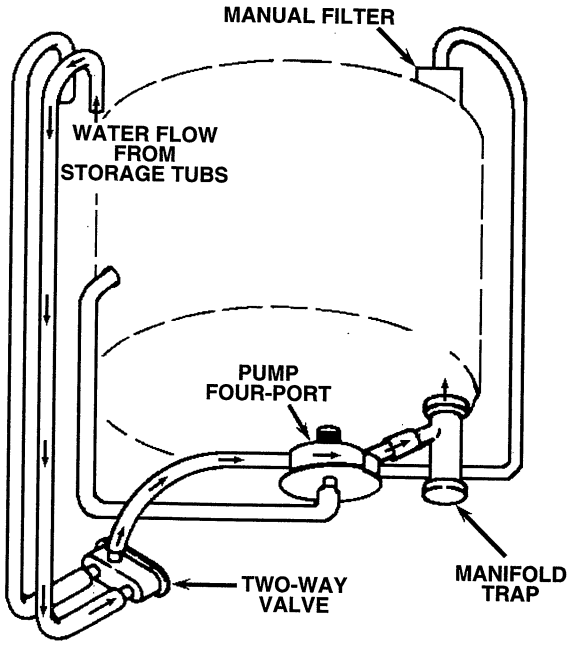
FILTERING



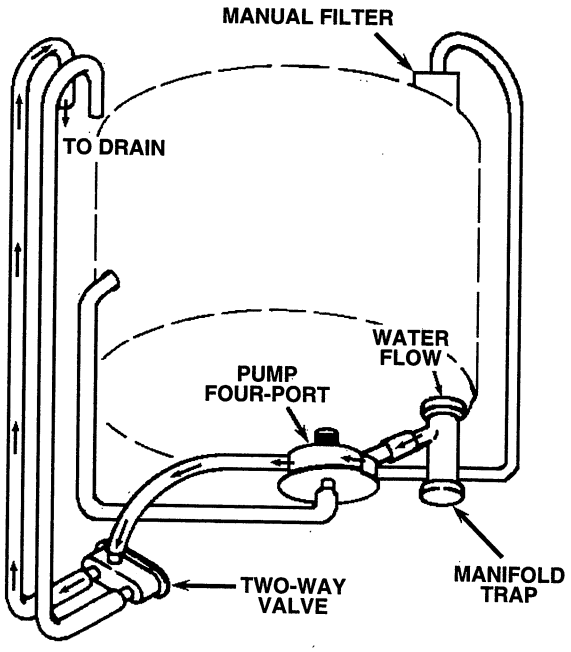
TO SUDS WATER STORAGE TUBS



FROM SUDS WATER STORAGE TUBS



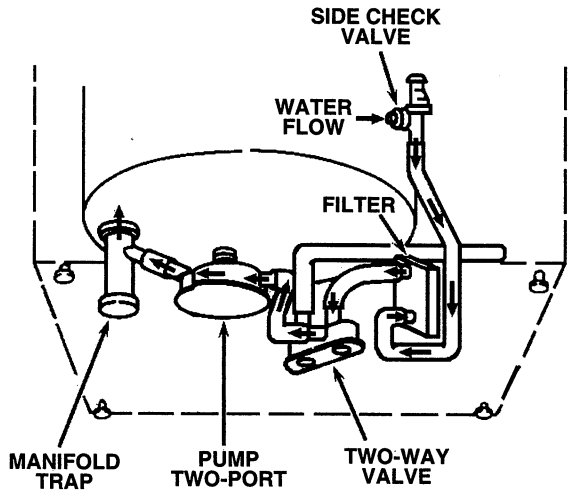
PUMP-OUT



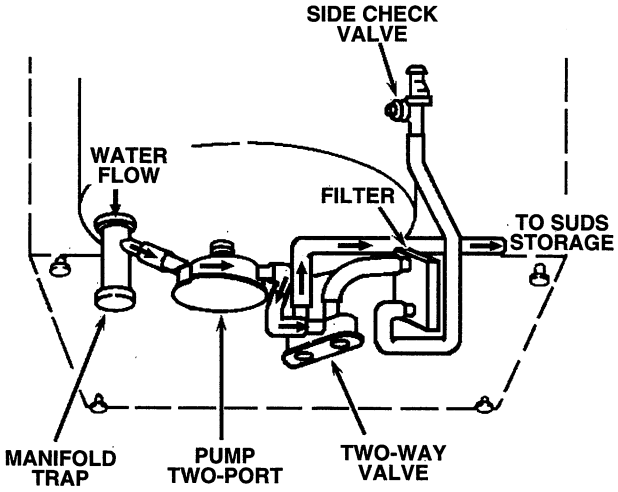
VIEWED FROM BACK OF WASHER

SELF-CLEANING FILTER WATER FLOW
(Suds Saver Models)

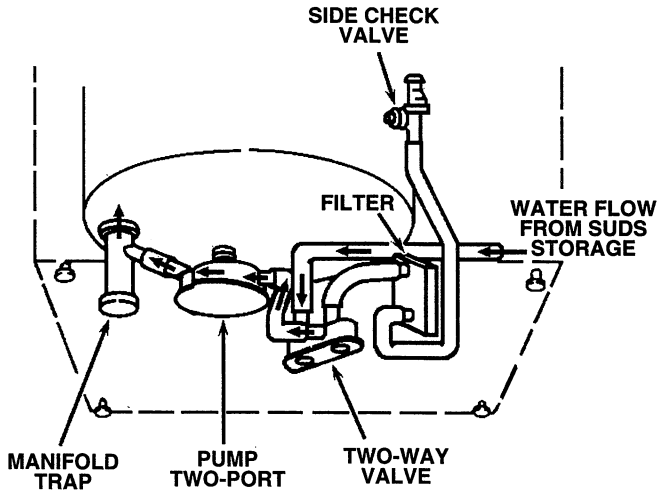
FILTERING



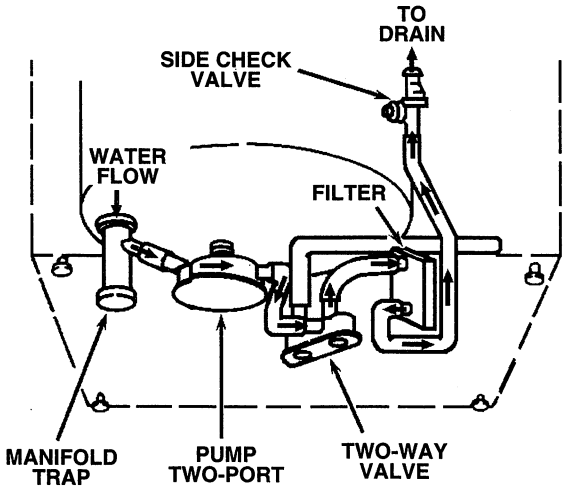
TO SUDS WATER STORAGE TUBS



FROM SUDS WATER STORAGE TUBS



PUMP-OUT



VIEWED FROM SIDE OF WASHER

NOTES

NOTES

SECTION H

Problem Solving Charts

4 Functions of the Automatic Washer for a Quick Check

It is important that you check these four functions after any repairs have been made (and before using the automatic washer) to see if you have solved your problem and have not created a different one.

1. DOES IT FILL?	YES — Go to 2. NO — See problems 1, 2, and 16.
2. DOES IT AGITATE?	YES — Go to 3. NO — See problems 1, 4, 5, and 16.
3. DOES IT DRAIN?	YES — Go to 4. NO — See problems 1, 6, and 16.
4. DOES IT SPIN?	YES — Check for other problems. NO — See problems 1, 4, 7, and 16.

SEE PAGES 21 AND 148–154 FOR LOCATION OF PARTS.

READ SECTION G — "HOW YOUR AUTOMATIC WASHER 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. Washer will not operate.	1a. No electrical power.	1a. Check electrical power. See section A, procedures 1 or 2, p. 5 or 6.
	1b. Power cord.	1b. Check power cord. See section N, procedure 1, p. 123.
	1c. Open circuit in timer.	1c. Check timer. See section I, procedure 7, p. 46.
	1d. Short (bare wire touching metal).	1d. Check all wiring for bare wire or terminal touching metal.
2. Water will not enter washer.	2a. No electrical power.	2a. Check electrical power. See section A, procedures 1 or 2, p. 5 or 6.
	2b. Power cord.	2b. Check power cord. See section N, procedure 1, p. 123.
	2c. Water faucets closed.	2c. Make sure water faucets are turned "ON."
	2d. Inlet hoses kinked.	2d. Move inlet hoses to prevent kinking.
	2e. Plugged inlet hose screens.	2e. Remove screens from inlet hoses and clean.
	2f. Inlet mixing valve.	2f. Check inlet mixing valve. See section L, procedure 1, p. 83. NOTE: Do not tamper with screens.
	2g. Water level switch.	2g. Check water level switch. See section I, procedure 6, p. 44.
	2h. Temperature switch.	2h. Check temperature switch. See section I, procedure 5, p. 42.
	2i. Timer.	2i. Check timer. See section I, procedure 7, p. 46.
	2j. Loose terminal.	2j. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	2k. Broken wire in wiring harness.	2k. Check for broken wire. See section N, procedure 4, p. 128.
3. Water level too low.	3a. Water level switch.	3a. Check water level switch. See section I, procedure 6, p. 44.
4. Drive motor will not run.	4a. No electrical power.	4a. Check electrical power. See section A, procedures 1 or 2, p. 5 or 6.
	4b. Power cord.	4b. Check power cord. See section N, procedure 1, p. 123.
	4c. Drive motor overheated.	4c. Allow motor thermal overload to cool.
	4d. Drive motor start switch.	4d. Check motor start switch. See section M, procedure 9, p. 118.
	4e. Drive motor.	4e. Check drive motor. See section M, procedure 8, p. 114.
	4f. Water level switch.	4f. Check water level switch. See section I, procedure 6, p. 44.
	4g. Pump.	4g. Check pump. See section L, procedure 4, p. 91.
	4h. Timer.	4h. Check timer. See section I, procedure 7, p. 46.

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
4. Drive motor will not run. (continued)	4i. Lid open in "SPIN CYCLE."	4i. Close lid.
	4j. Lid open in last 2 minutes of agitate.	4j. Close lid.
	4k. Loose terminal.	4k. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	4l. Broken wire in wiring harness.	4l. Check for broken wire. See section N, procedure 4, p. 128.
	4m. Gearcase.	4m. Replace gearcase. See section M, procedure 3, p. 103.
5. Washer will not agitate.	5a. Broken or loose belt.	5a. Check belt. See section M, procedure 2, p. 99.
	5b. Water level switch.	5b. Check water level switch. See section I, procedure 6, p. 44.
	5c. Control magnet.	5c. Check control magnet. See section M, procedure 5, p. 108.
	5d. Drive motor start switch.	5d. Check motor start switch. See section M, procedure 9, p. 118.
	5e. Drive motor.	5e. Check drive motor. See section M, procedure 8, p. 114.
	5f. Loose pulleys.	5f. Tighten setscrews on motor and gearcase pulleys.
	5g. Timer.	5g. Check timer. See section I, procedure 7, p. 46.
	5h. Gearcase.	5h. Replace gearcase. See section M, procedure 3, p. 103.
	5i. Broken cam bar rivet.	5i. Check cam bar rivets. See section M, procedure 7, p. 111.
	5j. Loose terminal.	5j. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	5k. Broken wire in wiring harness.	5k. Check for broken wire. See section N, procedure 4, p. 128.
6. Water does not drain from washer.	6a. Drain hose kinked.	6a. Move drain hose to prevent kinking or replace.
	6b. Too much suds.	6b. Add cold water. Use less detergent. Also read your "Use and Care Guide."
	6c. Incorrect drain height.	6c. Read your "Installation Instructions."
	6d. Plugged drain hose.	6d. Remove obstruction.
	6e. Pump.	6e. Check pump. See section L, procedure 4, p. 91.
	6f. Broken or loose belt.	6f. Check belt. See section M, procedure 2, p. 99.
	6g. Manifold air lock.	6g. Check manifold trap. See section L, procedure 2, p. 85.
	6h. Side check valve. (partial drain) (self-clean filter models)	6h. Clean or replace. See section K, procedure 6, p. 74.

(CONTINUED)

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
6. Water does not drain from washer. (continued)	6i. Lint filter. (self-clean)	6i. Check lint filter. See section L, procedure 3, p. 86.
	6j. Two-way valve.	6j. Check two-way valve. See section L, procedure 5, p. 93.
	6k. Timer.	6k. Check timer. See section I, procedure 7, p. 46.
	6l. Loose terminal.	6l. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	6m. Broken wire in wiring harness.	6m. Check for broken wire. See section N, procedure 4, p. 128.
7. Basket is slow or will not spin. (empty tub of water)	7a. Lid open.	7a. Close lid.
	7b. Broken or loose belt.	7b. Check belt. See section M, procedure 2, p. 99.
	7c. Control magnet.	7c. Check control magnet. See section M, procedure 5, p. 108.
	7d. Water level switch.	7d. Check water level switch. See section I, procedure 6, p. 44.
	7e. Lid switch.	7e. Check lid switch. See section J, procedure 3, p. 58.
	7f. Loose motor pulley.	7f. Tighten pulley setscrew.
	7g. Drive motor start switch.	7g. Check motor start switch. See section M, procedure 9, p. 118.
	7h. Drive motor.	7h. Check drive motor. See section M, procedure 8, p. 114.
	7i. Timer.	7i. Check timer. See section I, procedure 7, p. 46.
	7j. Clothes between basket and tub.	7j. Remove clothes.
	7k. Gearcase.	7k. Replace gearcase. See section M, procedure 3, p. 103.
	7l. Loose terminal.	7l. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	7m. Broken wire in wiring harness.	7m. Check for broken wire. See section N, procedure 4, p. 128.
8. Washer leaks water or splashes water on floor.	8a. Hoses not secured.	8a. Make sure hose clamps are tight, both inside and out of the washer.
	8b. Hose leaks.	8b. Check hoses and replace.
	8c. Leak in tub.	8c. Check hose connections, the four screws or holes in the tub. See section K, procedure 9, p. 79.
	8d. Side check valve. (self-clean filter models)	8d. Check side check valve. See section K, procedure 6, p. 74.
	8e. Drain funnel. (manual clean filter models with suds saver system)	8e. Check side funnel. See section K, procedure 7, p. 76.
	8f. Pump.	8f. Check pump. See section L, procedure 4, p. 91.
	8g. Use of low water level with high agitation.	8g. Use higher water level.

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
9. Washer will not spray rinse.	9a. Inlet mixing valve.	9a. Check inlet mixing valve. See section L, procedure 1, p. 83. NOTE: Do not tamper with screens.
	9b. Temperature switch.	9b. Check temperature switch. See section I, procedure 5, p. 42.
	9c. Timer.	9c. Check timer. See section I, procedure 7, p. 46.
	9d. Loose terminal.	9d. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	9e. Broken wire in wiring harness.	9e. Check for broken wire. See section N, procedure 4, p. 128.
10. Washer will not shut off.	10a. Timer.	10a. Check timer. See section I, procedure 7, p. 46.
11. Washer shakes or moves around.	11a. Shipping material not removed.	11a. Remove shipping material. See your "Use and Care Guide."
	11b. Unbalanced load.	11b. Move clothes evenly around basket.
	11c. Washer not level.	11c. Adjust the rear leveling feet and the front feet. See section N, procedure 2, p. 126 or procedure 3, p. 127.
	11d. Weak flooring.	11d. Floor must be solid.
	11e. Gearcase braces loose.	11e. Check the five nuts and one bolt and tighten. See section M, procedure 3, p. 103.
	11f. Oil, grease or detergent on snubber.	11f. Check snubber. See section K, procedure 1, p. 63.
12. Water will not shut off.	12a. Inlet mixing valve.	12a. Listen for running water. If you hear running water the valve is stuck and must be replaced. See section L, procedure 1, p. 83.
	12b. Water level switch.	12b. Check water level switch. See section I, procedure 6, p. 44.
	12c. Air leak or kink in water level switch hose.	12c. Check hose. See section K, procedure 8, p. 78.
	12d. Air leak in air dome.	12d. Check air dome. See section K, procedure 8, p. 78.
	12e. Timer.	12e. Check timer. See section I, procedure 7, p. 46.
13. No hot water.	13a. Inlet mixing valve.	13a. Check inlet mixing valve (hot coil). See section L, procedure 1, p. 83.
	13b. Temperature switch.	13b. Check temperature switch. See section I, procedure 5, p. 42.
	13c. Timer.	13c. Check timer. See section I, procedure 7, p. 46.
	13d. Loose terminal.	13d. Check terminal connections on above parts. See section N, procedure 4, p. 128.

(CONTINUED)

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
13. No hot water. (continued)	13e. Broken wire in wiring harness.	13e. Check for broken wire. See section N, procedure 4, p. 128.
14. No cold water.	14a. Inlet mixing valve.	14a. Check inlet mixing valve (cold coil). See section L, procedure 1, p. 83.
	14b. Temperature switch.	14b. Check temperature switch. See section I, procedure 5, p. 42.
	14c. Timer.	14c. Check timer. See section I, procedure 7, p. 46.
	14d. Loose terminal.	14d. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	14e. Broken wire in wiring harness.	14e. Check for broken wire. See section N, procedure 4, p. 128.
15. Washer damages clothes.	15a. Too much bleach or fabric softener poured on clothes.	15a. Read your "Laundry Guide."
	15b. Too many clothes.	15b. Read your "Laundry Guide."
	15c. Agitator.	15c. Check agitator. See section K, procedure 4, p. 69.
	15d. Basket.	15d. Check basket. See section K, procedure 5, p. 72.
	15e. Water level too low.	15e. Increase water level.
	15f. Foreign objects.	15f. Remove.
16. Timer does not advance.	16a. Timer motor.	16a. Check timer motor. See section I, procedure 8, p. 50.
	16b. Timer.	16b. Check timer. See section I, procedure 7, p. 46.
	16c. Water level switch.	16c. Check water level switch. See section I, procedure 6, p. 44.
	16d. Loose terminal.	16d. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	16e. Broken wire in wiring harness.	16e. Check for broken wire. See section N, procedure 4, p. 128.
17. Washer leaks oil.	17a. Leak in gearcase.	17a. Check gearcase. See section M, procedure 3, p. 103.
18. Clothes not spinning dry.	18a. Water not draining from washer correctly.	18a. See problem 6.
	18b. House drain.	18b. Incorrect drain height or plugged drain. See your "Installation Instructions."
	18c. Side check valve.	18c. Clean or replace. See section K, procedure 6, p. 74.
19. Water fills and drains at the same time.	19a. Pump.	19a. Check pump. See section L, procedure 4, p. 91.
	19b. Control magnet.	19b. Check control magnet. See section M, procedure 5, p. 108.
	19c. Cam bar. (agitate)	19c. Check cam bar. See section M, procedure 7, p. 111.

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
20. Lint on clothes.	20a. Filters.	20a. Check filters. See section L, procedure 3, p. 86.
	20b. Wrong mixture of clothes.	20b. See your "Use and Care Guide."
	20c. Overloading.	20c. See your "Use and Care Guide."
21. Suds water will not return to washer. (suds saver system)	21a. Kinked hoses.	21a. Move suds hoses to prevent kinking.
	21b. Plugged hoses.	21b. Remove obstruction.
	21c. Two-way valve.	21c. Check two-way valve. See section L, procedure 5, p. 93.
	21d. Pump.	21d. Check pump. See section L, procedure 4, p. 91.
	21e. Water level switch.	21e. Check water level switch. See section I, procedure 6, p. 44.
	21f. Timer.	21f. Check timer. See section I, procedure 7, p. 46.
	21g. Loose terminal.	21g. Check terminal connections on above parts. See section N, procedure 4, p. 128.
	21h. Broken wire in wiring harness.	21h. Check for broken wire. See section N, procedure 4, p. 128.

NOTES

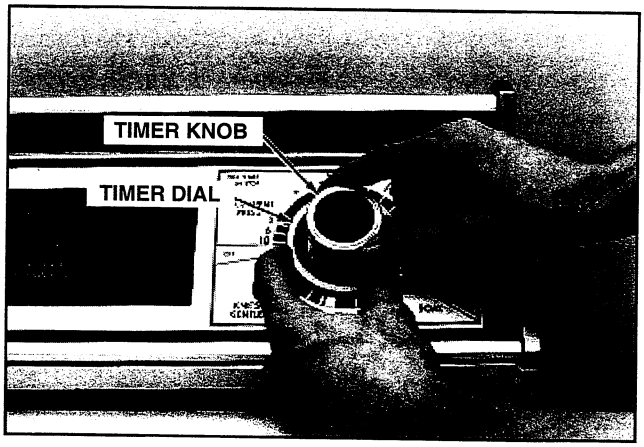
SECTION I

Console Area

PROCEDURE 1
Timer Knob Replacement

See page 148, illus. no. 58 for location of part.

NOTE: Be sure timer is pushed in (OFF).



Step 1 Hold the timer dial with one hand while turning the timer knob to the left with the other hand.

REPLACEMENT

NOTE: Be sure timer is pushed in (OFF).

Step 2 Place the new timer knob on the timer shaft. Turn the timer knob to the right until tight.

PROCEDURE 2
Timer Dial Replacement

See page 148, illus. no. 57 for location of part.

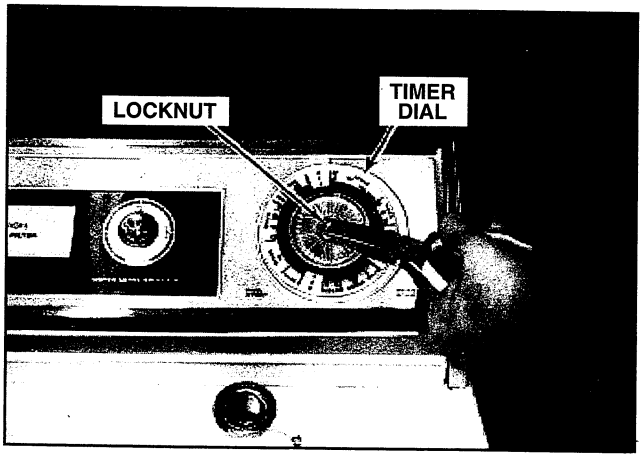
Two methods have been used to attach the timer dial to the shaft of the timer; either with a locknut or with a knob with a "D" flat molded in the hub.

To find out which type you have, first remove the timer knob. Look at the center of the dial. If there is a locknut holding the dial on, see Type A. If there is not a locknut, see Type B.

TYPE A

Step 1 Remove the timer knob.

NOTE: Before removing the old dial, notice on your old dial the cycle setting the timer is in. Place the timer dial on the timer shaft showing the exact cycle setting as your old one showed.



Step 2 Using needle nose pliers or an open end wrench, remove the locknut.

Step 3 If you do not know what cycle the timer is in, turn the water faucets to the washer OFF.

Step 4 Replace the timer knob.

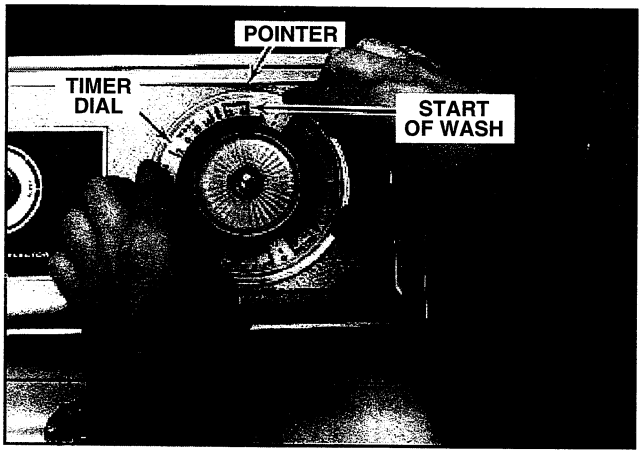
Step 5 Turn the washer ON by pulling up on the knob. Very slowly turn the timer knob to the right until the washer starts to agitate.

Step 6 Continue to turn the timer knob very slowly to the right until the agitation stops.

Step 7 Shut the washer OFF by pushing down on the knob.

Step 8 Remove the timer knob.

REPLACEMENT



Step 9 Place the new timer dial on so the pointer lines up with the start of the SUPER wash setting, and then push down on the dial. Timer dial is now set correctly.

Step 10 Using needle nose pliers or an open end wrench, replace the locknut with the open portion facing down.

Step 11 Replace the timer knob.

Step 12 Turn the water faucets back on.

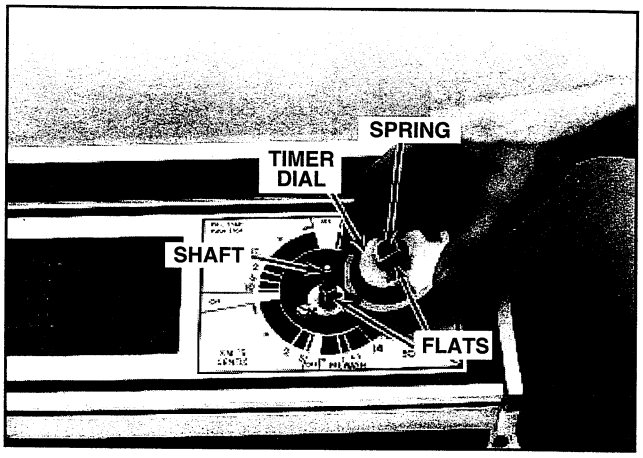
Step 13 Pull up on the knob in each of the OFF positions to make sure the washer is actually off. If the washer turns ON the dial needs to be readjusted. Remove the knob and locknut and slightly turn the dial. Replace the locknut and knob and test again.

TYPE B

Step 1 Remove the timer knob.

Step 2 Pull the timer dial straight off.

REPLACEMENT



Step 3 Check to make sure the metal clip is either inside or around the hub on the new timer dial.

Step 4 Place the timer dial on, by lining up the flat of the timer shaft with the flat of the dial, and push on.

Step 5 Replace the timer knob.

PROCEDURE 3

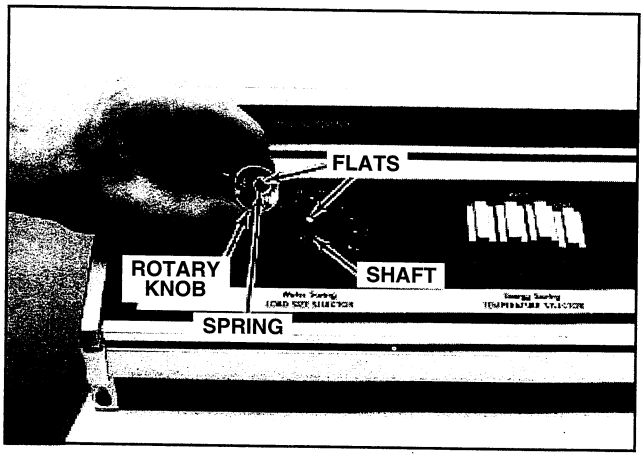
Rotary/Push-Button Control Knob Replacement

See page 148, illus. nos. 33 and 61 for location of parts.

There are two types of control knobs used; either the rotary or push-button type.

See Type A for the rotary or Type B for the push-button.

TYPE A



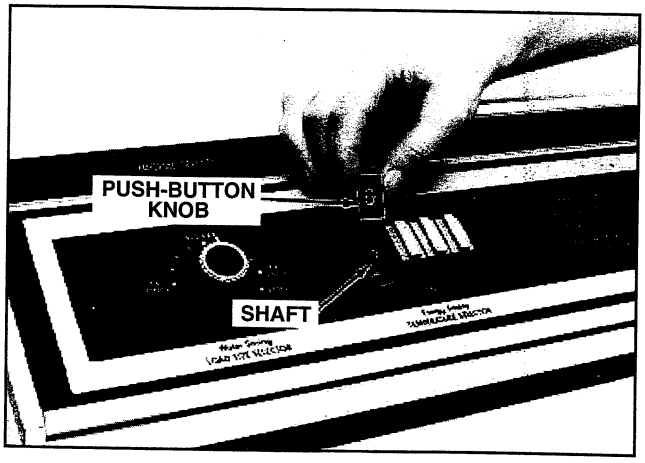
Step 1 To replace any rotary type knob, pull straight off. NOTICE the flat on the shaft of the switch and the flat in the back of the control knob.

REPLACEMENT

Step 2 Check to make sure the metal clip is either inside or around the hub on the new control knob.

Step 3 Line up the flat in the rotary knob with the flat on the switch shaft, and push on.

TYPE B



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

REPLACEMENT

Step 2 Push the new push-button onto the switch shaft.

PROCEDURE 4

⚠WARNING

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

Removing the Console Rear Panel and the Console Front Panel

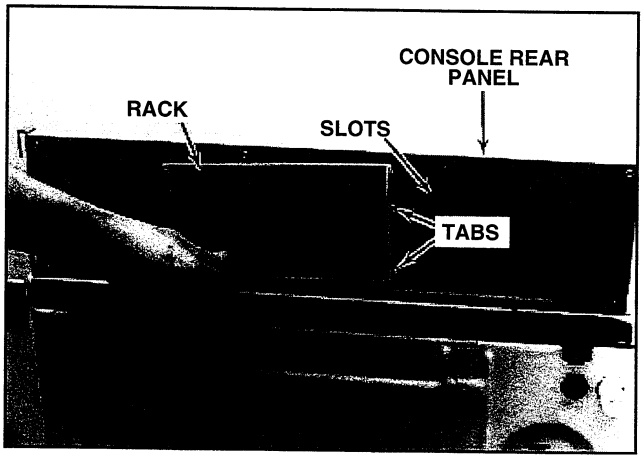
See page 148, illus. nos. 1 and 54 for location of parts.

There are two ways the console panel is attached to the top. See Type A for the metal end cap or Type B for the plastic end cap.

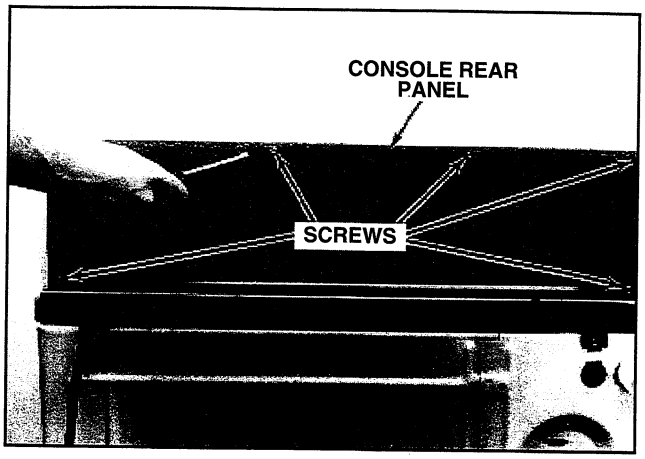
Step 1 Unplug washer or disconnect power.

NOTE: Do not use the console as a hand support when moving the appliance.

Step 2 Move the automatic washer away from the wall so you can work on it.



Step 3 If your washer has the plastic literature rack located on the console rear panel, this has to be removed. Slide the rack up so the tabs in the rack come out of the slots in the panel.



Step 4 Using a screwdriver or nutdriver, remove the rear console panel screws.

TYPE A

Read steps 1-4 of this procedure.

Step 5 Raise the top.

Step 6 Using a screwdriver or nutdriver, remove the four screws while holding the console so it does not fall.

Step 7 Lower the top.

Step 8 Place a towel on top of the washer to protect its finish.

Step 9 Lay the console on top of the towel. This will show the controls inside the console.

REPLACEMENT

⚠WARNING

Electrical Shock Hazard
Do not pinch any wires.
Doing so can result in death or electrical shock.

Step 10 To replace the console, hold onto the console while raising the top.

Step 11 Using a screwdriver or nutdriver, insert the four screws and tighten.

Step 12 Lower the top.

Step 13 Using a screwdriver or nutdriver, replace the console rear panel and tighten the screws.

Step 14 If your washer has the plastic rack, place the tabs in the slot of the console rear panel and push down.

NOTE: Do not use the console as a hand support when moving the appliance.

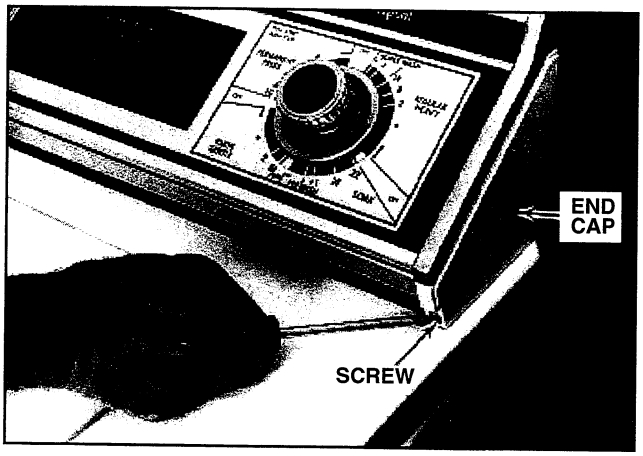
Step 15 Move the automatic washer back to its location.

Step 16 Plug in washer or reconnect power.

Step 17 See "Leveling Your Automatic Washer."

TYPE B

Read steps 1-4 of this procedure.



Step 5 Using a screwdriver, remove the screw in front of each end cap.

Step 6 Place a towel on top of the washer to protect its finish.

Step 7 Lay the console on top of the towel. This will show the controls inside the console.

REPLACEMENT

⚠WARNING

Electrical Shock Hazard
Do not pinch any wires.
Doing so can result in death or electrical shock.

Step 8 To replace the console, place the tabs from the plastic end caps into the slots in the top, then slide the console toward the rear.

Step 9 Using a screwdriver, replace the screw in each end cap and tighten.

Step 10 Using a screwdriver or nutdriver, replace the console rear panel and tighten the screws.

Step 11 If your washer has the plastic rack, place the tabs in the slot of the console rear panel and push down.

Step 12 Plug in washer or reconnect power.

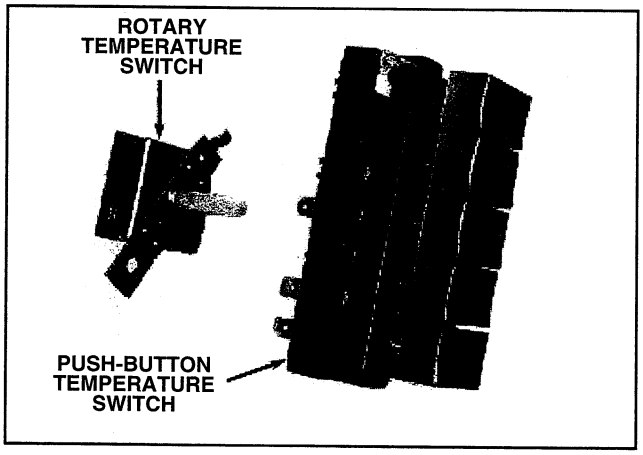
Step 13 See "Leveling Your Automatic Washer."

PROCEDURE 5

⚠WARNING

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

Temperature Switch Testing and/or Replacement



This switch, located inside the console, is used in controlling the temperature of the WASH and RINSE water. The first letter is the WASH water temperature, and the second letter is the RINSE water temperature. H stands for hot, C stands for cold, and W stands for warm. For example, HC denotes hot water wash with a cold water rinse.

See page 148, illus. no. 31 for location of part.

OHMMETER REQUIRED

There are two types of temperature switches used, either a rotary or push-button type.

Step 1 Unplug washer or disconnect power.

Step 2 See "Removing the Console Rear Panel and the Console Front Panel."

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the water temperature switch. This procedure should assure that the right wire is reconnected to the right terminal.

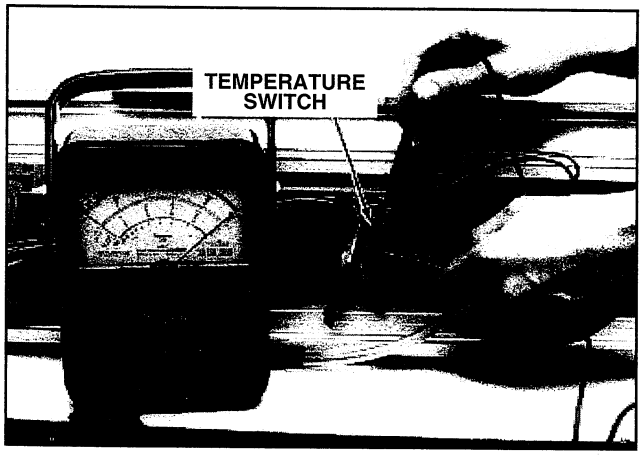
Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

Step 5 Check each circuit by turning the rotary knob or pushing in on the push-button to each setting and check the proper terminals.

Use the following chart. Your switch may not have all the settings shown.

SWITCH SETTING	TERMINAL MARKING ON SWITCH
Hot/Warm	BR to BR-R, G-BK to BR-R
Hot/Cold	BR to BR-R
Warm/Warm	BR to BR-R, G-BK to BR-R
	G-BK to YR
Warm/Cold	BR to BR-R, G-BK to Y-R
Cold/Cold	G-BK to Y-R

Step 6 EXAMPLE: Set temperature switch to (warm/cold). This closes two contacts inside the switch, BR to BR-R and G-BK to Y-R.



Step 7 Touch and hold one ohmmeter probe to the terminal BR.

Step 8 Touch the other ohmmeter probe to the terminal BR-R.

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

Step 10 Touch and hold one ohmmeter probe to the terminal BR.

Step 11 Touch the other ohmmeter probe to all the rest of the terminals without touching the terminal BR-R.

Step 12 The ohmmeter should show an open circuit when checking these other terminals. If not, the temperature switch is bad and needs replacing.

Step 13 Touch and hold one ohmmeter probe to the terminal G-BK.

Step 14 Touch the other ohmmeter probe to the terminal Y-R.

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

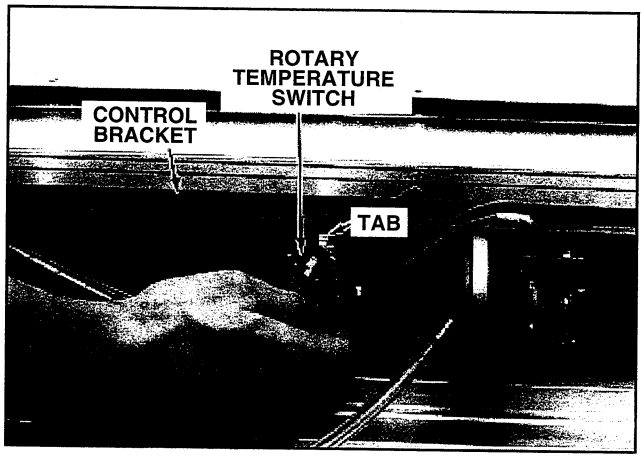
Step 16 Touch and hold one ohmmeter probe to the terminal G-BK.

Step 17 Touch the other ohmmeter probe to the rest of the terminals without touching terminal Y-R.

Step 18 The ohmmeter should show an open circuit when checking these other terminals. If not, the temperature switch is bad and needs replacing.

REPLACEMENT

Step 19 Remove the control knob.



Step 20 Notice the locating tab on the end of the switch bracket and where it's located in the slot on the control bracket. The tab on the replacement part must be installed in the same slot.

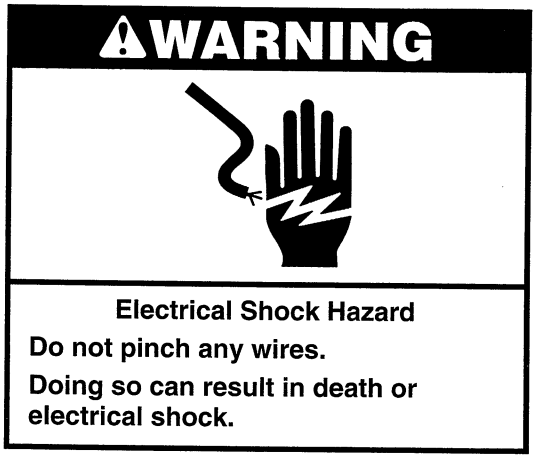
Step 21 Using a nutdriver or socket wrench, remove the one screw holding the rotary type or two screws which hold the push-button type temperature switch to the control bracket.

Step 22 Carefully remove the temperature switch. The wires should have been removed already because of testing.

Step 23 Place the new rotary type temperature switch with the locating tab in the slot on the control bracket, or the new push-button temperature switch on the control bracket.

Step 24 Using a nutdriver or socket wrench, insert the screw or screws through the temperature switch, into the control bracket and tighten.

Step 25 Reconnect the wires to the proper terminals as previously marked.



Step 26 See REPLACEMENT in "Removing the Console Rear Panel and the Console Front Panel."

Step 27 Replace the control knob.

Step 28 Plug in washer or reconnect power.

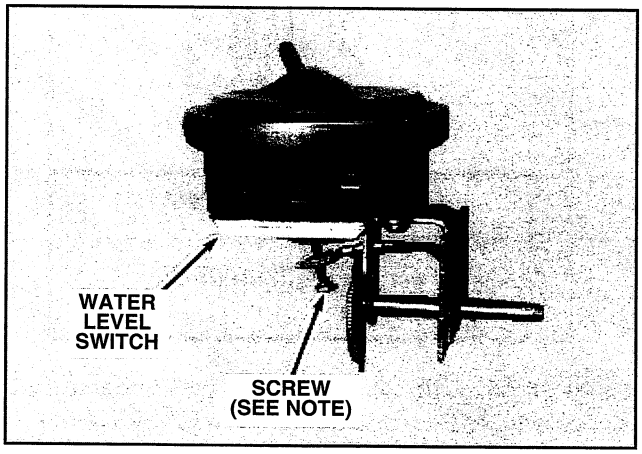
Step 29 Run a cycle check.

PROCEDURE 6

⚠WARNING

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

Water Level Switch Testing and/or Replacement



NOTE: DO NOT TURN THIS SCREW

This switch, located inside the console, is used in controlling the amount of water entering the washer. There are different water levels, depending on the model you have. Selections include EXTRA LOW, LOW, MEDIUM, HIGH, and EXTRA HIGH. Some models have a fixed water level switch. This allows for just one water level in the washer.

See page 148, illus. no. 29 for location of part.

OHMMETER REQUIRED

There are three color-coded wires going to this switch — violet (V), pink (P), and tan (T). The violet (V) wire carries the current (electricity) from the timer to this switch. Contacts inside this switch send current (electricity) back through either the pink (P) wire, meaning an empty tub of water, or the tan (T) wire, meaning a full tub of water.

Step 1 Unplug washer or disconnect power.

Step 2 See "Removing the Console Rear Panel and the Console Front Panel."

NOTE: If your tub is already full of water, skip to steps I-P.

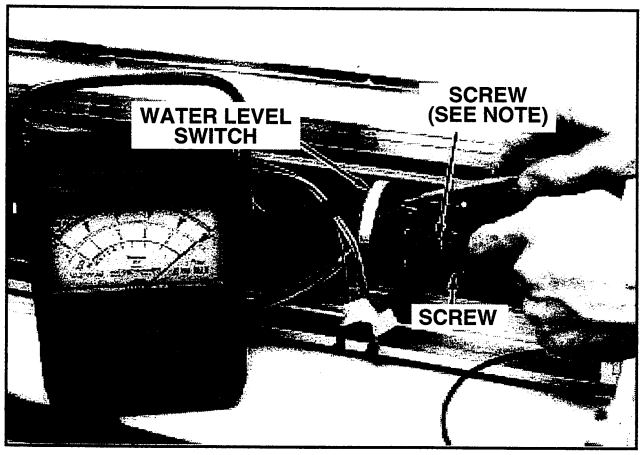
OR

With An Empty Tub Of Water

TESTING

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

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



NOTE: DO NOT TURN THIS SCREW

Step C Touch and hold one ohmmeter probe to the terminal V.

Step D Touch the other ohmmeter probe to the terminal P.

Step E The ohmmeter should show ZERO resistance (continuity). If not, the water level switch is bad and needs replacing.

Step F Touch and hold one ohmmeter probe to the terminal V.

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

Step H The ohmmeter should show an open circuit when checking these two terminals. If not, the water level switch is bad and needs replacing.

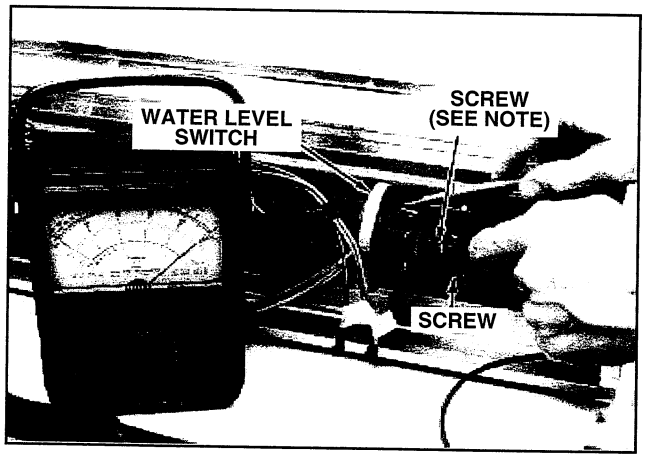
OR

With A Full Tub Of Water

TESTING

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

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



NOTE: DO NOT TURN THIS SCREW

Step K Touch and hold one ohmmeter probe to the terminal V.

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

Step M The ohmmeter should show ZERO resistance (continuity). If not, the water level switch is bad and needs replacing.

Step N Touch and hold one ohmmeter probe to the terminal V.

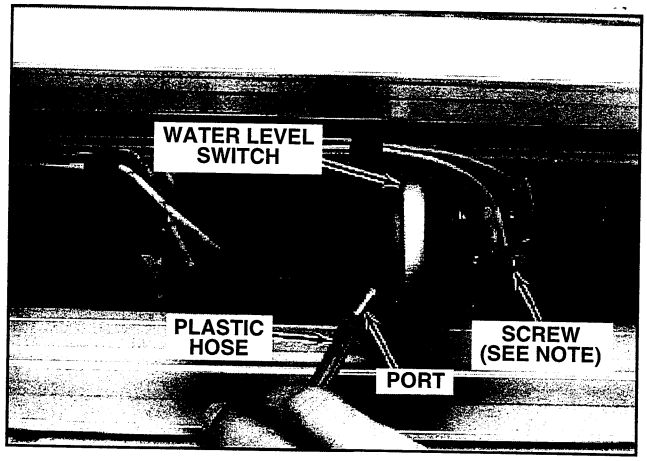
Step O Touch the other ohmmeter probe to the terminal P.

Step P The ohmmeter should show an open circuit. If not, the water level switch is bad and needs replacing.

NOTE: If you checked the water level switch with a full tub of water, the water left in the tub must be emptied by hand.

REPLACEMENT

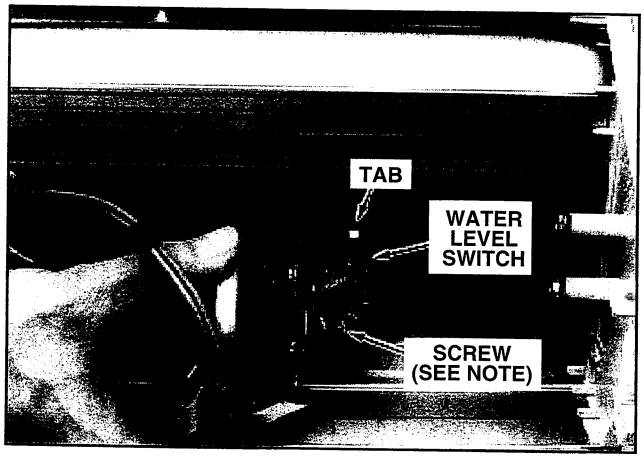
Step 3 Remove the rotary knob.



NOTE: DO NOT TURN THIS SCREW

Step 4 Remove the plastic hose from the port of the water level switch.

Step 5 Notice the locating tab on the end of the switch bracket and where it's located in the slot on the control bracket. The tab on the replacement part must be installed in the same slot.



NOTE: DO NOT TURN THIS SCREW

Step 6 Using a nutdriver or socket wrench, remove the screw.

Step 7 Carefully remove the water level switch. The wires should have been removed already because of testing.

Step 8 Place the new water level switch with the locating tab in the slot on the control bracket.

Step 9 Using a nutdriver or socket wrench, insert the screw and tighten.

Step 10 If you checked the water level switch with a full tub of water, the water left in the tub must be emptied by hand before the hose can be connected to the port. If this is not done, the machine will overflow with water.

Step 11 Replace the plastic hose on the water level switch port.

Step 12 Reconnect the wires to the proper terminals as previously marked.

⚠WARNING

Electrical Shock Hazard
Do not pinch any wires.
Doing so can result in death or electrical shock.

Step 13 See REPLACEMENT in "Removing the Console Rear Panel and the Console Front Panel."

Step 14 Replace the rotary type knob.

Step 15 Plug in washer or reconnect power.

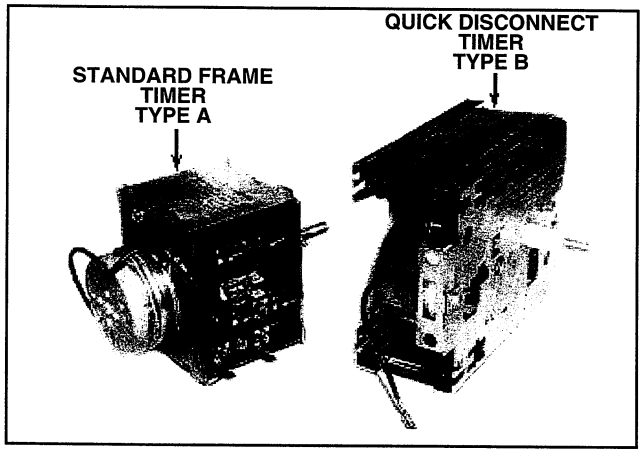
Step 16 Run a cycle check.

PROCEDURE 7

⚠WARNING

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 inside the console and is the heart of the automatic washer. Its function is to control the timing of the automatic washer.

See page 148, illus. no. 40 for location of part.

OHMMETER REQUIRED

All timers used on automatic washers 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.

On standard frame timers, the different colored harness wires are separate and plug onto separate terminals which are also marked.

On quick-disconnect 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 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 standard frame timers or Type B for quick disconnect timers.

TYPE A

Step 1 Unplug washer or disconnect power.

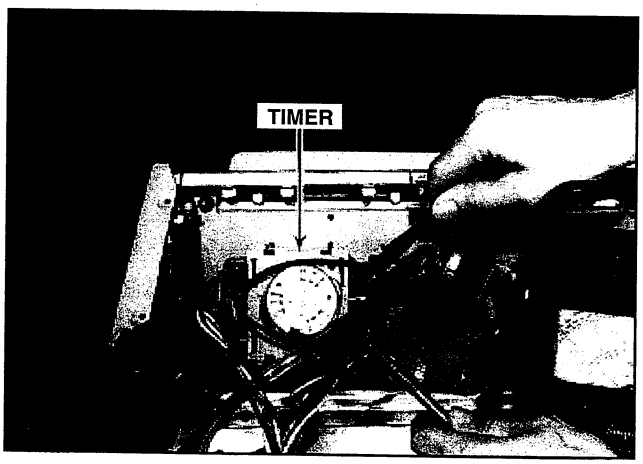
Step 2 See example in steps 9-15. Turn the timer knob to the point in the cycle you suspect is bad.

Step 3 See "Removing the Console Rear Panel and the Console Front Panel."

TESTING

Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.

Step 5 Remove the wire from the timer terminal in that part of the cycle you suspect is bad.



Step 6 Touch and hold one ohmmeter probe to this timer terminal.

Step 7 Touch the other ohmmeter probe to the other timer terminal in that part of the cycle you suspect is bad.

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

Step 9 **EXAMPLE:** Move the timer dial to the start of any wash cycle. PROBLEM — Automatic washer does not fill.

Step 10 Touch and hold one ohmmeter probe to the terminal P.

Step 11 Touch the other ohmmeter probe to the terminal G-BK.

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

Step 13 Touch and hold one ohmmeter probe to the terminal P.

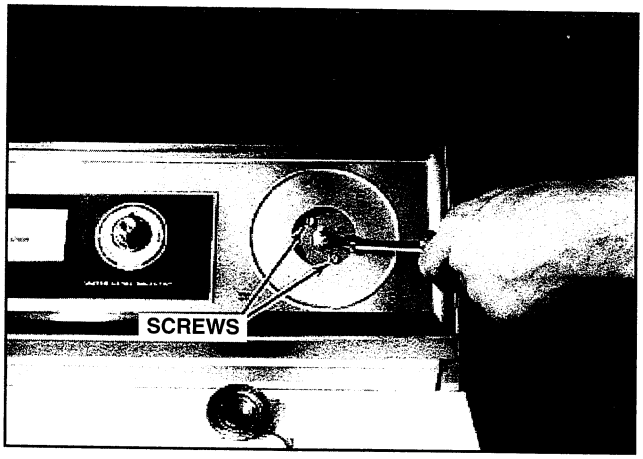
Step 14 Touch the other ohmmeter probe to the terminal BR.

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

REPLACEMENT

Step 16 Remove the timer knob.

Step 17 Remove the timer dial.



Step 18 Using a screwdriver or nutdriver, remove the two screws from the front of the console.

Step 19 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the timer. This procedure should assure that the right wire is reconnected to the right terminal.

Step 20 Carefully remove the timer.

Step 21 Place the new timer on the control bracket.

Step 22 Insert the two screws from the console front and tighten.

Step 23 Reconnect the wires to the proper terminals as previously marked.

⚠WARNING

Electrical Shock Hazard

Do not pinch any wires.

Doing so can result in death or electrical shock.

Step 24 See REPLACEMENT in "Removing the Console Rear Panel and the Console Front Panel."

Step 25 Replace the timer dial.

Step 26 Replace the timer knob.

Step 27 Plug in washer or reconnect power.

Step 28 Run a cycle check.

TYPE B

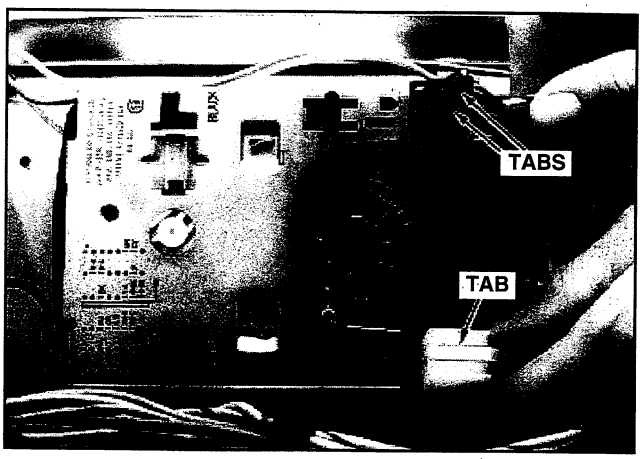
Step 1 Unplug washer or disconnect power.

Step 2 See example in steps 9-15. Turn the timer knob to the point in the cycle you suspect is bad.

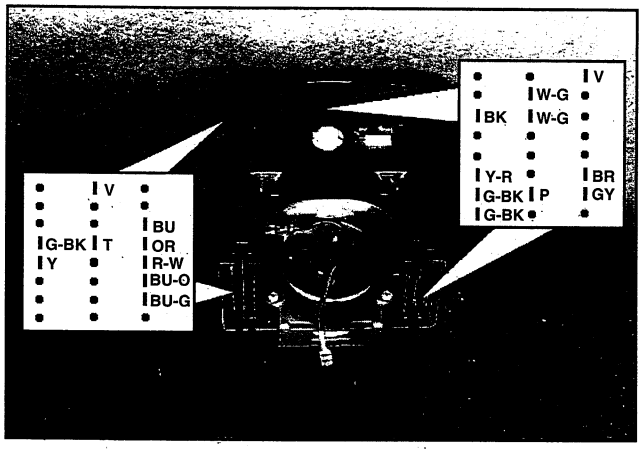
Step 3 See "Removing the Console Rear Panel and the Console Front Panel."

TESTING

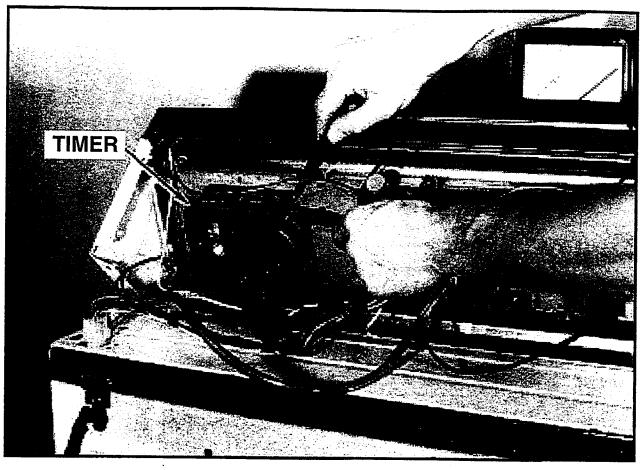
Step 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 5 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 6 Touch and hold one ohmmeter probe to the timer terminal specified for this function.

Step 7 Touch the other ohmmeter probe to the other timer terminal specified for this function.

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

Step 9 EXAMPLE: Move the timer dial to the start of any WASH cycle. PROBLEM — Automatic washer does not fill.

Step 10 Touch and hold one ohmmeter probe to the terminal P.

Step 11 Touch the other ohmmeter probe to the terminal G-BK.

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

Step 13 Touch and hold one ohmmeter probe to the terminal P.

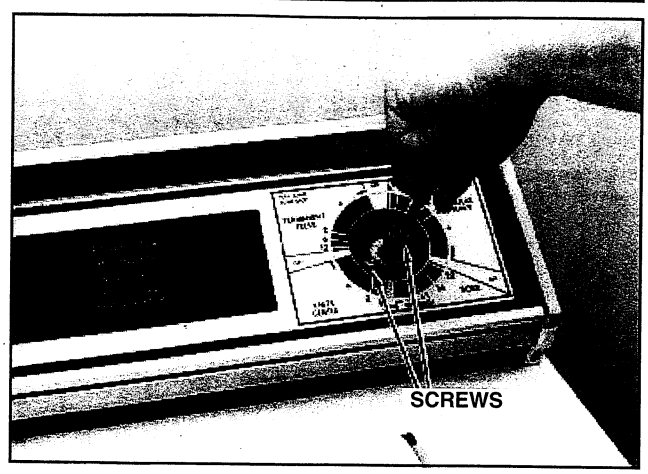
Step 14 Touch the other ohmmeter probe to the terminal BR.

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

REPLACEMENT

Step 16 Remove the timer knob.

Step 17 Remove the timer dial.



Step 18 Using a screwdriver or nutdriver, remove the two screws from the front of the console.

Step 19 Carefully remove the timer.

Step 20 Place the new timer on the control bracket.

Step 21 Insert the two screws from the console front and tighten.

Step 22 Replace the colored blocks in the proper end marked BLACK or WHITE on the timer.

⚠WARNING

Electrical Shock Hazard

Do not pinch any wires.

Doing so can result in death or electrical shock.

Step 23 See REPLACEMENT in "Removing the Console Rear Panel and the Console Front Panel."

Step 24 Replace the timer dial.

Step 25 Replace the timer knob.

Step 26 Plug in washer or reconnect power.

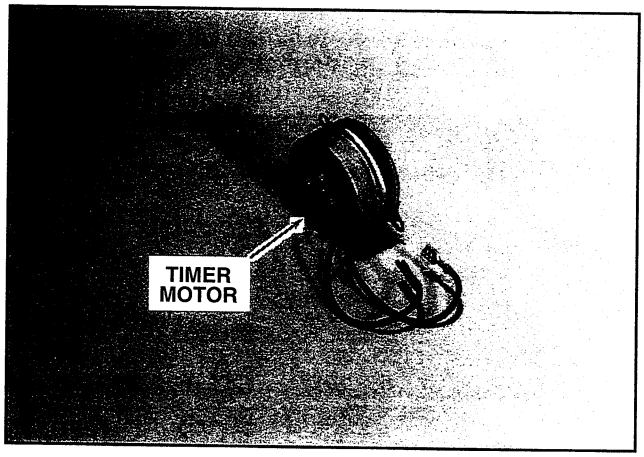
Step 27 Run a cycle check.

PROCEDURE 8

⚠WARNING

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.

See page 148, illus. no. 41 for location of part.

OHMMETER REQUIRED

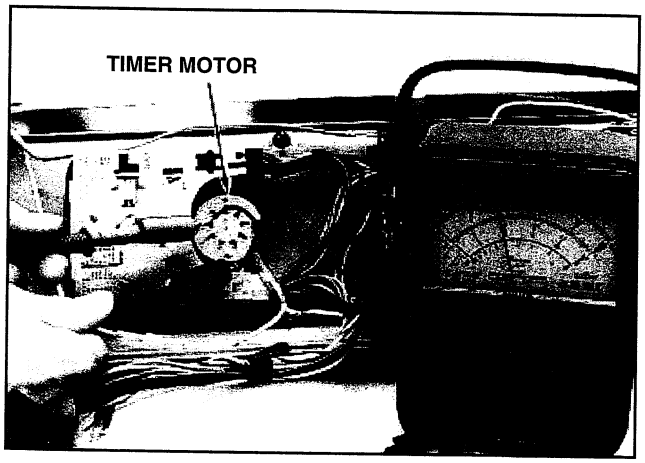
Step 1 Unplug washer or disconnect power.

Step 2 See "Removing the Console Rear Panel and the Console Front Panel."

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the timer motor. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 2,000-3,000 ohms. Set the ohms scale and ZERO the meter.



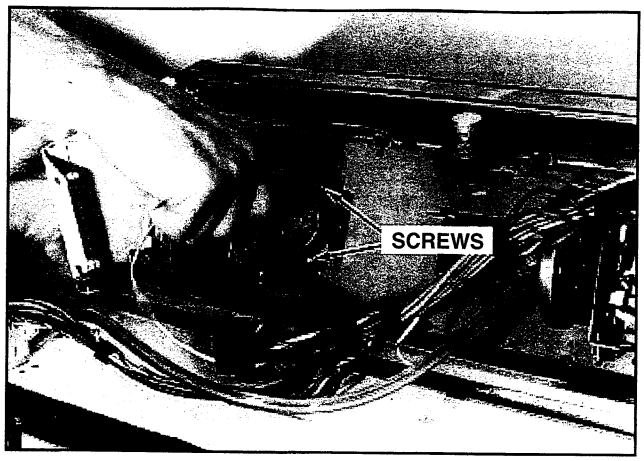
Step 5 Touch and hold one of the ohmmeter probes to one of the timer motor wire terminals.

Step 6 Touch the other ohmmeter probe to the other timer motor wire terminal.

Step 7 The ohmmeter should show a reading between 2,000-3,000 ohms on the ohms scale. If you do not get this reading, the timer motor is bad and needs replacing.

NOTE: If you get this reading, the timer motor could still be bad from a mechanical problem inside the motor. Replace the motor or have this condition checked by an authorized Whirlpool factory service technician.

REPLACEMENT



Step 8 Using a small screwdriver or nutdriver, remove the two screws which hold the motor on the timer.

Step 9 Place the new timer motor on the timer and tighten the two screws.

Step 10 Reconnect the wires to the proper terminals as previously marked.

⚠WARNING

Electrical Shock Hazard
Do not pinch any wires.
Doing so can result in death or electrical shock.

Step 11 See REPLACEMENT in "Removing the Console Rear Panel and the Console Front Panel."

Step 12 Plug in washer or reconnect power.

Step 13 Run a cycle check.

NOTES

SECTION J

Top and Lid Area

PROCEDURE 1

⚠WARNING

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

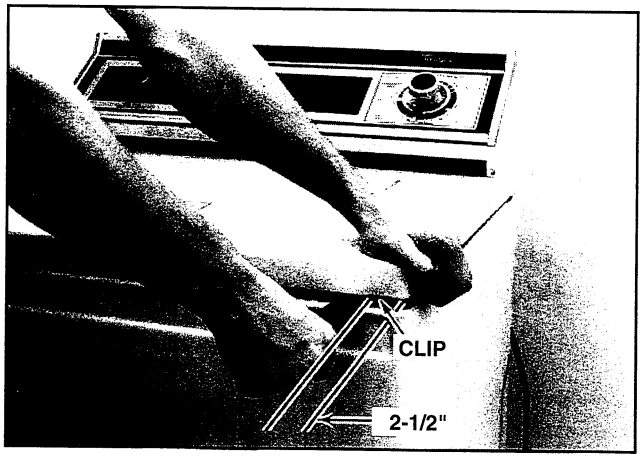
Top Access

See page 148, illus. no. 22 for location of part.

Step 1 Unplug washer or disconnect power.

Step 2 When raising the top, always tape the lid shut.

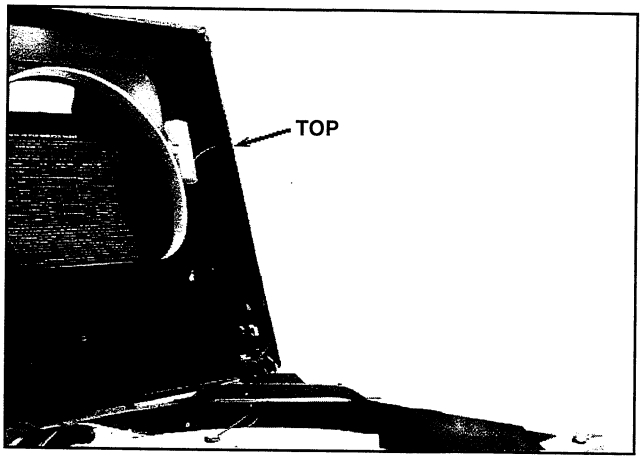
NOTE: Do not pry or you may ruin the finish.



Step 3 Using a putty knife, place the blade between the top and front cabinet panel in one corner, about 2-1/2 inches in from the edge.

Step 4 Push in on the putty knife to release the clip while lifting up on the corner of the top.

Step 5 Do the same to the other front corner.



Step 6 Open the top by pulling forward and up at each front corner. On the brush manual-clean filter models, there is a hose (located in the right front corner) which needs to be disconnected. Depending on the type of clamp used, either use pliers or a screwdriver to slide the clamp off the housing port and remove the hose. Rest the raised top against the wall behind the automatic washer (top is hinged at rear).

REPLACEMENT

Step 7 Be careful to slowly lower the top.

Step 8 On the brush manual-clean filter models, there is a hose (located in the right front corner) which needs to be reconnected. Use pliers or a screwdriver, depending on the type of clamp used. Slide the hose onto the housing port and then slide the clamp onto the housing port.

Step 9 Press down on the front corners of the top until it snaps in place.

Step 10 Remove the tape from the lid.

Step 11 Plug in washer or reconnect power.

PROCEDURE 2

⚠WARNING

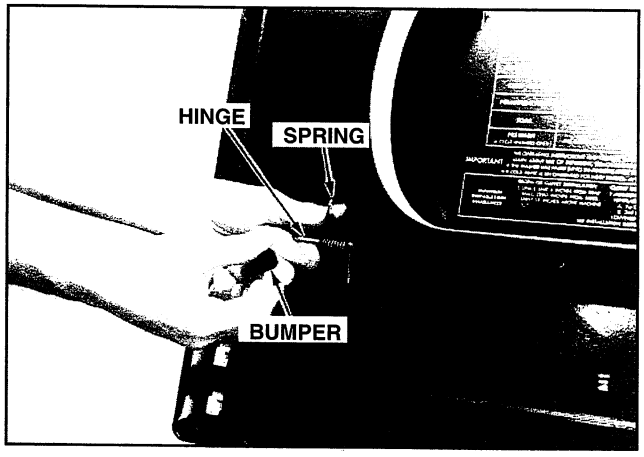
Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Lid, Hinge, and Spring Replacement

See page 148, illus. nos. 13, 15, 16, 17, 18, and 21 for location of parts.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

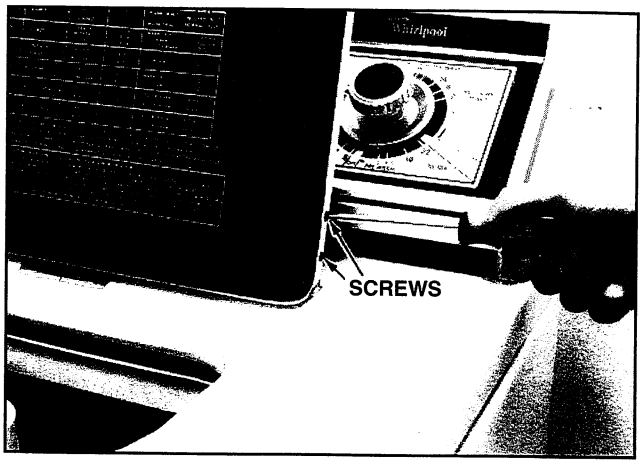


Step 3 Remove the rubber hinge bumpers from the lid hinges. Your washer might only have one bumper.

Step 4 Be careful when disconnecting the spring from the hinge. Hold on to the spring, gently remove the looped end from the hinge and slide the spring off.

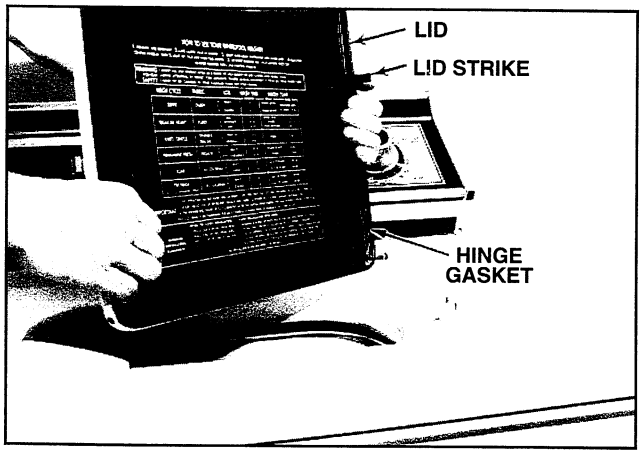
Step 5 Remove the spring or springs.

Step 6 Lower the top, remove the tape, and open the lid.



Step 7 Using a screwdriver, remove the two screws from one side of the lid.

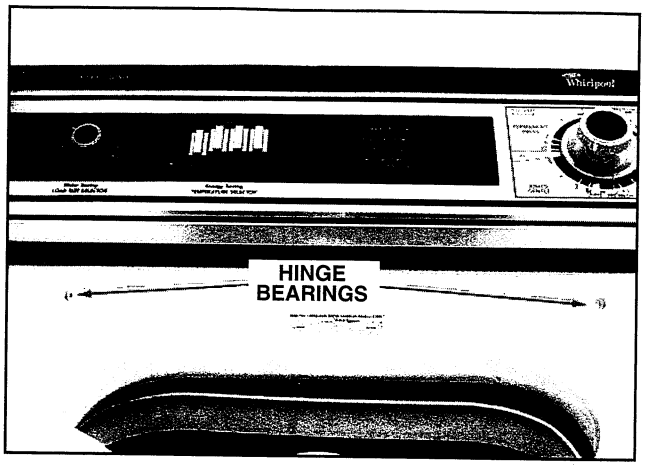
Step 8 Pull and turn the hinge to remove from the top and lid.



Step 9 To remove the other hinge, pull and turn the lid.

Step 10 Using a screwdriver, remove the other two screws which hold the other hinge.

Step 11 Check and replace the hinge gaskets if they have started to rot or crack.

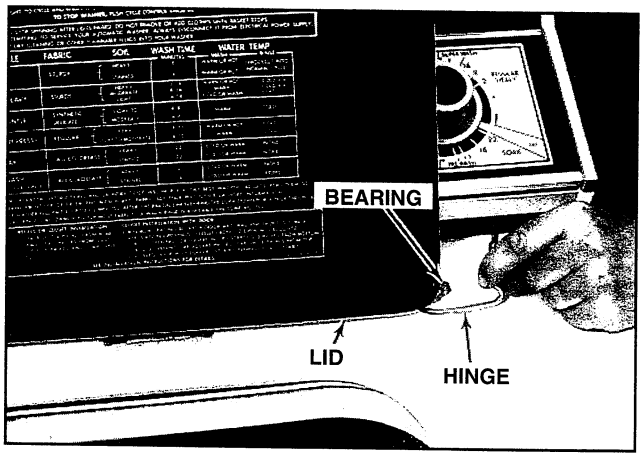


Step 12 Check the plastic hinge bearings in the hole on both sides of the top and replace if bad.

REPLACEMENT

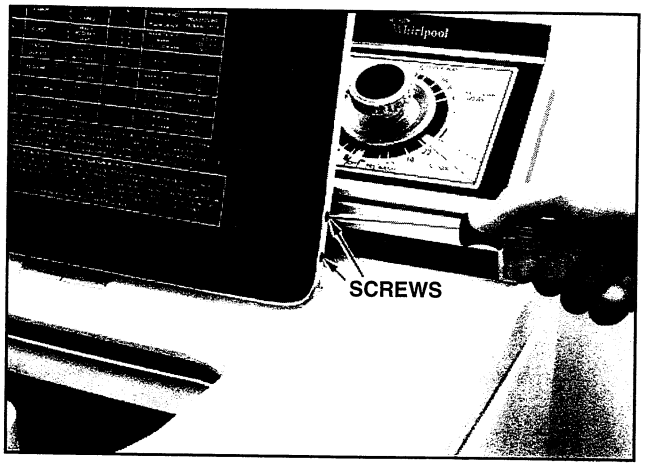
Step 13 Using a screwdriver, tighten one of the new gaskets and hinges to the lid with the two screws.

Step 14 Insert the new lid and hinge through the plastic hinge bearing in the top.



Step 15 Insert the other hinge from inside the lid through the plastic hinge bearing in the top.

Step 16 Place the other gasket between the lid and hinge.



Step 17 Using a screwdriver, insert the two screws and tighten.

Step 18 Tape the lid shut.

Step 19 Raise the top.

Step 20 Insert the new spring on the left hinge with the straight leg pointing to the back or down.

Step 21 Slide the looped end of the spring on the hinge.

Step 22 Insert the new spring on the right hinge, if used, with the straight leg pointing to the back or down.

Step 23 Slide the looped end of the spring on the hinge.

Step 24 Place the rubber hinge bumpers on each end of the hinges. Your washer might only have one.

Step 25 Lower the top.

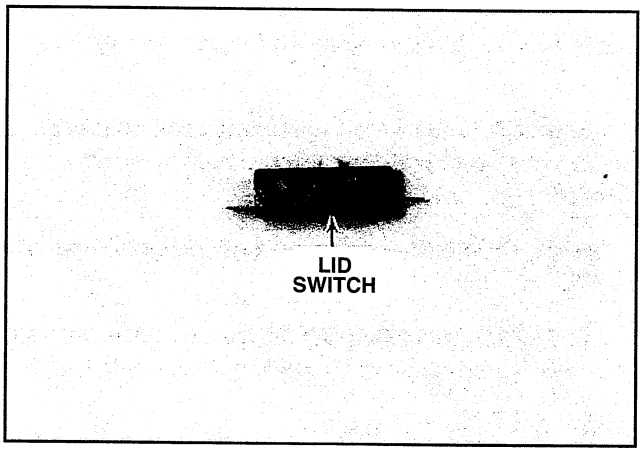
Step 26 Plug in washer or reconnect power.

PROCEDURE 3

⚠WARNING

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

Lid Switch and Lever Testing and/or Replacement



See page 148, illus. nos. 85, 88, 89, and 95 for location of parts.

OHMMETER REQUIRED

The purpose of the lid switch is to stop the automatic washer during the spin cycle when the lid is opened.

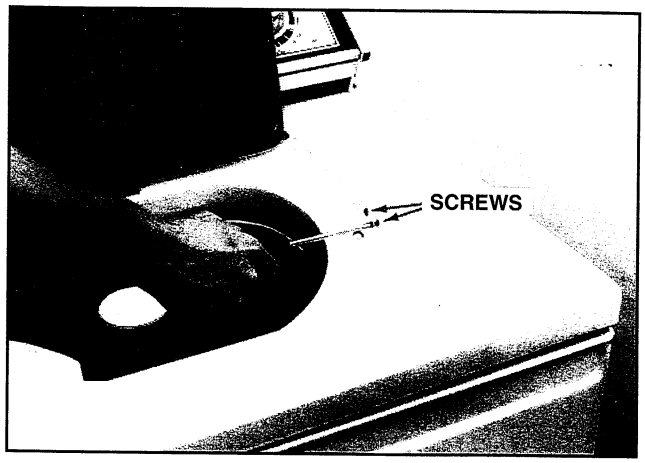
There were two types of lid switches used.

See type A for the switch mounted on the right side of the lid opening or Type B for the switch mounted in the rear of the lid opening.

TYPE A

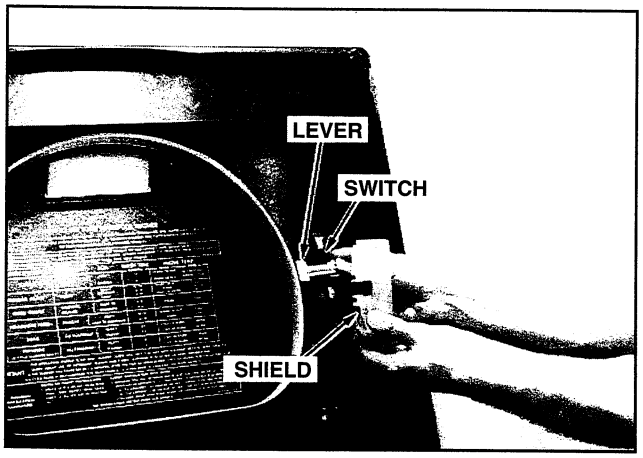
Step 1 Unplug washer or disconnect power.

Step 2 Open the lid.



Step 3 Using a screwdriver, remove the two screws on the right side of the lid well.

Step 4 Raise the top.



Step 5 Remove the shield and lever from the lid switch.

TESTING

Step 6 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the lid 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 With the button up, touch and hold one of the ohmmeter probes to one of the terminals.

Step 9 Touch the other ohmmeter probe to the other terminal.

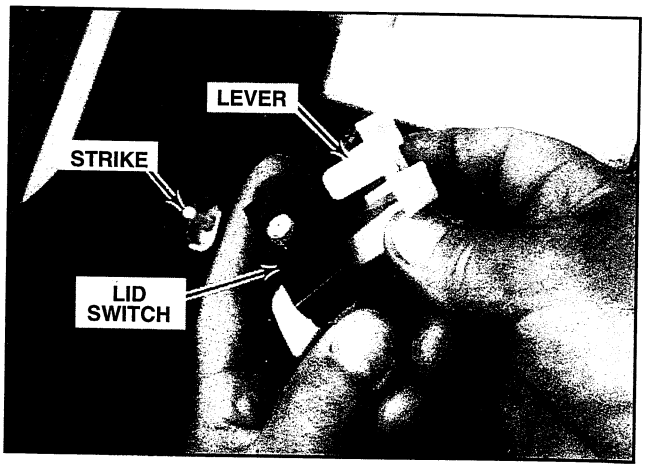
Step 10 The ohmmeter should show an open circuit when the button is up. If not, the lid switch is bad and needs replacing.

Step 11 With the button pressed in, touch and hold one of the ohmmeter probes to one of the terminals.

Step 12 Touch the other ohmmeter probe to the other terminal.

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

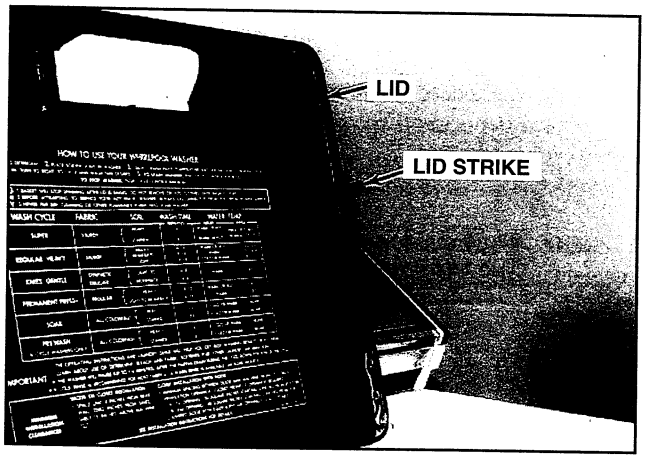
REPLACEMENT



Step 14 Place the new lid switch in the new lever.

Step 15 Remove the tape and carefully open the lid, holding the lid switch. Insert the two screws and turn until they start to grab.

Step 16 Replace the new plastic shield between the top and lid switch, and snap this on the screws. Tighten the screws.



Step 17 Check the strike on the right side of the lid and replace if it is cracked or broken.

This strike, when the lid is closed, sticks through a slot in the top and pushes down on the lever. The lever then pushes on the lid switch button.

Step 18 Reconnect the wires to the proper terminals as previously marked.

Step 19 Lower the top.

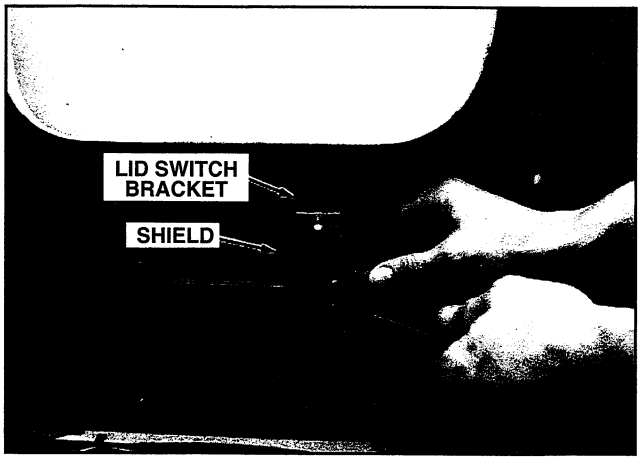
Step 20 Plug in washer or reconnect power.

Step 21 Run a cycle check.

TYPE B

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.



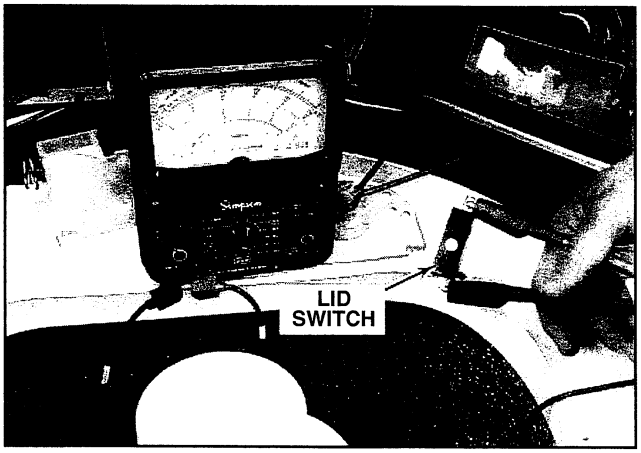
Step 3 Using a screwdriver or nutdriver, remove the two screws, located in the back, which hold the shield to the bracket.

Step 4 Remove the plastic shield.

TESTING

Step 5 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the lid switch. This procedure should assure that the right wire is reconnected to the right terminal.

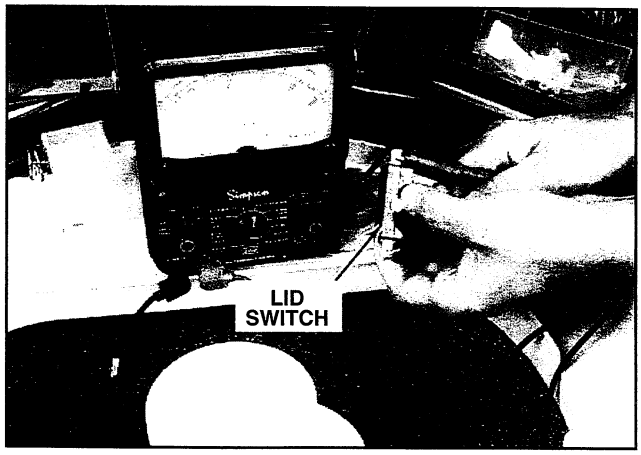
Step 6 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 7 With the button up, touch and hold one of the ohmmeter probes to one of the terminals.

Step 8 Touch the other ohmmeter probe to the other terminal.

Step 9 The ohmmeter should show an open circuit when the button is up. If not, the lid switch is bad and needs replacing.



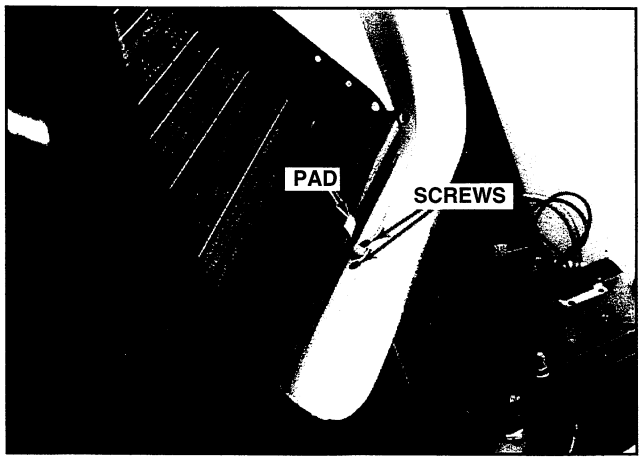
Step 10 With the button pressed in, touch and hold one of the ohmmeter probes to one of the terminals.

Step 11 Touch the other ohmmeter probe to the other terminal.

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

REPLACEMENT

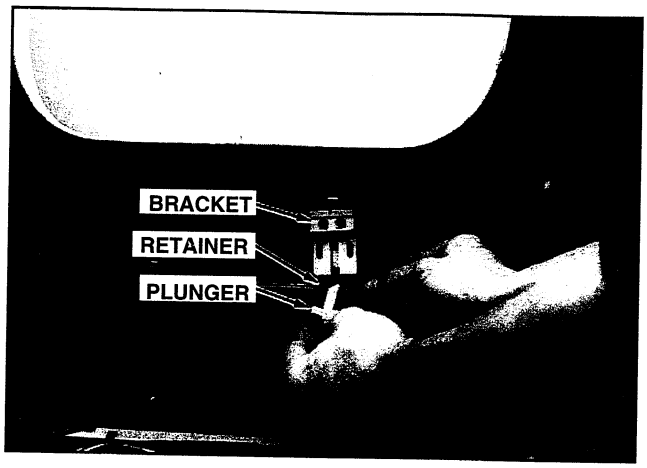
Step 13 If the lid switch bracket needs replacing, lower the top and remove the lid.



Step 14 Using a screwdriver, remove the two screws in the back of the lid well.

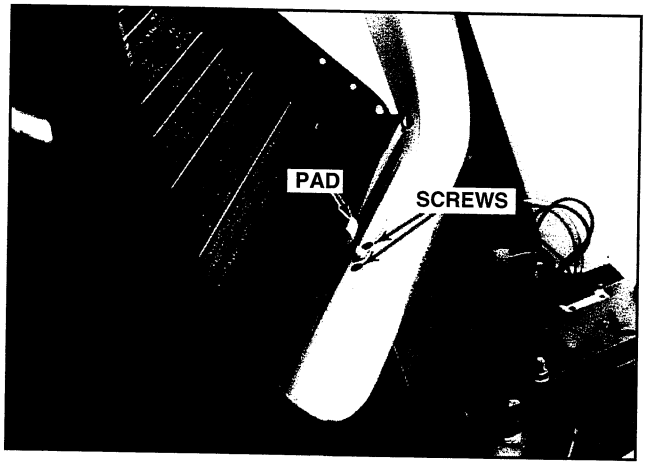
Step 15 Raise the top and place the new bracket onto the underneath side of the top.

Step 16 Using a screwdriver, insert the two screws in the back lid well and tighten.



Step 17 Using a screwdriver, insert the two screws, replace the new plunger, lid switch, retainer shield, and tighten the screws.

Step 18 Reconnect the wires to the proper terminals as previously marked.



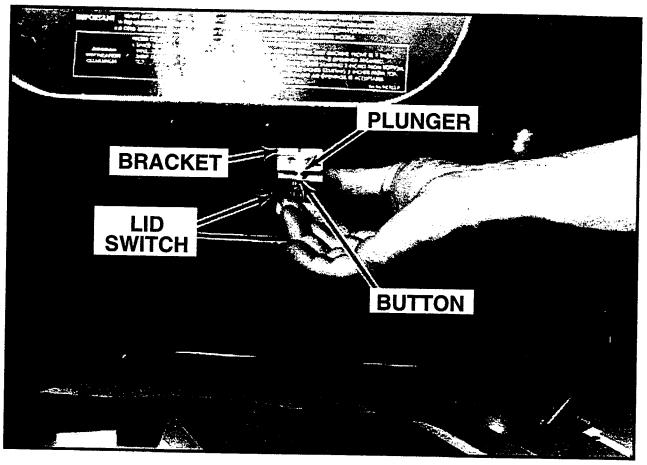
Step 19 Make sure the lid switch pad is snapped in place on the rear of the lid.

This pad, when the lid closes, presses on the plunger which in turn presses on the lid switch button.

Step 20 Replace the lid if removed.

ADJUSTMENT

Step 21 Tape the lid shut and raise the top.



Step 22 Push the lid switch toward the lid switch plunger until the lid switch button is completely pressed in.

Step 23 Using a screwdriver, tighten the two screws.

Step 24 Lower the top.

Step 25 Plug in washer or reconnect power.

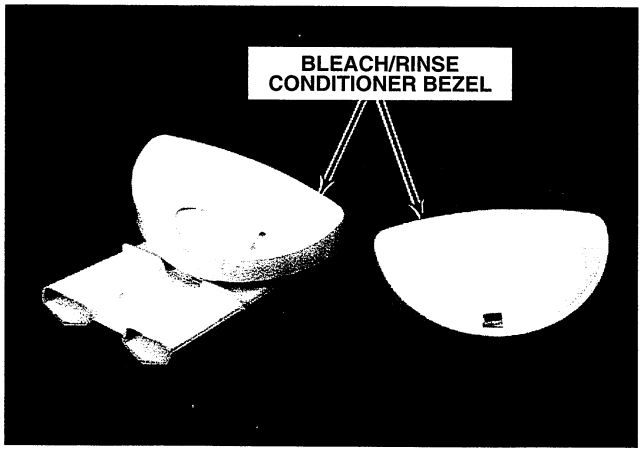
Step 26 Run a cycle check.

PROCEDURE 4

⚠WARNING

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

Bleach/Rinse Conditioner Bezel Replacement



This bezel is located in the left front corner, under the lid.

See page 148, illus. no. 77 for location of part.

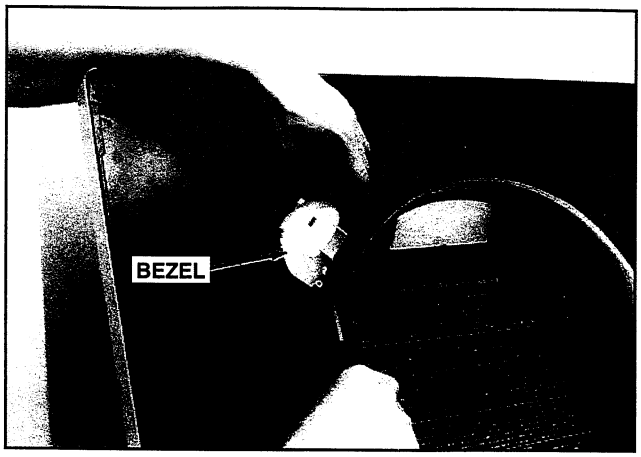
Depending on the features, pour the liquid into the proper side of the bezel.

Use only liquid bleach in the bleach side of the dispenser.

Dilute the rinse conditioner liquid before pouring in the rinse conditioner side of the dispenser.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.



Step 3 Using a screwdriver, push in on one stud while pushing in the other stud with your hand. Then push through the top.

REPLACEMENT

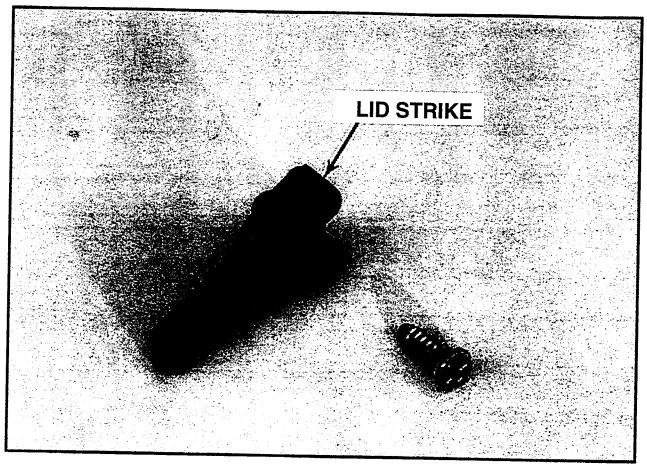
Step 4 Lower the top.

Step 5 Push down on the new bezel until it snaps in the top.

Step 6 Plug in washer or reconnect power.

PROCEDURE 5

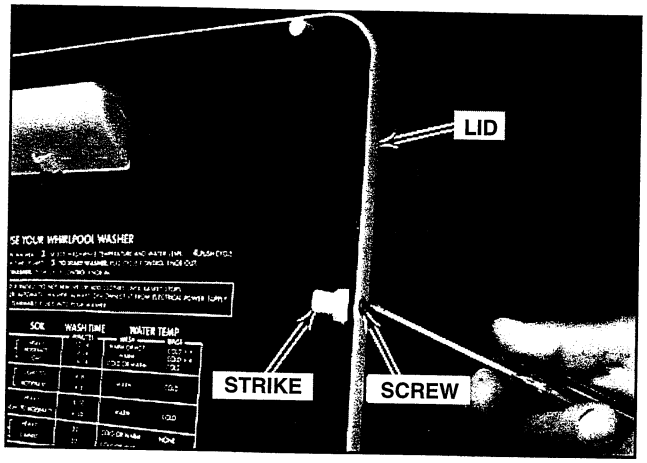
Lid Strike Replacement



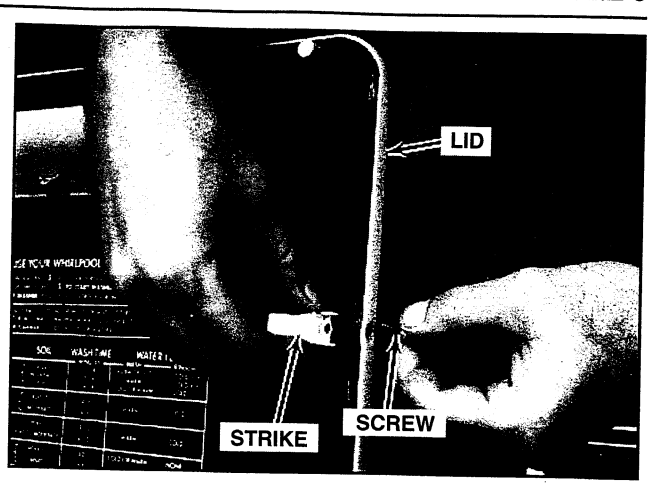
See page 148, illus. nos. 86 and 94 for location of parts.

This strike, when the lid is closed, sticks through a slot in the top and pushes down on the lever. The lever then pushes on the lid switch button.

Step 1 Open the lid.



Step 2 Using a screwdriver, remove the screw which holds the lid strike to the lid.



Step 3 Place the new lid strike in the flange on the side of the lid.

Step 4 Using a screwdriver, insert the screw through the lid into the strike and tighten.

Step 5 Close the lid.

NOTES

SECTION K

Tub and Basket Area

PROCEDURE 1

⚠WARNING

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

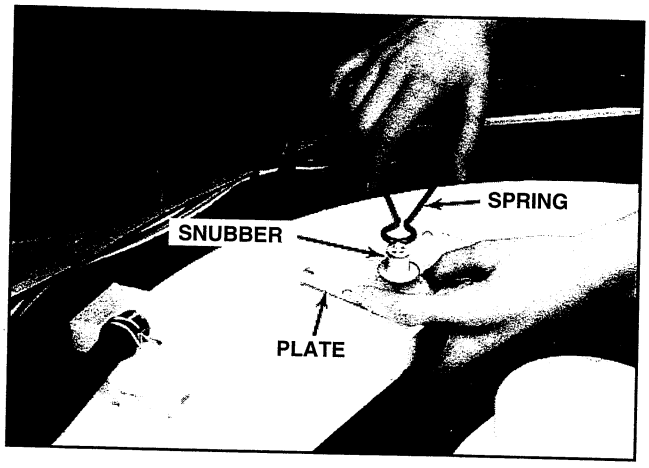
Snubber, Spring, and Plate Replacement

See page 150, illus. nos. 34 and 35, and page 151, illus. no. 44 for location of parts.

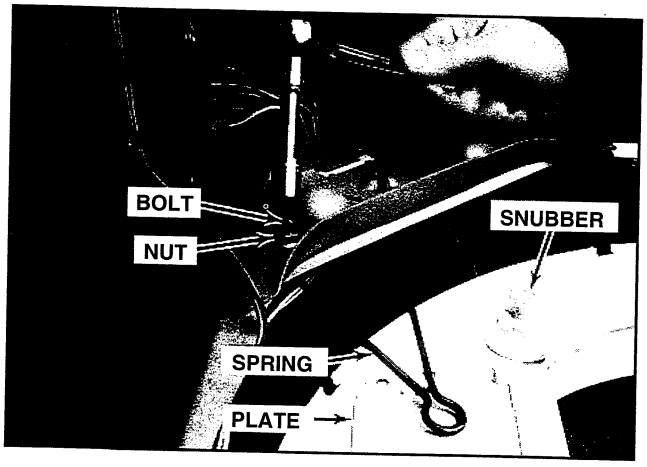
The purpose of the snubber is to reduce the movement of the base and tub during spin. The snubber rides on a stainless steel or porcelain plate. Snubbers sometimes squeak if water or soap splashes on the plate. To stop the squeak, the snubber should be rubbed against a rough surface such as a cement block.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

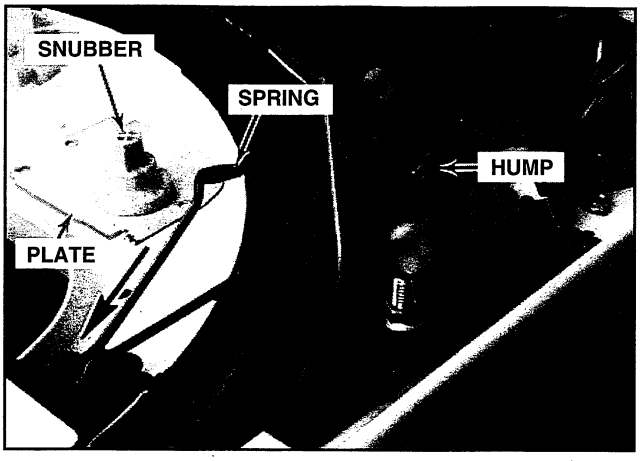


Step 3 Lift up on the spring to remove the snubber. Clean the bottom of the snubber by rubbing with sandpaper or rubbing against a rough surface such as a cement block. This should stop any squeaking noise.



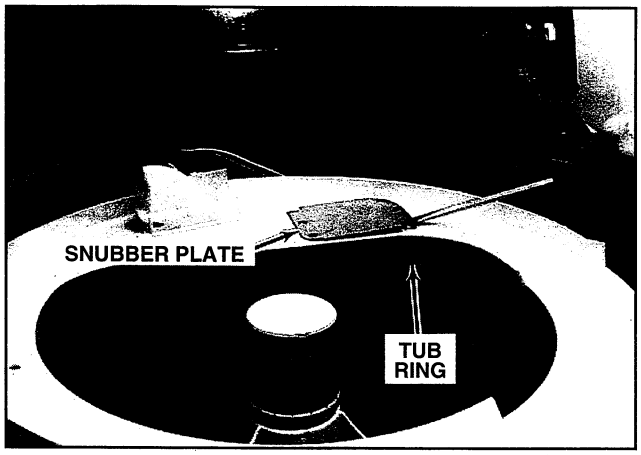
Step 4 To remove the spring, use a nutdriver or socket wrench and remove the nut.

Step 5 Remove the bolt from the bottom of the bracket.



Step 6 Remove the spring by pulling toward the front of the washer while pushing down at the back of the spring.

This will release the end of the spring from the hump on the bracket.



Step 7 To remove the snubber plate, insert a flat blade screwdriver between the plate and tub ring and pry up.

REPLACEMENT

Step 8 Place the snubber plate on the tub ring and push down until it snaps into place.

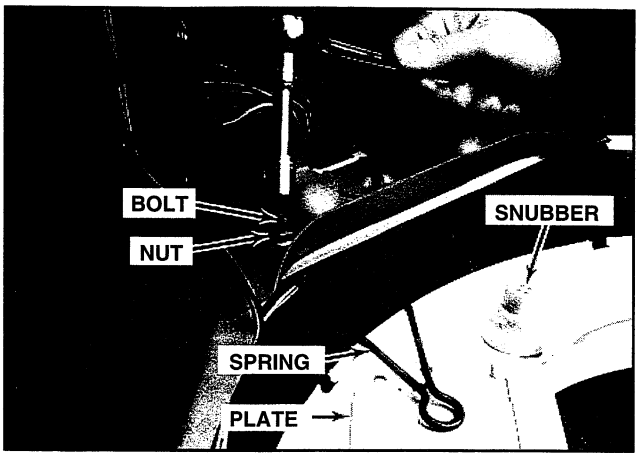
Step 9 Insert the spring with the offset leg under the bracket and through the slot.

NOTE: Make sure the wiring harness does not get tangled or in the way of the spring.

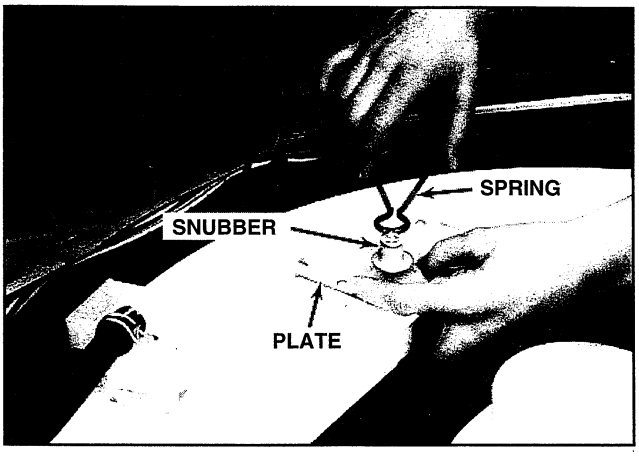
Step 10 Lift and turn the spring toward the rear of the washer.

Step 11 Turn until the offset of the spring snaps into place on the hump of the bracket.

Step 12 Insert the shoulder bolt from underneath the bracket, through the loop of the spring, then through the bracket.



Step 13 Using a nutdriver or socket wrench, assemble the nut and tighten.



Step 14 Lift up on the spring and insert the new snubber.

Step 15 Lower the top.

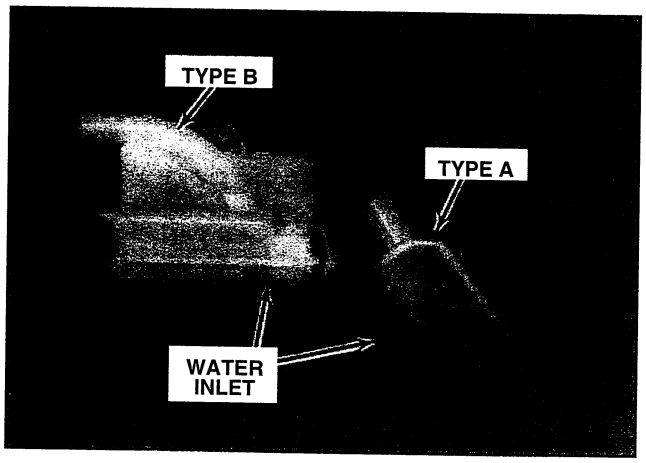
Step 16 Plug in washer or reconnect power.

PROCEDURE 2

⚠WARNING

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



See page 151, illus. no. 6 for location of part.

The purpose of the water inlet is to scatter the water as it enters the basket.

There were two types of water inlets used.

See Type A for the water inlet held on by a screw or Type B for the snap-in type.

TYPE A

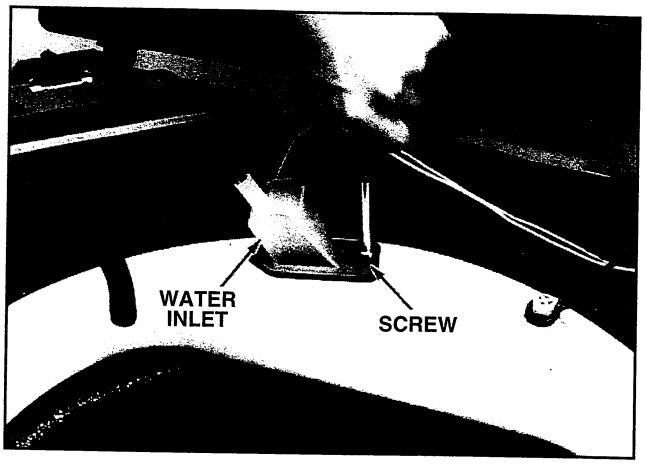
Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

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

Step 3 Using pliers, slide the clamp down the hose, just off the port of the water inlet.

Step 4 Remove the hose from the water inlet.

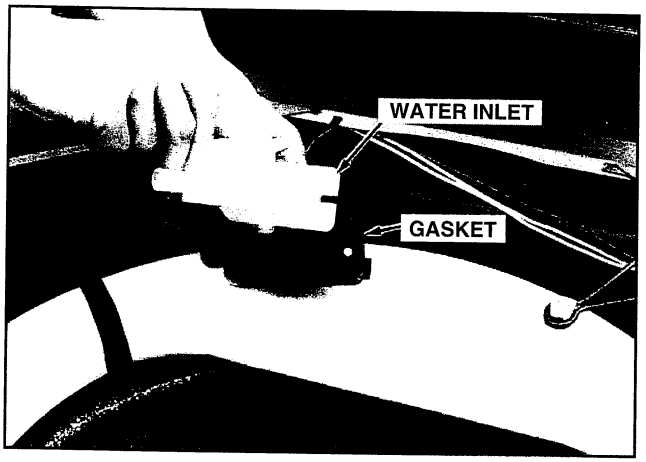


Step 5 Using a nutdriver or screwdriver, remove the screw which holds the water inlet to the tub ring.

Step 6 Carefully remove the water inlet by lifting up.

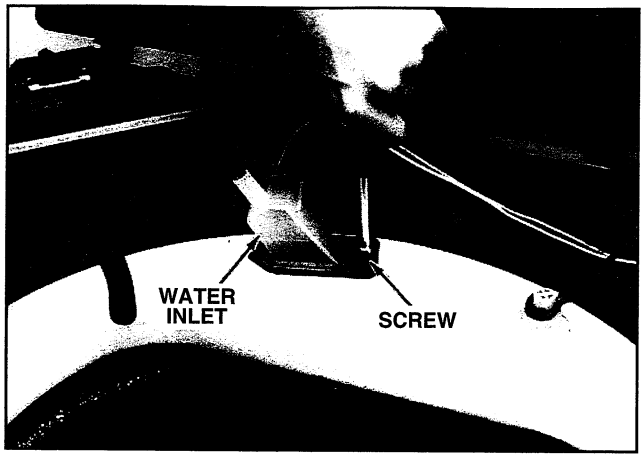
Step 7 Check and replace the water inlet gasket if it has started to rot or crack or there is any sign of water leakage.

REPLACEMENT



Step 8 Place the gasket on the bottom of the water inlet.

Step 9 Place the water inlet on the tub ring.



Step 10 Using a nutdriver or screwdriver, insert the screw and tighten.

Step 11 Attach the hose to the port on the water inlet.

Step 12 Using pliers, slide the clamp up the hose and onto the water inlet port.

Step 13 Lower the top.

Step 14 Plug in washer or reconnect power.

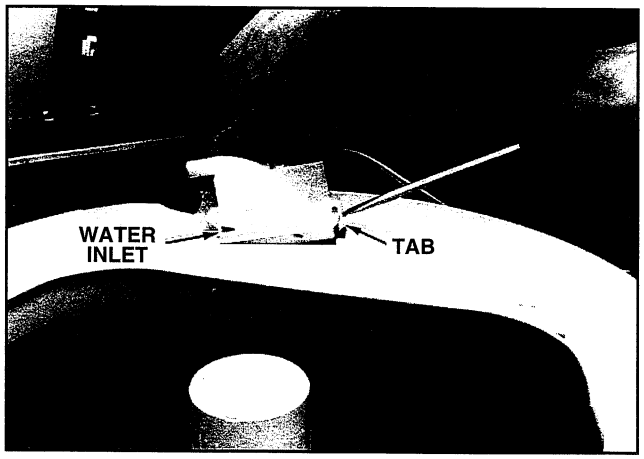
Step 15 Run a cycle check.

TYPE B

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

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



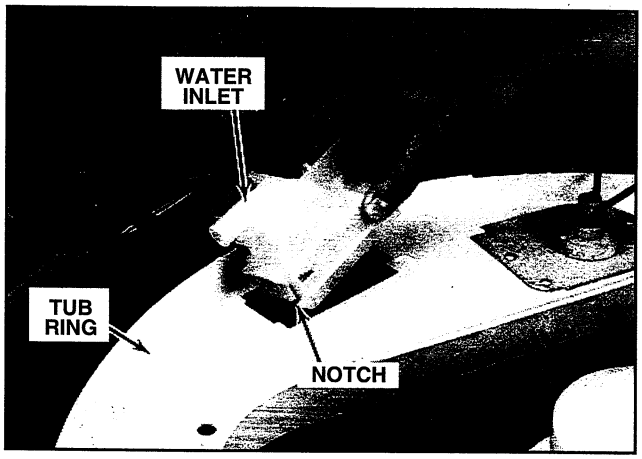
Step 3 Using a screwdriver, push in on the locking tab while pulling up.

Step 4 Using pliers, slide the clamp down the hose, just off the port of the water inlet.

Step 5 Remove the hose from the water inlet.

Step 6 Carefully remove the water inlet.

REPLACEMENT



Step 7 Place the water inlet notch in the slot in the tub ring and snap into place.

Step 8 Attach the hose to the port on the water inlet.

Step 9 Using pliers, slide the clamp up the hose and onto the water inlet port.

Step 10 Lower the top.

Step 11 Plug in washer or reconnect power.

Step 12 Run a cycle check.

PROCEDURE 3

⚠WARNING

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

Tub Ring, Gasket, and Clip Replacement

See page 151, illus. nos. 9, 10, 35, and 36 for location of parts.

The purpose of the tub ring is to prevent water from going over the tub during SPIN or splashing over the top during AGITATION.

There are two types of tub rings used because of different gaskets. These gaskets fit between the tub ring and tub.

See Type A for the gasket mounted on the tub or see Type B for the gasket mounted in the ring.

Step 1 Unplug washer or disconnect power.

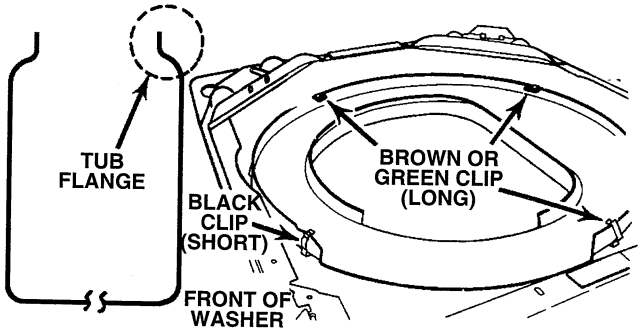
Step 2 Raise the top.

Step 3 Remove the snubber and spring.

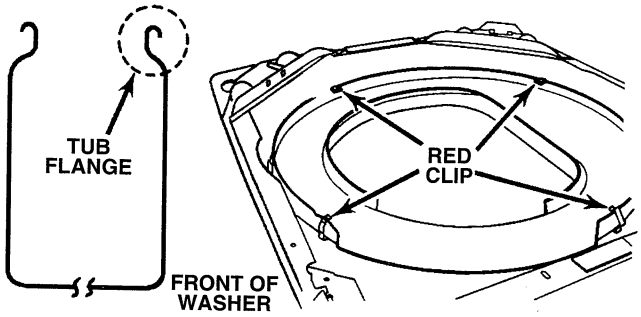
Step 4 Remove the water inlet.

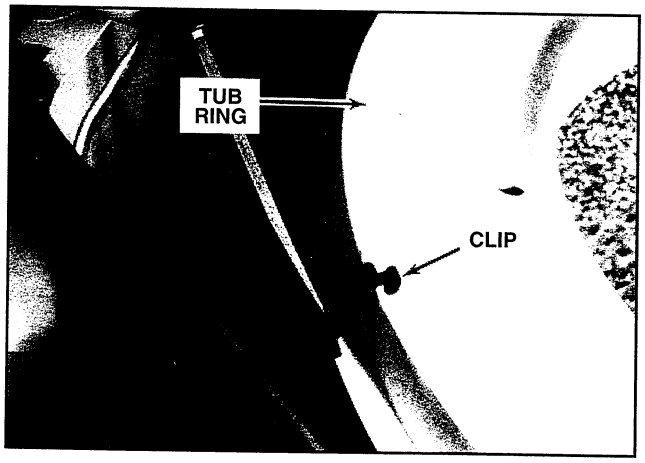
LOCATION OF TUB RING CLIPS

On machines where the top of the flange is straight, the brown or green and black clips must be used.



On machines where the top of the tub flange curls out, the red clips must be used.





Step 5 Using a screwdriver, push down on the tub ring by the clips, then snap the clips off the tub ring. Some washers have two, three, or four clips to remove.

Step 6 Carefully remove the tub ring by lifting straight up.

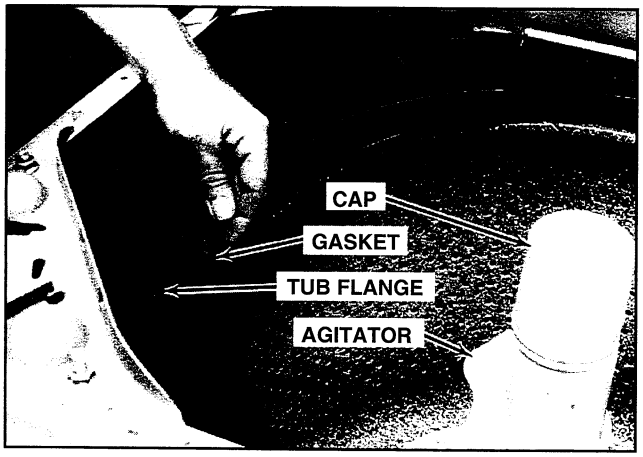
TYPE A

Read steps 1-6 of this procedure.

Step 7 Check and replace the tub gasket if it has started to rot or crack or there is any sign of water leakage.

This gasket fits on the edge of the tub.

REPLACEMENT

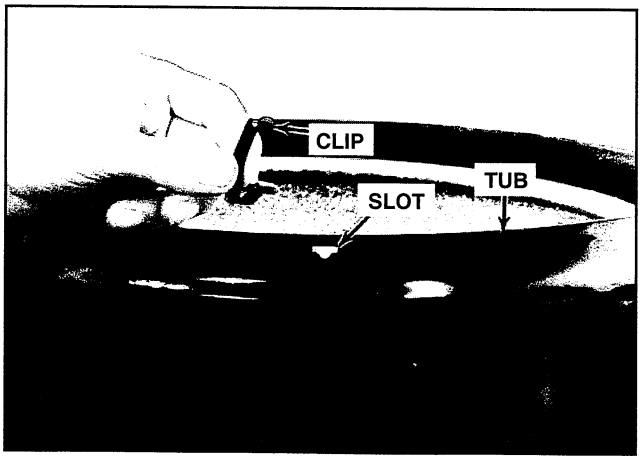


Step 8 To replace, fit the lip of the gasket over the straight edge of the tub, with the long side of the gasket on the inside of the tub.

Step 9 Place the tub ring on the gasket and tub.

Make sure the flat on the inside of the tub ring is across the back of the washer.

Step 10 Line up the notches in the tub ring with the slots in the tub.



Step 11 Insert the clips from the outside into the slots of the tub.

Step 12 Snap these clips over the tub ring notches.

Step 13 Replace the water inlet.

Step 14 Replace the snubber and spring.

Step 15 Lower the top.

Step 16 Plug in washer or reconnect power.

Step 17 Run a cycle check.

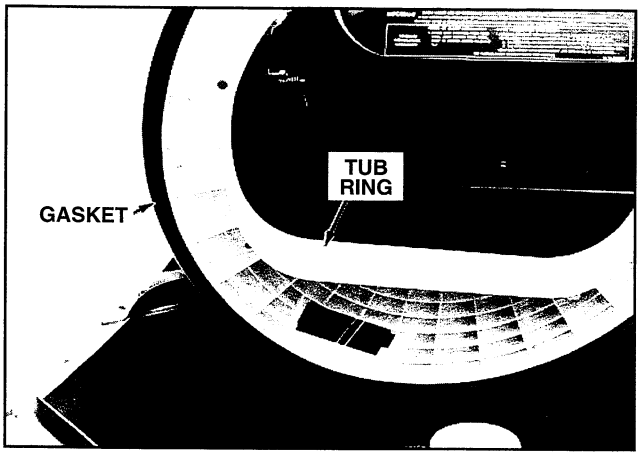
TYPE B

Read steps 1-6 of this procedure.

Step 7 Check and replace the tub gasket if it has started to rot or crack or there is any sign of water leakage.

This flat gasket fits into a groove in the tub ring.

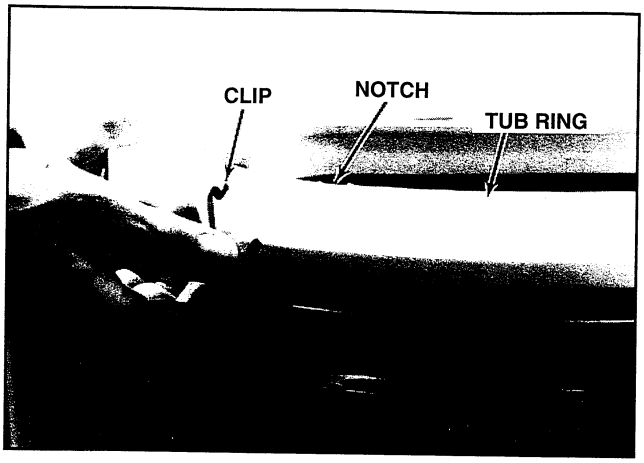
REPLACEMENT



Step 8 Place the gasket in the groove of the tub ring.

Step 9 Place the tub ring and gasket on the tub.

Make sure the flat on the inside of the tub ring is across the back of the washer.



Step 10 Insert the clips from the outside under the curled tub flange.

Step 11 Snap these clips over the tub ring notches.

Step 12 Replace the water inlet.

Step 13 Replace the snubber and spring.

Step 14 Lower the top.

Step 15 Plug in washer or reconnect power.

Step 16 Run a cycle check .

PROCEDURE 4

Agitator Cap, Stud, and Agitator Replacement

See page 151, illus. nos. 22, 23, 24, 25, and 26 for location of parts.

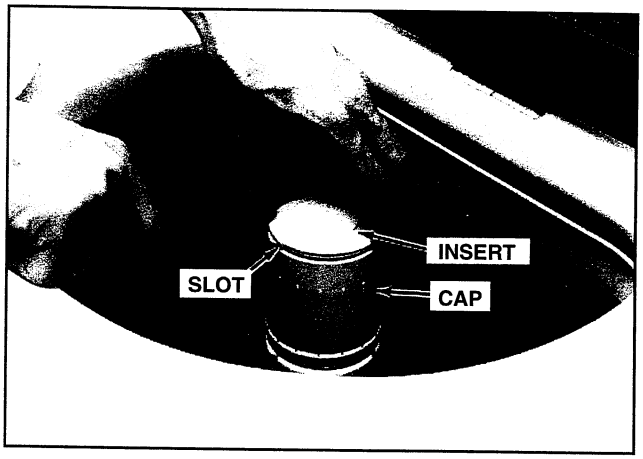
The purpose of the agitator is to move the water and clothes to provide a proper washing action.

There are two ways to remove the agitator.

See Type A for a slot at the top edge of the cap or see Type B for a one piece cap (no slot).

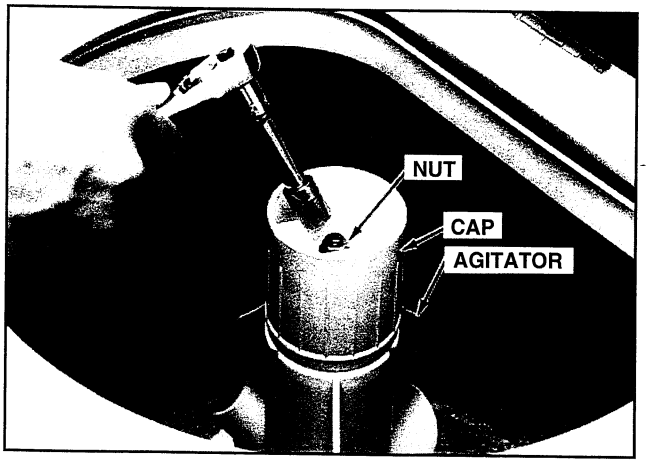
TYPE A

Step 1 Lift the lid.



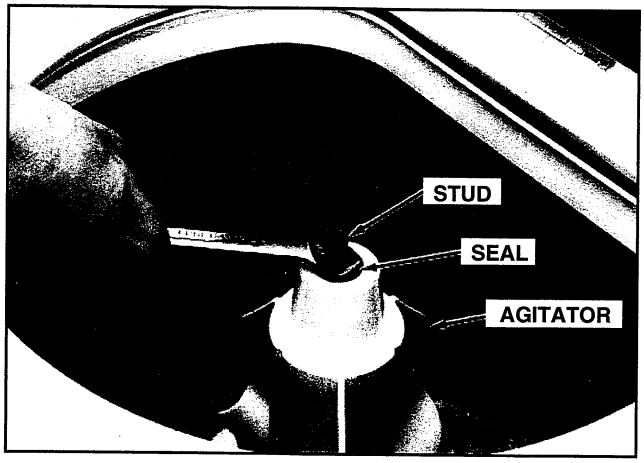
Step 2 Insert a screwdriver in the slot between the insert and cap.

Step 3 Pry the insert off the cap.



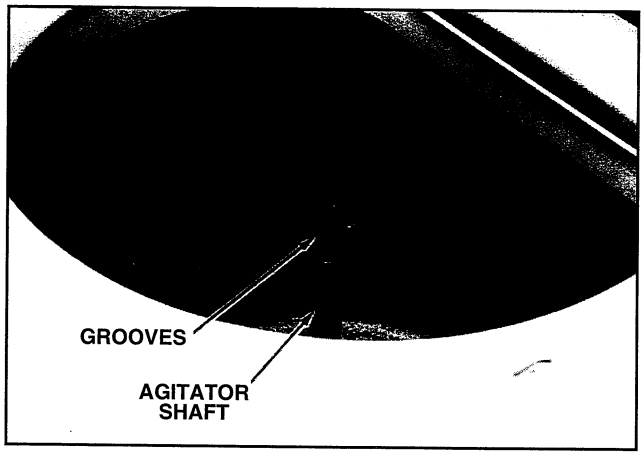
Step 4 Using a nutdriver or socket wrench, hold the agitator with one hand while removing the nut.

Step 5 Lift the agitator cap off the stud.



Step 6 Using an open end wrench or socket wrench, remove the stud and seal which hold the agitator to the shaft.

Step 7 Carefully remove the agitator by lifting straight up.

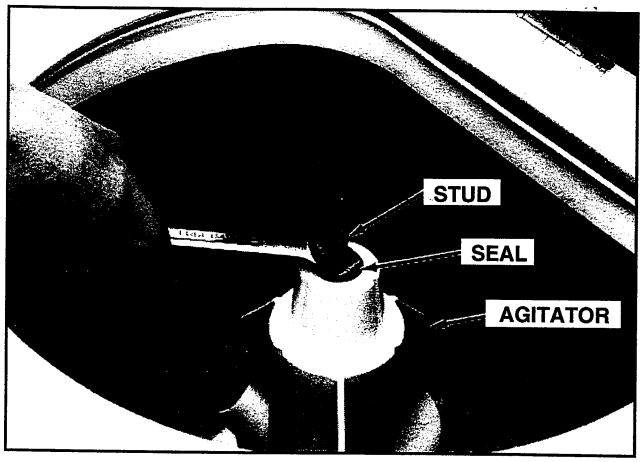


Step 8 Inspect the inside of the agitator for worn grooves or rust. Also check the agitator shaft for worn grooves or rust. If the shaft is bad, either call an authorized Whirlpool factory service branch to repair this or replace the complete gearcase yourself.

REPLACEMENT

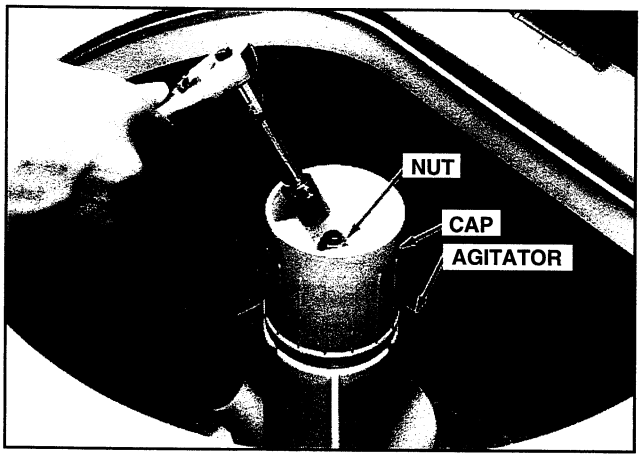
Step 9 Place the agitator on the shaft.

Rotate the agitator until it matches the grooves on the shaft, then push the agitator down.



Step 10 Using an open end wrench or socket wrench, insert the stud and seal and tighten.

Step 11 Place the agitator cap on the stud.



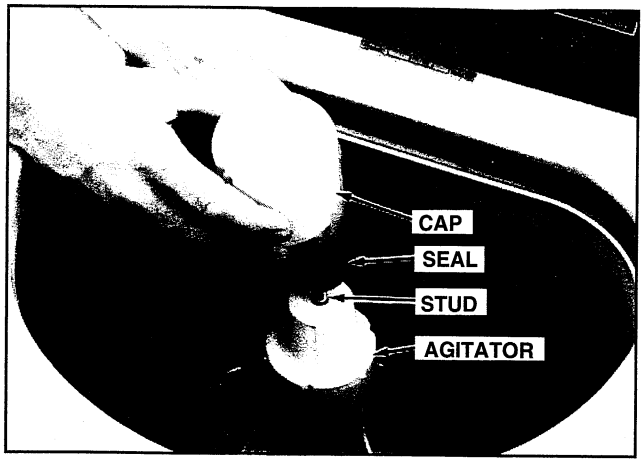
Step 12 Using a nutdriver or socket wrench, place the nut on top of the stud and tighten.

Step 13 Press down on the insert until it snaps into place on the agitator cap.

Step 14 Close the lid.

TYPE B

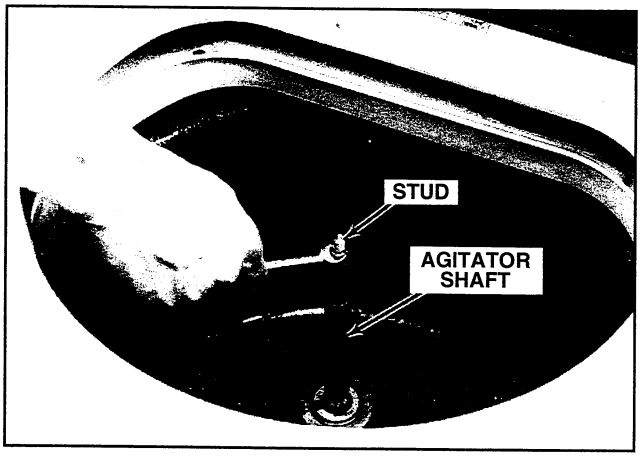
Step 1 Lift the lid.



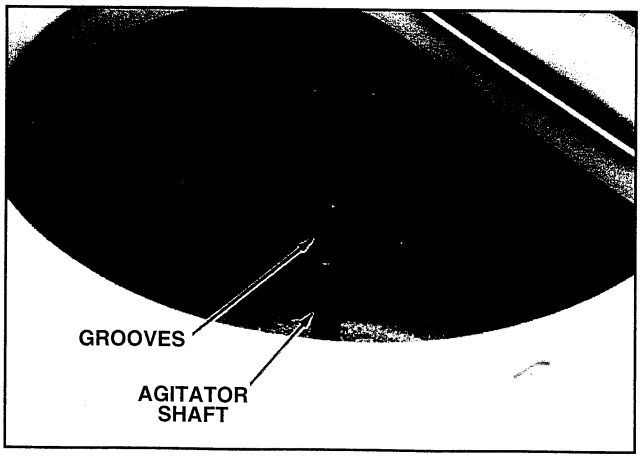
Step 2 With one hand, turn the agitator cap to the left while holding the agitator with the other hand.

Step 3 Remove the seal.

Step 4 Carefully remove the agitator by pulling straight up.

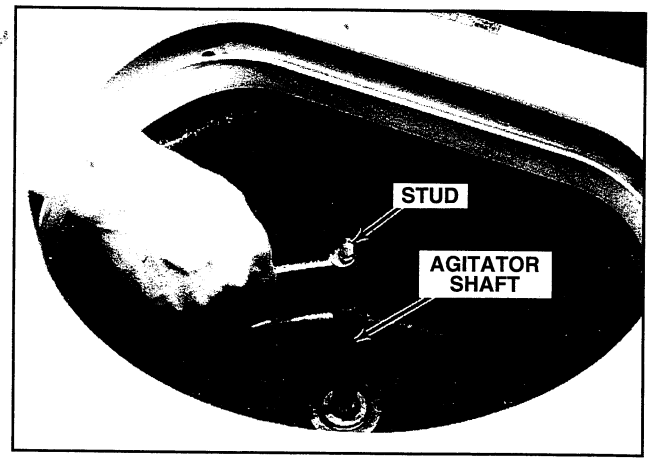


Step 5 Using an open end wrench or socket wrench, remove the stud.



Step 6 Inspect the inside of the agitator for worn grooves or rust. Also check the agitator shaft for worn grooves or rust. If the shaft is bad, either call an authorized Whirlpool factory service branch to repair this or replace the complete gearcase yourself.

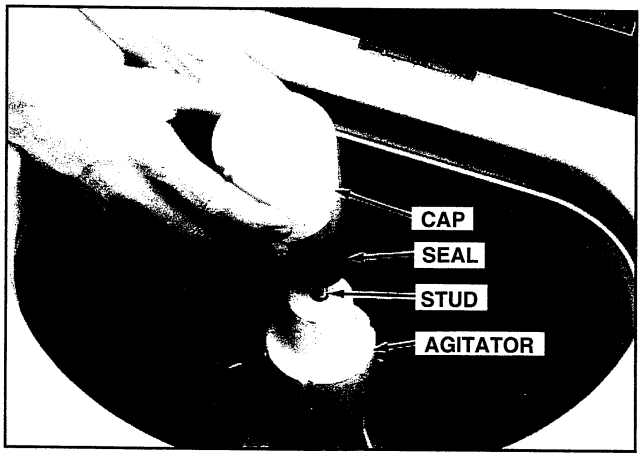
REPLACEMENT



Step 7 Using an open end wrench or socket wrench, insert the stud and tighten.

Step 8 Place the agitator on the shaft.

Rotate the agitator until it matches the grooves on the shaft, then push the agitator down.



Step 9 Place the new seal with the flat side on top of the agitator.

Step 10 Place the agitator cap on the stud and tighten.

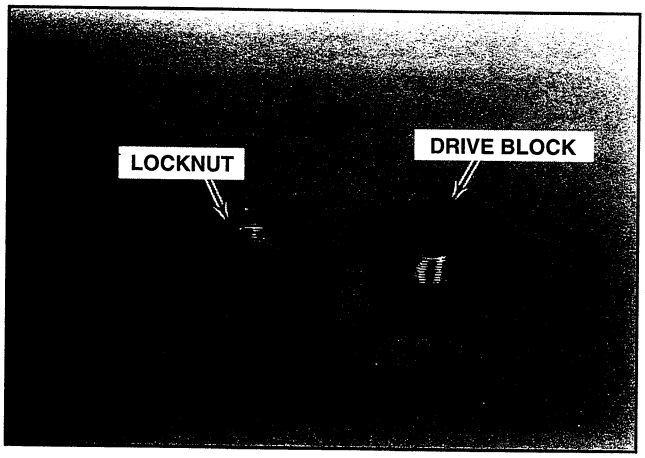
Step 11 Close the lid.

PROCEDURE 5

⚠WARNING

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

Locknut, Basket, and Drive Block Replacement



See page 151, illus. nos. 11, 12, and 27 for location of parts.

The purpose of the basket is to hold the clothes while they are being washed and spun dry.

The locknut and drive block fasten the basket to the spin tube.

Step 1 Unplug washer or disconnect power.

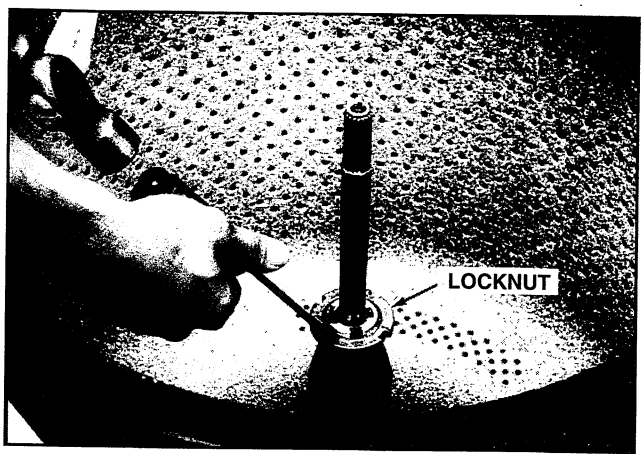
Step 2 Raise the top.

Step 3 Remove the snubber and spring.

Step 4 Using pliers, slide the clamp off the port to the water inlet and remove the hose.

Step 5 Remove the tub ring and clips.

Step 6 Remove the agitator cap, stud, and agitator.

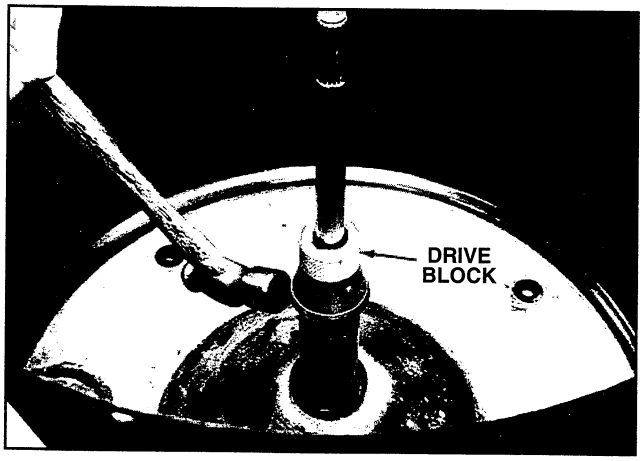


Step 7 Insert a screwdriver into one of the slots on the locknut.

Step 8 Using a hammer, tap the end of the screwdriver, turning the locknut to the left or counterclockwise to remove.

Step 9 Carefully remove the basket by lifting straight up.

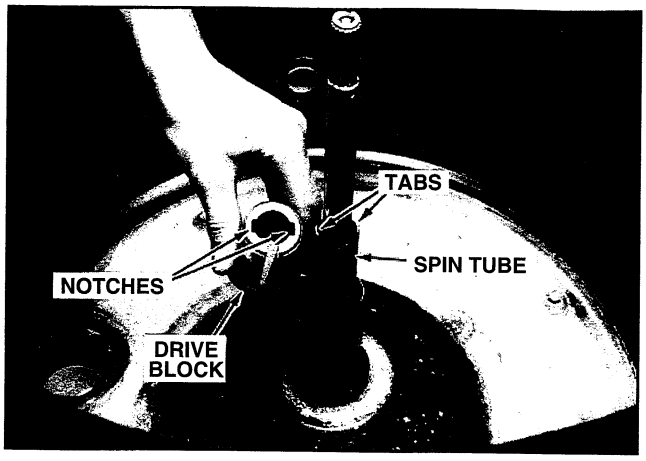
Step 10 Remove the ring filter from the bottom of the basket if used.



Step 11 Using a hammer, carefully tap up from the bottom of the drive block to remove.

REPLACEMENT

Step 12 Place the drive block on the spin tube.



Step 13 Line up the notches in the drive block with the tabs on the spin tube and push down by hand or tap with a hammer.

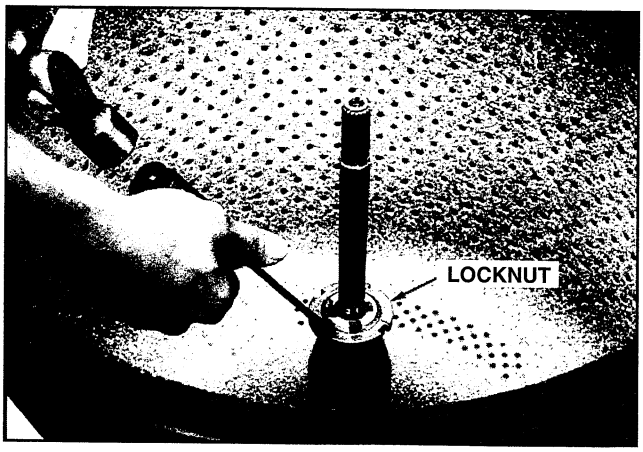
NOTE: You will need four new clips to hold your old filter if used on the basket.

Step 14 Replace the ring filter on the bottom of the basket if used.

Step 15 Place the basket on top of the drive block.

Step 16 Place the locknut on the drive block, turning to the right or clockwise.

Step 17 Insert a screwdriver into one of the slots on the locknut.



Step 18 Using a hammer, tap the end of the screwdriver, turning the locknut to the right or clockwise, until it's very tight.

Step 19 Replace the stud, agitator, and cap.

Step 20 Replace the tub ring and clips.

Step 21 Using pliers, replace the hose on the port of the water inlet and slide the clamp up the hose and onto the port.

Step 22 Replace the snubber and spring.

Step 23 Lower the top.

Step 24 Plug in washer or reconnect power.

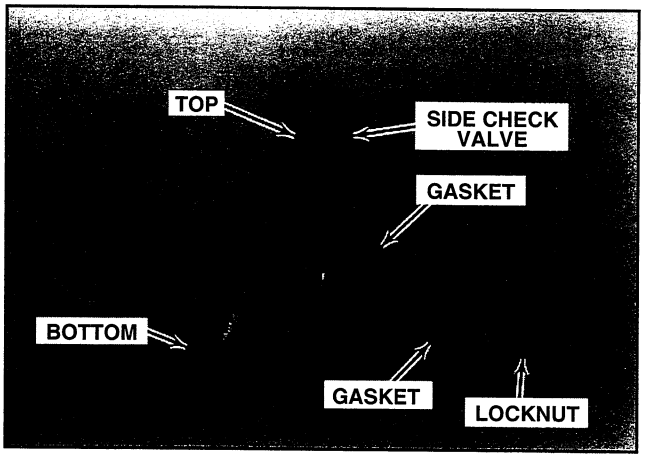
Step 25 Run a cycle check.

PROCEDURE 6

⚠WARNING

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

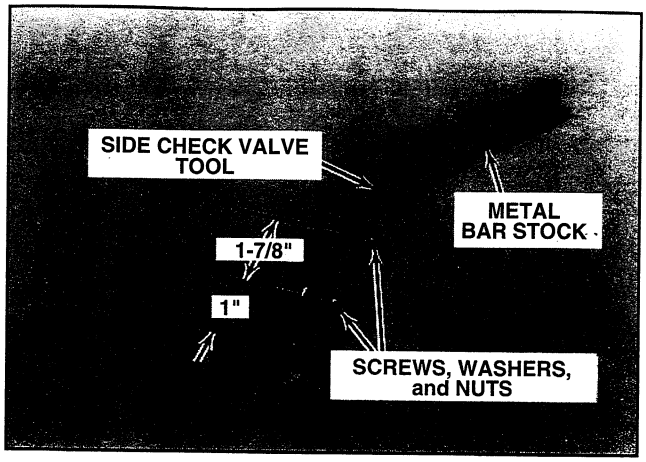
Side Check Valve Replacement



See page 154, illus. nos. 7, 8, 9, and 10 for location of parts.

The purpose of the side check valve is to direct the water flow through the filter during agitation or for draining the water from the tub. This is done with two rubber flapper valves inside the valve.

Replacing the side check valve takes a homemade tool which can be made from steel, 10 inches long by 1 inch wide and 1/8 inch thick.



Step 1 Use this tool and bend it in the middle as shown. Drill the first hole 1 inch from the end.

Step 2 Drill the other hole 1-7/8 inches from the center of the end hole.

Step 3 Use two each of #10 x 1/2-inch machine screws, flat washers, and nuts and assemble them in the holes.

Step 4 Unplug washer or disconnect power.

Step 5 Raise the top.

Step 6 Remove the snubber and spring.

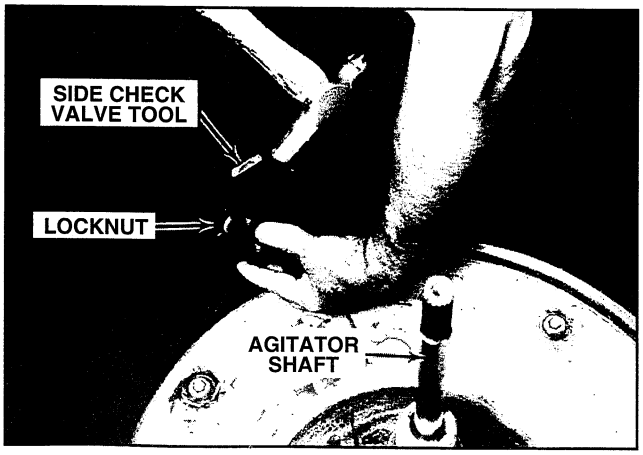
NOTE: Care should be taken when removing hoses as they may have water in them.

Step 7 Using pliers, slide the clamp off the port to the water inlet and remove the hose.

Step 8 Remove the tub ring and clips.

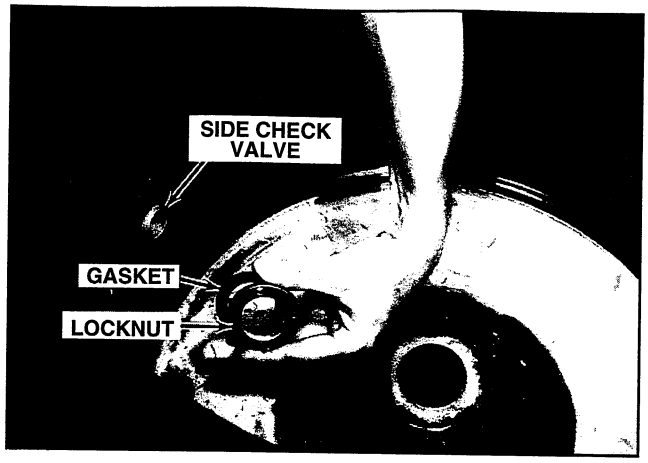
Step 9 Remove the agitator cap, stud, and agitator.

Step 10 Remove the basket.

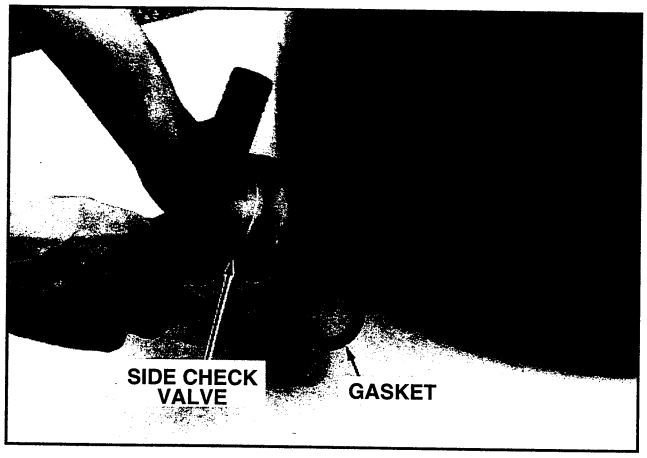


Step 11 Place the homemade tool screws in the holes of the locknut located on the inside of the tub.

Step 12 Using a hammer, tap the tool to loosen the locknut.



Step 13 Remove the fiber gasket and locknut from the inside of the tub.



Step 14 Remove the side check valve and rubber gasket from the outside of the tub.

Step 15 Using pliers, slide the clamps off the ports of the valve.

Step 16 Remove the two hoses from the side check valve.

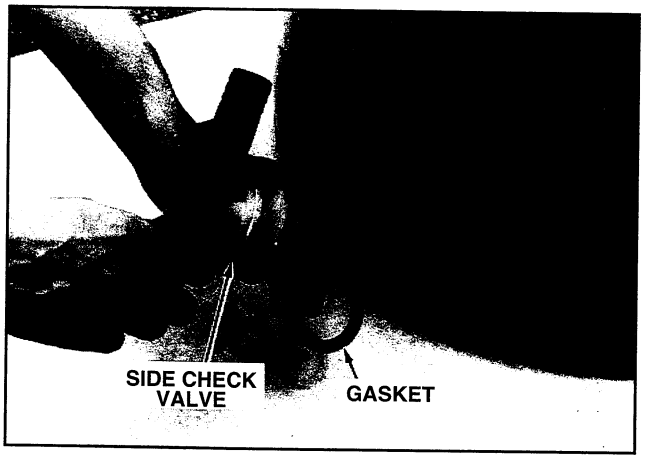
Step 17 Look inside the valve and check the two rubber flappers for proper fit, rot, or cracking.

REPLACEMENT

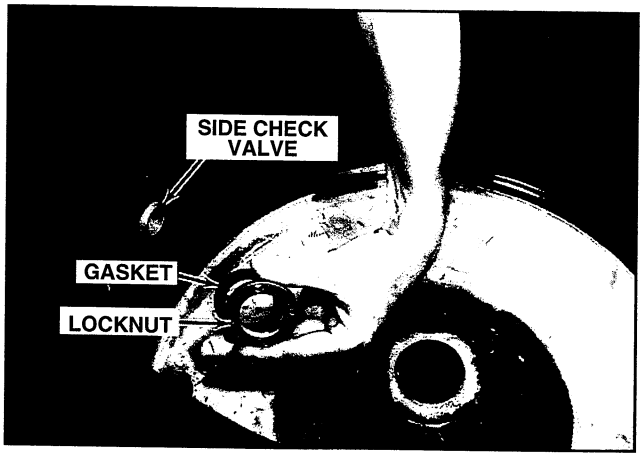
NOTE: When replacing the side check valve, be sure you do not turn it upside down. See picture under procedure 6 for top and bottom.

Step 18 Place the side check valve on the two hoses.

Step 19 Using pliers, slide the clamps onto the ports of the side check valve.

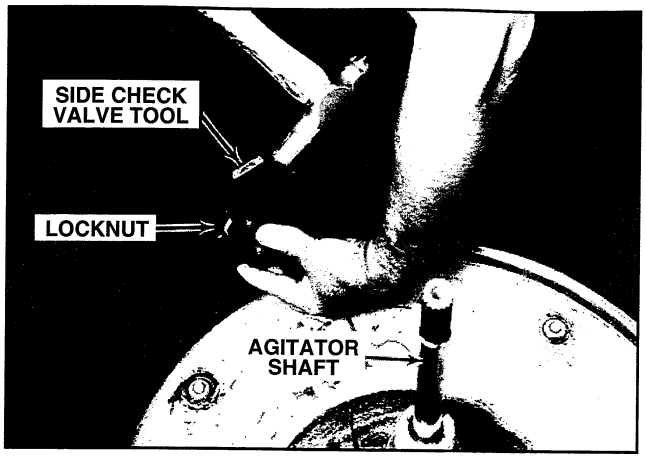


Step 20 Replace the rubber gasket on the valve and insert into the tub.



Step 21 Replace the fiber gasket from inside the tub.

Step 22 Replace the locknut from inside the tub.



Step 23 Using the homemade tool, insert the screws in the holes of the locknut and tap the end with a hammer to tighten.

Step 24 Replace the basket.

Step 25 Replace the stud, agitator, and cap.

Step 26 Replace the tub ring and clips.

Step 27 Using pliers, replace the hose on the port of the water inlet and slide the clamp up the hose and onto the port.

Step 28 Replace the snubber and spring.

Step 29 Lower the top.

Step 30 Plug in washer or reconnect power.

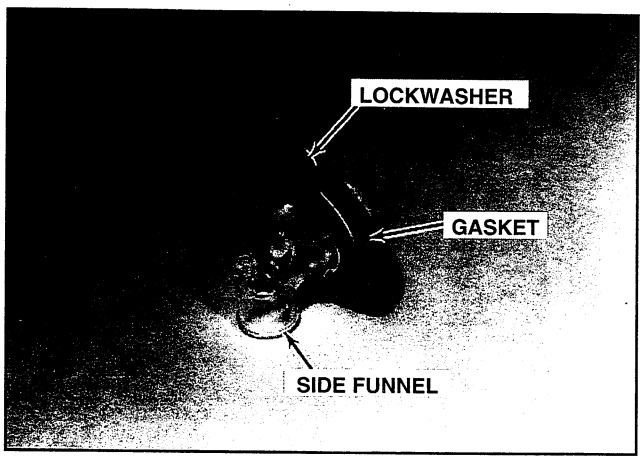
Step 31 Run a cycle check .

PROCEDURE 7

⚠WARNING

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

Side Funnel Replacement



See page 151, illus. nos. 46, 47, and 48 for location of parts.

The side funnel is used on manual clean filter automatic washers that have the suds saving feature.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

Step 3 Remove the snubber and spring.

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

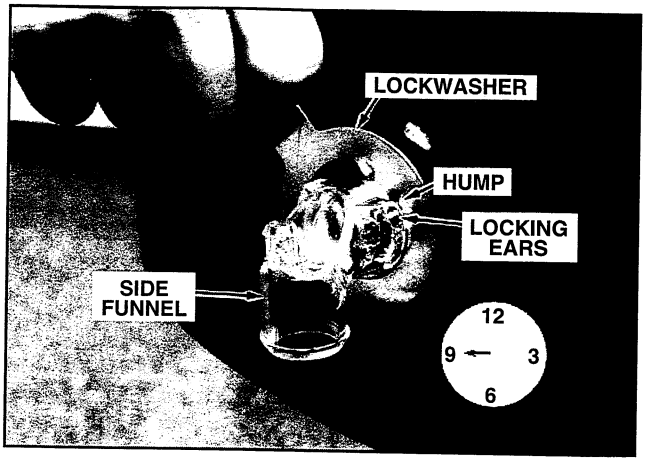
Step 4 Using pliers, slide the clamp off the port to the water inlet and remove the hose.

Step 5 Remove the tub ring and clips.

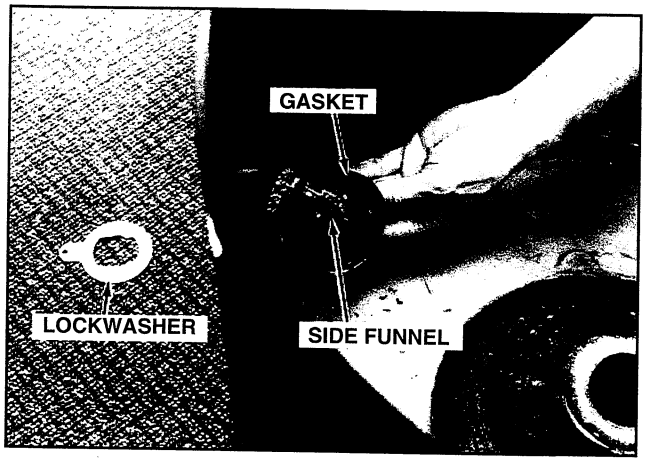
Step 6 Remove the agitator cap, stud, and agitator.

Step 7 Remove the basket.

Step 8 Remove the hose from the side funnel.



Step 9 Remove the lockwasher by turning to the left, past the locking ears of the funnel.

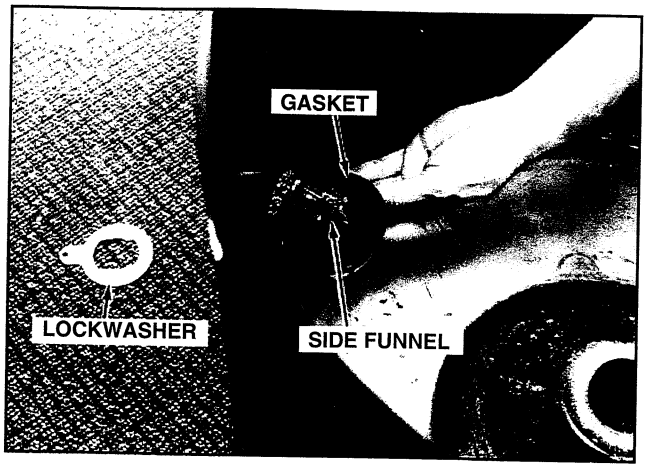


Step 10 Remove the funnel and gasket from inside the tub. Check the funnel for any cracks.

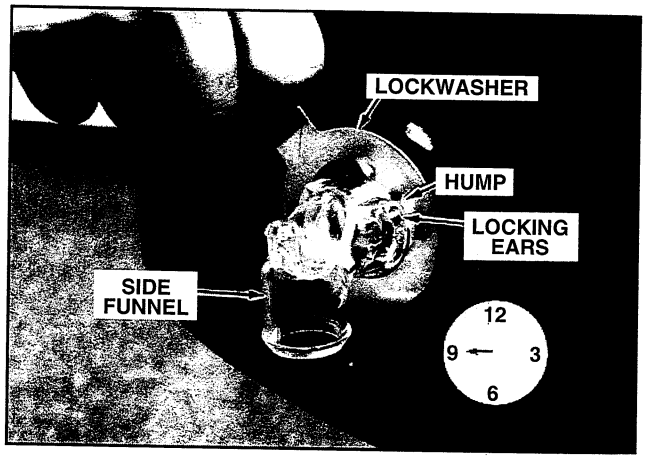
Step 11 Check and replace the funnel gasket if it has started to rot or crack or there is any sign of water leakage.

REPLACEMENT

Step 12 Place the gasket on the funnel with the flat side facing the funnel flange.



Step 13 Place the side funnel and gasket through the hole from inside the tub.



Step 14 Place the lockwasher over the side funnel with the tab at the 9 o'clock position to clear the ears.

Step 15 Turn the lockwasher to the right until the humps are behind the ears of the side funnel. The tab of the lockwasher should be almost straight up.

Step 16 Replace the hose on the side funnel.

Step 17 Replace the basket.

Step 18 Replace the stud, agitator, and cap.

Step 19 Replace the tub ring and clips.

Step 20 Using pliers, replace the hose on the port of the water inlet and slide the clamp up the hose and onto the port.

Step 21 Replace the snubber and spring.

Step 22 Lower the top.

Step 23 Plug in washer or reconnect power.

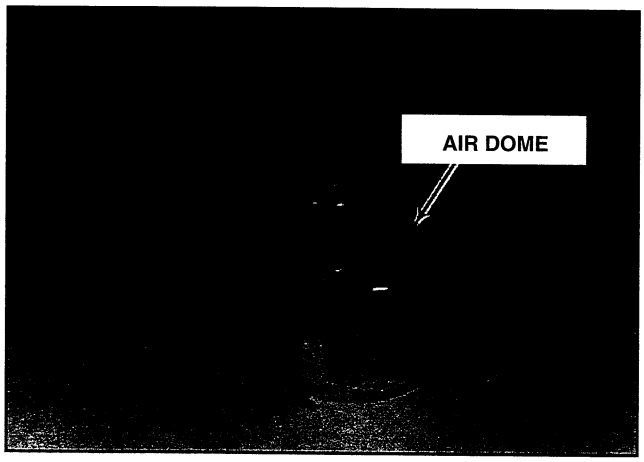
Step 24 Run a cycle check.

PROCEDURE 8

⚠WARNING

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

Air Dome Replacement

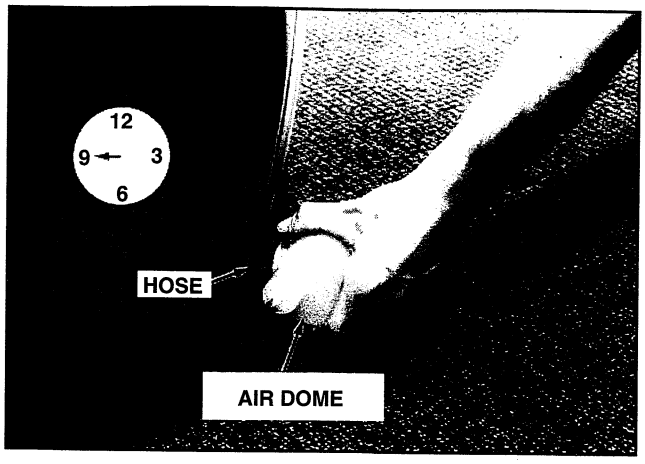


See page 151, illus. no. 29 for location of part.

The air dome, along with the water level switch and a plastic tube connected between the two, control the amount of water entering the tub. Air trapped in the dome is forced up the plastic tube by the pressure of the water as it rises. The air pressure then switches the water level switch contacts inside the switch from EMPTY to FULL.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.



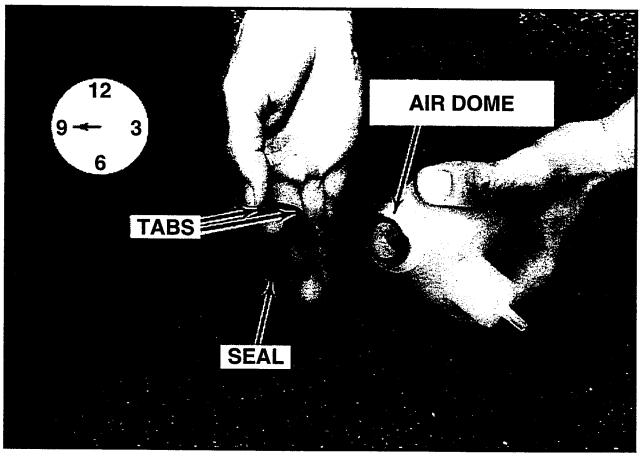
Step 3 Remove the air dome by pressing in and turning to the left to the 9 o'clock position.

Step 4 Pull the air dome away from the tub.

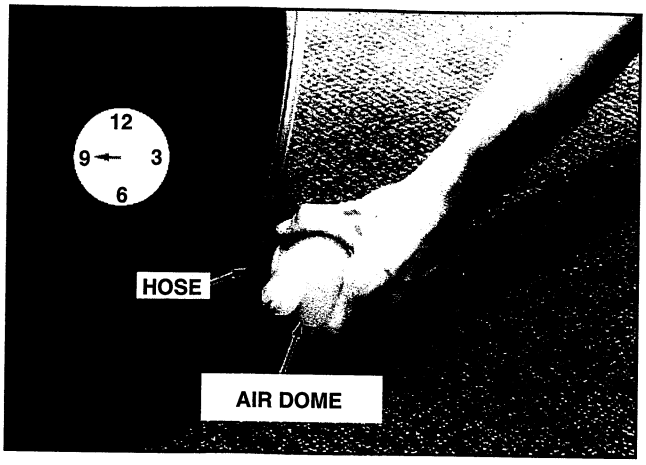
Step 5 Slide the plastic hose off the air dome.

REPLACEMENT

Step 6 Replace the plastic hose on the air dome.



Step 7 Place the seal on with the six tabs facing the air dome. The tabs on the rubber seal must face the air dome for a tight seal.



Step 8 Place the air dome into the side of the tub at the 9 o'clock position.

NOTE: Be sure the plastic hose is not kinked when you turned the air dome into place.

Step 9 Turn the air dome to the right until the port is straight up.

Step 10 Lower the top.

Step 11 Plug in washer or reconnect power.

Step 12 Run a cycle check.

PROCEDURE 9

⚠WARNING

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

Tub Replacement

See page 151, illus. no. 14 for location of part.

The tub holds the water during wash.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

Step 3 Remove the snubber and spring.

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

Step 4 Using pliers, slide the clamp off the port to the water inlet and remove the hose.

Step 5 Remove the tub ring and clips.

Step 6 Remove the agitator cap, stud, and agitator.

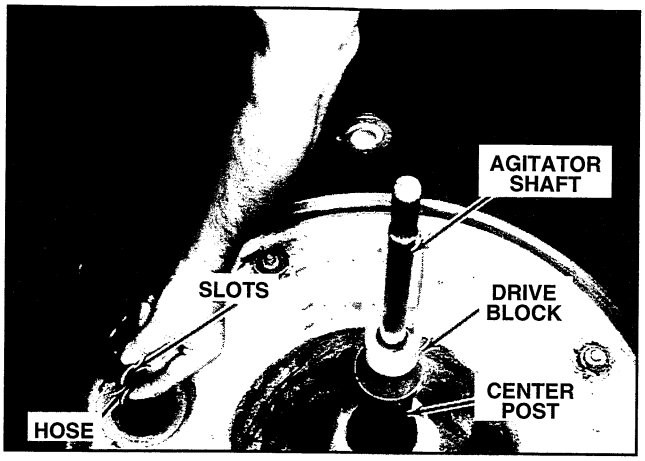
Step 7 Remove the locknut, basket, and drive block.

Step 8 Remove the tub-mounted filter, if used.

Step 9 Remove the side check valve, if used.

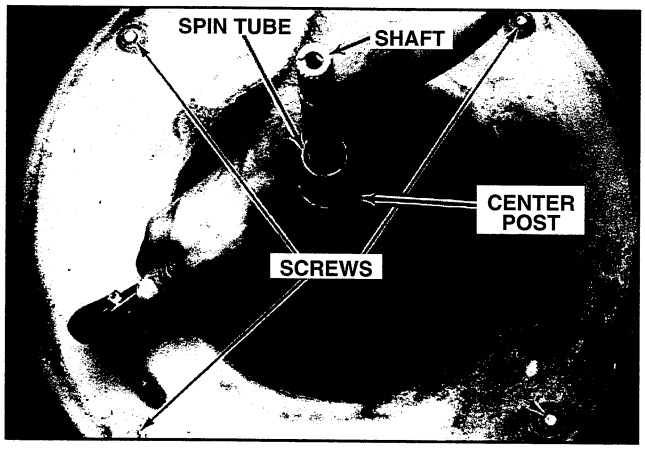
Step 10 Remove the side funnel, if used.

Step 11 Remove the air dome.



Step 12 Using pliers, slide the clamp off the bleach/rinse hose, if your washer has one, from the bottom port of the dispenser.

This hose has slots which must be facing up and down when in the tub.



Step 13 Using a socket wrench, nutdriver, or screwdriver, remove the four screws at the bottom of the tub.

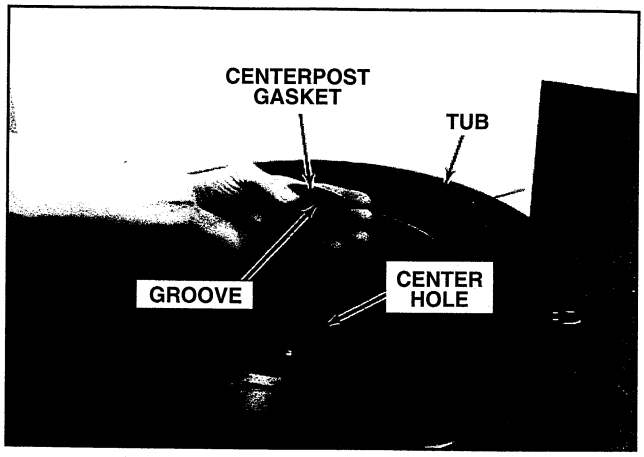
Step 14 Clean the centerpost by scraping off any deposits.

Step 15 Wash the centerpost with mild soap, leaving soap on the centerpost.

Step 16 Carefully remove the tub by pulling straight up.

The centerpost gasket should slide up the soapy centerpost when lifting the tub.

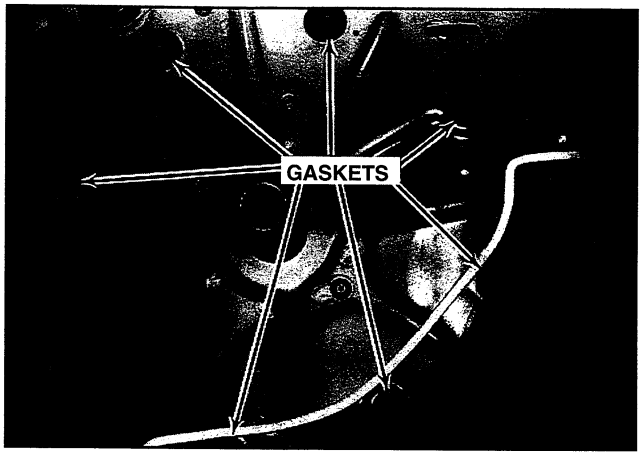
REPLACEMENT



Step 17 Replace the centerpost gasket by removing from the bottom of the tub.

Step 18 Place the gasket in the center hole from the bottom of the tub.

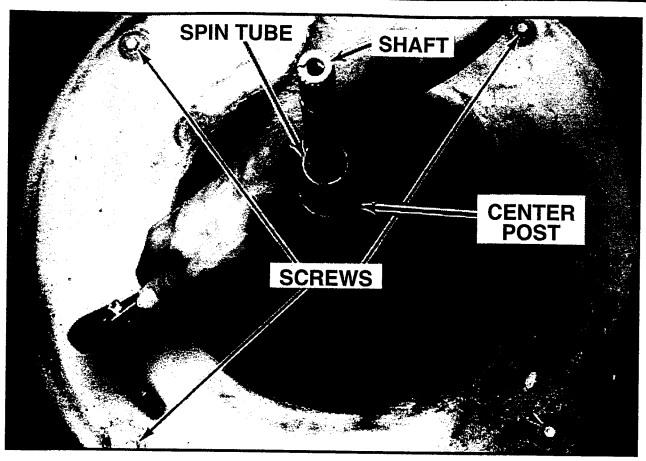
A groove in the gasket locks it in place on the tub.



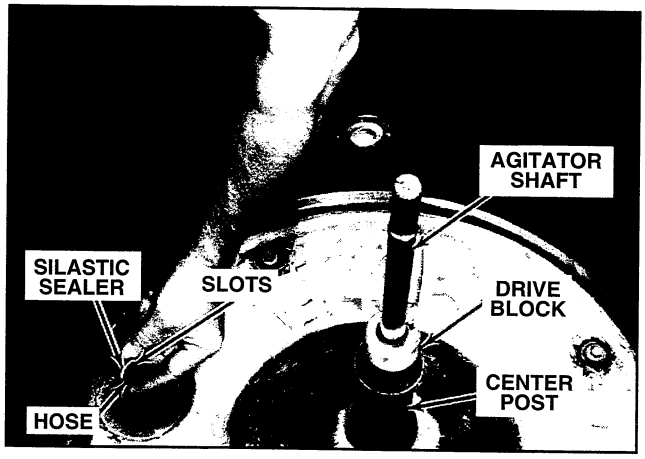
Step 19 Make sure the round cork pads are cemented on the baseplate. This is to protect the bottom finish on the tub.

Step 20 Lubricate the centerpost with mild soap, then slide the tub and gasket down the centerpost.

Step 21 Make sure the holes in the tub line up with the parts that have to be assembled.



Step 22 Using a socket wrench, nutdriver, or screwdriver, insert the four screws in the bottom of the tub.



Step 23 Replace the bleach/rinse hose (if your model has one) from inside the tub. Place a bead of silastic around the slanted portion of the tube and push the tube out from inside the tub.

This hose has slots which must be facing up and down when in the tub.

Step 24 Replace the air dome.

Step 25 Replace the side funnel, if used.

Step 26 Replace the side check valve, if used.

Step 27 Replace the tub-mounted filter, if used.

Step 28 Replace the drive block, basket, and locknut.

Step 29 Replace the stud, agitator, and cap.

Step 30 Replace the tub ring and clips.

Step 31 Using pliers, replace the hose on the port of the water inlet and slide the clamp up the hose and onto the port.

Step 32 Replace the snubber and spring.

Step 33 Lower the top.

Step 34 Plug in washer or reconnect power.

Step 35 Run a cycle check.

NOTES

SECTION L

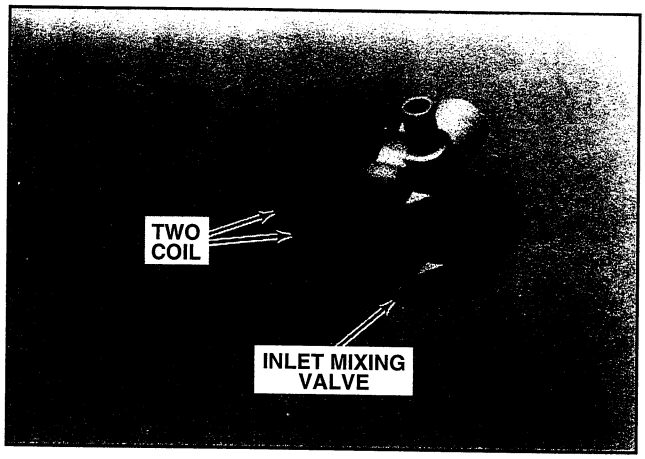
Water Flow Area

PROCEDURE 1

⚠WARNING

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

Inlet Mixing Valve Testing and/or Replacement



See page 150, illus. no. 33 for location of part.

OHMMETER REQUIRED

There are two basic types of inlet valves used. They are the single-coil or the two-coil mixing valve.

The single-coil inlet valve is mainly a shut-off valve for controlling water entering the machine. This is a single port valve used with a "Y" hose. Adjustments to hot and cold water are made at the faucets.

The two-coil inlet valve is actually mixing the hot and cold water at the valve.

An "H" (hot) and "C" (cold) will be found stamped on the back of the cabinet to assist in properly positioning the water inlet valve.

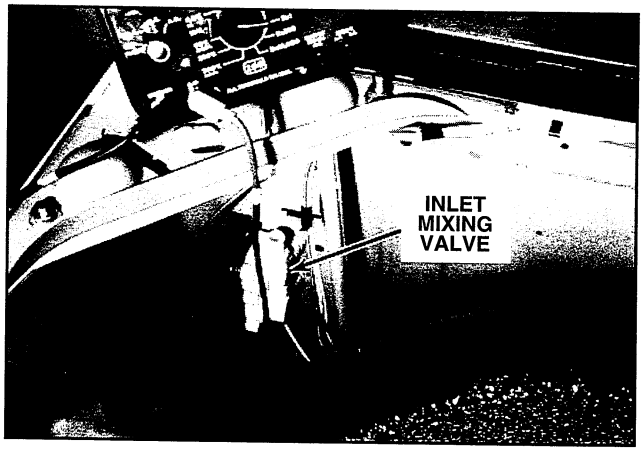
Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the inlet mixing valve. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 500-2,000 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one of the ohmmeter probes to one of the terminals on the coil.

Step 6 Touch the other ohmmeter probe to the other terminal on the same coil.

Step 7 The ohmmeter should show a reading between 500-2,000 ohms on the ohms scale. If you do not get this reading, the water inlet valve is bad and needs replacing.

Step 8 If your washer has a two-coil inlet mixing valve, check the other coil as described in steps 5-7.

NOTE: If you get this reading, the inlet valve could still be bad from a mechanical problem inside the valve. Replace the inlet valve or have this condition checked by an authorized Whirlpool factory service technician.

REPLACEMENT

Step 9 Shut off the hot and cold water faucets.

Step 10 Identify the hot water inlet hose with a piece of tape. This procedure will be easier when replacing it on the hot port of the water inlet valve.

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

Step 11 Using pliers, remove one of the hoses from the water inlet valve port.

Step 12 Using a pail, drain the excess water from this hose.

Step 13 Using pliers, remove the other hose from the water inlet valve port.

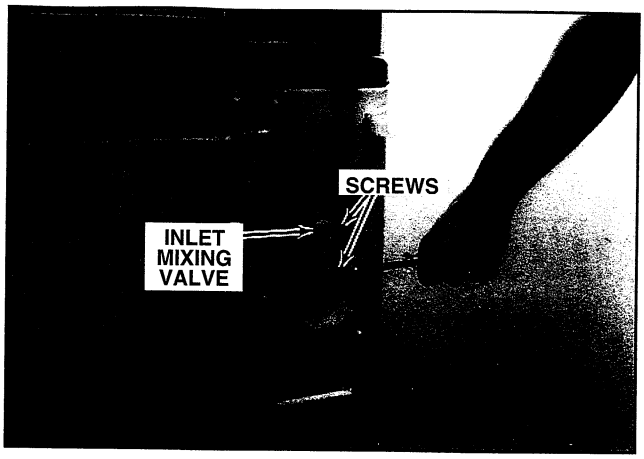
Step 14 Using a pail, drain the excess water from this hose.

Step 15 Remove the drain hose from the standpipe or laundry tub.

Step 16 Using a pail, drain the excess water from this hose.

Step 17 Using pliers, slide the clamp off the top of the water inlet valve port located on the inside of the cabinet.

Step 18 Remove the hose from the top of the mixing valve.



Step 19 Using a screwdriver or nutdriver, hold on to the mixing valve with one hand while removing the two screws which hold the inlet valve to the back of the cabinet.

Step 20 Carefully remove the inlet mixing valve up through the top opening. The wires should have been removed already because of testing.

Step 21 Place the new inlet mixing valve in the inside of the cabinet.

Step 22 Using a screwdriver or nutdriver, insert the two screws and tighten.

Step 23 Reconnect the wires to the proper terminals as previously marked.

Step 24 Using pliers, attach the inlet hose and slide the clamp over the water inlet port.

Step 25 Lower the top.

Step 26 Using pliers, attach the inlet hoses to the proper ports on the inlet mixing valve.

Step 27 Turn on the hot and cold water faucets, and check for leaks.

Step 28 Insert the drain hose into the standpipe or laundry tub.

Step 29 Plug in washer or reconnect power.

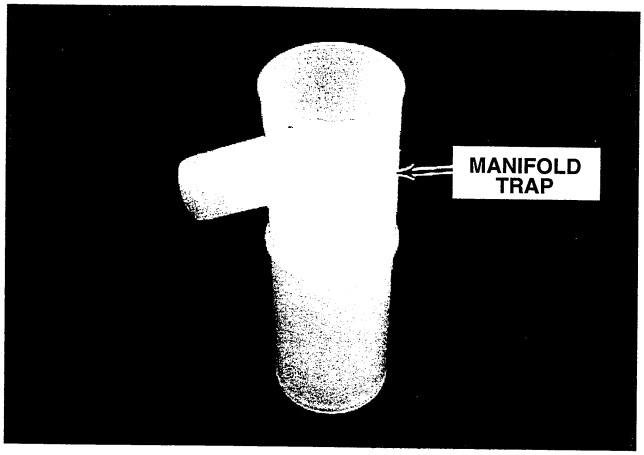
Step 30 Run a cycle check.

PROCEDURE 2

⚠WARNING

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

Manifold Trap Replacement



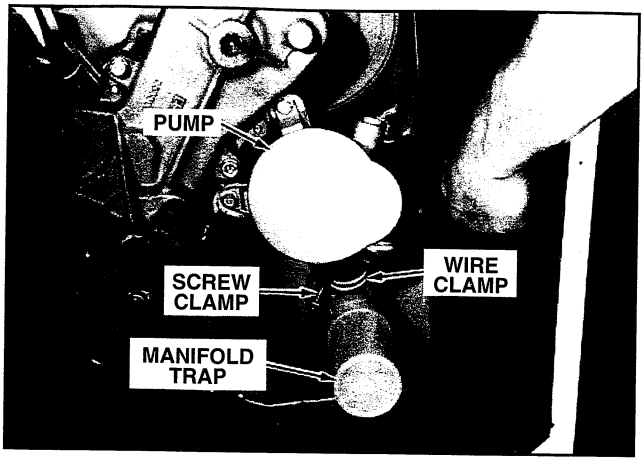
See page 151, illus. no. 51 for location of part.

The purpose of the manifold trap is to prevent large objects from entering the pump and damaging the pump impeller. A bleed hole in the center of the baffle prevents an air lock. This bleed hole must be kept open. An air lock will prevent water from pumping out or reduce the flow of water during pump-out.

Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

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

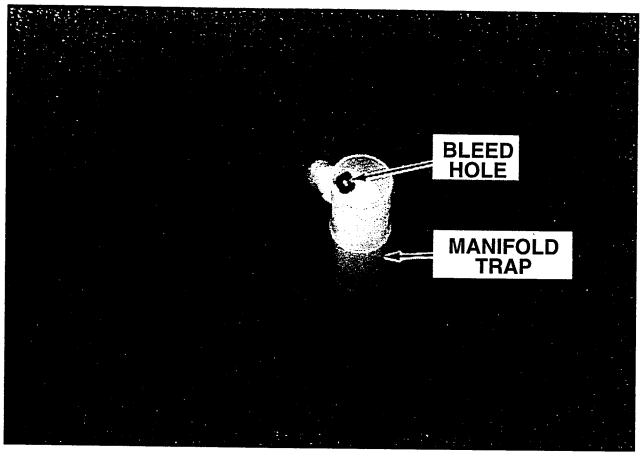


Step 3 Using a screwdriver, loosen the screw clamp.

Step 4 Using pliers, slide the wire clamp off the port of the manifold trap coming from the pump.

Step 5 Remove the hose from the port and carefully remove the manifold trap.

REPLACEMENT



NOTE: The bleed hole in the center of the manifold trap must be kept clean.

Step 6 Insert the new manifold trap in the hoses making sure they seat properly.

Step 7 Using pliers, slide the wire hose clamp up the hose onto the port of the manifold trap.

Step 8 Using a screwdriver, tighten the screw clamp.

Step 9 See REPLACEMENT in "Access to Lower Parts."

Step 10 Plug in washer or reconnect power.

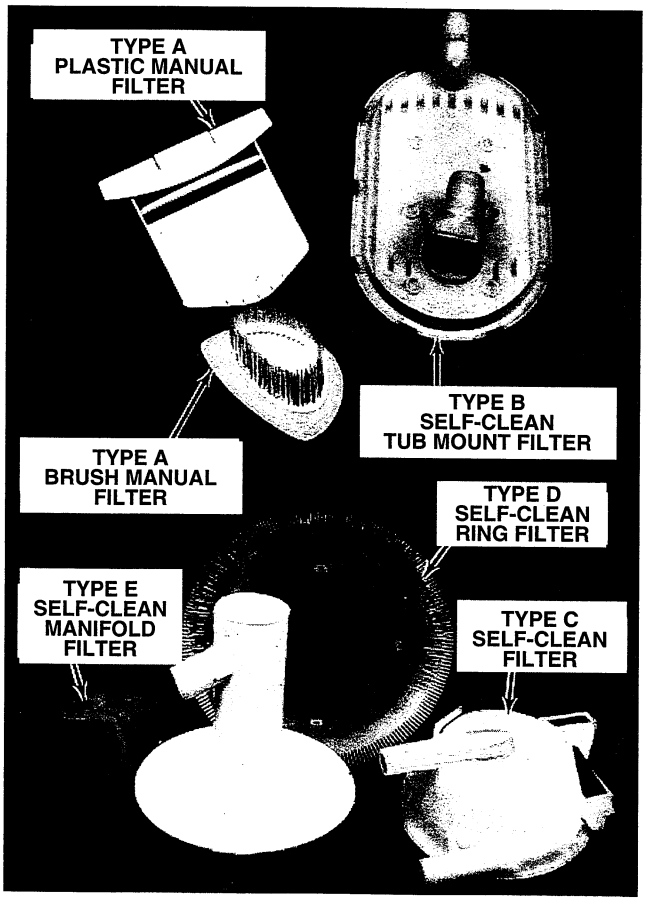
Step 11 Run a cycle check.

PROCEDURE 3

⚠WARNING

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

Filter Replacement



See page 151, illus. nos. 53 and 57, or page 154, illus. no. 39 for location of parts.

There are two types of filters that are used on automatic washers; manual or self-clean filters. With the manual clean filter, we recommend that the homeowner clean out the filter after every use. The self-cleaning filter is automatically cleaned when the water is pumped out of the automatic washer.

See Type A for the manual clean filter, Type B for the self-clean tub-mounted filter, Type C for the self-clean filter, Type D for the self-clean ring filter, or Type E for the self-clean manifold filter.

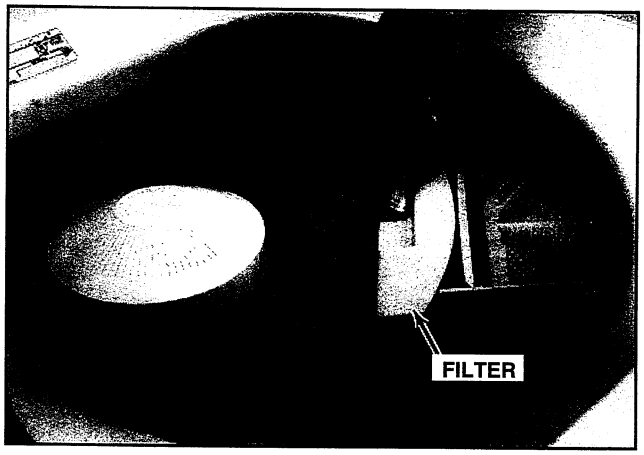
TYPE A

There are two types of manual clean filters used, either the brush type or the plastic type.

Plastic Type

The plastic type is located on the right side of the tub ring, underneath the top.

Step 1 Lift the lid.



Step 2 Remove by depressing the handle and pulling toward the center of the washer, then clean the filter.

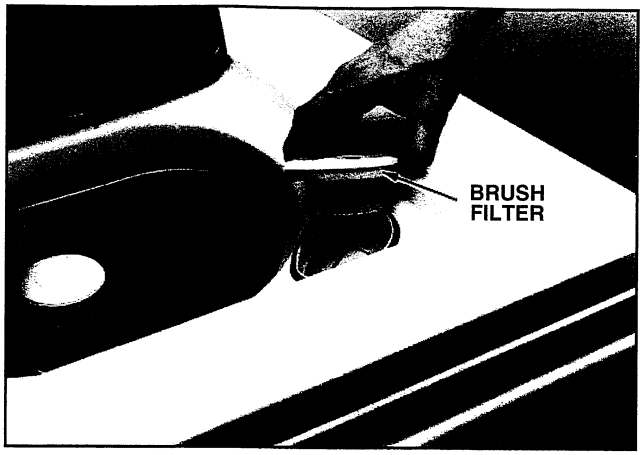
Step 3 To replace, insert the filter into the housing until it snaps into place.

Brush Type

The brush type is located on the right side of the top.

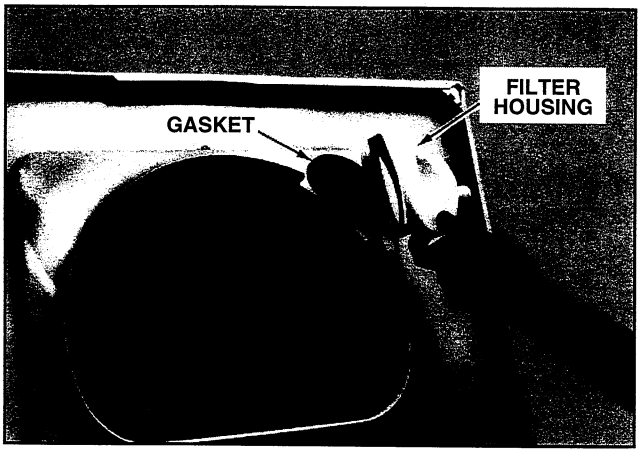
Step 1 Unplug washer or disconnect power.

Step 2 Lift the lid.



Step 3 To remove, lift straight up, then clean the filter.

Step 4 To remove the filter housing, raise the top.



Step 5 With brush filter removed, pull the housing out of the gasket and top.

Step 6 Remove the gasket.

REPLACEMENT

Step 7 Place the new gasket around the edge of the opening in the top. This gasket has a small groove which fits into the top.

Step 8 Push the new housing up into the groove of the gasket.

Step 9 Lower the top.

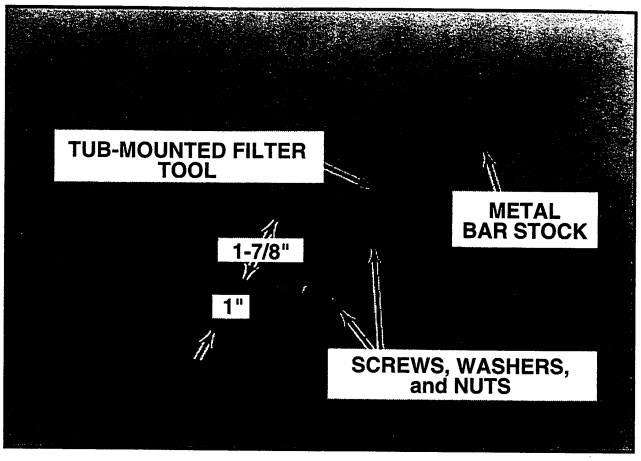
Step 10 Insert the brush.

Step 11 Plug in washer or reconnect power.

TYPE B

This type filter is located in the back left corner on the tub.

Step 1 Unplug washer or disconnect power.



Step 2 Use this tool and bend it in the middle as shown. Drill the first hole 1 inch from the end.

Step 3 Drill the other hole 1-7/8 inches from the center of the end hole.

Step 4 Use two each of #10 x 1/2-inch machine screws, washers, and nuts and assemble them in the holes.

Step 5 Raise the top.

Step 6 Remove the snubber and spring.

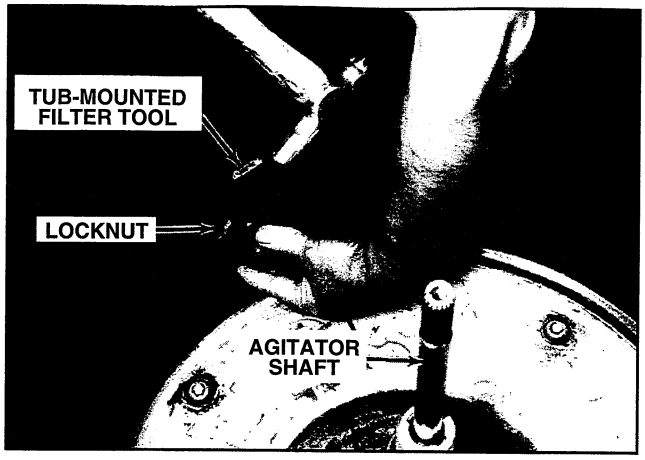
NOTE: Care should be taken when removing hoses, as they may have water in them.

Step 7 Using pliers, slide the clamp off the port to the inlet valve and remove the hose.

Step 8 Remove the tub ring and clips.

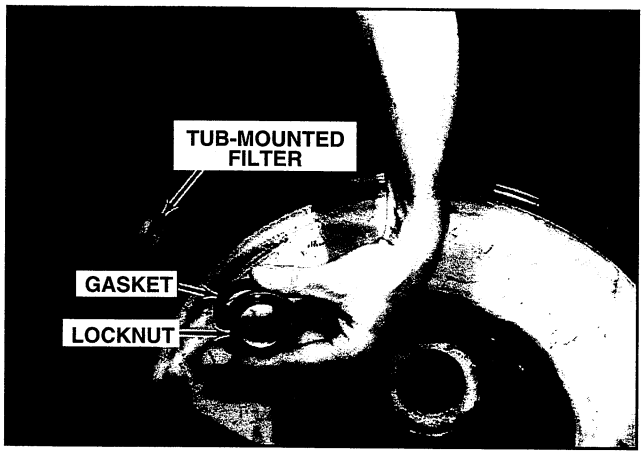
Step 9 Remove the agitator cap, stud, and agitator.

Step 10 Remove the tub filter locknut and basket.

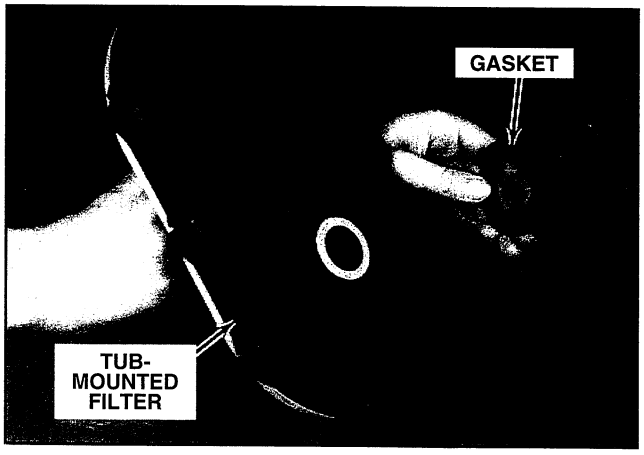


Step 11 Place the homemade tool screws in the holes of the locknut located on the inside of the tub.

Step 12 Using a hammer, tap the tool to the left to loosen the locknut.



Step 13 Remove the fiber gasket and locknut from the inside of the tub.



Step 14 Remove the tub-mounted filter and tub filter rubber gasket from the outside of the tub.

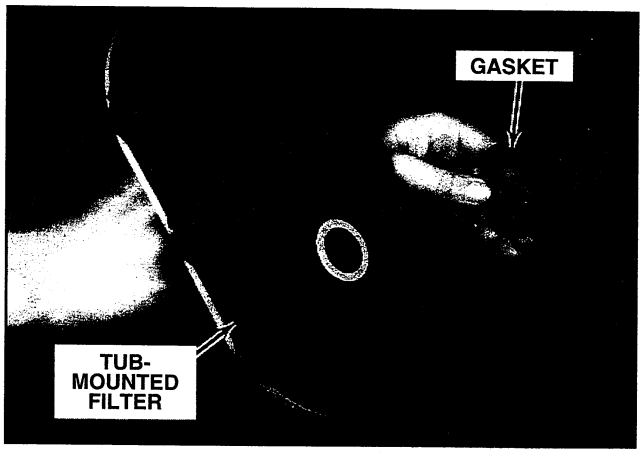
Step 15 Using pliers, slide the clamps off the ports of the filter.

Step 16 Remove the two hoses from the filter.

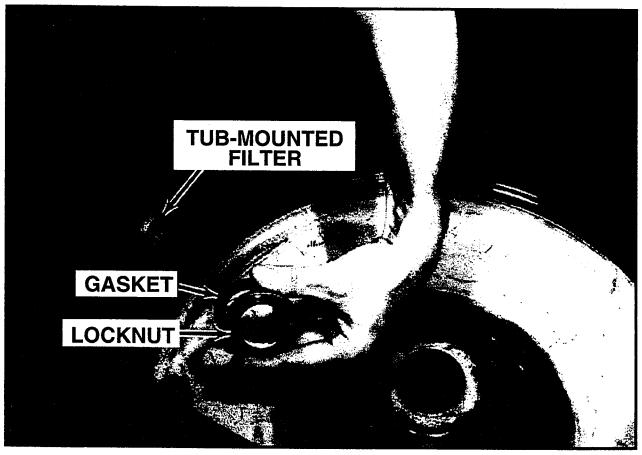
REPLACEMENT

Step 17 Place the new tub-mounted filter on the two hoses.

Step 18 Using pliers, slide the clamps onto the ports of the filter.

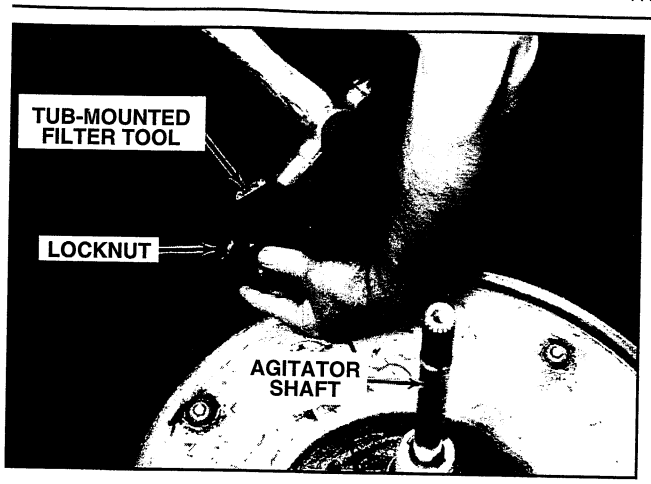


Step 19 Replace the tub filter rubber gasket on the filter and insert into the tub.



Step 20 Replace the fiber gasket from inside the tub.

Step 21 Replace the locknut from inside the tub.



Step 22 Using the homemade tool, insert the screws in the holes of the locknut and tap the end with a hammer to tighten.

Step 23 Replace the basket and locknut.

Step 24 Replace the stud, agitator, and cap.

Step 25 Replace the tub ring and clips.

Step 26 Using pliers, replace the hose on the port of the water inlet and slide the clamp up the hose and onto the port.

Step 27 Replace the snubber and spring.

Step 28 Lower the top.

Step 29 Plug in washer or reconnect power.

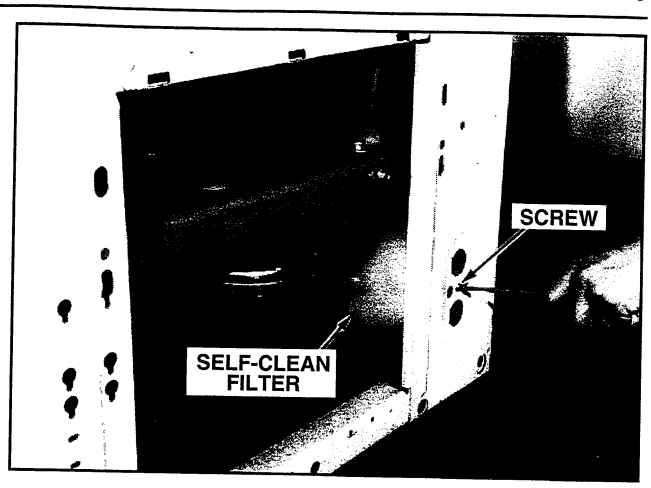
Step 30 Run a cycle check.

TYPE C

This self-cleaning filter is located in the left rear corner, held on with one screw to the cabinet.

Step 1 Unplug washer or disconnect power.

Step 2 Using a screwdriver or nutdriver, remove the rear service panel.



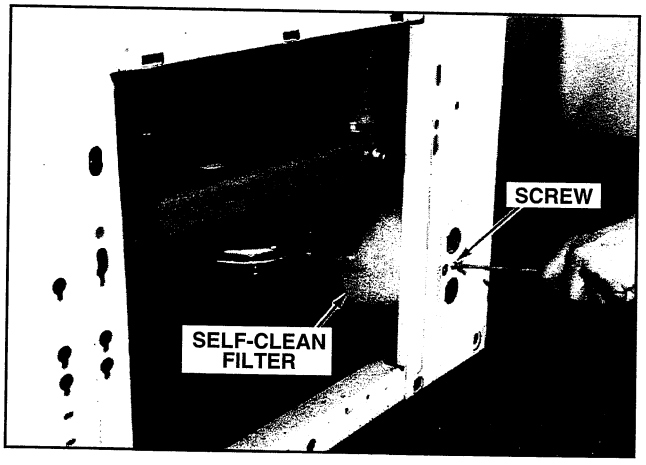
Step 3 Using a screwdriver or nutdriver, remove the screw which holds the filter to the back of the cabinet.

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

Step 4 Using pliers, slide the hose clamps off the filter ports and remove the hoses.

REPLACEMENT

Step 5 Check for cracks or see if there is anything inside the filter that might block the flow of water during washing or draining.



Step 6 Using a screwdriver or nutdriver, place the new filter in the rear of the cabinet. Insert the screw, and tighten.

Step 7 Using pliers, replace the hoses and slide the hose clamps over the filter ports.

Step 8 Using a screwdriver or nutdriver, place the rear service panel and screws.

Step 9 Plug in washer or reconnect power.

TYPE D

This type filter is located under the basket.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

Step 3 Remove the snubber and spring.

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

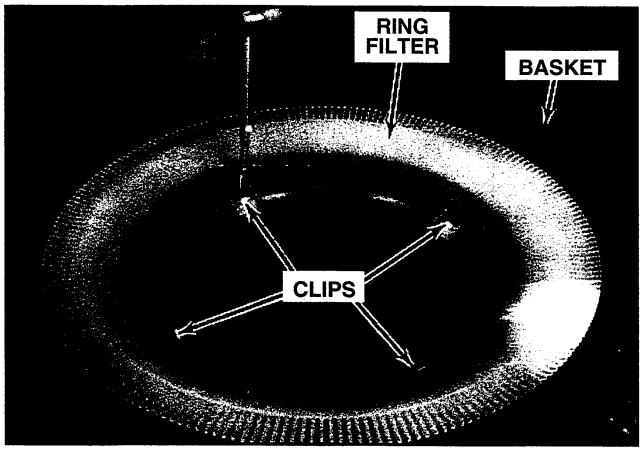
Step 4 Using pliers, slide the clamp off the port to the inlet valve and remove the hose.

Step 5 Remove the tub ring and clips.

Step 6 Remove the agitator cap, stud, and agitator.

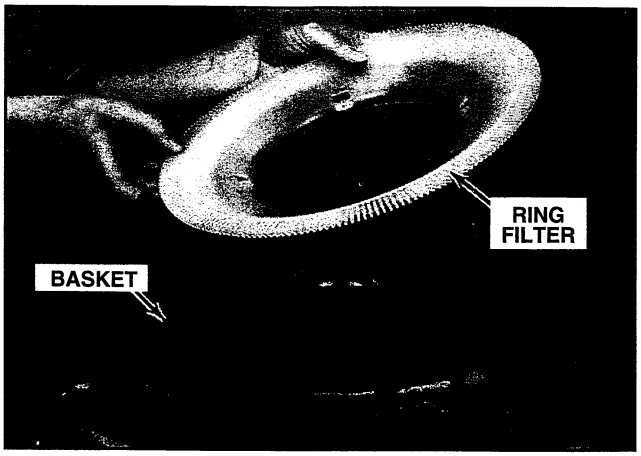
Step 7 Remove the locknut and basket.

Step 8 Turn the basket over.



Step 9 Using a screwdriver, punch out the four clips which hold the filter to the bottom of the basket.

REPLACEMENT



Step 10 Place the new ring filter on the bottom of the basket.

Step 11 Push the four new clips on from inside the basket and into the new filter.

Step 12 Replace the basket and locknut.

Step 13 Replace the stud, agitator, and cap.

Step 14 Replace the tub ring and clips.

Step 15 Using pliers, replace the hose on the port of the water inlet and slide the clamp up the hose and onto the port.

Step 16 Replace the snubber and spring.

Step 17 Lower the top.

Step 18 Plug in washer or reconnect power.

Step 19 Run a cycle check.

TYPE E

This is a combination manifold trap and self-cleaning filter.

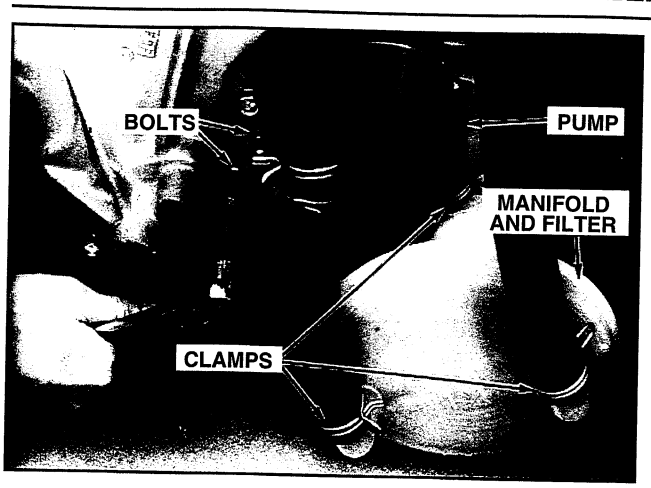
Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

Step 3 Using a screwdriver, loosen the screw clamp at the top of the manifold.

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

Step 4 Using pliers, slide the three wire hose clamps off the ports and remove the hoses.



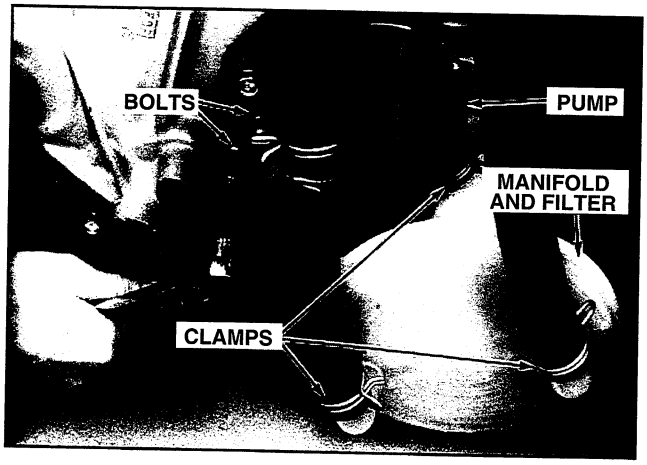
Step 5 Using a socket wrench, remove the two bolts which hold the manifold and filter to the gearcase.

Step 6 Carefully remove the manifold and filter.

REPLACEMENT

Step 7 Check for cracks or see if there is anything inside the filter that might block the flow of water during washing or draining.

STEP 8 Connect the new manifold and filter to the hoses, making sure they seat properly.



Step 9 Using a socket wrench, tighten the manifold and filter to the gearcase with the two bolts.

Step 10 Using pliers, slide the wire hose clamps onto the ports of the combination trap and filter.

Step 11 Using a screwdriver, tighten the screw clamp.

Step 12 See REPLACEMENT in "Access to Lower Parts."

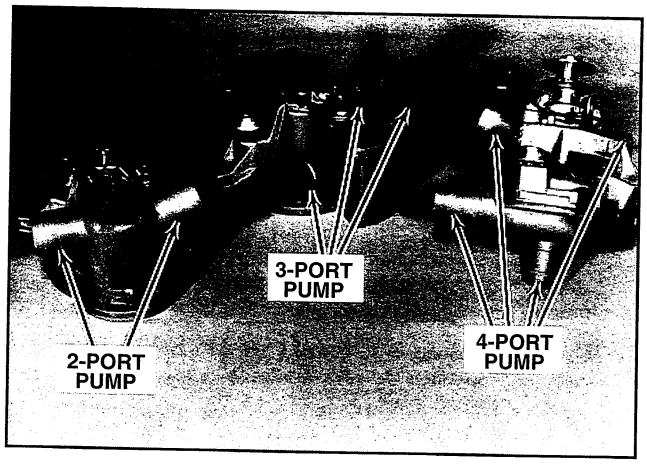
Step 13 Plug in washer or reconnect power.

PROCEDURE 4

⚠WARNING

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

Pump Replacement



See page 154, illus. no. 41 for location of part.

There are three pump designs that are used on automatic washers. They are the two-, three-, and four-port pumps.

The two-port pump is used on automatic washers using the self-cleaning filter or the water (suds saver) system.

The three-port pump is used on automatic washers using the manual clean filter.

The four-port pump is used on automatic washers using manual clean filter or the water (suds saver) system.

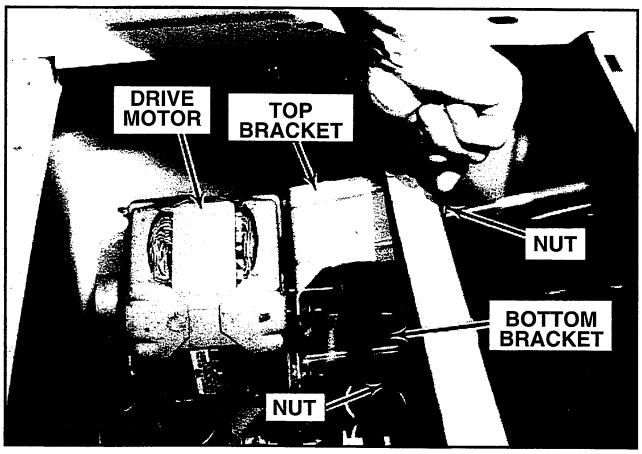
These pumps are mounted to the gearcase by two mounting bolts.

The direction of the water flow through the pump is controlled by a flapper valve inside the pump and a control lever. This control lever, located on the top of the pump, engages in a slot in the cam bar on the gearcase.

As this cam bar shifts, it moves the pump control lever. This lever, in turn, moves the flapper valve inside the pump to either recirculate or drain the water.

Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."



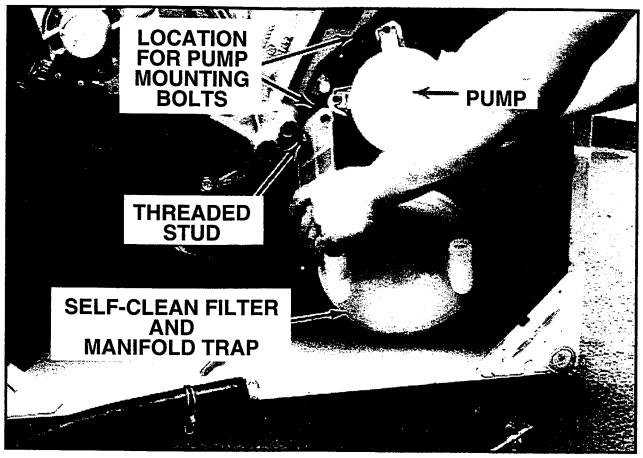
Step 3 Using an open end wrench and a socket wrench, loosen the two main drive motor nuts.

Step 4 Slide the motor to the right to loosen the belt.

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

Step 5 Using pliers, slide the hose clamps off the ports of the pump.

Step 6 Remove the hoses from the pump.

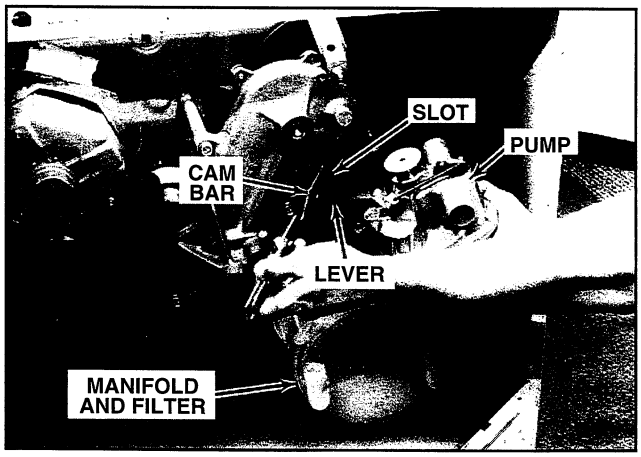


Step 7 Using a socket wrench, remove the two bolts which hold the pump to the gearcase.

Step 8 Carefully remove the pump.

Step 9 Check for cracks in the plastic body and look inside the ports for any blockage. Move the pump lever back and forth while looking in the ports to see if the flapper valve inside is making a tight seal when opening or closing the ports. Move the pulley back and forth to see if it moves or wobbles. If the pulley wobbles, or the seal is not tight, or if the plastic body is cracked, replace the pump.

REPLACEMENT

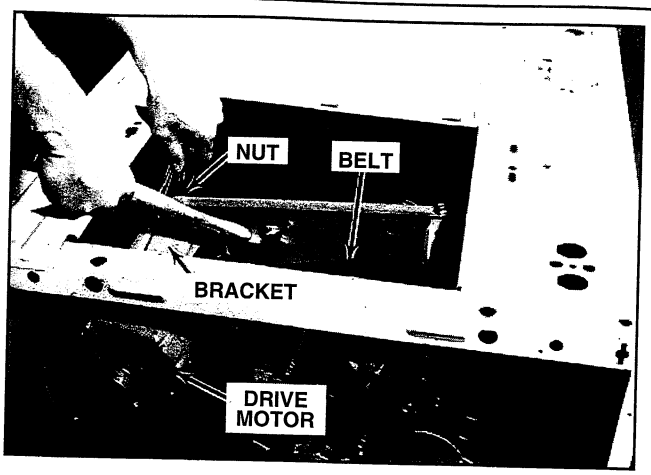


Step 10 Place the new pump on the gearcase, making sure the pump lever is in the slot of the agitator cam bar on the gearcase.

Step 11 Using a socket wrench, insert the bolts through the pump, into the gearcase and tighten.

Step 12 Using pliers, slide the hoses and clamps onto the ports.

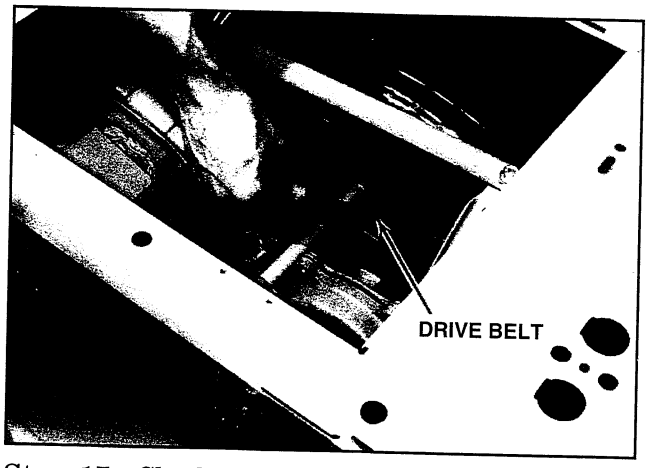
Step 13 Replace the drive belt on the four pulleys.



Step 14 Using an open end wrench and a socket wrench, firmly snug the two drive motor adjustment nuts.

Step 15 Using a hammer, tap the inside edge of the drive motor bracket outward until the belt is tight.

Step 16 Using an open end wrench and a socket wrench, finish tightening the two drive motor adjustment nuts.



Step 17 Check the back-and-forth movement of the drive belt between the motor and drive pulleys.

A properly adjusted drive belt will move 1/2 inch when pressed with six pounds of force.

TIGHT: If the belt is too tight, it may cause early failure of the belt, bearings, drive motor, or pump.

LOOSE: If the belt is too loose, slippage, no agitation, or low spin speed could happen.

Step 18 See REPLACEMENT in "Access to Lower Parts."

Step 19 Plug in washer or reconnect power.

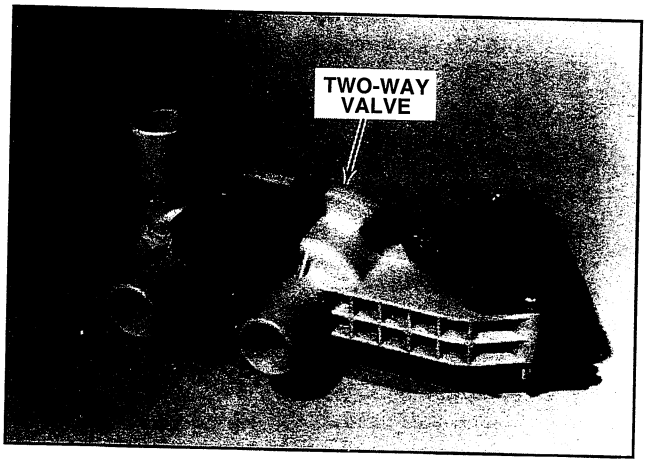
Step 20 Run a cycle check.

PROCEDURE 5

⚠WARNING

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

Two-Way Valve Testing and/or Replacement



See page 154, illus. no. 32 for location of part.

OHMMETER REQUIRED

The two-way valve is used only on automatic washers having the water (suds saver) system.

The purpose of this valve is to open or close the suds or drain ports in the valve during the operation of the automatic washer.

This valve may be located to the right bottom, looking from the back, or mounted to a bracket in the middle, behind the access panel.

Internal parts of this two-way valve will not be serviced.

Step 1 Unplug washer or disconnect power.

Step 2 Using a screwdriver or nutdriver, remove the rear service panel.

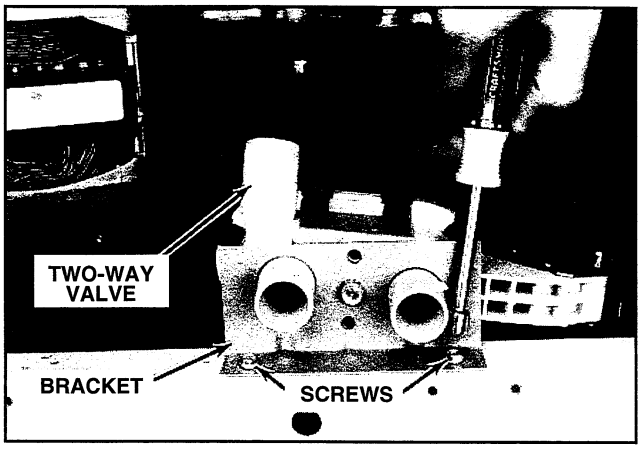
TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the two-way valve. This procedure should assure that the right wire is reconnected to the right terminal.

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

Step 4 To remove the two-way valve, use pliers and slide the clamps off the ports.

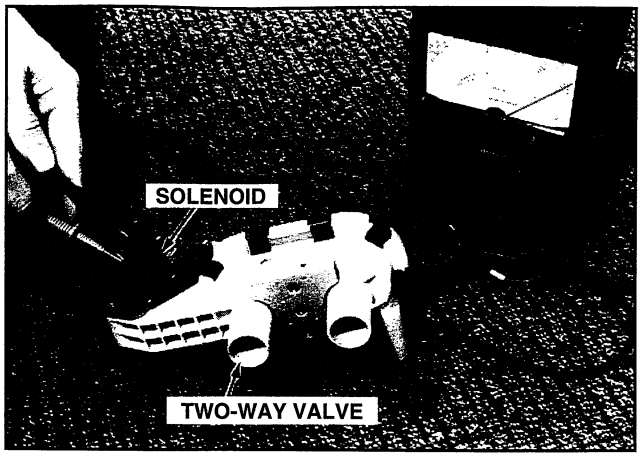
Step 5 Remove the three hoses from the two-way valve ports.



Step 6 Using a screwdriver or nutdriver, remove the two screws which hold the two-way valve to the back of the cabinet or the rear channel.

Step 7 Carefully remove the two-way valve.

Step 8 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 10-15 ohms. Set the ohms scale and ZERO the meter.



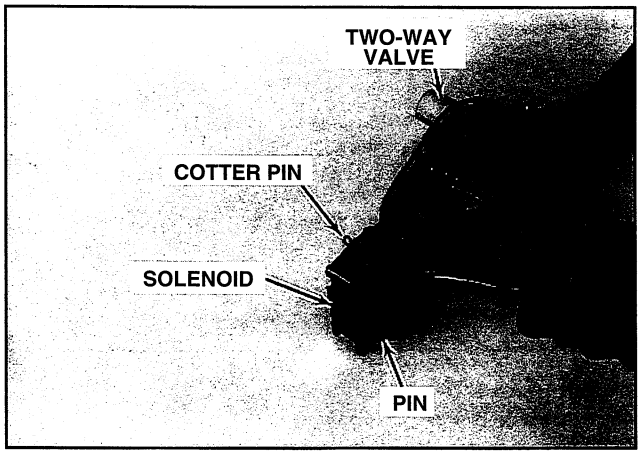
Step 9 Touch and hold one of the ohmmeter probes to one of the terminals on the solenoid.

Step 10 Touch the other ohmmeter probe to the other terminal.

Step 11 The ohmmeter should show a reading between 10-15 ohms on the ohms scale.

Step 12 If you do not get this reading, the solenoid is bad and needs replacing.

REPLACEMENT



Step 13 To remove the solenoid, use pliers and bend the cotter pin straight to remove.

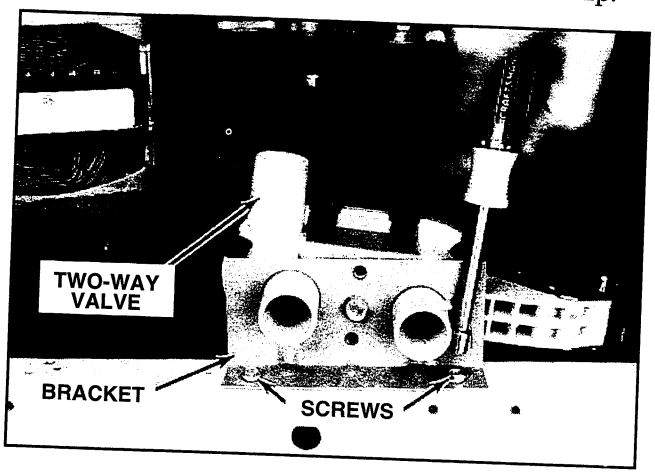
Step 14 Using a screwdriver or pliers, remove the clip and pull the rivet out.

Step 15 Carefully remove the solenoid.

Step 16 Place the new solenoid on the new two-way valve.

Step 17 Insert the cotter pin and bend.

Step 18 Insert the rivet and assemble the clip.



Step 19 Using a screwdriver or nutdriver, replace the new two-way valve on the cabinet with the screws.

Step 20 Replace the three hoses on the new two-way valve ports.

Step 21 Using pliers, slide the clamps onto the ports.

Step 22 Reconnect the wires to the proper terminals as previously marked.

Step 23 Using a screwdriver or nutdriver, assemble the rear service panel and screws.

Step 24 Plug in washer or reconnect power.

Step 25 Run a cycle check.

NOTES

SECTION M

Service Below the Tub Area

If you do not feel you can do procedures 3, 4, 6 or 7;
call your nearest authorized WHIRLPOOL Factory Service Branch for servicing.

PROCEDURE 1

⚠WARNING

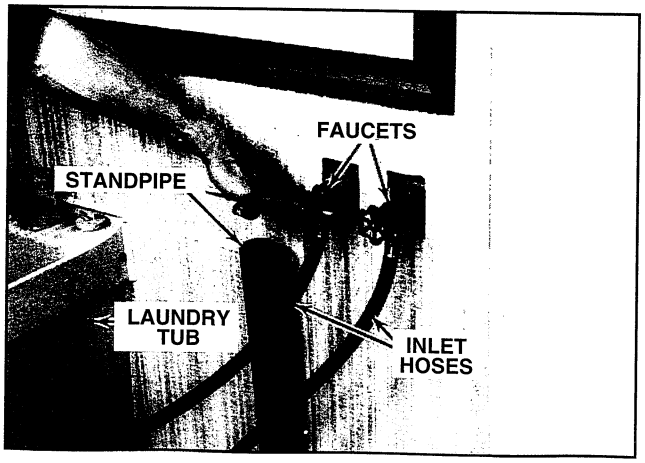
Electrical Shock Hazard
Disconnect power before servicing.
Replace all panels before operating.
Failure to do so can result in death or electrical shock.

Access to Lower Parts

Step 1 Unplug washer or disconnect power.

NOTE: Do not use the console as a hand support when moving the appliance.

Step 2 Move the automatic washer away from the wall so you can work on it.



Step 3 Shut off the hot and cold water faucets.

Step 4 Identify the hot water inlet hose with a piece of tape. This procedure will be easier when replacing it on the hot faucet.

Step 5 Using pliers, remove one of the hoses from the faucet.

Step 6 Using a pail, drain the excess water from this hose.

Step 7 Using pliers, remove the other hose from the faucet.

Step 8 Using a pail, drain the excess water from this hose.

Step 9 Remove the drain hose from the standpipe or laundry tub.

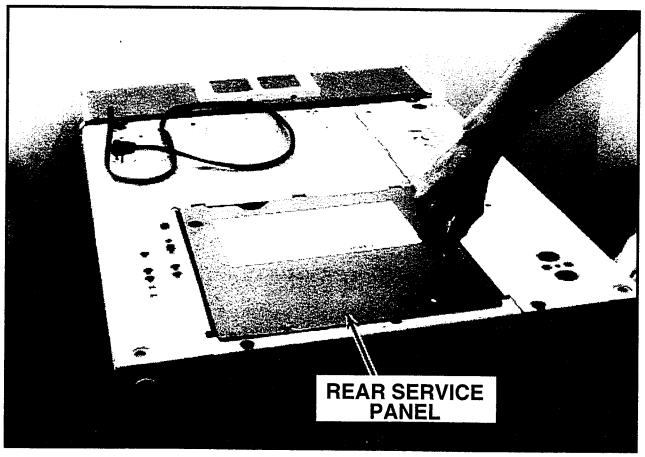
Step 10 Using a pail, drain the excess water from this hose.

Step 11 Tape the lid shut.

NOTE: Do not leave the washer lying down for any length of time, as this may cause the oil in the gearcase to leak out.

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

Step 12 Lay the washer on its back, front, or side, depending what you are working on.



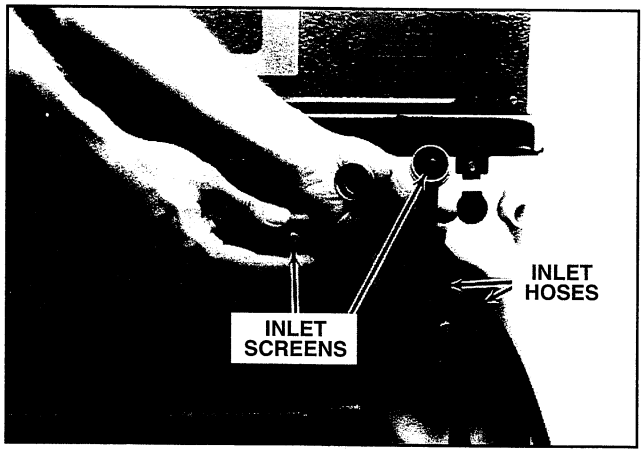
Step 13 Using a screwdriver or nutdriver, remove the rear service panel.

REPLACEMENT

Step 14 Using a screwdriver or nutdriver, attach the rear service panel and screws.

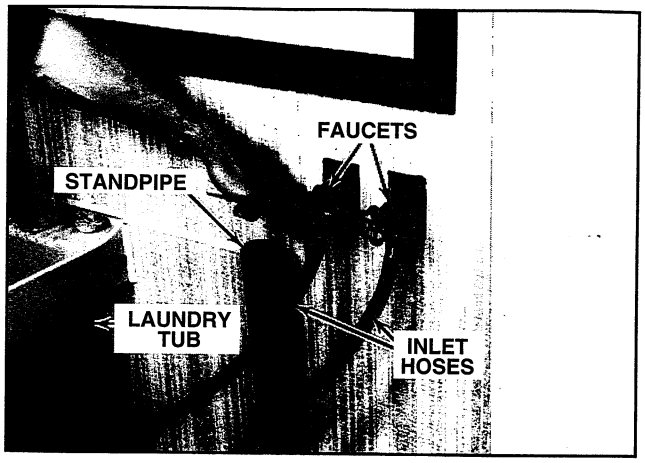
NOTE: Do not use the console as a hand support when moving the appliance.

Step 15 Set the washer upright and move it to its proper place.



SOME MODELS MAY NOT USE INLET SCREENS

Step 16 Before attaching the hot and cold inlet hoses, make sure the inlet screen located in the end of each hose at the faucet end is cleaned.



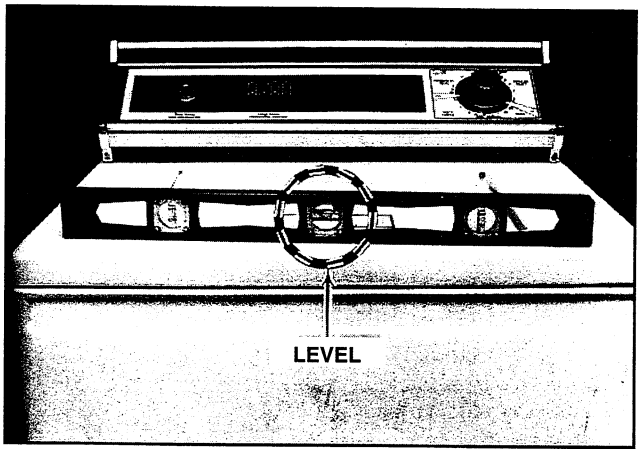
Step 17 Using pliers, attach the water inlet hoses to the correct faucets.

Step 18 Turn the faucets on and check for leaks.

Step 19 Insert the drain hose into the standpipe or laundry tub.

Step 20 Remove the tape.

Step 21 Plug in washer or reconnect power.



Step 22 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, and then stop the washer. Check to see if the water meets the holes all the way around the basket. If it does not, screw the front feet up or down to adjust; then tilt the washer forward so the back legs will self-adjust. Carefully lower.

Step 23 Using an open end wrench, tighten the locknuts.

Step 24 Drain the water if you had to level it this way.

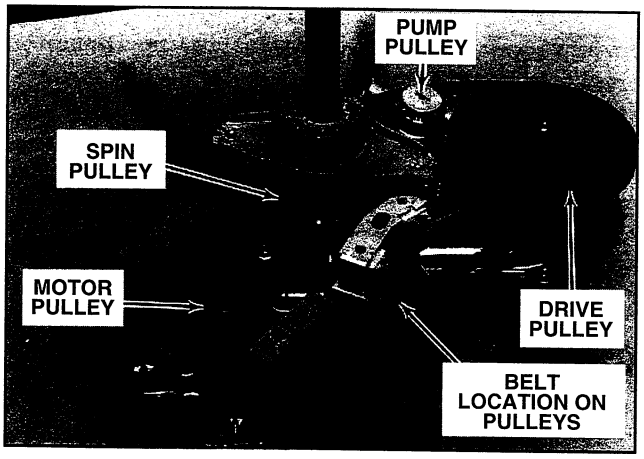
Step 25 Run a cycle check.

PROCEDURE 2

⚠WARNING

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

Drive Belt Replacement



See page 152, illus. no. 13 for location of part.

The drive belt fits around the pump pulley, main drive pulley, spin pulley, and the main drive motor pulley. The drive motor pulley moves the belt around these pulleys, causing the automatic washer to agitate, spin, circulate, or drain the water.

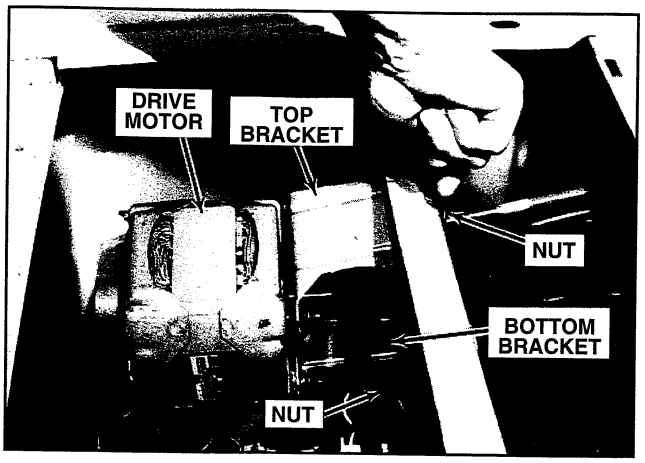
Step 1 Unplug washer or disconnect power.

Step 2 If your drive belt only needs tightening, see steps 34-37.

Step 3 If your drive belt broke during operation, any water standing in the basket must be emptied by hand.

Step 4 Remove the agitator cap, stud, and agitator.

Step 5 See "Access to Lower Parts."

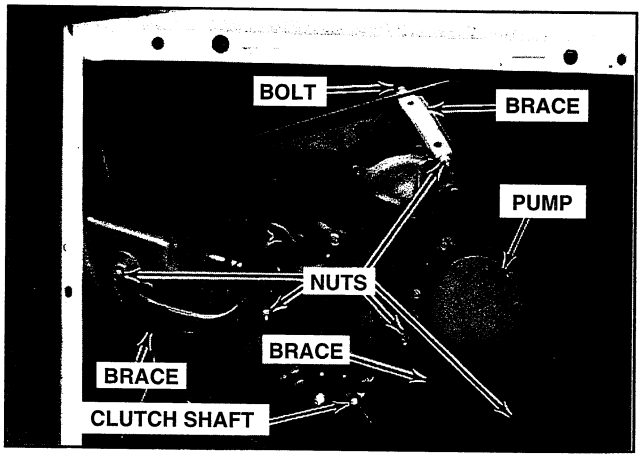


Step 6 Using an open end wrench and a socket wrench, loosen the two main drive motor nuts.

Step 7 Slide the motor to the right and remove the drive belt from the pulleys.

Step 8 Slide the motor to the left.

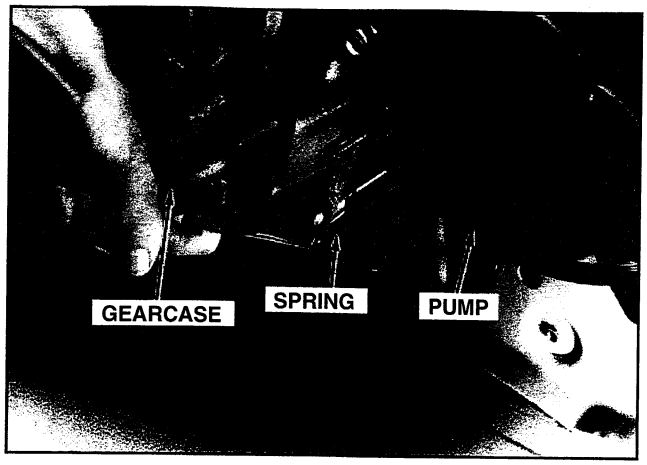
NOTE: The main drive motor was removed to clarify the picture. This drive motor does not have to be removed.



Step 9 Using a socket wrench, remove the three braces by removing the five nuts and one bolt which hold these braces from the base to the gearcase.

NOTE: Note the green ground wire on the stud closest to the motor. The ground wire must be on the stud when the support bracket is reinstalled.

Step 10 Using a socket wrench, remove the bolts which attach the pump.

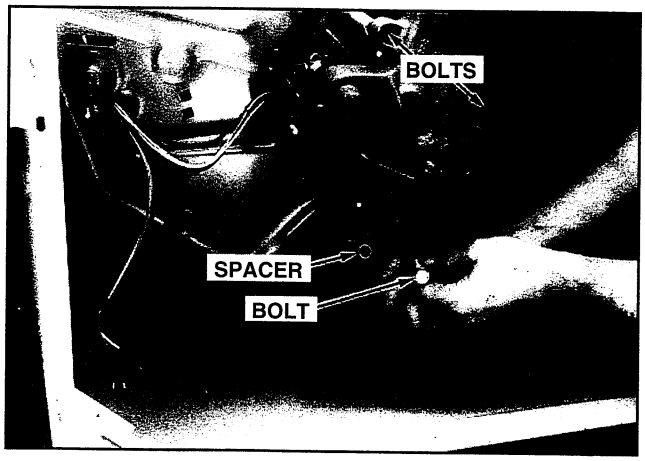


Step 11 Using needle nose pliers, remove the end of the brake yoke spring from the gearcase.

Step 12 Hold the spin plunger up while turning the main drive pulley until the spin cam bar is in the spin position or pulled all the way back (plunger and rivet are in the upper slot).

This procedure will pull the spin cam bar back from the clutch shaft, allowing the shaft to move downward.

NOTE: The main drive motor was removed to clarify the picture. This drive motor does not have to be removed.

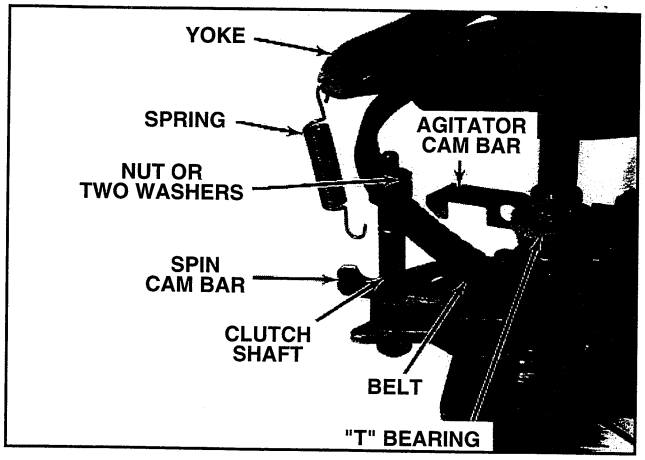


Step 13 Using a socket wrench, remove the gearcase mounting bolt located lower left. A spacer will fall out when the bolt is removed.

Step 14 Using a socket wrench, loosen the other two gearcase mounting bolts 1/2 inch or about 7-10 turns.

Step 15 Using your hands, snap the yoke support out of the plastic retainer on the yoke. Your washer could have used a washer, spring, and clip in place of the plastic retainer.

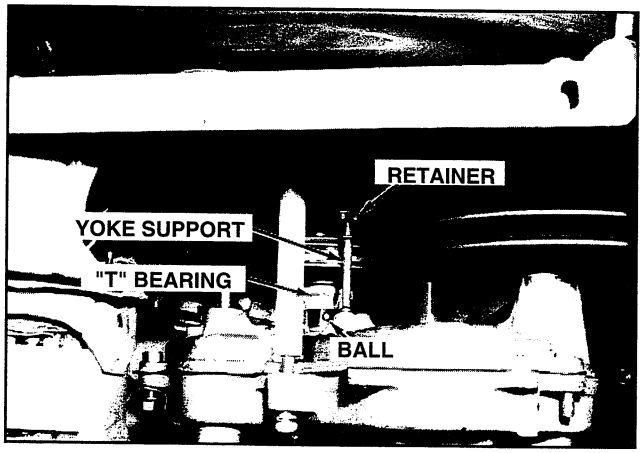
Step 16 Pull the gearcase straight out until the gearcase stops against the bolts.



Step 17 Slip the worn drive belt between the clutch shaft and yoke, and through the opening where the spacer was located.

REPLACEMENT

Step 18 Slip the new drive belt through the spacer opening and between the clutch shaft and the yoke.



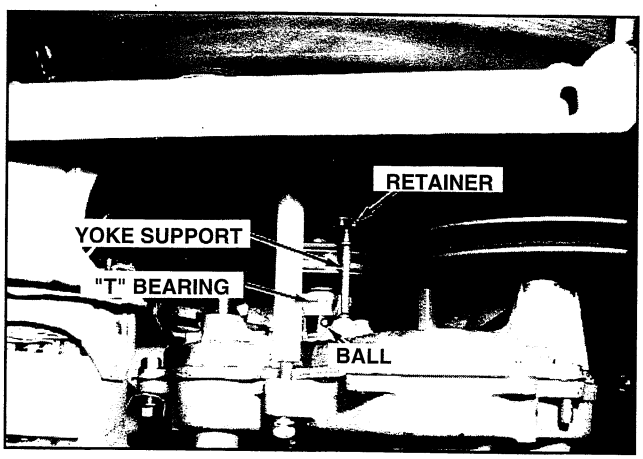
NOTE: Be sure the "T" bearing and ball are in the proper place on the agitator shaft.

The ball fits into a hole in the gearcase shaft, then the "T" bearing with a slot in it fits down over the ball.

Some washers could have used "C" type clips with the "T" bearing instead of the ball. This clip is located in a groove just under the "T" bearing.

NOTE: Be sure the two washers or hexnut are in their proper place on the clutch shaft.

Step 19 Push the gearcase back in.

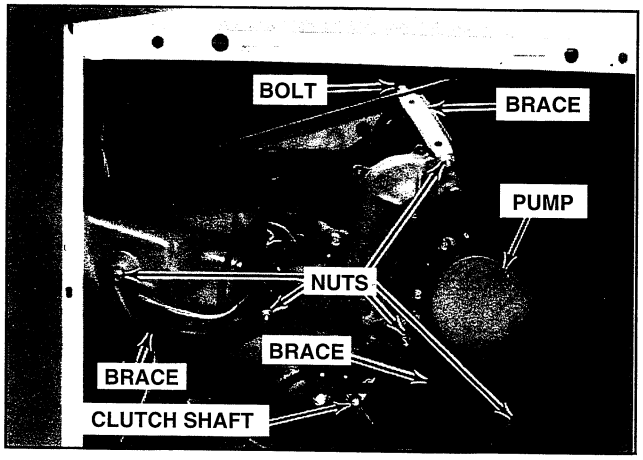


Step 20 Snap the yoke support into the plastic retainer on the yoke. Your washer could have used a washer, spring, and clip in place of the plastic retainer.

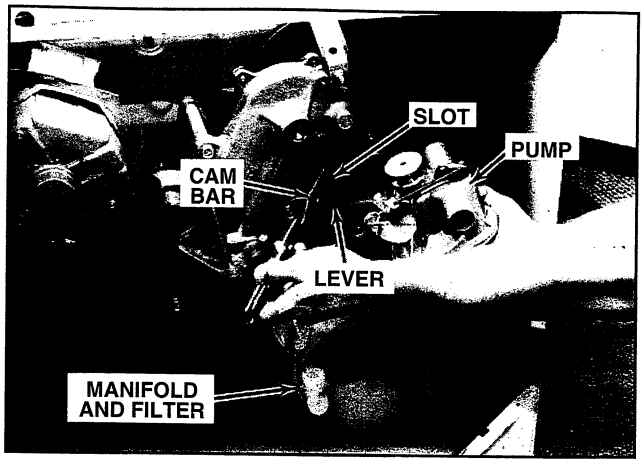
Step 21 Insert the clutch shaft with the two washers or hexnut into the hole at the other end of the yoke.

Step 22 Tighten the two gearcase mounting bolts finger tight only.

Step 23 Insert the spacer and mounting bolt into the lower left stud, finger tight only.



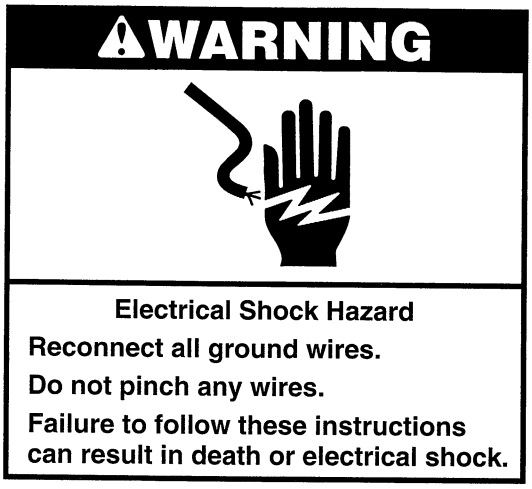
Step 24 Replace the three support braces on the studs.



Step 25 Replace the pump on the gearcase with the two mounting bolts, finger tight only.

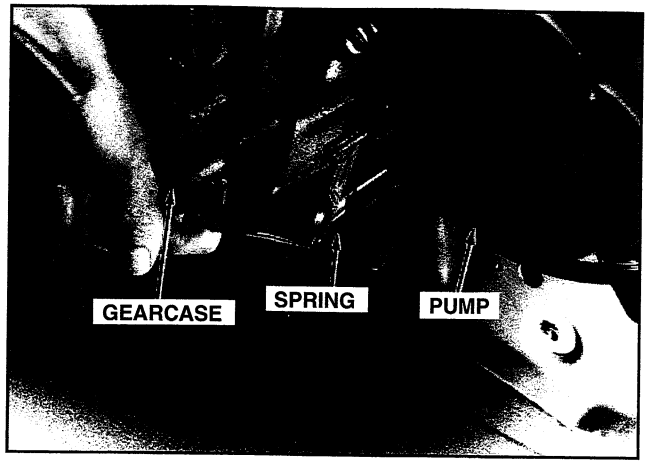
NOTE: Make sure the pump lever is in the slot of the agitator cam bar.

Step 26 Insert the bolt through the base and into the brace, finger tight only.

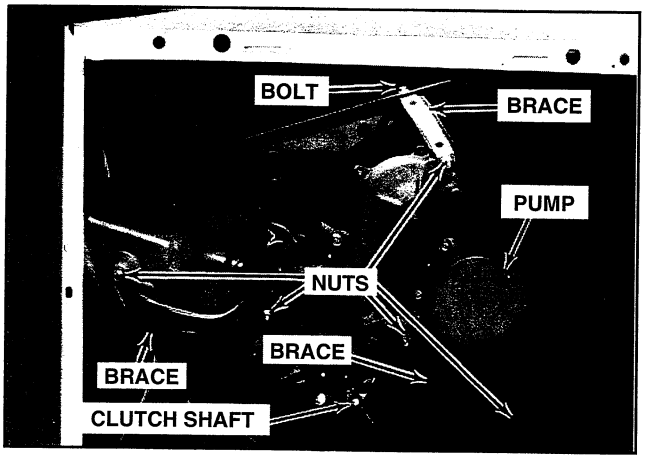


Step 27 Replace the five nuts on the threaded studs the support braces are on, finger tight only.

Step 28 Using a socket wrench, tighten the three gearcase mounting bolts.



Step 29 Using needle nose pliers, attach the spring to the gearcase and yoke.



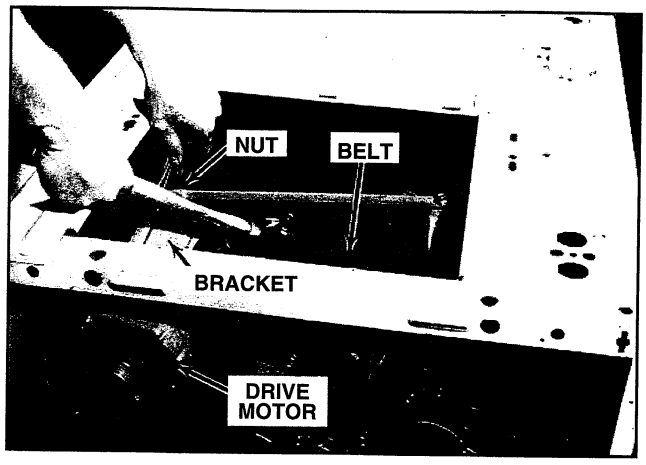
Step 30 Using a socket wrench, tighten the five nuts and one bolt which hold the three support braces.

Step 31 Using a socket wrench, tighten the pump mounting bolts.

Step 32 Move the motor and bracket to the right.

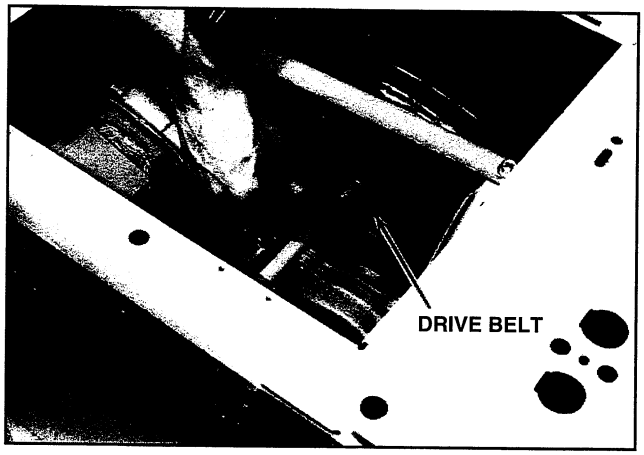
Step 33 Place the drive belt on the four pulleys.

Step 34 Using an open end wrench and a socket wrench, firmly snug the two drive motor adjustment nuts.



Step 35 Using a hammer, tap the inside edge of the drive motor bracket outward until the belt is tight.

Step 36 Using an open end wrench and a socket wrench, finish tightening the two drive motor adjustment nuts.



Step 37 Check the back-and-forth movement of the drive belt between the motor and drive pulleys.

A properly adjusted drive belt will move back and forth 1/2 inch with six pounds of force applied.

TIGHT: If the belt is too tight, it may cause early failure of the belt, bearings, drive motor, or pump.

LOOSE: If the belt is too loose, slippage, no agitation, or low spin speed could happen.

Step 38 See REPLACEMENT in "Access to Lower Parts."

Step 39 Replace the stud, agitator, and cap.

Step 40 Plug in washer or reconnect power.

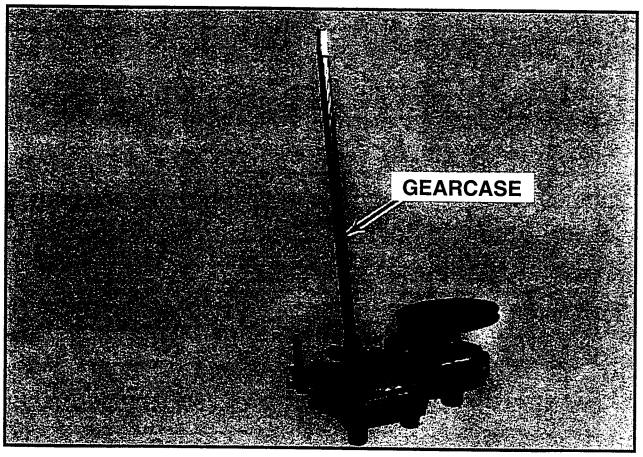
Step 41 Run a cycle check.

PROCEDURE 3

⚠WARNING

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

Gearcase Replacement



See page 152, illus. no. 26 for location of part.

NOTE: If you do not feel you can do this procedure, call your nearest authorized Whirlpool factory service branch for servicing.

NOTE: This manual will not cover servicing of any parts inside the gearcase. Call your authorized Whirlpool factory service branch for any servicing inside this part.

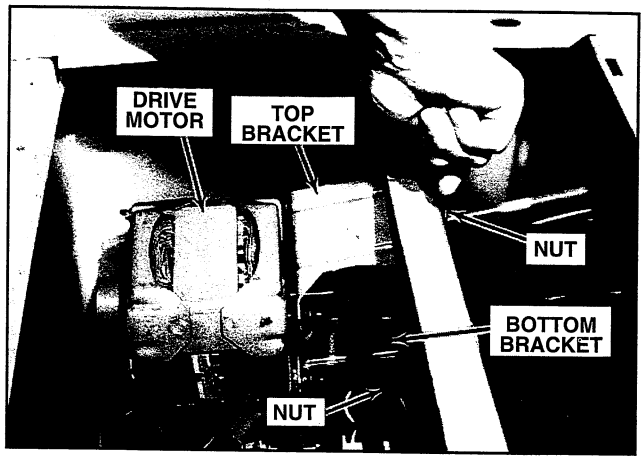
The main function of the gearcase is to drive the agitator — first in one direction then the other.

Step 1 Unplug washer or disconnect power.

Step 2 Lift the lid.

Step 3 Remove the agitator cap, stud, and agitator.

Step 4 See "Access to Lower Parts."

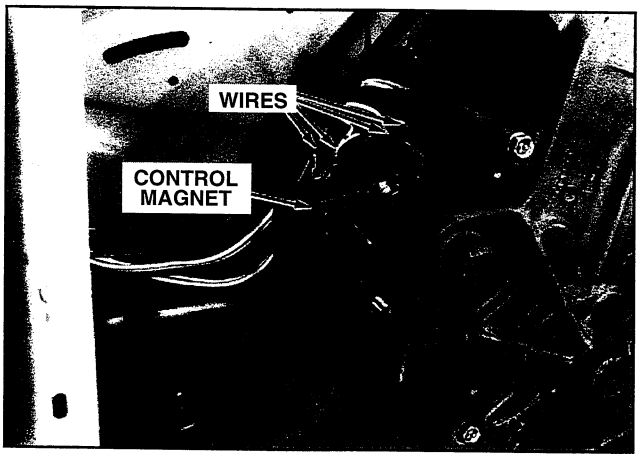


Step 5 Using an open end wrench and a socket wrench, loosen the two main drive motor nuts.

Step 6 Slide the motor to the right and remove the belt from the pulleys.

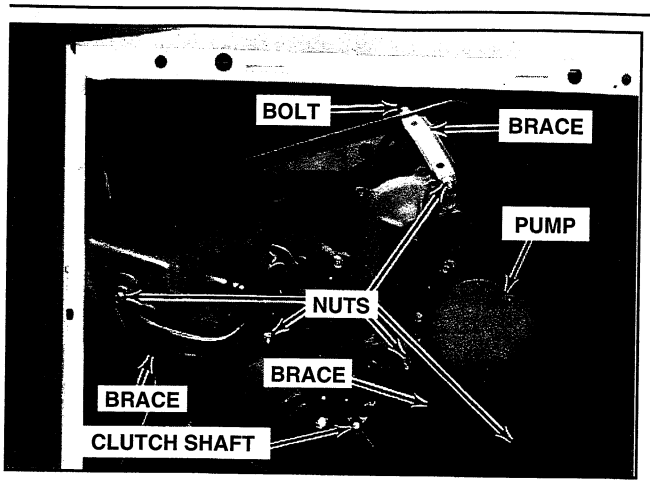
Step 7 Slide the motor to the left.

NOTE: The main drive motor was removed to clarify the picture. This drive motor does not have to be removed.

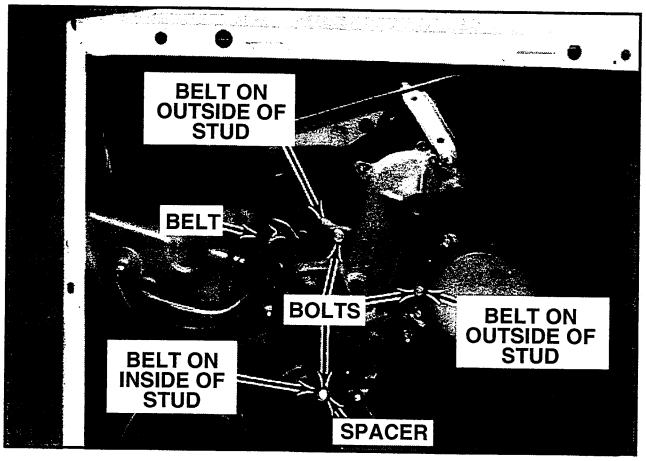


Step 8 One at a time, remove the wires from the top of the control magnet, carefully labeling each wire according to the terminal marking on the control magnet. This procedure should assure that the right wire is reconnected to the right terminal.

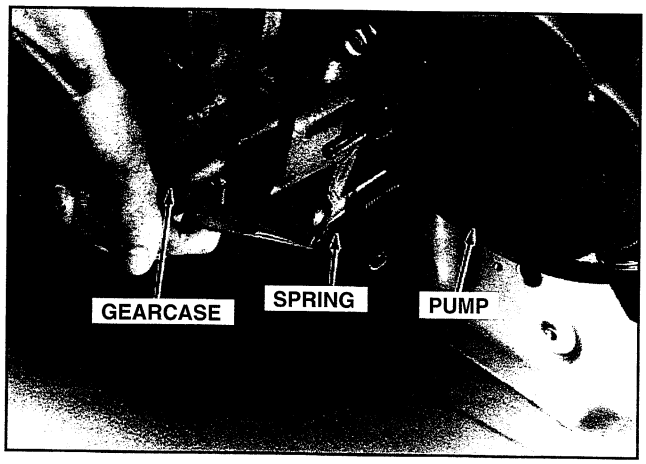
Step 9 Using a socket wrench, remove the bolts which attach the pump.



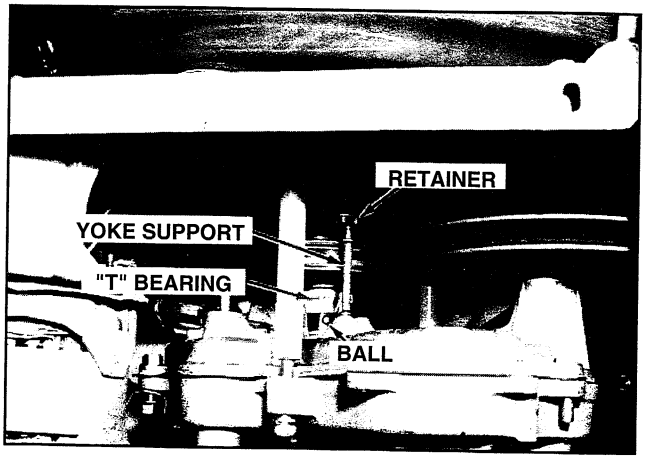
Step 10 Using a socket wrench, remove the five nuts and one bolt which hold the three support braces, from the base to the gearcase.



Step 11 Using a socket wrench, remove the three gearcase mounting bolts. One bolt will have a spacer between the gearcase and stud which will come out when the bolt is removed.

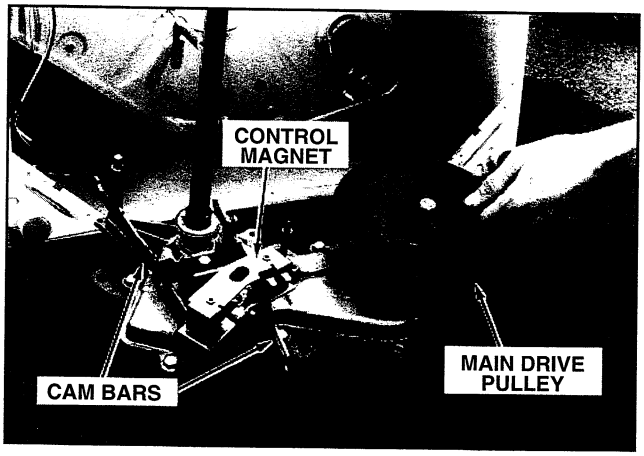


Step 12 Using needle nose pliers, remove the end of the spring on the gearcase.



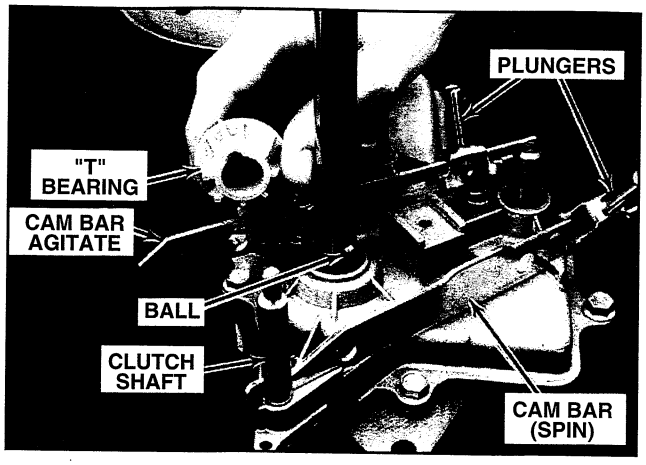
Step 13 Using your hands, snap the yoke support out of the plastic retainer on the yoke. Your washer could have used a washer, spring, and clip instead of the plastic retainer.

Step 14 Pull the gearcase straight out.



Step 15 With an allen wrench turn the setscrew and remove the main drive pulley from your old gearcase. You may have to heat the setscrew to loosen the glue on the threads of the setscrew.

Step 16 Remove the control magnet, cam bars, and other related parts from your old gearcase.

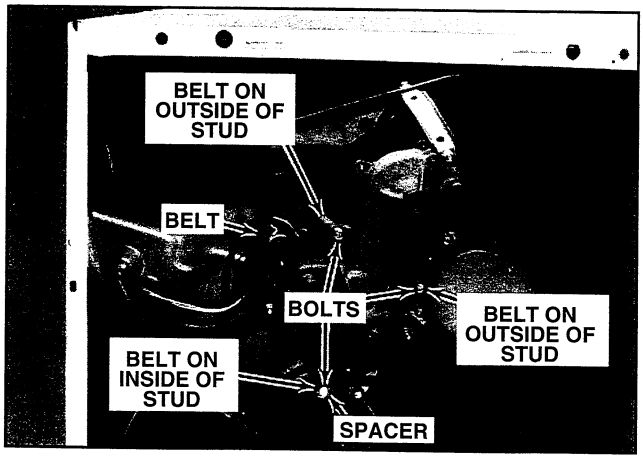


Step 17 Remove the "T" bearing and ball from your old gearcase.

Some washers could have used "C" type clips with the "T" bearing instead of the ball. This clip is located in a groove just under the "T" bearing.

REPLACEMENT

Step 18 Place the drive pulley on the new gearcase. Line up the hole in the pulley with the hole in the shaft and tighten the setscrew.



Step 19 Place the drive belt over the top and right studs and inside the left stud.

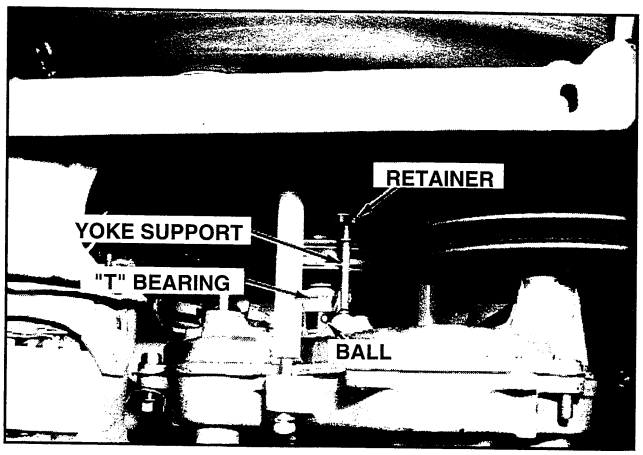
Step 20 Carefully slide the new gearcase into the basket drive.

NOTE: Be sure the "T" bearing and ball are in their proper place on the agitator shaft.

The ball fits into a hole in the gearcase shaft; then the "T" bearing with a slot in it, fits down over the ball.

Some washers could have used "C" type clips with the "T" bearing instead of the ball. This clip is located in a groove just under the "T" bearing.

NOTE: Be sure the two washers or hexnut are in their proper place on the clutch shaft.



Step 21 Snap the yoke support into the plastic retainer on the yoke. Your washer could have used a washer, spring, and clip instead of the plastic retainer.

Step 22 Insert the clutch shaft with the two washers or hexnut into the hole at the other end of the yoke.

NOTE: Make sure the drive belt is also on the inside of this clutch shaft.

Step 23 Insert the two mounting bolts through the gearcase and into the top and right studs, finger tight only.

Step 24 Insert the spacer and mounting bolt into the left stud, finger tight only.

Step 25 Replace the three gearcase support braces.

Step 26 Replace the pump, manifold, and filter (if used), to the gearcase with the two mounting bolts, finger tight only.

NOTE: Make sure the pump lever is in the slot of the agitator cam bar.

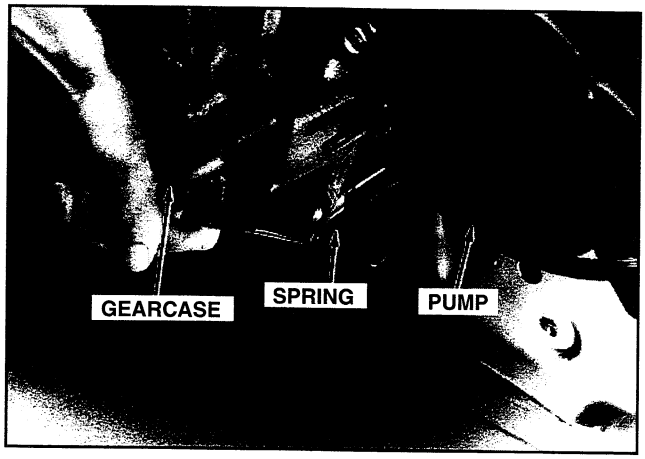
Step 27 Insert the bolt through the base and into the brace, finger tight only.

⚠WARNING

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 28 Replace the five nuts on the threaded studs the support braces are on, finger tight only.

Step 29 Using a socket wrench, tighten the three gearcase mounting bolts.



Step 30 Using needle nose pliers, attach the spring to the gearcase and yoke.

Step 31 Using a socket wrench, tighten the five nuts and one bolt which hold the support braces.

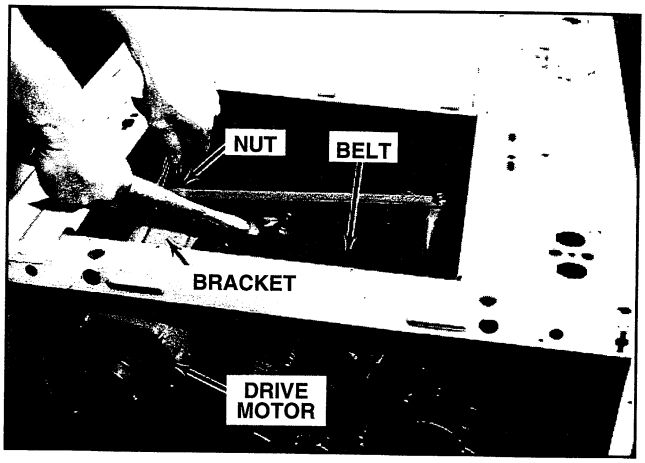
Step 32 Using a socket wrench, tighten the pump mounting bolts.

Step 33 Reconnect the wires to the proper terminals as previously marked.

Step 34 Place the drive belt on the pulleys.

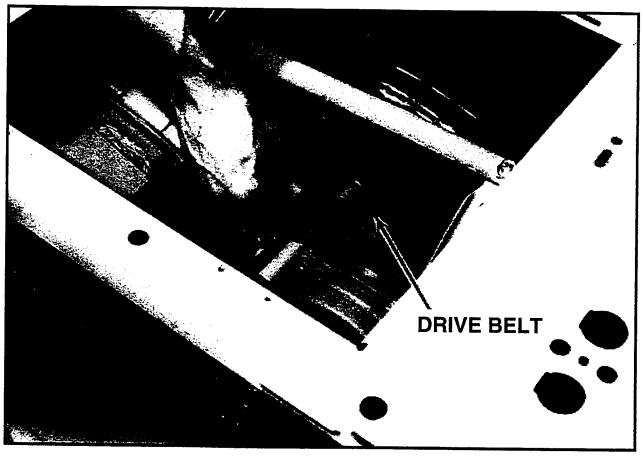
Step 35 Slide the motor to the left.

Step 36 Using an open end wrench and a socket wrench, firmly snug the two drive motor adjustment nuts.



Step 37 Using a hammer, tap the inside edge of the drive motor bracket outward until the belt is tight.

Step 38 Using an open end wrench and a socket wrench, finish tightening the two drive motor adjustment nuts.



Step 39 Check the back-and-forth movement of the drive belt between the motor and drive pulleys.

A properly adjusted drive belt will move back and forth 1/2 inch with six pounds of force applied.

TIGHT: If the belt is too tight, it may cause early failure of the belt, bearings, drive motor, or pump.

LOOSE: If the belt is too loose, slippage, no agitation, or low spin speed could happen.

Step 40 See REPLACEMENT in "Access to Lower Parts."

Step 41 Replace the agitator, stud, and cap.

Step 42 Plug in washer or reconnect power.

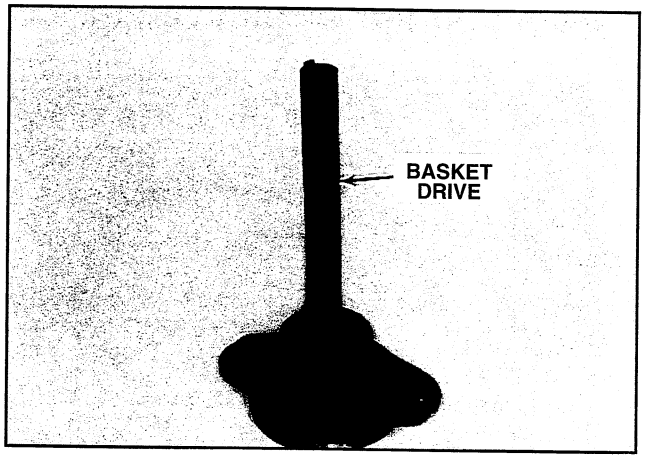
Step 43 Run a cycle check.

PROCEDURE 4

⚠WARNING

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

Basket Drive Replacement



See page 152, illus. no. 20 for location of part.

NOTE: If you do not feel you can do this procedure, call your nearest authorized Whirlpool factory service branch for servicing.

NOTE: This manual will not cover servicing of any parts on the basket drive. To clean the grease or oil off the pads or check the pads for wear, call your Authorized Whirlpool factory service branch for any servicing on this part.

Noise caused by worn centerpost bearings cannot be corrected by replacing the basket drive. Special tools are required to remove the centerpost bearings. This repair must be done by a qualified service technician.

The main function of the basket drive is to spin the basket or stop the basket when the lid is opened or the cycle has ended.

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

Step 3 Remove the snubber and spring.

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

Step 4 Using pliers, slide the clamp off the port to the water inlet, and remove the hose.

Step 5 Remove the tub ring and clips.

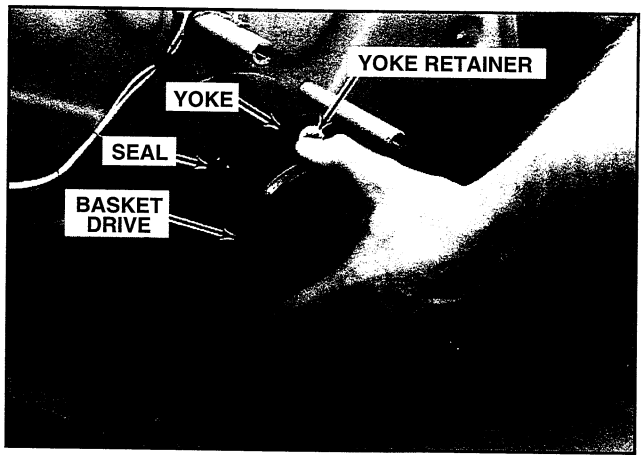
Step 6 Remove the agitator cap, stud, and agitator.

Step 7 Remove the locknut, basket, and drive block.

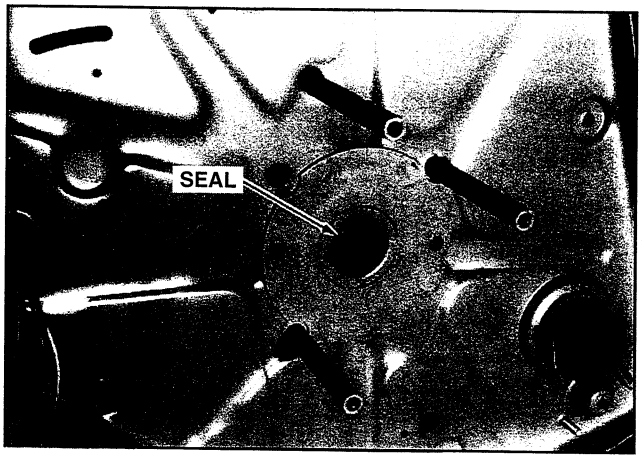
Step 8 Lower the top.

Step 9 See "Access to Lower Parts."

Step 10 Remove the gearcase.



Step 11 Remove the basket drive by carefully pulling straight out.

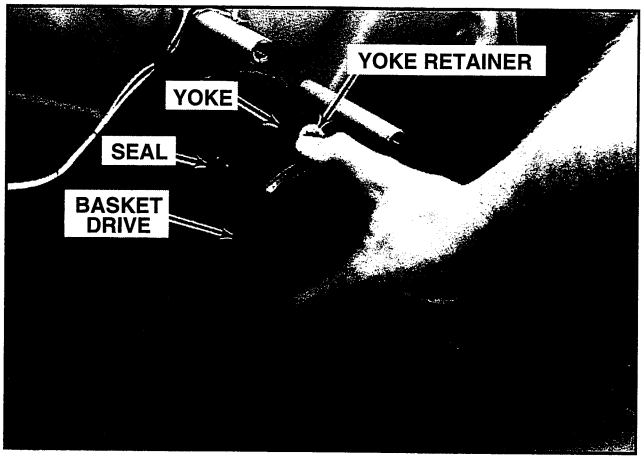


Step 12 Check the lower seal in the base and make sure it stayed in place when you pulled the basket drive out.

If the seal came out, be sure there is RYKON grease in the cup (groove) of the seal. Place the cup side of the seal next to the bearing and tap in.

REPLACEMENT

NOTE: When inserting the basket drive, be very careful not to catch the seals.



Step 13 Place the new basket drive into the centerpost and carefully push.

Step 14 Replace the gearcase.

Step 15 See REPLACEMENT in "Access to Lower Parts."

Step 16 Replace the drive block, basket, and locknut.

Step 17 Replace the agitator, stud, and cap.

Step 18 Replace the tub ring and clips.

Step 19 Using pliers, replace the hose on the port of the water inlet, and slide the clamp up the hose onto the port.

Step 20 Replace the snubber and spring.

Step 21 Lower the top.

Step 22 Plug in washer or reconnect power.

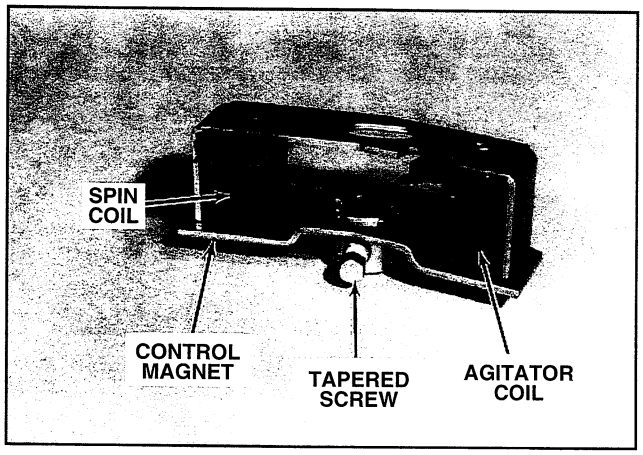
Step 23 Run a cycle check.

PROCEDURE 5

⚠WARNING

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

Control Magnet Testing and/or Replacement



See page 152, illus. no. 9 for location of part.

OHMMETER REQUIRED

The function of the control magnet is to raise or lower the plungers, shifting the cam bars to either the AGITATION or SPIN position.

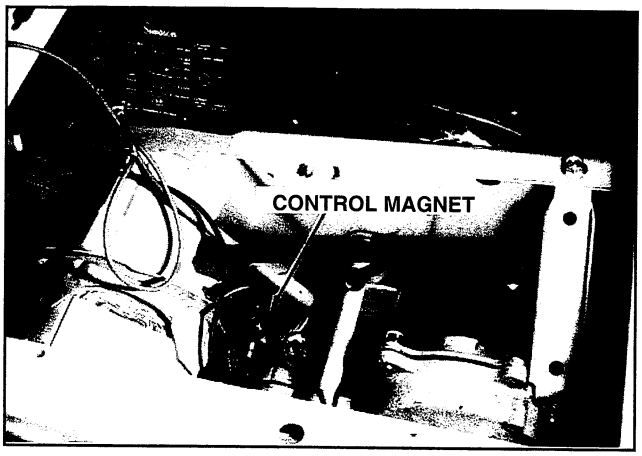
Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

TESTING

Step 3 One at a time, remove the wires from the top of the control magnet, carefully labeling each wire according to the terminal marking on the control magnet. This procedure should assure that the right wire is reconnected to the right terminal.

Step 4 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 200-700 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one ohmmeter probe to one of the terminals on the coil.

Step 6 Touch the other ohmmeter probe to the other terminal on the same coil.

Step 7 The ohmmeter should show a reading between 200-700 ohms on the ohms scale. If you do not get this reading, the control magnet is bad and needs replacing.

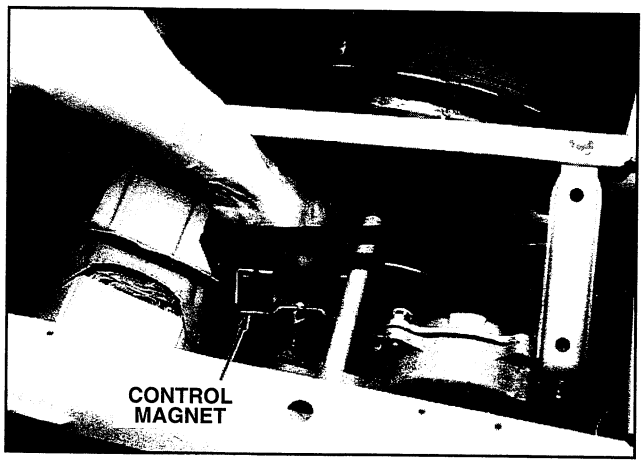
Step 8 Touch and hold one of the ohmmeter probes to one of the terminals on the other coil.

Step 9 Touch the other ohmmeter probe to the other terminal on the same coil.

Step 10 The ohmmeter should show a reading between 200-700 ohms on the ohms scale. If you do not get this reading, the control magnet is bad and needs replacing.

REPLACEMENT

Step 11 Using a socket wrench, remove the tapered screw.



Step 12 Carefully remove the control magnet, lifting up and off the plungers.

Step 13 Place the new control magnet over the plungers and on the stud, with the screw hole facing away from the agitator shaft.

Step 14 Using a socket wrench, insert the tapered screw and tighten.

Step 15 Place the wires through the top of the new control magnet or insert them in the bushing. Then reconnect the wires to the proper terminals as previously marked.

Step 16 See REPLACEMENT in "Access to Lower Parts."

Step 17 Plug in washer or reconnect power.

Step 18 Run a cycle check.

PROCEDURE 6

⚠WARNING

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

Plunger Replacement

See page 152, illus. nos. 17 and 18 for location of parts.

NOTE: If you do not feel you can do this procedure, call your nearest authorized Whirlpool factory service branch for servicing.

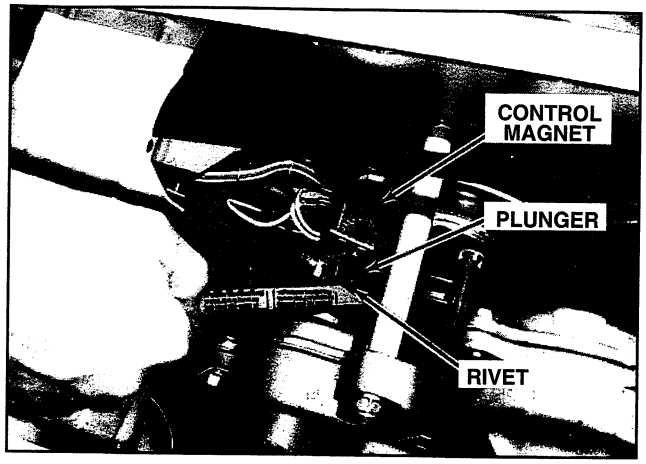
The plungers are secured to each cam bar with a hardened rivet. When the control magnet pulls the plunger up into the coil, the hardened rivet moves in offsetting slots in the cam bars. This action causes the automatic washer to shift into either AGITATION or SPIN.

The plastic liners used on each plunger are used to reduce the noise during operation.

Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

Step 3 Remove the control magnet.

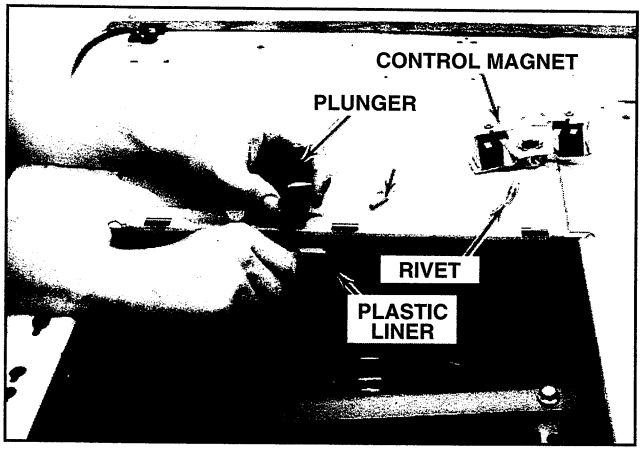


Step 4 Using wire cutters or hacksaw blade, cut the rivets.

Step 5 Slide the rivets out of the plungers.

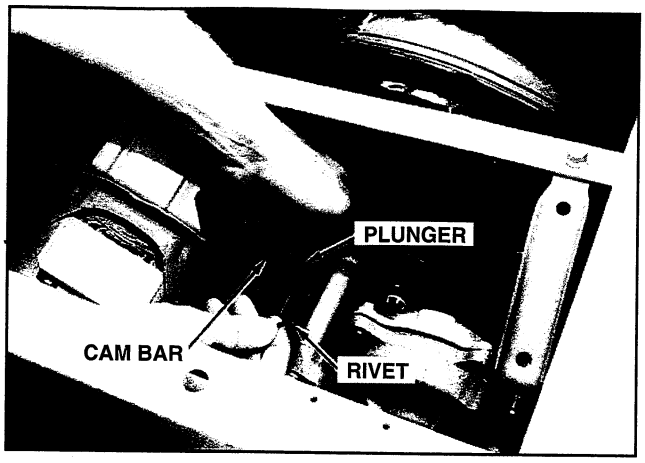
Step 6 Lift the plungers and plastic liners off the cam bars.

REPLACEMENT



Step 7 Place the new plastic liners inside the plungers with the curved edges facing the plungers.

Step 8 Place the new plungers on the cam bars.



Step 9 Slide the new hardened rivets through the plungers.

Step 10 Place the new speed clips on the end of the rivets and push on until they hit the plungers.

Step 11 Replace the control magnet.

Step 12 See REPLACEMENT in "Access to Lower Parts."

Step 13 Plug in washer or reconnect power.

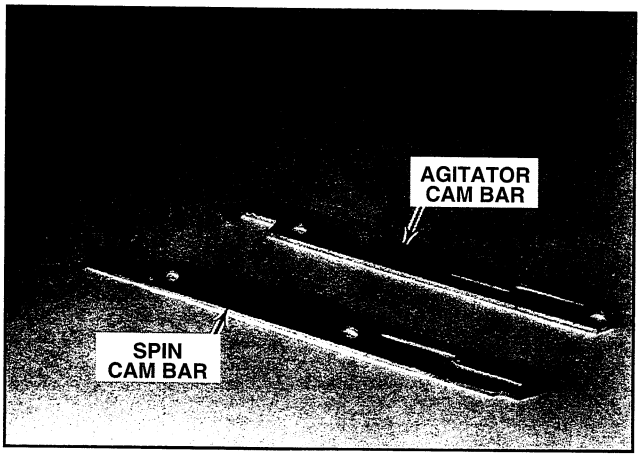
Step 14 Run a cycle check.

PROCEDURE 7

⚠WARNING

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

Cam Bar Replacement



See page 152, illus. nos. 12 and 16 for location of parts.

NOTE: If you do not feel you can do this procedure, call your nearest authorized Whirlpool factory service branch for servicing.

During agitation, one coil raises the plunger, moving the agitator cam bar in such a manner as to agitate the clothes and change the direction of the flow of water through the pump.

During spin the other coil raises the other plunger, moving the spin cam bar in such a manner as to cause the basket drive pads to come in contact with the basket drive pulley.

Step 1 Unplug washer or disconnect power.

Step 2 Lift the lid.

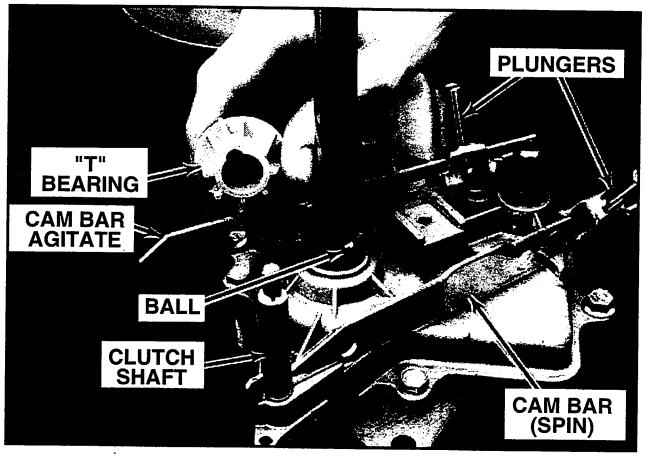
Step 3 Remove the agitator cap, stud, and agitator.

Step 4 See "Access to Lower Parts."

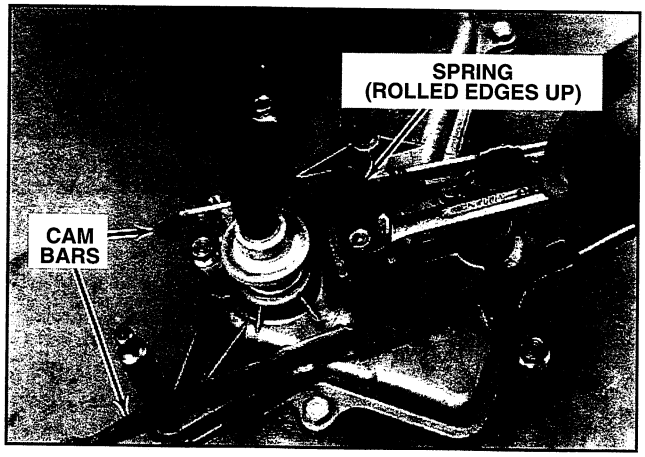
Step 5 Remove the gearcase.

Step 6 Remove the control magnet.

Step 7 Remove the plungers.

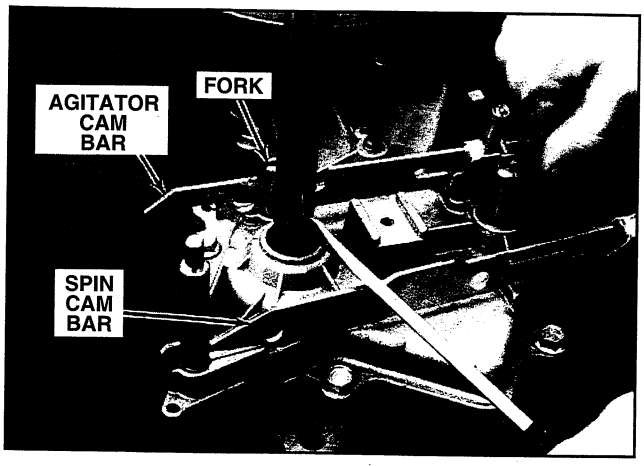


Step 8 Slide the "T" bearing up and off the agitator shaft, and remove the ball.



Step 9 Using a socket wrench or open end wrench, remove the screw which holds the cam bar spring.

Agitator Cam Bar Removal

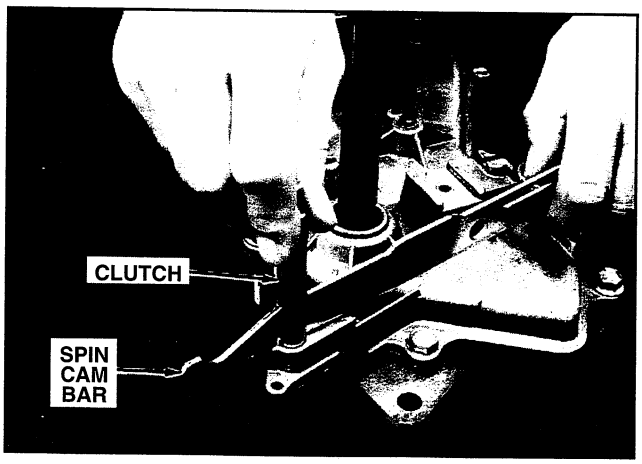


Step 10 Insert the end of a flat blade screwdriver into the hole on the agitator shaft.

Step 11 Place the screwdriver over the spin cam bar and pry the agitator shaft up.

Step 12 While lifting the agitator shaft, slide the agitator cam bar out of the cam bar fork.

Spin Cam Bar Removal



Step 13 Lift up on the clutch shaft while pulling the spin cam bar out.

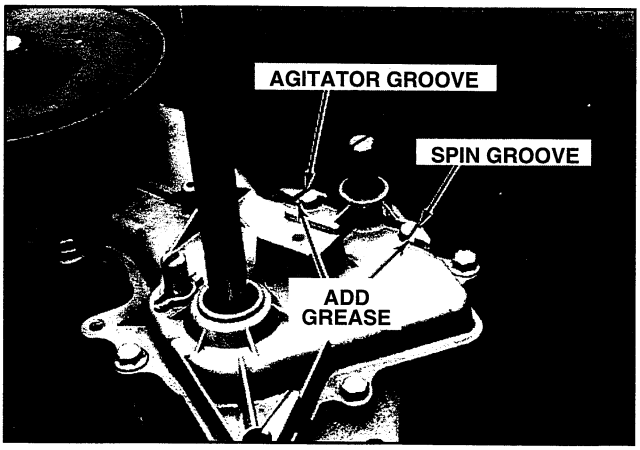
Step 14 Replace the plungers.

REPLACEMENT

Step 15 Place RYKON grease in both of the grooves where the cam bars ride on the gearcase cover.

Step 16 Raise the clutch shaft (with the long slot facing the plunger) and slide the new spin cam bar in the slot.

NOTE: Be sure the clutch is all the way down the slope part of the spin cam bar.



Step 17 Place the spin cam bar in the groove on the gearcase cover.

Step 18 Insert the end of a flat blade screwdriver into the hole on the agitator shaft.

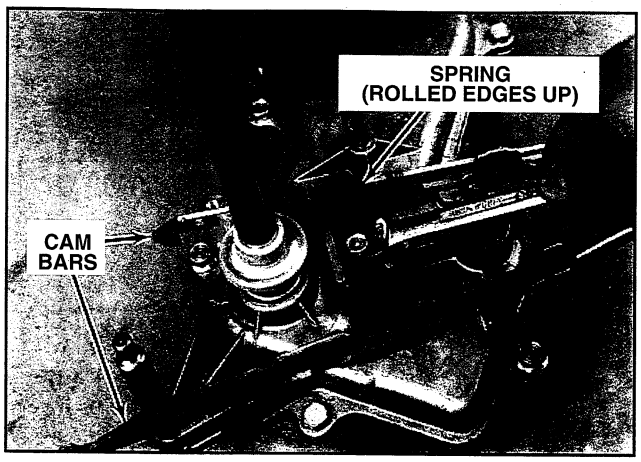
Step 19 Place the screwdriver over the spin cam bar and lift the agitator shaft up.

Step 20 While lifting the agitator shaft, slide the new agitator cam bar through the slot in the fork.

Step 21 Place the agitator cam bar in the groove on the gearcase cover.

Step 22 Place RYKON grease on top of the cam bars where they will rub under the spring.

Step 23 Place the cam bar spring, with the rolled edges facing up, on top of the boss.



Step 24 Using a socket wrench or open end wrench, insert the screw through the cam bar spring and tighten.

Step 25 Replace the control magnet.

Step 26 Place a little grease on the ball and insert the ball into the hole in the agitator shaft on the gearcase.

Step 27 Slide the "T" bearing down the agitator shaft so the groove in the "T" bearing slides over the ball.

Step 28 Replace the gearcase.

Step 29 See REPLACEMENT in "Access to Lower Parts."

Step 30 Replace the agitator, stud, and cap.

Step 31 Plug in washer or reconnect power.

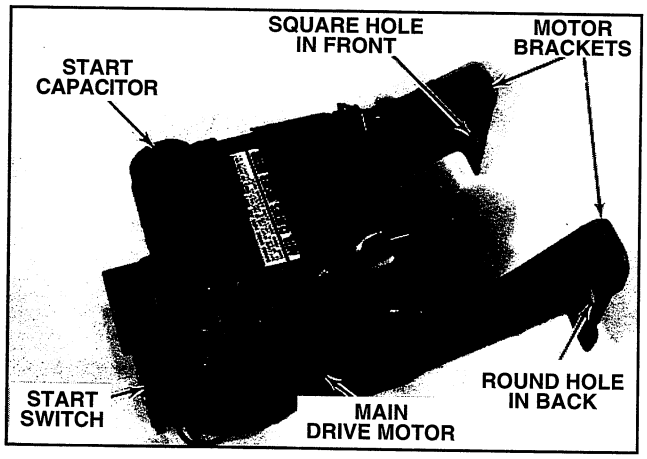
Step 32 Run a cycle check.

PROCEDURE 8

⚠WARNING

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

Drive Motor Testing and/or Replacement



See page 152, illus. no. 46 for location of part.

OHMMETER REQUIRED

The main drive motor supplies the power to the pump, gearcase, and basket drive through a series of pulleys and a drive belt. Drive motors are mounted with the shaft pointing up. There are one-, two- or three-speed motors used on automatic washers. Because of different drive motor brands used, it is necessary when replacing the drive motor start switch that you use the same brand as your drive motor. Some drive motors also have a start capacitor.

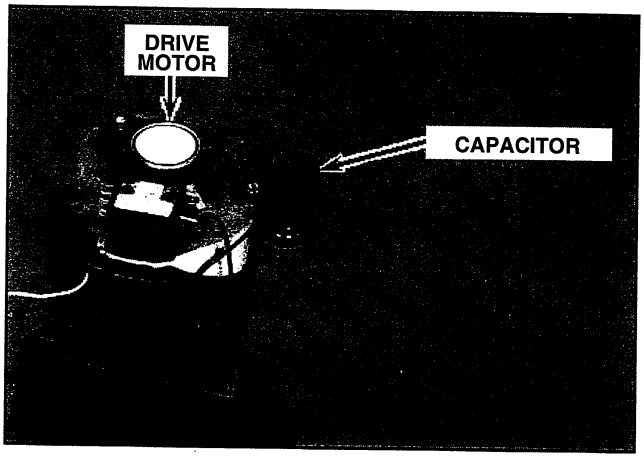
Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

TESTING

NOTE: It is not necessary to remove the drive motor for testing. We did, only to show clarity.

Step 3 Remove one wire at a time coming from the main wiring harness to the start switch, carefully labeling each wire according to the terminal markings on the start switch. Then, one at a time, remove the wires coming from the motor, carefully labeling each wire according to the terminal markings on the start switch. This procedure should assure that the right wire is reconnected to the right terminal.



Step 4 If your motor has a capacitor, remove the red or black wire from the capacitor to the motor.

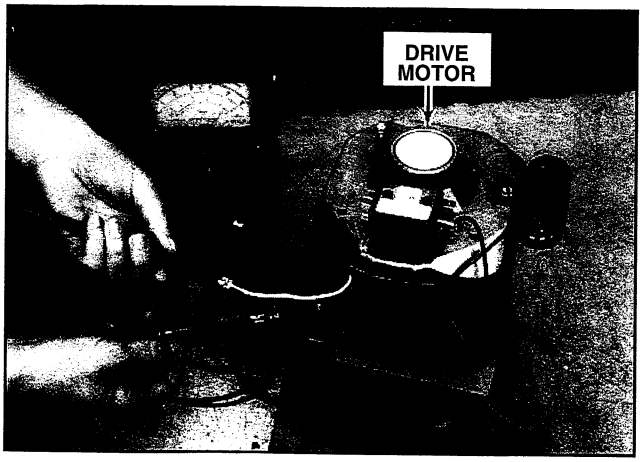
Step 5 Remove the black jumper wire from the capacitor to the start switch.

Step 6 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 1-20 ohms. Set the ohms scale and ZERO the meter.

To tell what speed drive motor you have, look at the colored wires coming from the drive motor.

ONE-SPEED	TWO-SPEED	THREE-SPEED
White	White	White
Blue	Blue	Blue
Black	Black	Black
	Violet	Violet
		Gray / Pink

THE FOLLOWING TEST MUST BE MADE ON ONE-, TWO-, AND THREE-SPEED DRIVE MOTORS:



Step 7 Touch and hold one ohmmeter probe to the terminal on the white wire from the motor.

Step 8 Touch the other ohmmeter probe to the terminal on the blue wire from the motor.

Step 9 The ohmmeter should show a reading of about 1-4 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

Step 10 Touch and hold one ohmmeter probe to the terminal on the white wire from the motor.

Step 11 Touch the other ohmmeter probe to the terminal on the black wire from the motor.

Step 12 The ohmmeter should show a reading of about 5-20 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

If you do get this reading, the start switch must be checked.

THE FOLLOWING TEST MUST BE MADE ON TWO- AND THREE-SPEED DRIVE MOTORS — ALONG WITH STEPS 7-12:

Step 13 Touch and hold one ohmmeter probe to the terminal on the white wire from the motor.

Step 14 Touch the other ohmmeter probe to the terminal on the violet wire from the motor.

Step 15 The ohmmeter should show a reading of about 1-4 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

If you do get this reading, the start switch must be checked.

THE FOLLOWING TEST MUST BE MADE ON THREE-SPEED DRIVE MOTORS — ALONG WITH STEPS 7-15:

Step 16 Touch and hold one ohmmeter probe to the terminal on the white wire from the motor.

Step 17 Touch the other ohmmeter probe to the terminal on the gray-with-pink-stripe wire from the motor.

Step 18 The ohmmeter should show a reading of about 1-4 ohms on the ohms scale. If you do not get this reading, the drive motor is bad and needs replacing.

If you do get this reading the start switch must be checked.

THE FOLLOWING THREE CHECKS MUST BE MADE ON ALL ONE,- TWO-, AND THREE-SPEED DRIVE MOTORS TO CHECK FOR AN INTERNAL FAILURE (SHORT):

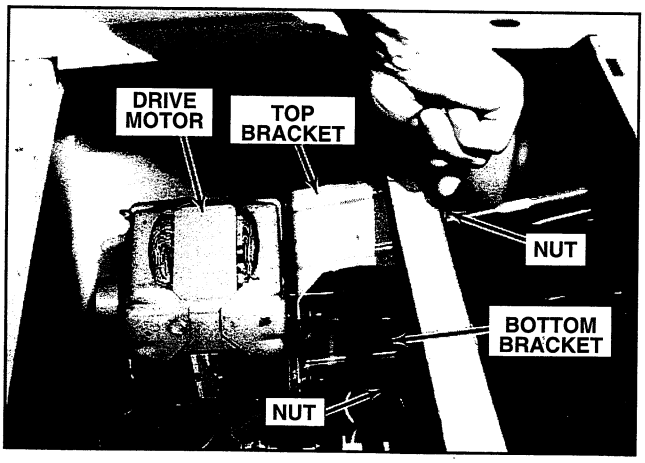
Step 19 Touch and hold one ohmmeter probe to the motor housing.

Step 20 One at a time, touch the other ohmmeter probe to each of the wires (terminals) coming out of the motor.

Step 21 The ohmmeter should show an open circuit when each of the wires (terminals) are checked. If not, the drive motor is bad and needs replacing.

REPLACEMENT

Step 22 Using a socket wrench or open end wrench, remove the screw which holds the green ground wire to the motor.



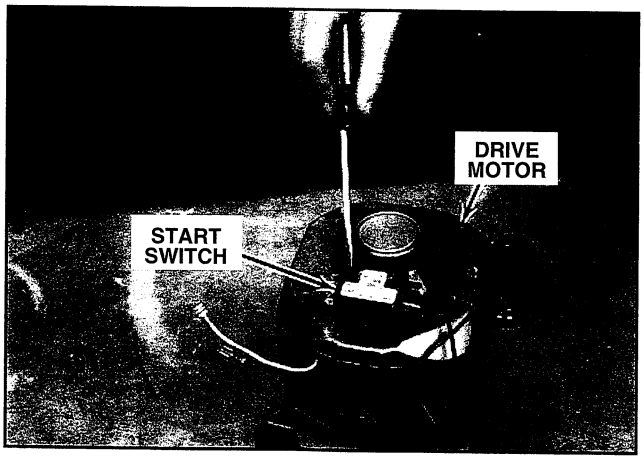
Step 23 Using an open end wrench, remove the nut which holds the drive motor bracket.

Step 24 Slide the motor to the right and remove the drive belt from the motor pulley.

Step 25 Using a socket wrench, remove the other nut which holds the other motor bracket.

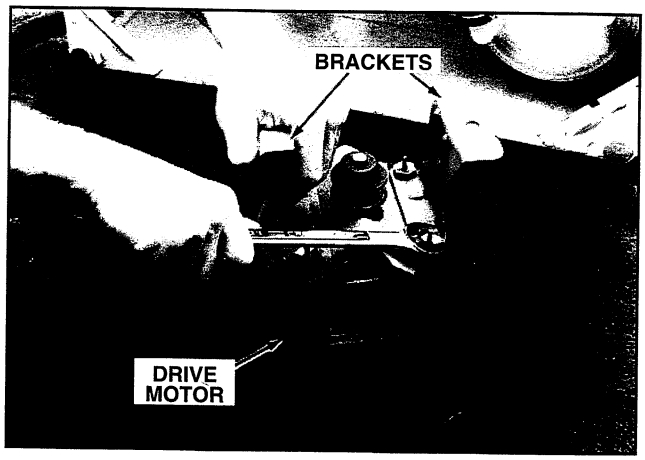
Step 26 Carefully remove the main drive motor.

Step 27 Remove the other wires from the start switch, carefully labeling each one according to the terminal markings on the start switch. This procedure should assure that the right wire is reconnected to the right terminal.

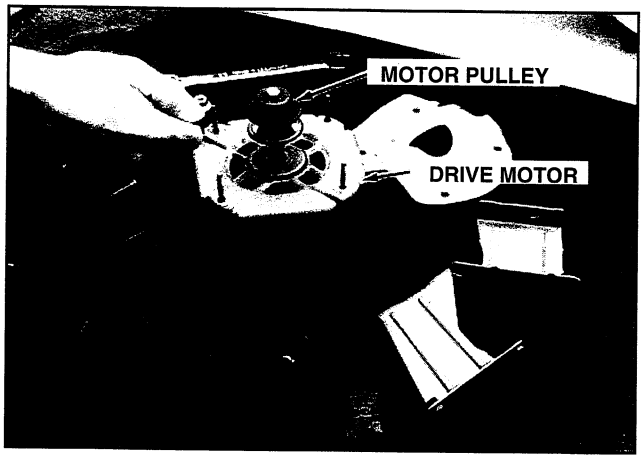


Step 28 Using a screwdriver, remove the two screws which hold the start switch.

Step 29 Using a socket wrench or open end wrench, remove the capacitor, bracket, and screw.



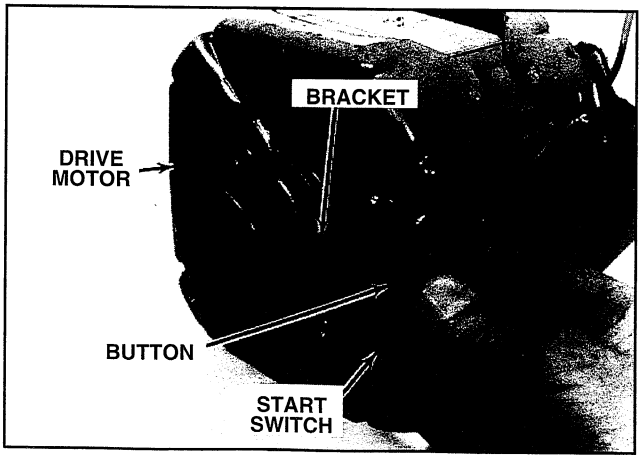
Step 30 Using a socket wrench or an open end wrench, remove the nuts from the brackets.



Step 31 Using an allen wrench, loosen the setscrew and remove the motor pulley.

Step 32 Replace the motor pulley by sliding the pulley over the shaft of the new drive motor. DO NOT tighten the setscrew yet.

Step 33 Using a socket wrench, assemble the two brackets to the drive motor with the nuts.



Step 34 Using a screwdriver, replace the start switch (button facing bracket), with the two screws.

Step 35 Using a socket wrench or open end wrench, replace the capacitor, bracket and screw, if your drive motor uses one.

Step 36 Attach the red or black wire from the motor to the capacitor.

Step 37 Attach the other wires from the motor to the terminals on the start switch.

Step 38 Attach the black jumper wire to the capacitor and start switch.

Step 39 Using a socket wrench, tighten the lower bracket by turning the nut on the bolt.

Step 40 Replace the bolt from underneath, through the base, and hand tighten the nut to the bolt.

Step 41 Place the drive belt on the pulleys.

Step 42 Slide the motor to the left.

Step 43 Turn the main drive pulley by hand. This causes the motor pulley to line up with the rest of the pulleys.

Step 44 Using an allen wrench, make sure the flat on the motor shaft is aligned with the setscrew and tighten.

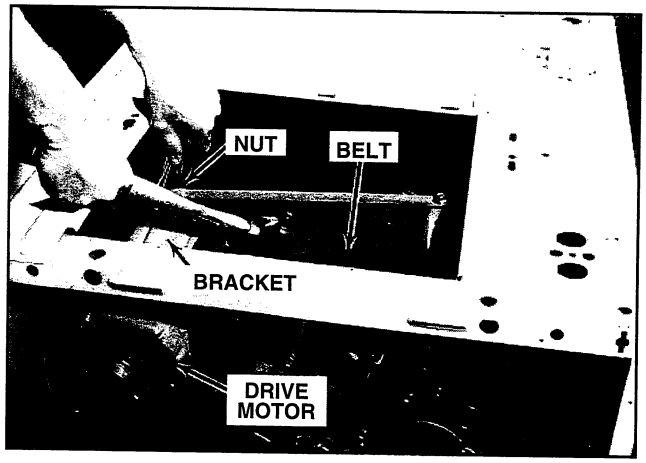
Step 45 Using a socket wrench or open end wrench, replace the screw and green ground wire on the drive motor.

⚠WARNING

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

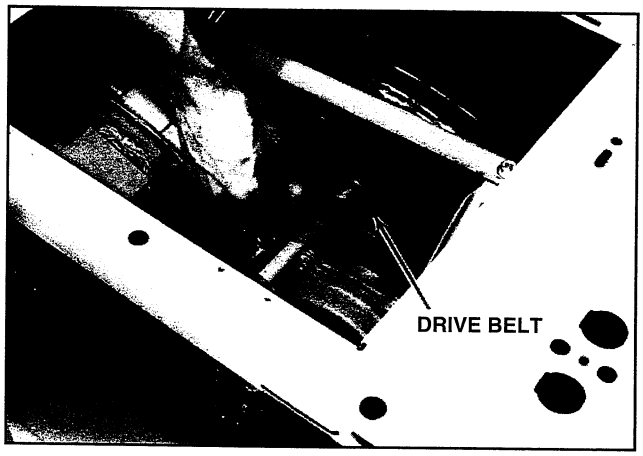
Step 46 Reconnect the wires to the proper terminals as previously marked.

Step 47 Using an open end wrench and a socket wrench, firmly snug the two drive motor adjustment nuts.



Step 48 Using a hammer, tap the inside edge of the drive motor bracket outward until the belt is tight.

Step 49 Using an open end wrench and a socket wrench, finish tightening the two drive motor adjustment nuts.



Step 50 Check the back-and-forth movement of the drive belt between the motor and drive pulleys.

A properly adjusted drive belt will move back and forth 1/2 inch with six pounds of force applied.

TIGHT: If the belt is too tight, it may cause early failure of the belt, bearings, drive motor, or pump.

LOOSE: If the belt is too loose, slippage, no agitation, or low spin speed could happen.

Step 51 See REPLACEMENT in "Access to Lower Parts."

Step 52 Plug in washer or reconnect power.

Step 53 Run a cycle check.

PROCEDURE 9

⚠WARNING

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

Motor Start Switch Testing and/or Replacement

See page 152, illus. no. 56 for location of part.

OHMMETER REQUIRED

The start switch is used in getting voltage to the motor start and run windings at the same time. As the motor increases in speed, an actuating arm inside the motor opens the switch and removes the voltage from the start windings. There are one-, two- or three-speed start switches used on automatic washers.

Because of different drive motor brands used, it is necessary when replacing the drive motor start switch that you use the same brand as your drive motor.

Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the start switch. This procedure should assure that the right wire is reconnected to the right terminal.

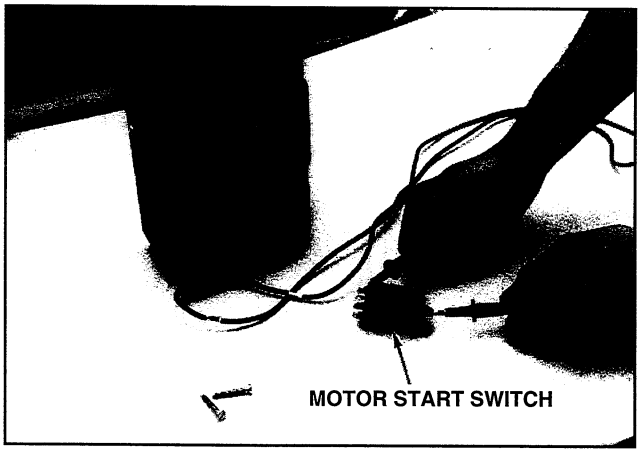
Step 4 Using a screwdriver, remove the two screws which hold the start switch to the motor.

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

To tell what speed start switch you have, look at the colored wires coming from the drive motor.

ONE-SPEED	TWO-SPEED	THREE-SPEED
White	White	White
Blue	Blue	Blue
Black	Black	Black
	Violet	Violet
		Gray / Pink

THE FOLLOWING TEST MUST BE MADE ON ONE-, TWO-, AND THREE-SPEED START SWITCHES:



Step 6 Touch and hold one ohmmeter probe to the terminal BU.

Step 7 Touch the other ohmmeter probe to the terminal BK (7).

Step 8 With the start switch button out, the ohmmeter should show an open circuit. If not, the start switch is bad and needs replacing.

Step 9 With the ohmmeter probes still touching these terminals, push in on the button.

Step 10 With the start switch button in, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

THE FOLLOWING TEST MUST BE MADE ON TWO- AND THREE-SPEED START SWITCHES — ALONG WITH STEPS 6-10:

Step 11 Touch and hold one ohmmeter probe to the terminal OR.

Step 12 Touch the other ohmmeter probe to the terminal BK (7).

Step 13 With the start switch button out, the ohmmeter should show an open circuit. If not, the start switch is bad and needs replacing.

Step 14 With the ohmmeter probes still touching these terminals (OR and BK [7]), push in on the button.

Step 15 With the start switch button in, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

Step 16 Touch and hold one ohmmeter probe to the terminal OR.

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

Step 18 With the start switch button out, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

Step 19 With the ohmmeter probes still touching these terminals (OR and V), push in on the button.

Step 20 With the start switch button in, the ohmmeter should show an open circuit. If not, the start switch is bad and needs replacing.

THE FOLLOWING TEST MUST BE MADE ON THREE-SPEED START SWITCHES — ALONG WITH STEPS 6-20:

Step 21 Touch and hold one ohmmeter probe to the terminal GY-P.

Step 22 Touch the other ohmmeter probe to the terminal BK (7).

Step 23 With the start switch button out, the ohmmeter should show an open circuit. If not, the start switch is bad and needs replacing.

Step 24 With the ohmmeter probes still touching these terminals (GY-P and BK [7]), push in on the button.

Step 25 With the start switch button in, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

Step 26 Touch and hold one ohmmeter probe to the terminal GY-P.

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

Step 28 With the start switch button out, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

Step 29 With the ohmmeter probes still touching these terminals (GY-P and G), push in on the button.

Step 30 With the start switch button in, the ohmmeter should show an open circuit. If not, the start switch is bad and needs replacing.

REPLACEMENT

Step 31 Using a screwdriver, place the start switch on the drive motor and tighten the two screws.

Step 32 Reconnect the wires to the proper terminals as previously marked.

Step 33 See REPLACEMENT in "Access to Lower Parts."

Step 34 Plug in washer or reconnect power.

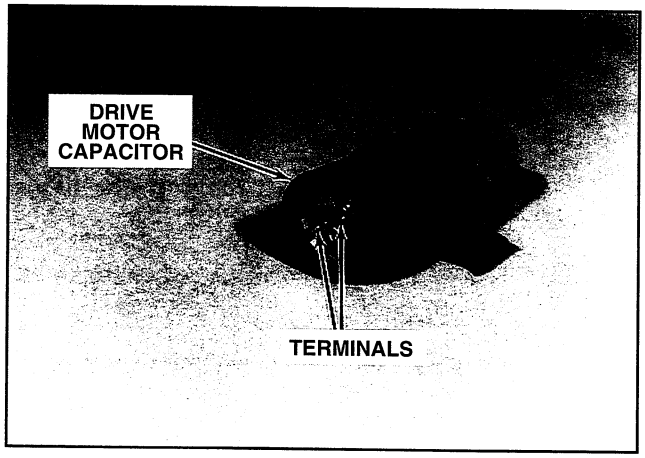
Step 35 Run a cycle check.

PROCEDURE 10

⚠WARNING

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

Drive Motor Capacitor Testing and/or Replacement



See page 152, illus. nos. 47 and 48 for location of parts.

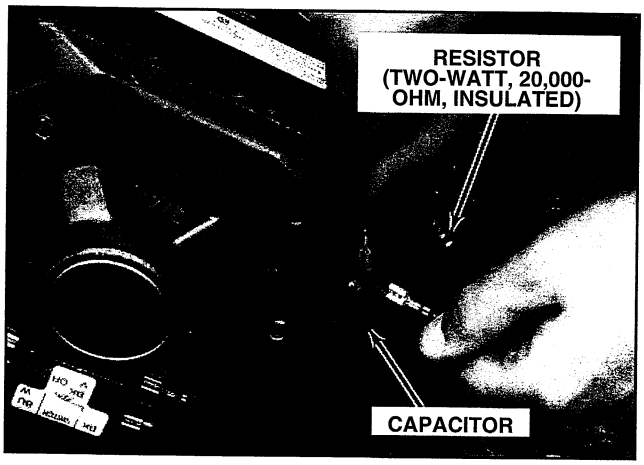
OHMMETER REQUIRED

A start capacitor increases the turning force of the rotor in the motor during start.

Step 1 Unplug washer or disconnect power.

Step 2 See "Access to Lower Parts."

TESTING



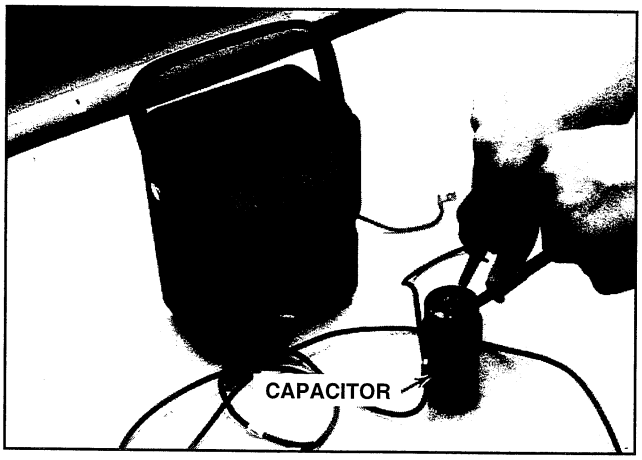
Step 3 Remove the red or black wire from the capacitor to the motor.

Step 4 Remove the black jumper wire from the other terminal on the capacitor.

Step 5 Using a socket wrench or open end wrench, loosen the screw which holds the capacitor to the motor.

Step 6 Remove the capacitor.

Step 7 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 15-30 ohms. Set the ohms scale and ZERO the meter.



Step 8 Touch and hold one ohmmeter probe to one of the terminals on the capacitor.

NOTE: At the instant the other ohmmeter probe touches the other terminal on the capacitor, the ohmmeter needle should move instantly toward ZERO, then return slowly.

Step 9 Touch the other ohmmeter probe to the other terminal on the capacitor.

Step 10 If the ohmmeter needle stays at or near ZERO or does not move at all, the capacitor is bad and needs replacing.

Step 11 Now switch the ohmmeter probes on the capacitor terminals. The same thing should happen as in steps 8-10. If not, the capacitor is bad and needs replacing.

REPLACEMENT

Step 12 Place the new capacitor in the clamp.

Step 13 Using a socket wrench or open end wrench, tighten the screw.

Step 14 Attach the red or black wire from the motor to one of the capacitor terminals.

Step 15 Attach the black jumper wire from the start switch to the other capacitor terminal.

Step 16 See REPLACEMENT in "Access to Lower Parts."

Step 17 Plug in washer or reconnect power.

Step 18 Run a cycle check .

NOTES

SECTION N

Cabinet Area

PROCEDURE 1

⚠WARNING

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

The power cord is located coming out the back of the cabinet area and supplies power to the automatic washer.

See page 150, illus. no. 32 for location of part.

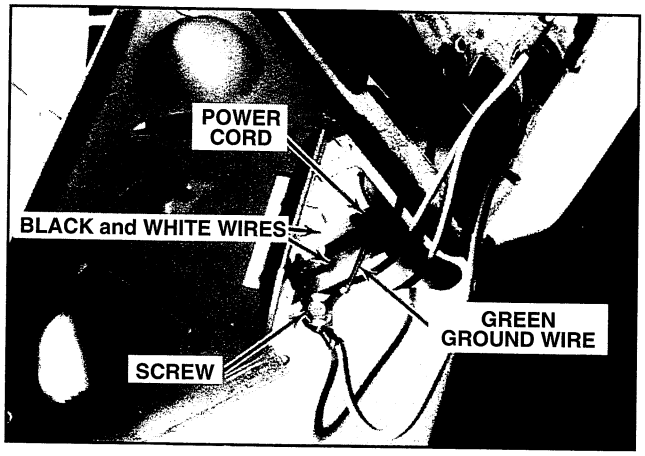
OHMMETER REQUIRED

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

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

TESTING



Step 3 Remove the black wire from the power cord terminal.

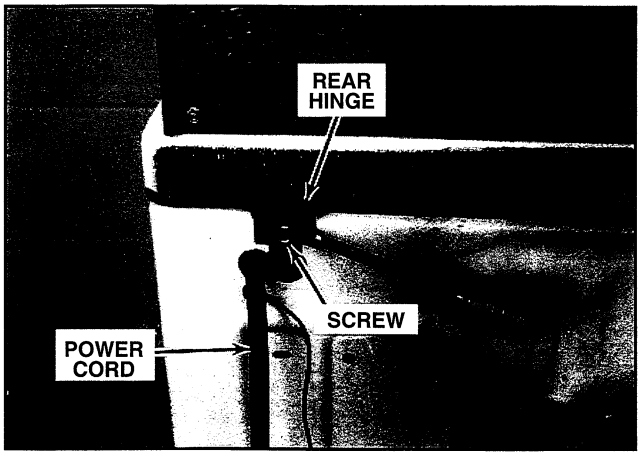
Step 4 Remove the white wire from the power cord terminal.

Step 5 Using a nutdriver or socket wrench, remove the screw which holds the power cord ground wire (green).

Step 6 Lower the top.

NOTE: Do not use the console as a hand support when moving the appliance.

Step 7 Move the automatic washer away from the wall so you can work on it.

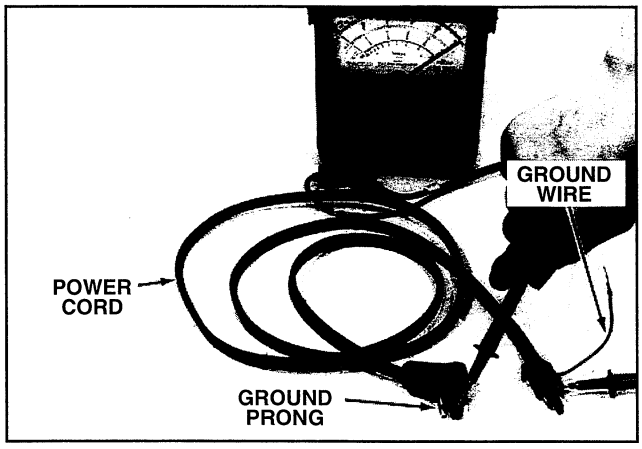


Step 8 Using a socket wrench or nutdriver, remove the rear hinge screw next to the power cord.

Step 9 Carefully remove the hinge and pad.

Step 10 Slide the power cord over and out the opening where the hinge was.

Step 11 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter.



Step 12 Touch and hold one ohmmeter probe to the one of the prongs on the plug.

Step 13 Touch the other ohmmeter probe to the same wire but on the terminal at the other end of the cord.

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

Step 15 Touch and hold one ohmmeter probe to the other prong on the plug.

Step 16 Touch the other ohmmeter probe to the other wire on the terminal at the end of the cord.

Step 17 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

Step 18 Touch and hold one ohmmeter probe to the round prong.

Step 19 Touch the other probe to the terminal on the green wire at the end of the cord.

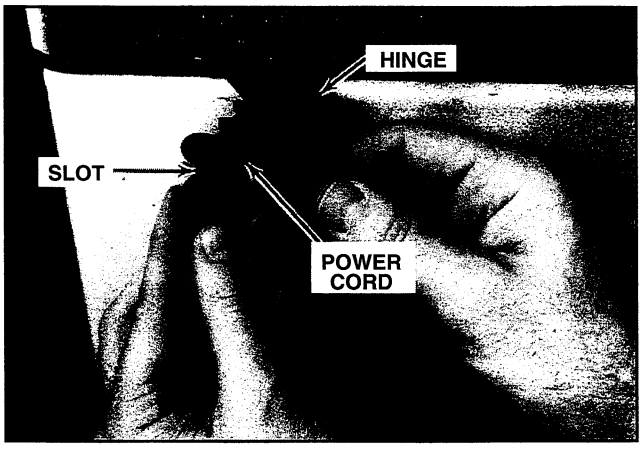
Step 20 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

Step 21 Touch and hold one ohmmeter probe to one of the prongs on the plug.

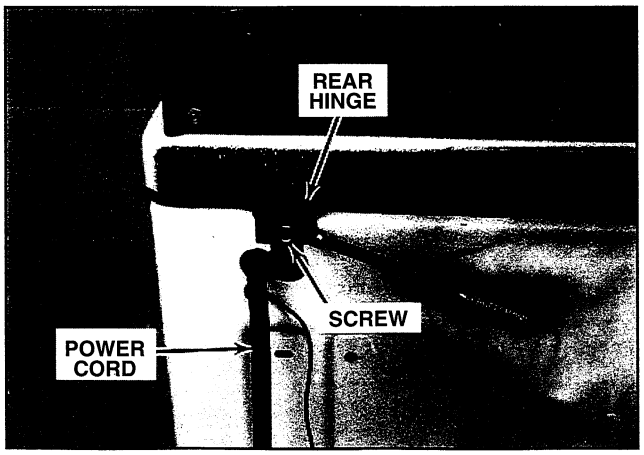
Step 22 Touch the other ohmmeter probe to the other prong on the plug.

Step 23 The ohmmeter should show an open circuit. If not, the power cord is bad and needs replacing.

REPLACEMENT



Step 24 Place the new power cord with the molded bushing in the lid hinge hole and slide over.



Step 25 Using a socket wrench or nutdriver, replace the hinge into the slit on the top and tighten the screw.

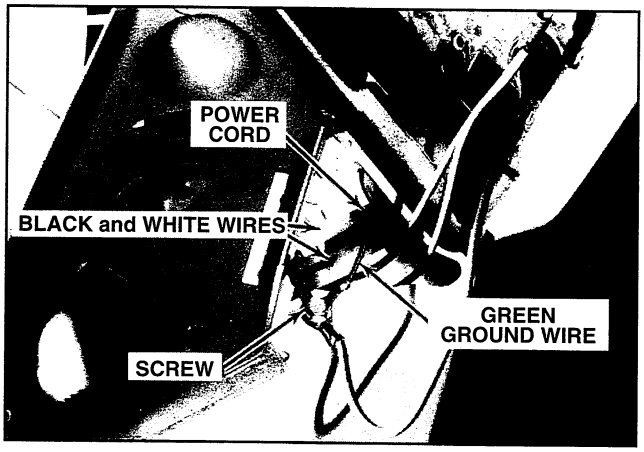
NOTE: Do not use the console as a hand support when moving the appliance.

Step 26 Move the automatic washer back to its proper place.

Step 27 Raise the top.

⚠WARNING

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 28 Using a socket wrench or nutdriver, replace the green ground wire with the other wires and tighten the screw.

Step 29 Reconnect the white wire on the power cord terminal.

Step 30 Reconnect the black wire on the power cord terminal.

⚠WARNING

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.

Step 31 Lower the top.

Step 32 Plug in washer or reconnect power.

Step 33 See "Leveling Your Automatic Washer."

Step 34 Run a cycle check.

PROCEDURE 2

⚠WARNING

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 Feet Replacement

The rear feet are housed in the rear cabinet support channel and leveling mechanism. The feet move up or down, depending on the level of your floor.

See page 150, illus. no. 29 for location of part.

Step 1 Unplug washer or disconnect power.

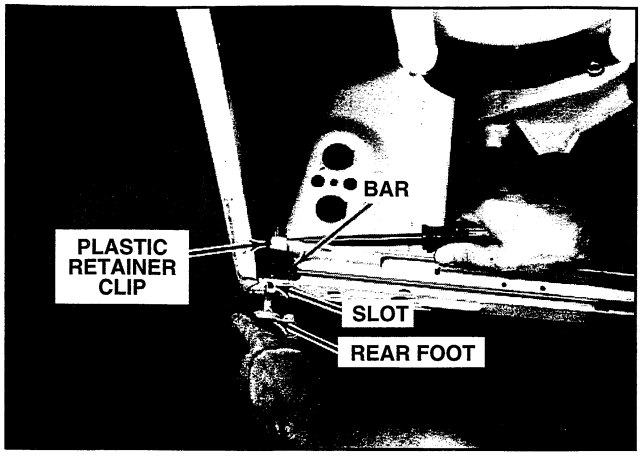
NOTE: Do not use the console as a hand support when moving the appliance.

Step 2 Move the automatic washer away from the wall so you can work on it.

NOTE: Do not leave the washer lying down for any length of time, as this may cause the oil in the gearcase to leak out.

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

Step 3 Lay the washer on its back.



Step 4 Insert a screwdriver in the right slot and spread the plastic tabs on the retainer clip.

Step 5 Pull the right rear foot out of the bar assembly.

Step 6 Insert a screwdriver into the left slot and spread the plastic tabs on the retainer clip.

Step 7 Pull the left rear foot out of the bar assembly.

REPLACEMENT

Step 8 Insert the new left rear foot, lining up the flat side and pins of the foot with the slots in the cabinet flange.

Step 9 Push in on the foot until it snaps into place.

Step 10 Insert the new right rear foot, lining up the flat side and pins of the foot with the slots in the cabinet flange.

Step 11 Push in on the foot until it snaps into place.

Step 12 To check for proper operation, push up on one foot; the other foot should go down.

Step 13 Check the other foot in the same way.

NOTE: Do not use the console as a hand support when moving the appliance.

Step 14 Set the washer upright and move it to its proper place.

Step 15 Plug in washer or reconnect power.

Step 16 See "Leveling Your Automatic Washer."

PROCEDURE 3

Front Feet Replacement

The front feet are screwed into the front corners of the automatic washer. These are stationary.

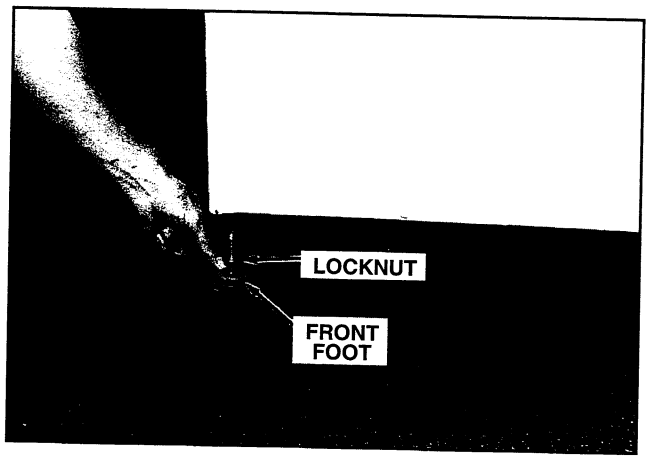
See page 150, illus. no. 38 for location of part.

There are two types of front feet that could be used.

See Type A for the metal feet or Type B for the plastic feet.

TYPE A

Step 1 Place a 4-inch block of wood under the middle front edge of the cabinet.



Step 2 Using an open end wrench, loosen the locknuts. Your washer may use a washer on top of each locknut.

Step 3 Remove the front feet and washers, if used.

REPLACEMENT

Step 4 Place a locknut on each new foot and screw down to 1/2 inch from the foot.

Step 5 If your washer uses the washers, they must be placed on top of each locknut.

Step 6 Screw each front foot into the front brackets up to the locknut.

Step 7 Remove the block.

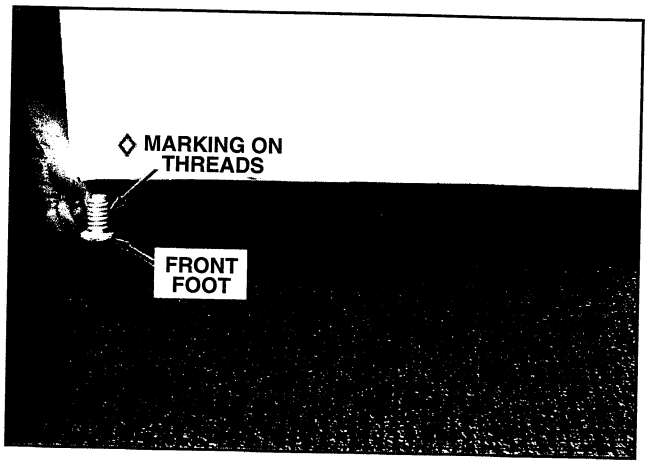
Step 8 See "Leveling Your Automatic Washer."

TYPE B

Step 1 Place a 4-inch block of wood under the middle front edge of the cabinet.

Step 2 Using pliers, remove the plastic front feet.

REPLACEMENT



Step 3 Insert the new plastic front feet into the corner brackets and turn them to the right.

Notice the ◇ marking on the thread of each front foot.

Step 4 Use pliers and a little liquid soap (for lubrication) on the threads of the foot. Turn the feet until the ◇ is level with the washer.

Step 5 Remove the block.

Step 6 See "Leveling Your Automatic Washer."

PROCEDURE 4

⚠WARNING

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

See page 148, illus. nos. 34 and 35 for location of parts.

OHMMETER REQUIRED

Wiring harnesses carry the electrical current to different electrical parts throughout the automatic washer.

These harnesses are normally divided into two sections, the console harness and the cabinet harness.

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

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

Step 1 Unplug washer or disconnect power.

Step 2 See "Removing the Console Rear Panel and the Console Front Panel."

Step 3 Using a flat blade screwdriver or nutdriver, remove the rear service panel.

Step 4 Raise the top.

TESTING

Step 5 Set the ohmmeter scale 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 same wire.

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

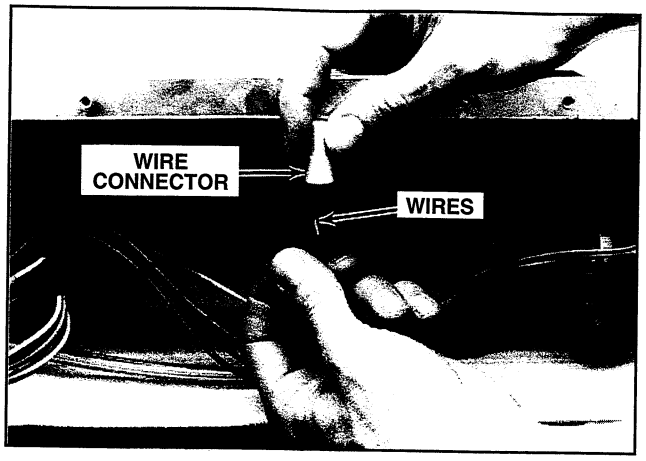
Step 10 Replace the entire wire and terminal with the same gauge wire, or locate the bad spot. To locate the bad spot, use your fingers and gently bend the wire, feeling at the same time and looking for bumps in the wire.

Step 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.



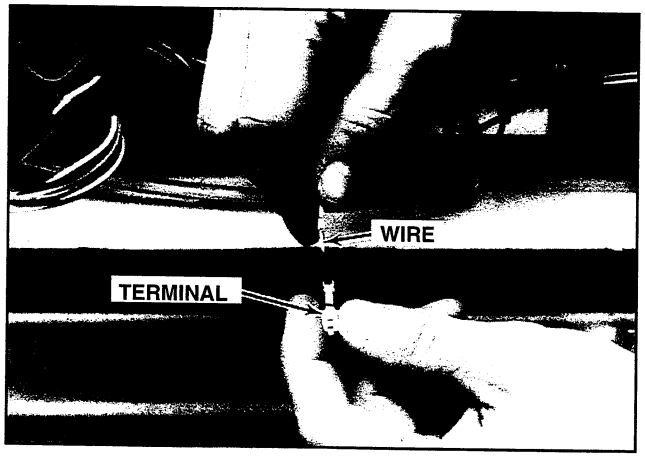
Step 13 Use only a wire connector for splicing wires together.

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

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

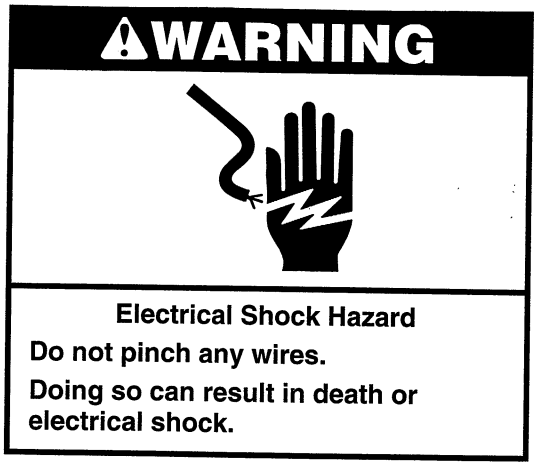
Step 16 Strip the insulation back 1/2 inch and twist the wire strands together.

NOTE: The wires must be shiny; otherwise replace.



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

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



Step 19 Replace the rear service panel and screws.

Step 20 See REPLACEMENT in "Removing the Console Rear Panel and the Console Front Panel."

Step 21 Lower the top.

Step 22 Plug in washer or reconnect power.

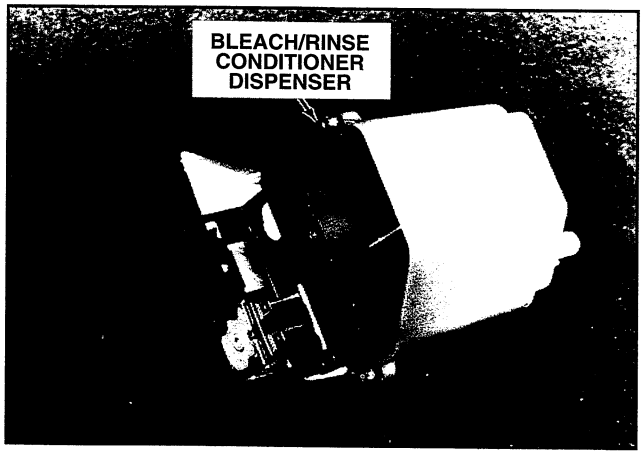
Step 23 Run a cycle check.

PROCEDURE 5

⚠WARNING

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

Bleach/Rinse Conditioner Dispenser Testing and/or Replacement



These dispensers are located in the left front corner, under the top.

See pages 148, illus. no. 80 or 150, illus. nos. 43-49 for location of parts.

OHMMETER REQUIRED

Some dispensers are electrically controlled, dumping the liquid at the right time in the wash or rinse cycles. The electric dispenser may use one or two solenoids, depending on the features of the automatic washer. In other dispensers the liquid is poured into a tray and goes into the wash right away.

There are two types of dispensers used; see Type A for electric or Type B for non-electric.

TYPE A

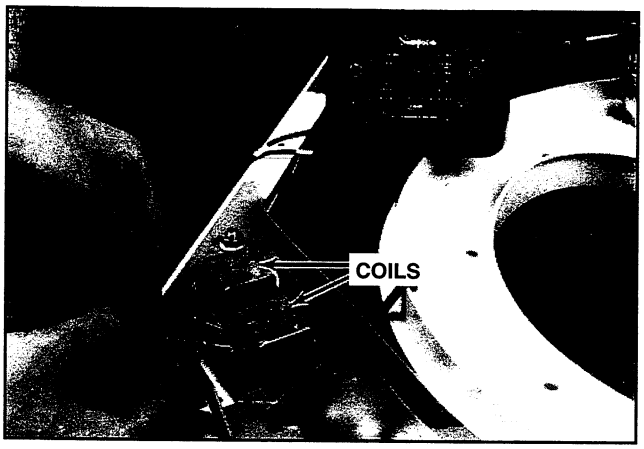
Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

TESTING

Step 3 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the conditioner coils. This procedure should assure that the right wire is reconnected to the right terminal on the coils.

Step 4 Refer to the instructions that came with your volt-ohmmeter to find the proper scale to measure 200-500 ohms. Set the ohms scale and ZERO the meter.



Step 5 Touch and hold one of the ohmmeter probes to one of the terminals on the coil.

Step 6 Touch the other ohmmeter probe to the other terminal on the same coil.

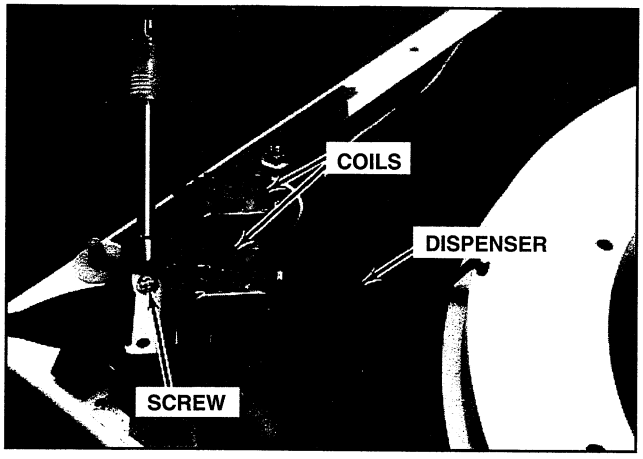
Step 7 The ohmmeter should show a reading between 200-500 ohms on the ohms scale. If you do not get this reading, the coil is bad and needs replacing.

Step 8 If your washer has two coils, touch and hold one ohmmeter probe to one of the terminals on the other coil.

Step 9 Touch the other ohmmeter probe to the other terminal on the same coil.

Step 10 The ohmmeter should show a reading between 200-500 ohms on the ohms scale. If you do not get this reading, the coil is bad and needs replacing.

REPLACEMENT



Step 11 Using a nutdriver or screwdriver, remove the screw which holds the dispenser to the cabinet bracket.

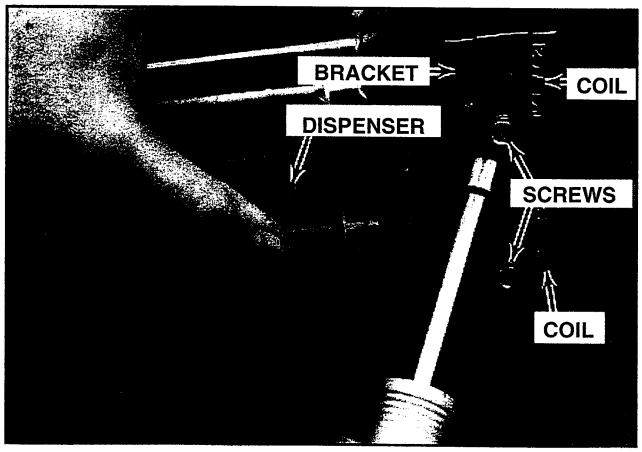
Step 12 Slide the dispenser toward the front corner to release a tab on the coil bracket from between the corner brackets.

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

Step 13 Using pliers, slide the clamp off the bottom port of the dispenser.

Step 14 Remove the hose from the bottom port of the dispenser.

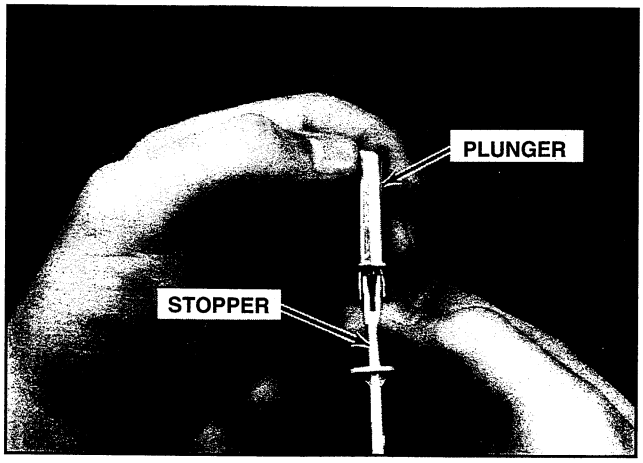
Step 15 Push the basket toward the back right corner while removing the dispenser.



Step 16 Using a nutdriver, remove the screw(s) which hold the coil(s) to the bracket.

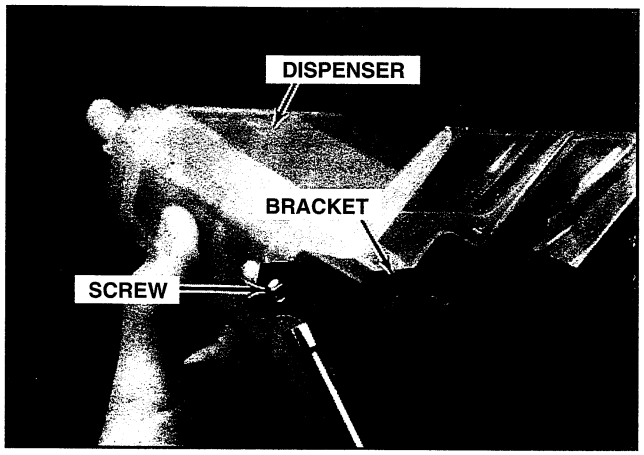
Step 17 Carefully remove the coil(s).

Step 18 Carefully remove the spring(s) and stopper(s) from the dispenser.



Step 19 Push together the tabs on the stopper, pulling it out of the holes in the plunger.

Step 20 Using a nutdriver, remove the screws which hold the bracket to the dispenser.



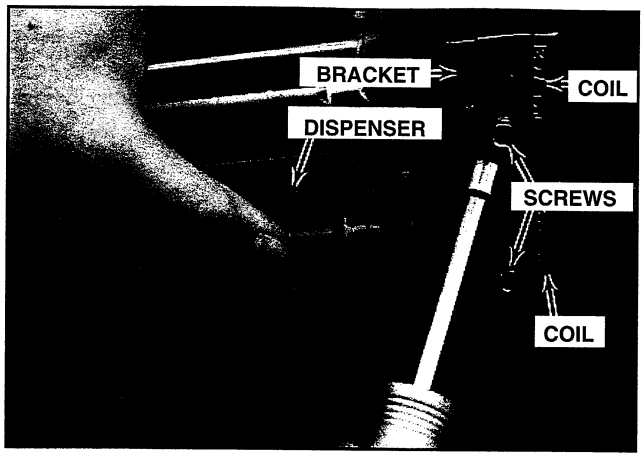
Step 21 Using a nutdriver, insert the screws through the new bracket into the new dispenser and tighten.

Step 22 Snap the tabs from the new barrel(s) into the holes in the top of the new plunger(s).

Step 23 Insert the plunger(s) into the dispenser with the rubber stopper(s) in the holes in the bottom of the dispenser.

Step 24 Place the new spring(s) over the barrel(s) and on top of the bracket. The larger part of the spring(s) must be on the bottom of the coil(s).

Step 25 Place the new coil(s) over the spring(s) with the barrel(s) inside the coil(s), then push down.

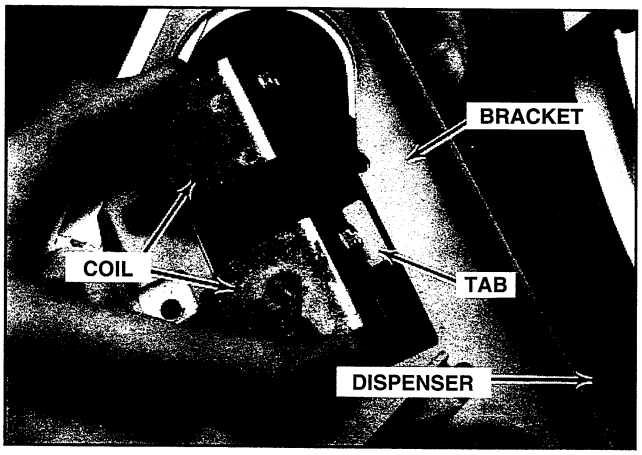


Step 26 Using a nutdriver, insert the screw(s) through the coil(s), into the dispenser and tighten.

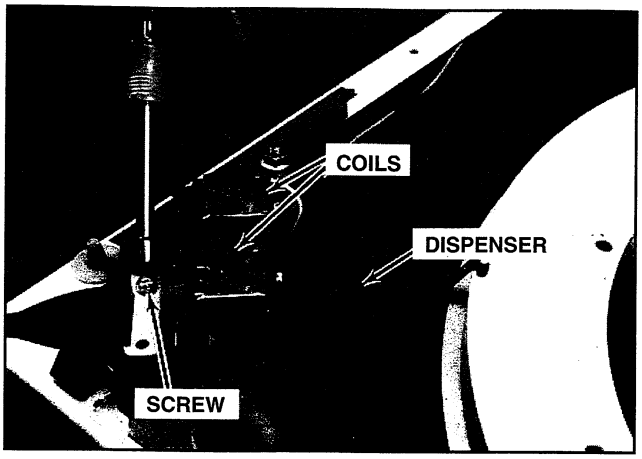
Step 27 Push the basket toward the back right corner while replacing the dispenser in the left front corner.

Step 28 Replace the hose on the bottom port of the dispenser.

Step 29 Using pliers, slide the clamp on the bottom port of the dispenser.



Step 30 Insert the tab on the dispenser bracket between the corner brackets on the cabinet.



Step 31 Using a nutdriver or screwdriver, insert the screw which holds the dispenser to the cabinet bracket.

Step 32 Reconnect the wires to the proper terminals as previously marked.

Step 33 Lower the top.

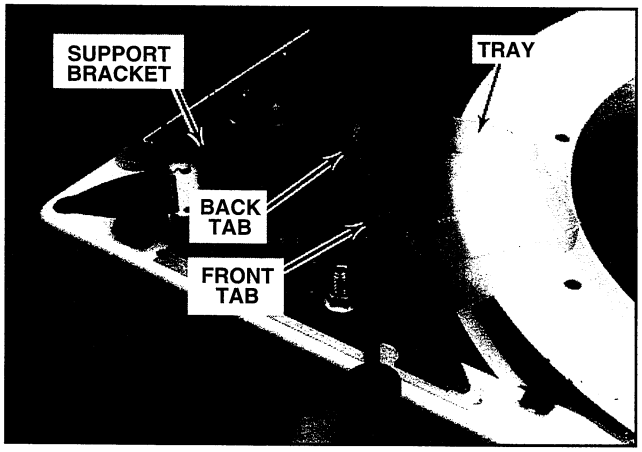
Step 34 Plug in washer or reconnect power.

TYPE B

Step 1 Unplug washer or disconnect power.

Step 2 Raise the top.

Step 3 Slide the plastic dispenser tray, located in the left front corner, to the back.



Step 4 Using a screwdriver, pry in on the tab in the front, away from the support bracket.

While prying the tab out, slide the tray to the front to remove the rear tab. Then slide the tray to the back to remove the front tab.

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

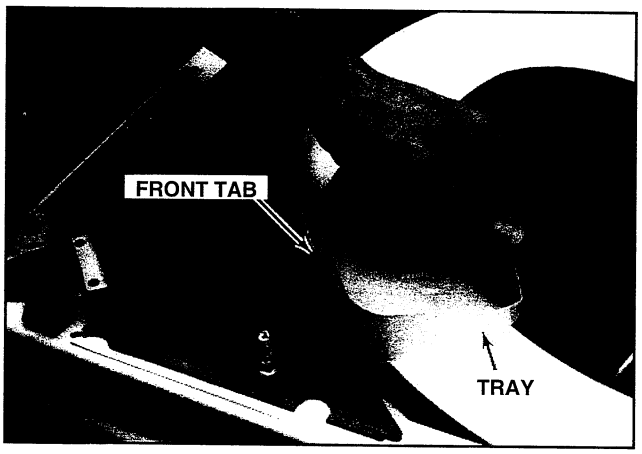
Step 5 Using pliers, slide the hose clamp off the bottom port of the tray.

Step 6 Remove the hose.

REPLACEMENT

Step 7 Place the hose on the new dispenser tray.

Step 8 Using pliers, slide the hose clamp onto the tray.



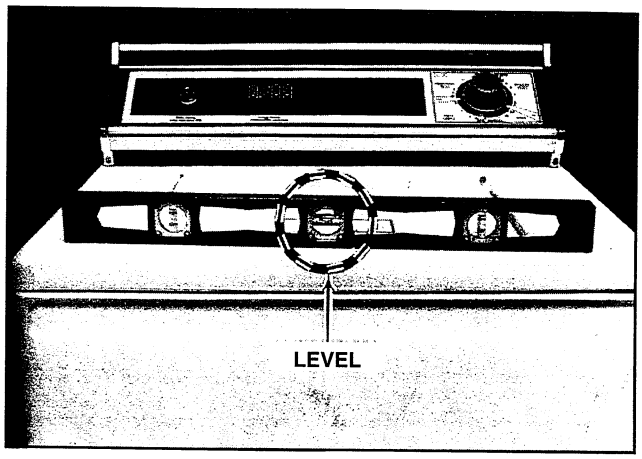
Step 9 Insert the front tab first, then the back.

Step 10 Lower the top.

Step 11 Plug in washer or reconnect power.

PROCEDURE 6

Leveling Your Automatic Washer



Step 1 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, and then stop the washer. Check to see if the water meets the holes all the way around the basket. If it does not, screw the front feet up or down to adjust; then tilt the washer forward so the back legs will self-adjust. Carefully lower.

Step 2 Using an open end wrench, tighten the locknuts.

Step 3 Drain the water if you had to level it this way.

NOTES

SECTION O

Compact/Portable Automatic Washer Area

The compact/portable automatic washer has many of the same parts and operates basically the same as the regular size automatic washer.

We will cover:

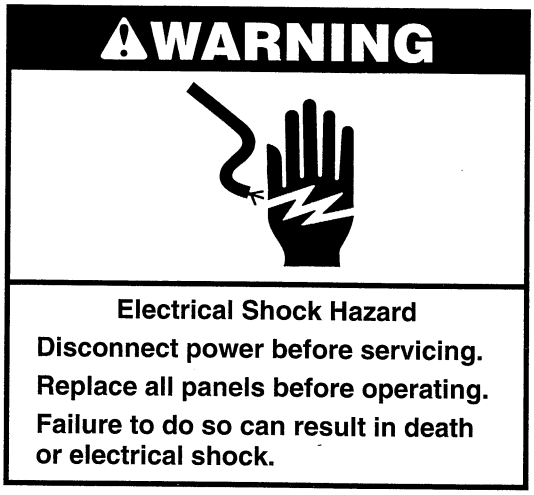
A. How to get to parts under the top.

B. How to get to parts at the bottom of the machine.

C. How to change a drive belt.

Once you have found the part you are looking for, refer to sections "I - M" using some of the steps for removing and replacement. The testing of that part will be the same.

PROCEDURE 1

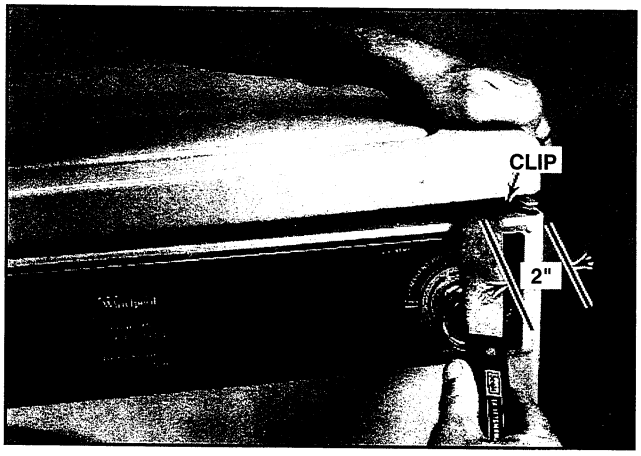


Top Access

Step 1 Unplug washer or disconnect power.

Step 2 When raising the top, always tape the lid shut.

NOTE: Do not pry or you may ruin the finish.



STEP 3 Using a putty knife, place the blade between the top and cabinet in one corner, about 2 inches in from the edge.

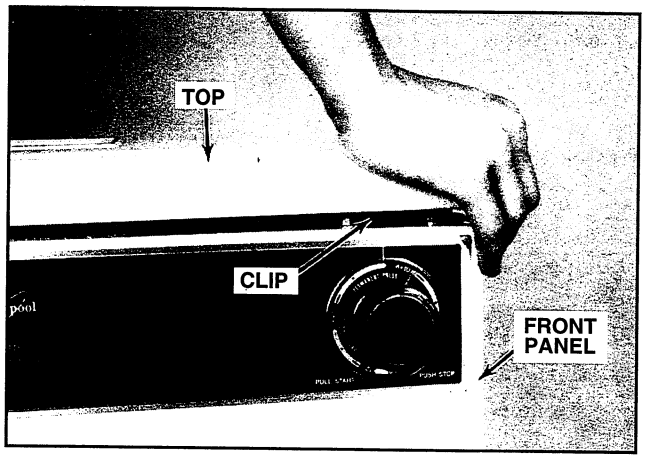
Step 4 Push in on the putty knife to release the clip while lifting up on the corner of the top. Do the same to the other front corner.

Step 5 Slowly raise the top.

Step 6 Support the top against the wall.

REPLACEMENT

Step 7 Slowly lower the top.



Step 8 Press down on the front corners of the top until it snaps into place.

Step 9 Remove the tape from the lid.

Step 10 Plug in washer or reconnect power.

PROCEDURE 2

⚠WARNING

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

Bottom Access

There are two ways to service parts in the bottom of the automatic washer.

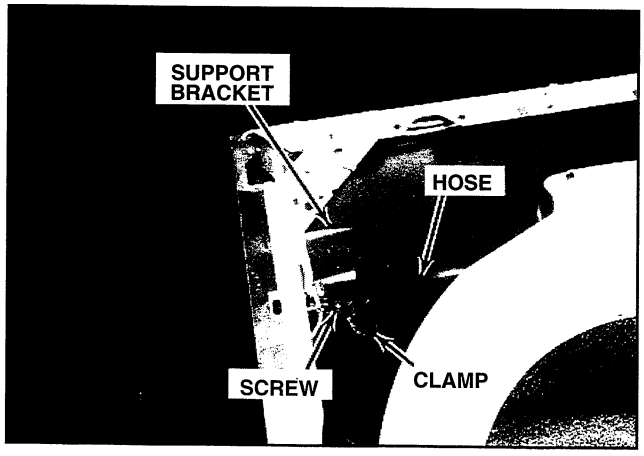
See Type A for raising the cabinet or Type B for laying the automatic washer down.

TYPE A

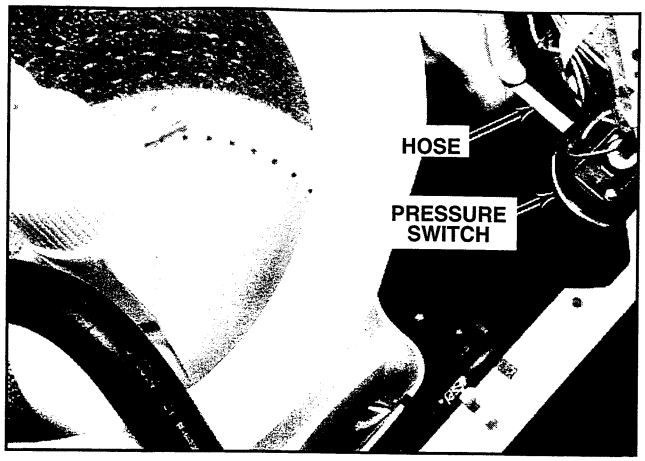
Step 1 Unplug washer or disconnect power.

Step 2 Remove any hoses that are connected to water faucets.

Step 3 Raise the top.

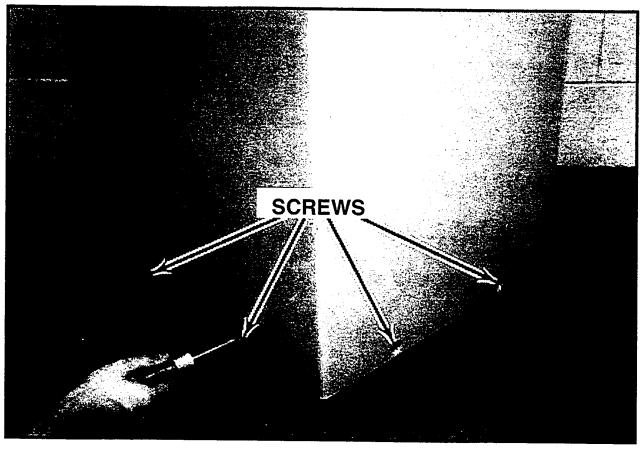


Step 4 Using a screwdriver or nutdriver, remove the screw which holds the drain hose and clamp to a support bracket.

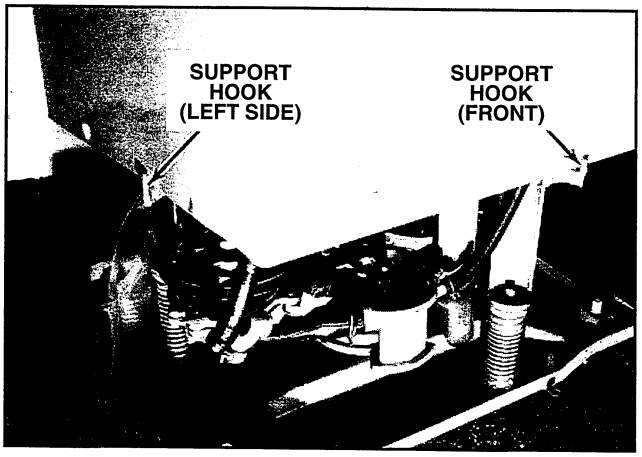


Step 5 Remove the pressure switch hose from the top of the air dome.

Step 6 Carefully lower the top.



Step 7 Using a screwdriver or nutdriver, remove the screws from around the bottom of the cabinet (two on each side and two in the back).



Step 8 Lift up on the cabinet and rest it on the two support hooks, one on the left side plus one in the right front corner.

REPLACEMENT

⚠WARNING

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 Lower the cabinet over the baseplate.

Step 10 Using a screwdriver or nutdriver, insert the screws through the cabinet (bottom) into the base and tighten.

Step 11 Carefully raise the top.

Step 12 Push the pressure switch hose over the port of the air dome.

Step 13 Using a screwdriver or nutdriver, insert the screw through the drain hose clamp into the support bracket and tighten.

Step 14 Lower the top.

Step 15 Plug in washer or reconnect power.

TYPE B

Step 1 Unplug washer or disconnect power.

Step 2 Remove any hoses that are connected to water faucets.

Step 3 Using a screwdriver or nutdriver, remove the two back screws.

Step 4 Tape the lid shut.

NOTE: To protect the finish on the cabinet or floor, lay a pad (rug or blanket) on the floor before laying the automatic washer down.

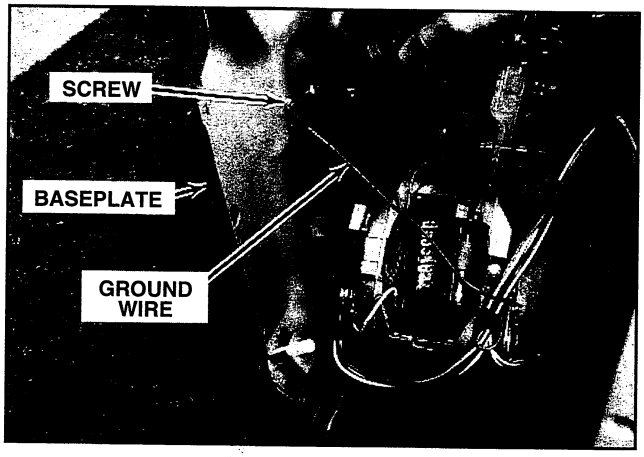
NOTE: Do not leave the washer lying down for any length of time as this may cause the oil in the gearcase to leak out.

Step 5 Carefully lay the automatic washer on its back.

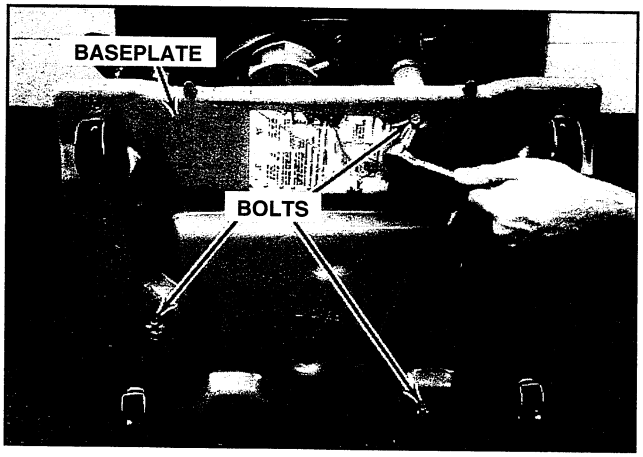
Step 6 Place a 2 x 4 — 2 feet long — under the bottom edge of the automatic washer.

Step 7 Using a screwdriver or nutdriver, remove the bottom side screws.

Step 8 Grab the casters and slide the baseplate, gearcase, and tub out the cabinet to the bottom of the tub.



Step 9 Using a nutdriver, remove the screw which holds the green ground wire on the inside of the baseplate.



Step 10 Using a socket wrench, loosen the three bolts (if your baseplate has the keyhole slots) which hold the baseplate to the springs.

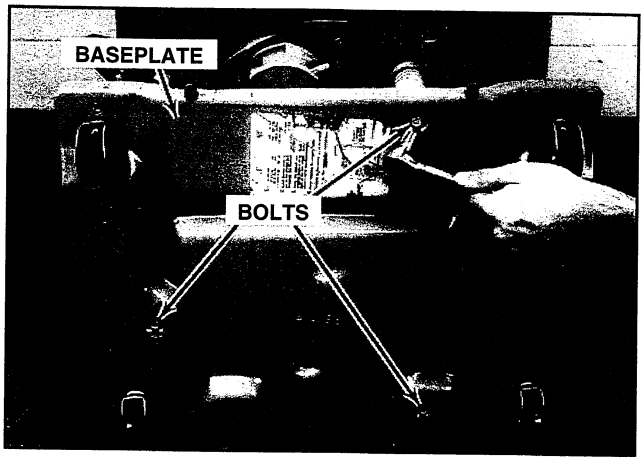
If your baseplate does not have these keyhole slots, the three bolts which hold the baseplate to the springs must be removed.

Step 11 Set the baseplate to one side.

REPLACEMENT

Step 12 Replace the baseplate on the three springs.

NOTE: The slanted casters are in the back.



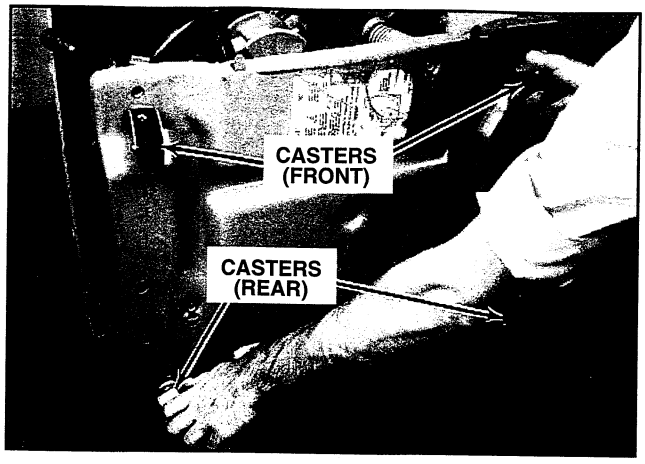
Step 13 Using a socket wrench, tighten the three bolts.

On some models the bolts will have to be inserted through the baseplate into the springs and tightened.

⚠WARNING

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 14 Using a nutdriver, insert the screw through the green ground wire into the baseplate and tighten.



Step 15 Grab one front caster and one opposite rear caster.

Step 16 Slide the tub, gearcase and baseplate back into the cabinet. Some rocking of the baseplate may be required when sliding this into the cabinet.

Step 17 Using a nutdriver or screwdriver, insert the bottom side screws through the cabinet into the baseplate and tighten.

Step 18 Using a nutdriver or screwdriver, insert the bottom back screws through the cabinet into the baseplate and tighten.

Step 19 Raise the top.

Step 20 Check all hoses to be sure they are properly connected and are not pinched in any way.

Step 21 Check the water shield making sure they are covering the timer and water level switch.

Step 22 Lower the top.

Step 23 Plug in washer or reconnect power.

PROCEDURE 3

⚠WARNING

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

Drive Belt

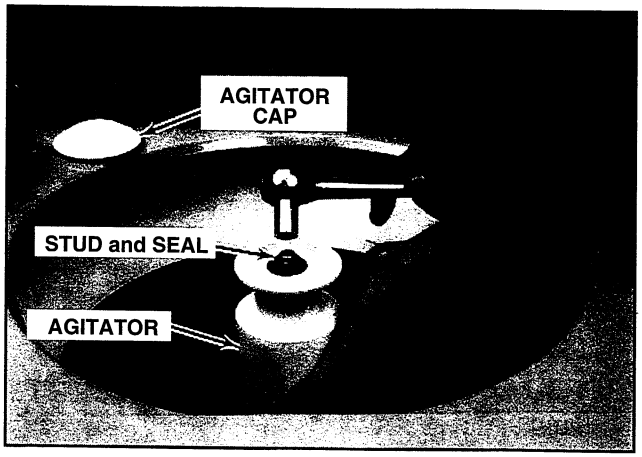
The drive belt fits around the pump pulley, main drive pulley, motor pulley, spin pulley, and an idler pulley. The drive motor pulley moves the belt around these pulleys, causing the automatic washer to agitate, spin, circulate, or drain the water.

Step 1 Unplug washer or disconnect power.

Step 2 Lift the lid.

Step 3 Insert a screwdriver into the slot between the insert (cap) and agitator, and pry.

NOTE: On some models you will have to screw the cap off the agitator.



Step 4 Using a socket wrench, hold the agitator while removing the stud and seal.

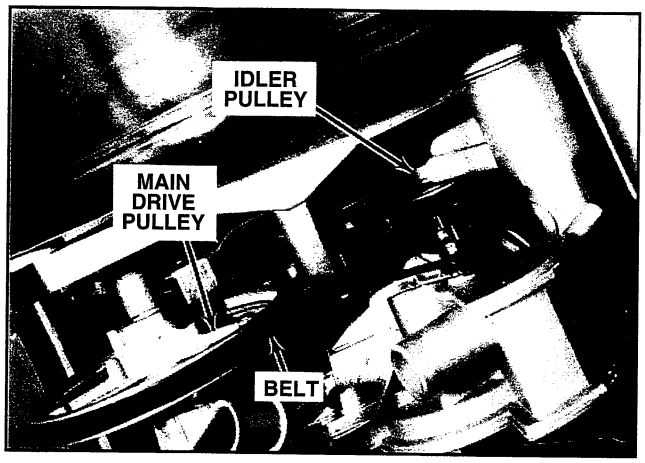
Step 5 Carefully remove the agitator by lifting straight up.

Step 6 Lower the lid.

Step 7 Tape the lid shut.

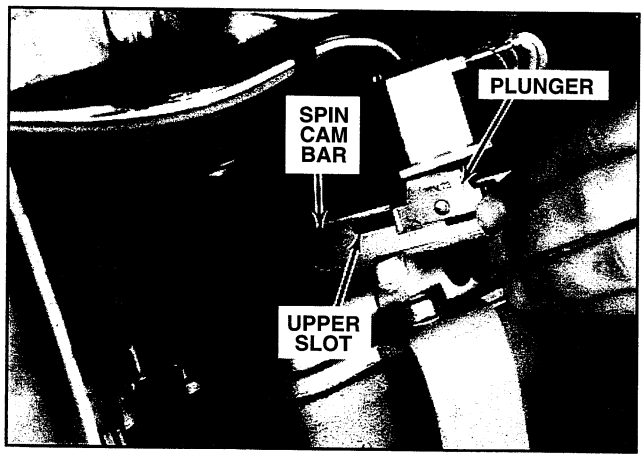
Step 8 See "Bottom Access."

NOTE: Be careful when moving the idler pulley, as it may spring back.



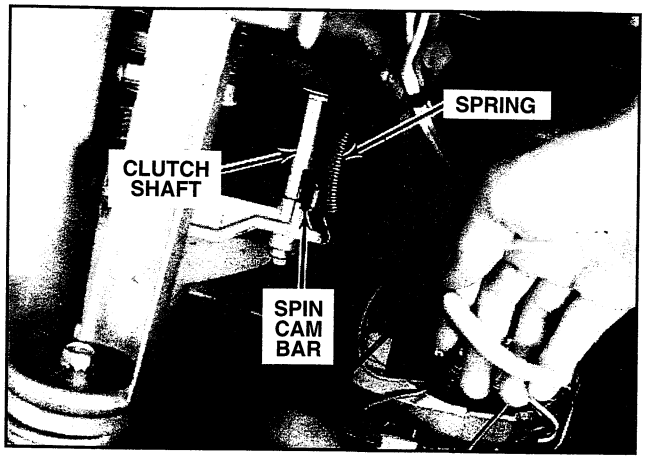
Step 9 Using your hand, push the idler pulley toward the middle and then remove the belt.

Step 10 Slowly move the idler pulley back.

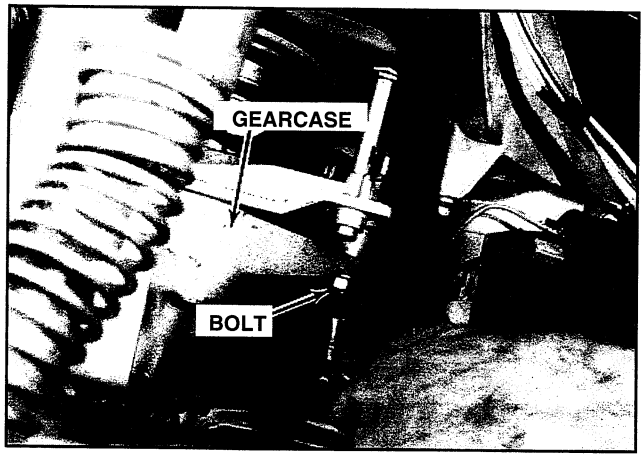


Step 11 To make sure the spin cam bar is all the way back, hold the spin plunger up while turning the main drive pulley until the spin cam bar is in the spin position or pulled all the way back (plunger and rivet are in the upper slot).

This procedure will pull the spin cam bar back from the clutch shaft, allowing the shaft to move downward.

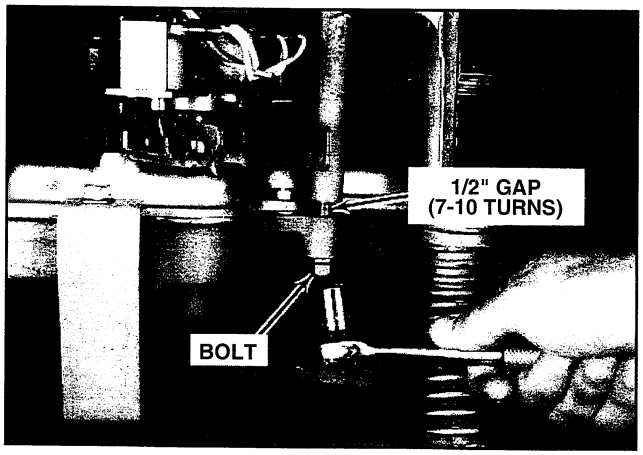


Step 12 Using needle nose pliers, remove the spring.



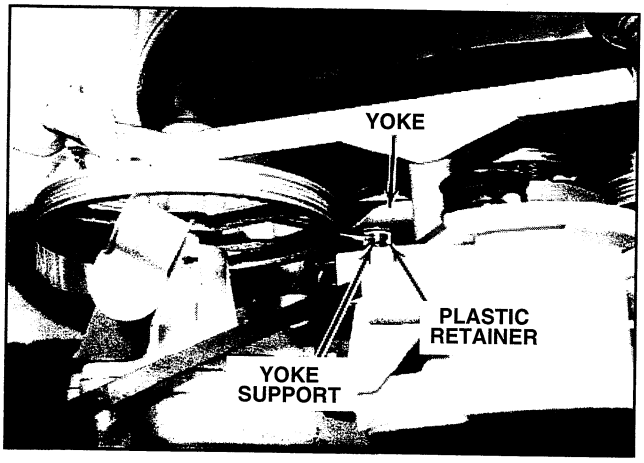
Step 13 Using a socket wrench, remove the gearcase mounting bolt by the motor.

Step 14 Using a socket wrench, remove the gearcase mounting bolt by the pump.



Step 15 Using a socket wrench, loosen the gearcase mounting bolt which is next to the control magnet about 1/2 inch or 7-10 turns.

NOTE: Be careful not to break the ears off the plastic retainer.



Step 16 Using a screwdriver, place it between the plastic retainer and yoke support, and pry.

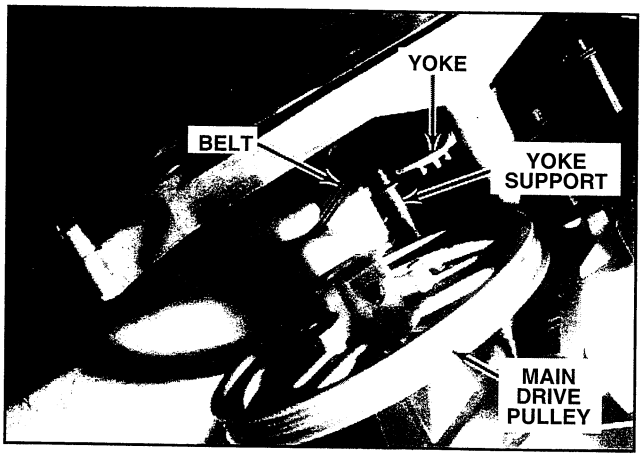
NOTE: Your washer may have two washers on top of this clutch shaft which could fall off. Be careful not to lose them.

Your washer may have used a nut on top of this clutch shaft. Be careful not to turn this.

Step 17 Lift the yoke from the yoke support and the clutch shaft, and turn slightly.

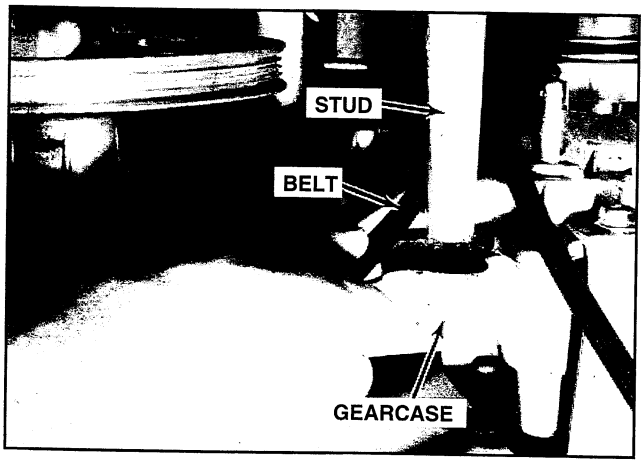
Step 18 Hold the bottom of the tub while pulling the gearcase out until it stops against the bolts.

NOTE: If the belt is not to be reused it may be cut and removed. If it is to be reused, proceed as follows.



Step 19 Grab the portion of the belt in the back of the machine and slide this toward you, over the main drive pulley and yoke support.

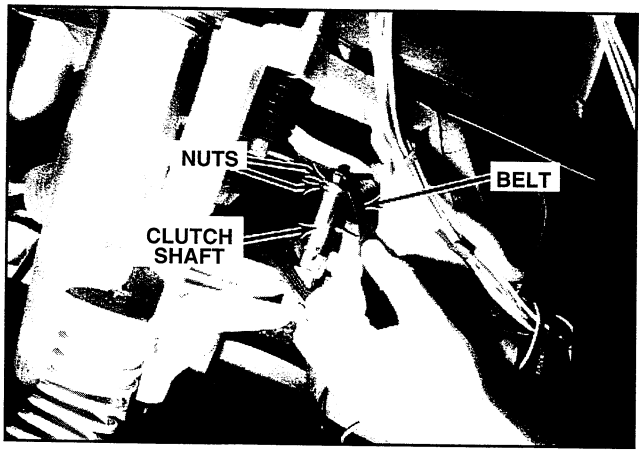
NOTE: The pump was removed to clarify the picture. This pump does not have to be removed.



Step 20 Now slide this belt toward you, between the stud (by the pump) and gearcase.

Step 21 On newer washers, the stud by the motor did not go all the way up to the bottom of the tub.

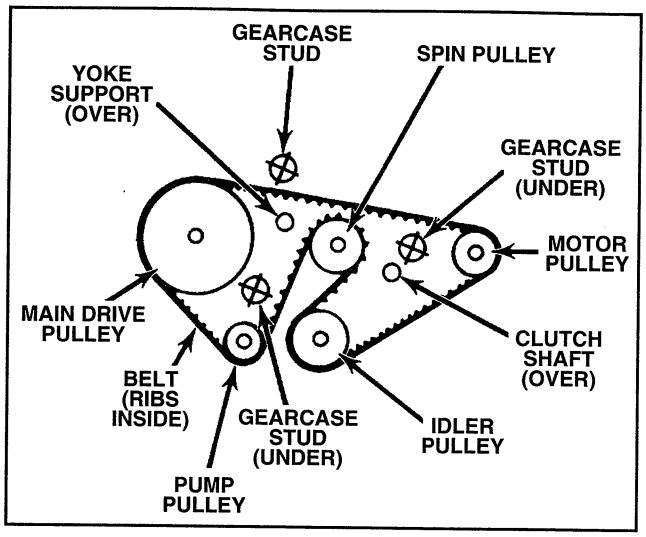
On older washers, slide the belt toward you, between the stud (by the motor) and gearcase.



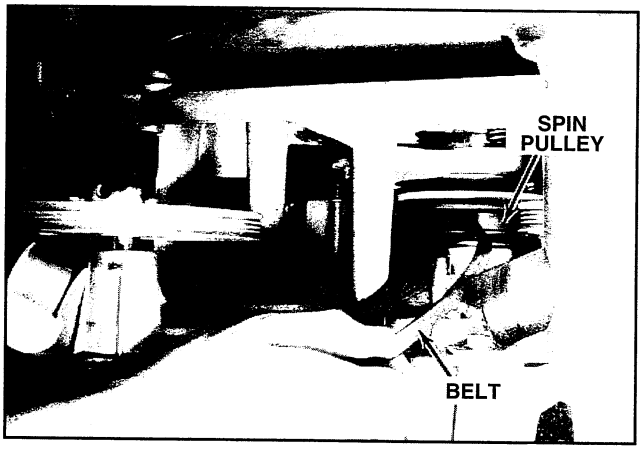
Step 22 Slide the belt (toward you) over the clutch shaft.

Step 23 Remove the belt.

REPLACEMENT

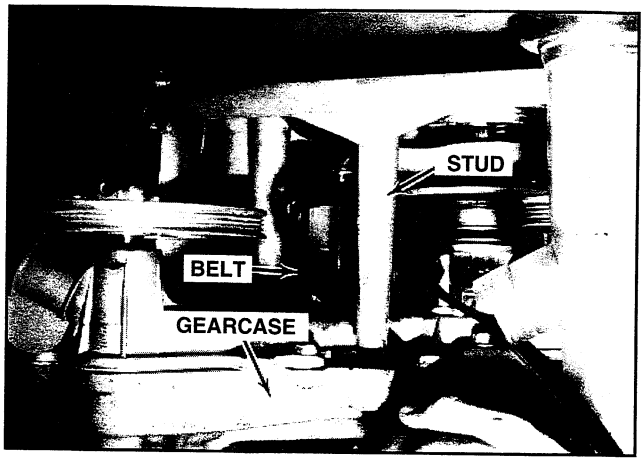


TOP FRONT VIEW

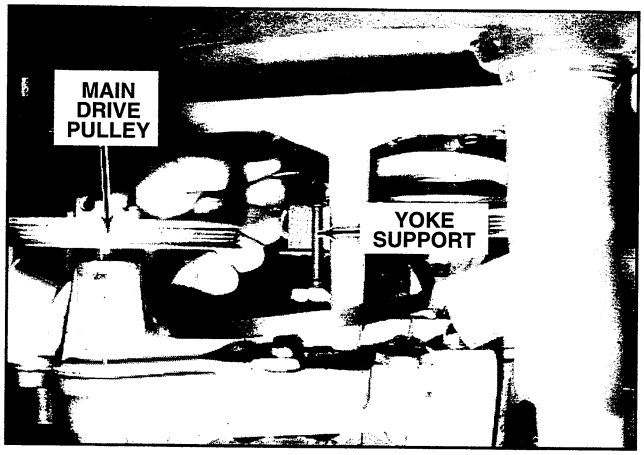


Step 24 Loop the new belt (ribs inside) behind the back side of the spin pulley.

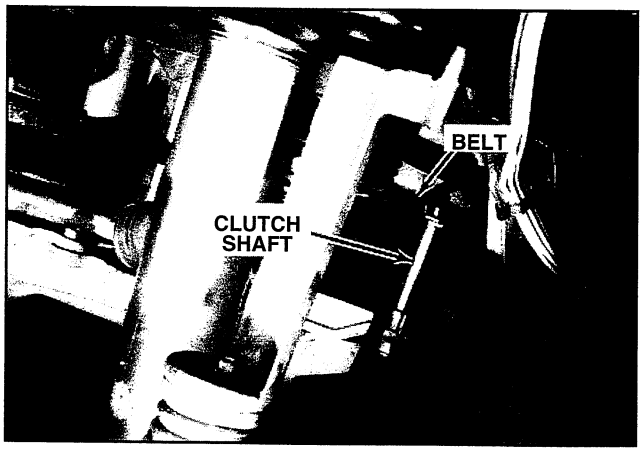
NOTE: The pump was removed to clarify the picture. This pump does not have to be removed.



Step 25 Slide the loop of the belt away from you, between the stud (by the pump) and gearcase.



Step 26 Slide the loop of the belt away from you, over the yoke support and main drive pulley.



Step 27 Slide the loop of the belt away from you, over the clutch shaft.

Step 28 On new washers, the stud by the motor did not go all the way up to the bottom of the tub.

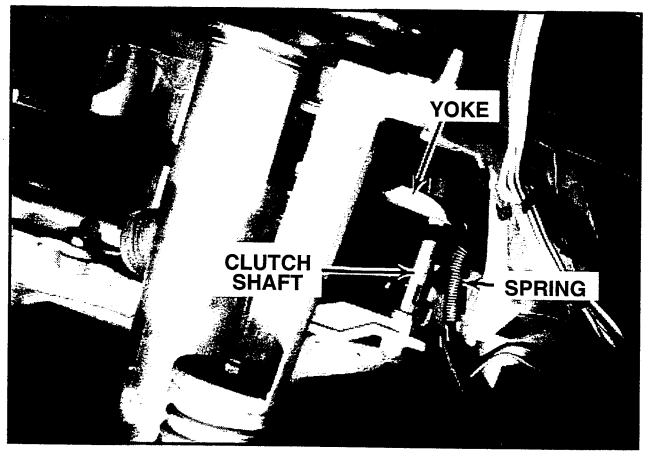
On older washers, slide the loop of the belt away from you, between the stud (by the motor) and gearcase.

NOTE: Do not put the belt on the pulleys yet.

Step 29 Be sure the two washers (if used) or nut, are on the clutch shaft.

Step 30 Be sure the ears on the plastic retainer in the yoke are not broken.

Step 31 Snap the retainer on the yoke support.



Step 32 Using needle nose pliers, place on end of the spring in the hole in the yoke and the other end of the spring in the hole of the gearcase.

Step 33 Hold onto the tub while sliding the gearcase back into the washer.

NOTE: Lift on the bottom of the gearcase. This will line up the spin tube and agitator shaft and should prevent binding. If this is not done properly it could cause a slow spin speed.

Step 34 Finger tighten the bottom gearcase mounting bolt.

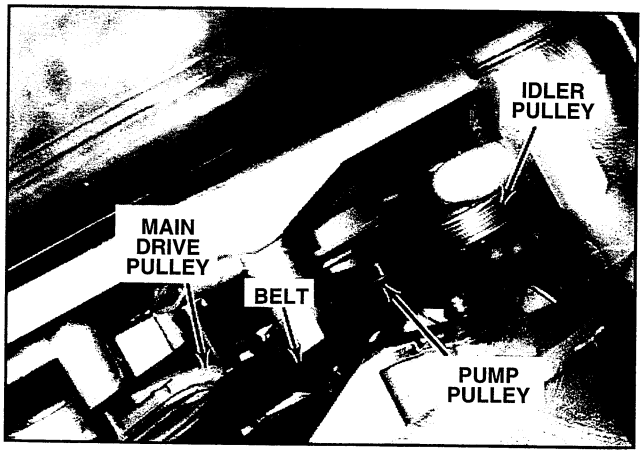
Step 35 Insert the gearcase mounting bolt by the pump, and finger tighten only.

Step 36 Insert the gearcase mounting bolt by the motor, and finger tighten only.

Step 37 Using a socket wrench, tighten these three gearcase mounting bolts.

Step 38 Place the belt around the motor pulley, main drive pulley and pump pulley.

NOTE: Be careful when moving the idler pulley, as it may spring back.



Step 39 Use your hand and push the idler pulley toward the middle.

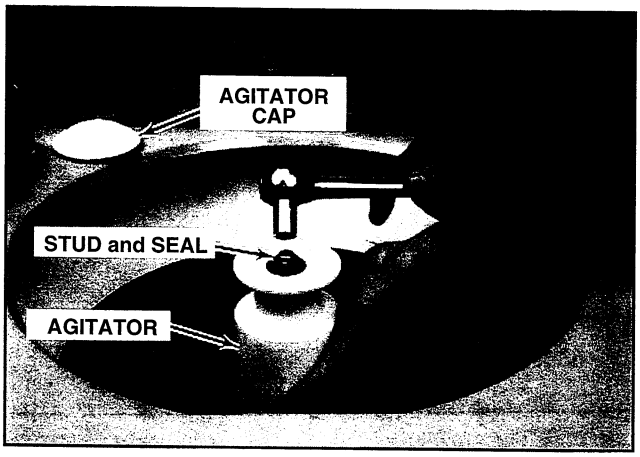
Step 40 Place the belt around the idler pulley.

Step 41 See REPLACEMENT in "Bottom Access."

Step 42 Remove the tape and raise the lid.

Step 43 Replace the agitator on the shaft.

Rotate the agitator until it matches the grooves on the shaft, then push the agitator down.



Step 44 Using a socket wrench, insert the stud and seal on top of the agitator and tighten.

Step 45 Replace the insert (cap) on top of the agitator and press down until it snaps into place.

Step 46 Close the lid.

Step 47 Plug in washer or reconnect power.

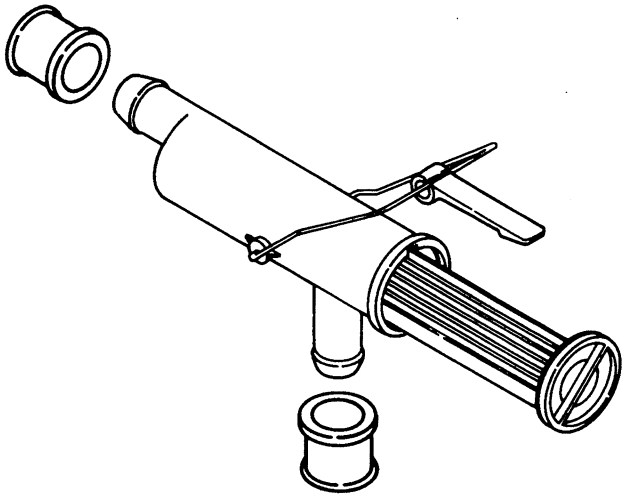
NOTES

SECTION P

Automatic Washer Accessories

DRAIN PROTECTOR

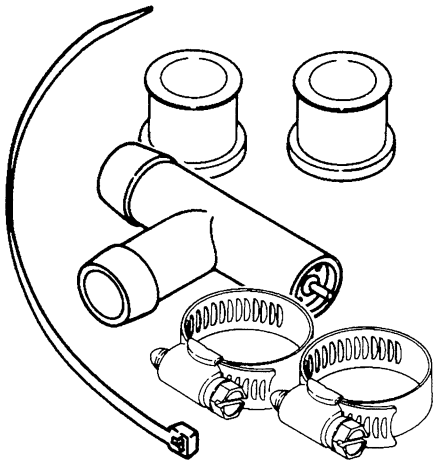
367031



DESIGNED TO BREAK UP THE LARGER CHUNKS OF LINT BEFORE BEING DISCHARGED INTO THE DRAIN.

SIPHON BREAK

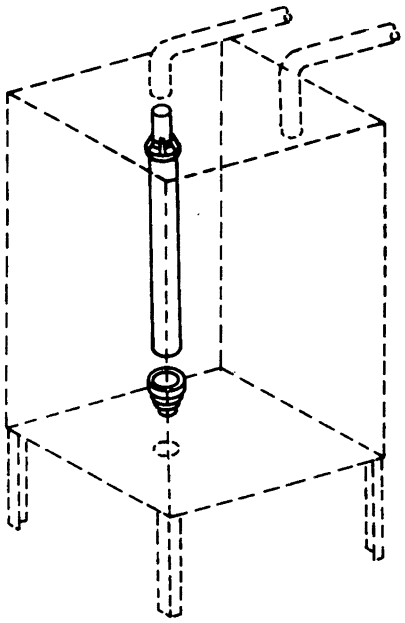
285320



PROVIDES AN AIR GAP IN THE DRAIN LINE TO PREVENT SIPHONING OF DIRTY WATER BACK INTO THE WASHER.

STANDPIPE

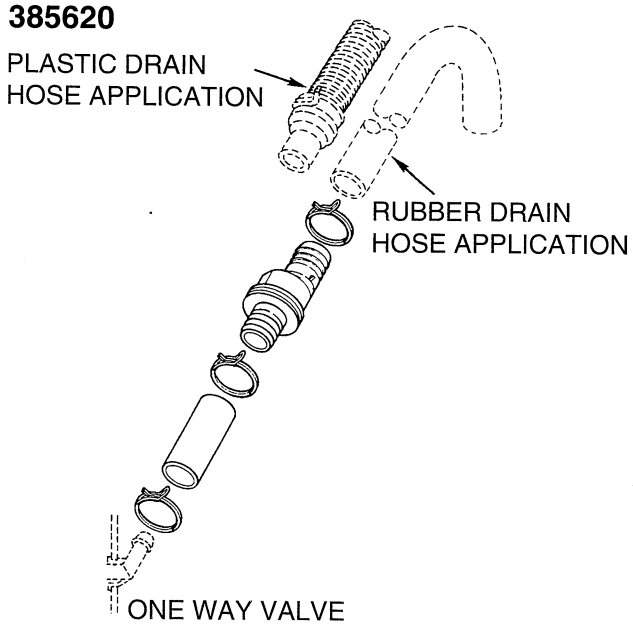
89121



ALLOWS A SUDS SAVER AUTOMATIC WASHER TO BE USED WITH A SINGLE LAUNDRY TUB.

DRAIN VALVE

385620



USED TO REDUCE GURGLING DURING PUMP-OUT AND SPIN CYCLES.

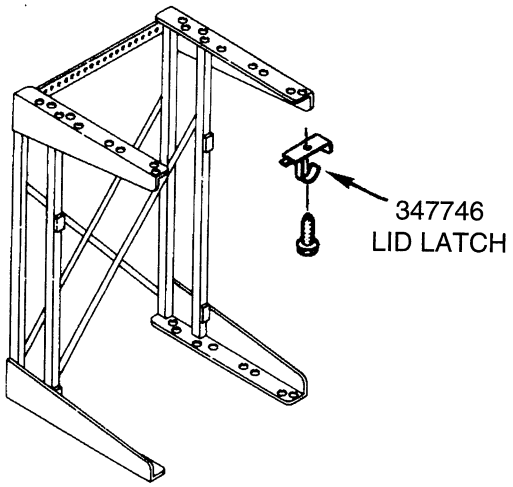
SEE YOUR AUTHORIZED WHIRLPOOL FACTORY SERVICE BRANCH FOR ORDERING

STAND KIT

49971 — White

49978 — Almond
INCLUDES HARDWARE PARTS BAG.

685427 — Hardware Parts Bag



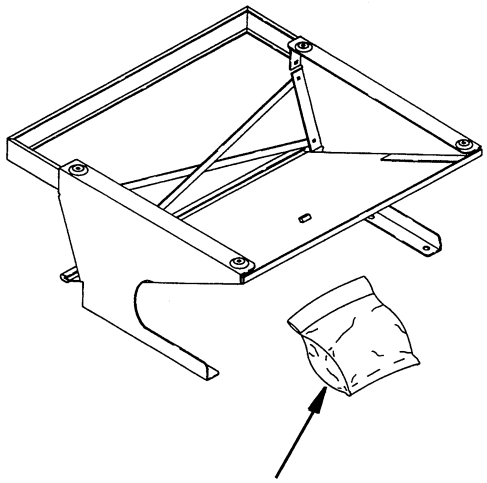
RACK MUST BE SECURED TO WALL AND DRYER BOLTED TO RACK.

ALLOWS WASHER TO BE ROLLED OUT FROM UNDER THE DRYER FOR USE.
FOR COMPACT WASHER AND DRYER MODELS.

STACK KIT

3390175 — White

3390196 — Almond

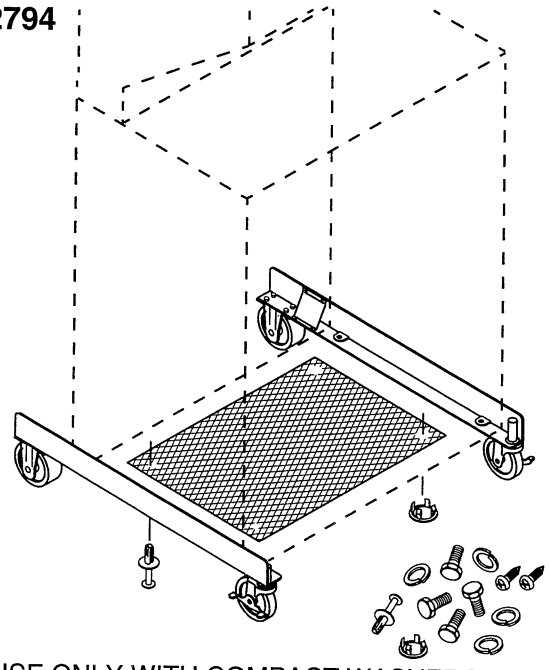


DO NOT USE WITH GAS DRYER. IF WASHER IS PORTABLE, WASHER MUST BE CONVERTED TO PERMANENT INSTALLATION USING 285418 KIT.

FOR 1994 AND OLDER COMPACT WASHER AND ELECTRIC DRYER MODELS.

CASTER KIT

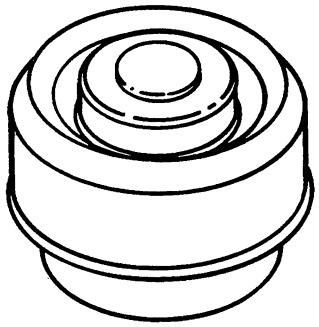
3392794



FOR USE ONLY WITH COMPACT WASHERS.

FABRIC CONDITIONER DISPENSER

350415 — White

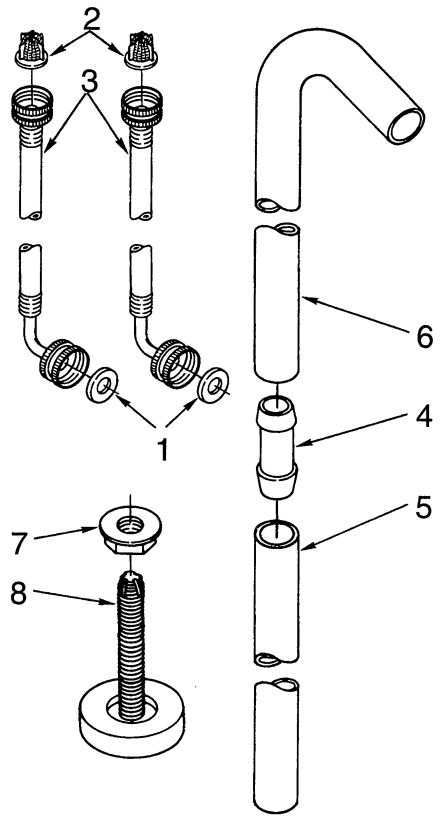


FITS WHIRLPOOL AGITATORS.

COMPACT PERMANENT INSTALLATION KIT

285175

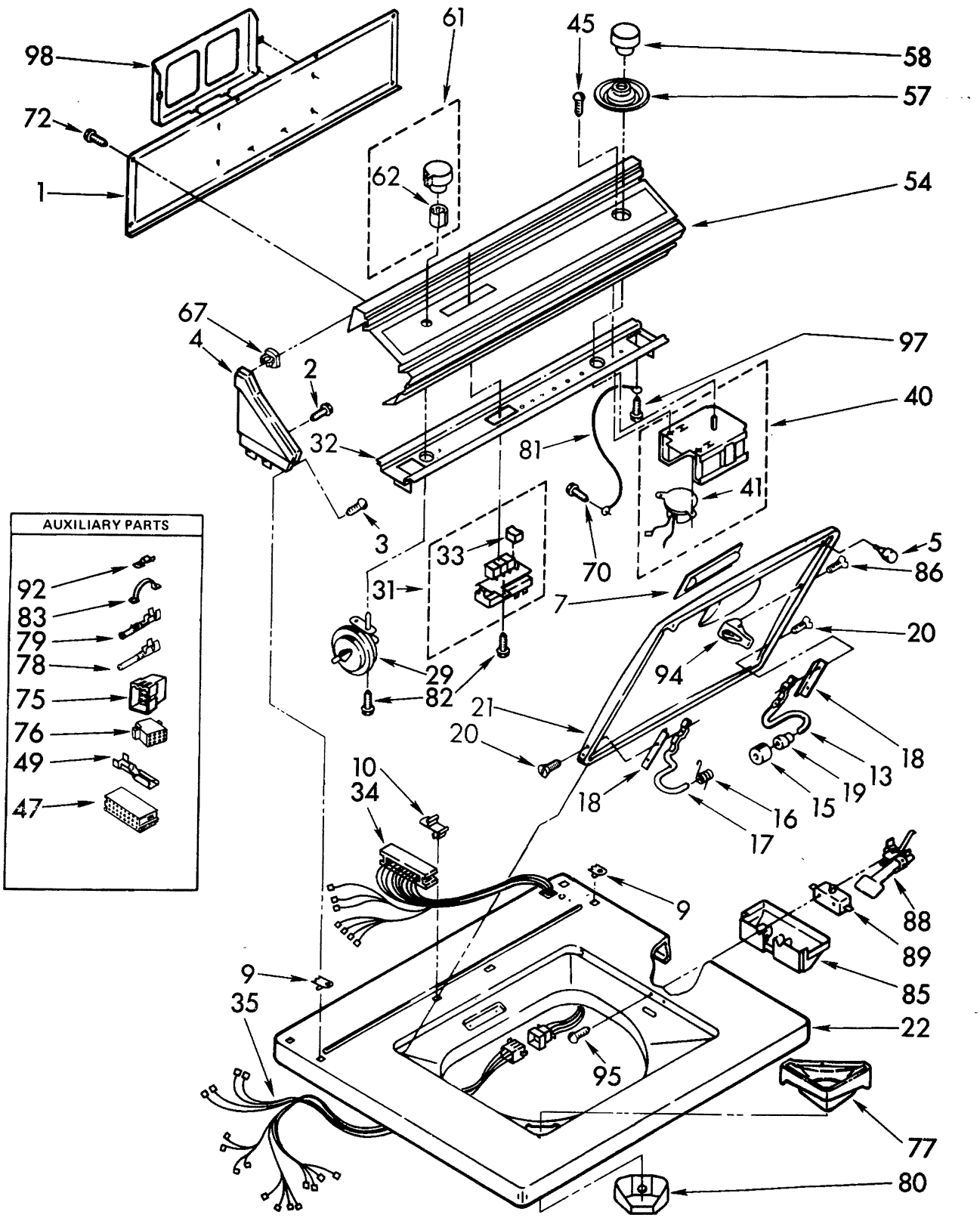
DESIGNED FOR MODELS WITH WATER INLET CAPPED.



ILLUS. NO.	PART NO.	DESCRIPTION
1	16123	Washer, Flat (2)
2	353362	Screen, Washer Filter (2)
3	76314	Hose, Fill (2)
4	16272	Connector, Drain Hose
5	96746	Hose, Drain
6	285458	Hose, Drain
7	359304	Nut (4)
8	389102	Feet, Leveling (4)

ALLOWS CONVERSION FROM A PORTABLE TYPE COMPACT MODEL TO A STATIONARY PERMANENT INSTALLATION.

TYPICAL TOP AND CONSOLE PARTS



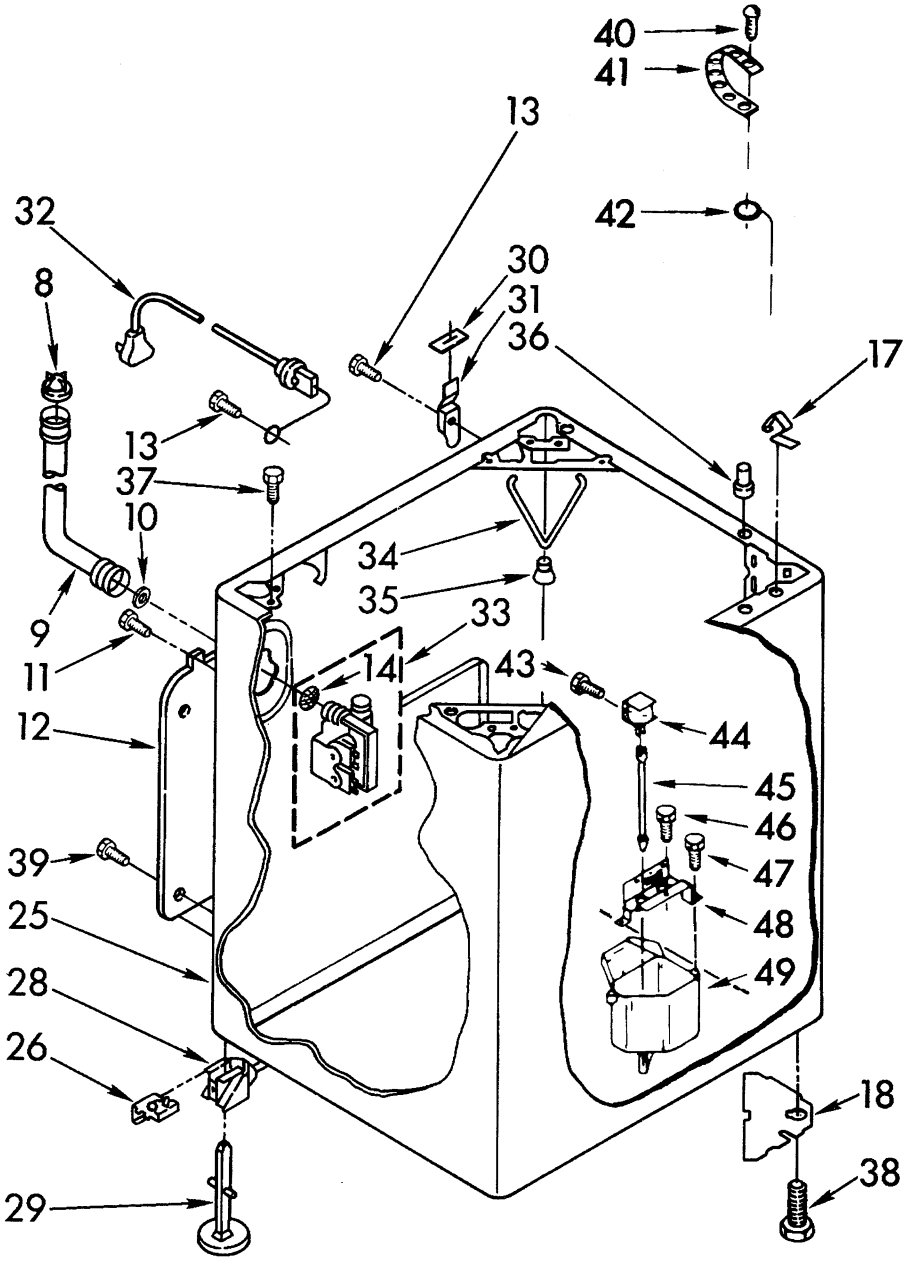
TYPICAL TOP AND CONSOLE PARTS

Illus. No.	DESCRIPTION
1	Panel, Rear
2	Screw, # 13-16 x 5/8 (2)
3	Screw (2)
4	Cap, End (2)
5	Bumper, Rubber
7	Handle, Lid
9	Nut, Push-In (2)
10	Stop, Push-In Top
13	Hinge, R.H.
15	Bumper, Hinge
16	Spring, Hinge (L.H.)
17	Hinge, L.H.
18	Gasket, Hinge
19	Bearing, Hinge
20	Screw (4)
21	Lid
22	Top
29	Switch, Water Level
31	Switch, Temperature

Illus. No.	DESCRIPTION
32	Bracket, Control
33	Push-button
34	Harness, Console
35	Harness, Cabinet
40	Timer
41	Motor, Timer
45	Screw, # 10-32 x .31
47	Block, Disconnect
49	Terminal (Female)
54	Panel, Control
57	Dial, Timer
58	Knob, Timer
61	Knob (Water Level)
62	Clip, Control Knob
67	Nut, Push-In (2)
70	Screw, # 10 x 3/8
72	Screw, # 8-18 x 1/2 (4)
75	Cap, Terminal (Console Harness)

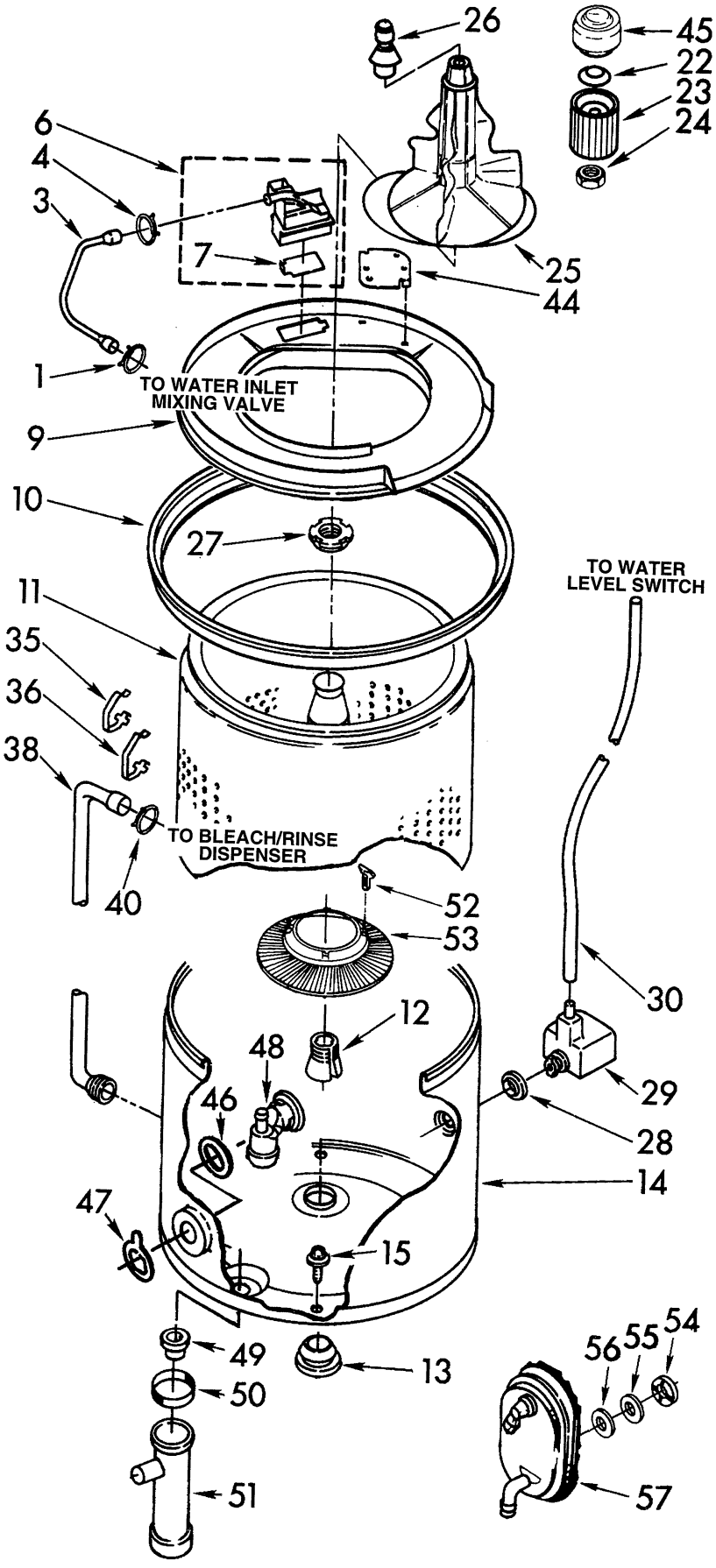
Illus. No.	DESCRIPTION
76	Plug, Terminal (Cabinet Harness)
77	Bezel, Dispenser
78	Terminal (Male)
79	Terminal (Female)
80	Tray, Dispenser
81	Wire, Ground
82	Screw (2)
83	Clip, Harness
85	Shield, Lid Switch
86	Screw and Washer
88	Switch, Actuator
89	Switch, Lid
92	Clip, Harness
94	Strike, Lid Switch
95	Screw and Washer (2)
97	Screw, # 10-16 x 1/2
98	Rack, Literature

TYPICAL CABINET PARTS



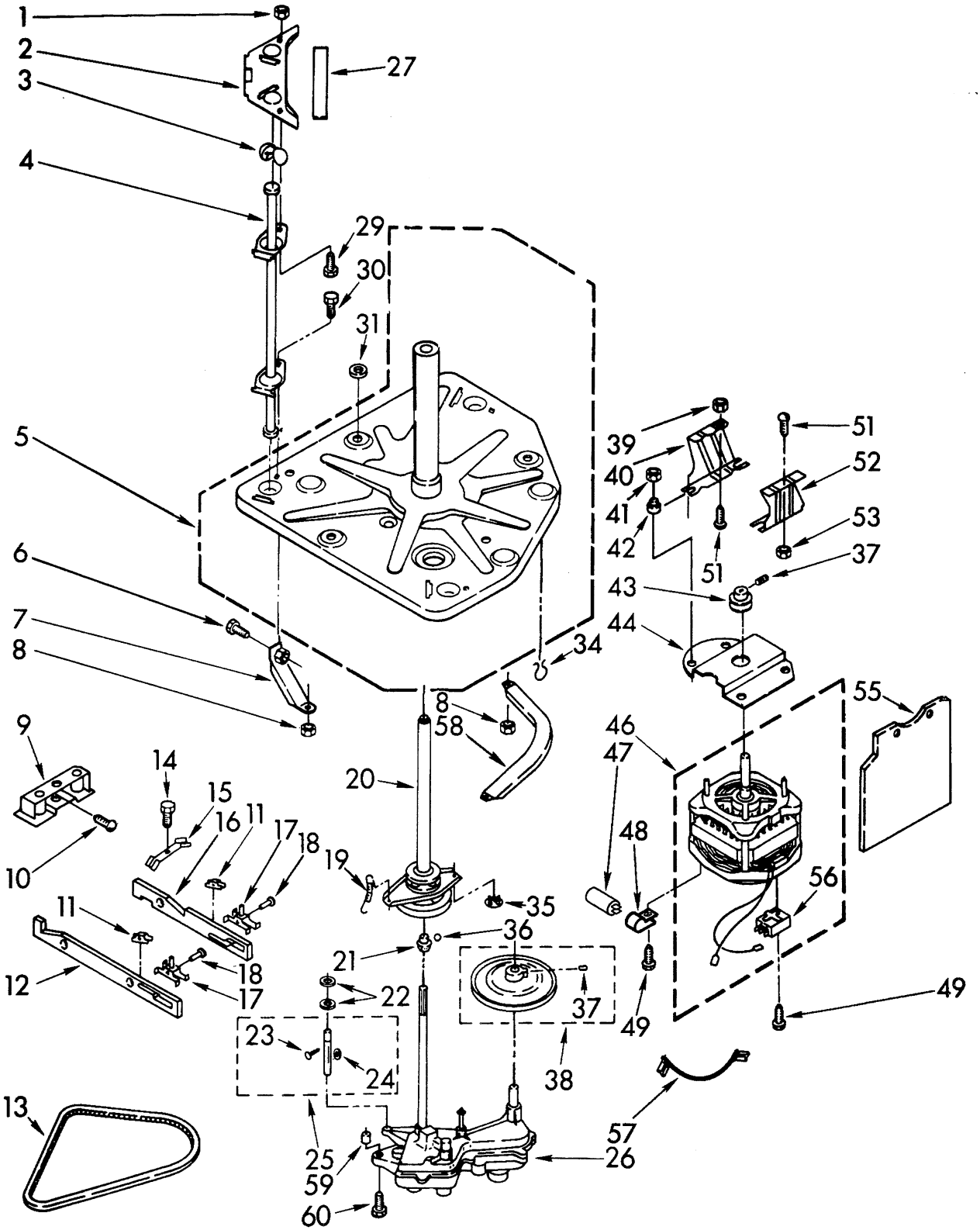
Illus. No.	DESCRIPTION
8	Screen, Filter (2)
9	Hose, Inlet (2)
10	Washer, Rubber (2)
11	Screw, # 10-24 x 3/8
12	Panel, Rear
13	Screw, # 10-16 x 1/2
14	Screen, Filter (2)
17	Lock, Front Top (2)
18	Plate, Gusset
25	Cabinet
26	Clip, Leveling Mechanism (2)
28	Link, Leveling
29	Foot, Rear (2)
30	Pad, Hinge (2)
31	Hinge, R.H. and L.H.
32	Cord, Power
33	Valve, Inlet Mixing
34	Spring, Snubber
35	Snubber
36	Locator, Top (2)
37	Screw, # 10-16 x 1/2
38	Foot, Front (2)
39	Screw, # 10-16 x 1/2
40	Screw, Ground # 10-24 x 1
41	Strap, Ground
42	Wire, Ground
43	Screw
44	Coil
45	Rod and Stopper
46	Screw, # 10-16 x 1/2
47	Screw
48	Bracket, Dispenser
49	Reservoir

TYPICAL TUB AND BASKET PARTS



Illus. No.	DESCRIPTION
1	Clamp, Hose
3	Hose, Water Inlet
4	Clamp, Hose
6	Inlet, Water
7	Gasket
9	Ring, Tub (Includes Illus. 44)
10	Gasket, Tub Ring
11	Basket
12	Block, Drive
13	Gasket, Center Post
14	Tub
15	Screw and Washer (4)
22	Insert, Agitator Cap
23	Cap, Agitator
24	Locknut
25	Agitator
26	Stud and Seal
27	Nut, Spanner
28	Seal
29	Dome, Air
30	Hose
35	Clip, Tub Ring
36	Clip, Tub Ring
38	Hose, Dispenser
40	Clamp, Hose
44	Plate, Snubber
45	Dispenser, Rinse
46	Gasket
47	Lockwasher
48	Funnel, Side
49	Hose, Tub Outlet
50	Clamp, Hose
51	Trap, Manifold
52	Clip
53	Filter, Basket Ring
54	Locknut
55	Washer, Fiber
56	Washer, Rubber
57	Filter, Tub

TYPICAL DRIVE SYSTEM PARTS



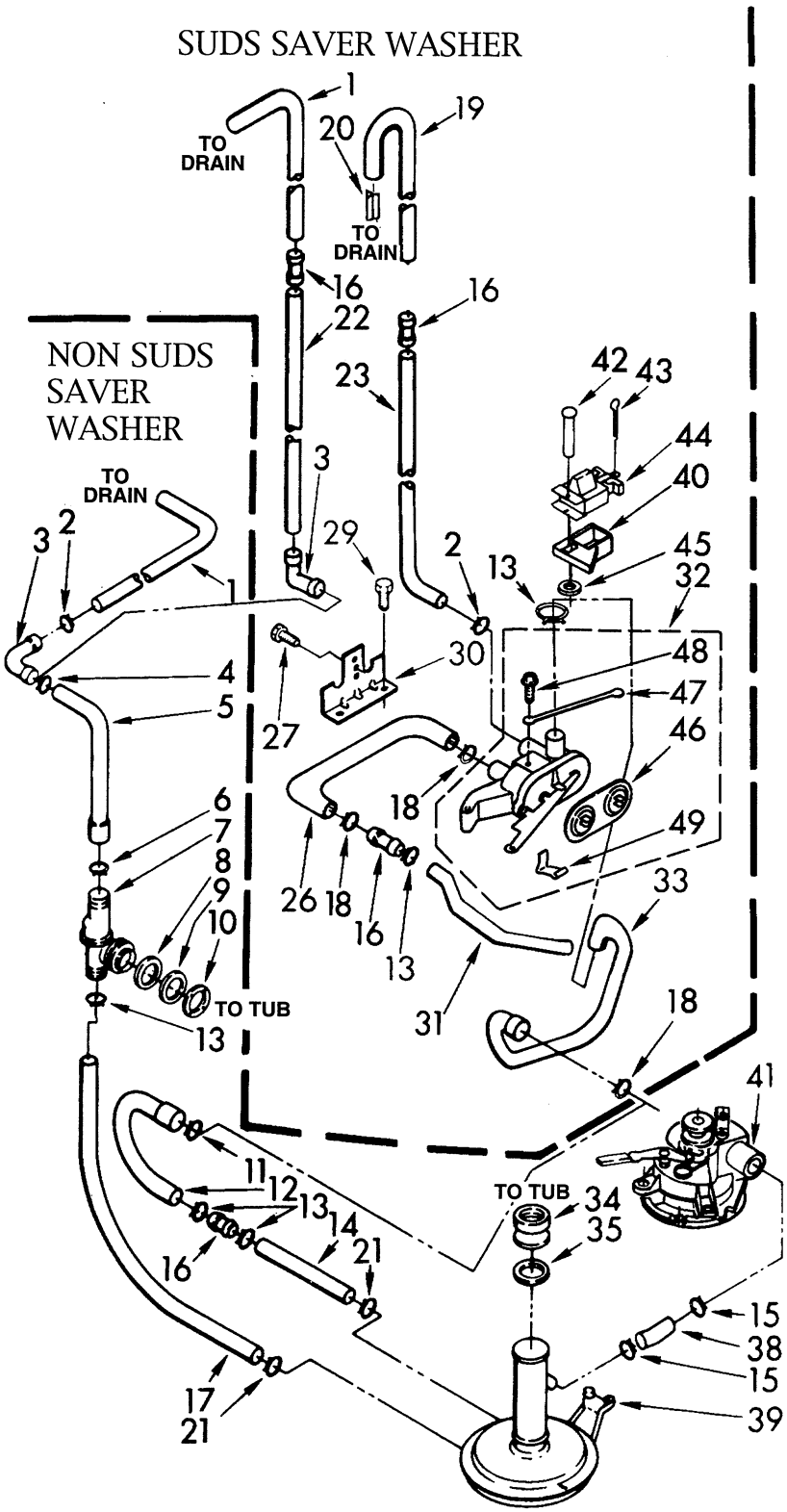
TYPICAL DRIVE SYSTEM PARTS

Illus. No.	DESCRIPTION
1	Nut, # 5/16-18
2	Cover, Front and Rear Gusset
3	Ball, Suspension (6)
4	Rod, Suspension (3)
5	Baseplate and Centerpost
6	Screw
7	Brace, Baseplate
8	Nut, # 5/16-24
9	Magnet, Control
10	Screw
11	Guide, Cam Bar
12	Bar, Cam (Spin)
13	Belt, Drive
14	Screw, # 1/4-28 x 1/2
15	Spring, Brake
16	Bar, Cam (Agitator)
17	Plunger (2)
18	Rivet (2)
19	Spring, Brake Yoke
20	Basket Drive and Brake

Illus. No.	DESCRIPTION
21	Support, Spin Tube
22	Washer
23	Pin, Roll
24	Roller, Basket Clutch Shaft
25	Shaft, Basket Clutch
26	Gearcase
27	Pad, Gusset Cover (6)
29	Bolt, # 5/16 x 1 (3) Bolt, # 5/16 x 5/8 (2) Bolt, Snubber (1)
30	Bolt, # 5/16-24
31	Gasket, Tub (7)
34	Clip, Harness
35	Retainer, Brake Yoke
36	Ball
37	Setscrew, # 5/16-18 x 1/2
38	Pulley, Main Drive
39	Locknut, # 3/8-16
40	Bracket, Motor Mounting

Illus. No.	DESCRIPTION
41	Nut
42	Grommet, Motor Bracket (4)
43	Pulley, Motor
44	Shield, Motor (upper)
46	Motor
47	Capacitor, Drive Motor
48	Clamp, Capacitor
49	Screw, Motor Grounding
51	Bolt, # 3/8-16 x 3/4
52	Bracket, Motor Mounting
53	Nut, # 3/8-16
55	Shield, Motor
56	Switch, Motor
57	Wire, Jumper
58	Brace, Manifold (1) Brace, Motor (1)
59	Spacer, Stud and Gearcase
60	Screw and Washer

TYPICAL WATER SYSTEM PARTS



Illus. No.	DESCRIPTION
1	Hose, Drain
2	Clamp, Hose
3	Connector, Hose
4	Clamp, Hose
5	Hose (Side Check Valve to drain)
6	Clamp, Hose
7	Valve, Side Check
8	Gasket, Rubber
9	Gasket, Fiber
10	Locknut
11	Clamp
12	Hose (Pump to Filter)
13	Clamp, Hose
14	Hose (Pump to Filter)
15	Clamp, Hose
16	Connector, Hose
17	Hose (Side Check Valve to Filter)
19	Hose (Suds Return)
20	Strainer, Hose
21	Clamp, Hose
22	Hose, Outlet
23	Hose (Suds Return)
26	Hose (Filter to Valve)
27	Screw and Washer
29	Screw, # 10-16 x 1/2
30	Bracket, Two-Way Valve
31	Hose (Valve to Filter)
32	Valve, Two-Way
33	Hose (Valve to Pump)
34	Hose, Tub Outlet
35	Clamp, Hose
38	Hose (Pump to Manifold)
39	Manifold and Filter
40	Shield, Two-Way Valve
41	Pump
42	Rivet
43	Pin, Cotter (1/8 x 3/4)
44	Solenoid
45	Clip, Push-On
46	Diaphragm
47	Strap, Ground
48	Screw, # 8A x 3/8
49	Clip, Retainer

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Whirlpool

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