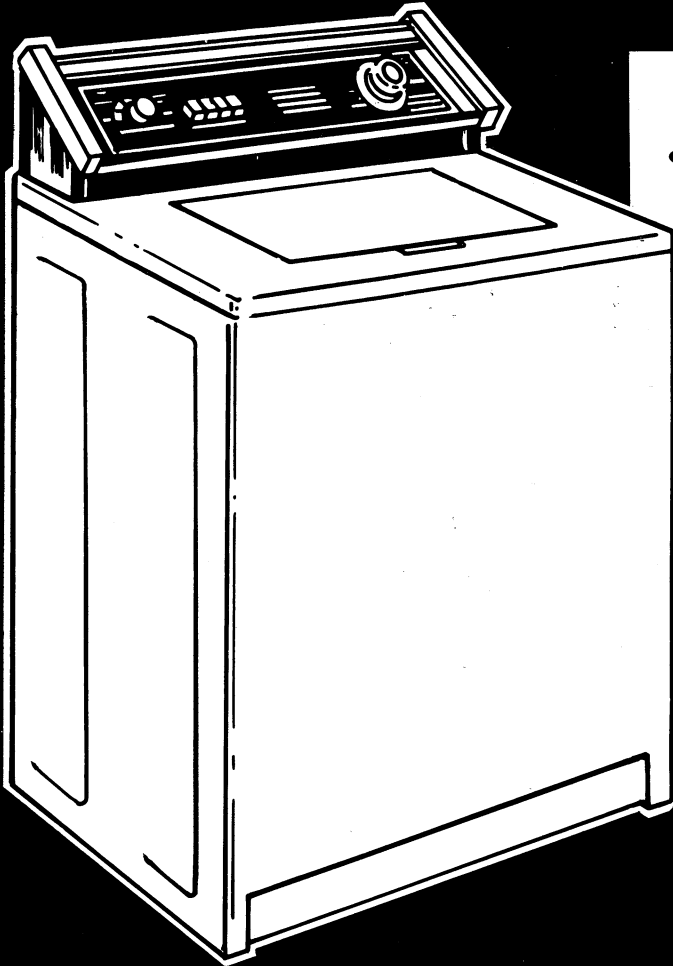


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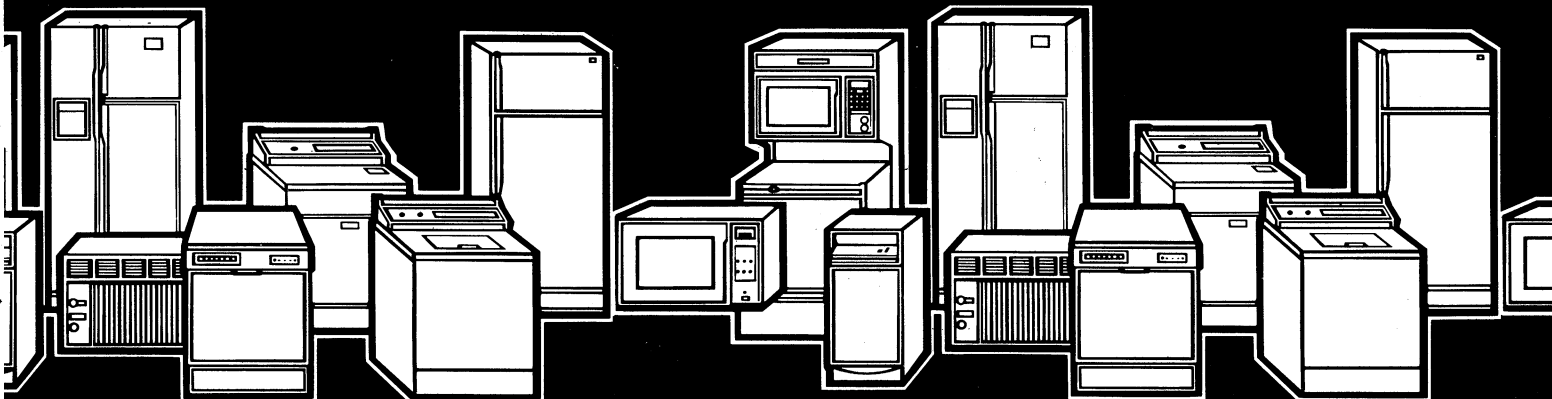
Repair Manual for Your



AUTOMATIC WASHER (Direct Drive)

Easy-to-Follow
Photographs
and Step-by-Step
Repair Procedures

e Units, Ranges, Microwave Ovens, Trash Compactors, Room Air Conditioners, Dehumidifiers, Automatic Washers, Clothes Dryers, Freezers, Refrigerator-Freezers, Ice Makers, Dishwashers, Built-In Oven



INTRODUCTION

This Do-It-Yourself Repair Manual should provide you with a basic understanding of the operation of your WHIRLPOOL® automatic washer. This manual includes step-by-step procedures for testing and/or replacing parts, instructions for reading wiring diagrams and timer sequence charts, problem solving charts, suggestions for preventive maintenance, and descriptions of product accessories. Although this manual covers most repair procedures for WHIRLPOOL automatic washers built over the past ten years, it does NOT cover any procedures for the electronic solid state controls.

A WHIRLPOOL clothes dryer is a complicated piece of equipment. The repairs covered in this manual require mechanical skills and the ability to follow written instructions. Understanding the section in this manual entitled "HOW TO READ WIRING DIAGRAMS AND TIMER SEQUENCE CHARTS" (section H) is a must to make many of the repairs.

WARNING

Personal Injury Hazard Or Property Damage

- Anyone who cannot use basic tools or follow written instructions should not attempt to repair the WHIRLPOOL automatic washer.
- No attempt should be made to repair your automatic washer if you do not fully understand the procedures included in this manual.
- When in doubt, contact your nearest authorized Whirlpool Factory Service Branch for assistance (section C).
- This manual includes numerous safety cautions and warnings.
- No attempt should be made to repair your WHIRLPOOL automatic washer without first carefully reading Section A, SAFETY FIRST, and all other safety cautions and warnings printed throughout this manual and on the automatic washer.

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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OR TESTING PROCEDURES ARE ATTEMPTED.**

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SECTION A

Safety First

THIS SECTION MUST BE CAREFULLY READ BEFORE ANY REPAIR OR TESTING PROCEDURES ARE ATTEMPTED.



The following statements appear throughout this manual and must be adhered to.



Indicates severe personal injury or death will occur if instructions are not followed.



Indicates a potentially hazardous situation in which personal injury or death could occur if instructions are not followed.



Indicates correct operating or maintenance procedures or practices of the appliance are followed in order to prevent damage to the product or property.

Any repairs on your WHIRLPOOL® automatic washer, if improperly performed, may result in personal injury or property damage. No repairs should be attempted unless the repair procedures and the safety cautions and warnings described in this section, throughout this manual and printed on the appliance, are carefully followed and fully understood.

- Be sure to read the entire procedure carefully before attempting the step-by-step testing and/or replacements.
- To help avoid electrical shock, no live electrical test will be made.
- Make sure you know where the plug fuses, or circuit breakers are located within your home.
- Before doing any repairs or testing of parts, disconnect the appliance from the electrical power supply (section B).
- It is recommended that a separate grounded 120VAC electrical circuit with a 15-amp. time-delay plug fuse or circuit breaker be used for this appliance.
- Be careful when doing any repairs or testing on this appliance as there may be sharp edges.
- Replace any damaged, pinched or frayed “power cord” or “wiring” which may be discovered when disconnecting or reconnecting the appliance.
- Do not use an extension cord.
- Do not cut off the grounding prong if your wall outlet does not accept the 3-prong power cord.
- This appliance must be grounded. Make sure all green ground wires are properly attached.
- When replacing parts or putting things back together, all wiring should be checked to be sure it is not crossing any sharp edges or pinched in some way which may cause an electrical problem.
- Carefully observe all safety cautions and warnings.
- During or following completion of the repair procedure, the appliance should not be operated unless all panels have been put back in place.
- When discarding an old appliance, always remove the door(s) to prevent accidental entrapment.
- Remember, use your appliance only for the job it was designed to do.
- Do not let children or others play, work or operate your appliance while it is being repaired.
- Use only genuine FSP® (Factory Specification Parts) replacement parts as specified for your model. This FSP trademark is shown on the parts carton and is a registered trademark of WHIRLPOOL CORPORATION that identifies quality-tested replacement parts.
- Do not attempt to operate your appliance unless it has been properly reinstalled (including electrical power connections and grounding connections) in accordance with the operating and installation instructions supplied for it by WHIRLPOOL CORPORATION. If you are unable to locate these installation instructions, contact your nearest authorized WHIRLPOOL FACTORY SERVICE BRANCH or WHIRLPOOL CORPORATION (section C).
- If you receive a shock from touching the appliance at any time during normal operation, immediately disconnect (section B) the electrical power supply. Find the electrical short and repair, or contact your nearest authorized WHIRLPOOL FACTORY SERVICE BRANCH or WHIRLPOOL CORPORATION (section C) for repair.
- Do not sit, stand on or abuse the appliance.

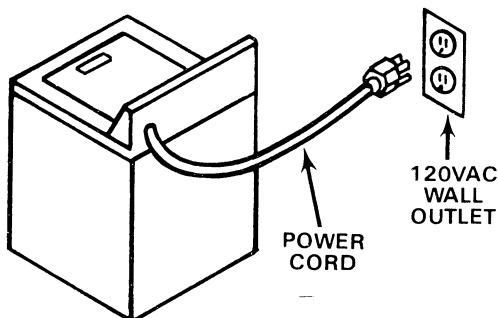
SECTION B

Electrical Power Supply Connections

**SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR
OR TESTING PROCEDURES ARE ATTEMPTED.**



PROCEDURE 1



TO DISCONNECT ELECTRIC POWER

STEP 1 Pull the power cord plug from the wall outlet.

TO CONNECT ELECTRIC POWER.

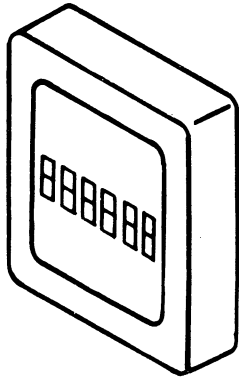
STEP 2 Plug the power cord plug into the wall outlet.

PROCEDURE 2

Household Service Box

NOTE: TO BE SURE YOU HAVE DISCONNECTED THE CORRECT CIRCUIT BREAKER OR REMOVED THE RIGHT PLUG FUSE, TURN THE APPLIANCE “ON” OR PLUG A PROPERLY WORKING TABLE LAMP INTO THE 120VAC WALL RECEPTACLE THE APPLIANCE WAS PLUGGED INTO. IF THE APPLIANCE OR LIGHT TURNS ON, YOU HAVE DISCONNECTED THE WRONG CIRCUIT. KEEP SELECTING DIFFERENT CIRCUITS UNTIL THE APPLIANCE OR LIGHT GOES OFF.

CIRCUIT BREAKER



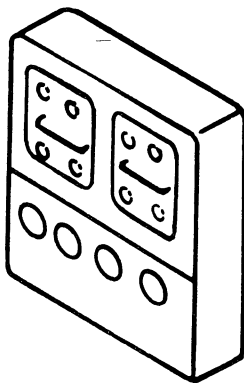
TO DISCONNECT ELECTRIC POWER

STEP 1 Move the switch to the OFF position.

TO CONNECT ELECTRIC POWER

STEP 2 Move the switch to the ON position.

PLUG FUSE



TO DISCONNECT ELECTRIC POWER

STEP 1 Unscrew the plug fuse out of the household service box.

TO CONNECT ELECTRIC POWER

STEP 2 Screw the plug fuse into the household service box.

SECTION C

Replacement Parts Information

When automatic washer problems occur, refer to the problem-solving charts in section I.

We have listed most problems, possible causes and what to do to help you. This manual also tells you how to test the parts and replace them. Be sure to read the **ENTIRE PROCEDURE** carefully before attempting the step-by-step testing and/or replacements.

A complete index in the back of the manual will help you find page numbers of various parts.

Model Number Plate

Open the lid and locate the metal or foil plate attached to the back of the lid well. 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.



**ALWAYS USE YOUR COMPLETE
MODEL NUMBER WHEN ORDERING
PARTS.**

**WRITE IN YOUR COMPLETE
MODEL NUMBER HERE**

TYPICAL MODEL NUMBER PLATE

WHIRLPOOL CORPORATION-BENTON HARBOR, MICHIGAN, U.S.A. 49022					
10	120	60	Whirlpool®		
AMPS	VOLTS	HZ	MARCA REGISTRADA		
STOCK			LISTED 1183		
LA8800S			UL		
MODEL			SERIAL		
LA8800XSNO			C73606270		

Parts Quality

An important step in the appliance repair procedure is the selection of FSP® (Factory Specification Parts) as replacements. Use of “fits-all” or “look alike” parts could result in early parts failure, safety hazard or substandard performance of your WHIRLPOOL appliance . . . and an unnecessary repeat of your repair efforts.

To be sure that the part(s) you purchase meet the exacting quality standards used to build every new WHIRLPOOL appliance, be sure to ask for genuine FSP replacement parts as specified for your model. FSP (Factory Specification Parts) is a registered trademark of WHIRLPOOL CORPORATION that identifies quality-tested replacement parts.

Ask for them by name FSP!



Where To Buy Parts

You can buy your genuine FSP (Factory Specification Parts) replacement parts from any authorized WHIRLPOOL FACTORY SERVICE BRANCH. To find the telephone number, look in the yellow pages of your phone directory under:

Appliances — Household — Major or Whirlpool Appliances or Factory Service Branches
Service & Repair

You can also purchase parts through the WHIRLPOOL CONSUMER ASSISTANCE CENTER. See below for the toll-free telephone number.

If You Need Help Finding Parts, Or An Authorized Whirlpool Factory Service Branch

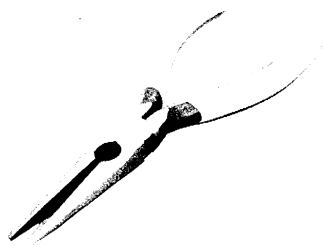
.....Call the toll-free WHIRLPOOL CONSUMER ASSISTANCE CENTER telephone number:
Continental U.S. - Alaska - Hawaii1 (800) 253-1301

.....or write to:
WHIRLPOOL CORPORATION
Consumer Relations Department
Administrative Center
2000 M63 North
Benton Harbor, Michigan 49022

SECTION D

Tools and Testing Equipment

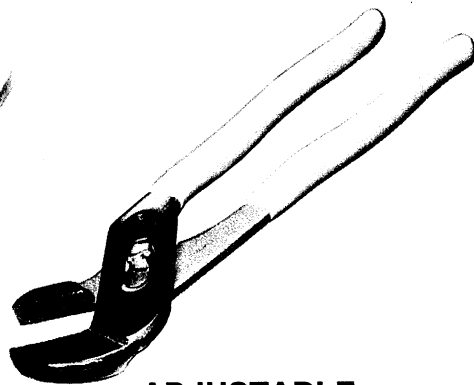
These tools are required for servicing any WHIRLPOOL® automatic washer.



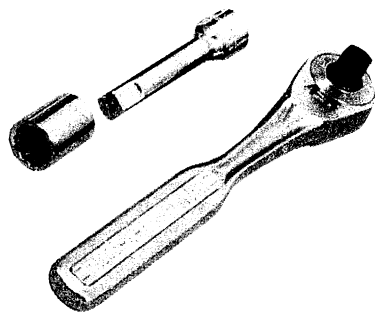
**NEEDLE NOSE
PLIERS**



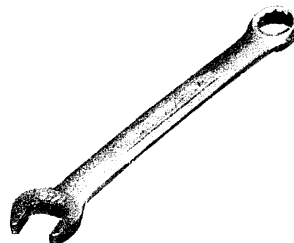
**STANDARD
PLIERS**



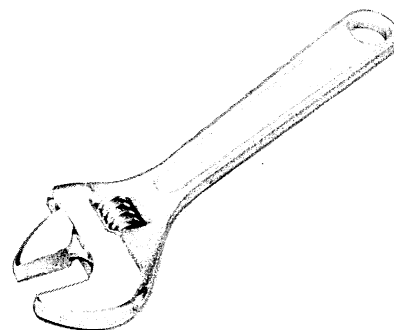
**ADJUSTABLE
PLIERS**



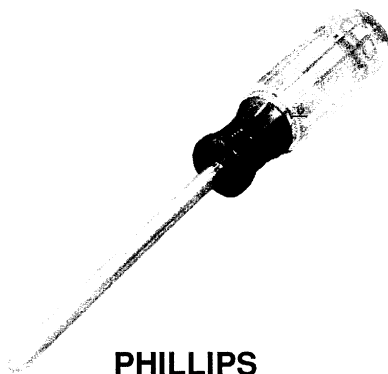
**SOCKET
WRENCHES**



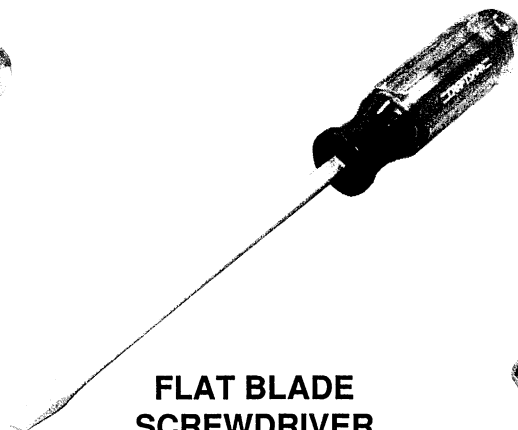
**COMBINATION
WRENCHES**



**ADJUSTABLE
WRENCH**



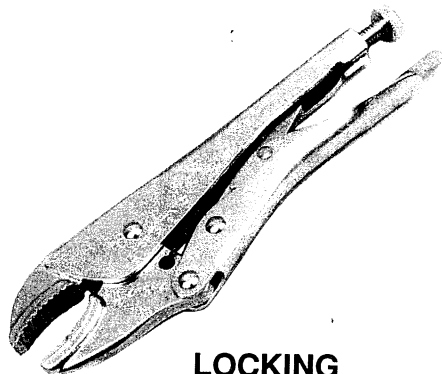
**PHILLIPS
SCREWDRIVER**



**FLAT BLADE
SCREWDRIVER**



NUTDRIVERS



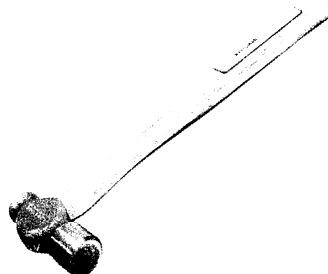
**LOCKING
PLIERS**



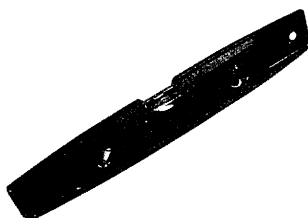
**WIRE
STRIPPERS**



**PUTTY
KNIFE**



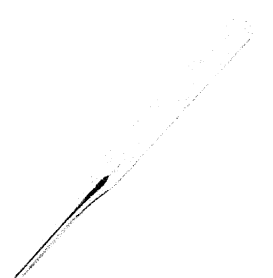
HAMMER



LEVEL



**ALLEN
WRENCH**



PUNCH



OHMMETER

An ohmmeter is required for checking electrical parts of the WHIRLPOOL® automatic washer.

Ohmmeters are usually combined with a voltmeter. This test instrument is called a multimeter, multimeter or volt-ohmmeter (VOM).

Volt-ohmmeters measure the amount of resistance or voltage in an electrical circuit.

We will only be using the ohmmeter scale to measure resistance.

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.

⚠ WARNING

Electrical Shock Hazard

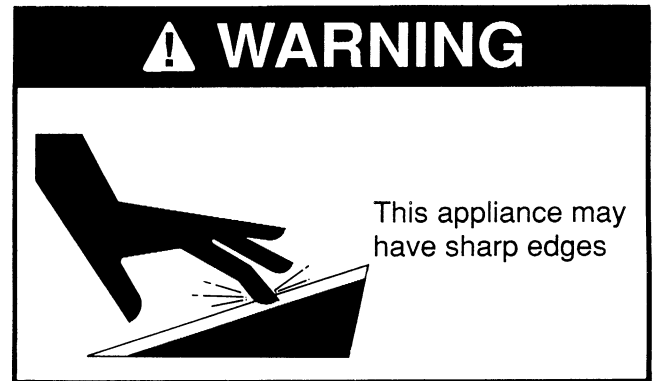
- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

READ THE INSTRUCTIONS THAT CAME WITH YOUR OHMMETER.

SECTION E

Fuses and Circuit Breakers

**SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR
OR TESTING PROCEDURES ARE ATTEMPTED.**



PROCEDURE	PAGE
1 Fuse	14
2 Circuit Breaker	15

PROCEDURE 1

Fuse

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 4-8).

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

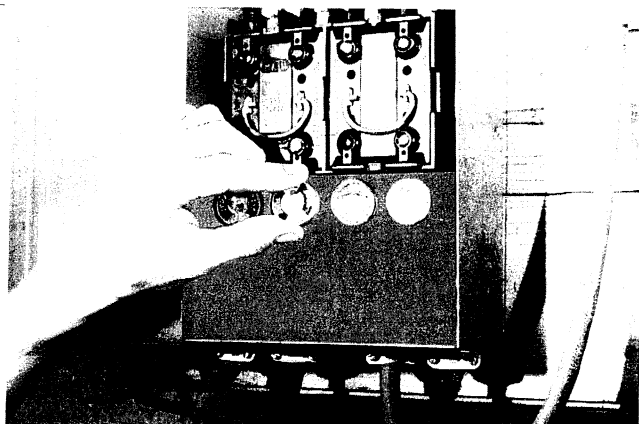
It is recommended that a separate grounded 120VAC electrical circuit with a 15-amp. time-delayed plug fuse be used for the appliance.

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

This check is to make sure your fuse has not blown.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Plug a properly working table lamp into the 120VAC receptacle the appliance was plugged into. This is to see if you are getting electricity to your appliance. **DO NOT** plug the lamp into a 240VAC receptacle.



STEP 3 If the lamp does not turn on, remove the plug fuse from the panel and test or replace it with a new 15-amp. time-delayed plug fuse.

TESTING

STEP 4 You must know how to use an ohmmeter.

STEP 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.



STEP 6 Touch one ohmmeter probe to the side threads.

STEP 7 Touch the other ohmmeter probe to the tip, on the bottom of the plug fuse.

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

STEP 9 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 10 After replacing the plug fuse and the plug fuse does not blow, plug the appliance power cord back in (section B). If the plug fuse blows now, the problem is in your appliance. See problem 1 in the Problem Solving Charts, section I.

PROCEDURE 2

Circuit Breaker

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


WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

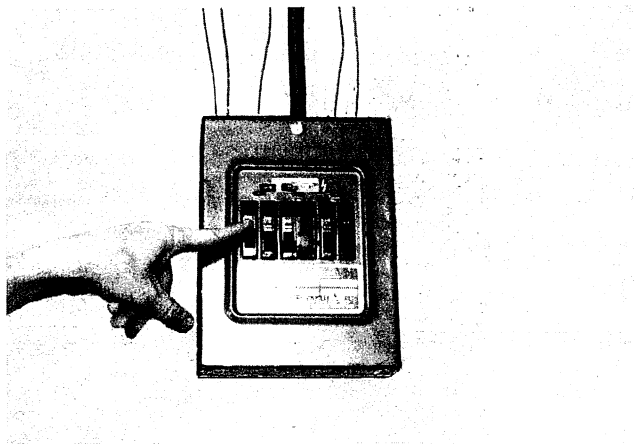
It is recommended that a separate grounded 120VAC electrical circuit with a 15-amp. circuit breaker be used for the appliance.

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

This check is to make sure your circuit breaker has not tripped to the OFF position.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Plug a properly working table lamp into the 120VAC receptacle the appliance was plugged into. This is to see if you are getting electricity to your appliance. **DO NOT** plug the lamp into a 240VAC receptacle.



STEP 3 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 4 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 5 After resetting the circuit breaker and the breaker does not trip, plug the appliance power cord back in (section B). If the circuit breaker trips now, the problem is in your appliance. See problem 1 in the Problem Solving Charts, section I.

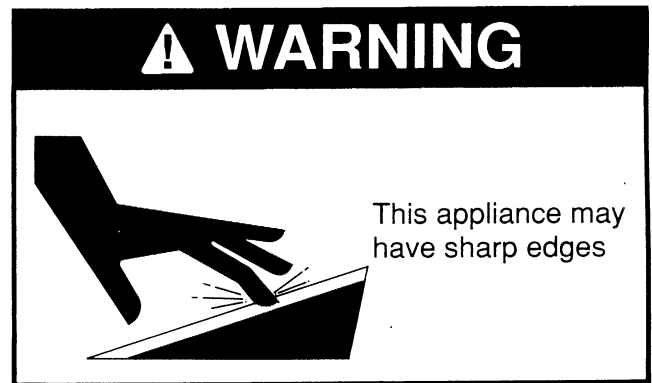
NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SECTION F

Touch-Up Repairs, Preventive Maintenance and Winterizing

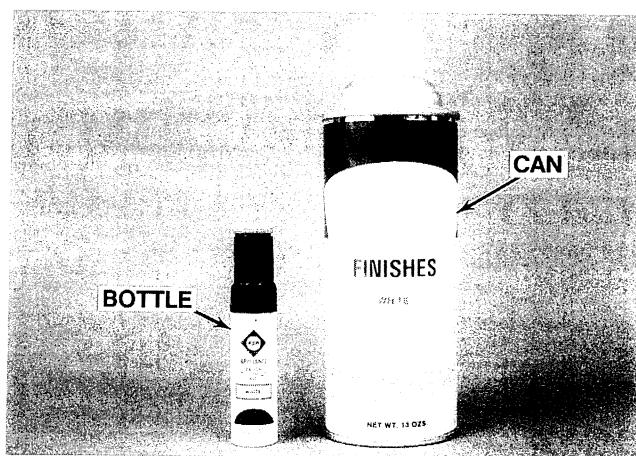
SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR OR TESTING PROCEDURES ARE ATTEMPTED.



PROCEDURE	PAGE
1 Touch-up Repairs	18
2 Preventive Maintenance	19
3 Winterizing	19

PROCEDURE 1

Touch-Up Repairs



! WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

Your WHIRLPOOL® automatic washer can look like new for many years by following these cleaning instructions.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 To remove dirt and soiled spots, wash them with a mild liquid soap, warm water and a soft cloth.

STEP 3 Reach-in and clean what you can on top of the tub ring with mild liquid soap, warm water and a soft cloth.

STEP 4 Leave a space between the washer and dryer. Because of vibration, the two cabinets will rub together, causing scratches and rusting.

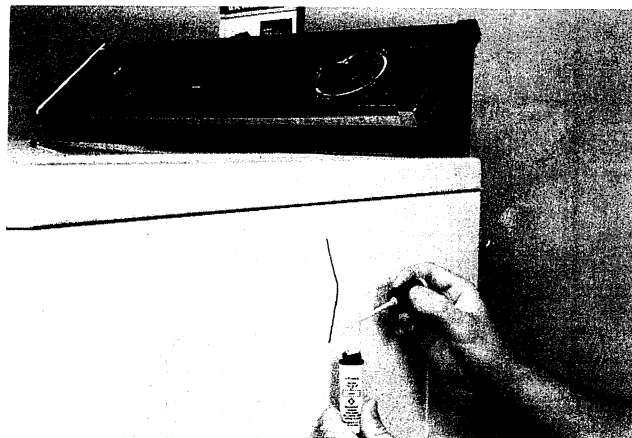
Scratches do occur, and when they do there are touch-up paints available in 1/2-oz. bottles or 15-oz. spray cans.

! WARNING

Fire Hazard or Explosion

- Do not store or use flammable paints in the area of other appliances.
- Fumes can cause a fire hazard or explosion.
- Paint in a well ventilated area.
- Read the instructions on the bottle or can.

STEP 5 To repair scratches, remove any wax or dirt, using a mild liquid soap, warm water and a soft cloth. Rinse with clean water.



STEP 6 On small scratches the 1/2-oz. touch-up bottle is recommended.

STEP 7 On larger jobs the scratched area must be sanded with extra-fine sandpaper until smooth.



STEP 8 Using a spray can, spray very lightly over the area, letting each coat dry. Use several coats to avoid any running.

STEP 9 After spray painting the area, cover the area painted with leveler. This will bring back the shine in your appliance.

STEP 10 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 2

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 then manual 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 rinse and bleach dispensers, check them for clogging, leaks and operation.

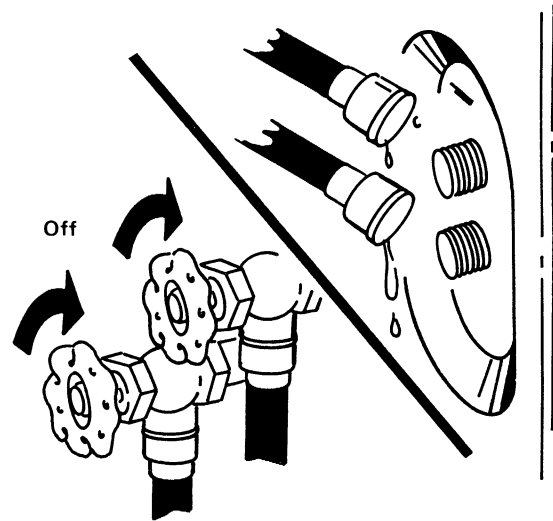
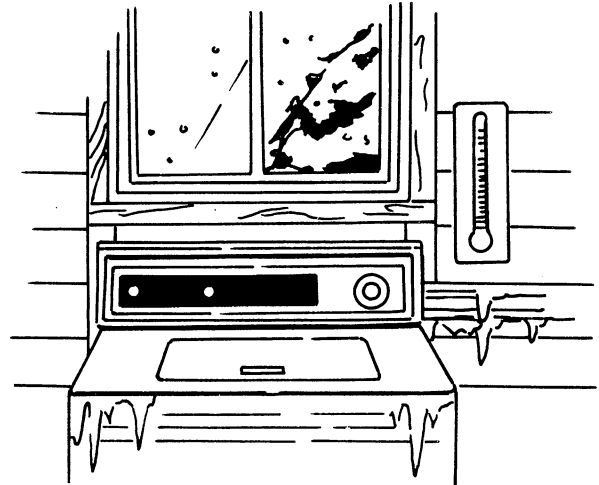
STEP 8 Pump and hoses should be checked for leaks.

STEP 9 Do not use any oil on parts unless the instructions tell you to do so.

PROCEDURE 3

Winterizing

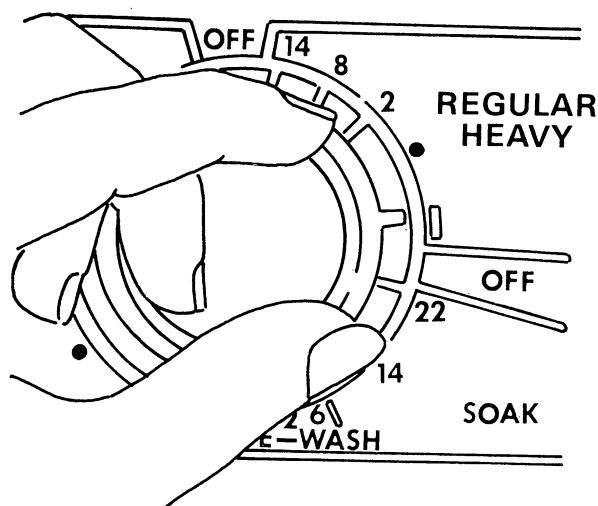
Install or store your washer where it won't freeze. Because some water stays in the washer, freezing can cause a lot of damage. If your washer is stored or moved during cold weather, it's a good idea to winterize it by following these steps:



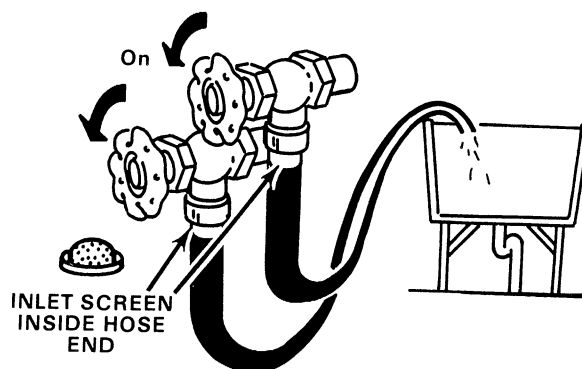
STEP 1 Shut off both water faucets. Turn the timer knob to FILL with a WARM WASH, WARM RINSE selection, and turn the machine ON for 10 seconds. This will run the water out of the water inlet valve. Disconnect the end of the hoses from the washer.



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.



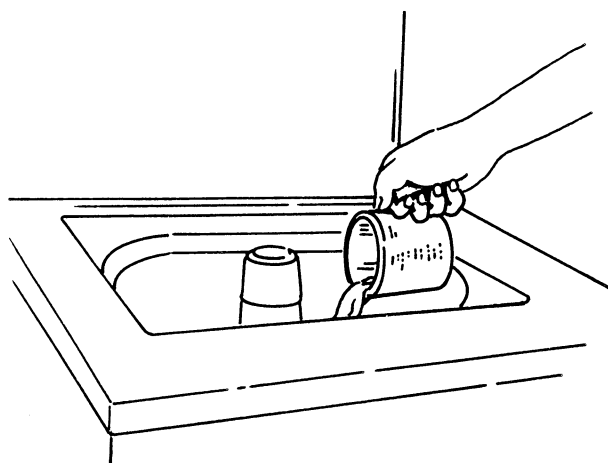
TO USE THE WASHER AGAIN

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, then run the washer through a complete cycle; it will 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 vacuum break. As the water rises in the tub and basket, it forces air through the air pressure 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 out the side of the basket, down to the bottom of the tub then drawn upward through the bottom of the filter (catching lint) by the motion of the agitator, then back into the tub. The filter catches the lint during agitation. This circulation of water is done over and over again.

When the automatic washer goes into **DRAIN** on self-clean filter models, the water leaves the bottom of the tub and basket, through the filter taking with it all the lint. The water and lint travels through the pump, hoses and to the drain.

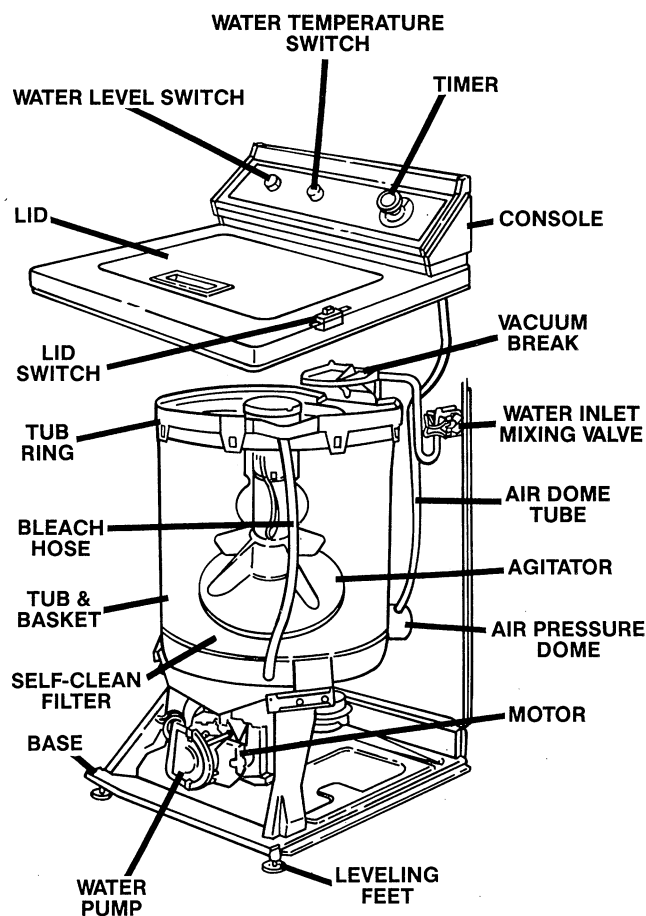
The basket is put into **SPIN**. The clothes are spun to remove most of the water from the clothes.

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.

Shown below is a self-cleaning filter washer; the manual-clean filter, mounted on the agitator, is not shown.

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



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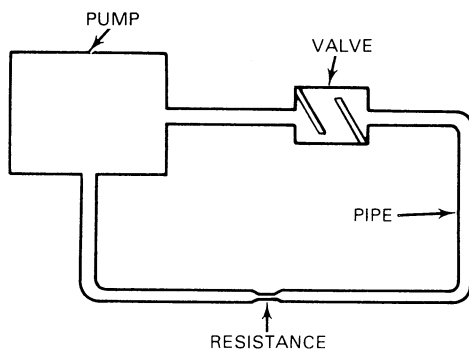
SECTION H

How to Read Wiring Diagrams and Timer Sequence Charts, Wiring Diagram Symbols, 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 operate.

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 inside of the rear service panel. See Access To Parts in the Console, Rear Panel, and Cabinet Areas (section. J, proc. 4).

On pages 26-28 are typical examples of a timer sequence chart and wiring diagrams. 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 26 represents a typical timer sequence chart. Pages 27 & 28 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 T, BR, Y-R, 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— REGULAR/HEAVY, PERMANENT PRESS and KNITS/GENTLE as well as special cycle— SUPER WASH. To the left of each cycle are the machine functions for that cycle.

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

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

Closed 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) components 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 (No. 1) 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.

Since studying and learning information has no value until it is applied, Let's follow a step-by-step procedure to diagnose a machine malfunction.

For an example, say the washer was set in the PERMANENT PRESS cycle with the water temperature switch set at HOT WASH and COLD RINSE, and that the washer will not FILL. A rule is to always check the easy and obvious first.

Is there power to the machine? Be sure the machine's power cord is plugged into a live wall receptacle. Next, be sure the water faucets are turned on! Also, make sure the timer dial indication coincides with the timer function.

Let's assume in our example that, having completed all the normal examinations, the machine still does not FILL. Turn to the wiring diagram and timer sequence chart found on the inside of the rear service panel (section J, proc. 4). By using this information, you can determine which circuits and components are affected in an appliance's electrical system at any given time. The wiring chart is easy to follow when a step-by-step checking sequence is used.

Fill in the PERMANENT PRESS cycle, takes place in timer step 20. Let's start by drawing a line horizontally through timer step 20 on the timer sequence chart and note the closed circuits.

The closed switches are switch no. 5 (high motor), 7 (agitate), 10 (fill), 11 (wash) and switch no. 18 (motor).

Now close these switches on the wiring diagram on page 27. As you can see by the heavy line, the electricity on the "BK" side of the line flows through the timer knob switch, water level switch (empty), temperature switch (remember we selected HC), the mixing valve and then back through the "W" side of the line, completing a circuit.

Since our problem is "NO FILL", the first thing to do is turn your timer dial to the start of the PERMANENT PRESS cycle.

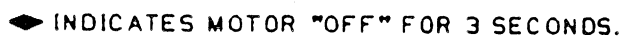
Did the light, if used, turn on? If so, the timer knob switch is OK. Now turn your timer dial to SPIN and pull the knob out. Did your automatic washer start to spin? If so, the water level switch is OK. Now you will have to go back to the section and procedure for checking out timer switches 10 and 11, the temperature switch and the mixing valve to find and correct the problem.

When the correct water level is reached, the switch trips from "P" (empty) to "T" (full).

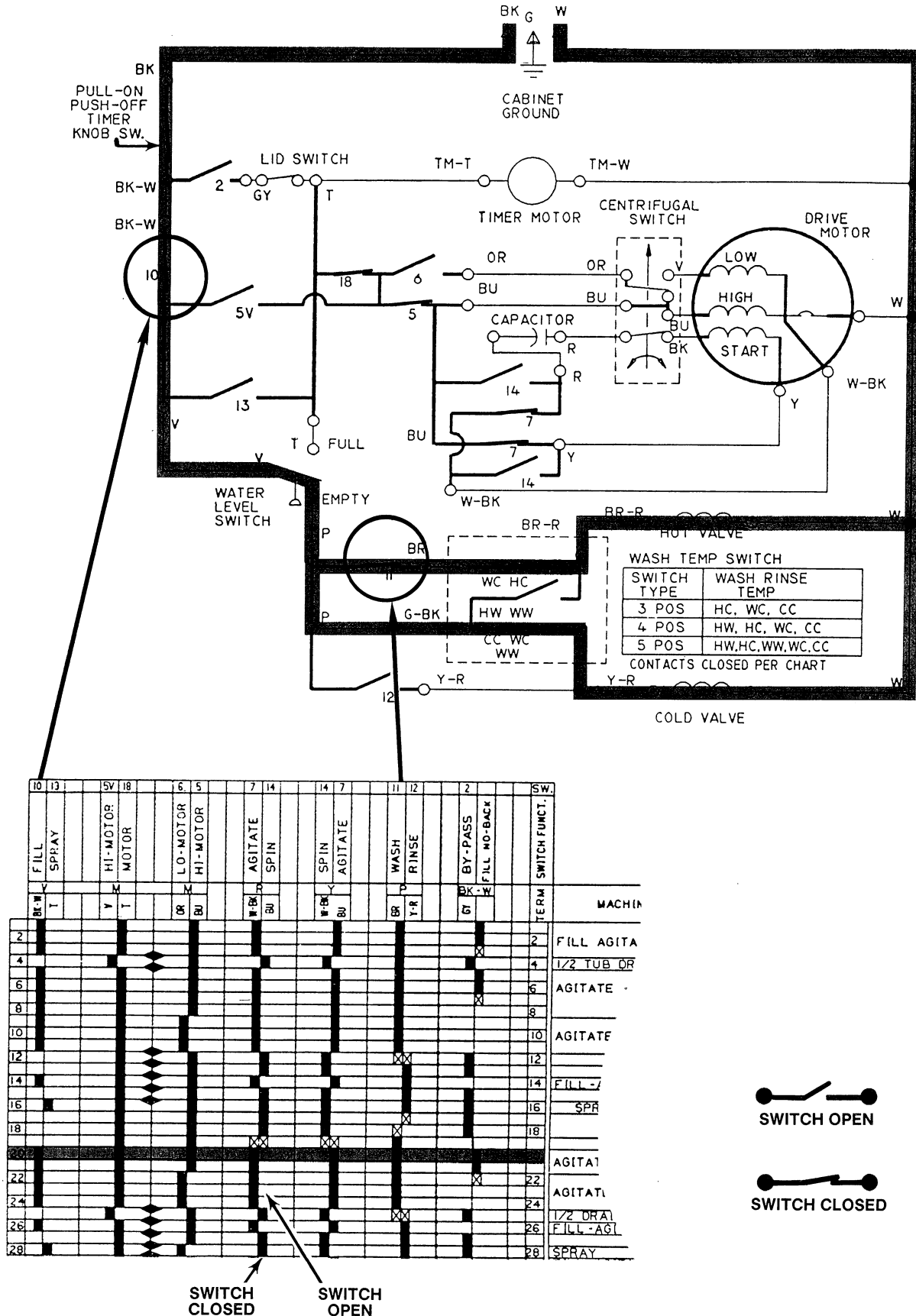
With the water level switch tripping from "P" to "T", (see page 28) there is no electricity through switch 11, temperature switch and the mixing valve.

Electricity now flows from the "BK" side of the line through the timer knob switch, water level switch (full), timer motor, start switch, drive motor and then back through the "W" side of the line, completing a circuit.

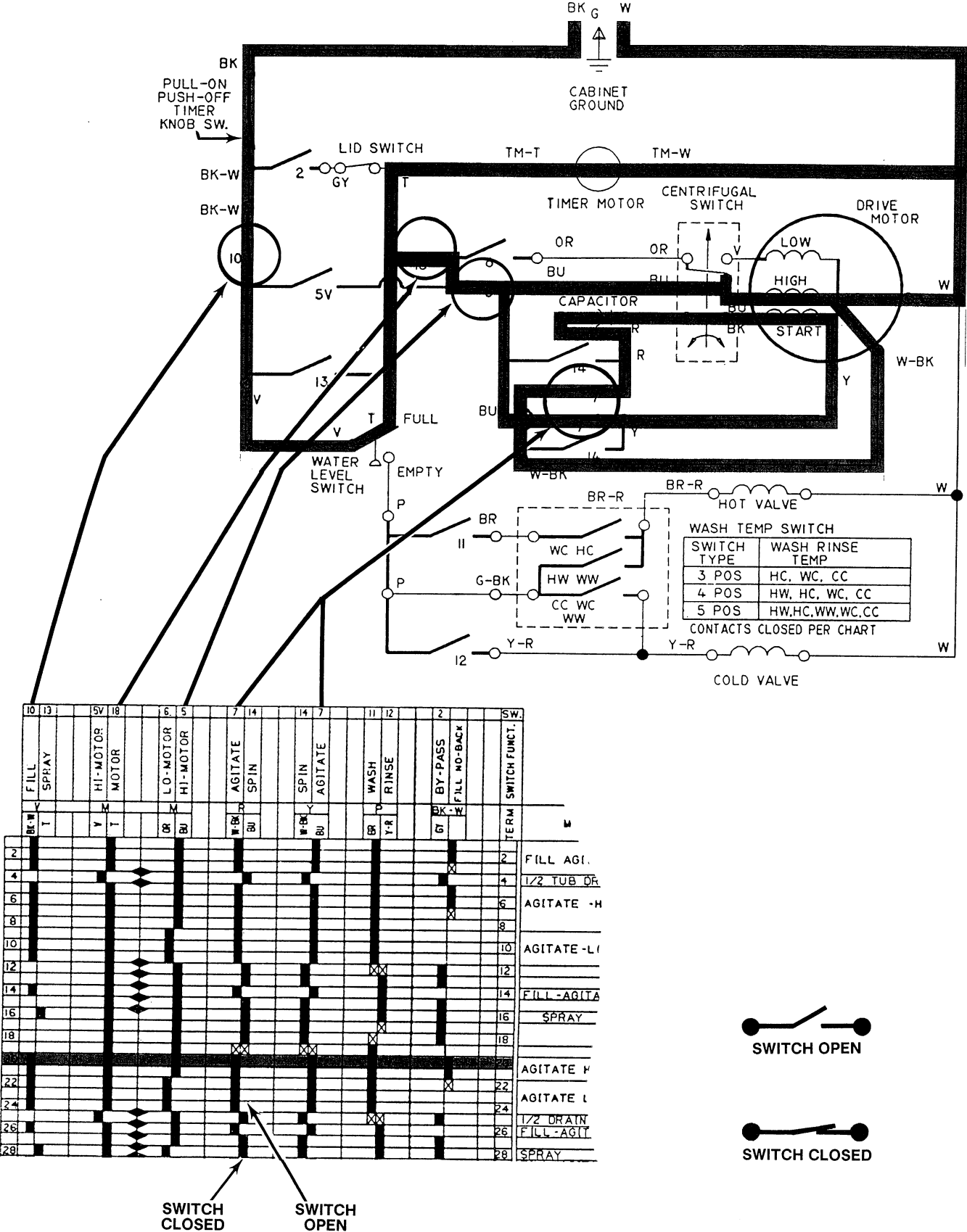
1



SAMPLE WIRING DIAGRAM



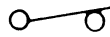
SAMPLE WIRING DIAGRAM



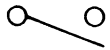
WIRING DIAGRAM SYMBOLS

MANUAL AND MECHANICAL SWITCHES

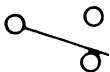
Normally Closed (SPST)
(Single-Pole, Single-Throw)



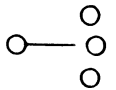
Normally Open (SPST)
(Single-Pole, Single-Throw)



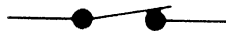
Transfer (SPDT)
(Single-Pole, Double-Throw)



Multi-Position



Number of Terminals



Timer Switch

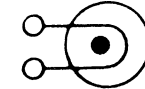


LAMPS

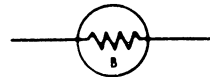
Incandescent



Germicidal



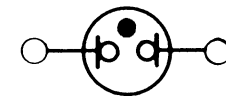
Ballast



Fluorescent

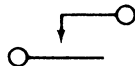


Neon

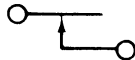


AUTOMATIC SWITCH

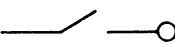
N.O.
(Normal Open)



N.C.
(Normal Closed)



Integral Switch
(Timer, Clock, Etc.)



CIRCUIT PROTECTORS

Circuit Breaker



Circuit Breaker
W/Thermal O.L.



Fuse

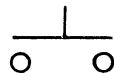


Thermal Fuse

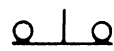


PUSHBUTTON SWITCH (Momentary or Spring Return)

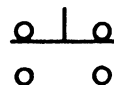
Circuit Closing
N.O. (Normal Open)



Circuit Opening
N.C. (Normal Closed)



Two Circuit



SPDT
(Single-Pole, Double-Throw)



MOTORS

Timer or Clock



Single-Speed



Two-Speed



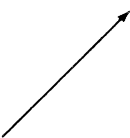
Three-Speed



WIRING DIAGRAM SYMBOLS

MISCELLANEOUS

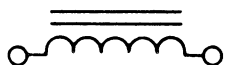
Adjustable Component
(Arrow Drawn thru
Component at Approx. 45°)



Operating Coil
(Solenoid Relay)



Solenoid



Starter



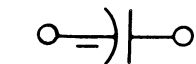
Rectifier
(Diode)



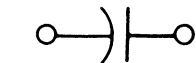
Resistor
or Heater



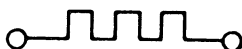
Capacitor
(Polarized)



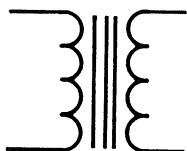
Capacitor (Non-Polarized)



Heater



Transformer



LINES AND CONNECTIONS

Integral Conductor



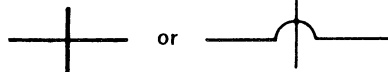
External or Harness Wire



Optional or Alternate Circuit



Crossover



Permanent Connection
Junction



Permanent Connection



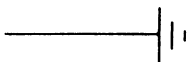
Terminal



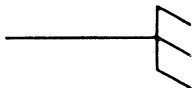
Shield



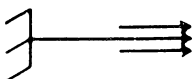
Ground (Earth)



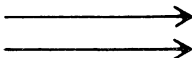
Ground (Chassis)



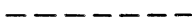
Grounded Service Cord
(3-Prong Plug)



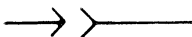
Service Cord (2-Prong)



Mechanical Connection



Separable Connector



CENTRIFUGAL SWITCH



PRESSURE SWITCH S.P.D.T.



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 PUR-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 -GN	Yellow with Green Tracer
Y-R	Yellow with Red Tracer

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This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SECTION I

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 & 19. |
| 2. DOES IT AGITATE? | YES Go to 3.
NO See problems 1, 3, 4, 5 & 19. |
| 3. DOES IT DRAIN? | YES Go to 4.
NO See problems 1, 9 & 19 |
| 4. DOES IT SPIN? | YES Check for other problems.
NO See problems 1, 3, 4, 10 & 19 |

SEE PAGES 21 AND 169–175 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 sec. B, proc. 1 or 2, p. 7 or 8.
	1b. Power cord.	1b. Check power cord. See sec. J, proc. 15, p. 64.
	1c. Open circuit in timer.	1c. Check timer. See sec. J, proc. 5, p. 45.
	1d. Short (bare wire touching metal).	1d. Check all wiring for bare wire or terminal touching metal.

PROBLEM SOLVING CHARTS—SECTION I

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
2. Water will not enter washer.	2a. No electrical power.	2a. Check electrical power. See sec. B, proc. 1 or 2, p. 7 or 8.
	2b. Power cord.	2b. Check power cord. See sec. J, proc. 15, p. 64.
	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 sec. J, proc. 16, p. 66. NOTE: DO NOT tamper with screens.
	2g. Water level switch.	2g. Check water level switch. See sec. J, proc. 8, p. 52.
	2h. Water temperature switch.	2h. Check water temperature switch. See sec. J, proc. 7, p. 49.
	2i. Timer.	2i. Check timer. See sec. J, proc. 5, p. 45.
	2j. Loose terminal.	2j. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.
	2k. Broken wire in wiring harness.	2k. Check for broken wire. See sec. J, proc. 23, p. 79.
3. Water level too low.	3a. Water level switch.	3a. Check water level switch. See sec. J, proc. 8, p. 52.
4. Drive motor will not run.	4a. No electrical power.	4a. Check electrical power. See sec. B, proc. 1 or 2, p. 7 or 8.
	4b. Power cord.	4b. Check power cord. See sec. J, proc. 15, p. 64.
	4c. Drive motor overheated.	4c. Allow motor thermal overload to cool.
	4d. Drive motor start switch.	4d. Check start switch. See sec. N, proc. 2, p. 136.
	4e. Drive motor.	4e. Check drive motor. See sec. N, proc. 3, p. 138.
	4f. Water level switch.	4f. Check water level switch. See sec. J, proc. 8, p. 52.
	4g. Pump.	4g. Check pump. See sec. N, proc. 1, p. 134.
	4h. Timer.	4h. Check timer. See sec. J, proc. 5, p. 45.
	4i. Lid open in "SPIN CYCLE".	4i. Close lid.
	4j. Lid open in last 2 min. of agitate.	4j. Close lid.
	4k. Loose terminal.	4k. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.

CONTINUED

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
4. Drive motor will not run. (continued)	4l. Broken wire in wiring harness. 4m. Gearcase.	4l. Check for broken wire. See sec. J, proc. 23, p. 79. 4m. Replace gearcase. See sec. N, proc. 4, p. 144.
5. Washer will not agitate.	5a. Water level switch. 5b. Drive motor start switch 5c. Drive motor. 5d. Timer. 5e. Gearcase. 5f. Loose terminal. 5g. Broken wire in wiring harness.	5a. Check water level switch. See sec. J, proc. 8, p. 52. 5b. Check start switch. See sec. N, proc. 2, p. 136. 5c. Check drive motor. See sec. N, proc. 3, p. 138. 5d. Check timer. See sec. J, proc. 5, p. 45. 5e. Replace gearcase. See sec. N, proc. 4, p. 144. 5f. Check terminal connections on above parts. See sec. J, proc. 23, p. 79. 5g. Check for broken wire. See sec. J, proc. 23, p. 79.
6. Knock during agitation.	6a. Suspension sticking 6b. Agitator splines.	6a. Clean suspension plate and pads with liquid detergent. 6b. Check agitator. See sec. L, proc. 2, p. 96.
7. Tries to agitate during spin.	7a. Broken drive motor coupling. 7b. Gearcase.	7a. Check drive motor coupling. See sec. N, proc. 6, p. 150. 7b. Replace gearcase. See sec. N, proc. 4, p. 144.
8. No agitate or spin but drive motor runs.	8a. Broken drive motor coupling.	8a. Check drive motor coupling. See sec. N, proc. 6, p. 150.
9. Water does not drain from washer.	9a. Drain hose kinked. 9b. Too much suds. 9c. Incorrect drain height. 9d. Plugged drain hose. 9e. Pump. 9f. Timer. 9g. Loose terminal. 9h. Broken wire in wiring harness.	9a. Move drain hose to prevent kinking or replace. 9b. Add cold water. Use less detergent. Read your USE & CARE GUIDE. 9c. Read your INSTALLATION INSTRUCTIONS. 9d. Remove obstruction. 9e. Check pump. See sec. N, proc. 1, p. 134. 9f. Check timer. See sec. J, proc. 5, p. 45. 9g. Check terminal connections on above parts. See sec. J, proc. 23, p. 79. 9h. Check for broken wire. See sec. J, proc. 23, p. 79.

PROBLEM SOLVING CHARTS—SECTION I

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
10. Basket is slow or will not spin.	10a. Lid open.	10a. Close lid.
	10b. Water level switch.	10b. Check water level switch. See sec. J, proc. 8, p. 52.
	10c. Lid switch.	10c. Check lid switch. See sec. K, proc. 4, p. 84.
	10d. Drive motor start switch.	10d. Check start switch. See sec. N, proc. 2, p. 136.
	10e. Drive motor.	10e. Check drive motor. See sec. N, proc. 3, p. 138.
	10f. Timer.	10f. Check timer. See sec. J, proc. 5, p. 45.
	10g. Weak clutch spring.	10g. Replace clutch spring. See sec. N, proc. 5, p. 148.
	10h. Clothes between basket and tub.	10h. Remove clothes.
	10i. Gearcase.	10i. Replace gearcase. See sec. N, proc. 4, p. 144.
	10j. Loose terminal.	10j. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.
	10k. Broken wire in wiring harness.	10k. Check for broken wire. See sec. J, proc. 23, p. 79.
11. Washer leaks water or splashes water on floor.	11a. Hoses not secured.	11a. Make sure hose clamps are tight, both inside and out of the washer.
	11b. Hose leaks.	11b. Check hoses and replace.
	11c. Pump.	11c. Check pump. See sec. N, proc. 1, p. 134.
	11d. Use of low water level with high agitation.	11d. Use higher water level.
12. Washer will not spray rinse.	12a. Inlet mixing valve.	12a. Check inlet mixing valve. See sec. J, proc. 16, p. 66. NOTE: DO NOT tamper with screens.
	12b. Water temperature switch.	12b. Check water temperature switch. See sec. J, proc. 7, p. 49.
	12c. Timer.	12c. Check timer. See sec. J, proc. 5, p. 45.
	12d. Loose terminal.	12d. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.
	12e. Broken wire in wiring harness.	12e. Check for broken wire. See sec. J, proc. 23, p. 79.
13. Washer will not shut off.	13a. Timer.	13a. Check timer. See sec. J, proc. 5, p. 45.
14. Washer shakes or moves around.	14a. Shipping material not removed.	14a. Remove shipping material. See your USE & CARE GUIDE.
	14b. Unbalanced load.	14b. Move clothes evenly around basket.

CONTINUED

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
14. Washer shakes or moves around. (continued)	14c. Washer not level.	14c. Adjust the front feet and rear leveling feet. See sec. M, proc. 7 or 8, p. 129 or 130.
	14d. Weak flooring.	14d. Floor must be solid.
	14e. Basket ballast missing.	14e. Replace basket.
	14f. Suspension plate.	14f. Check suspension plate. See sec. M, proc. 6, p. 127. If sticky, clean.
	14g. Suspension pads.	14g. Check suspension pads. See sec. M, proc. 3, p. 120.
	14h. Tub support.	14h. Check tub support. See sec. M, proc. 5, p. 125. If sticky, clean.
	14i. Suspension springs.	14i. Check suspension springs. See sec. M, proc. 1, p. 116.
15. Water will not shut off.	15a. Inlet mixing valve.	15a. Listen for running water. If you hear running water the valve is stuck and must be replaced. See sec. J, proc. 16, p. 66.
	15b. Water level switch.	15b. Check water level switch. See sec. J, proc. 8, p. 52.
	15c. Air leak or kink in water level switch hose.	15c. Check hose. See sec. L, proc. 6, p. 109.
	15d. Air leak in pressure dome	15d. Check pressure dome. See sec. L, proc. 6, p. 109.
	15e. Timer.	15e. Check timer. See sec. J, proc. 5, p. 45.
16. No hot water.	16a. Inlet mixing valve.	16a. Check inlet mixing valve (hot coil). See sec. J, proc. 16, p. 66.
	16b. Water temperature switch.	16b. Check water temperature switch. See sec. J, proc. 7, p. 49.
	16c. Timer.	16c. Check timer. See sec. J, proc. 5, p. 45.
	16d. Loose terminal.	16d. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.
	16e. Broken wire in wiring harness.	16e. Check for broken wire. See sec. J, proc. 23, p. 79.
17. No cold water.	17a. Inlet mixing valve.	17a. Check inlet mixing valve (cold coil). See sec. J, proc. 16, p. 66.
	17b. Water temperature switch.	17b. Check water temperature switch. See sec. J, proc. 7, p. 49.
	17c. Timer.	17c. Check timer. See sec. J, proc. 5, p. 45.
	17d. Loose terminal.	17d. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.
	17e. Broken wire in wiring harness.	17e. Check for broken wire. See sec. J, proc. 23, p. 79.

PROBLEM SOLVING CHARTS—SECTION I

PROBLEM	POSSIBLE CAUSE	REPAIR PROCEDURE
18. Washer damages clothes.	18a. Too much bleach or fabric softener poured on clothes.	18a. Read your LAUNDRY GUIDE.
	18b. Too many clothes.	18b. Read your LAUNDRY GUIDE.
	18c. Agitator.	18c. Check agitator. See sec. L, proc. 2, p. 96.
	18d. Basket.	18d. Check basket. See sec. L, proc. 4, p. 105.
	18e. Water level too low.	18e. Increase water level.
	18f. Foreign objects.	18f. Remove.
19. Timer does not advance.	19a. Timer motor.	19a. Check timer motor. See sec. J, proc. 6, p. 48.
	19b. Timer.	19b. Check timer. See sec. J, proc. 5, p. 45.
	19c. Water level switch.	19c. Check water level switch. See sec. J, proc. 8, p. 52.
	19d. Loose terminal.	19d. Check terminal connections on above parts. See sec. J, proc. 23, p. 79.
	19e. Broken wire in wiring harness.	19e. Check for broken wire. See sec. J, proc. 23, p. 79.
20. Washer leaks oil.	20a. Gearcase.	20a. Replace gearcase. See sec. N, proc. 4, p. 144.
21. Basket won't stop in 7 seconds.	21a. Brake shoe rollers, cam or lining.	21a. Replace. See sec. N, proc. 5, p. 148.
22. Brake squeal.	22a. Linings.	22a. Replace. See sec. N, proc. 5, p. 148.

SECTION J

Console, Rear Panel And Cabinet Areas

**SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR
OR TESTING PROCEDURES ARE ATTEMPTED.**



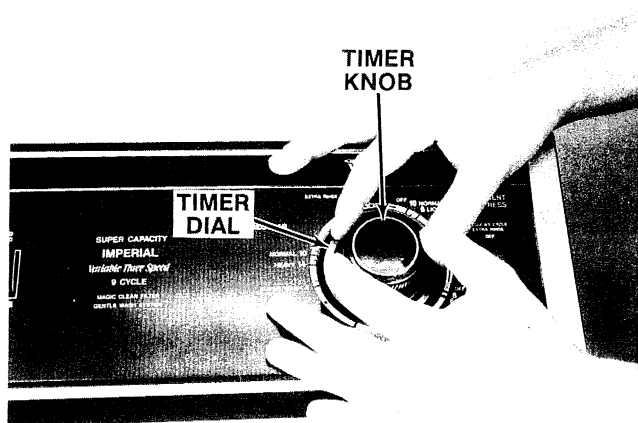
PROCEDURE	PAGE	PROCEDURE	PAGE
1 Timer Knob	40	13 Console Panel	61
2 Timer Dial	40	14 Literature Rack	63
3 Control Knob	40	15 Power Cord	64
4 Access To Parts	41	16 Inlet Mixing Valve	66
5 Timer	45	17 Vacuum Break	70
6 Timer Motor	48	18 Inlet Hose	71
7 Water Temperature Switch	49	19 Suds Shield	73
8 Water Level Switch	52	20 Drain Hose	74
9 Motor Start Capacitor	55	21 Drain Hose Connector	75
10 Rinse Switch	56	22 Rear Panel	77
11 End Cap	58	23 Wiring Harness and Terminal	79
12 Hinge	59		

PROCEDURE 1

Timer Knob Replacement

See page 170, illus. no. 44 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, then turn the knob to the right until tight.

PROCEDURE 2

Timer Dial Replacement

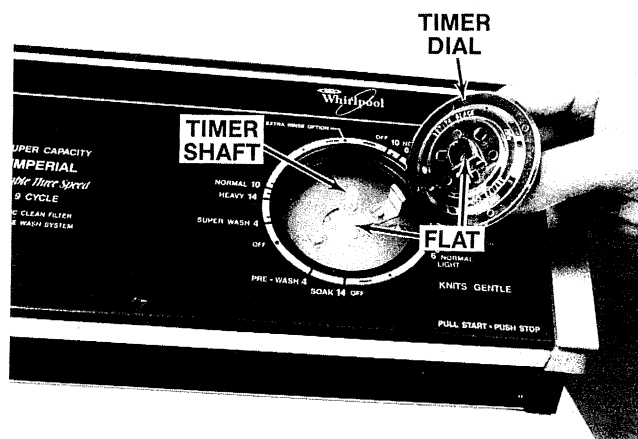
See page 170, illus. no. 45 for location of part.

STEP 1 Remove the timer knob (section J, proc. 1).

STEP 2 Pull the timer dial straight off.

REPLACEMENT

STEP 3 Check to make sure the metal clip (if used) is either inside or around the hub on the timer dial.



STEP 4 Place the new timer dial on, by lining up the flat of the timer shaft with the flat of the dial, then push on.

STEP 5 Replace the timer knob (section J, proc. 1).

PROCEDURE 3

Rotary/Push-button Control Knob Replacement

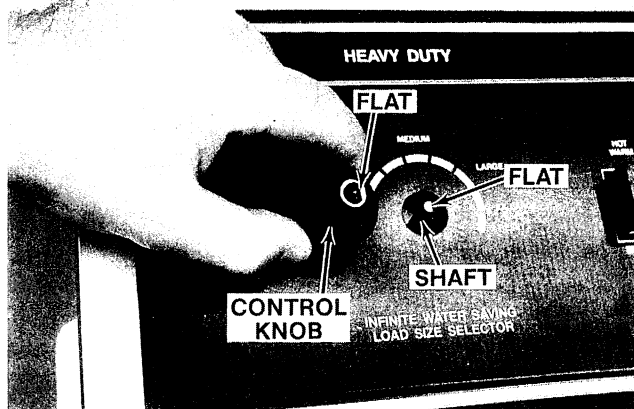
See page 170, illus. no.'s 37 and 47 for location of parts.

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.

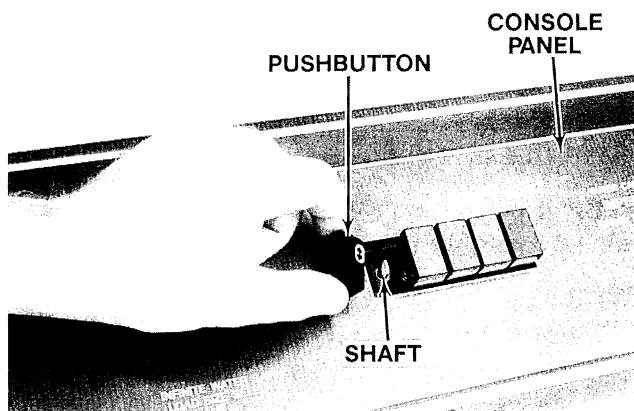
NOTE: Notice the flat on the shaft of the switch and the flat in the back of the control knob.

REPLACEMENT

STEP 2 Check and make sure the metal clip is either inside or around the hub on the control knob.

STEP 3 Line up the flat in the rotary knob with the flat on the switch shaft, then push on.

TYPE B



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

REPLACEMENT

STEP 2 Push the push-button control knob onto the switch shaft.

PROCEDURE 4

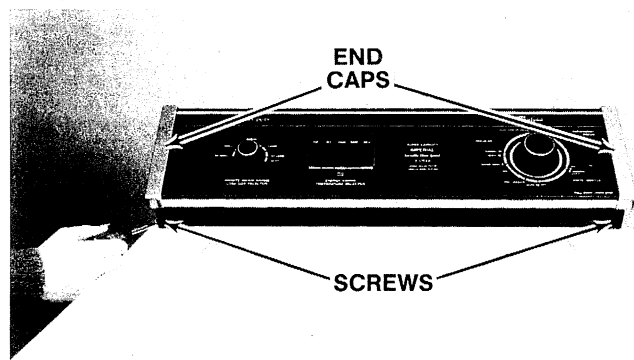
Access To Parts In The Console, Rear Panel and Cabinet Areas

⚠ WARNING

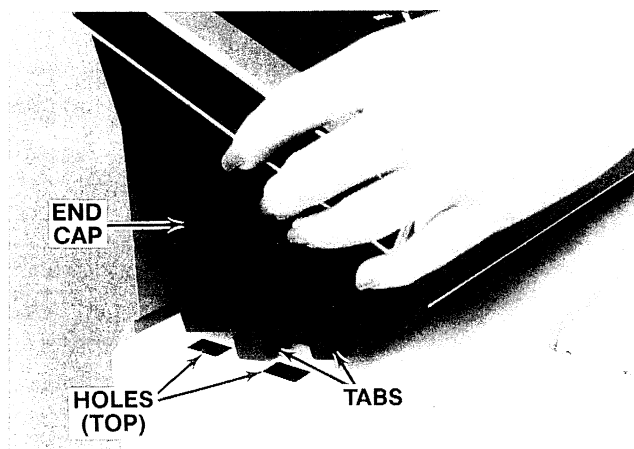
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

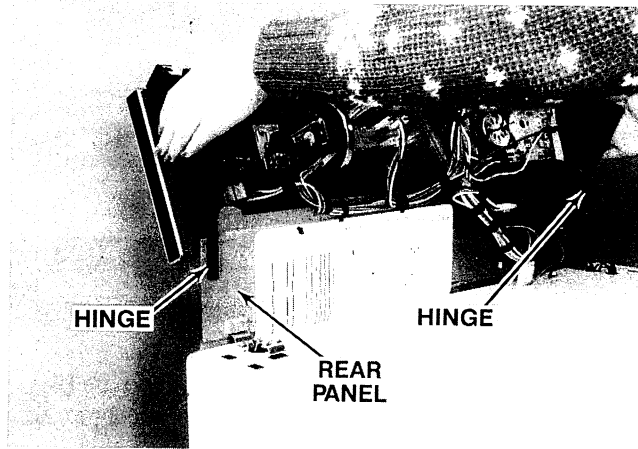
STEP 1 Disconnect the electrical power supply (section B).



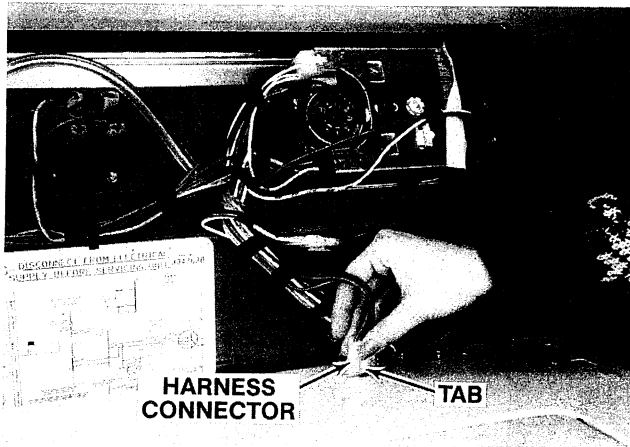
STEP 2 Using a screwdriver, remove the screw from the front of each end cap.



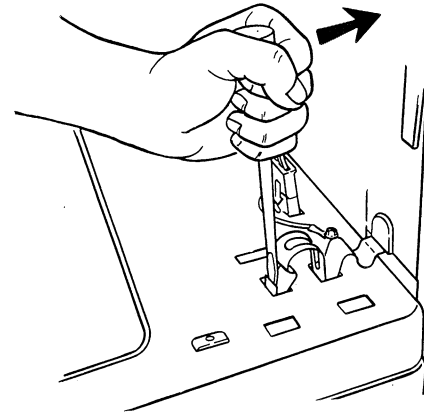
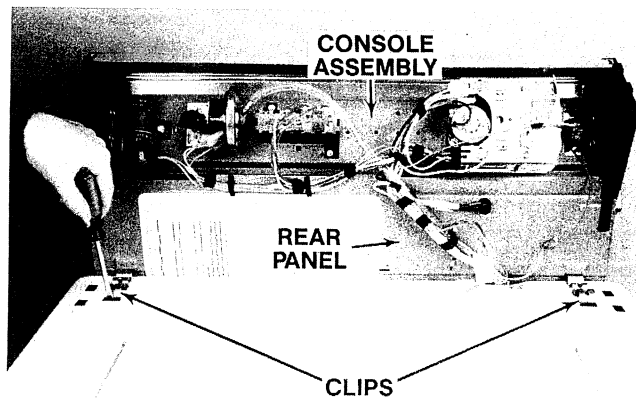
STEP 3 Pull forward and up to remove the tabs from the bottom of the end caps, out the holes in the top.



STEP 4 Lay the console back until it rests on the hinges.

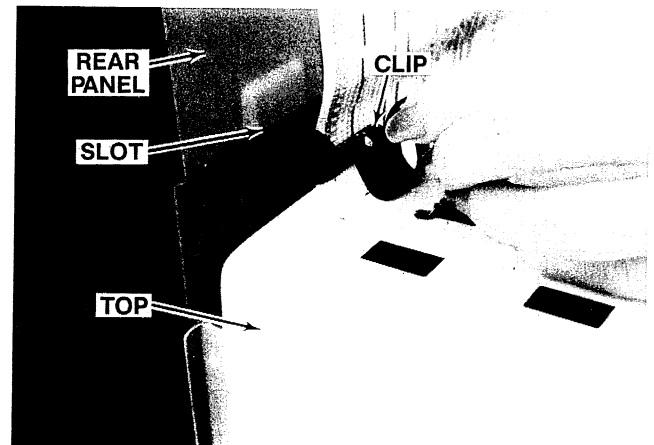


STEP 5 Disconnect the harness connectors by pressing on the tab (located in the middle), then pull up.



STEP 6 Using a screwdriver, insert the blade into the turned-up edge of the clip (located on both sides), then pry back.

This removes the clip from the hole in the cabinet.

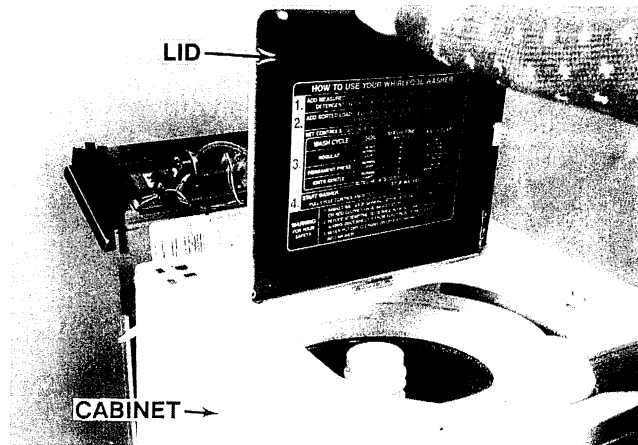


STEP 7 Slide the other end of the clip, down and out the slot in the rear panel.

STEP 8 Do the something (steps 6 & 7) to the other clip located on the other side of the top.

STEP 9 Open and hold the lid while grabbing the cabinet front opening.

NOTE: Be sure when tilting the cabinet, the back edge clears the vacuum break.



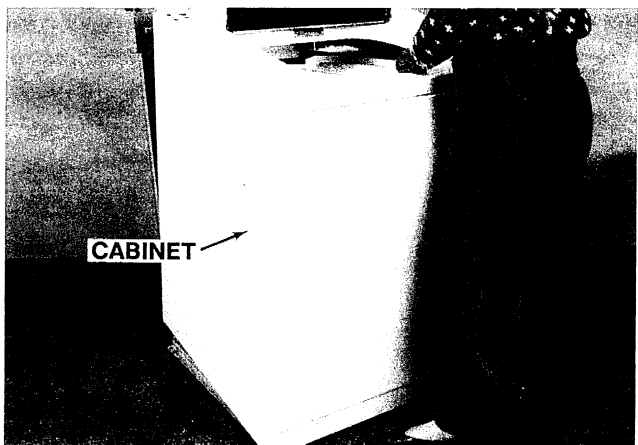
STEP 10 Tilt the top of the cabinet toward you by pulling on the lid and opening of the cabinet.

This releases the back slots of the cabinet from the tabs in the back of the base.

! WARNING

Personal Injury Hazard

- Be careful when moving the cabinet as it could fall and injure your toes.



STEP 11 Using your knee, leg and/or body as a support for the front of the cabinet, carefully lift while pulling it away from the base of the washer.

This releases the front slots of the cabinet from the tabs in the front of the base.

STEP 12 Set the cabinet aside.

STEP 13 Close the lid.

REPLACEMENT

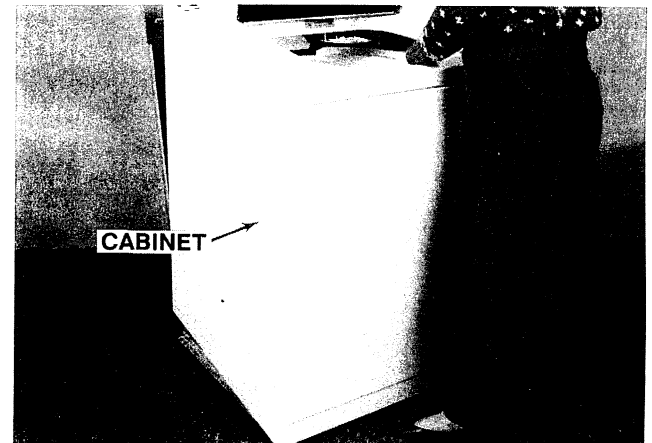
! WARNING

Personal Injury Hazard

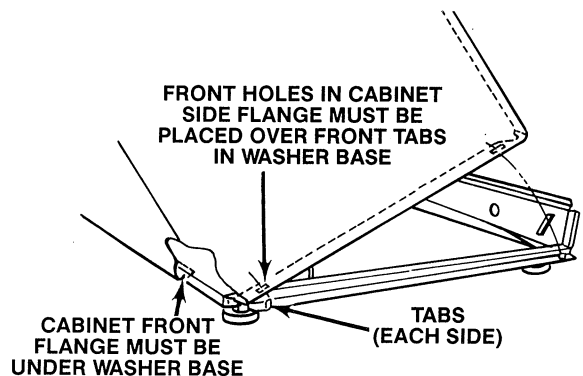
- Be careful when moving the cabinet as it could fall and injure your toes.

STEP 14 Open and hold the lid while grabbing the cabinet front opening.

STEP 15 Tilt the top of the cabinet toward you by pulling on the lid and opening of the cabinet.



STEP 16 Using your knee, leg and/or body as a support for the front of the cabinet, carefully walk the cabinet to the base of the washer.

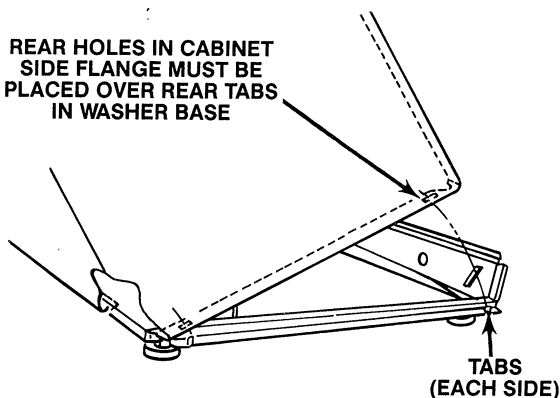


STEP 17 Place the bottom front flange of the cabinet under the front flange of the base.

STEP 18 The slots in the front (on each side flange) of the cabinet should fit over the tabs on the front sides of the base.

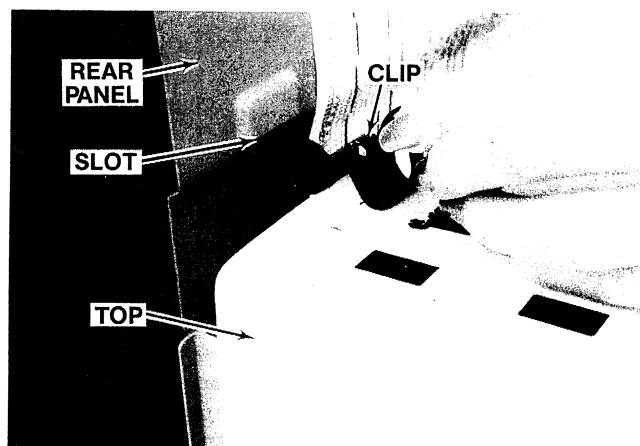
NOTE: Be sure when tilting the cabinet back, the back edge of the cabinet clears the vacuum break.

REAR HOLES IN CABINET
SIDE FLANGE MUST BE
PLACED OVER REAR TABS
IN WASHER BASE

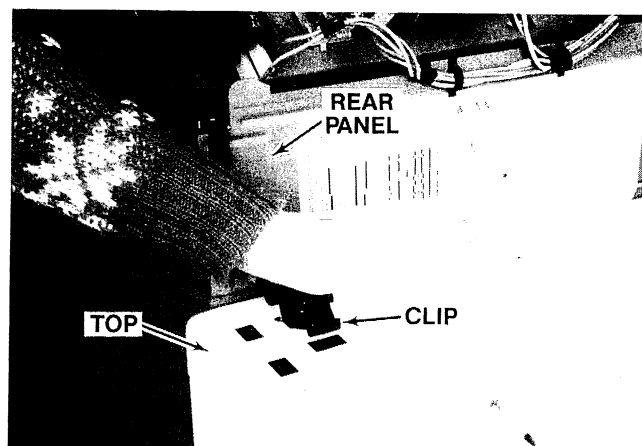


STEP 19 Carefully lower the cabinet so the rear slots (on each side flange) of the cabinet fit over the tabs on the rear sides of the base.

STEP 20 Move the rear panel so it fits up against the rear of the cabinet.

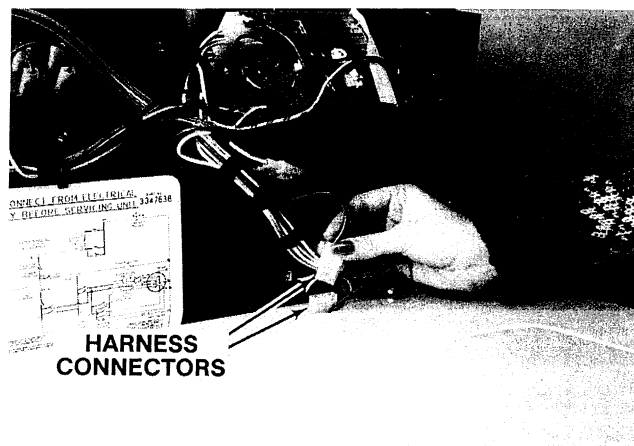


STEP 21 Using one of the clips, insert the end of the clip upward, into the slot on the rear panel.



STEP 22 Press down on the other end of the clip until it snaps into the hole in the top.

STEP 23 Do the same thing (steps 20-22) to the other clip located on the other side of the top.

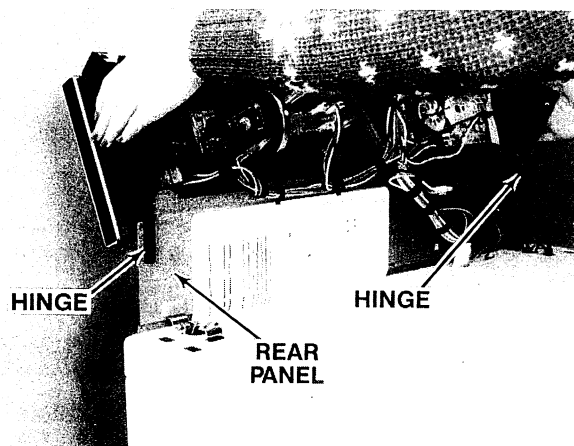


STEP 24 Reconnect the harness connectors by pushing them together.

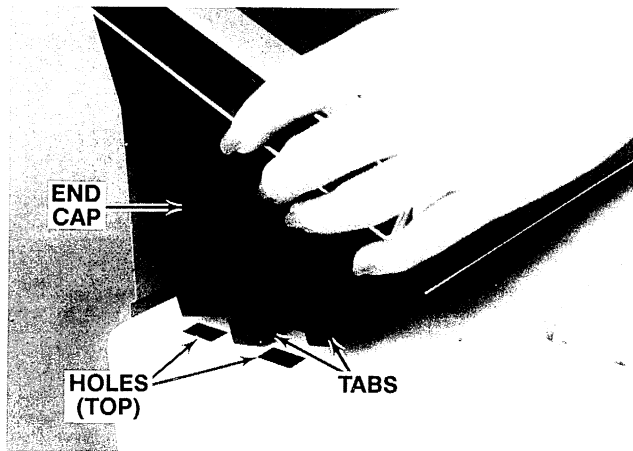
⚠ WARNING

Electrical Shock Hazard

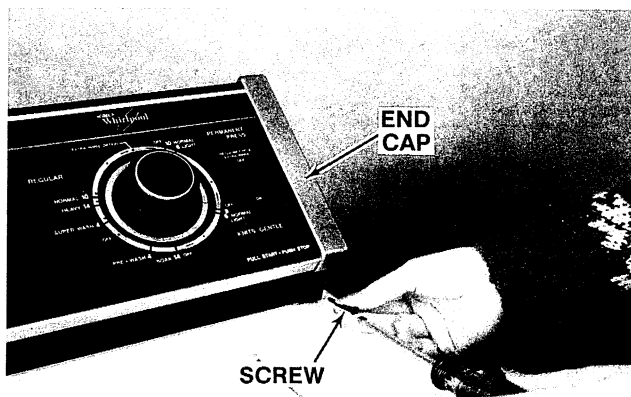
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.



STEP 25 Roll the console forward and down onto the top.



STEP 26 Place the tabs of the end caps into the slots in the top, then slide the console toward the rear.

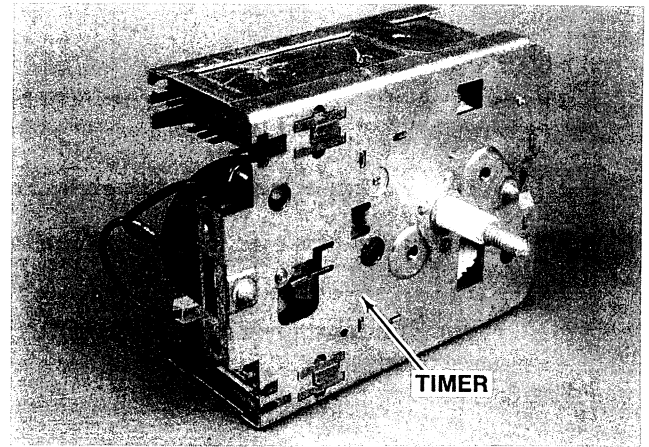


STEP 27 Using a screwdriver, insert the screw in each end cap and tighten.

STEP 28 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 5

Timer Testing and/or Replacement



See page 170, illus. no. 9 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

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.

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 quick-disconnect timers, the different colored harness wires are placed inside either a black, white or both blocks which then plug 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 H).

CONSOLE, REAR PANEL, CABINET AREA—SECTION J—PROCEDURE 5

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

STEP A Touch one ohmmeter probe to terminal P.

STEP B Touch the other ohmmeter probe to terminal G-BK.

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

STEP D Touch one ohmmeter probe to terminal P.

STEP E Touch the other ohmmeter probe to terminal BR.

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

ACTUAL PROCEDURE

STEP 1 Disconnect the electrical power supply (section B).

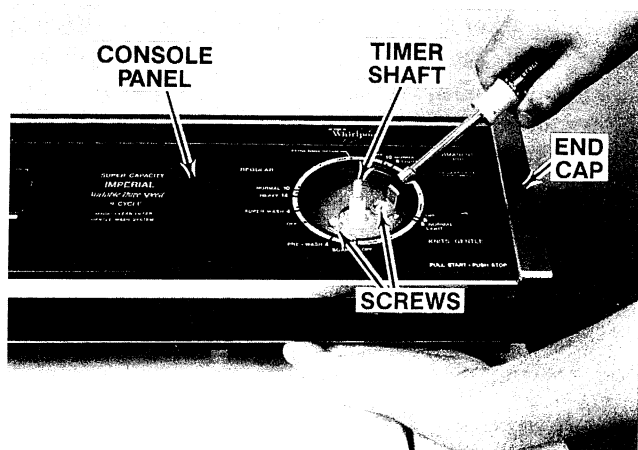
STEP 2 Turn the timer knob to the point in the cycle you suspect is bad

STEP 3 Remove the timer knob (section J, proc. 1).

STEP 4 Remove the timer dial (section J, proc. 2).

STEP 5 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 6 Place one hand under the timer to hold it from falling when the screws are removed.

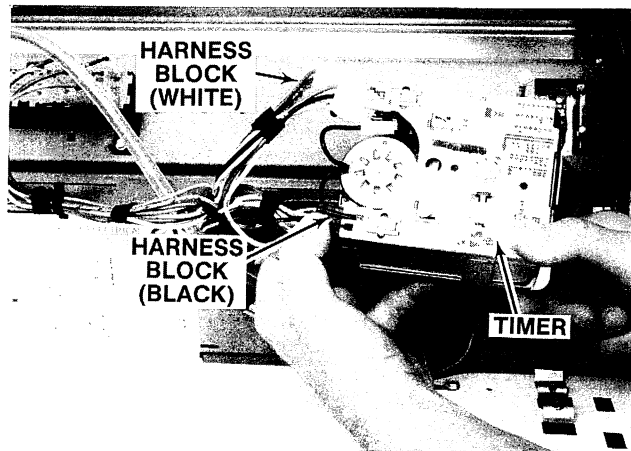


STEP 7 Using a screwdriver or nutdriver, remove the two screws from the front of the console holding the timer to the control bracket.

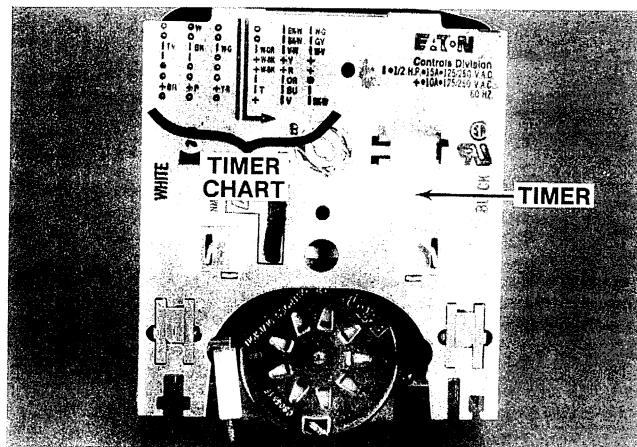
STEP 8 With one hand carefully lay the console back until it rest on the hinges while holding the timer in your other hand.

STEP 9 Carefully remove the timer.

TESTING



STEP 10 Remove both the white and black disconnect blocks. Some models only have the one disconnect block. The blocks have tabs on each end which must be pressed while pulling on the block.

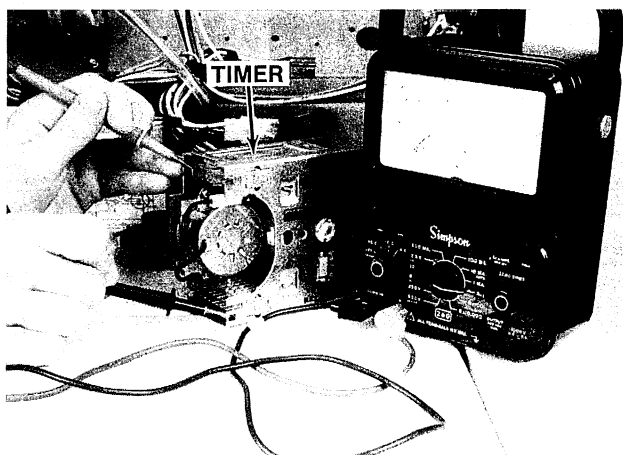


A chart of each wiring block is printed on the back of the timer. The line through the chart separates the two blocks. Letters indicate active terminals while the black dots identify blank terminals.

Now do the ohmmeter checks from your actual problem.

STEP 11 You must know how to use an ohmmeter.

STEP 12 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.



STEP 13 Touch one ohmmeter probe to the timer terminal you suspect is bad

STEP 14 Touch the other ohmmeter probe to the other timer terminal you suspect is bad.

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

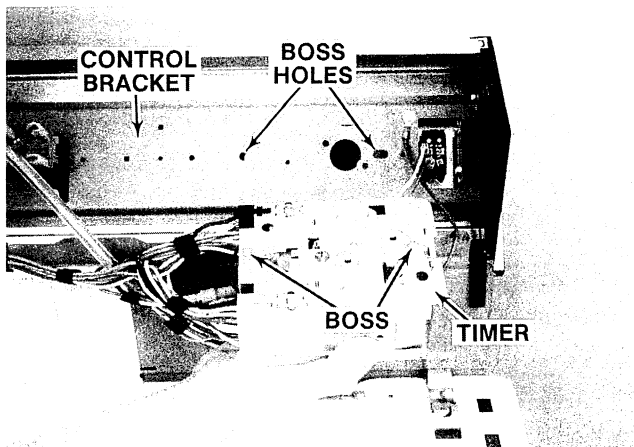
REPLACEMENT

⚠ WARNING

Electrical Shock Hazard

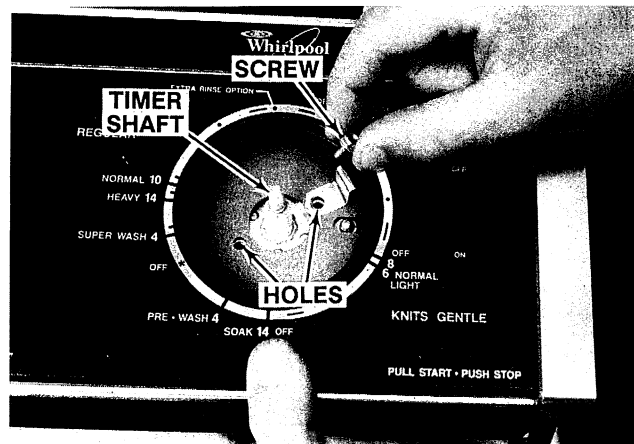
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 16 Replace the colored wiring block(s) in the proper end marked BLACK or WHITE on the new timer by pushing-in, until they lock in place.



STEP 17 Place the new timer on the control bracket with the timer shaft and boss going through the holes in the control bracket.

STEP 18 With one hand, carefully roll the console forward and down onto the top, while holding the timer in your other hand.



STEP 19 Using a screwdriver or nutdriver, insert the screws through the control bracket into the timer and tighten.

STEP 20 Replace the timer dial (section J, proc. 2).

STEP 21 Replace the timer knob (section J, proc. 1).

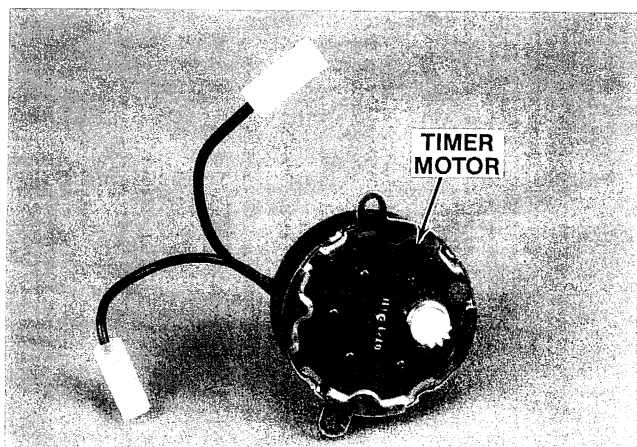
STEP 22 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 23 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 24 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 6

Timer Motor Testing and/or Replacement



See page 170, illus. no. 10 for location of part.

WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

This part is located on the timer assembly and is used to advance the timer through the cycles.

STEP 1 Disconnect the electrical power supply (section B).

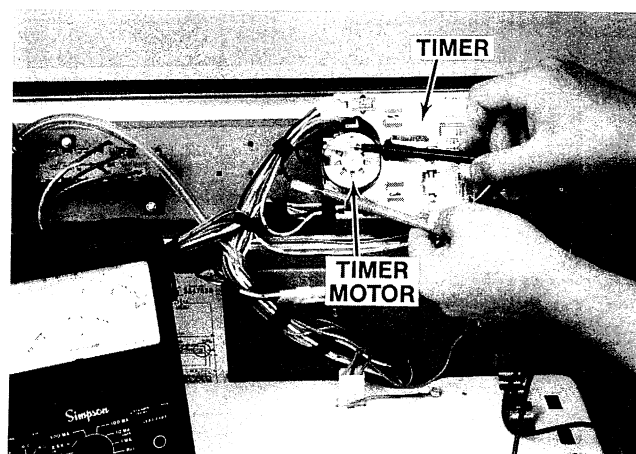
STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

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 You must know how to use an ohmmeter.

STEP 5 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 2,000-6,000 ohms. Set the ohms scale and ZERO the meter.



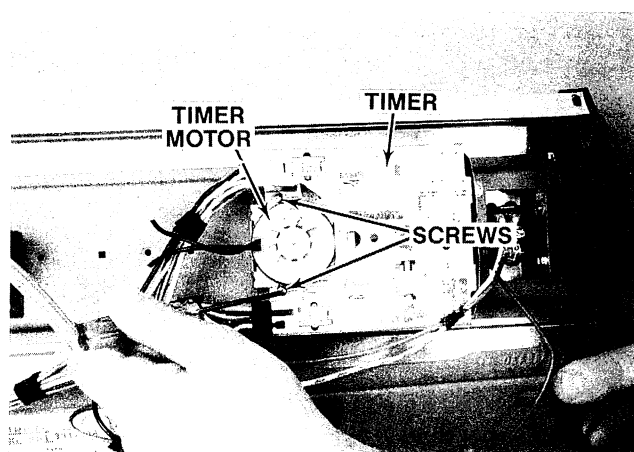
STEP 6 Touch one of the ohmmeter probes to one of the timer motor wire terminals.

STEP 7 Touch the other ohmmeter probe to the other timer motor wire terminal.

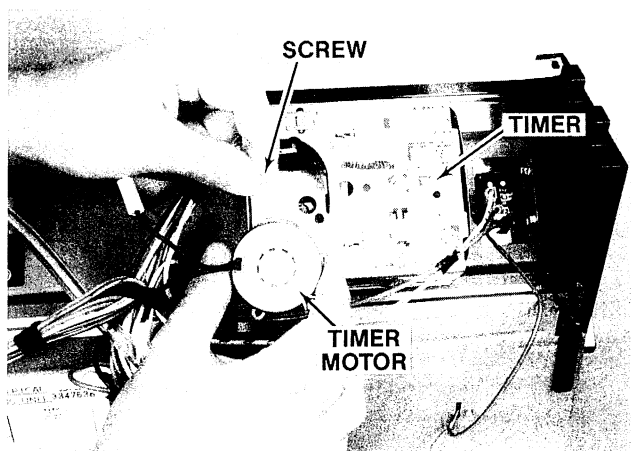
STEP 8 The ohmmeter should show between 2,000-6,000 ohms. If not, the timer motor is bad and needs replacing.

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 RUNNING A VOLTAGE CHECK. FOR YOUR PERSONAL SAFETY, THIS CHECK MUST BE DONE BY AN AUTHORIZED WHIRLPOOL FACTORY SERVICE BRANCH.

REPLACEMENT



STEP 9 Using a small screwdriver, remove the two screws holding the timer motor to the timer.



STEP 10 Place the new timer motor on the timer.

STEP 11 Using a small screwdriver, insert the screws through the timer motor into the timer and tighten.

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

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

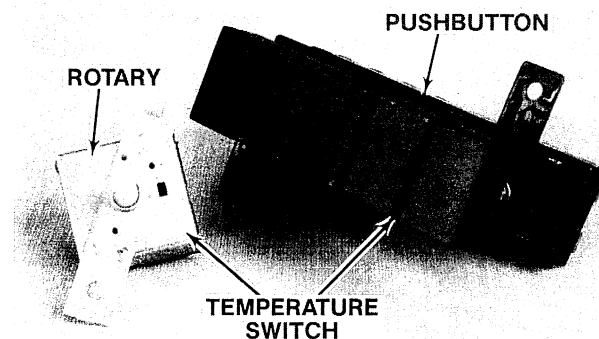
STEP 13 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 14 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 15 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 7

Water Temperature Switch Testing and/or Replacement



See page 170, illus. no. 35 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

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.

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

STEP 1 Disconnect the electrical power supply (section B).

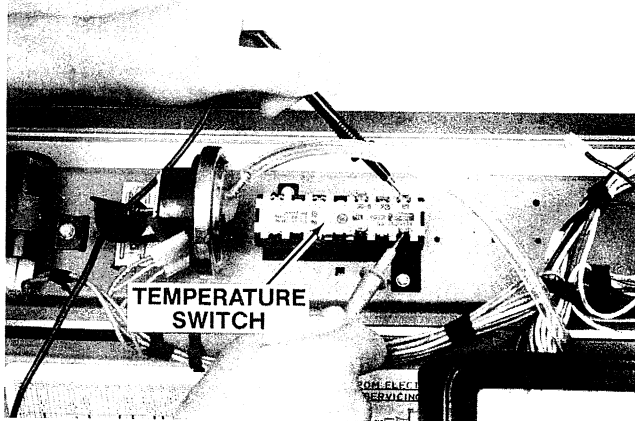
STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

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 You must know how to use an ohmmeter.

STEP 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.



STEP 6 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 in the chart.

SWITCH SETTING	TERMINAL MARKINGS 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 Y-R
Warm/Cold	BR to BR-R, G-BK to Y-R
Cold/Cold	G-BK to Y-R

STEP 7 EXAMPLE: Set the temperature switch to Warm/Cold. This closes two contacts inside the switch, BR to BR-R and G-BK to Y-R.

STEP 8 Touch one ohmmeter probe to terminal BR.

STEP 9 Touch the other ohmmeter probe to terminal BR-R.

STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the temperature switch is bad and needs replacing.

STEP 11 Touch one ohmmeter probe to terminal BR.

STEP 12 Touch the other ohmmeter probe to the rest of the terminals without touching terminal BR-R.

STEP 13 The ohmmeter should show an open circuit when checking these other terminals. If not, the temperature switch is bad and needs replacing.

STEP 14 Touch one ohmmeter probe to terminal Y-R.

STEP 15 Touch the other ohmmeter probe to terminal G-BK.

STEP 16 The ohmmeter should show ZERO resistance (continuity). If not, the temperature switch is bad and needs replacing.

STEP 17 Touch one ohmmeter probe to terminal G-BK.

STEP 18 Touch the other ohmmeter probe to the rest of the terminals without touching terminal Y-R.

STEP 19 The ohmmeter should show an open circuit when checking these other terminals. If not, the temperature switch is bad and needs replacing.

REPLACEMENT

ROTARY KNOB TYPE SWITCHES ONLY

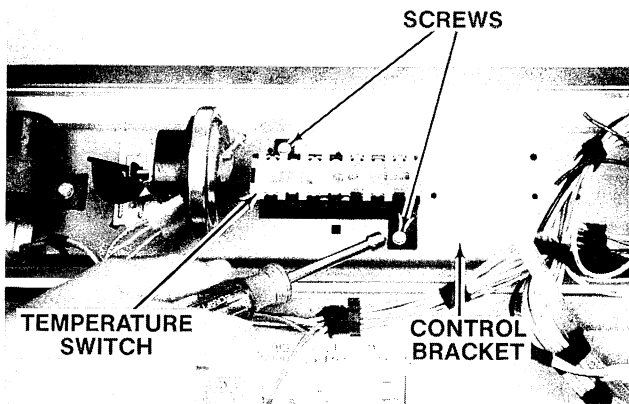
STEP 20 Roll the console forward and down onto the top.

STEP 21 Remove the control knob (section J, proc. 3; Type A).

STEP 22 Lay the console back until it rests on the hinges.

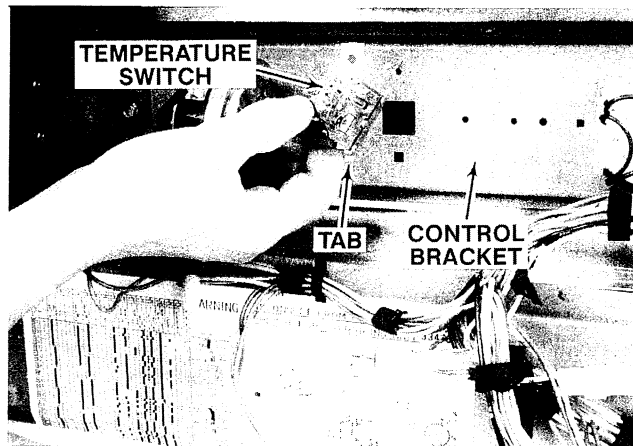
STEP 23 Notice the locating tab on the end of the temperature switch and where it's located in the slot on the control bracket. The tab on the new switch must be installed in the same slot.

ROTARY KNOB AND PUSH-BUTTON TYPE SWITCHES

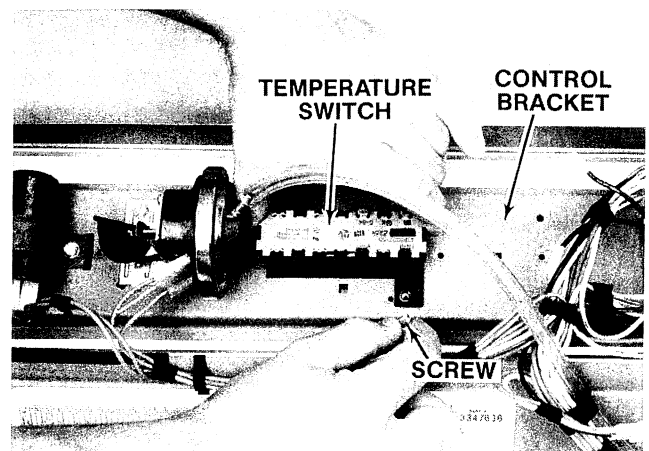


STEP 24 Using a nutdriver or socket wrench, remove the one screw holding the rotary type or two screws holding the push-button type temperature switch to the control bracket.

STEP 25 Carefully remove the temperature switch.



NOTE: The new rotary type switch locating tab, must use the same slot in the control bracket as the old one used.



STEP 26 Place the new temperature switch on the control bracket.

STEP 27 Using a nutdriver or socket wrench, insert the screw(s) through the temperature switch, into the control bracket and tighten.

STEP 28 Reconnect the wires to the proper terminals as previously marked.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 29 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

ROTARY KNOB TYPE SWITCHES ONLY

STEP 30 Replace the control knob (section J, proc. 3; Type A).

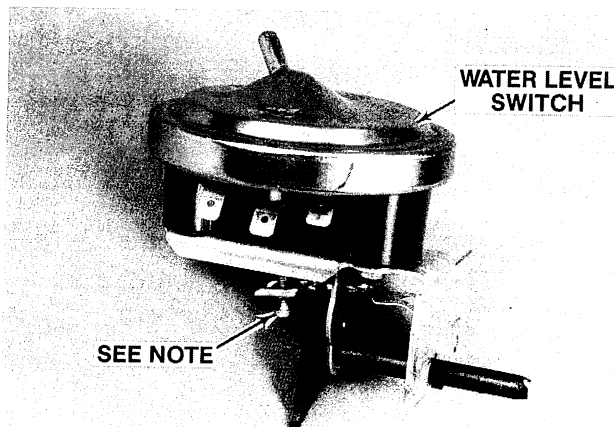
BOTH ROTARY KNOB AND PUSH- BUTTON TYPE SWITCHES

STEP 31 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 32 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 8

Water Level Switch Testing and/or Replacement



NOTE: DO NOT TURN THIS SCREW

See page 170, illus. no. 12 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

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 might include EXTRA SMALL, SMALL, MEDIUM, LARGE, and EXTRA LARGE plus a RESET option. Some models have a fixed water level switch. This allows for just one water level in the washer.

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

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

TESTING

STEP 3 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.

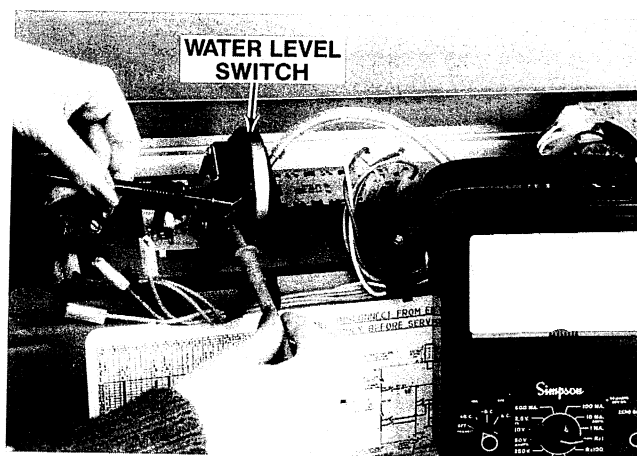
STEP 4 You must know how to use an ohmmeter.

STEP 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.

NOTE: If your tub is already full of water, go to steps 21-26, NOTE, 6-11, 27-40.

If your tub is empty, go to steps 6-40. Omit note after step 26.

With An Empty Tub Of Water



STEP 6 Touch one ohmmeter probe to terminal V.

STEP 7 Touch the other ohmmeter probe to terminal P.

STEP 8 The ohmmeter should show ZERO resistance (continuity). If not, the water level switch is bad and needs replacing.

STEP 9 Touch one ohmmeter probe to terminal V.

STEP 10 Touch the other ohmmeter probe to terminal T.

STEP 11 The ohmmeter should show an open circuit when checking these two terminals. If not, the water level switch is bad and needs replacing.

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

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 13 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 14 Reconnect the electrical power supply. See section B for the proper reconnection.

With A Full Tub Of Water

STEP 15 Fill the machine with water.

NOTE: IF you suspect the water level switch is bad, make sure you shut the water off before the water overflows onto the floor.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 16 Disconnect the electrical power supply (section B).

STEP 17 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

TESTING

STEP 18 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 19 You must know how to use an ohmmeter.

STEP 20 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.

STEP 21 Touch one ohmmeter probe to terminal V.

STEP 22 Touch the other ohmmeter probe to terminal T.

STEP 23 The ohmmeter should show ZERO resistance (continuity). If not, the water level switch is bad and needs replacing.

STEP 24 Touch one ohmmeter probe to terminal V.

STEP 25 Touch the other ohmmeter probe to terminal P.

STEP 26 The ohmmeter should show an open circuit when checking these two terminals. If not, the water level switch is bad and needs replacing.

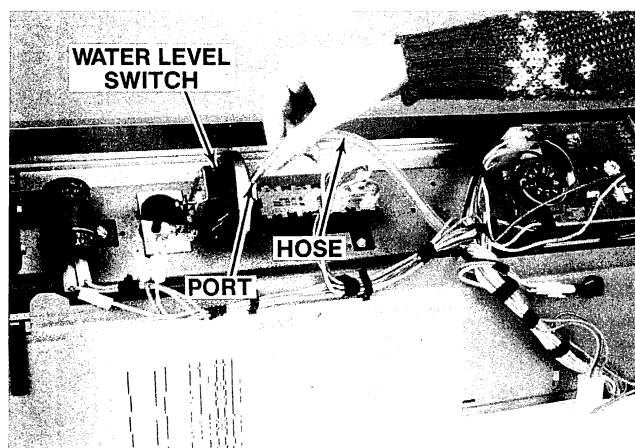
NOTE: If you checked the water level switch with a full tub of water first, the water left in the tub must be emptied by hand for the next test. Now go back to steps 6-11, 27-40.

REPLACEMENT

STEP 27 Roll the console forward and down onto the top.

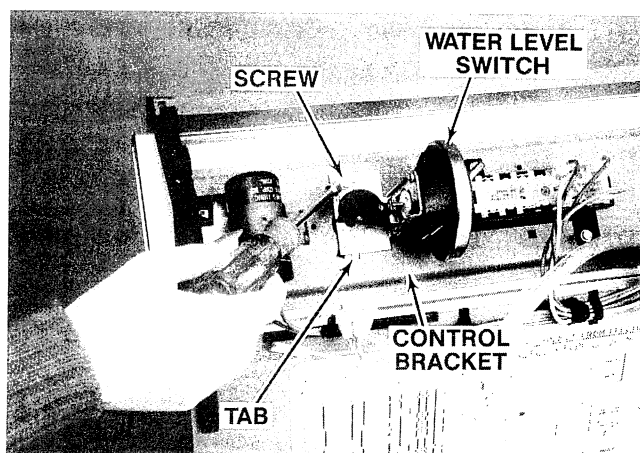
STEP 28 Remove the control knob (section J, proc. 3; Type A).

STEP 29 Lay the console back until it rests on the hinges.



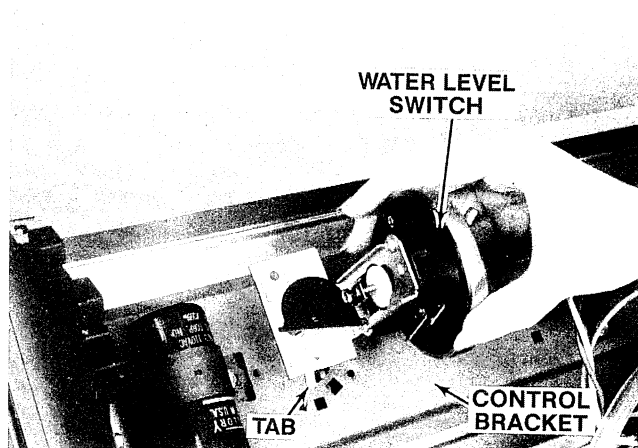
STEP 30 Remove the plastic hose from the port on the water level switch.

NOTE: 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 new part must use the same slot in the control bracket as the old one used.

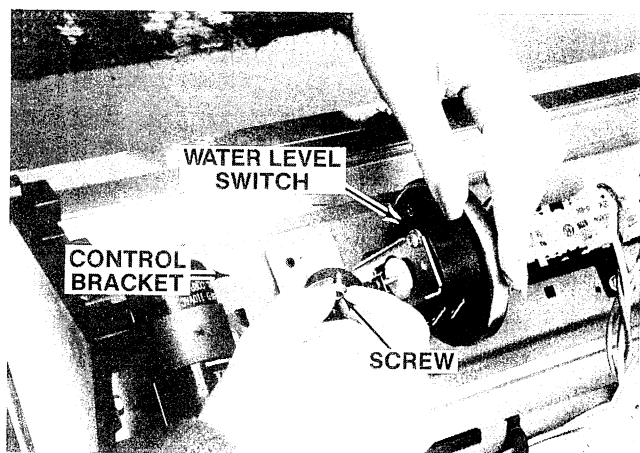


STEP 31 Using a nutdriver or socket wrench, remove the screw holding the water level switch to the control bracket.

STEP 32 Carefully remove the water level switch.

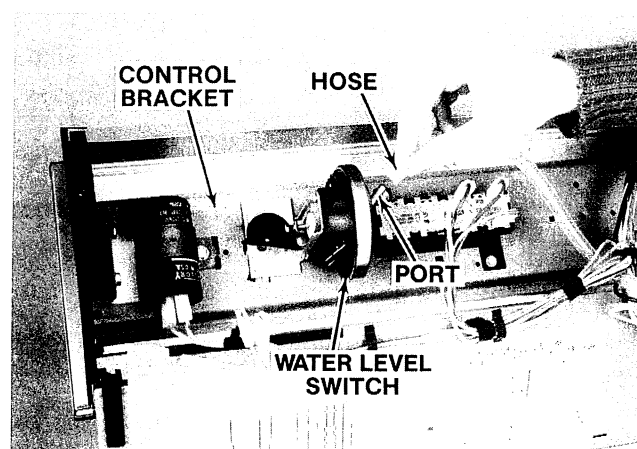


STEP 33 Place the new water level switch with the locating tab in the slot on the control bracket.



STEP 34 Using a nutdriver or socket wrench, insert the screw through the switch bracket, into the control bracket and tighten.

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 before the plastic hose can be connected to the port. If this is not done, the washer will overflow the next time it's used.



STEP 35 Replace the plastic hose on the water level switch port.

STEP 36 Reconnect the wires to the proper terminals as previously marked.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 37 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

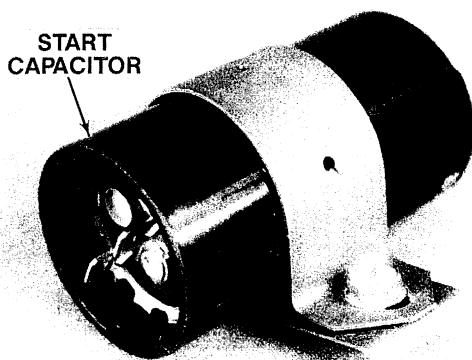
STEP 38 Replace the control knob (section J, proc. 3; Type A).

STEP 39 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 40 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 9

Motor Start Capacitor Testing and/or Replacement



See page 170, illus. no. 34 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

A start capacitor increases the turning force of the rotor in the drive motor during start. This part could be located in the console or on the drive motor.

STEP 1 Disconnect the electrical power supply (section B).

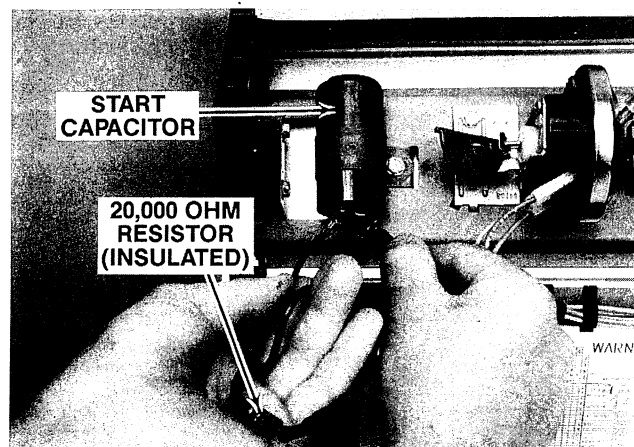
STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

TESTING

⚠ WARNING

Electrical Shock Hazard

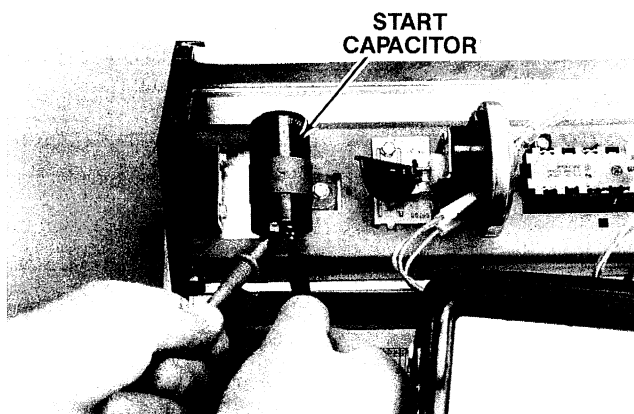
- Do not touch both terminals at the same time.
- Capacitors should always be discharged prior to handling. To discharge the capacitor, use a two-watt, 20,000-ohm resistor with insulated leads. Touch both capacitor terminals at the same time with the resistor.



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

STEP 4 You must know how to use an ohmmeter.

STEP 5 Set the ohmmeter scale to the Rx100 ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.



STEP 6 Touch one ohmmeter probe to one of the terminals on the capacitor.

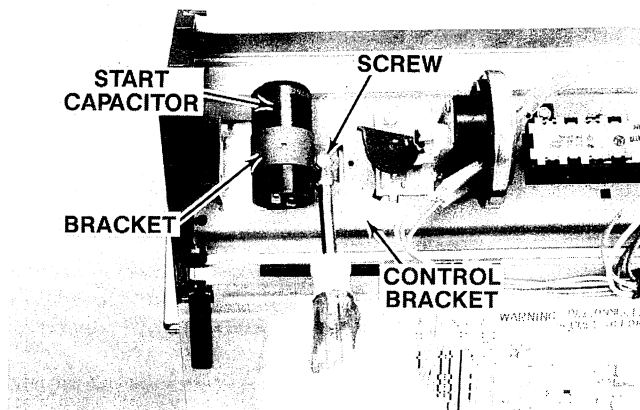
AT THE INSTANT THE OTHER OHMMETER PROBE TOUCHES THE OTHER TERMINAL ON THE CAPACITOR, THE OHMMETER NEEDLE SHOULD MOVE INSTANTLY TOWARD ZERO (RIGHT), THEN RETURN SLOWLY (LEFT).

STEP 7 Touch the other ohmmeter probe to the other terminal on the capacitor.

STEP 8 If the ohmmeter needle stays at or near ZERO and does not move back at all, the capacitor is bad and needs replacing.

STEP 9 Now switch the ohmmeter probes on the capacitor terminals. The same thing should happen as in steps 6-8. If not, the capacitor is bad and needs replacing.

REPLACEMENT



STEP 10 Using a screwdriver or nutdriver, loosen or remove the screw holding the capacitor clamp to the control bracket.

STEP 11 Slide the capacitor out of the clamp.

STEP 12 Place the new capacitor (half way) in the clamp with the terminals facing down.

STEP 13 Using a screwdriver or nutdriver, tighten the screw holding the capacitor clamp to the control bracket.

STEP 14 Reconnect the wires to the proper terminals as previously marked.

⚠ WARNING

Electrical Shock Hazard

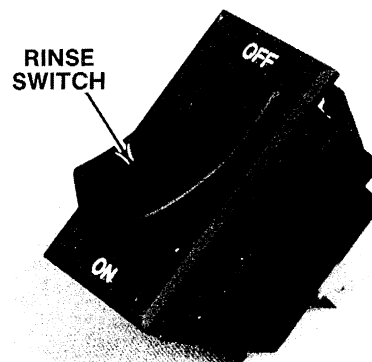
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 15 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 16 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 10

Rinse Switch Testing and/or Replacement



See page 170, illus. no. 61 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

This switch, located in the console, gives you the option of an extra rinse, in the REGULAR CYCLE.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

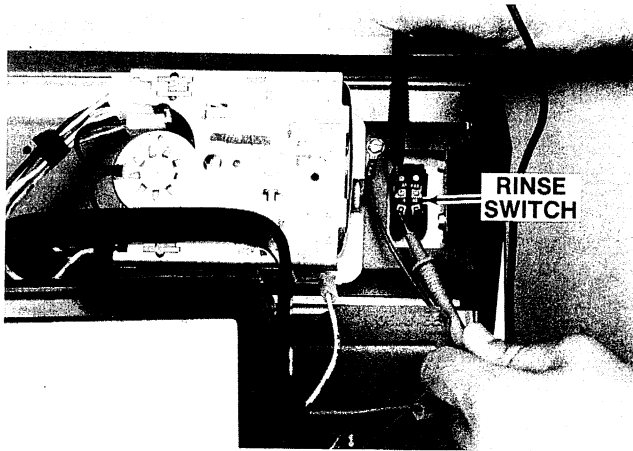
TESTING

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

STEP 4 You must know how to use an ohmmeter.

STEP 5 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.

OFF POSITION



STEP 6 Touch and hold one ohmmeter probe to terminal VY (same as W-G).

STEP 7 Touch the other ohmmeter probe, one at a time to terminals V (same as T-V), GY, GY-Y.

STEP 8 The ohmmeter should show an open circuit when checking these terminals. If not, the rinse switch is bad and needs replacing.

STEP 9 Touch and hold one ohmmeter probe to terminal V (same as T-V).

STEP 10 Touch the other ohmmeter probe, one at a time to terminals GY, GY-Y.

STEP 11 The ohmmeter should show an open circuit when checking these terminals. If not, the rinse switch is bad and needs replacing.

STEP 12 Touch one ohmmeter probe to terminal GY (same as W-G).

STEP 13 Touch the other ohmmeter probe to terminal GY-Y (same as T-V).

STEP 14 The ohmmeter should show an open circuit when checking these terminals. If not, the rinse switch is bad and needs replacing.

ON POSITION

STEP 15 Touch one ohmmeter probe to terminal VY.

STEP 16 Touch the other ohmmeter probe to terminal V.

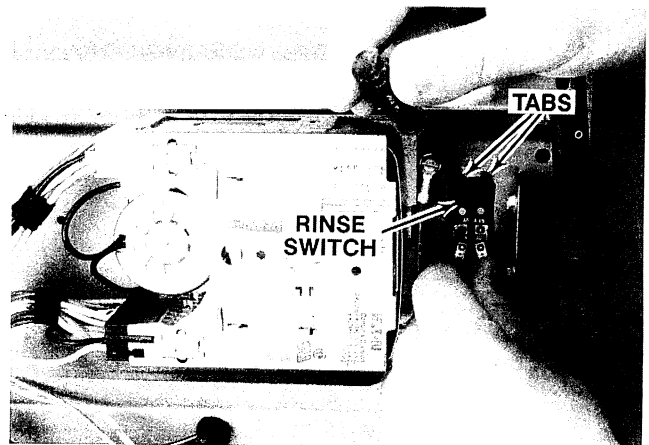
STEP 17 The ohmmeter should show ZERO resistance (continuity). If not, the rinse switch is bad and needs replacing.

STEP 18 Touch one ohmmeter probe to terminal GY.

STEP 19 Touch the other ohmmeter probe to terminal GY-Y.

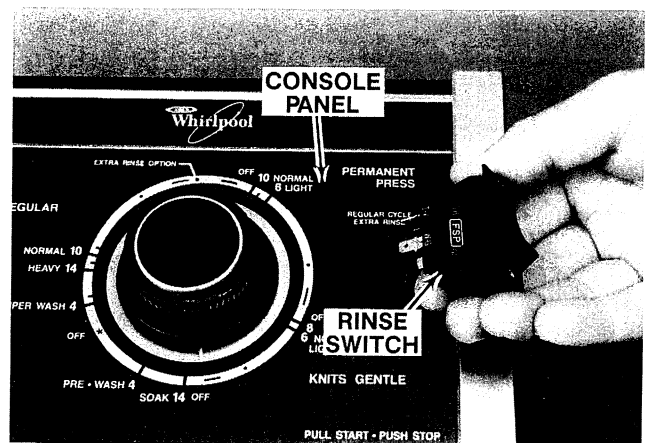
STEP 20 The ohmmeter should show ZERO resistance (continuity). If not, the rinse switch is bad and needs replacing.

REPLACEMENT



STEP 21 Using a screwdriver, push down on each of the four tabs (two top and two bottom) and pry or wiggle the rinse switch out the hole in the console.

STEP 22 Roll the console forward and down onto the top.



STEP 23 Insert the new rinse switch in the hole in the console, then push and rock until it snaps into place.

STEP 24 Lay the console back until it rests on the hinges.

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

⚠ WARNING

Electrical Shock Hazard

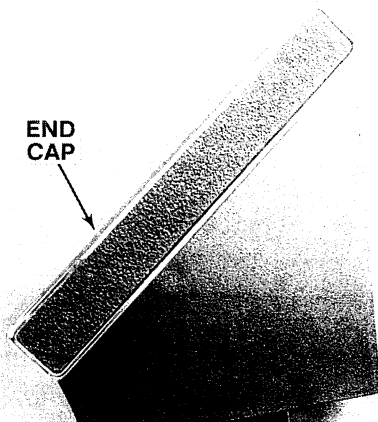
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 26 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 27 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 11

End Cap Replacement



See page 170, illus. no.'s 16 and 51 for location of parts.

⚠ WARNING

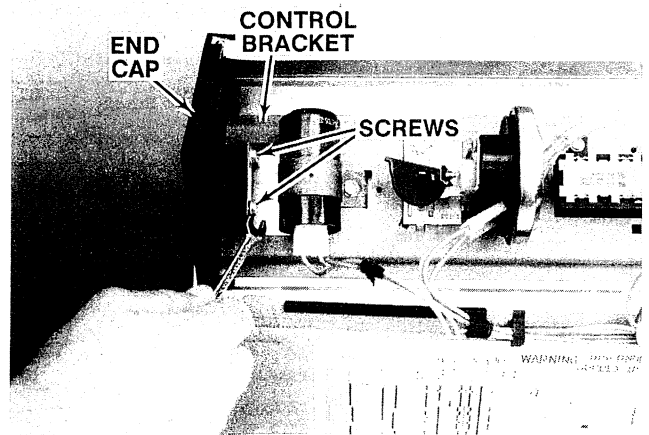
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

These end caps are located on each end of the console

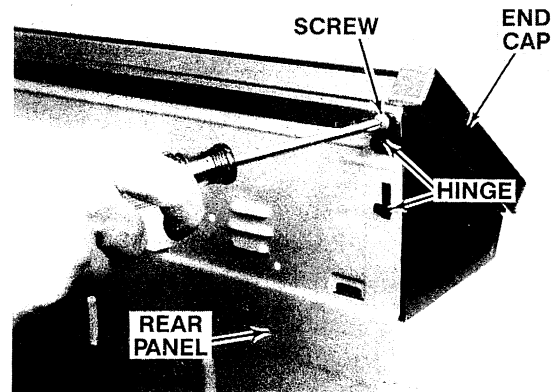
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



STEP 3 Using a combination wrench, remove the two screws holding the end cap to the control bracket.

STEP 4 Carefully roll the console forward and down onto the top.



STEP 5 Using a screwdriver, remove the screw holding the hinge to the back of the end cap.

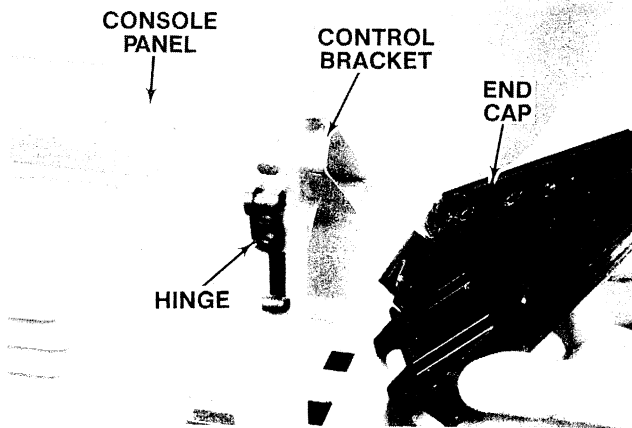
STEP 6 Carefully pull the end cap off the console.

REPLACEMENT

NOTE: Make sure the push-in nut is in place at the top of the end cap.

PROCEDURE 12

Hinge Replacement

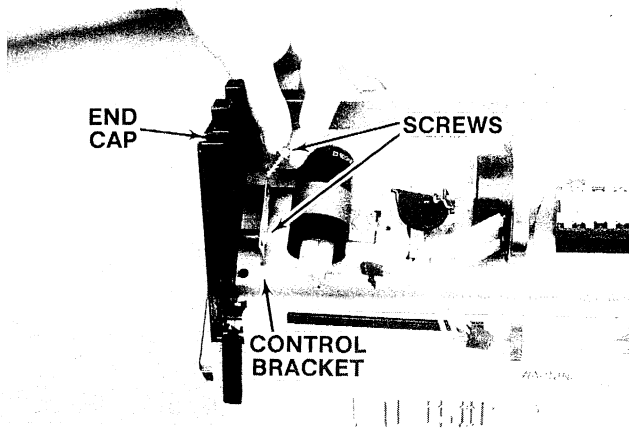


STEP 7 Push the end cap onto the console.

STEP 8 Lift up on the small part of the hinge.

STEP 9 Using a screwdriver, insert the screw through the hinge, console then into the end cap and tighten.

STEP 10 Carefully lay the console back until it rests on the hinges.



STEP 11 Using a combination wrench, insert the screws through the control bracket, into the end cap and tighten.

STEP 12 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 13 Reconnect the electrical power supply. See section B for the proper reconnection.



See page 170, illus. no. 5 for location of part.

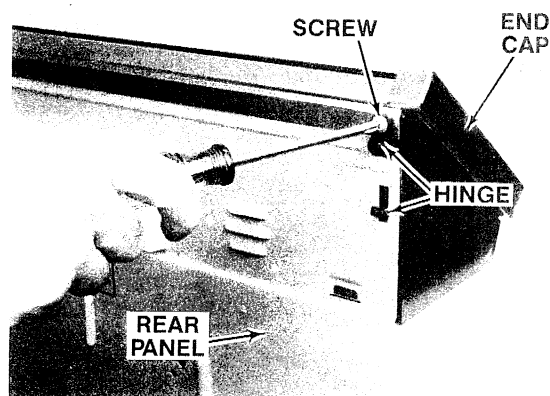
! WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

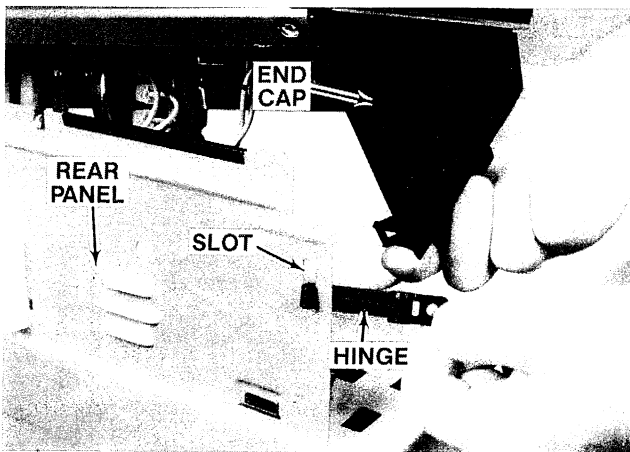
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



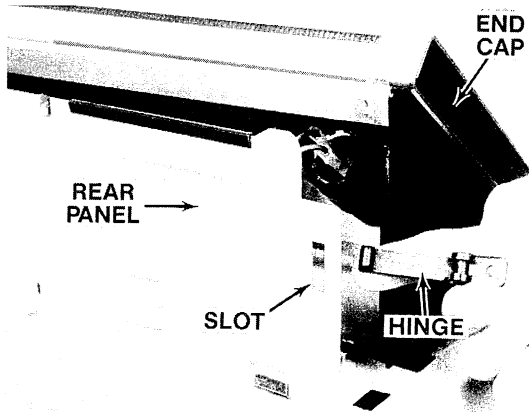
STEP 3 Using a screwdriver, remove the screw holding the hinge to the back of the end cap.

STEP 4 Carefully pull the end cap away from the rear panel.



STEP 5 Turn the hinge so the bottom part comes out the slot in the rear panel.

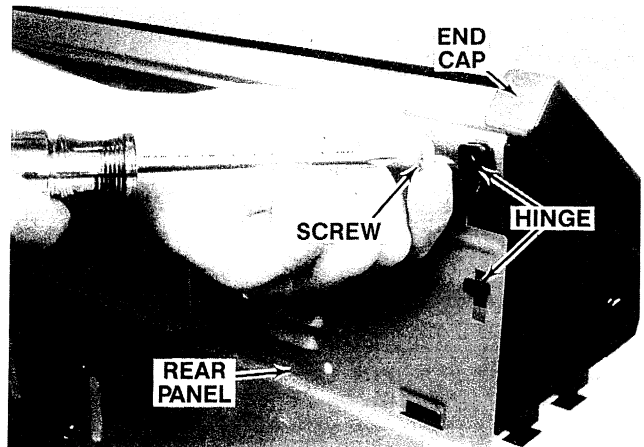
REPLACEMENT



STEP 6 Place the new hinge on the inside of the rear panel with the bottom part in the slot on the rear panel.

STEP 7 Turn the hinge up.

NOTE: Make sure the back edge of the console is over the edge of the rear panel.



STEP 8 Using a screwdriver, insert the screw through the hinge, console into the end cap and tighten.

⚠ WARNING

Electrical Shock Hazard

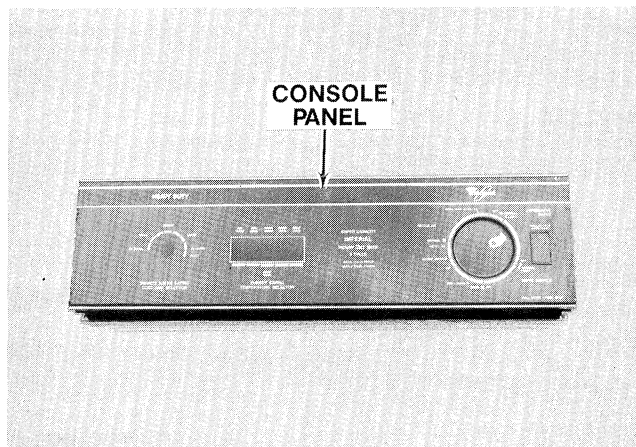
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 9 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 10 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 13

Console Panel Replacement



See page 170, illus. no. 39 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

The console panel is located on top of the automatic washer and has all the information printed on it for the different cycles, water temperatures and water levels.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Remove the control knob(s) (section J, proc. 3; Type A).

STEP 3 Remove the timer knob (section J, proc. 1).

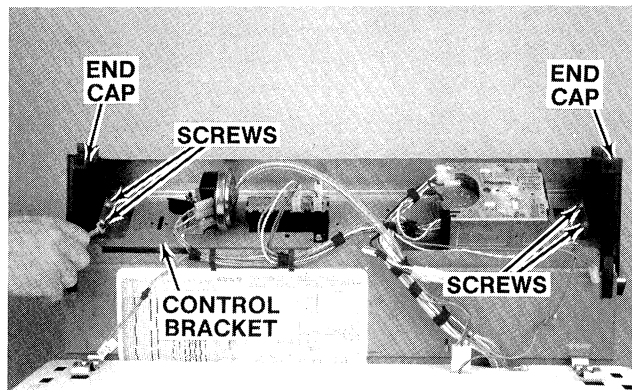
STEP 4 Remove the timer dial (section J, proc. 2).

STEP 5 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 6 Remove the motor start capacitor if used there (section J, proc. 9).

NOTE: If your washer uses the extra rinse switch, this will have to be removed.

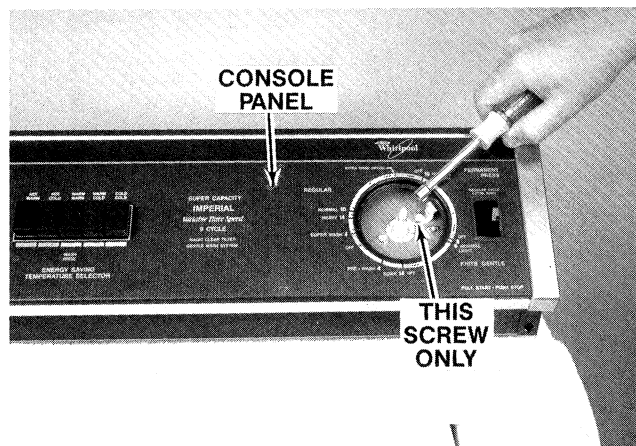
STEP 7 Remove the extra rinse switch if used (section J, proc. 10).



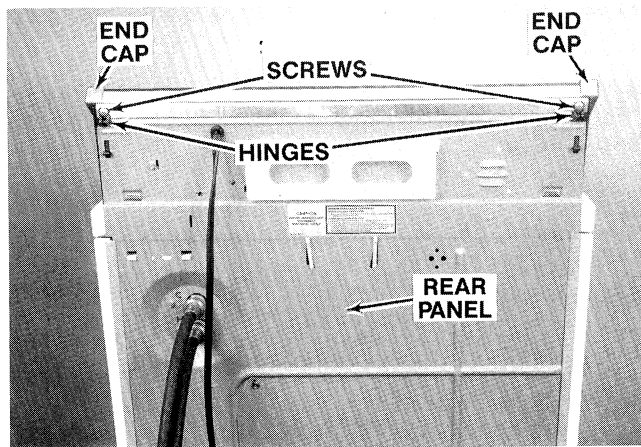
STEP 8 Using an open end wrench, remove the four screws (two on each end) holding the end caps to the control bracket.

STEP 9 Place a towel on top of the washer to protect its finish.

STEP 10 Roll the console forward and down onto the top.



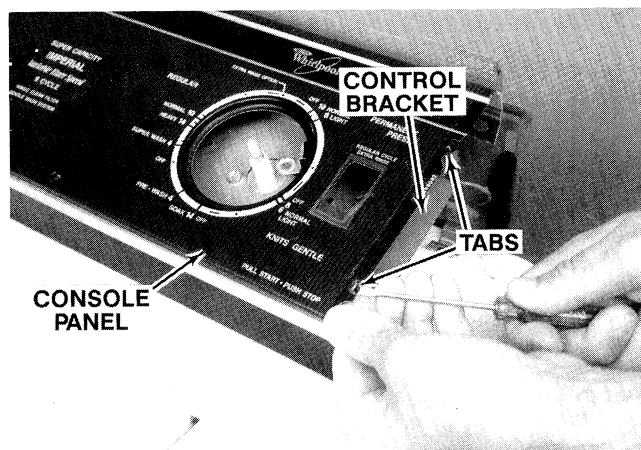
STEP 11 Using a screwdriver or nutdriver, remove the one screw holding the console panel to the timer.



STEP 12 Using a screwdriver, remove the two screws (one on each end) in the back holding the end caps to the hinges.

STEP 13 Carefully remove each end cap by pulling straight off.

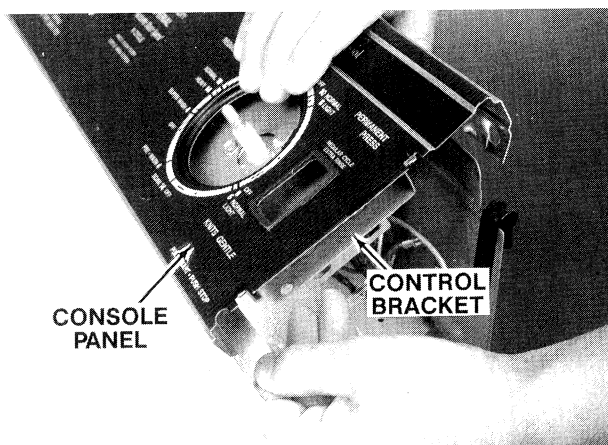
NOTE: There are two small tabs on each end of the console panel which might be bent over to hold this to the control bracket.



STEP 14 Using a small screwdriver, bend these tabs straight out.

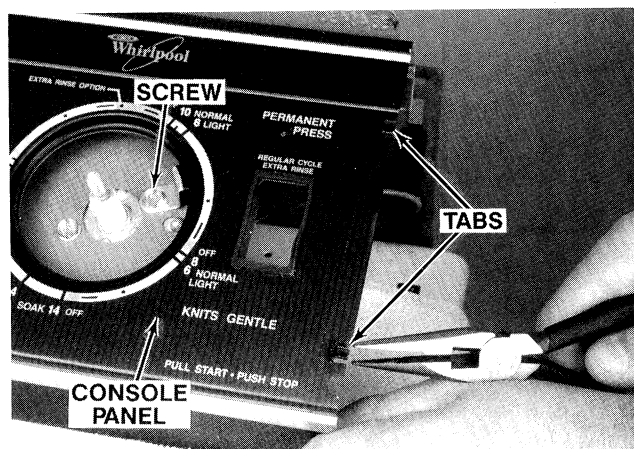
STEP 15 Carefully remove the console panel.

REPLACEMENT



STEP 16 Place the new console panel over the control bracket.

STEP 17 Using a screwdriver or nutdriver, insert the screw through the console panel, control panel into the timer and tighten.



STEP 18 Using pliers, carefully bend the four tabs (two on each end) on the console panel over the control bracket.

STEP 19 Push the end caps onto the ends of the console.

STEP 20 Using a combination wrench, insert the screws through the control bracket, into the end caps and tighten.

STEP 21 Place the top edge of the console panel over the edge of the rear panel.

STEP 22 Using a screwdriver, insert the screws through the hinges, into the end caps and tighten.

STEP 23 Replace the extra rinse switch if removed (section J, proc. 10).

STEP 24 Lay the console back until it rests on the hinges.

STEP 25 Replace the motor start capacitor if used there (section J, proc. 9).

STEP 26 Reconnect the wires to the proper terminals as previously marked both on the extra rinse switch and the motor start switch.

STEP 27 Remove the towel.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 28 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 29 Replace the timer dial (section J, proc. 2).

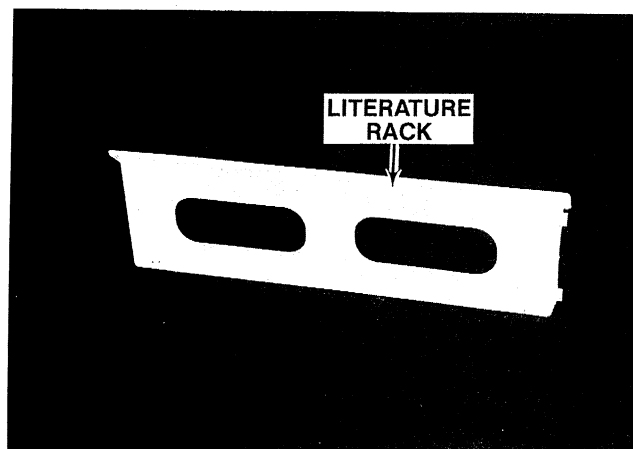
STEP 30 Replace the timer knob (section J, proc. 1).

STEP 31 Replace the control knob(s) (section J, proc. 3; Type A).

STEP 32 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 14

Literature Rack Replacement

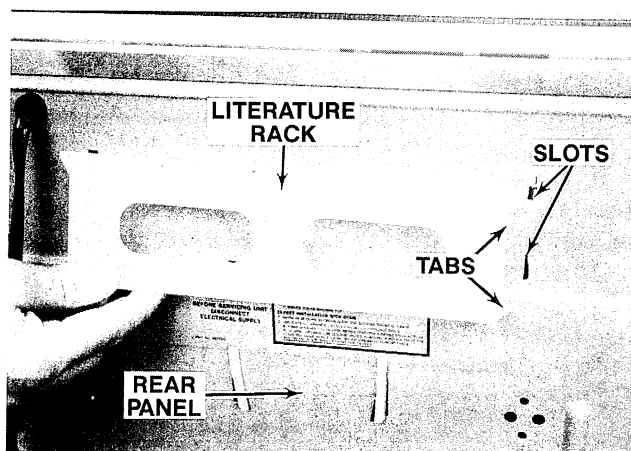


See page 170, illus. no. 53 for location of part.

This rack is located on the back of the console rear panel and holds the owners manual, installation instructions and any other papers you might have.

STEP 1 Slide the rack up, then pull so the tabs in the rack come out of the slots in the rear panel.

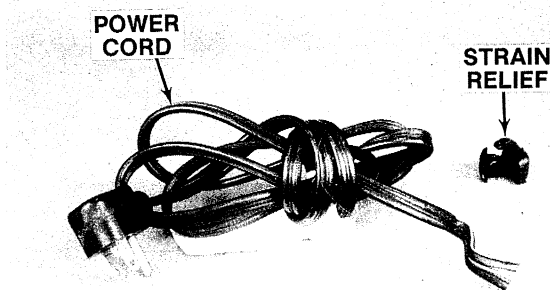
REPLACEMENT



STEP 2 Place the new literature rack with the tabs going into the slots on the rear panel, then push down.

PROCEDURE 15

Power Cord Testing and/or Replacement



See page 170, illus. no.'s 14 and 15 for location of parts.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

The power cord is located coming out the back of the console area. This automatic washer is supplied with a power cord having a 3-prong grounding plug. It must be plugged into a mating 3-prong grounding wall outlet in accordance with the National Electrical Code and your local codes.

STEP 1 Disconnect the electrical power supply (section B).

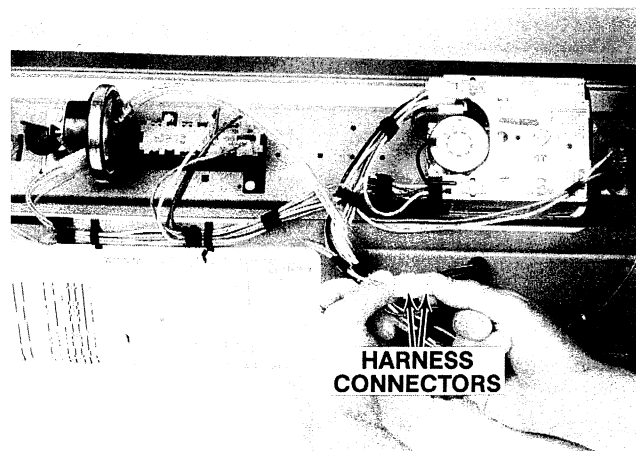
⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

STEP 3 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



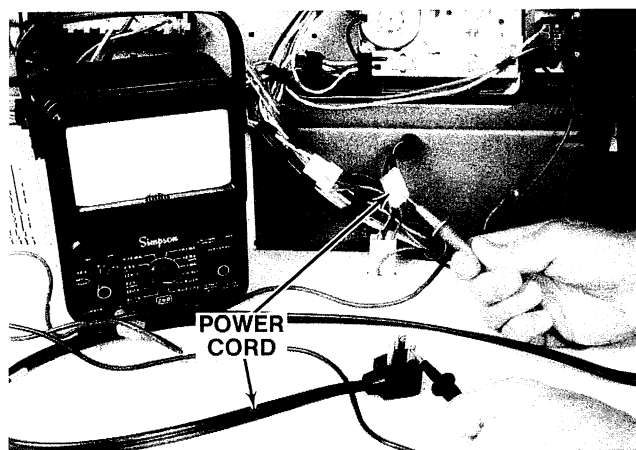
STEP 4 Disconnect the harness connectors by pressing on the tab (located in the middle), then pull them apart.

TESTING

STEP 5 You must know how to use an ohmmeter.

STEP 6 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.

STEP 7 Place the plug end of the power cord on the top of the washer.



STEP 8 Touch one ohmmeter probe to the prong on the plug which has that part of the cord ribbed or grooves in it.

STEP 9 Touch the other ohmmeter probe to the terminal located in the connector which has that part of the cord, ribbed, grooves in it or a white line painted on it.

STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

STEP 11 Touch one ohmmeter probe to the prong on the plug which has that part of the cord smooth.

STEP 12 Touch the other ohmmeter probe to the terminal located in the connector which has that part of the cord smooth.

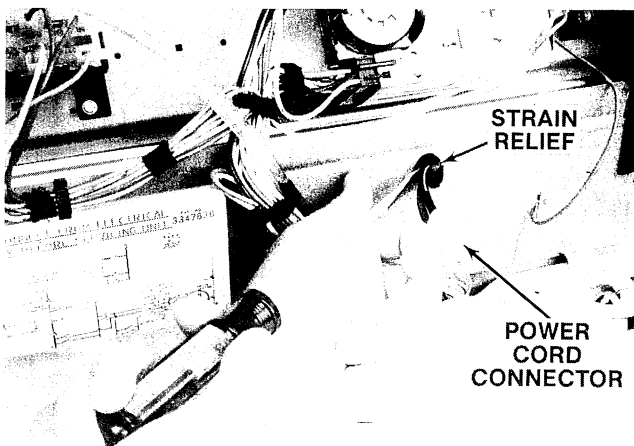
STEP 13 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

STEP 14 Touch one ohmmeter probe to the round prong on the plug.

STEP 15 Touch the other ohmmeter probe to the terminal located in the connector which has the green ground wire.

STEP 16 The ohmmeter should show ZERO resistance (continuity). If not, the power cord is bad and needs replacing.

REPLACEMENT

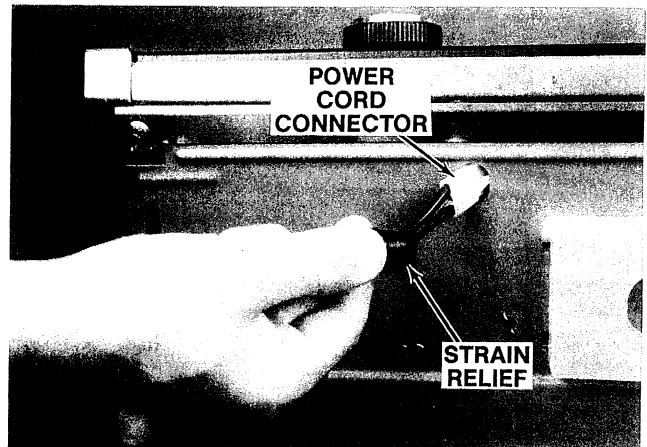


STEP 17 Using a screwdriver, pry the strain relief (toward the back) out the hole in the rear panel.

STEP 18 Carefully remove the power cord.

STEP 19 Place the new power cord in the strain relief about two inches from the end of the connector.

STEP 20 Place the connector, from the back, through the hole in the rear panel up to the strain relief.



STEP 21 Using a screwdriver, push the strain relief into the hole until it snaps into place.

STEP 22 Push on the two connectors until they snap together

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 23 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 24 Move the automatic washer back to its proper place.

STEP 25 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 26 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 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, then carefully lower.

STEP 27 Using an open end wrench, tighten the locknuts.

STEP 28 Drain the water if you had to level it this way.

STEP 29 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 16

Inlet Mixing Valve Testing and/or Replacement



See page 170, illus. no. 18 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

There is one basic type of mixing valve used, and that is the two-coil valve.

On portable washers the bottom port is blocked off and is not used. In using one coil, it is called a single-coil inlet mixing valve. Adjustments to hot and cold water are made at the faucets at your kitchen sink.

On other washers the two-coil inlet mixing valve is used and 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 panel to assist in properly positioning the inlet mixing valve and inlet hose(s).

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

STEP 3 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

TESTING

STEP 4 Remove one wire connector at a time, carefully labeling each connector according to the terminal marking or location on the inlet mixing valve. This procedure should assure that the right connector is reconnected to the right terminals.

STEP 5 You must know how to use an ohmmeter.

STEP 6 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 100-1,000 ohms. Set the ohms scale and ZERO the meter.



STEP 7 Touch one of the ohmmeter probes to one of the terminals on the coil.

STEP 8 Touch the other ohmmeter probe to the other terminal on the same coil.

STEP 9 You should read between 100-1,000 ohms. If you do not get this reading, the inlet mixing valve is bad and needs replacing.

STEP 10 If your inlet mixing valve has two or three coils, check these coils the same way as in steps 7-9.

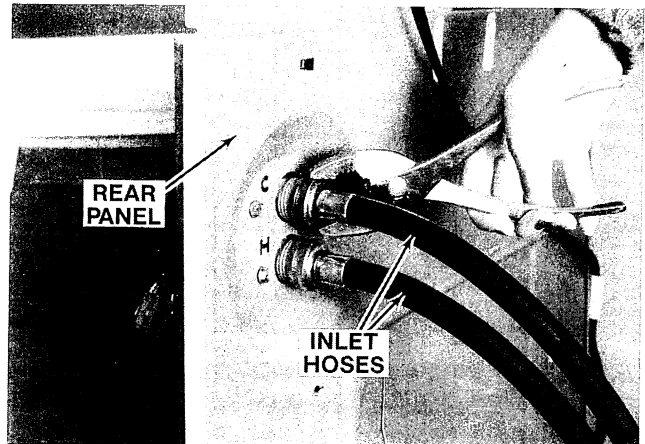
NOTE: IF YOU GET THIS READING, THE INLET VALVE COULD STILL BE BAD FROM A MECHANICAL PROBLEM INSIDE THE VALVE. REPLACE THE INLET VALVE OR HAVE THIS CONDITION CHECKED BY RUNNING A VOLTAGE CHECK. FOR YOUR PERSONAL SAFETY, THIS CHECK MUST BE DONE BY AN AUTHORIZED WHIRLPOOL FACTORY SERVICE BRANCH.

REPLACEMENT

STEP 11 Shut off the hot and cold water faucets.

STEP 12 Identify the hot and cold water inlet hoses with a piece of tape. This procedure will be easier when placing them back on the ports on the new inlet mixing valve.

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

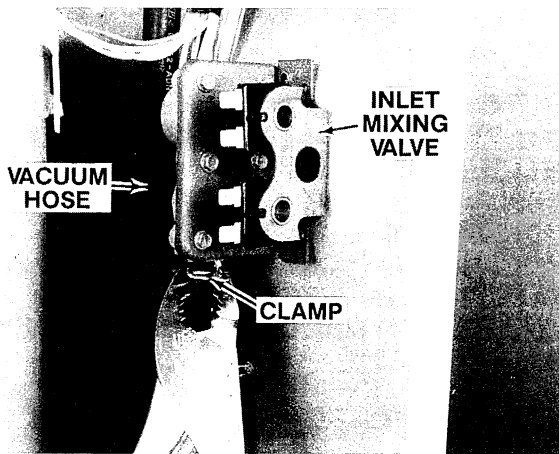


STEP 13 Using pliers, remove the top hose (cold) from the inlet mixing valve port.

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

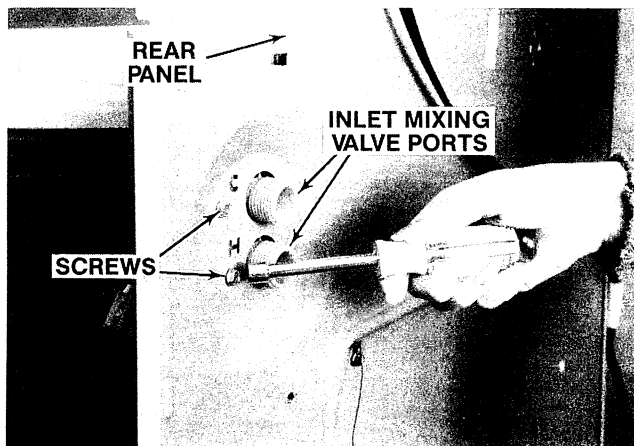
STEP 15 Using pliers, remove the bottom hose (hot) from the inlet mixing valve port.

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



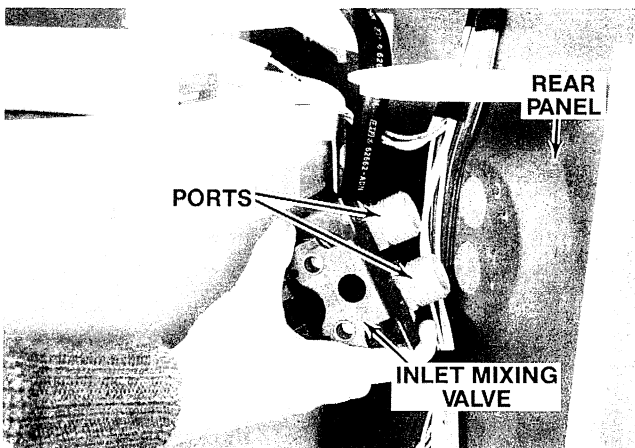
STEP 17 Using pliers, slide the clamp on the vacuum hose, off the inlet mixing valve port.

STEP 18 Remove the hose from the inlet mixing valve port.

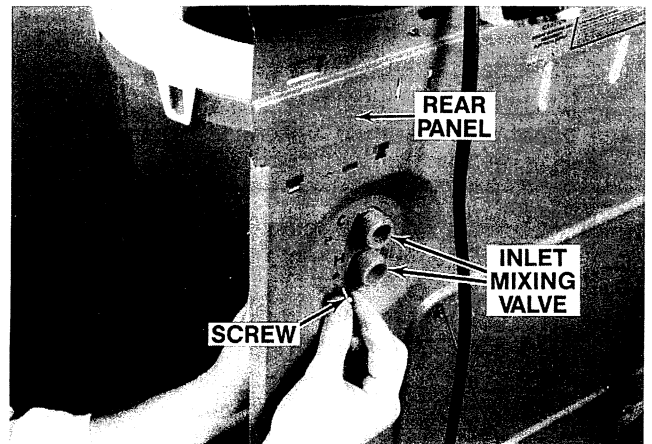


STEP 19 Using a screwdriver or nutdriver, remove the screws holding the inlet mixing valve to the rear panel.

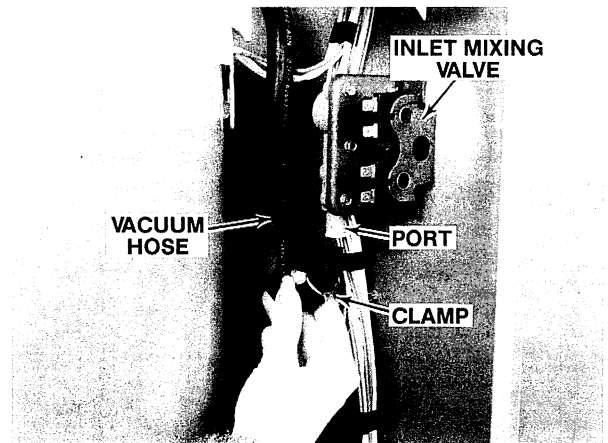
STEP 20 Carefully remove the inlet mixing valve.



STEP 21 Place the new inlet mixing valve ports through the holes from inside the rear panel.

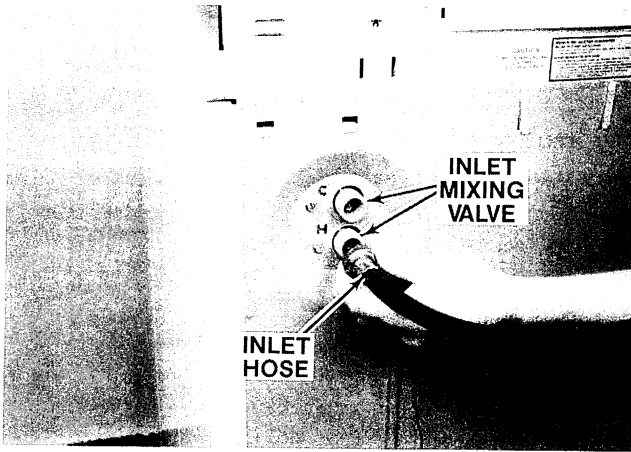


STEP 22 Using a screwdriver or nutdriver, insert the screws through the rear panel, into the inlet mixing valve and tighten.



STEP 23 Slide the vacuum hose over the port on the inlet mixing valve.

STEP 24 Using pliers, slide the clamp on this hose, over the port.



STEP 25 Using pliers, hand turn one of the hoses (until tight) onto one of the ports on the inlet mixing valve, then turn 1/4 turn with the pliers to tighten.

STEP 26 Using pliers, hand turn the other hose (until tight) onto the other port on the inlet mixing valve, then turn 1/4 turn with the pliers to tighten.

STEP 27 Using pliers, attach the inlet hoses to the proper ports on the inlet mixing valve.

STEP 28 Reconnect the wire connectors to the proper terminals as previously marked.

STEP 29 Turn the hot and cold water faucets ON and check for leaks.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 30 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 31 Move the automatic washer back to its proper place.

STEP 32 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 33 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, 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, then carefully lower.

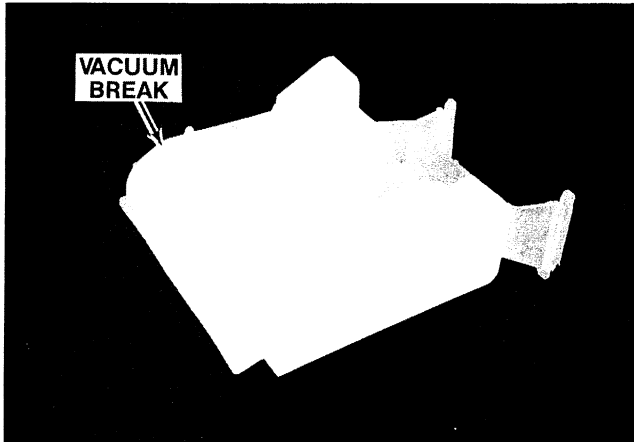
STEP 34 Using an open end wrench, tighten the locknuts.

STEP 35 Drain the water if you had to level it this way.

STEP 36 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 17

Vacuum Break Replacement



See page 170, illus. no. 24 for location of part.

WARNING

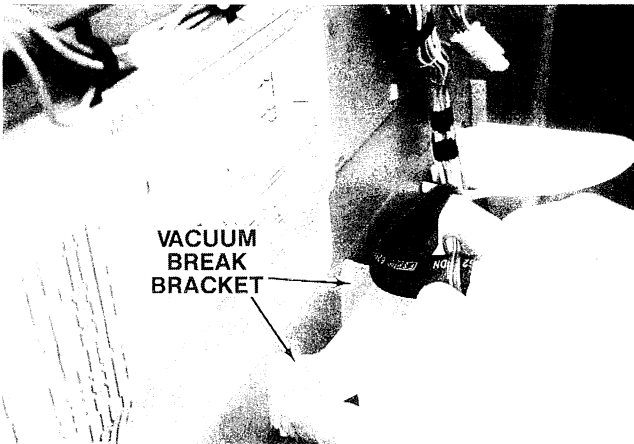
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This part is located in the middle on top of the rear panel. The purpose of the vacuum break is to scatter the water as it enters the basket.

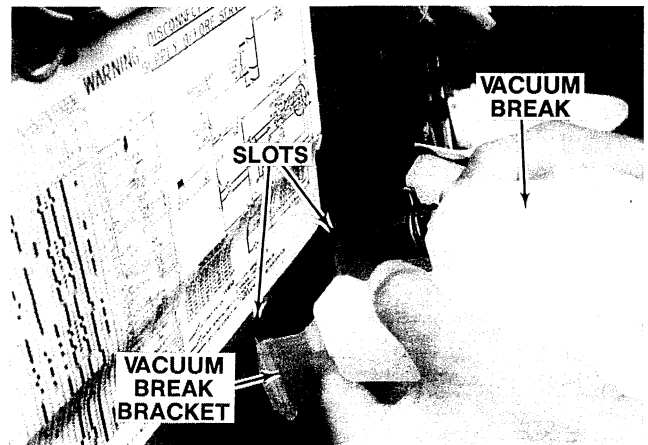
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



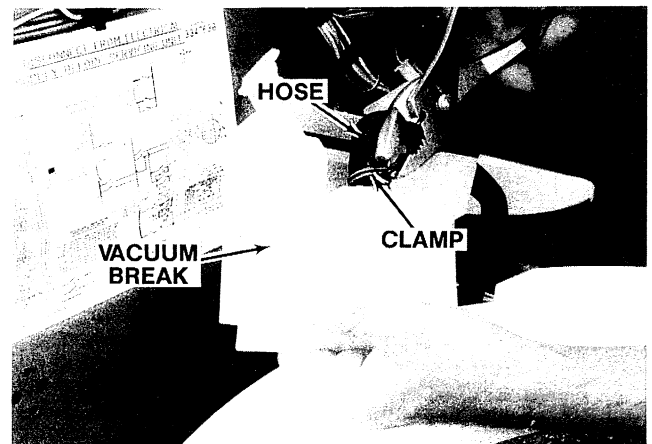
STEP 3 At the same time, push-in on the bottom sides of the vacuum break bracket.

STEP 4 Then pull the bottom out the slots in the rear panel.



STEP 5 Tilt the vacuum break up and slide the top down, to remove it from the top slots in the rear panel.

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



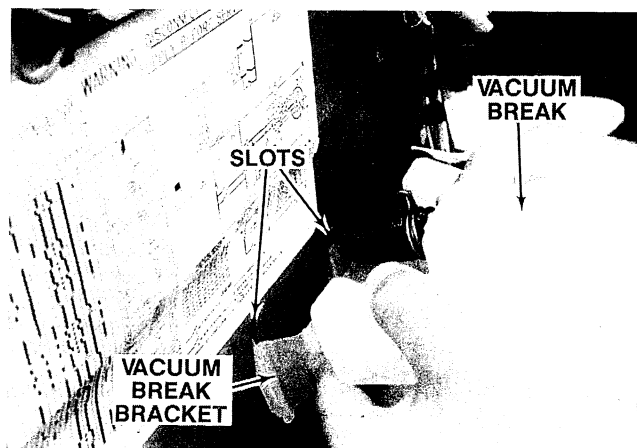
STEP 6 Using pliers, slide the clamp off the port on the vacuum break.

STEP 7 Remove the hose from the vacuum break.

REPLACEMENT

STEP 8 Push the hose onto the port on the new vacuum break.

STEP 9 Using pliers, slide the clamp onto the port on the vacuum break.



STEP 10 Tilt the vacuum break and place the top part of the vacuum break bracket, into the top slots in the rear panel.

STEP 11 At the same time, push-in on the bottom sides of the vacuum break bracket.

STEP 12 Then push them into the slots in the rear panel, let go, and they should snap into place.

⚠ WARNING

Electrical Shock Hazard

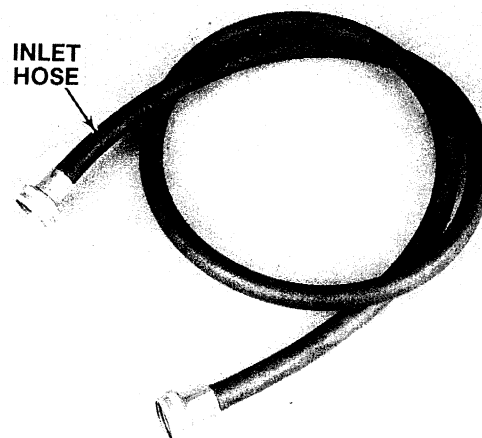
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 13 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 14 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 18

Inlet Hose Replacement



See page 170, illus. no. 3 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This hose is located in the back of the automatic washer. It is connected at one end to the inlet mixing valve, the other end is connected to the water faucet.

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

NOTE: With a piece of tape, mark which faucet is the hot water faucet. This procedure will make it easier when replacing the hoses.

STEP 3 Shut off the Hot and Cold water faucets.

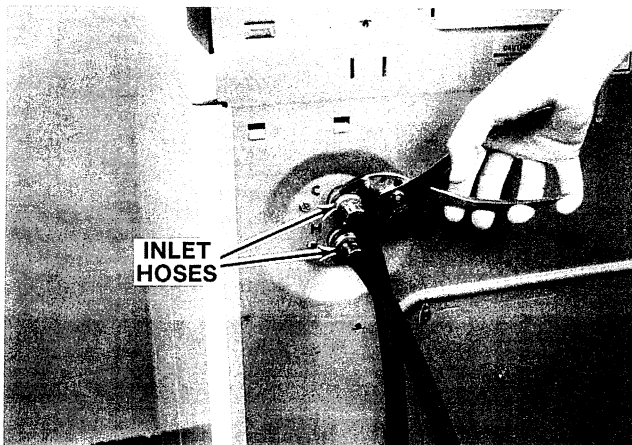
NOTE: Care should be taken when removing hoses as they may have water in them.

STEP 4 Using pliers, remove one of the hoses from the faucet.

STEP 5 Using a pail, drain the excess water from this hose.

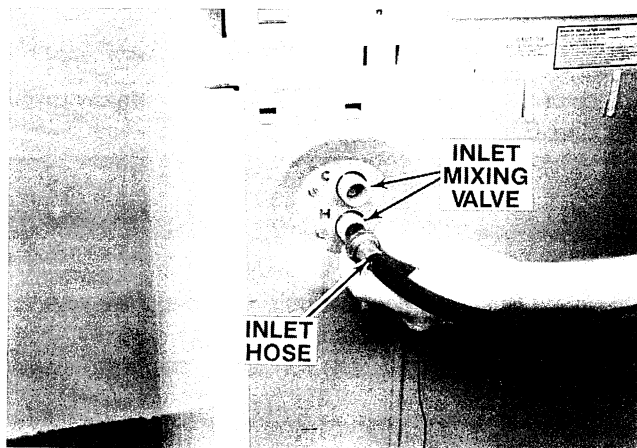
STEP 6 Using pliers, remove the other hose from the other faucet.

STEP 7 Using a pail, drain the excess water from this hose.



STEP 8 Using pliers, remove both hoses from the inlet mixing valve.

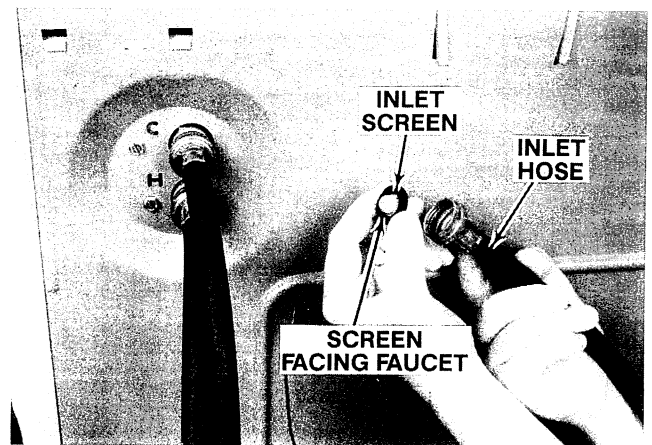
REPLACEMENT



STEP 9 Using pliers, hand turn one of the hoses (until tight) onto one of the ports on the inlet mixing valve, then turn 1/4 turn with the pliers to tighten.

STEP 10 Using pliers, hand turn the other hose (until tight) onto the other port on the inlet mixing valve, then turn 1/4 turn with the pliers to tighten.

NOTE: Before attaching the hot and cold inlet hoses to the faucets, you may want to reuse the inlet screens if your old hoses had them. If you do, remove the inlet screens from the old hoses. Make sure they are cleaned and install them with the screen facing the faucet.



STEP 11 Take the bottom hose which is the hot (H stamped on cabinet by bottom port) and hand turn (until tight) onto the hot faucet you marked with a piece of tape.

STEP 12 Using pliers, turn this hose 1/4 turn to tighten.

STEP 13 Take the top hose which is the cold (C stamped on the cabinet by the top port) and hand turn (until tight) onto the cold faucet.

STEP 14 Using pliers, turn this hose 1/4 turn to tighten.

STEP 15 Remove the tape.

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 16 Move the automatic washer back to its proper place.

STEP 17 Reconnect the electrical power supply. See section B for the proper reconnection.

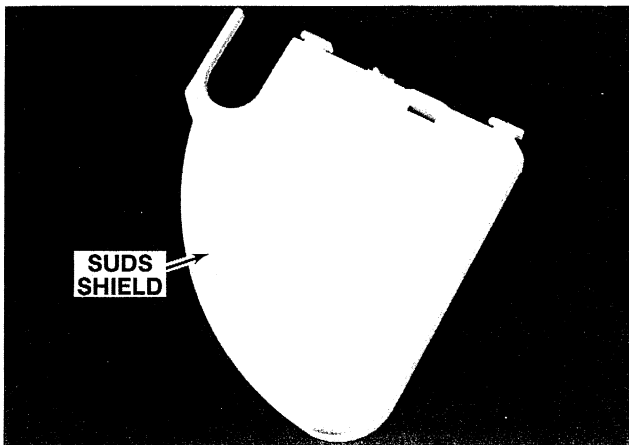
STEP 18 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 19 Using an open end wrench, tighten the locknuts.

STEP 20 Drain the water if you had to level it this way.

PROCEDURE 19

Suds Shield Replacement



See page 170, illus no. 60 for location of part.

⚠ WARNING

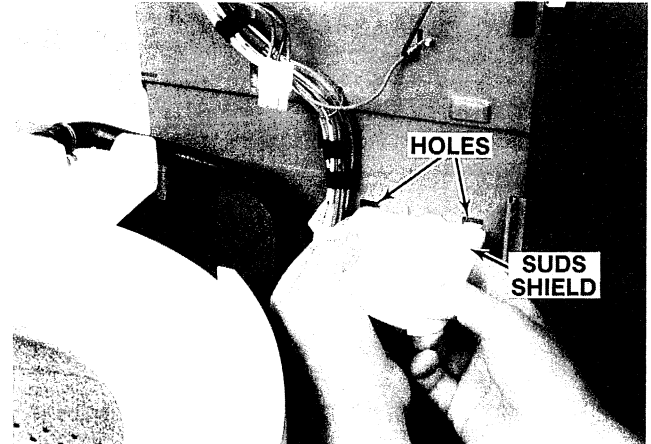
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This part is located on the rear panel, above the inlet mixing valve, and is used to keep water from splashing on the valve.

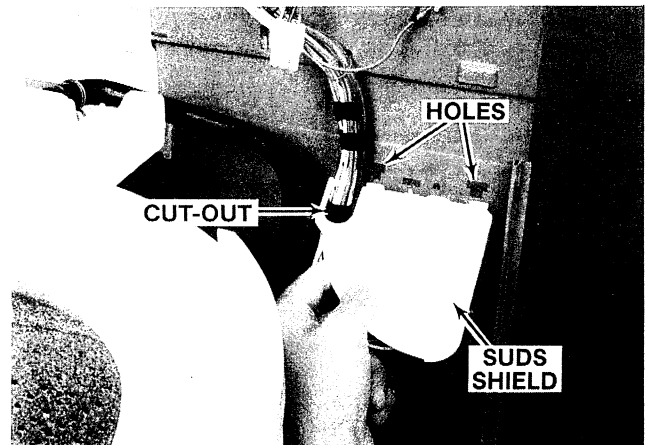
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



STEP 3 Lift on both edges until it snaps out the holes in the rear panel.

REPLACEMENT



STEP 4 Place the new suds shield with the cut-out on the left, over the wires.

STEP 5 Place the tabs on the new suds shield into the slots in the rear panel.

STEP 6 Push down on the ends until they snap into place.

STEP 7 Push down in the middle of the shield until this snaps into place.

⚠ WARNING

Electrical Shock Hazard

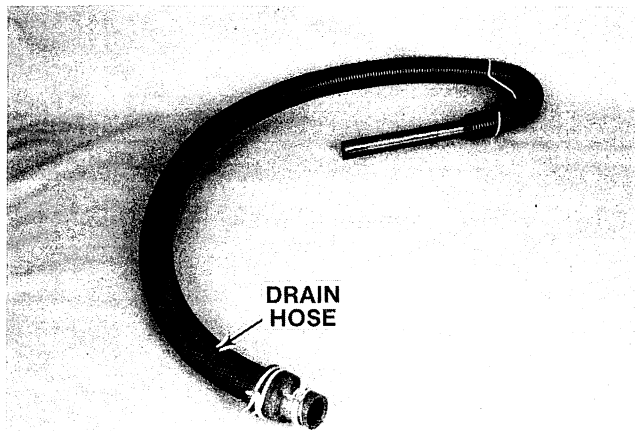
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 8 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 9 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 20

Drain Hose Replacement



See page 170, illus. no. 8 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 1 Disconnect the electrical power supply (section B).

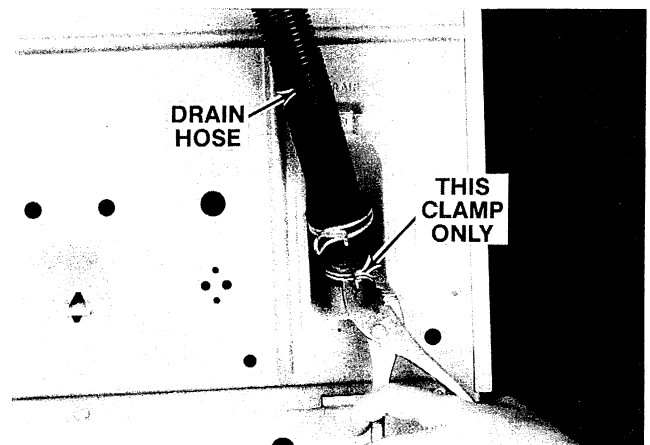
⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

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



STEP 3 Using pliers, slide the clamp on the drain hose off the port of the connector.

STEP 4 Carefully remove the drain hose.

STEP 5 Using a pail, drain the excess water from this hose.

REPLACEMENT

STEP 6 Place the clamp on the end of the new drain hose.

STEP 7 Slide the new drain hose over the port on the connector.

STEP 8 Using pliers, slide the clamp on the drain hose onto the port on the connector.

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 9 Move the automatic washer back to its proper place.

STEP 10 Reconnect the electrical power supply. See section B for the proper reconnection.

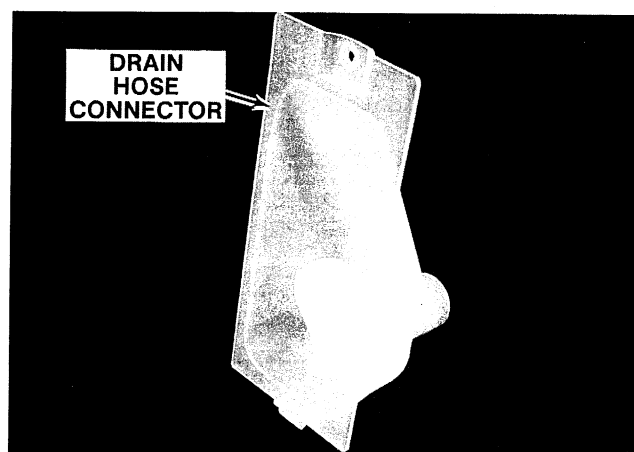
STEP 11 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 12 Using an open end wrench, tighten the locknuts.

STEP 13 Drain the water if you had to level it this way.

PROCEDURE 21

Drain Hose Connector Replacement



See page 170, illus. no. 26 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 1 Disconnect the electrical power supply (section B).

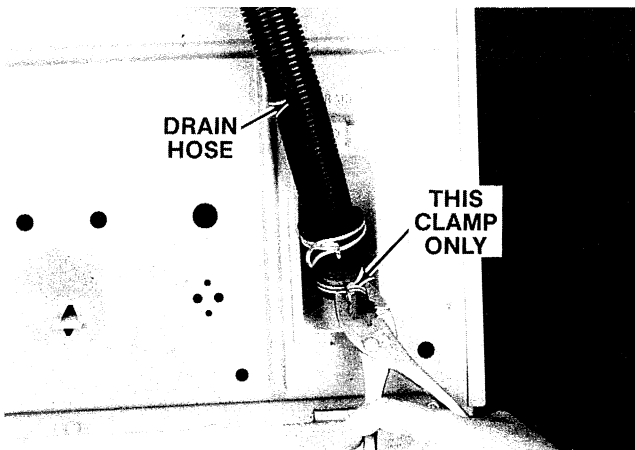
⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

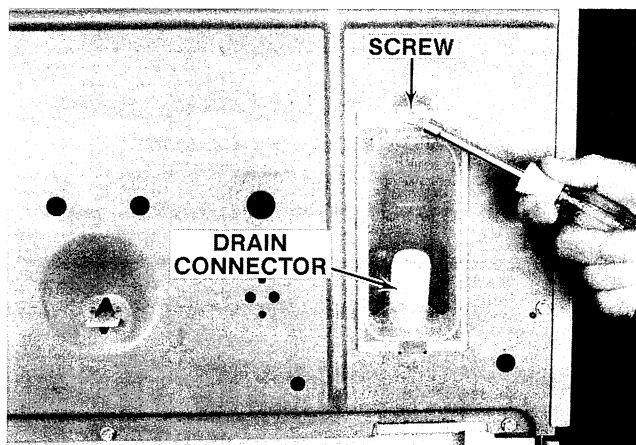
NOTE: Care should be taken when removing hoses as they may have water in them.



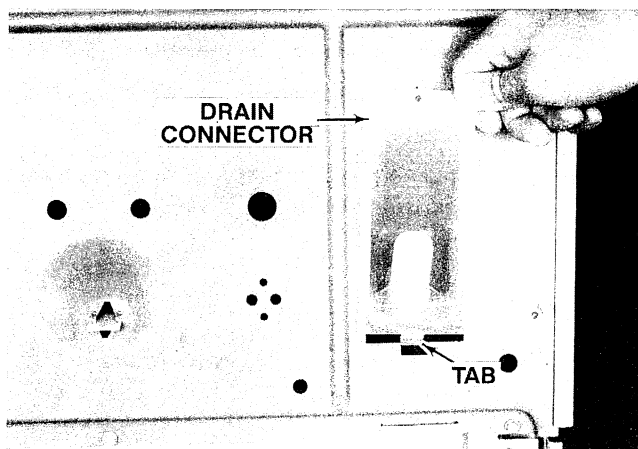
STEP 3 Using pliers, slide the clamp on the drain hose off the port of the connector.

STEP 4 Carefully remove the drain hose.

STEP 5 Using a pail, drain the excess water from this hose.



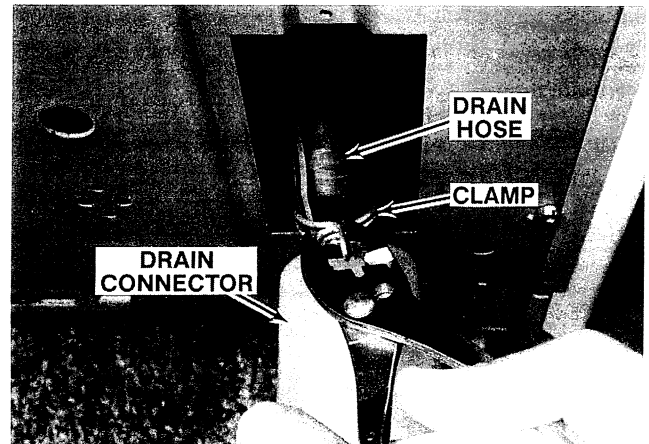
STEP 6 Using a screwdriver or nutdriver, remove the screw holding the drain connector to the rear panel.



STEP 7 Lift so the tab on the bottom of the connector can be pulled out the slot in the rear panel.

STEP 8 Pull the connector out of the rear panel until the clamp can be seen.

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

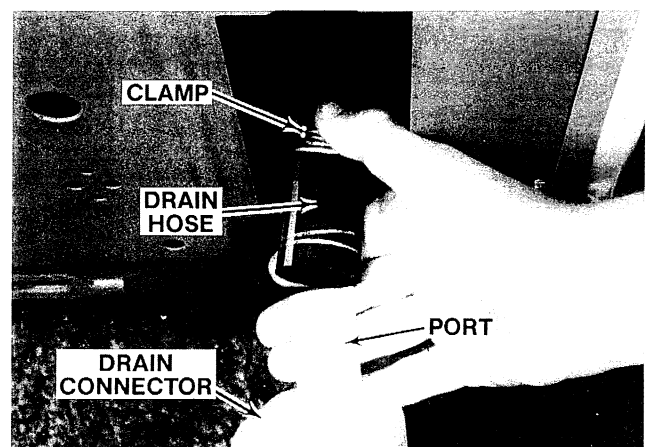


STEP 9 Using pliers, slide the clamp on the hose off the port of the connector.

STEP 10 Carefully remove the drain hose.

STEP 11 Using a pail, drain the excess water from this hose.

REPLACEMENT

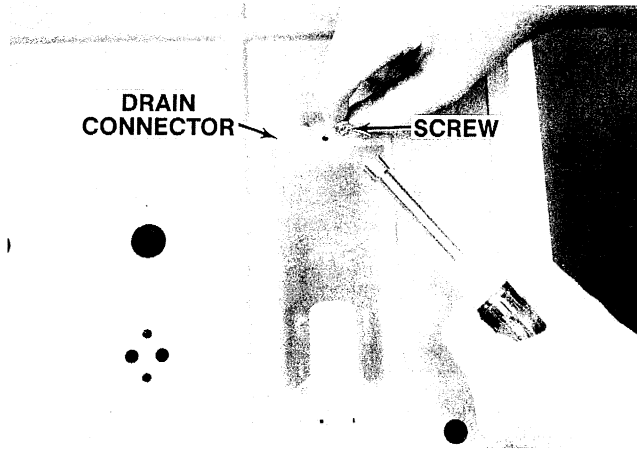


STEP 12 Slide the hose over the port on the drain connector.

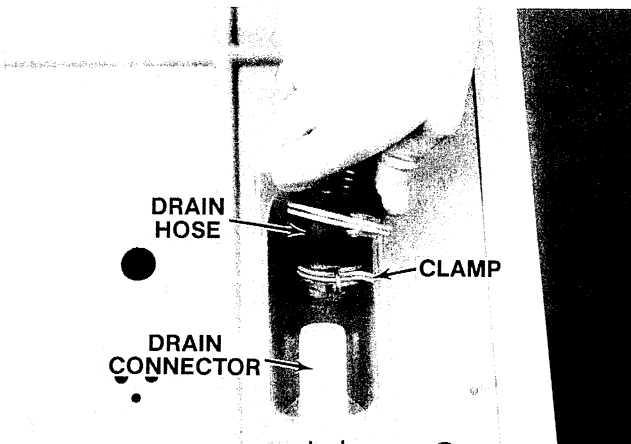
STEP 13 Using pliers, slide the clamp on the hose onto the port on the connector.

STEP 14 Push the hose and connector back into the washer.

STEP 15 Place the tab on the bottom of the connector in the slot in the rear panel.



STEP 16 Using a screwdriver or nutdriver, insert the screw through the connector, into the rear panel and tighten.



STEP 17 Slide the drain hose over the port on the drain connector.

STEP 18 Using pliers, slide the clamp on the drain hose onto the port on the connector.

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 19 Move the automatic washer back to its proper place.

STEP 20 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 21 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, 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, then carefully lower.

STEP 22 Using an open end wrench, tighten the locknuts.

STEP 23 Drain the water if you had to level it this way.

PROCEDURE 22

Rear Panel

See page 170, illus. no. 6 for location of part.

⚠ WARNING

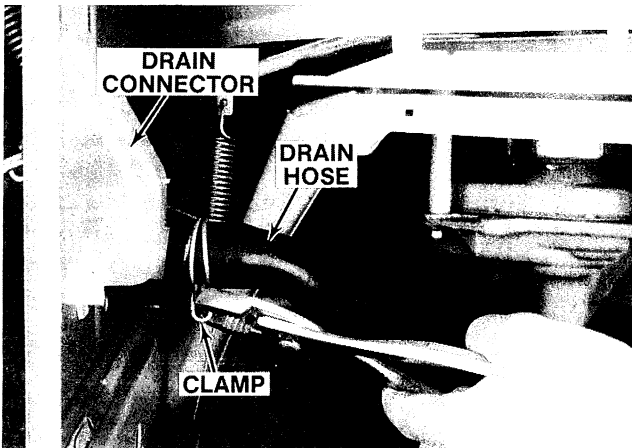
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This rear panel has the console and other parts attached to it.

STEP 1 Disconnect the electrical power supply (section B).

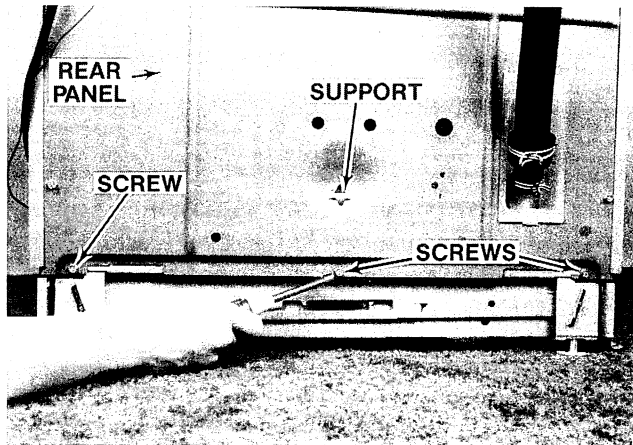
NOTE: Care should be taken when removing hoses as they may have water in them.



STEP 2 Using pliers, slide the clamp on the drain hose off the inside port of the connector.

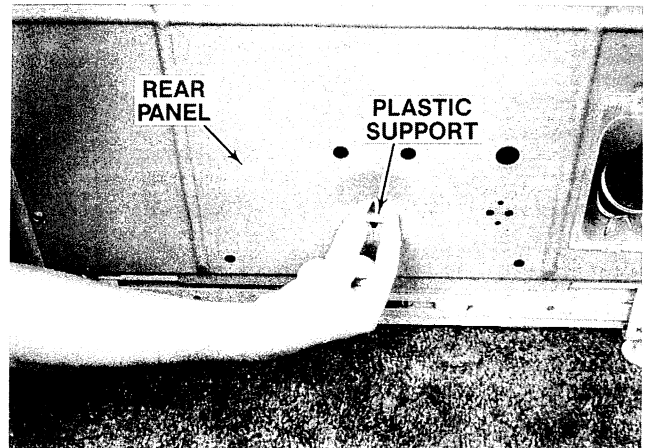
STEP 3 Carefully remove the drain hose.

STEP 4 Using a pail, drain the excess water from this hose.



STEP 5 Using a nutdriver or socket wrench, remove the screws along the bottom of the rear panel, holding the panel to the base.

NOTE: Hold onto the panel, when the support is turned the panel could fall.

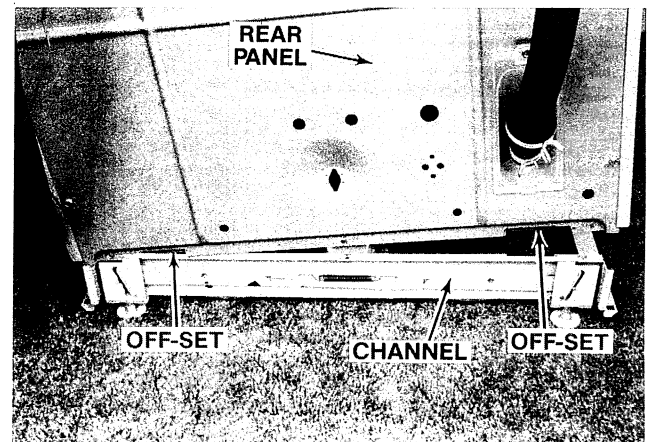


STEP 6 Using your hand, turn the plastic support either way, until the tab is straight up and down.

STEP 7 Grab hold of each side of the rear panel, then lift and move it over to the right as far as it will go.

REPLACEMENT

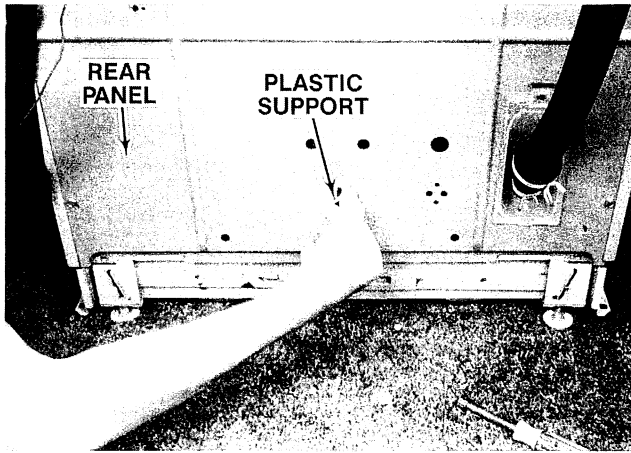
STEP 8 Move the rear panel back to the rear of the base.



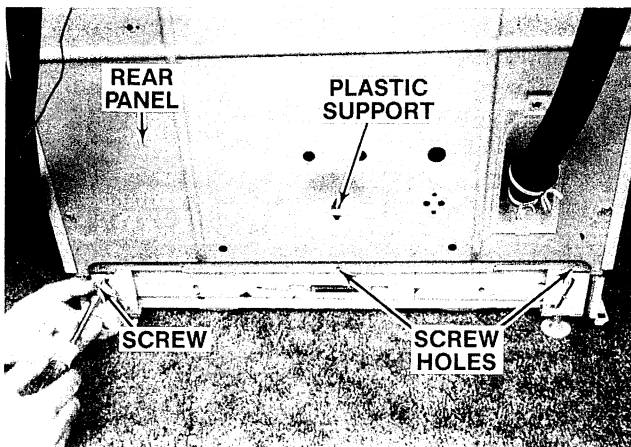
STEP 9 Lift the rear panel up and place it on the channel of the base.

NOTE: The rear panel will sit on the outside of the channel except for two off-set pieces which will be on the inside.

NOTE: Make sure the plastic support is sticking through the slot in the rear panel.



STEP 10 Using your hand, turn the plastic support either way, until the tab is level (straight across).



STEP 11 Using a nutdriver or socket wrench, insert the screws through the rear panel into the base and tighten.

STEP 12 Slide the drain hose over the inside port on the drain connector.

STEP 13 Using pliers, slide the clamp on the hose, onto the port on the connector.

STEP 14 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 23

Wiring Harnesses, Terminal Testing and/or Replacement

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

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.

A damaged wire could cause a safety hazard or a part to operate incorrectly.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

TESTING

STEP 3 You must know how to use an ohmmeter.

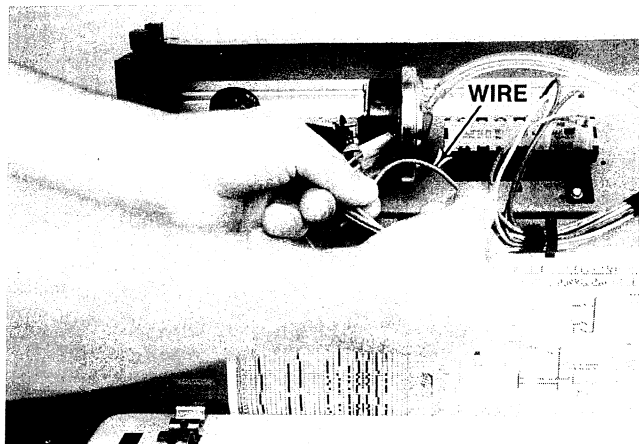
STEP 4 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.

STEP 5 Disconnect one end of the wire from the part.

STEP 6 Touch one ohmmeter probe to the wire terminal removed from the part.

STEP 7 Touch the other ohmmeter probe to the other end of the same wire.

STEP 8 The ohmmeter should show ZERO resistance (continuity). If not, the wire is bad and needs repair or replacing.

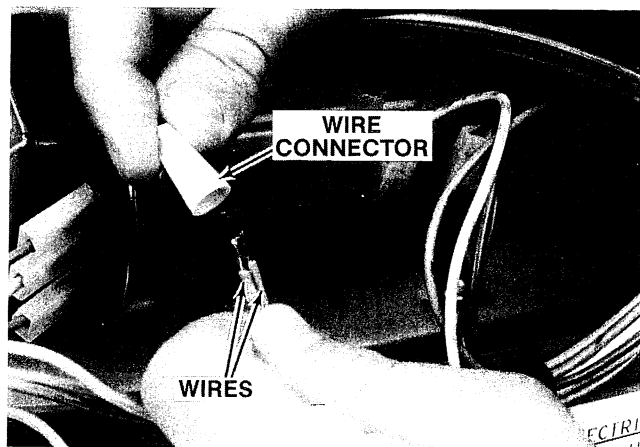


STEP 9 Replace the entire wire and terminal with the same gauge wire, or locate the bad spot. To locate the bad spot, use your fingers and gently bend the wire, feeling at the same time and looking for bumps in the wire.

STEP 10 Using wire cutters cut the bad spot out of the harness.

STEP 11 Strip the insulation back 1/2 inch on each cut end.

NOTE: Tape is not recommended.

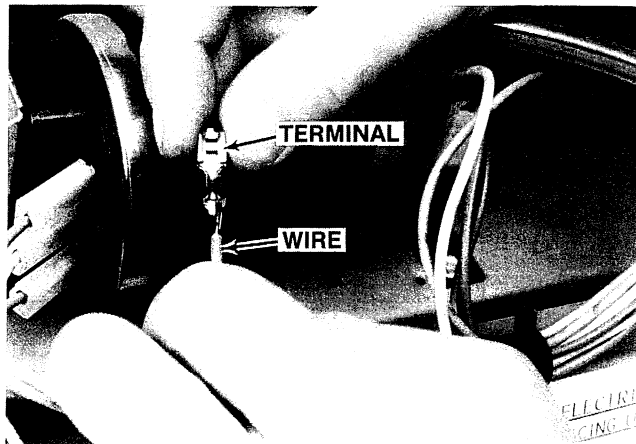


STEP 12 Use only a wire connector for splicing wires together.

STEP 13 Hold the two wires together, screwing the wire connector down on the bare wires.

STEP 14 To replace a terminal, cut the old terminal off.

STEP 15 Strip the insulation back 1/2 inch and twist the wire strands together.



STEP 16 Using a wire stripper/crimping tool, slip the terminal over the bare wire and crimp tightly.

STEP 17 Reconnect the wire to the proper terminal on the part.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 18 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 19 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 20 Run a cycle check (section F, proc. 2, or section I, 1-4).

SECTION K

Top, Cabinet And Lid Area

SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR
OR TESTING PROCEDURES ARE ATTEMPTED.



PROCEDURE

PAGE

1	Bleach Dispenser	82
2	Lid Handle	82
3	Lid Strike	83
4	Lid Switch, Lever, Shield	84
5	Lid, Hinge, Spring	86
6	Top	90
7	Cabinet	93

PROCEDURE 1

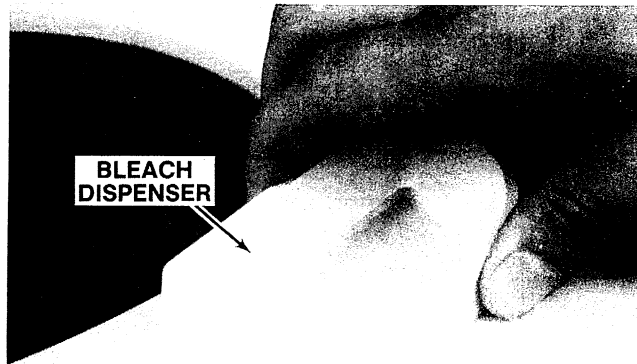
Bleach Dispenser Replacement



See page 169, illus. no. 33 for location of part.

This dispenser is located in the right front corner, under the lid.

STEP 1 Raise the lid.

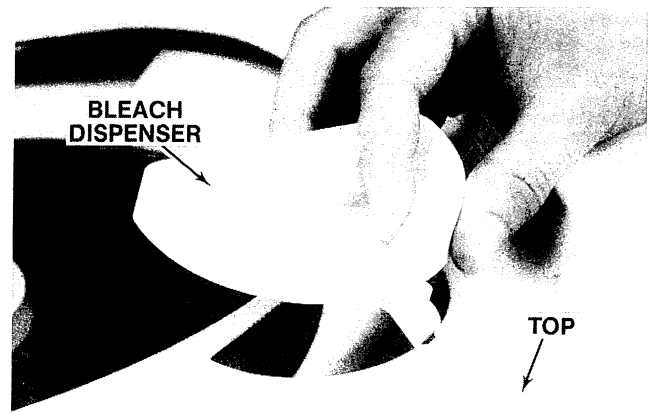


STEP 2 Using your thumbs, push in on the front of the dispenser and lift.

STEP 3 Slide forward and up to remove the tabs from the back of the dispenser from the cut-out in the top.

REPLACEMENT

STEP 4 Place the front of the new dispenser into the cut-out in the top and slide forward.

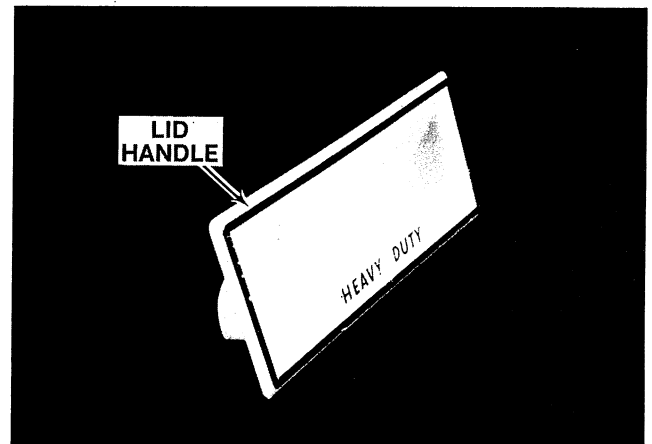


STEP 5 Push-in on the back of the dispenser and down until it snaps into place.

STEP 6 Close the lid.

PROCEDURE 2

Lid Handle Replacement



See page 169, illus. no. 23 for location of part.

WARNING

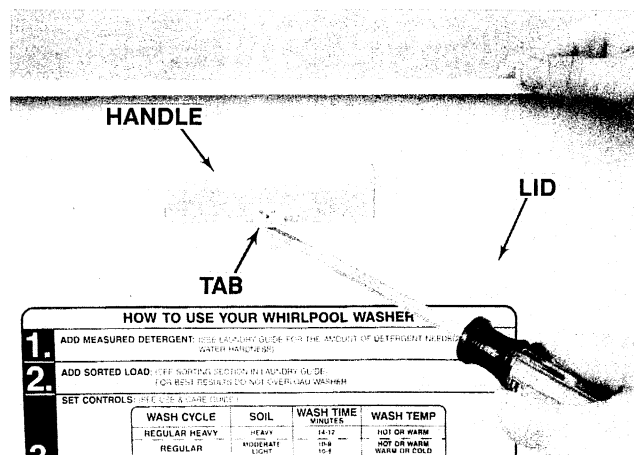
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This part is located on the lid.

STEP 1 Disconnect the electrical power supply (section B).

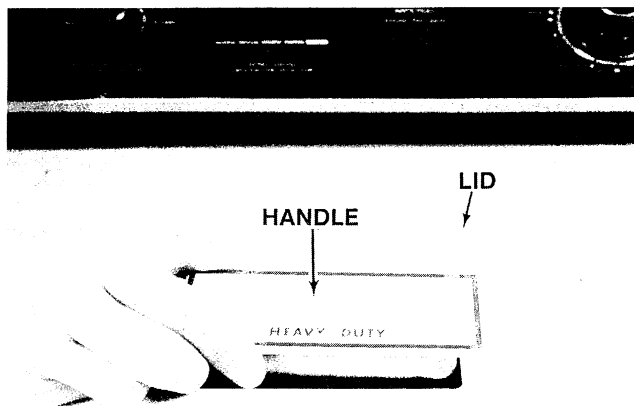
STEP 2 Raise the lid.



STEP 3 Using a screwdriver, push-in, in the middle to remove the tab on the handle from the edge of the lid.

REPLACEMENT

STEP 4 Close the lid.



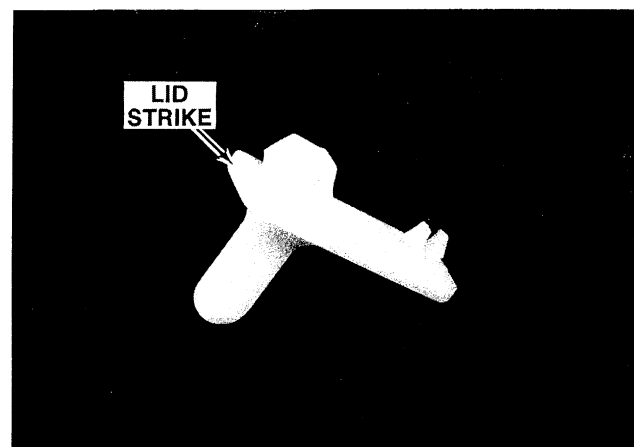
STEP 5 Place the front of the new handle in the opening on the lid.

STEP 6 Push the back of the handle down until it snaps into place.

STEP 7 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 3

Lid Strike Replacement



See page 169, illus. no. 20 for location of part.

WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This strike is located on the right side of the lid. When the lid is closed, the strike sticks through a slot in the top and pushes down on the lid switch lever. The lever in turn pushes on the lid switch button.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Raise the lid.

NOTE: Mark which set of holes the strike came out of so the new strike is put back in the same place.

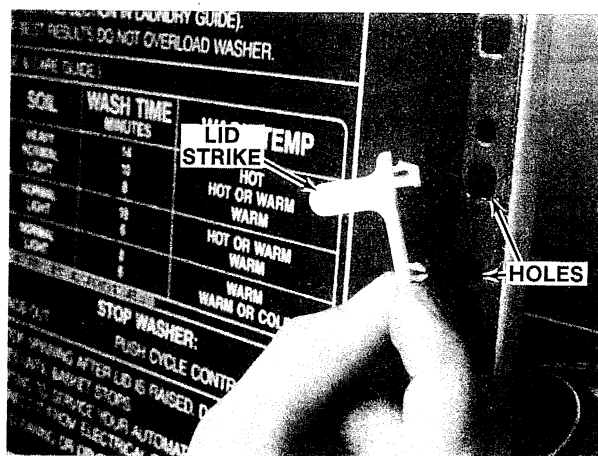
CAUTION

Product Damage

- Do not pry. This may cause you to ruin the finish.

STEP 3 Using a screwdriver, insert it between the strike and lid and carefully pry.

REPLACEMENT



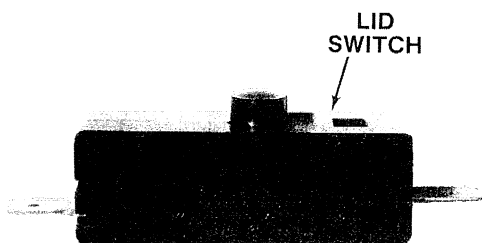
STEP 4 Place the new strike in the holes in the lid and push-in until it snaps into place.

STEP 5 Close the lid.

STEP 6 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 4

Lid Switch, Lever and Shield Testing and/or Replacement



See page 169, illus. no's. 10, 11 and 12 for location of parts.

⚠ WARNING

Electrical Shock Hazard

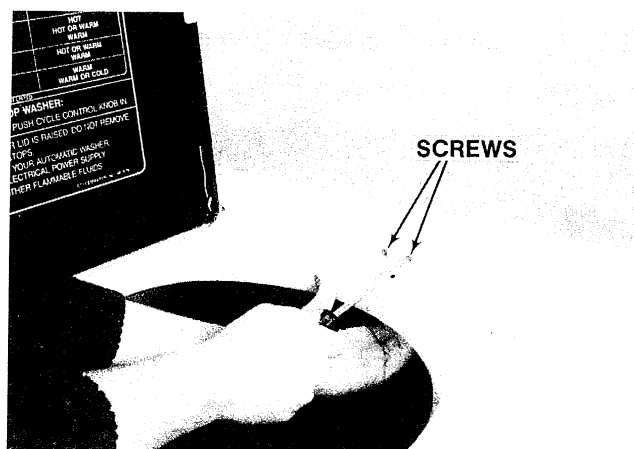
- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

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

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

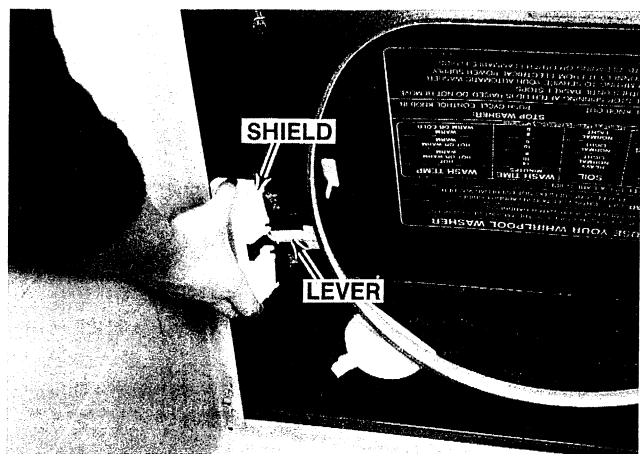


STEP 3 Using a screwdriver, remove the two screws on the right side of the cabinet lid well.

⚠ CAUTION

Product / Property Damage

- Lay the cabinet on its front on a blanket to prevent scratches.
- Do not climb into or stand on the cabinet sides.



STEP 4 Reach-in and pull the shield off the two screws.

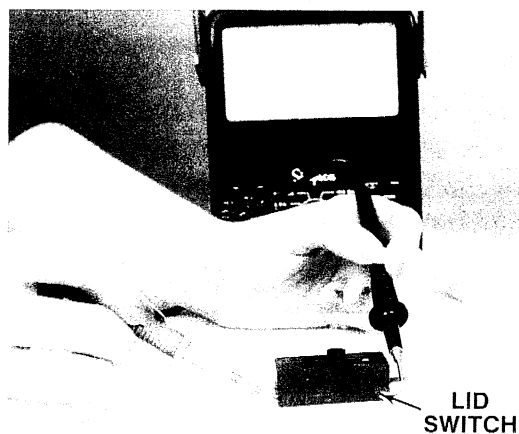
STEP 5 Reach-in and slide the lever off the lid switch.

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 You must know how to use an ohmmeter.

STEP 8 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.



STEP 9 With the button out, touch one of the ohmmeter probes to one of the terminals.

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

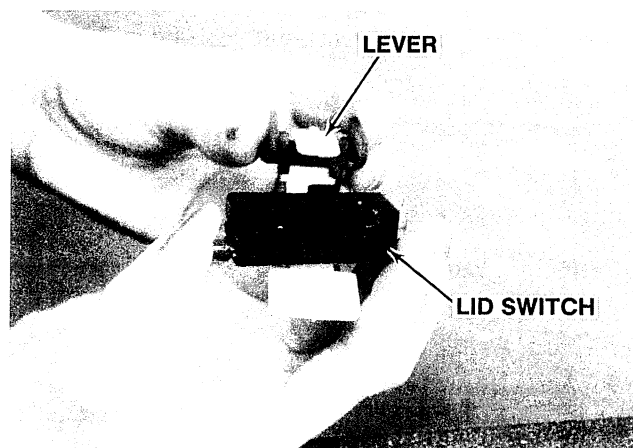
STEP 11 The ohmmeter should show an open circuit with the button out. If not, the lid switch is bad and needs replacing.

STEP 12 With the button pressed in, touch one of the ohmmeter probes to one of the terminals.

STEP 13 Touch the other ohmmeter probe to the other terminal.

STEP 14 The ohmmeter should show ZERO resistance (continuity) with the button pressed in. If not, the lid switch is bad and needs replacing.

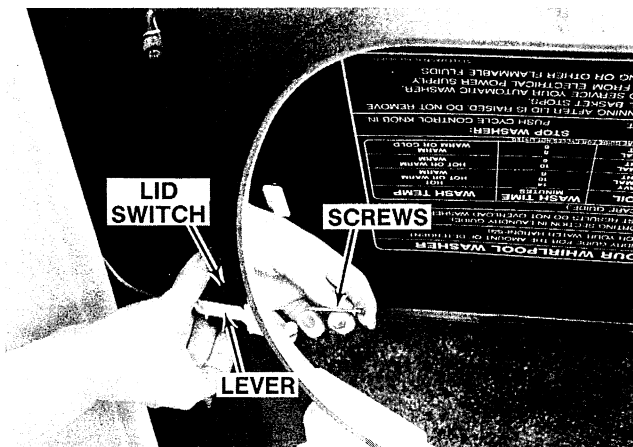
REPLACEMENT



STEP 15 Place the new lid switch in the new lever.

STEP 16 Reach-in with the lid switch and lever and reconnect the wires to the proper terminals as previously marked.

STEP 17 Line up the holes in the lid switch and lever, with the holes in the cabinet lid well.



STEP 18 Insert the screws through the cabinet lid well, lid switch, lever, then hand turn them until they start to grab.

STEP 19 Replace the new plastic shield between the top and lid switch by snapping this on the screws.

STEP 20 Using a screwdriver, tighten the screws.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

NOTE: Stand the cabinet up if you laid it down.

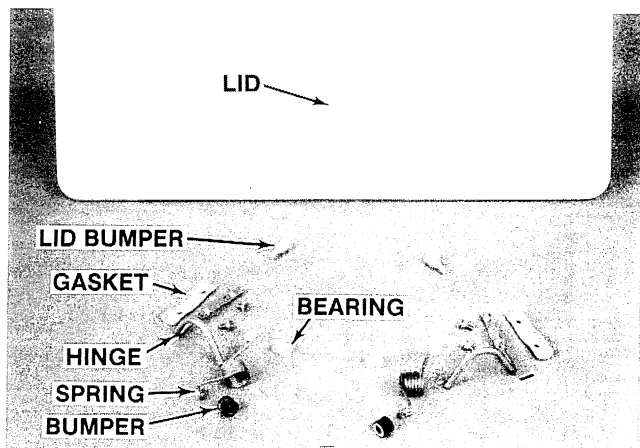
STEP 21 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 22 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 23 Run a cycle check (section F, proc. 2 or section I, 1-4).

PROCEDURE 5

Lid, Hinge and Spring Replacement



See page 169, illus. no.'s 15, 16, 19 and 24 for location of parts.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

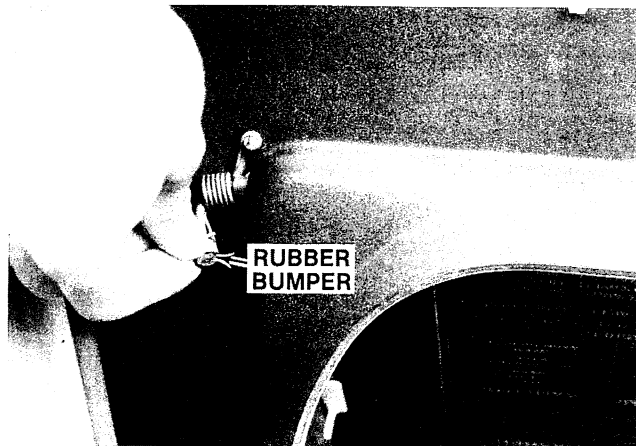
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

⚠ CAUTION

Product / Property Damage

- Lay the cabinet on its front on a blanket to prevent scratches.
- Do not climb into or stand on the cabinet sides.



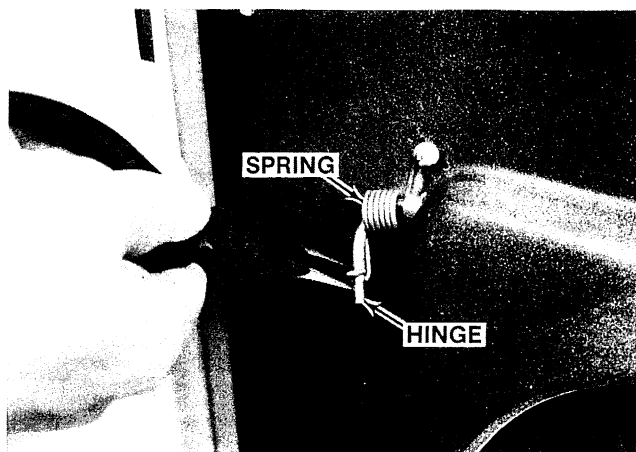
STEP 3 Remove the rubber bumpers from each lid hinge.

STEP 4 Open the lid a little to take the tension off the spring.

⚠ WARNING

Personal Injury Hazard

- Be careful when removing the springs from the hinges as they may snap back.
- Failure to do so could result in personal injury or property damage.



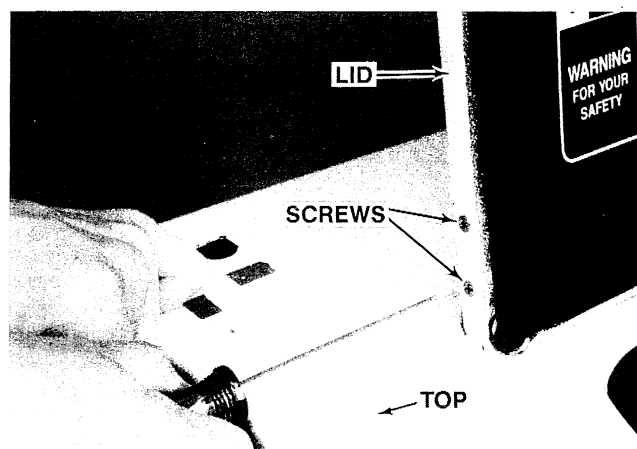
STEP 5 Using needle nose pliers, gently remove the looped end of the spring from the hinge.

STEP 6 Slide the spring off the hinge.

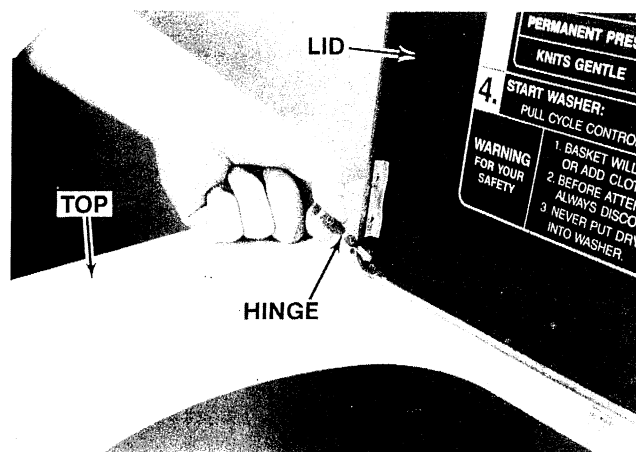
STEP 7 Do the same thing to the other spring on the other side as in steps 4-6.

STEP 8 Set the cabinet upright.

STEP 9 Raise the lid.

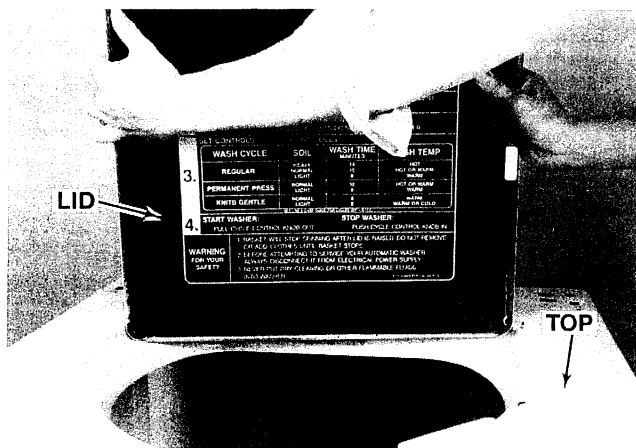


STEP 10 Using a screwdriver, remove the two screws from one side of the lid, holding the hinge to the lid.



STEP 11 Pull, turn and wiggle the hinge to remove it from the top and lid.

STEP 12 Remove the gasket.

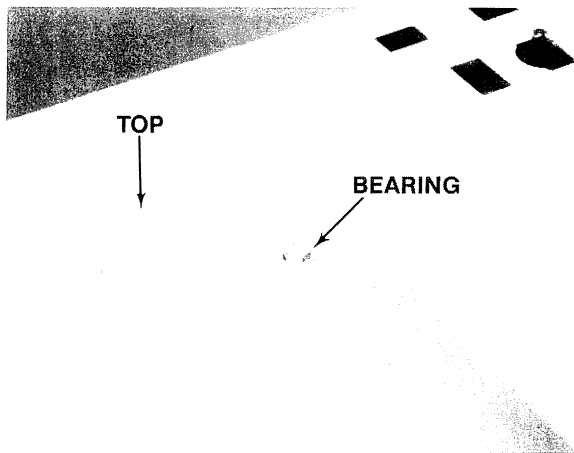


STEP 13 To remove the other hinge, pull turn and wiggle the lid until the hinge comes out the other hole in the top.

STEP 14 Using a screwdriver, remove the other two screws holding the other hinge to the lid.

STEP 15 Remove the gasket.

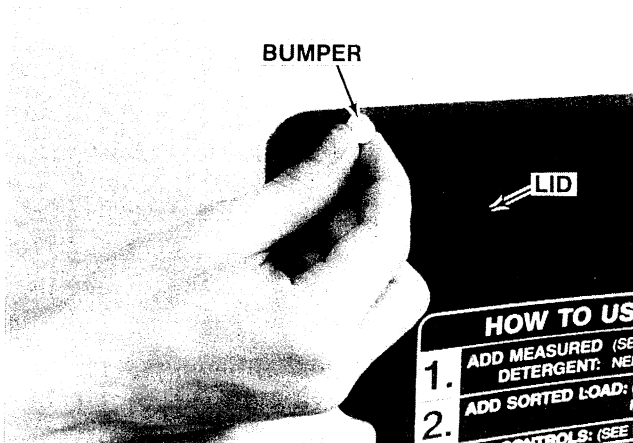
STEP 16 Check the hinge gaskets, if they have started to rot or crack, replace them.



STEP 17 Check the plastic bearings located in the holes on both sides of the top (they may be on the hinges). If they are split or worn, replace them.

STEP 18 Remove the handle, if used (section K, proc. 2).

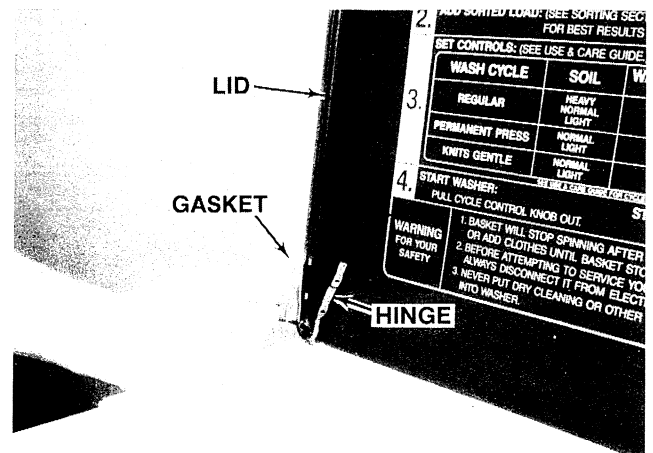
STEP 19 Remove the lid strike (section K, proc. 3).



STEP 20 Remove the two rubber bumpers, one located on each side in the front of the lid, by pulling them out of the holes.

REPLACEMENT

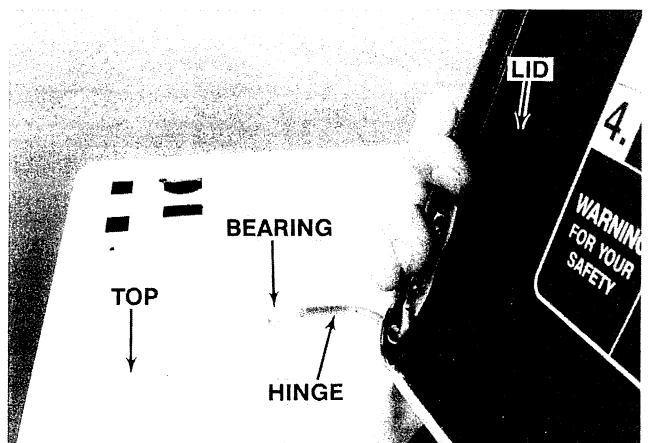
STEP 21 Insert the new hinge through the new lid hole from inside the lid.



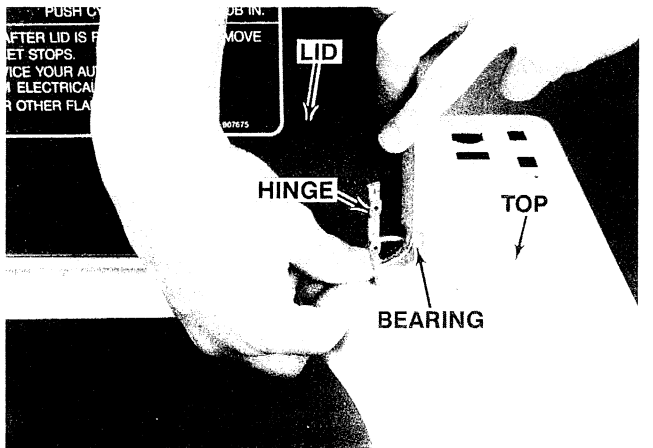
STEP 22 Place one of the new gaskets in the inner flange of the lid.

STEP 23 Using a screwdriver, insert the two screws through the lid, gasket into the hinge and tighten.

NOTE: Be sure the new bearings are in the holes in the top.



STEP 24 Insert the hinge and lid through the bearing and top by turning and wiggling until it's all the way in.



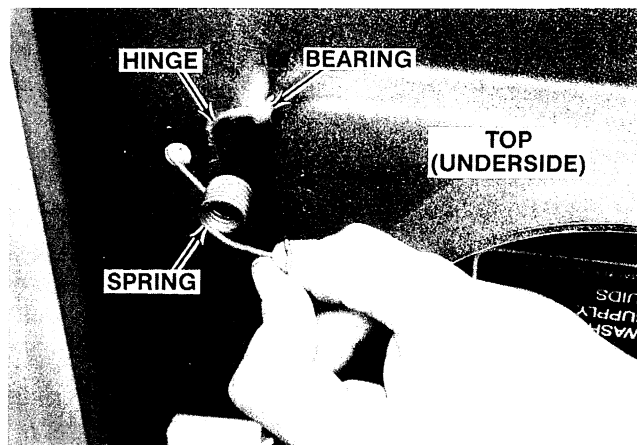
STEP 25 Insert the other new hinge through the hole from inside the lid, then through the bearing and top, turning and wiggling until its all the way in.

STEP 26 Place the other new gasket between the lid and hinge.

STEP 27 Using a screwdriver, insert the two screws through the lid, gasket into the hinge and tighten.

STEP 28 Close the lid.

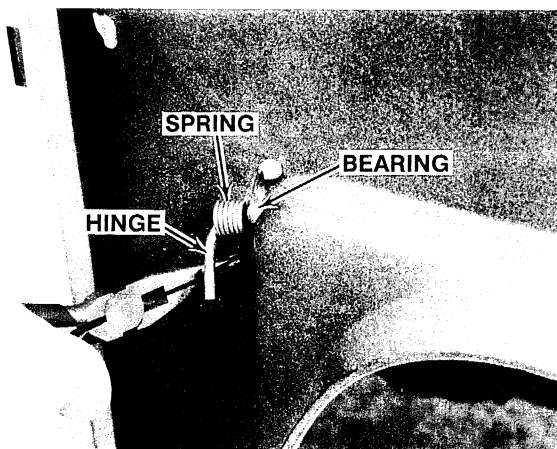
NOTE: Lay the cabinet on its side.



STEP 29 Insert the new left spring (looking into the cabinet back), with the straight leg or plug button up and facing the side of the cabinet.

STEP 30 Slide this spring all the way up on the hinge.

STEP 31 Slowly raise the lid.



STEP 32 Using needle nose pliers, hook the looped end of the spring over the hinge.

STEP 33 Close the lid.

STEP 34 Place the new lid hinge bumper on the end of the left hinge.

STEP 35 Insert the new right spring (looking into the cabinet back), with the straight leg or plug button up and facing the side of the cabinet.

STEP 36 Slide this spring all the way up on the hinge.

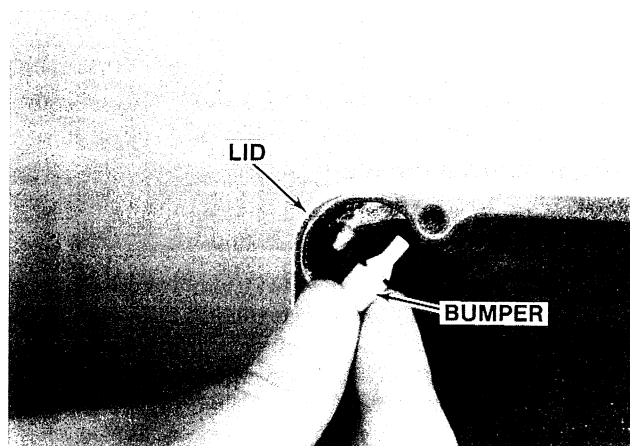
STEP 37 Slowly raise the lid.

STEP 38 Using a screwdriver, hook the looped end of the spring over the hinge.

STEP 39 Close the lid.

STEP 40 Place the new lid hinge bumper on the end of the right hinge.

NOTE: Set the cabinet upright.



STEP 41 Replace the rubber lid bumpers by pushing them into the holes in the lid, one located in each front corner of the lid.

STEP 42 Replace the lid strike (section K, proc. 3).

STEP 43 Replace the handle, if used (section K, proc. 2).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 44 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 45 Reconnect the electrical power supply.
See section B for the proper reconnection.

PROCEDURE 6

Top Replacement

See page 169, illus. no. 2 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

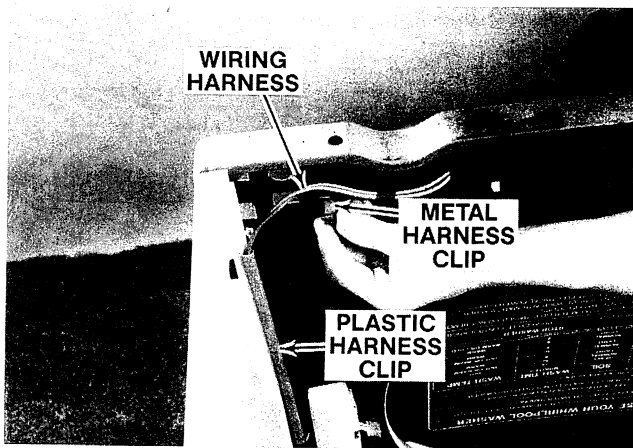
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

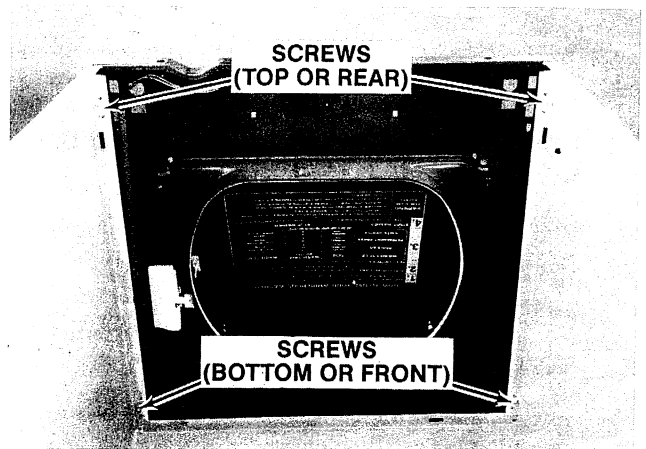
⚠ CAUTION

Product / Property Damage

- Lay the cabinet on its front on a blanket to prevent scratches.
- Do not climb into or stand on the cabinet sides.



STEP 3 Using a screwdriver, pry the two metal harness clips or with your hand, remove the long plastic clip, off the flange of the top or cabinet holding the wiring harness and lid switch.

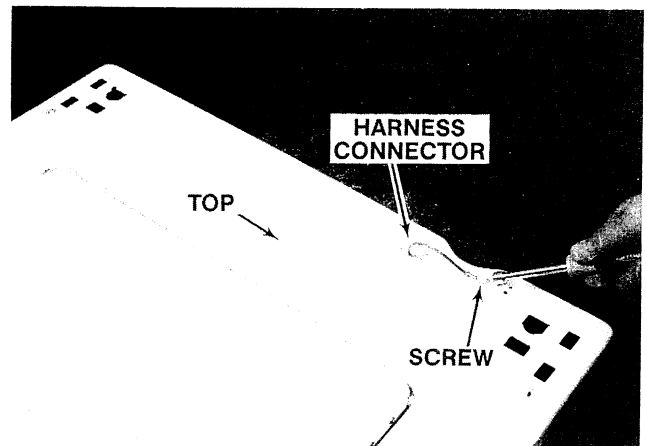


STEP 4 Using a nutdriver or socket wrench, remove the two bottom (front) screws.

NOTE: Hold onto the top when removing these screws so the top does not fall.

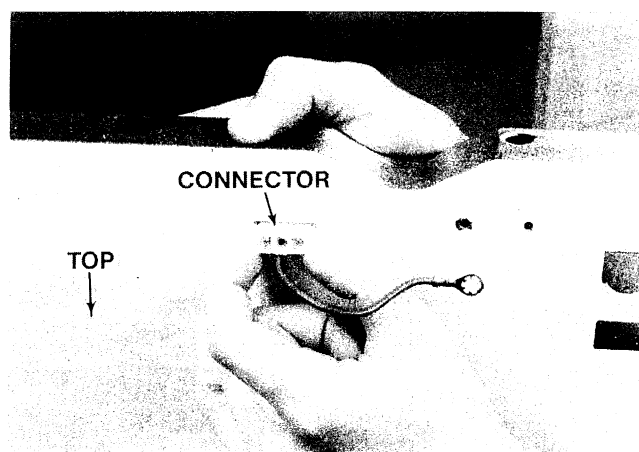
STEP 5 Using a nutdriver or socket wrench, remove the two top (rear) screws.

STEP 6 Carefully remove the top.



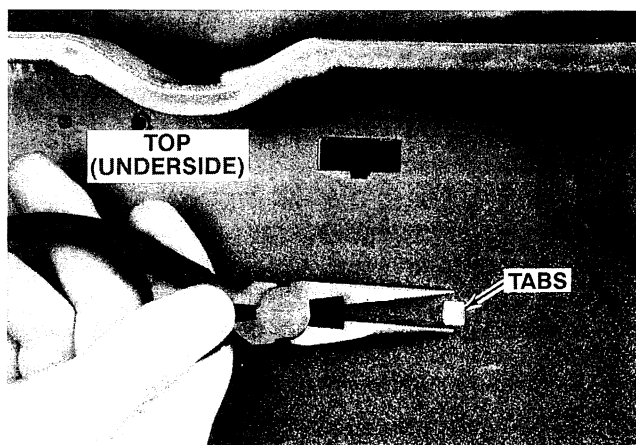
STEP 7 Using a screwdriver or nutdriver, remove the screw holding the green ground wire from the harness connector, to the top.

STEP 8 Remove the lid switch, lever and shield (section K, proc. 4).

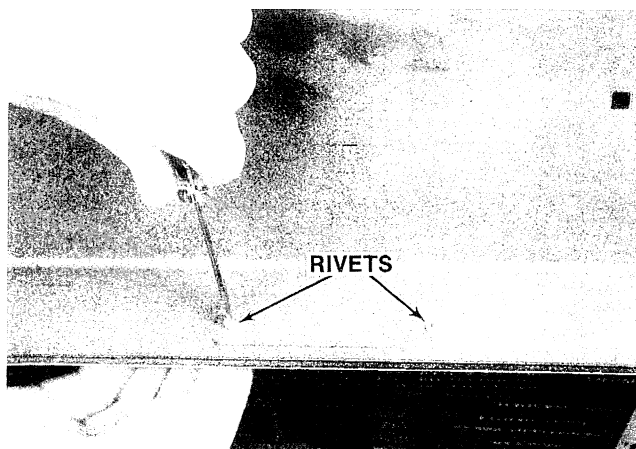


STEP 9 Using your thumbs, push-in on the tabs on the connector, then remove it out the bottom of the hole in the top.

NOTE: Mark where the following parts are located so you can put these or new parts back on the new top.



STEP 10 Using needle nose pliers, squeeze the tabs (located in the back) on all the push-in nuts and stops, to remove them from the front of the top.



STEP 11 Using a small punch or screwdriver, push the plunger, located in the middle of the rivets, to remove them from holding the nameplate to the top.

STEP 12 Carefully remove the nameplate.

STEP 13 Remove the lid (section K, proc. 5).

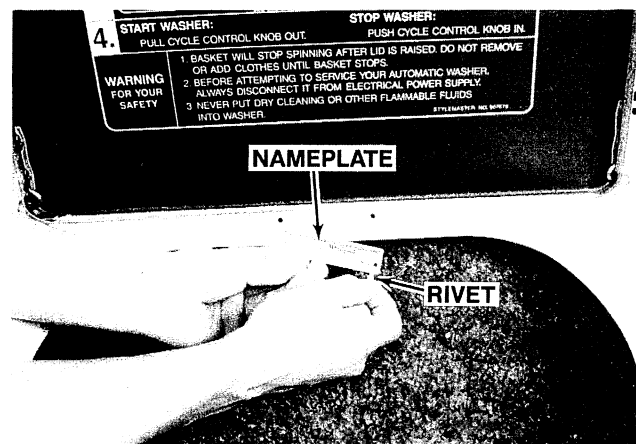
STEP 14 Remove the bleach dispenser (section K, proc. 1).

REPLACEMENT

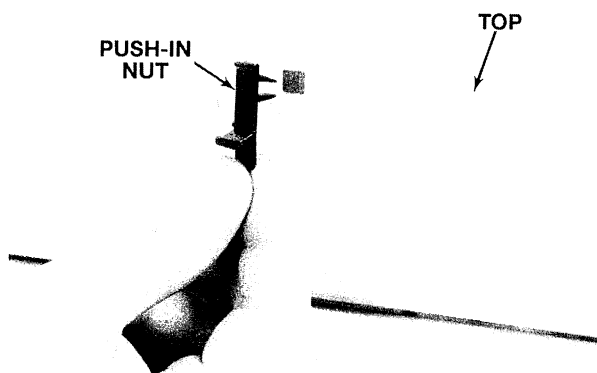
STEP 15 Replace the bleach dispenser (section K, proc. 1).

STEP 16 Replace the lid (section K, proc. 5).

STEP 17 Place the nameplate in the back part of the lid well on the new top.



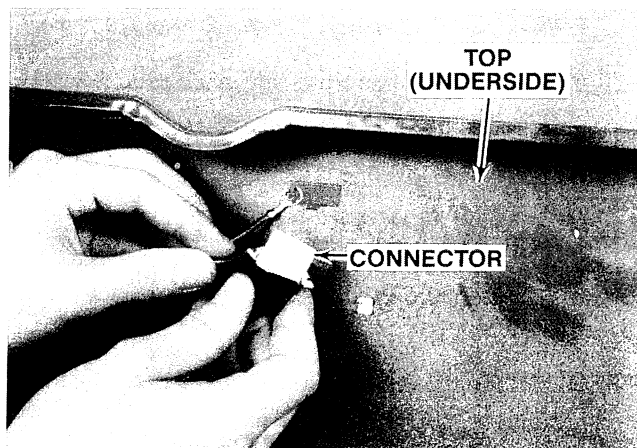
STEP 18 Push the plastic rivets through the nameplate and into the holes in the top.



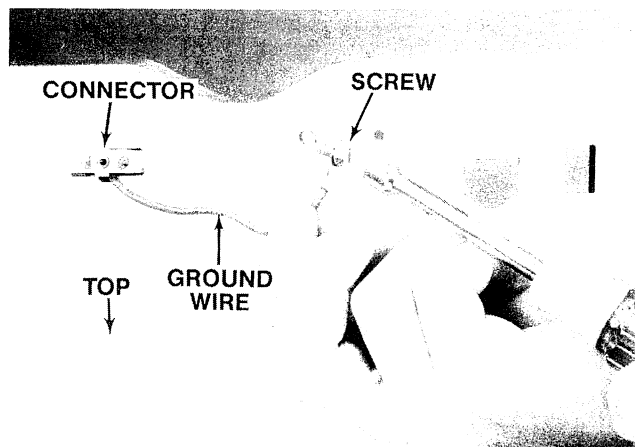
STEP 19 Push the push-in nuts and stops from the front of the top, into the proper holes in the top.

TOP, CABINET AND LID AREA—SECTION K—PROCEDURE 6

NOTE: The green ground wire must be facing the front of the washer and inserted first through the hole so it can fit in the little slot in the top.



STEP 20 Push the connector and green ground wire from the back, through the proper hole in the top until it snaps into place.



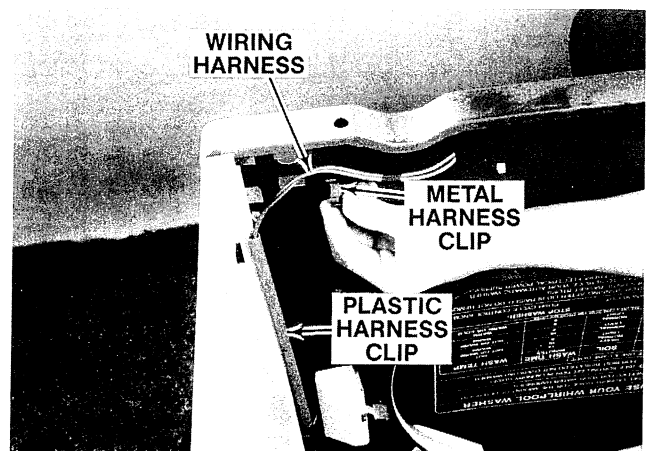
STEP 21 Using a screwdriver or nutdriver, insert the screw through the green ground wire, into the front of the top and tighten.

STEP 22 Place the new top on the cabinet.

STEP 23 Using a nutdriver or socket wrench, insert the two top (rear) screws through the cabinet, spacer into the top and tighten.

STEP 24 Using a nutdriver or socket wrench, insert the two bottom (front) screws through the cabinet, spacer into the top and tighten.

STEP 25 Place the harness along the inner flange of the top or cabinet.



STEP 26 Replace the two metal harness clips or the long plastic clip on the flange of the top or cabinet, holding the wiring harness and lid switch.

STEP 27 Replace the lid switch and lever (section K, proc. 4).

STEP 28 Stand the cabinet upright, if you laid it down.

WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 29 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 30 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 7

Cabinet Replacement

See page 169, illus. no. 5 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

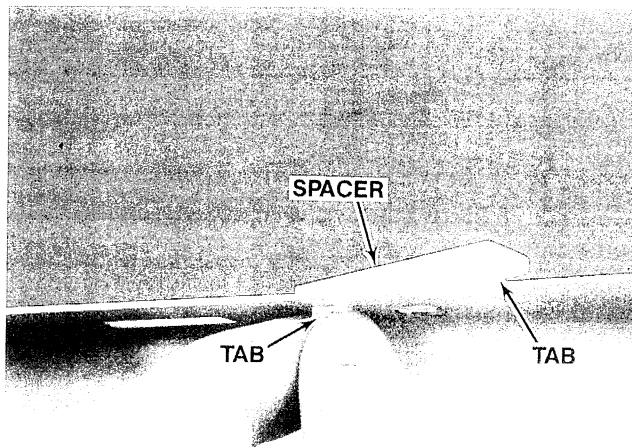
⚠ CAUTION

Product / Property Damage

- Lay the cabinet on its front on a blanket to prevent scratches.
- Do not climb into or stand on the cabinet sides.

STEP 3 Remove the top (section K, proc. 6).

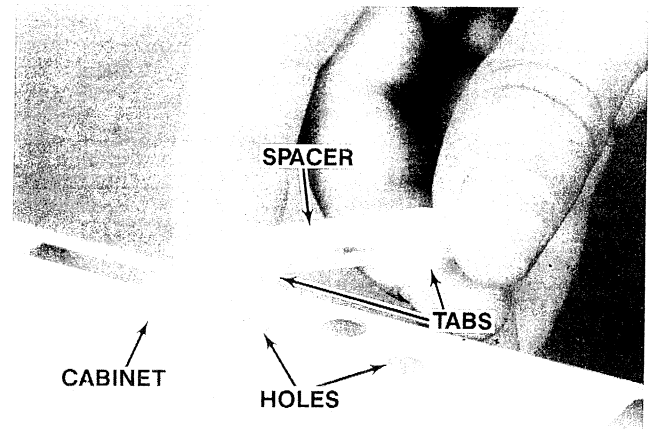
NOTE: There are four spacers, one located in each corner that must be removed.



STEP 4 Using needle nose pliers or your hand, squeeze the tabs on the bottom of the spacers, then push and pull to remove them from the cabinet flange.

REPLACEMENT

NOTE: There are four locations for these spacers, one in each corner that must be replaced.



STEP 5 Line up the tabs on the spacer with the holes in the cabinet flange.

STEP 6 Press down on the spacer until it snaps into place.

STEP 7 Replace the top (section K, proc. 6).

STEP 8 Set the cabinet upright.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 9 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 10 Reconnect the electrical power supply. See section B for the proper reconnection.

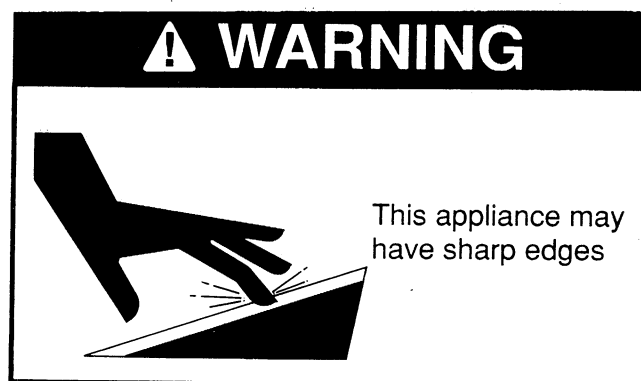
NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slightly textured appearance and some minor discoloration or shadows, suggesting it might be a scan of a physical document. There is no handwriting or other markings on the page.

SECTION L

Agitator, Basket and Tub Area

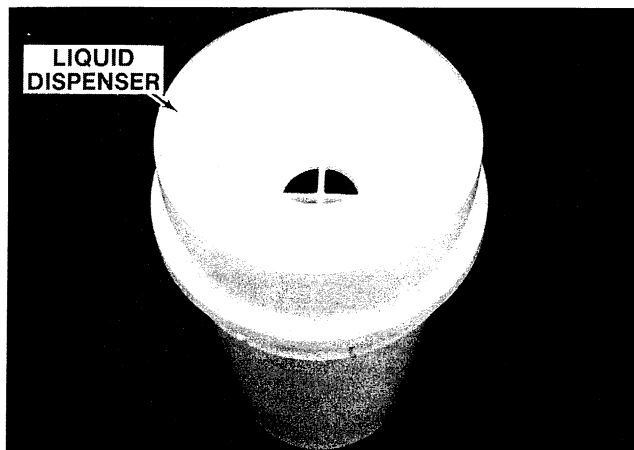
**SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR
OR TESTING PROCEDURES ARE ATTEMPTED.**



PROCEDURE	PAGE
1 Liquid Dispenser	96
2 Agitator and Parts	96
3 Tub Ring, Gasket	103
4 Spanner Nut, Basket, Drive Block	105
5 Filter	107
6 Tub, Centerpost Gasket	109

PROCEDURE 1

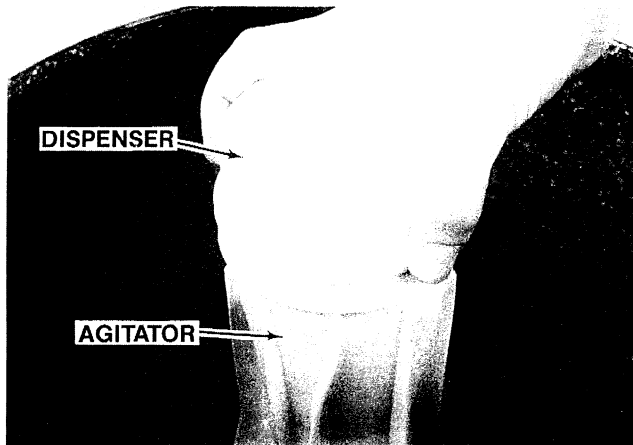
Liquid Dispenser Replacement



See page 172, illus. no. 1 for location of part.

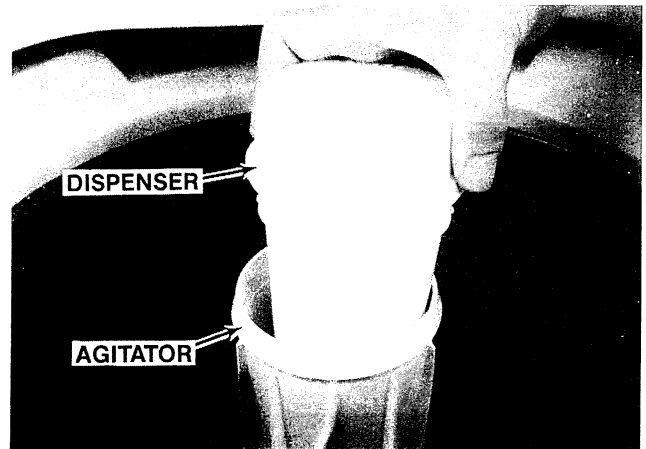
The purpose of this dispenser is to add liquid fabric softener during the rinse cycle. This dispenser is located on the agitator.

STEP 1 Raise the lid.



STEP 2 Pull the dispenser up to remove it from the agitator.

REPLACEMENT

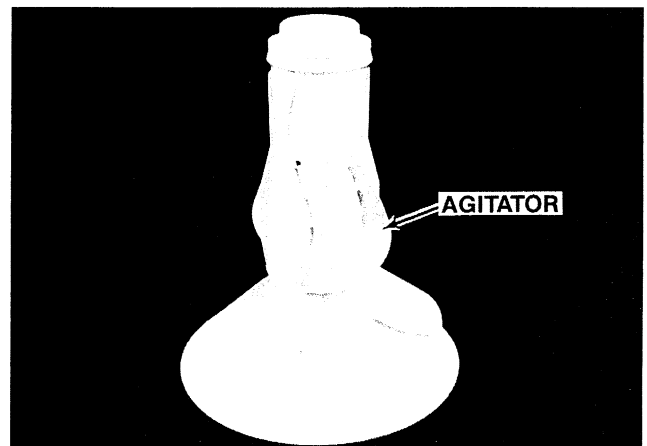


STEP 3 Push the new dispenser down into the agitator.

STEP 4 Close the lid.

PROCEDURE 2

Agitator and Parts Replacement



See page 172, illus. no.'s 2 and 3, 21-29, for location of parts.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

The purpose of the agitator is to provide a proper washing action by moving the water and clothes around in the basket.

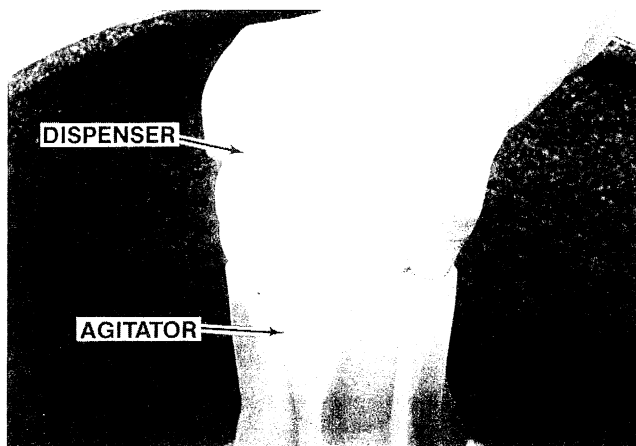
There are three basic designs of agitators used. They are the one piece agitator, the two piece agitator or the auger agitator where by the bottom part moves back and forth and the top part only moves in one direction.

See Type A for the one piece agitator, Type B for the two piece agitator or Type C for the auger agitator.

TYPE A

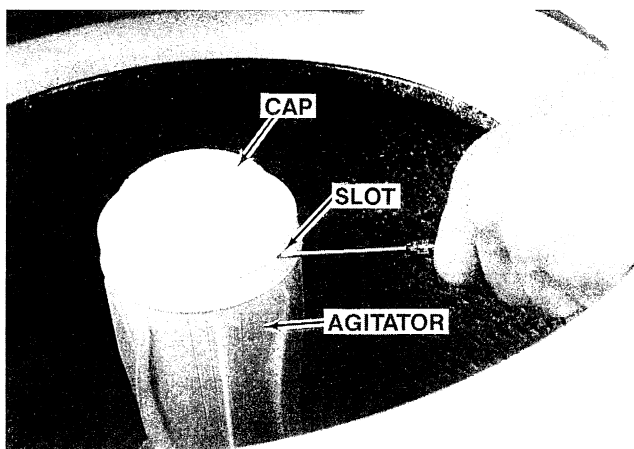
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Raise the lid.

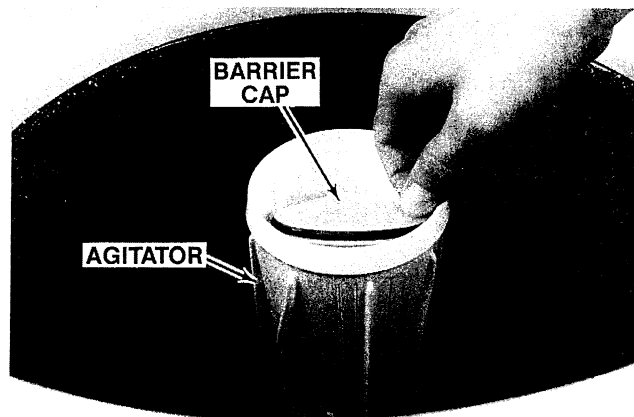


STEP 3 Pull the liquid fabric softener dispenser (if used) up, to remove it from the top of the agitator.

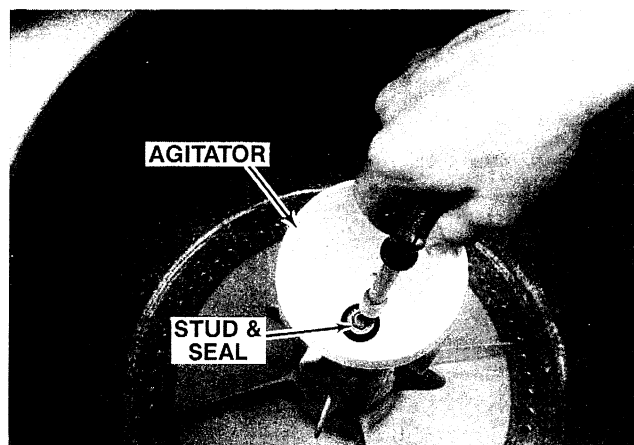
OTHERWISE



STEP 4 Using a small screwdriver, insert it in the slot between the agitator and cap, then pry the cap off the agitator.

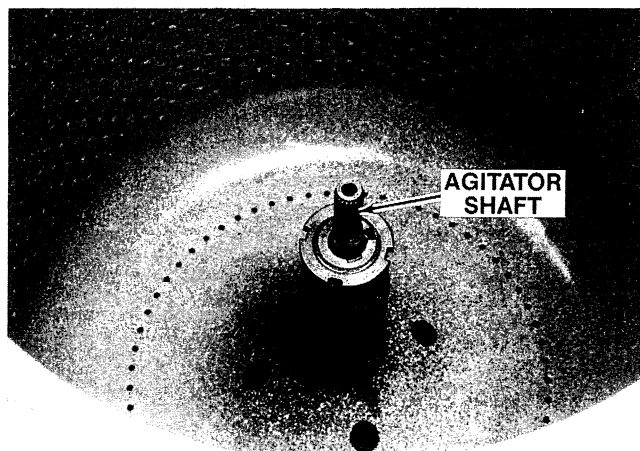


STEP 5 Reach in and remove the barrier cap and seal (if used) by pulling up.



STEP 6 Using a socket wrench (with an extension) or nutdriver, remove the stud and seal holding the agitator to the shaft.

STEP 7 Carefully remove the one piece agitator by lifting straight up.

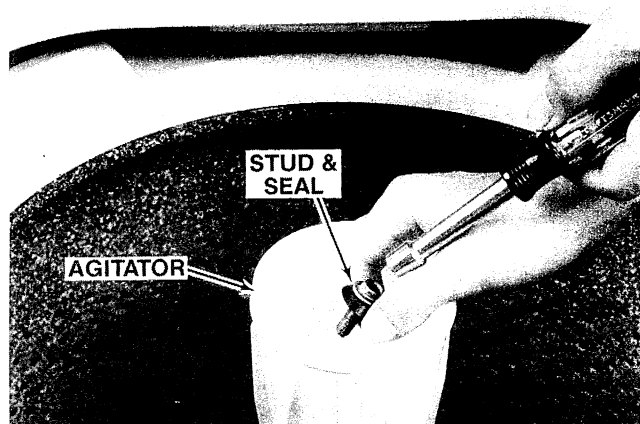


STEP 8 Inspect the agitator shaft for worn grooves or rust. If the shaft is bad, either call a authorize WHIRLPOOL Factory Service Branch to repair this, or replace the complete gearcase yourself.

REPLACEMENT

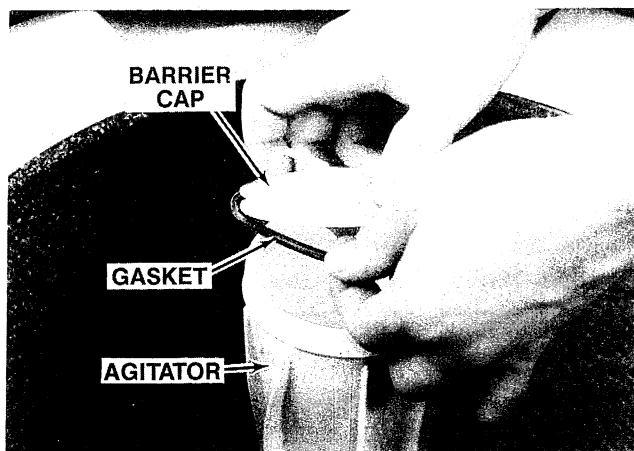
STEP 9 Place the new agitator on the shaft.

STEP 10 Rotate the agitator until the grooves in the agitator match the grooves on the shaft, then push the agitator down.



STEP 11 Using a socket wrench (with an extension) or a nutdriver, insert the stud and seal through the agitator, into the shaft and tighten.

NOTE: The barrier cap must be pushed down past the holes in the agitator, this is so the liquid from the dispenser can flow out the holes



STEP 12 Be sure the round gasket is in the groove in the barrier cap (if used).

STEP 13 Push the barrier cap and seal (if used) down into the agitator all the way.

STEP 14 Press down on the liquid fabric softener dispenser or cap, which ever you have, until it is all the way down on the agitator.

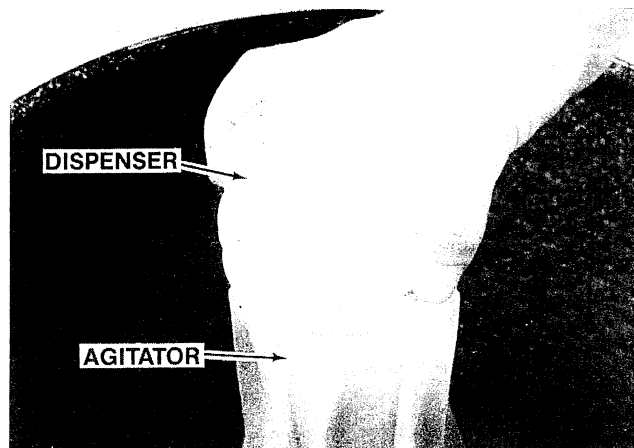
STEP 15 Close the lid.

STEP 16 Reconnect the electrical power supply. See section B for the proper reconnection.

TYPE B

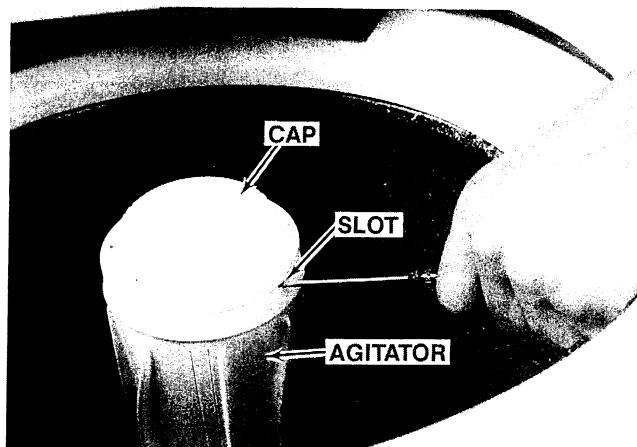
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Raise the lid.

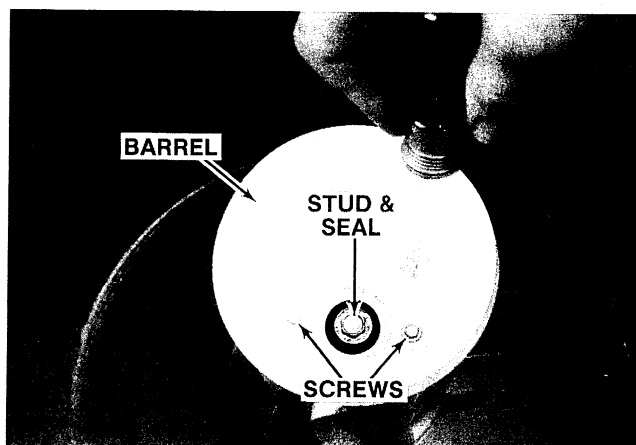


STEP 3 Pull the liquid fabric softener dispenser (if used) up, to remove it from the top of the agitator.

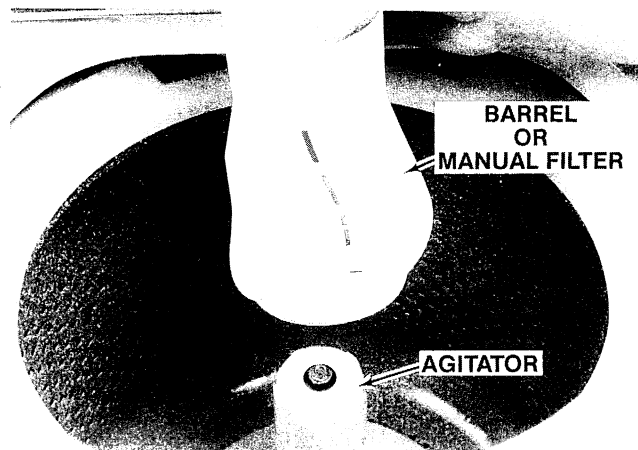
OTHERWISE



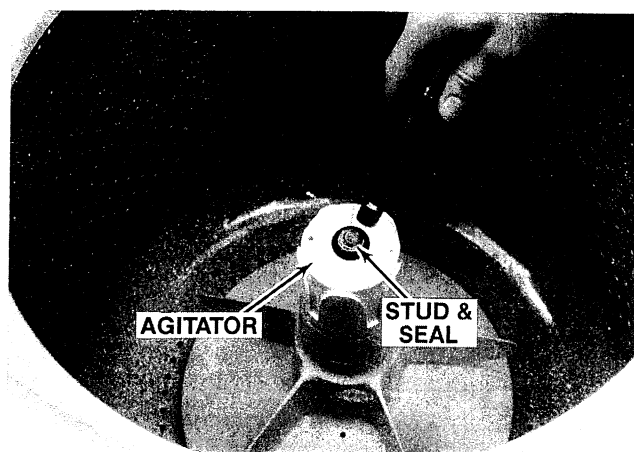
STEP 4 Using a small screwdriver, insert it in the slot between the agitator and cap, then pry the cap off the agitator.



STEP 5 Using a nutdriver, remove the two screws (if used) holding the barrel to the agitator.

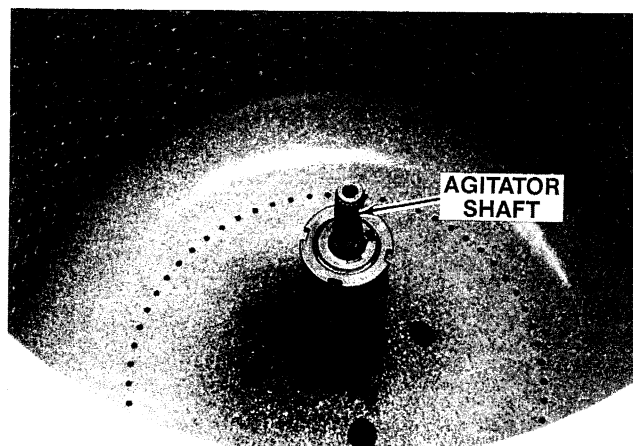


STEP 6 Pull the barrel or manual filter up and off the agitator.



STEP 7 Using a socket wrench or nutdriver, remove the stud and seal holding the agitator to the shaft.

STEP 8 Carefully remove the agitator by lifting straight up.

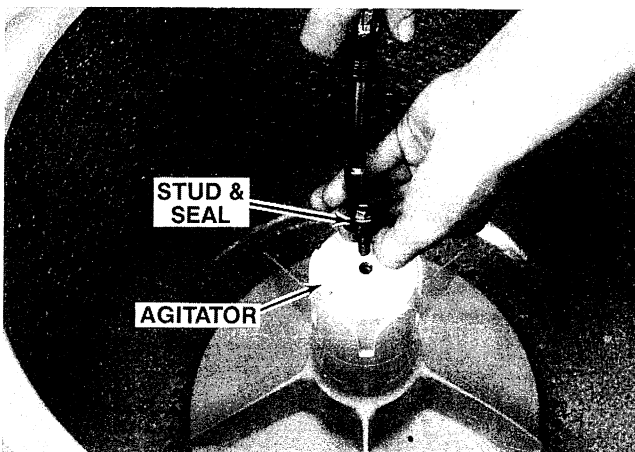


STEP 9 Inspect the agitator shaft for worn grooves or rust. If the shaft is bad, either call a authorize WHIRLPOOL Factory Service Branch to repair this, or replace the complete gearcase yourself.

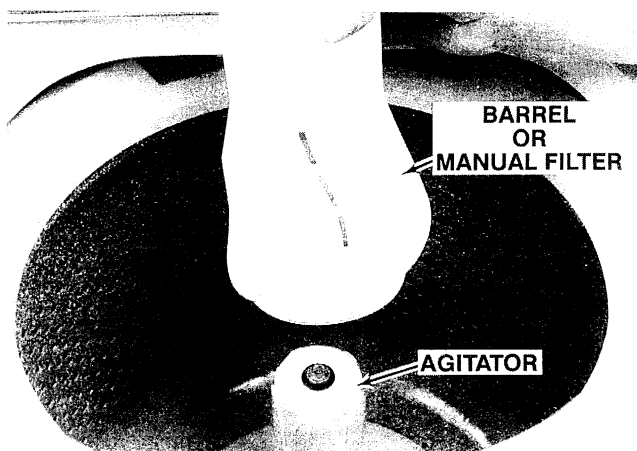
REPLACEMENT

STEP 10 Place the new agitator on the shaft.

STEP 11 Rotate the agitator until the grooves in the agitator match the grooves on the shaft, then push the agitator down.



STEP 12 Using a socket wrench (with an extension) or nutdriver, insert the stud and seal through the agitator, into the shaft and tighten.



STEP 13 Place the new manual filter or barrel over the top of the agitator.

STEP 14 Rotate the barrel or manual filter until it matches-up with the agitator, then push down.

STEP 15 Using a nutdriver, insert the two screws (if used) through the barrel into the agitator and tighten.

STEP 16 Press down on the liquid fabric softener dispenser or cap, which ever you have, until it is all the way down on the agitator.

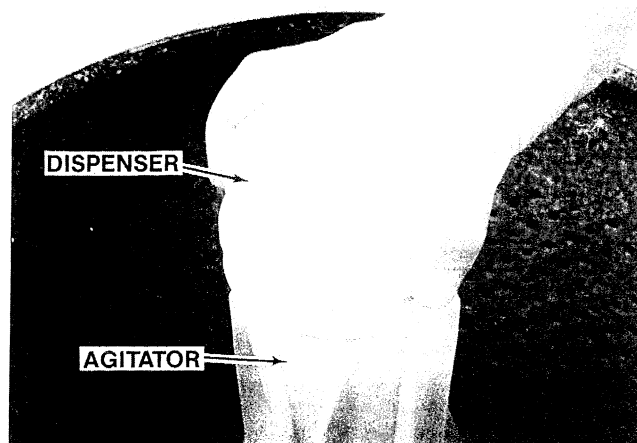
STEP 17 Close the lid.

STEP 18 Reconnect the electrical power supply. See section B for the proper reconnection.

TYPE C

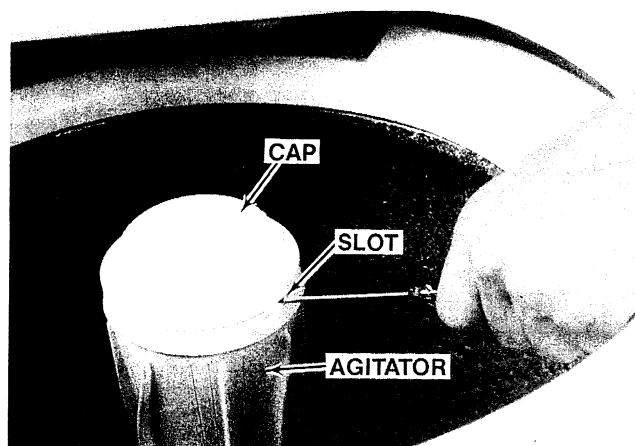
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Raise the lid.

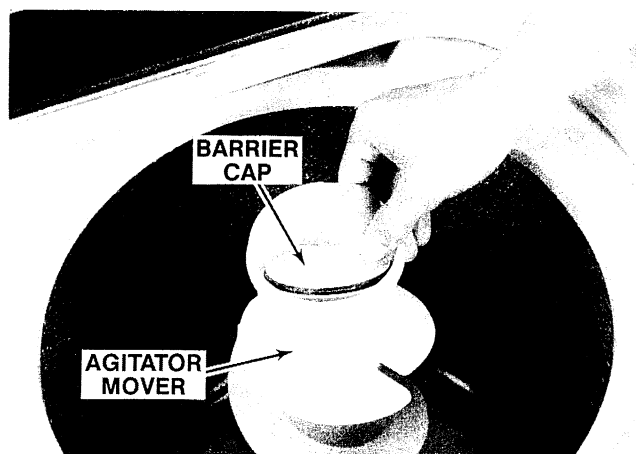


STEP 3 Pull the liquid fabric softener dispenser (if used) up, to remove it from the top of the agitator.

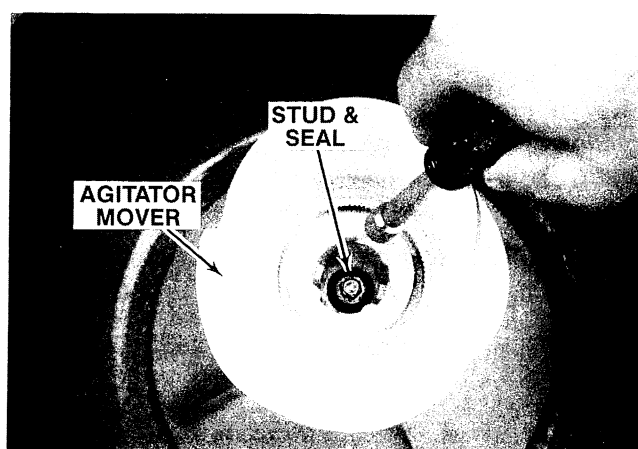
OTHERWISE



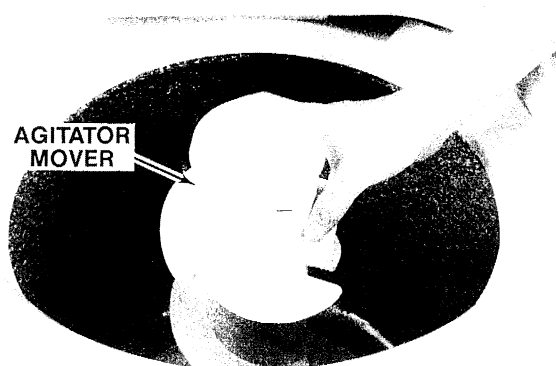
STEP 4 Using a small screwdriver, insert it in the slot between the agitator and cap, then pry the cap off the agitator.



STEP 5 Reach in and remove the barrier cap and seal by pulling up.

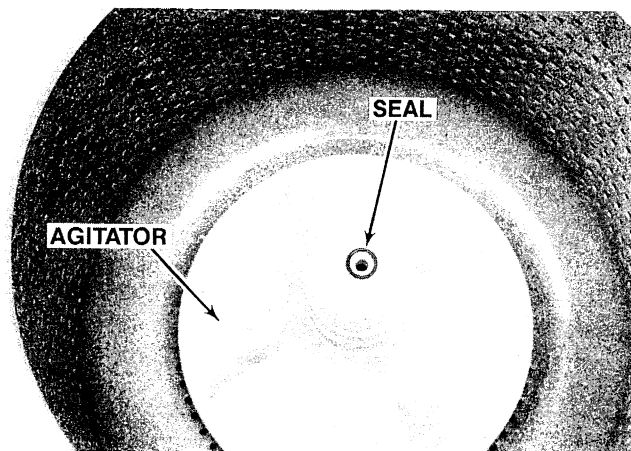


STEP 6 Using a socket wrench (with extension) or nutdriver, remove the stud and seal holding the agitator to the shaft.



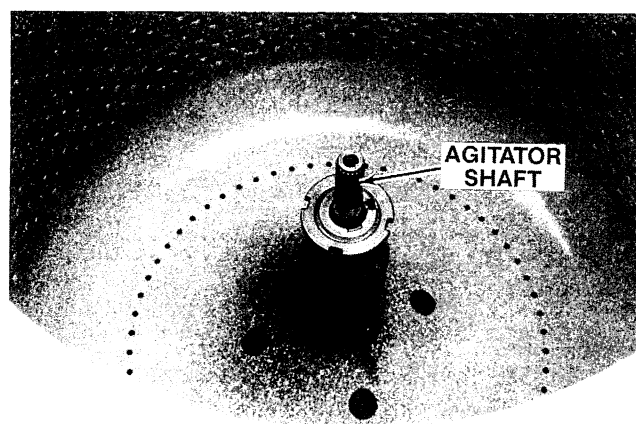
STEP 7 Remove the agitator mover by pulling this up off the agitator.

STEP 8 Turn this agitator mover over so the cam and clutch dogs (4 pieces) slide out.



STEP 9 Carefully remove the round rubber seal off the top of the agitator.

STEP 10 Carefully remove the agitator by lifting straight up.

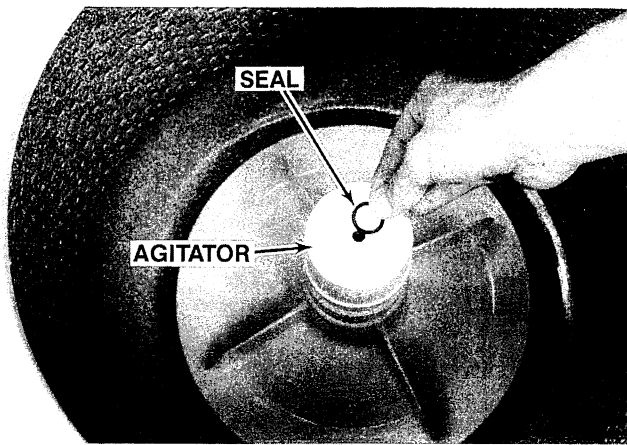


STEP 11 Inspect the agitator shaft for worn grooves or rust. If the shaft is bad, either call a authorize WHIRLPOOL Factory Service Branch to repair this, or replace the complete gearcase yourself.

REPLACEMENT

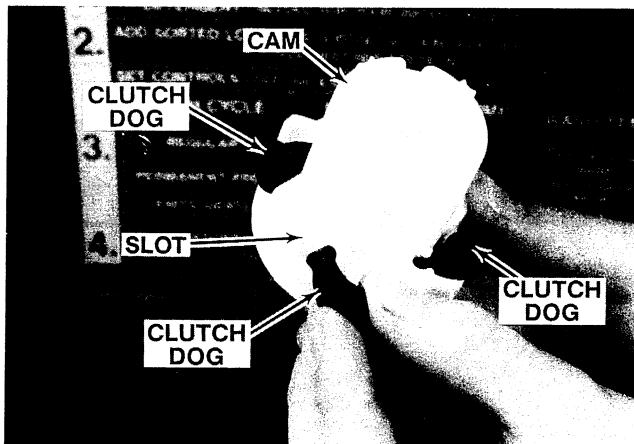
STEP 12 Place the new agitator on the shaft.

STEP 13 Rotate the agitator until the grooves in the agitator match the grooves on the shaft, then push the agitator down.



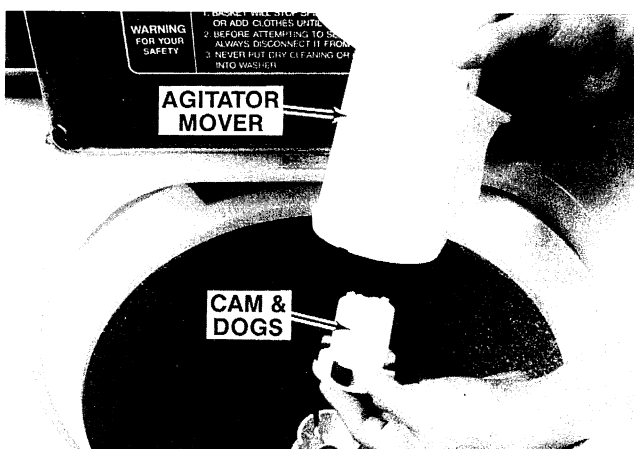
STEP 14 Place the new round rubber seal in the groove on top of the agitator.

STEP 15 Hold the new cam upside down.



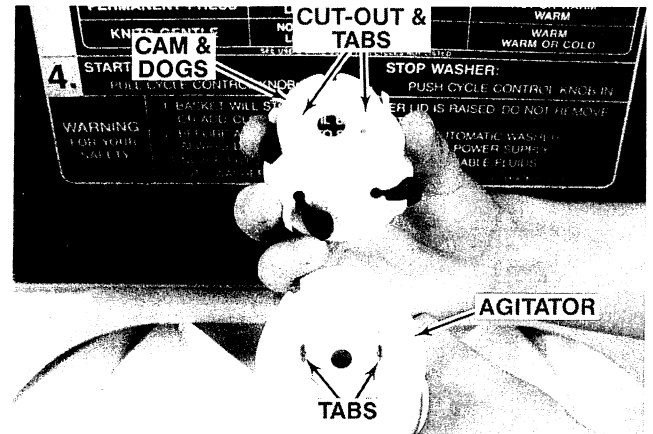
STEP 16 Place the small round part of the new clutch dog (4 pieces) in the slot on the cam.

STEP 17 Do the same thing to the other (3) three clutch dogs.



STEP 18 Turn the agitator mover over and carefully insert the cam and dogs, up into the agitator mover until it stops.

STEP 19 Carefully turn the agitator mover upright.



NOTE: The cam has a cut-out and tabs across from each other. The agitator has tabs across from each other. These must line up in order for the cam to slide down on the agitator.

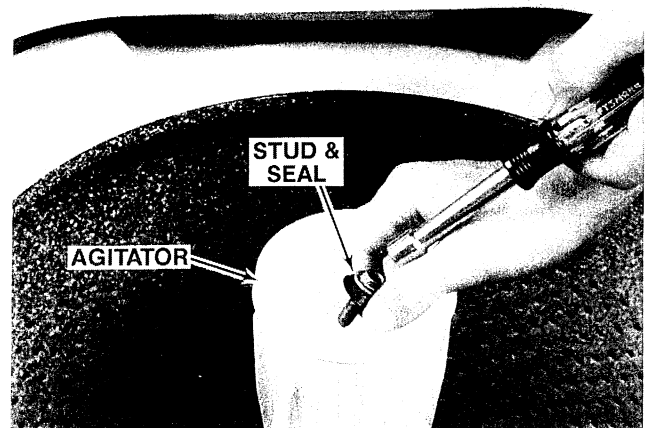
STEP 20 Place the agitator mover, cam and dogs over the agitator, lining up the tabs.

NOTE: If the dog(s) falls out of the slot(s) in the cam you will have to do steps 15-20 over.

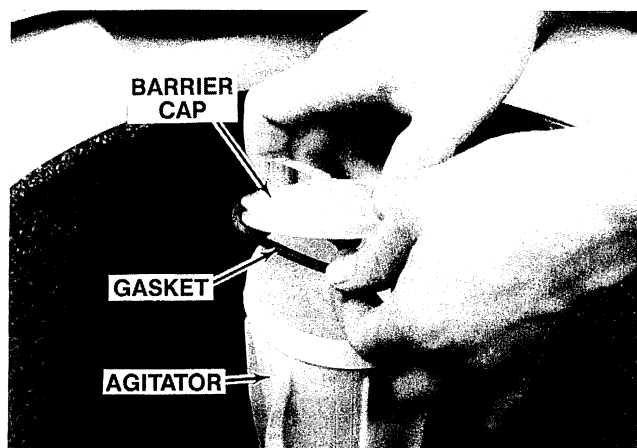
STEP 21 Push the cam down until the tabs snap together.

STEP 22 Place the new auger agitator on the shaft.

STEP 23 Rotate the agitator until the grooves in the agitator match the grooves on the shaft, then push the agitator down.



STEP 24 Using a socket wrench (with an extension) or nutdriver, insert the stud and seal through the agitator, into the shaft and tighten.



STEP 25 Be sure the round gasket is in the groove in the barrier cap.

NOTE: The barrier cap must be pushed down past the holes in the mover, this is so the liquid from the dispenser can flow out the holes

STEP 26 Push the barrier cap and seal down into the agitator mover all the way.

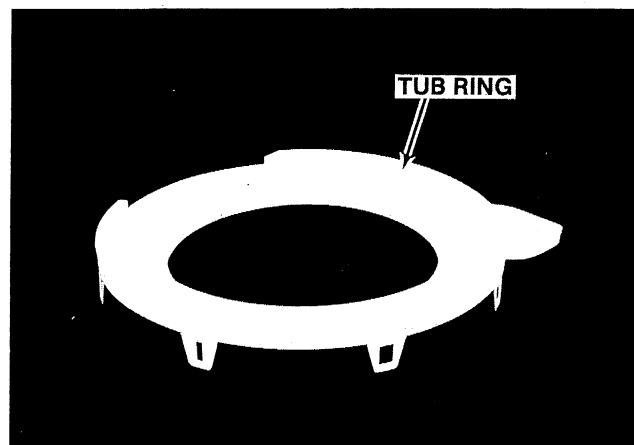
STEP 27 Press down on the liquid fabric softener dispenser or cap, whichever you have, until it is all the way down on the agitator.

STEP 28 Close the lid.

STEP 29 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 3

Tub Ring and Gasket Replacement



See page 172, illus. no.'s 4 and 5 for location of parts.

⚠ WARNING

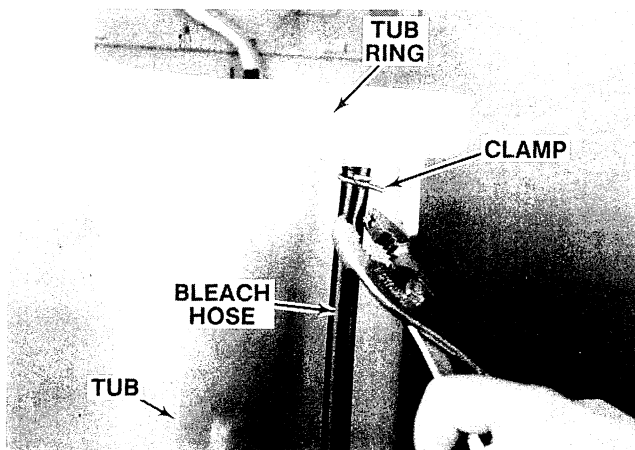
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

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

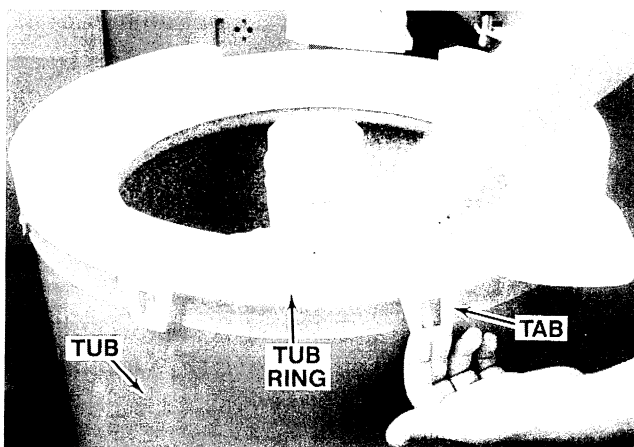
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



STEP 3 Using pliers, slide the clamp holding the bleach hose, located in the right front corner, down and off the tab on the tub ring.

STEP 4 Carefully pull the bleach hose off the tub ring.



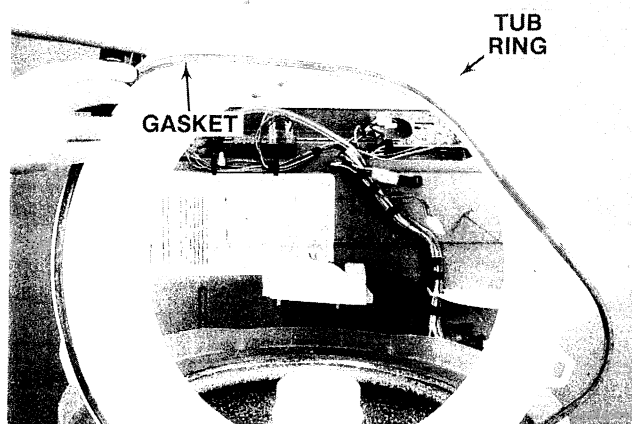
STEP 5 One at a time, push down with the palm of one hand, while unsnapping the tub ring tab, from the tub with the other hand.

STEP 6 Carefully remove the tub ring and gasket.

REPLACEMENT

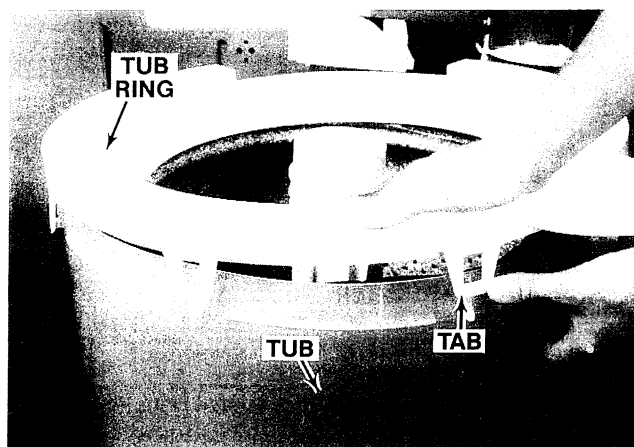
STEP 7 Check and replace the gasket if it has started to rot, crack or there is any sign of water leakage.

This gasket fits in a groove in the tub ring.

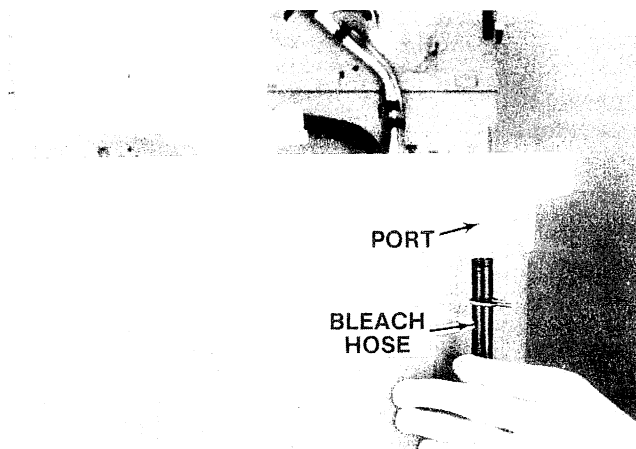


STEP 8 Place the gasket with the smooth side facing the new tub ring into the groove.

STEP 9 Place the new tub ring, with the bleach dispenser tray in the right hand corner, over the edge of the tub.



STEP 10 One at a time, push down with the palm of one hand, while snapping the tub ring tab, over the tub, with the other hand.



STEP 11 Slide the bleach dispenser hose over the port on the tray.

STEP 12 Using pliers, slide the clamp up the bleach hose and over the tab on the tub ring.

⚠ WARNING

Electrical Shock Hazard

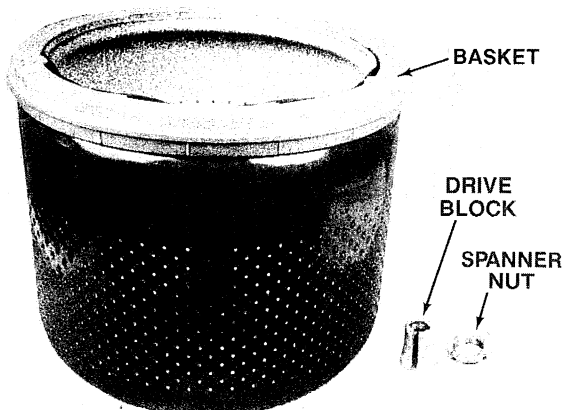
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 13 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 14 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 4

Spanner (Lock) Nut, Basket and Drive Block Replacement



See page 172, illus. no.'s 11, 12 and 16 for location of parts.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

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

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 3 Move the vacuum break out of the way (section J, proc. 17).

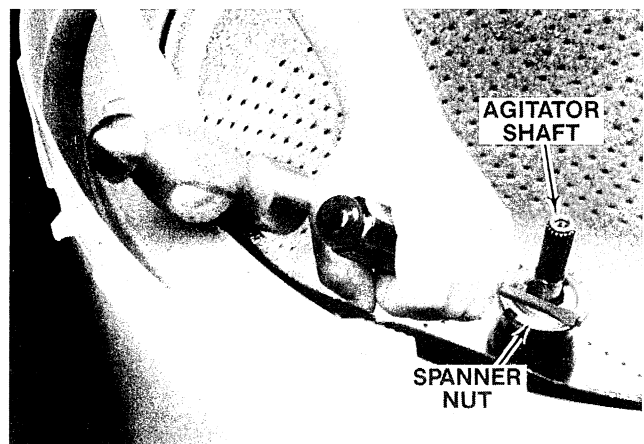
STEP 4 Remove the tub ring and gasket (section L, proc 3).

STEP 5 Remove the agitator and parts (section L, proc. 2; Type A or Type B).

⚠ WARNING

Personal Injury / Product Hazard

- We recommended wearing safety glasses and gloves when hitting the spanner (lock) nut or drive block. This metal is very soft.
- Be very careful not to hit the basket as it has a porcelain finish and chips very easily when hit.
- Failure to do so could result in personal injury or product damaged.



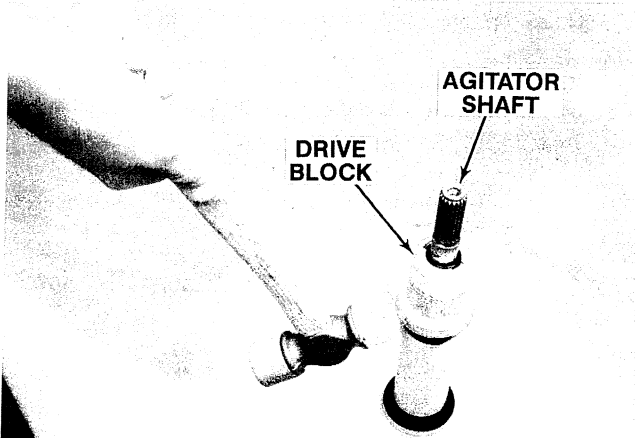
STEP 6 Insert a screwdriver into one of the slots on the spanner (lock) nut.

STEP 7 Using a hammer tap the end of the screwdriver, turning the spanner (lock) nut to the left to loosen.

STEP 8 Remove the spanner (lock) nut.

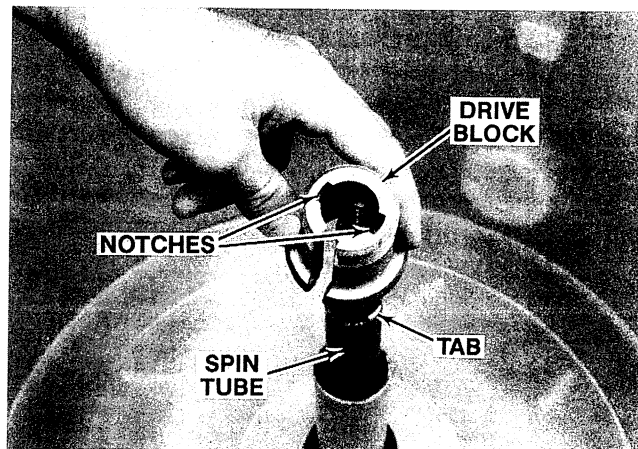
STEP 9 Carefully remove the basket by lifting straight up.

STEP 10 Remove the ring filter from the bottom of the basket, if used (section L, proc. 5, Type B).



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

REPLACEMENT



STEP 12 Place the new drive block on the spin tube.

⚠ WARNING

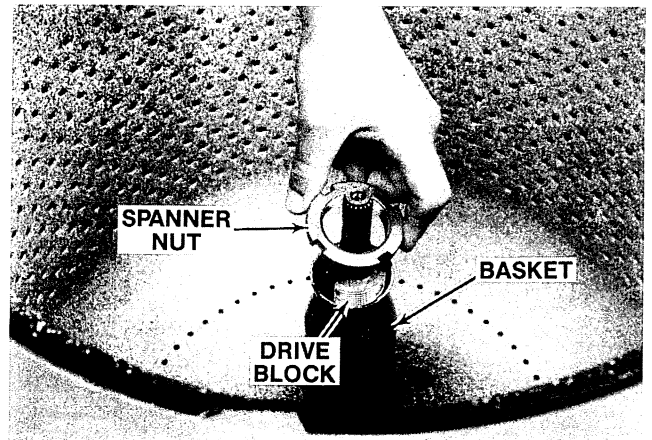
Personal Injury / Product Hazard

- We recommended wearing safety glasses and gloves when hitting the spanner (lock) nut or drive block. This metal is very soft.
- Be very careful not to hit the basket as it has a porcelain finish and chips very easily when hit.
- Failure to do so could result in personal injury or product damaged.

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

STEP 14 Replace the ring filter on the bottom of the new basket, if used (section L, proc. 5; Type B).

STEP 15 Place the new basket on top of the drive block.



STEP 16 Place the spanner (lock) nut on the drive block, turning to the right.

STEP 17 Insert a screwdriver into one of the slots on the spanner (lock) nut.

STEP 18 Using a hammer, tap the end of the screwdriver, turning the spanner (lock) nut to the right to tighten.

STEP 19 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 20 Replace the tub ring and gasket (section L, proc. 3).

STEP 21 Replace the vacuum break (section J, proc. 17).

⚠ WARNING

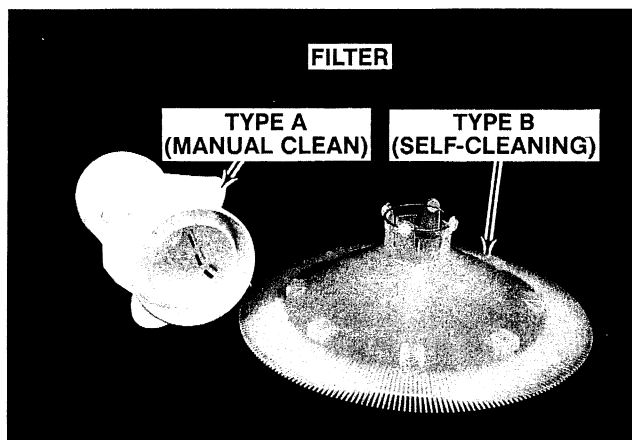
Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 22 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 23 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 5 **Filter Replacement**



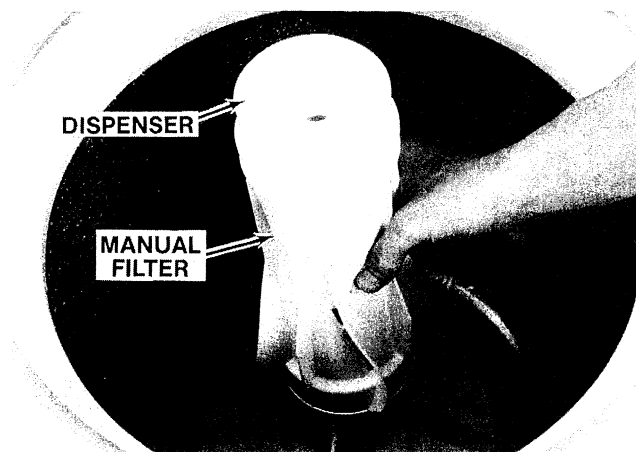
See page 172, illus. no.'s 13 and 14 for location of parts.

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 home owner clean out the filter after every use. The self-cleaning filter is automatically cleaned out when the water is pumped out of the automatic washer.

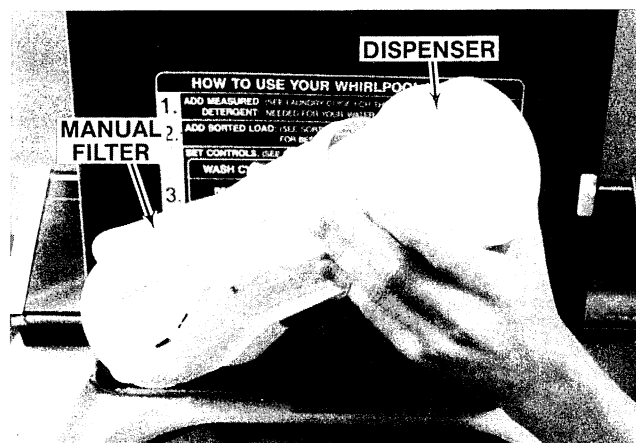
See Type A for the manual clean filter, located on top of the agitator or Type B for the ring filter (self-cleaning filter), located under the basket.

TYPE A

STEP 1 Raise the lid.

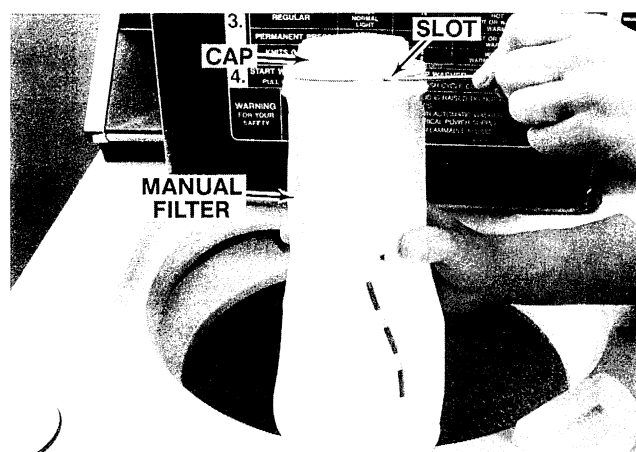


STEP 2 Grab hold of the filter and pull up.



STEP 3 Pull the liquid fabric softener dispenser (if used) out of the filter.

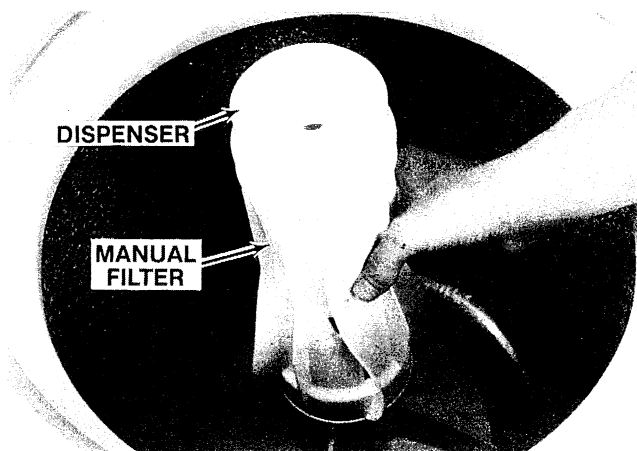
OTHERWISE



STEP 4 Using a small screwdriver, insert it in the slot between the filter and cap, then pry the cap off.

REPLACEMENT

NOTE: You may have to turn the filter a little before pushing.



STEP 5 Place the new filter over the agitator and push down until it snaps into place.

STEP 6 Push down on the liquid fabric softener dispenser or cap, whichever you have, until it is all the way down on the agitator.

STEP 7 Close the lid.

TYPE B

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

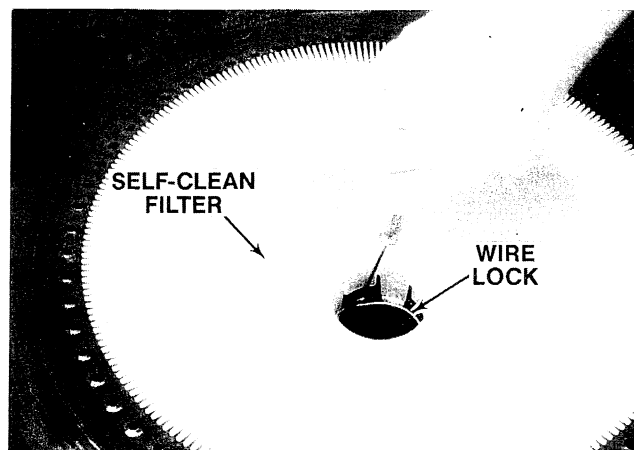
STEP 3 Move the vacuum break out of the way (section J, proc. 17).

STEP 4 Remove the tub ring and gasket (section L, proc. 3).

STEP 5 Remove the agitator and parts (section L, proc. 2; Type A, Type B, or Type C).

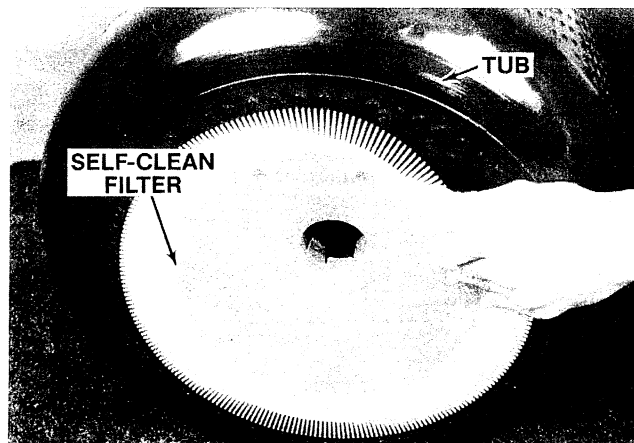
STEP 6 Remove the spanner (lock) nut and basket (section L, proc. 4).

STEP 7 Turn the basket over, so you can see the filter.



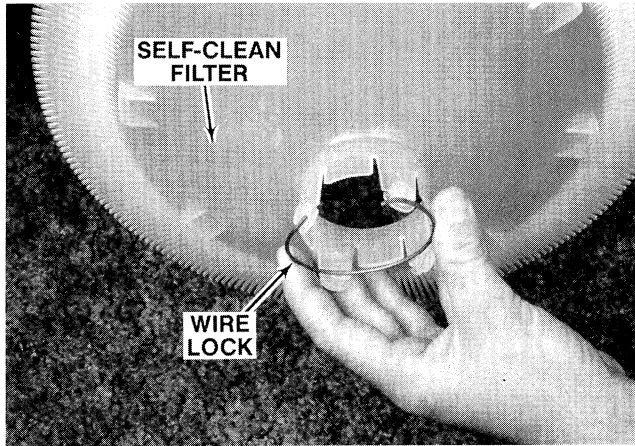
STEP 8 Using a small screwdriver, pry the wire lock out of the groove in the ring filter.

STEP 9 Lay the basket on its side.

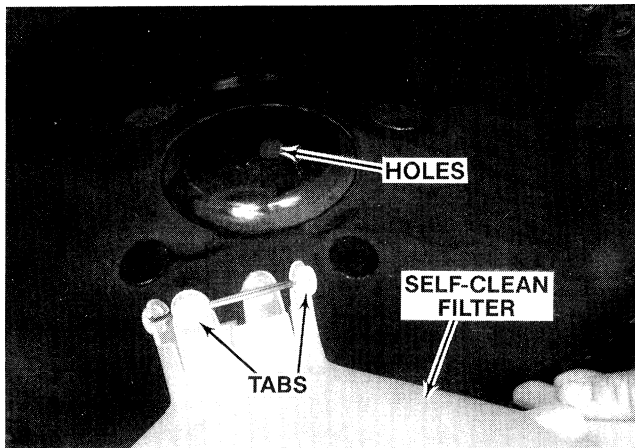


STEP 10 Reach-in with one hand and push the tabs (buttons) one at a time, out the holes in the basket while pulling on the ring filter with the other hand.

REPLACEMENT



STEP 11 Place the wire lock inside into the new ring filter.



STEP 12 Line up the tabs on the new ring filter with the holes in the basket.

STEP 13 Push the new ring filter up into the bottom of the basket until the tabs snap into the holes in the basket.

STEP 14 Replace the basket and spanner (lock) nut (section L, proc. 4).

STEP 15 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 16 Replace the tub ring and gasket (section L, proc. 3).

STEP 17 Replace the vacuum break (section J, proc. 17).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 18 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 19 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 6

Tub and Centerpost Gasket Replacement

See page 172, illus. no.'s 15 and 17 for location of parts.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

The tub holds the water during wash.

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

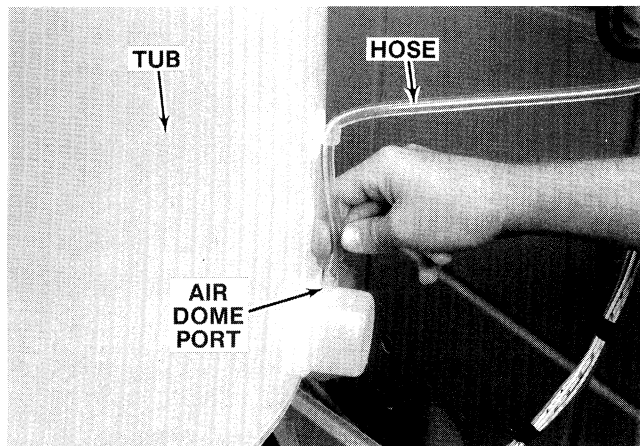
STEP 3 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 4 Remove the rear panel (section J, proc. 22).

STEP 5 Remove the tub ring and gasket (section L, proc. 3).

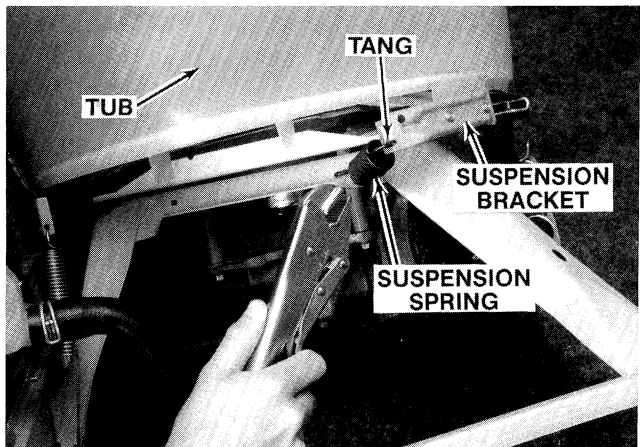
STEP 6 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 7 Remove the spanner (lock) nut, basket and drive block (section L, proc. 4).



STEP 8 Pull the water level switch hose off the air dome port, located in the right rear corner of the tub.

STEP 9 Slide the hose up and out the hole in the side of the tub.



STEP 10 Using locking pliers, pull the tang on the front left spring, out the hole in the suspension bracket.

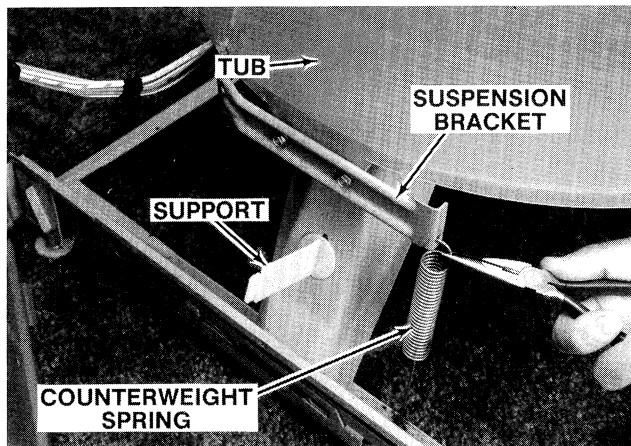
STEP 11 Carefully let the suspension spring (still hooked to the retainer) hang down.

STEP 12 Using locking pliers, pull the tang on the front right spring, out the hole in the suspension bracket.

STEP 13 Carefully let the suspension spring (still hooked to the retainer) hang down.

STEP 14 Using locking pliers, pull the tang on the center rear spring, out the hole in the suspension bracket.

STEP 15 Carefully let the suspension spring (still hooked to the retainer) hang down.

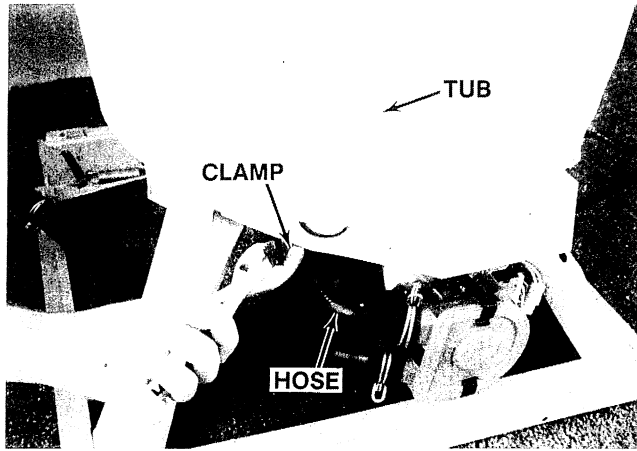


STEP 16 Using needle nose pliers, remove the counterweight spring hooked to the end of either the left front or center rear bracket.

NOTE: Mark where these brackets were, so you can put them back-on in the same place.

STEP 17 Using a socket wrench, remove the screws holding these three brackets and tub to the support.

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



STEP 18 Using pliers, slide the clamp down the hose connecting the tub to the pump.

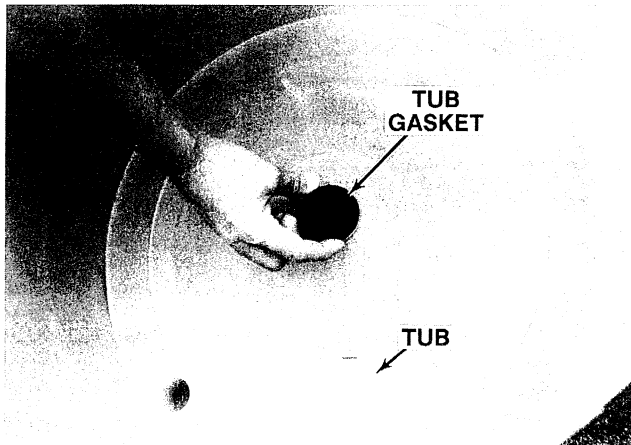
STEP 19 Remove this hose.

STEP 20 Using a pail, drain the excess water from this hose.

STEP 21 Clean the centerpost by scraping deposits off of it.

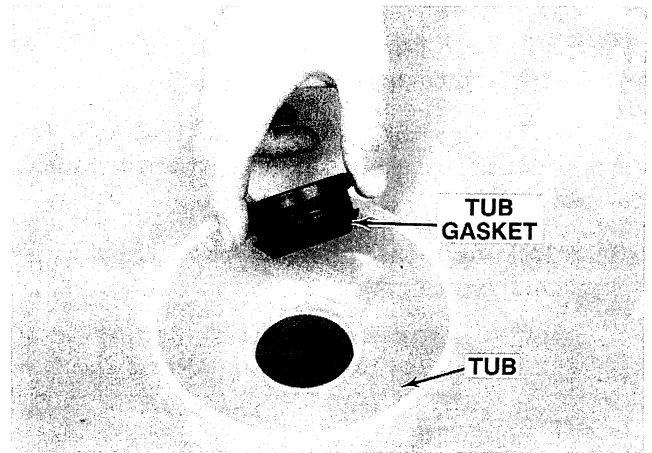
STEP 22 Wash the centerpost with mild soap, leaving some soap on the centerpost. The tub gasket should slide on the soapy centerpost when lifting the tub.

STEP 23 Carefully remove the tub by pulling straight up. You may have to rock the tub at the same time while pulling.



STEP 24 Squeeze the tub gasket from the inside of the tub, then push-out the bottom to remove.

REPLACEMENT



STEP 25 Push the new tub gasket up into the hole from the bottom of the tub.

A groove in the gasket locks it in place.

BLEACH
HOSE

BLEACH
HOSE
GROOVE

STEP 26 Replace the new bleach hose (if your washer has one) by inserting it through the hole, from the inside of the tub.

STEP 27 Place a bead of silastic around the groove on the hose, then push it all the way into the hole (LET DRY).

STEP 28 Wash the centerpost with mild soap, leaving some soap on the centerpost. The tub gasket should slide on the soapy centerpost when lowering the tub.

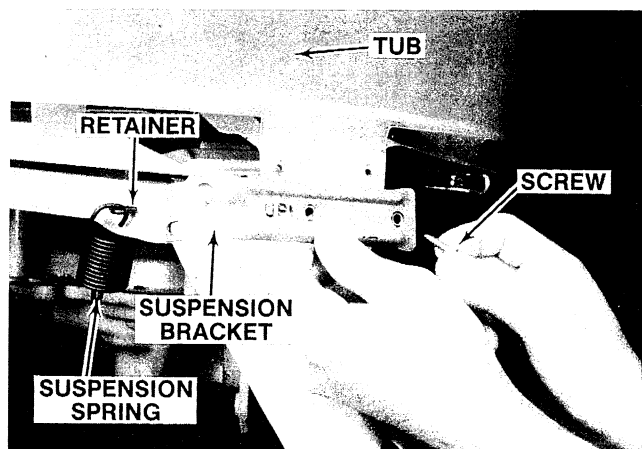
NOTE: The bleach hose (if used) must be in the right front corner and the air pressure dome in the right rear corner.

STEP 29 Slide the new tub with gasket down over the centerpost.

STEP 30 Line up the holes in the tub with the holes in the support.

NOTE: Be sure the **ARROW** and the word **UP**, stamped on the bracket, are up and facing away from the base.

STEP 31 Place the left front bracket up to the screw holes in the tub.



STEP 32 Using a socket wrench, insert the two screws through the bracket, tub into the support and tighten.

STEP 33 Using locking pliers, pull the tang on the spring and hook it into the hole in the suspension spring bracket.

NOTE: Be sure the **ARROW** and the word **UP**, stamped on the bracket, are up and facing away from the base.

STEP 34 Place the right front bracket up to the screw holes in the tub.

STEP 35 Using a socket wrench, insert the two screws through the bracket, tub into the support and tighten.

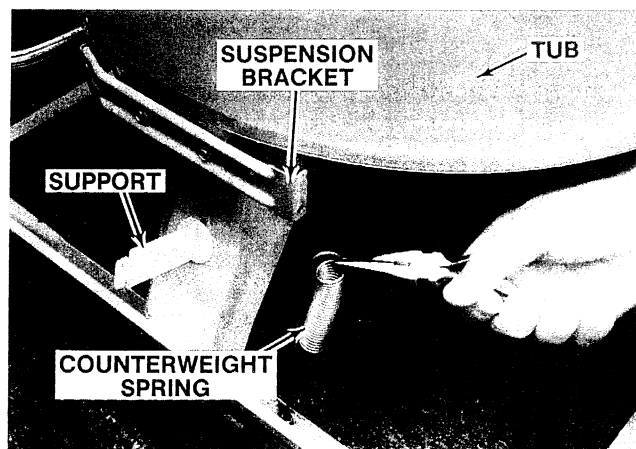
STEP 36 Using locking pliers, pull the tang on the spring and hook it into the hole in the suspension spring bracket.

NOTE: Be sure the **ARROW** and the word **UP**, stamped on the bracket, are up and facing away from the base.

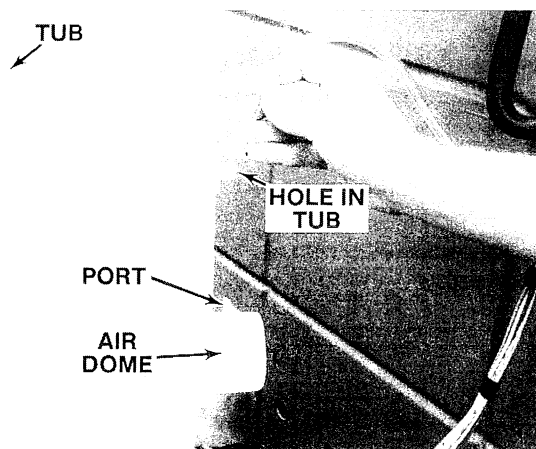
STEP 37 Place the center rear bracket up to the screw holes in the tub.

STEP 38 Using a socket wrench, insert the two screws through the bracket, tub into the support and tighten.

STEP 39 Using locking pliers, pull the tang on the spring and hook it into the hole in the suspension spring bracket.



STEP 40 Using needle nose pliers, hook the counterweight spring into the hole in the end, on either the left front or center rear bracket.



STEP 41 Place the pressure switch hose through the hole in the tub.

STEP 42 Slide the end of the pressure switch hose over the port on the air dome of the tub.

STEP 43 Place the top hose from the pump onto the port on the bottom of the tub.

STEP 44 Using pliers, slide the clamp up the hose connecting the hose to the tub.

STEP 45 Replace the drive block, basket and spanner (lock) nut (section L, proc. 4).

STEP 46 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 47 Replace the tub ring and gasket (section L, proc. 3).

STEP 48 Replace the rear panel (section J, proc. 22).

WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 49 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 50 Move the automatic washer back to its proper place.

STEP 51 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 52 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, 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, then carefully lower.

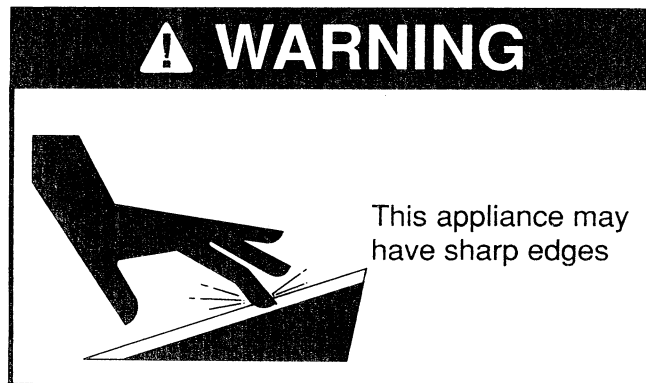
STEP 53 Using an open end wrench, tighten the locknuts.

STEP 54 Drain the water if you had to level it this way.

SECTION M

Machine Base Area

SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR OR TESTING PROCEDURES ARE ATTEMPTED.



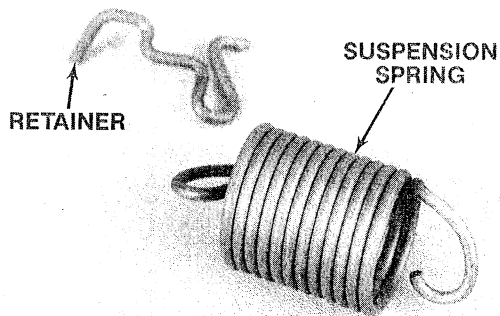
PROCEDURE

PAGE

1	Suspension Spring, Retainer	116
2	Suspension Spring Bracket	117
3	Suspension Plate Pad	120
4	Base Pad	123
5	Tub Support	125
6	Suspension Plate	127
7	Front Feet	129
8	Rear Leveling Feet	130

PROCEDURE 1

Suspension Spring and Retainer Replacement



See page 174, illus. no's. 3 and 26 for location of parts.

⚠ WARNING

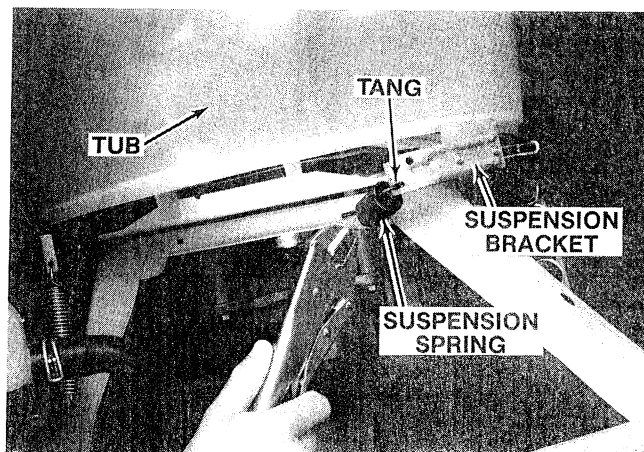
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

There are (3) three suspension springs used on this automatic washer. Two (2) located in the front, one on each side and (1) one located in the back.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

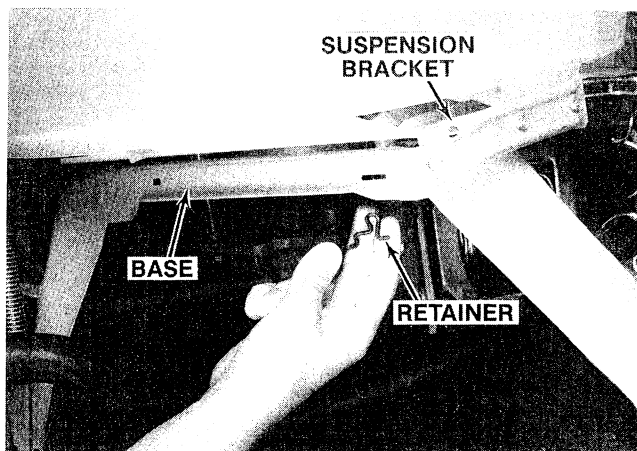


STEP 3 Using locking pliers, pull the tang on the spring, out the hole in the suspension bracket.

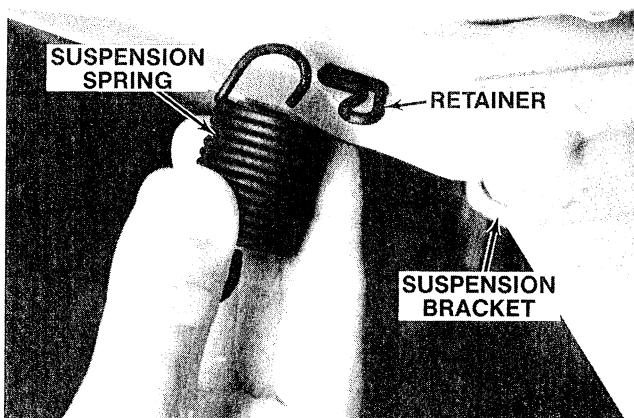
STEP 4 Unhook the other end of the suspension spring from the retainer.

STEP 5 Push the retainer out of the slot in the base.

REPLACEMENT



STEP 6 Push the new retainer through the slot from the back side of the base, until it snaps into place.



STEP 7 Hook one end of the new suspension spring in the loop of the retainer.

STEP 8 Using locking pliers, pull the tang on the spring and hook it into the hole in the suspension bracket.

⚠ WARNING

Electrical Shock Hazard

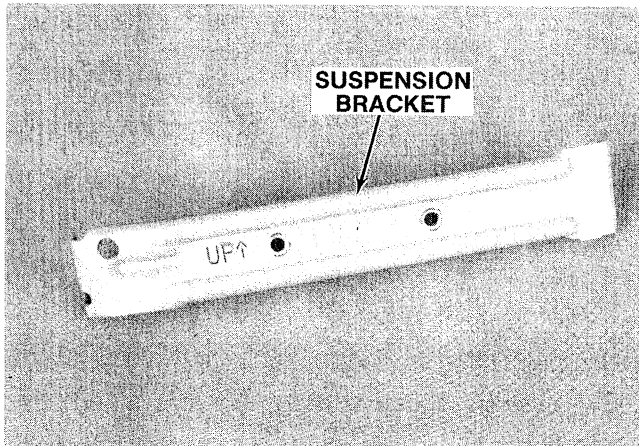
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 9 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 10 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 2

Suspension Spring Bracket Replacement



See page 174, illus. no's. 2 and 5 for location of parts.

⚠ WARNING

Electrical Shock Hazard

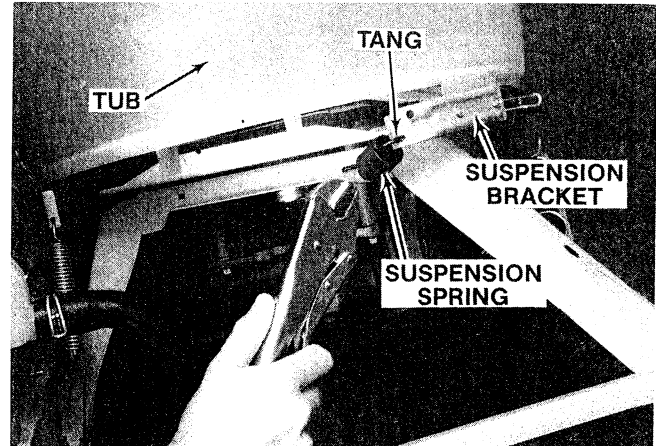
- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

There are (3) three suspension spring brackets used on this automatic washer. Two (2) located in the front, one on each side and (1) one located in the back. See Type A for the front brackets and Type B, for the rear bracket.

TYPE A

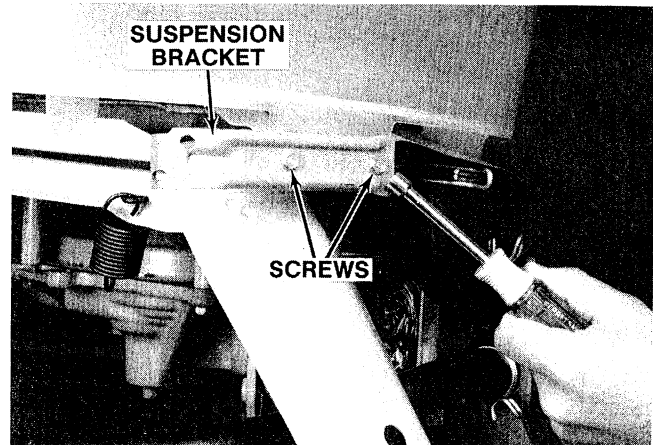
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



STEP 3 Using locking pliers, pull the tang on the spring, out the hole in the suspension bracket.

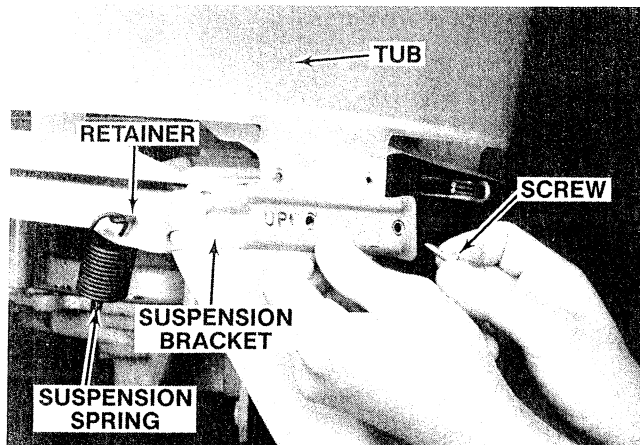
STEP 4 Carefully let the suspension spring (still hooked to the retainer) hang down.



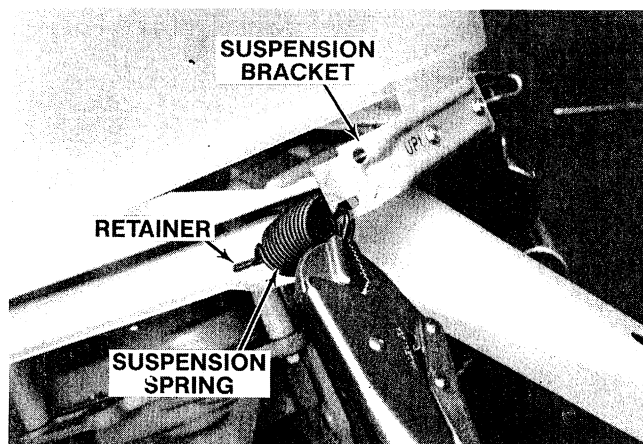
STEP 5 Using a nutdriver or socket wrench, remove the two screws holding the suspension bracket and tub, to the support.

REPLACEMENT

NOTE: Be sure the ARROW and the word UP, stamped on the new bracket, are up and facing away from the base.



STEP 6 Using a nutdriver or socket wrench, insert the screws through the new bracket, tub into the base and tighten.



STEP 7 Using locking pliers, pull the tang on the spring and hook it into the hole in the suspension spring bracket.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 8 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 9 Reconnect the electrical power supply. See section B for the proper reconnection.

TYPE B

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

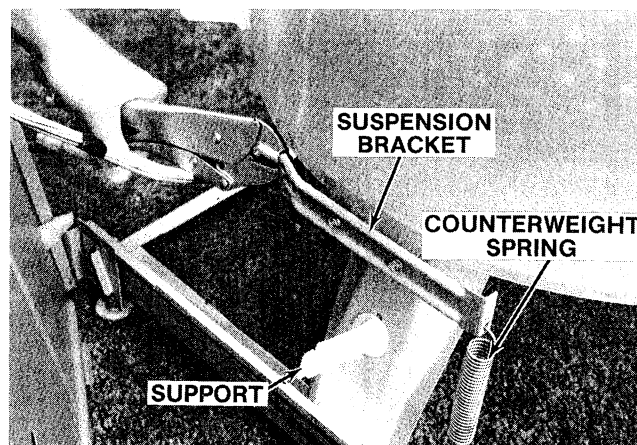
Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

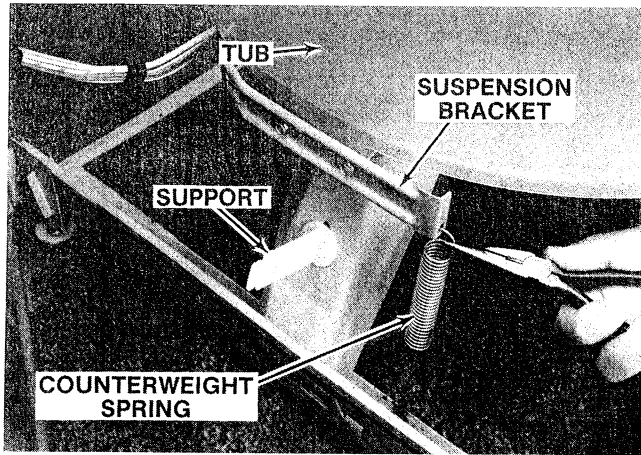
STEP 3 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 4 Remove the rear panel (section J, proc. 22)

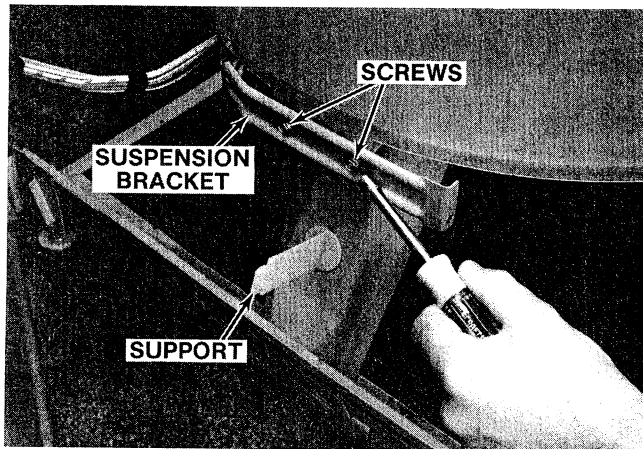


STEP 5 Using locking pliers, pull the tang on the spring, out the hole in the rear suspension bracket.

STEP 6 Carefully let the suspension spring (still hooked to the retainer) hang down.



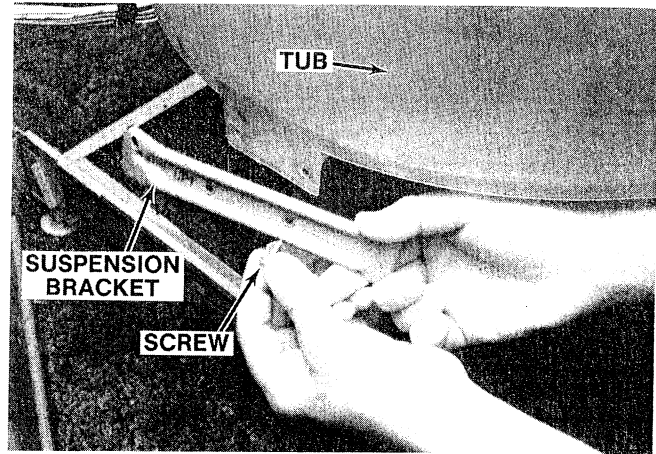
STEP 7 Using needle nose pliers, remove the counterweight spring (if its located here) hooked to the other end of the rear suspension spring bracket.



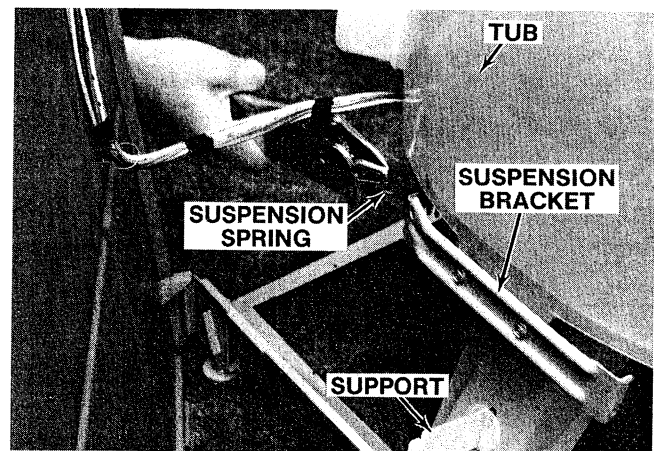
STEP 8 Using a nutdriver or socket wrench, remove the two screws holding the rear suspension bracket and tub, to the support.

REPLACEMENT

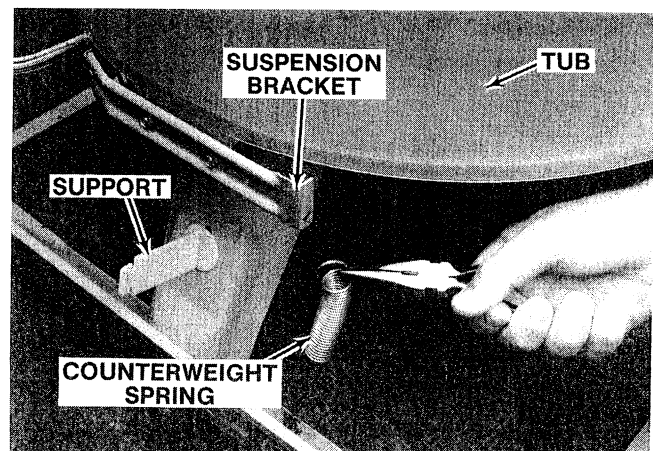
NOTE: Be sure the ARROW and the word UP, stamped on the new bracket, are up and facing away from the base.



STEP 9 Using a nutdriver or socket wrench, insert the screws through the new bracket, tub into the base and tighten.



STEP 10 Using locking pliers, pull the tang on the spring and hook it into the hole, in the rear suspension spring bracket.



STEP 11 Using needle nose pliers, hook the counterweight spring (if its located here) into the hole in the other end of the rear suspension spring bracket.

STEP 12 Replace the rear panel (section J, proc. 22).

! WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 13 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

! CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 14 Move the automatic washer back to its proper place.

STEP 15 Reconnect the electrical power supply. See section B for the proper reconnection.

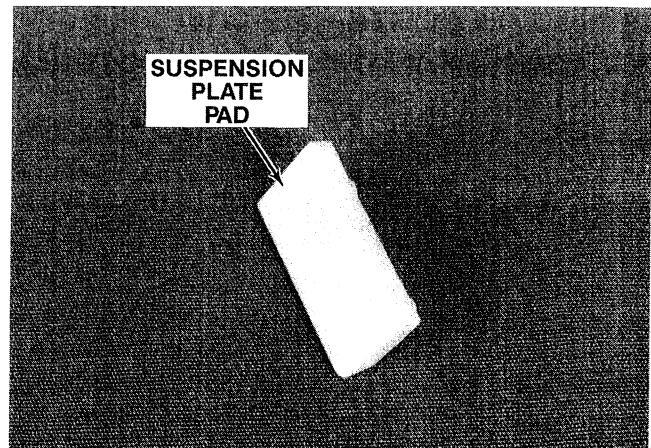
STEP 16 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 17 Using an open end wrench, tighten the locknuts.

STEP 18 Drain the water if you had to level it this way.

PROCEDURE 3

Suspension Plate Pad Replacement



See page 174, illus. no. 16 for location of part.

! WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

These pads are used with the suspension system and are located on the suspension plate, under the tub support.

STEP 1 Disconnect the electrical power supply (section B).

! CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

STEP 3 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 4 Remove the rear panel (section J, proc. 22).

STEP 5 Remove the tub ring and gasket (section L, proc. 3).

STEP 6 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 7 Remove the spanner (lock) nut, basket and drive block (section L, proc. 4).

STEP 8 Remove the tub (section L, proc. 6).

NOTE: All three suspension plate pads **MUST** be replaced at the same time.

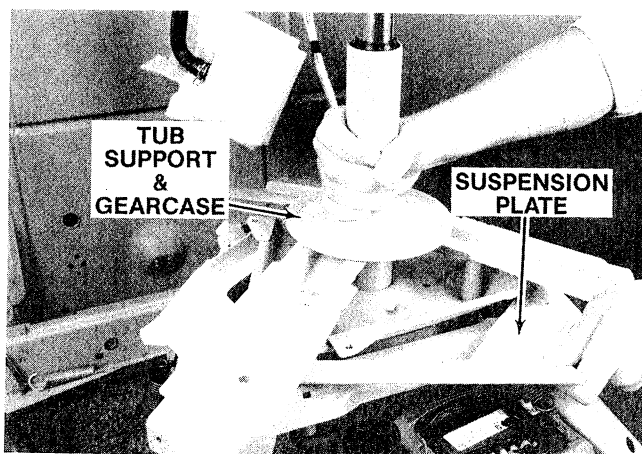
DO NOT grease suspension pads; they are internally greased. Additional grease will attract matter, resulting in poor suspension system operation.

If any one of the pads show excessive wear, the mating surface on the bottom of the tub support must be checked. If the mating surface is nicked, burred or if the finish is worn away, the tub support must be replaced.

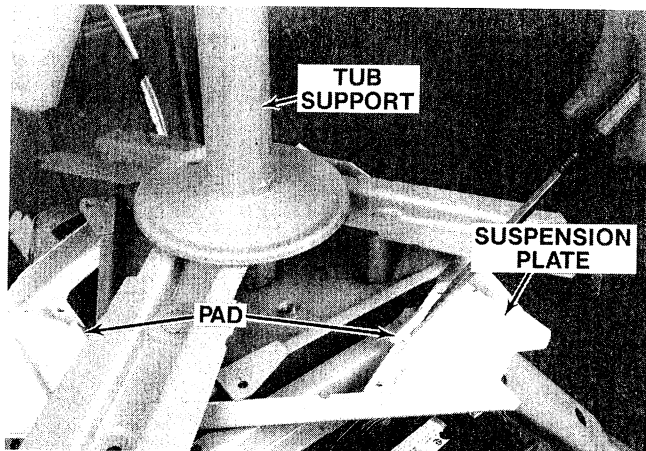
⚠ WARNING

Personal Injury Hazard

- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.

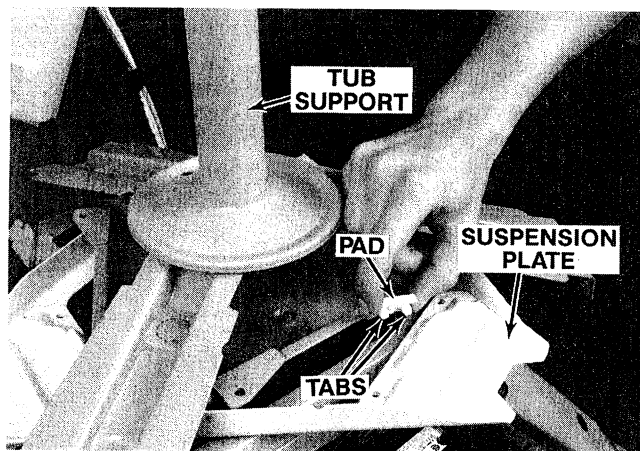


STEP 9 Lift the gearcase and tub support with one hand while turning the suspension plate with the other hand, to expose the pads.

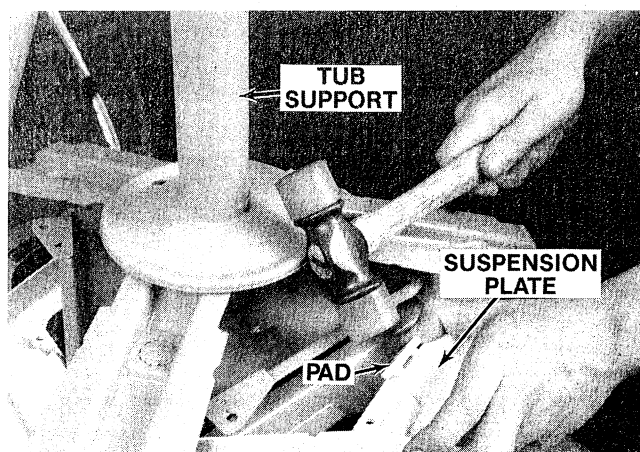


STEP 10 Using a straight blade screwdriver, pry the three suspension plate pads out of the plate.

REPLACEMENT



STEP 11 Place the tabs of the new pad, over the holes in the plate.

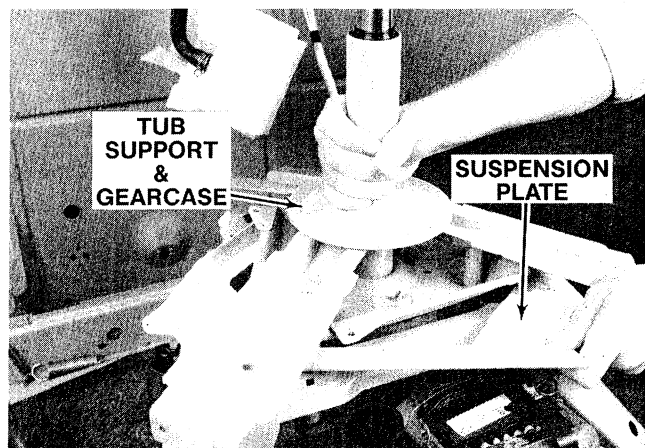


STEP 12 Using a hammer, tap very lightly until the tabs on the pad, snap into place in the plate.

⚠ WARNING

Personal Injury Hazard

- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.



STEP 13 Lift the gearcase and tub support with one hand while turning the suspension plate with the other hand, back to its proper location.

NOTE: The proper location is when the three legs on the base, line-up with the three corners on the suspension plate, and the three legs on the tub support.

STEP 14 Replace the tub (section L, proc. 6).

STEP 15 Replace the drive block, basket and spanner (lock) nut (section L, proc. 4).

STEP 16 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 17 Replace the tub ring and gasket (section L, proc. 3).

STEP 18 Replace the rear panel (section J, proc. 22).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 19 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 20 Move the automatic washer back to its proper place.

STEP 21 Reconnect the electrical power supply. See section B for the proper reconnection.

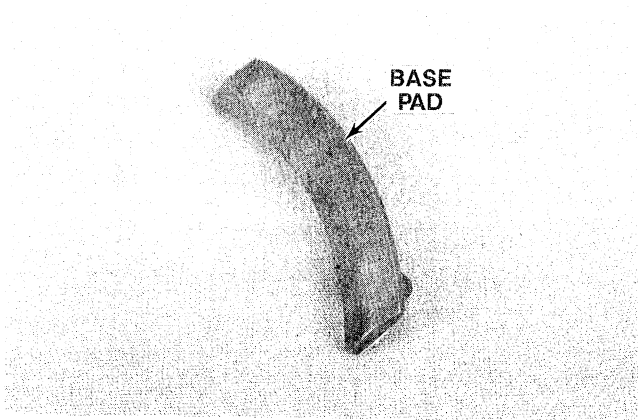
STEP 22 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then 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.

PROCEDURE 4

Base Pad Replacement



See page 174, illus. no. 18 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section 2).
- Failure to do so could result in personal injury or death.

These pads are used with the suspension system and are located on the base, under the suspension plate.

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 3 Move the automatic washer away from the wall so you can work on it.

STEP 4 Remove the rear panel (section J, proc. 22).

STEP 5 Remove the tub ring and gasket (section L, proc. 3).

STEP 6 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 7 Remove the spanner (lock) nut, basket and drive block (section L, proc. 4).

STEP 8 Remove the tub (section L, proc. 6).

NOTE: All three base pads **MUST** be replaced at the same time.

DO NOT grease base pads, they are internally greased. Additional grease will attract matter, resulting in poor suspension system operation.

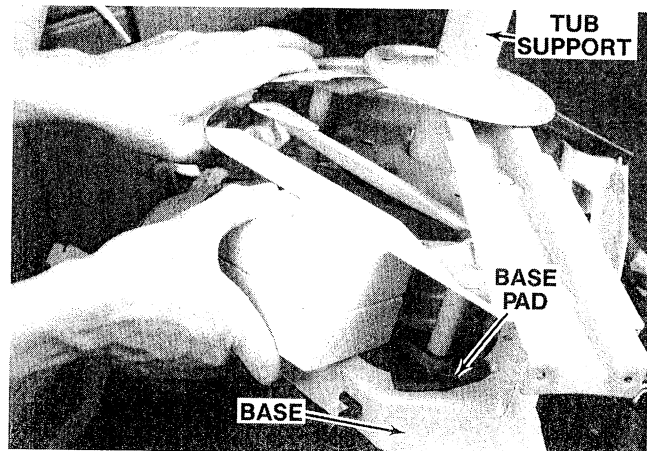
If any one of the pads show excessive wear, the mating surface on the bottom of the suspension plate must be checked. If the mating surface is nicked, burred or if the finish is worn away, the suspension plate must be replaced.

REPLACEMENT

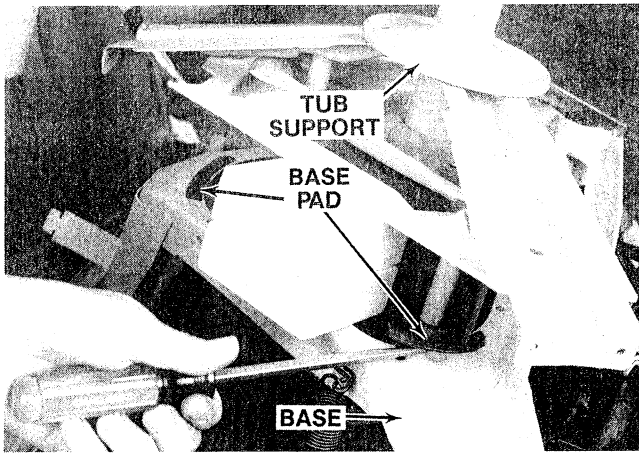
⚠ WARNING

Personal Injury Hazard

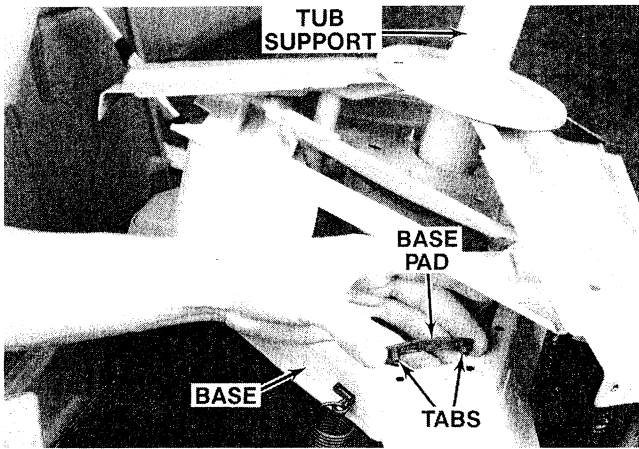
- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.



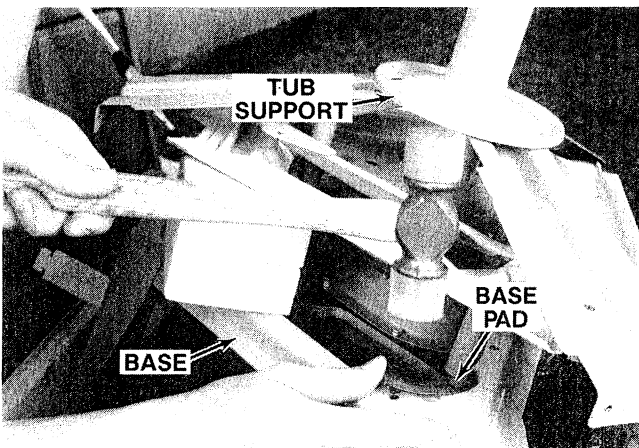
STEP 9 Place a block of wood (2, 2x4's-4 inches long, nailed together) under the left edge of the suspension plate and on top of the base.



STEP 10 Using a straight blade screwdriver, pry the front-left and center-rear base pads out of the base.



STEP 11 Place the tabs of the new base pad, over the holes in the front-left of the base.



STEP 12 Using a hammer, tap very lightly until the tabs on the base pad, snap into place on the base.

STEP 13 Place the tabs of the new base pad, over the holes in the center-rear of the base.

STEP 14 Using a hammer, tap very lightly until the tabs on the base pad, snap into place on the base.

STEP 15 Carefully remove the block of wood.

STEP 16 Place the same block of wood under the right edge of the suspension plate and on top of the base.

STEP 17 Using a straight blade screwdriver, pry the front-right base pad out of the base.

STEP 18 Place the tabs of the new base pad, over the holes in the front-right of the base.

STEP 19 Using a hammer, tap very lightly until the tabs on the base pad, snap into place on the base.

STEP 20 Carefully remove the block of wood.

STEP 21 Replace the tub (section L, proc. 6).

STEP 22 Replace the drive block, basket and spanner (lock) nut (section L, proc. 4).

STEP 23 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 24 Replace the tub ring and gasket (section L, proc. 3).

STEP 25 Replace the rear panel (section J, proc. 22).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 26 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 27 Move the automatic washer back to its proper place.

STEP 28 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 29 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, 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, then carefully lower.

STEP 30 Using an open end wrench, tighten the locknuts.

STEP 31 Drain the water if you had to level it this way.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This part contains the bearings and seals for the brake and drive tube plus the gearcase is mounted to it.

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

STEP 3 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 4 Remove the gearcase (section N, proc. 4).

STEP 5 Stand the automatic washer upright.

STEP 6 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 7 Remove the tub ring and gasket (section L, proc. 3).

STEP 8 Remove the spanner (lock) nut, basket and drive block (section L, proc. 4).

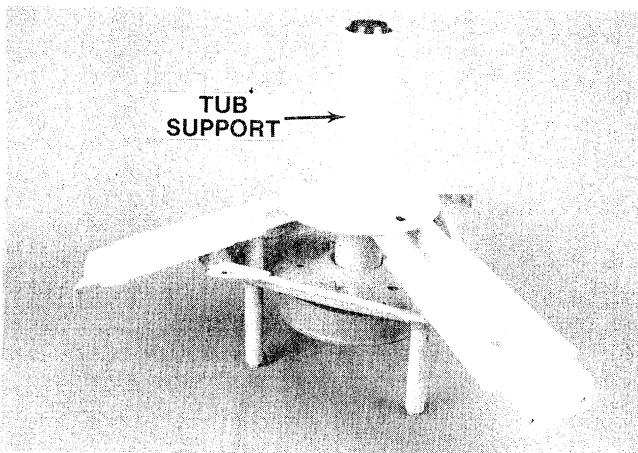
STEP 9 Remove the tub (section L, proc. 6).

STEP 10 Carefully lift the tub and tub support with brake and drive tube, off the base.

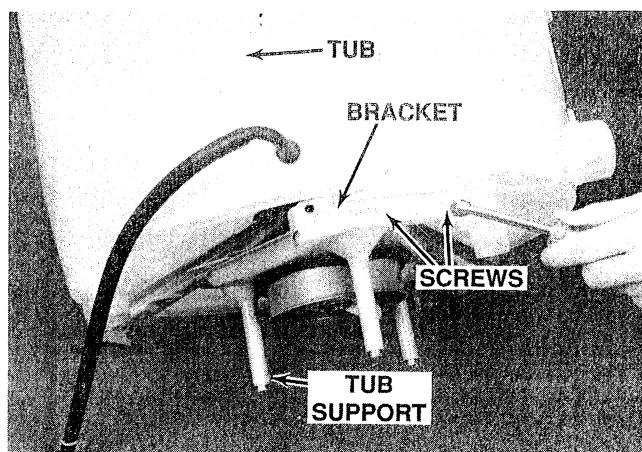
NOTE: Mark where these brackets were so you can put them back-on in the same place.

PROCEDURE 5

Tub Support Replacement



See page 174, illus. no. 4 for location of part.

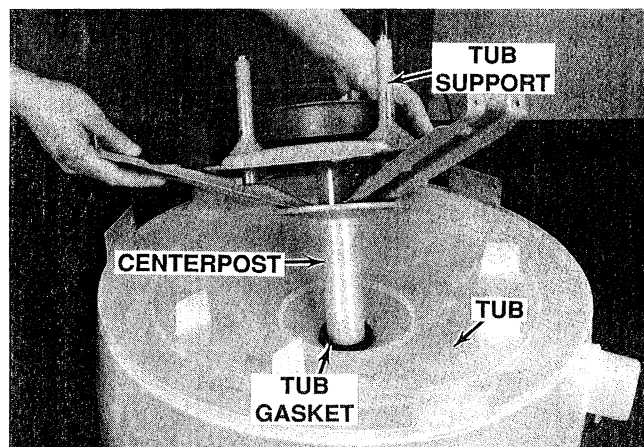


STEP 11 Using a nutdriver or socket wrench, remove the screws holding the three brackets to the tub and tub support.

STEP 12 Clean the centerpost by scraping deposits off of it.

STEP 13 Wash the centerpost with mild soap, leaving some soap on the centerpost. The tub gasket should slide on the soapy centerpost.

STEP 14 Turn the tub upside down.



STEP 15 Carefully lift while turning the tub support (centerpost) out of the tub.

STEP 16 Remove the brake and drive tube (section N, proc. 5).

REPLACEMENT

STEP 17 Replace the tub support by pushing down lining up the holes in the tub support with the holes in the tub.

STEP 18 Replace the brackets.

STEP 19 Using a nutdriver or socket wrench, insert the screws through brackets, tub into the tub support and tighten.

STEP 20 Replace the brake and drive tube (section N, proc. 5).

NOTE: Make sure the suspension plate is on the base. Match the three corners on the plate with the legs on the base.

STEP 21 Carefully place the tub support with brake and drive tube, on top of and through the suspension plate and base.

STEP 22 Replace the tub (section L, proc. 6).

STEP 23 Replace the drive block, basket and spanner (lock) nut (section L, proc. 4).

STEP 24 Replace the tub ring and gasket (section L, proc. 3).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 25 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 26 Lay the automatic washer on its back.

STEP 27 Replace the gearcase (section N, proc. 4).

STEP 28 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

⚠ CAUTION**Product Damage**

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

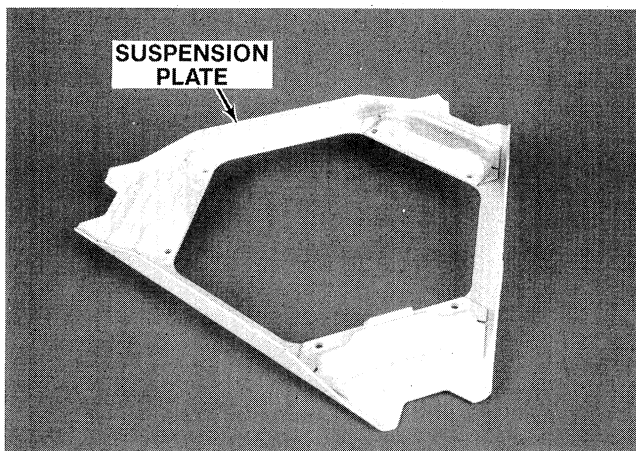
STEP 29 Move the automatic washer back to its proper place.

STEP 30 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 31 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, 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, then carefully lower.

STEP 32 Using an open end wrench, tighten the locknuts.

STEP 33 Drain the water if you had to level it this way.

PROCEDURE 6**Suspension Plate Replacement**

See page 174, illus. no. 17 for location of part.

⚠ WARNING**Electrical Shock Hazard**

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

This part is located between the tub support and the base and is used as part of the suspension system.

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION**Product Damage**

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

STEP 3 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 4 Remove the gearcase (section N, proc. 4).

STEP 5 Stand the automatic washer upright.

STEP 6 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 7 Remove the tub ring and gasket (section L, proc. 3).

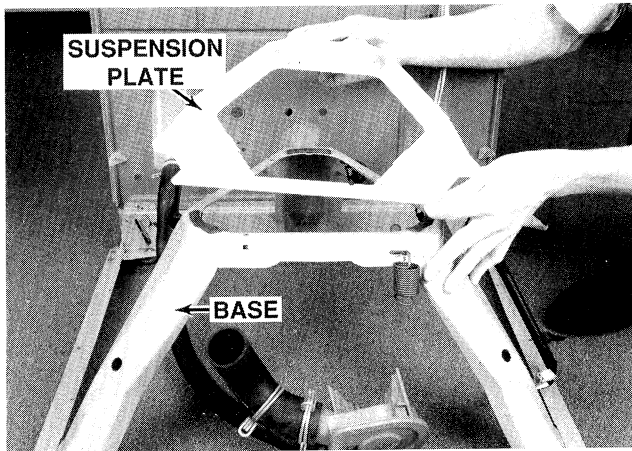
STEP 8 Remove the spanner (lock) nut, basket and drive block (section L, proc. 4).

STEP 9 Remove the tub (section L, proc. 6).

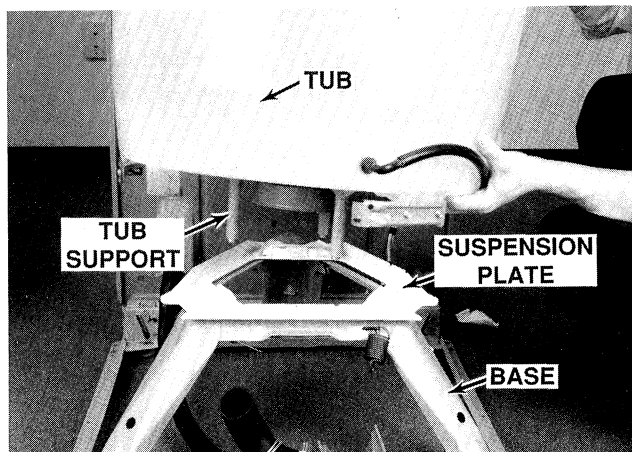
STEP 10 Carefully lift the tub and tub support with brake and drive tube, off the base.

STEP 11 Remove the suspension plate from the base.

REPLACEMENT



STEP 12 Place the new suspension plate on the base, matching the three corners on the plate with the legs on the base.



STEP 13 Carefully place the tub and tub support with brake and drive tube, on top of and through the suspension plate and base.

NOTE: The three legs on the tub support should line-up with the three corners on the suspension plate and the three legs on the base.

STEP 14 Replace the tub (section L, proc. 6).

STEP 15 Replace the drive block, basket and spanner (lock) nut (section L, proc. 4).

STEP 16 Replace the tub ring and gasket (section L, proc. 3).

! WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 17 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 18 Lay the automatic washer on its back.

STEP 19 Replace the gearcase (section N, proc. 4).

STEP 20 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

! CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 21 Move the automatic washer back to its proper place.

STEP 22 Reconnect the electrical power supply. See section B for the proper reconnection.

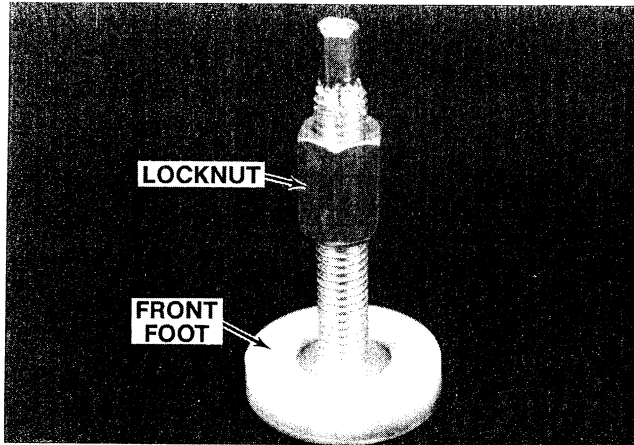
STEP 23 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 24 Using an open end wrench, tighten the locknuts.

STEP 25 Drain the water if you had to level it this way.

PROCEDURE 7

Front Feet Replacement



See page 174, illus. no's. 21 and 22 for location of parts.

⚠ WARNING

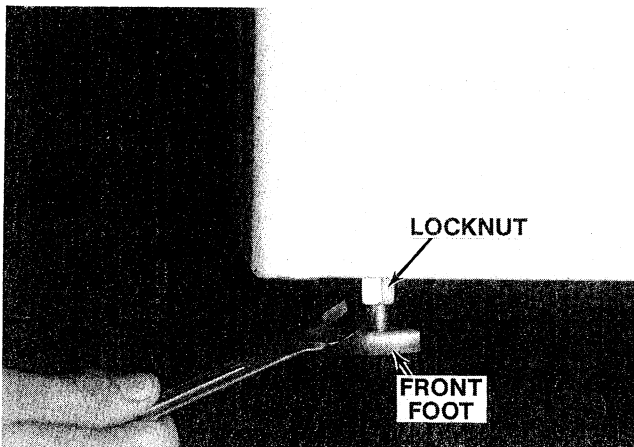
Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

The front feet are screwed into the front corners of the automatic washer.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Place a 4-inch block in the middle, under the front edge of the cabinet.

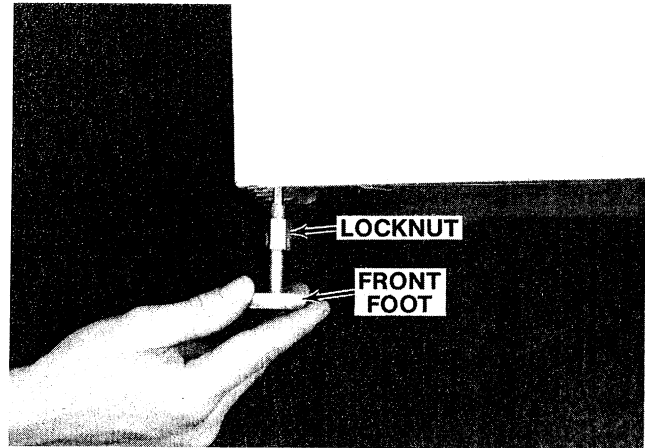


STEP 3 Using an open end wrench, loosen the locknuts.

STEP 4 Unscrew the front feet.

REPLACEMENT

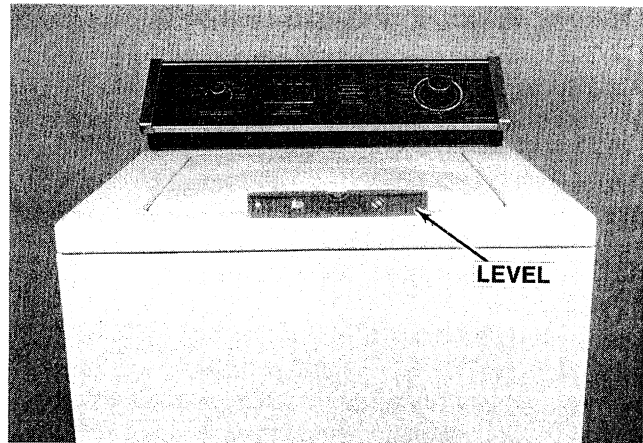
STEP 5 Place a locknut on each new front foot and screw down to 1/2-inch from the foot.



STEP 6 Screw each front foot into the corner brackets, up to the locknut.

STEP 7 Remove the block.

STEP 8 Reconnect the electrical power supply. See section B for the proper reconnection.



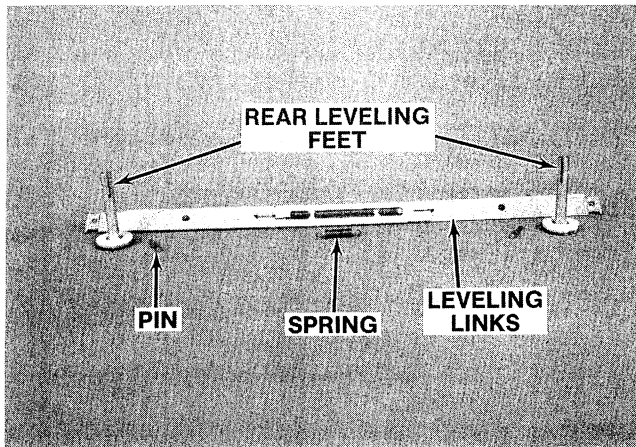
STEP 9 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 10 Using an open end wrench, tighten the locknuts.

STEP 11 Drain the water if you had to level it this way.

PROCEDURE 8

Rear Leveling Feet Replacement



See page 174, illus. no's. 6, 7, 8 and 9 for location of parts.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

The rear feet are housed in the rear of the base and move up or down, depending on the level of your floor.

STEP 1 Disconnect the electrical power supply (section B).

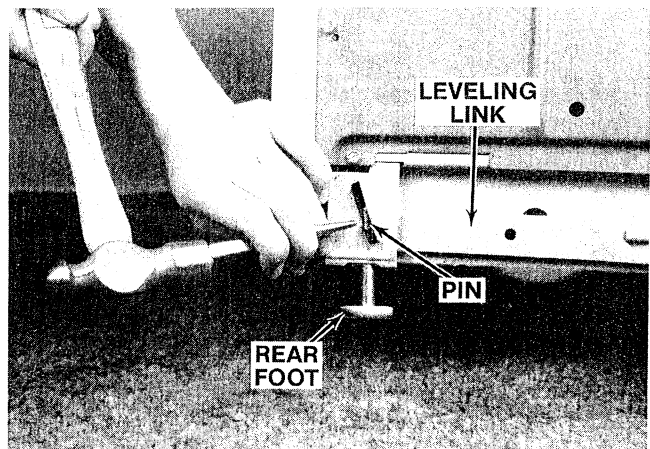
⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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

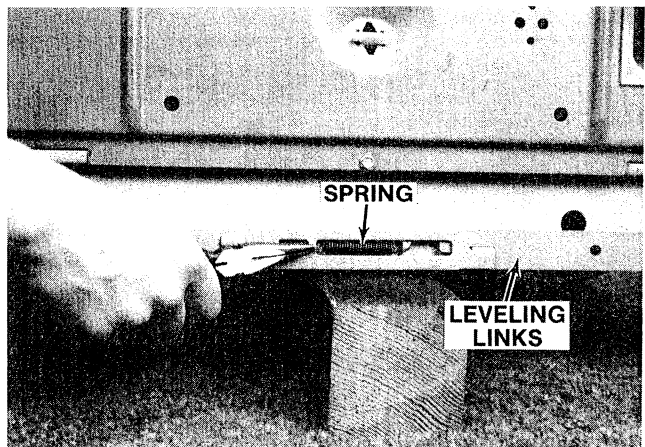
STEP 3 Place a 4-inch block in the middle, under the rear edge of the cabinet.



STEP 4 Using a punch and a hammer, knock the pin out of the rear foot.

STEP 5 Slide the rear leveling foot down to remove it from the leveling link.

STEP 6 Do the same thing to the other rear foot as in steps 4 & 5.



STEP 7 Using needle nose pliers, remove the spring holding the leveling links together.

STEP 8 Remove the leveling links out of the base.

the drive motor, 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.

⚠ WARNING

Electrical Shock Hazard

- Do not touch both terminals at the same time.
- Capacitors should always be discharged prior to handling. To discharge the capacitor, use a two-watt, 20,000-ohm resistor with insulated leads. Touch both capacitor terminals at the same time with the resistor.

STEP 5 If your drive motor has a capacitor mounted on it, remove the wires from the capacitor, carefully labeling each wire, then discharged the capacitor.



STEP 8 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 9 Touch the other ohmmeter probe to the terminal on the white wire from the motor.

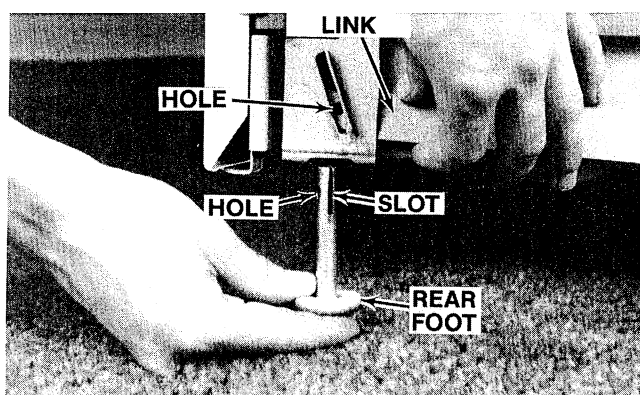
STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the drive motor is bad and needs replacing.

START WINDING

STEP 11 Touch one ohmmeter probe to the terminal on the black wire from the motor.

STEP 12 Touch the other ohmmeter probe to the terminal on the yellow wire from the motor.

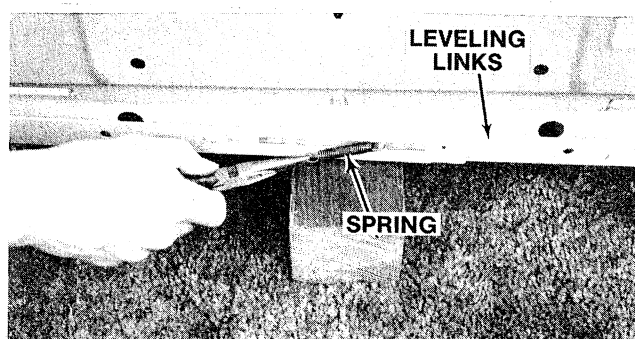
139



STEP 11 Slide one new leveling foot up so the link is in the slot in the foot.

STEP 12 Line-up the holes.

STEP 13 Insert the new pin into the new rear leveling foot.



STEP 16 Using needle nose pliers, hook the spring onto the links.

STEP 17 Remove the block.

⚠ CAUTION

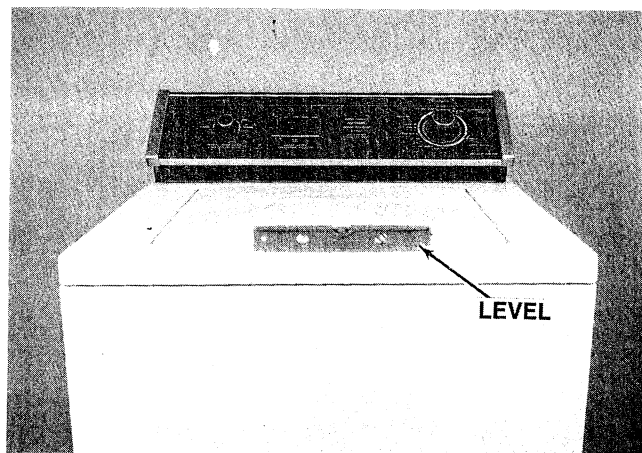
Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 18 Move the automatic washer back to its proper place.

STEP 19 Reconnect the electrical power supply. See section B for the proper reconnection.

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STEP 20 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, 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, then carefully lower.

STEP 21 Using an open end wrench, tighten the locknuts.

STEP 22 Drain the water if you had to level it this way.

! WARNING

Electrical Shock Hazard

- Do not touch both terminals at the same time.
- Capacitors should always be discharged prior to handling. To discharge the capacitor, use a two-watt, 20,000-ohm resistor with insulated leads. Touch both capacitor terminals at the same time with the resistor.

STEP 5 If your drive motor has a capacitor mounted on it, remove the wires from the capacitor, carefully labeling each wire, then discharge the capacitor.

STEP 8 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 9 Touch the other ohmmeter probe to the terminal on the white wire from the motor.

STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the drive motor is bad and needs replacing.

START WINDING

STEP 11 Touch one ohmmeter probe to the terminal on the black wire from the motor.

STEP 12 Touch the other ohmmeter probe to the terminal on the yellow wire from the motor.

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Disconnect power
before servicing



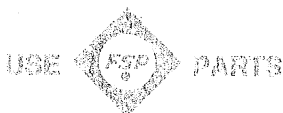
This appliance may
have sharp edges

PROCEDURE

PAGE

1	Pump	134
2	Motor Start Switch	136
3	Drive Motor	138
* 4	Gearcase	144
* 5	Brake, Drive Tube	148
6	Motor Isolation, Couplings	150

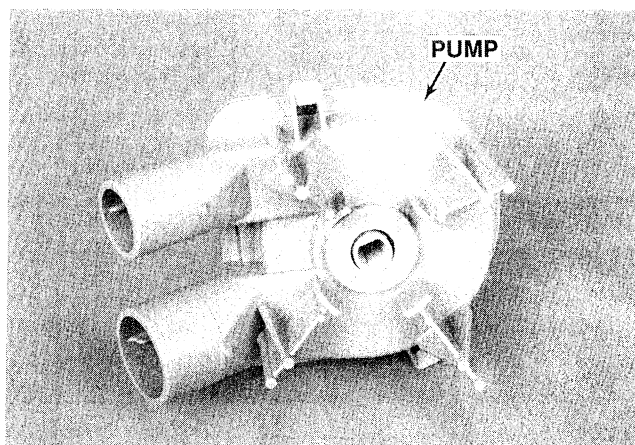
* Call your authorized WHIRLPOOL FACTORY SERVICE BRANCH for servicing.



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PROCEDURE 1

Pump Replacement



See page 175, illus. no. 22 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

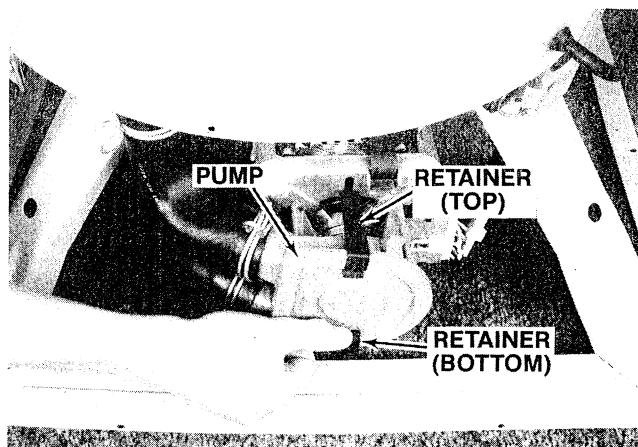
This pump could be located either in the right rear corner (before 1984) or in the front (after 1983) of the washer.

This is a two port pump. The top port with the action of the impeller turning counterclockwise, forces the water back into the tub and basket.

When the washer goes into spin, the impeller turns clockwise, drawing the water through the top port, through the pump then out the bottom port to drain.

STEP 1 Disconnect the electrical power supply (section B).

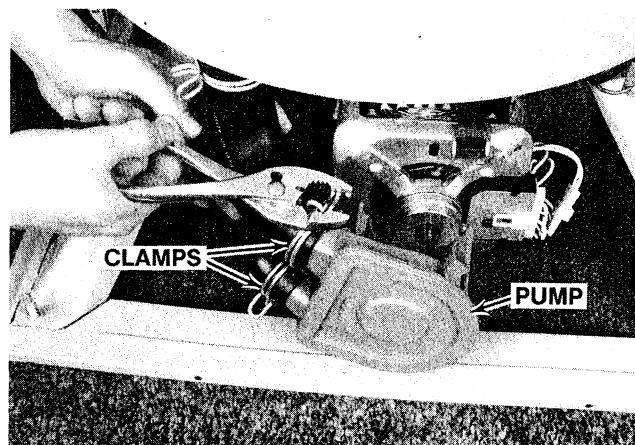
STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).



STEP 3 Using a screwdriver or your hand, unsnap the bottom retainer from the pump.

STEP 4 Using a screwdriver or your hand, unsnap the top retainer from the pump.

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



STEP 5 Using pliers, slide the clamp on the top hose off the port of the pump.

STEP 6 Carefully remove this hose.

STEP 7 Using a pail, drain the excess water from this hose.

STEP 8 Using pliers, slide the clamp on the bottom hose off the port of the pump.

STEP 9 Carefully remove this hose.

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

procedure should assure that the right wire is reconnected to the right terminal.

⚠ WARNING

Electrical Shock Hazard

- Do not touch both terminals at the same time.
- Capacitors should always be discharged prior to handling. To discharge the capacitor, use a two-watt, 20,000-ohm resistor with insulated leads. Touch both capacitor terminals at the same time with the resistor.

STEP 5 If your drive motor has a capacitor mounted on it, remove the wires from the capacitor, carefully labeling each wire, then discharge the capacitor.

STEP 8 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 9 Touch the other ohmmeter probe to the terminal on the white wire from the motor.

STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the drive motor is bad and needs replacing.

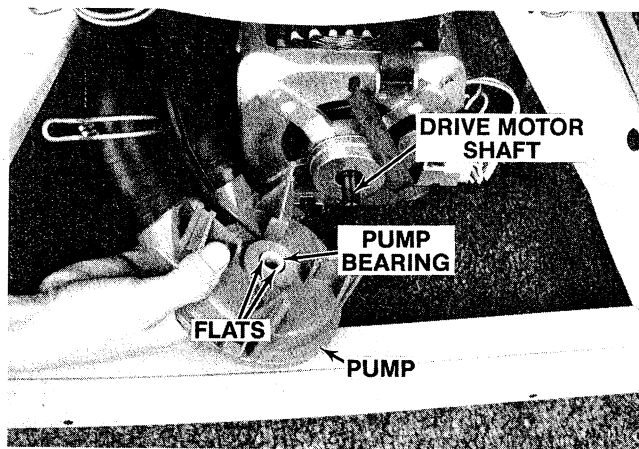
START WINDING

STEP 11 Touch one ohmmeter probe to the terminal on the black wire from the motor.

STEP 12 Touch the other ohmmeter probe to the terminal on the yellow wire from the motor.

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STEP 13 Push the bottom hose on the bottom port (small) on the pump.



STEP 14 Line up the flats on the pump bearing with the flats on the drive motor shaft.

STEP 15 Push the pump on until the (4) four legs are pressed up against the drive motor.

STEP 16 The bottom retainer must be in the bottom slot in the drive motor.

hose over the port on the pump.

NOTE: The tangs on the clamp must be facing up to avoid hitting the cabinet during spin.

STEP 21 Using pliers, slide the bottom clamp on the hose over the port on the pump.

NOTE: The tangs on the clamp must be facing down to avoid hitting the cabinet during spin.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

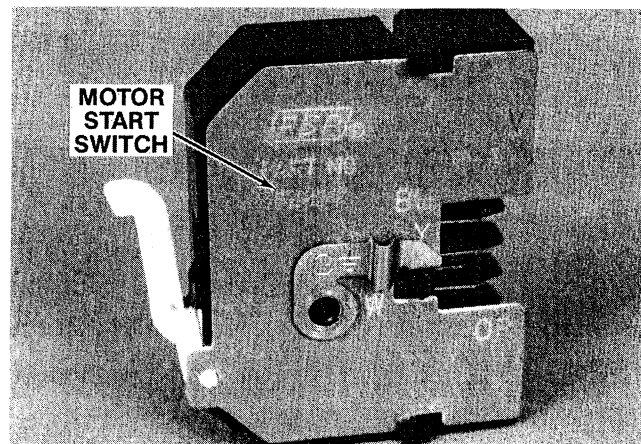
STEP 22 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 23 Reconnect the electrical power supply. See section B for the proper reconnection.

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PROCEDURE 2

Motor Start Switch Testing and/or Replacement



See page 175, illus. no. 20 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

OHMMETER REQUIRED

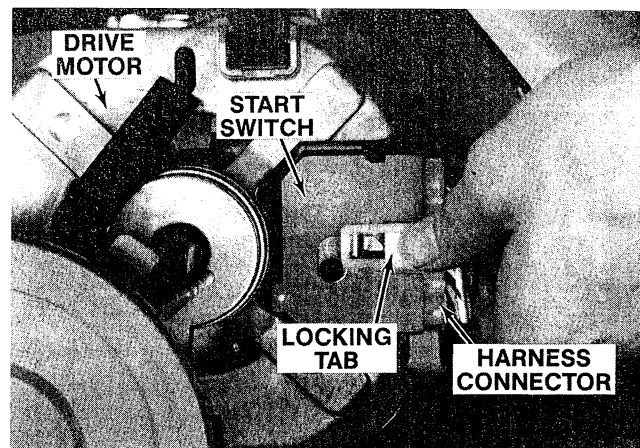
This start switch is used in getting voltage to the motor start and run windings at the same time. An actuating arm from the start switch rides on a sleeve inside the motor. As the motor increases in speed the actuating arm opens the switch and removes the voltage from the start windings. There are one, two or three-speed start switches used on automatic washers.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

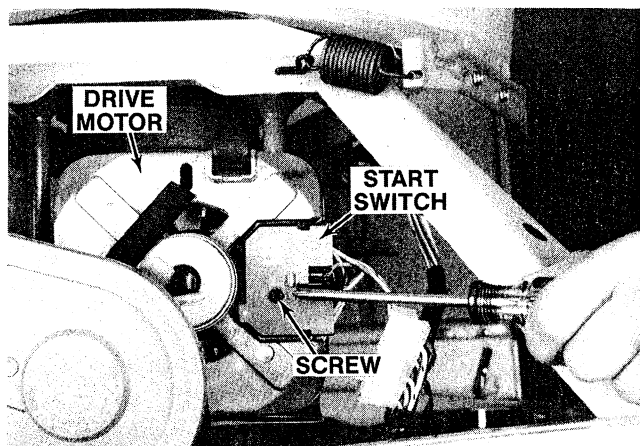
STEP 3 Remove the pump (section N, proc. 1).

TESTING



STEP 4 Remove the motor harness connector by pushing in on the locking tab, located in the middle, and pull.

STEP 5 Remove one wire at a time coming from the drive motor, 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 6 Using a screwdriver, remove the screw holding the start switch to the drive motor.

STEP 7 You must know how to use an ohmmeter.

STEP 8 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. Read the instructions that came with your ohmmeter.

NOTE: To tell what speed start switch you have, look at the colored wires coming from the drive motor.

to the terminal marking on the start switch. This procedure should assure that the right wire is reconnected to the right terminal.

⚠ WARNING

Electrical Shock Hazard

- Do not touch both terminals at the same time.
- Capacitors should always be discharged prior to handling. To discharge the capacitor, use a two-watt, 20,000-ohm resistor with insulated leads. Touch both capacitor terminals at the same time with the resistor.

STEP 5 If your drive motor has a capacitor mounted on it, remove the wires from the capacitor, carefully labeling each wire, then discharge the capacitor.



STEP 8 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 9 Touch the other ohmmeter probe to the terminal on the white wire from the motor.

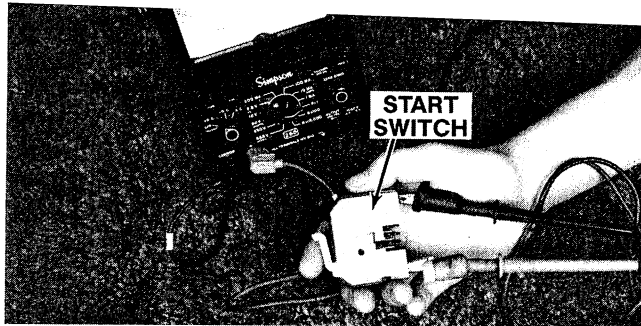
STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the drive motor is bad and needs replacing.

START WINDING

STEP 11 Touch one ohmmeter probe to the terminal on the black wire from the motor.

STEP 12 Touch the other ohmmeter probe to the terminal on the yellow wire from the motor.

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STEP 9 Touch one ohmmeter probe to terminal R.

STEP 10 Touch the other ohmmeter probe to terminal BK.

STEP 11 With the start lever pushed-in, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

RUN MODE

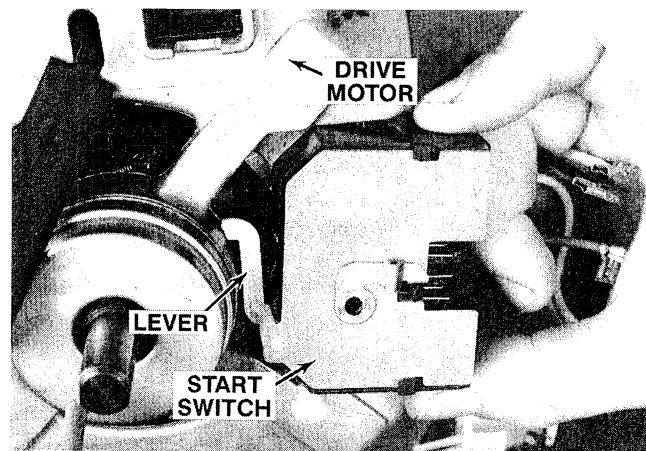
STEP 12 Touch one ohmmeter probe to terminal R.

STEP 13 Touch the other ohmmeter probe to terminal BK.

STEP 14 With the start lever out, the ohmmeter should show an open circuit. If not, the start switch is bad and needs replacing.

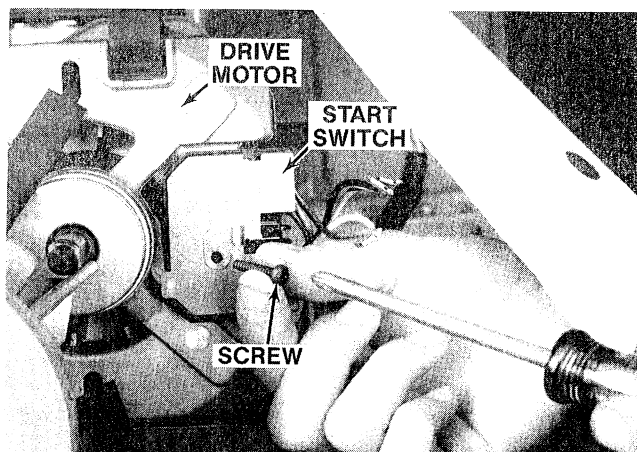
STEP 20 With the start lever out, the ohmmeter should show ZERO resistance (continuity). If not, the start switch is bad and needs replacing.

REPLACEMENT



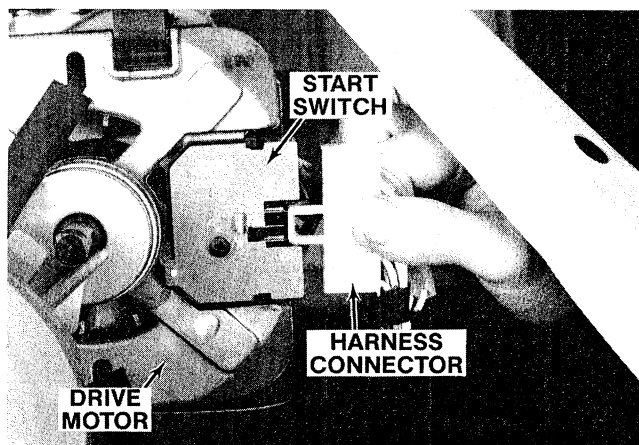
STEP 21 Place the new start switch on the motor with the lever from the start switch resting on the sleeve inside the drive motor.

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STEP 22 Using a screwdriver, insert the screw through the start switch into the drive motor and tighten.

STEP 23 Reconnect the wires from the drive motor to the proper terminals on the start switch as previously marked.



STEP 24 Push the harness connector into the motor start switch until the tab locks it in place.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

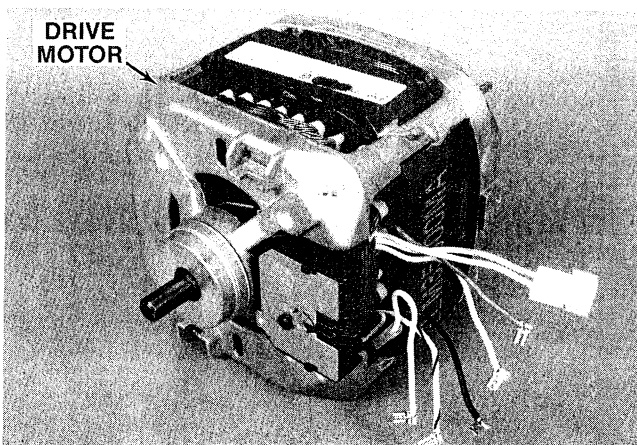
STEP 25 Replace the pump (section N, proc. 1).

STEP 26 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 27 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 3

Drive Motor Testing and/or Replacement



See page 175, illus. no. 19 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

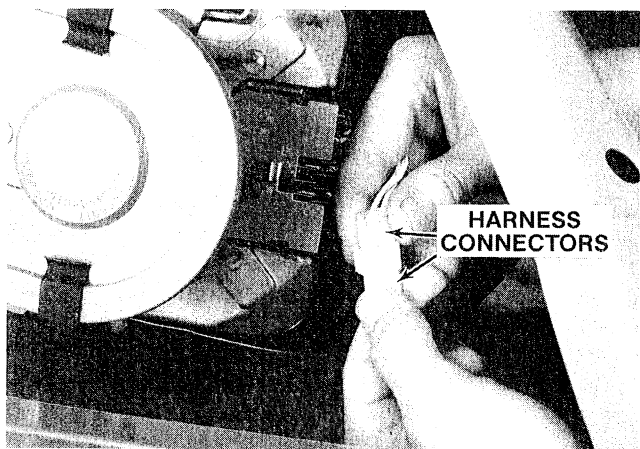
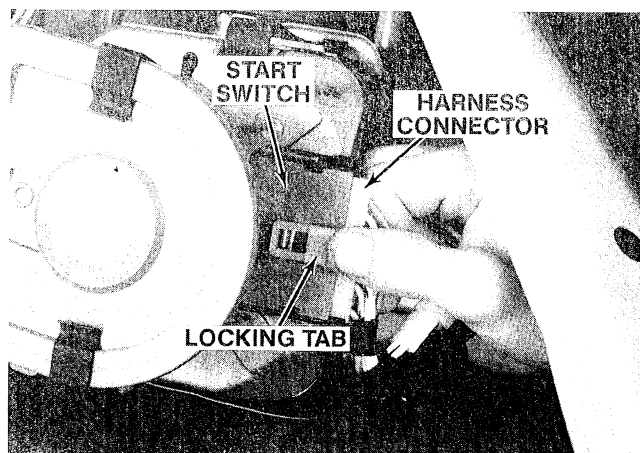
OHMMETER REQUIRED

The main drive motor supplies the power to the pump, gearcase and basket drive. There are one, two and three-speed motors used on automatic washers. This drive motor could be located either in the right rear corner (before 1984) or in the front (after 1983) of the washer.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

TESTING



STEP 3 Remove the (2) two motor harness connectors (only one might be used) by pushing in on the locking tab, located in the middle, and pull.

STEP 4 Remove one wire at a time coming from the drive motor, 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.

⚠ WARNING

Electrical Shock Hazard

- Do not touch both terminals at the same time.
- Capacitors should always be discharged prior to handling. To discharge the capacitor, use a two-watt, 20,000-ohm resistor with insulated leads. Touch both capacitor terminals at the same time with the resistor.

STEP 5 If your drive motor has a capacitor mounted on it, remove the wires from the capacitor, carefully labeling each wire, then discharged the capacitor.

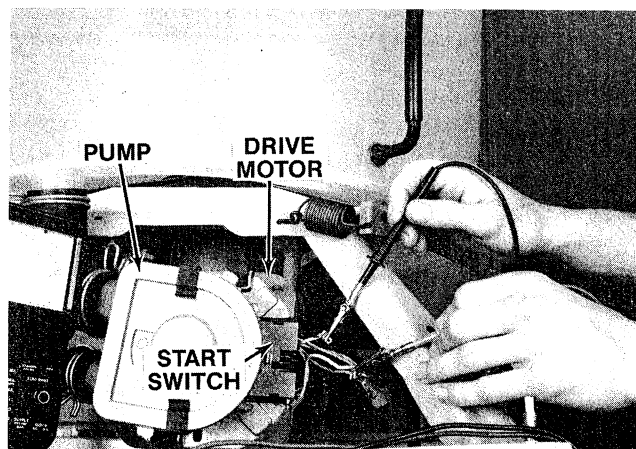
STEP 6 You must know how to use an ohmmeter.

STEP 7 Refer to the instructions that came with your ohmmeter to find the proper scale to measure 1-10 ohms. Set the ohms scale and ZERO the meter.

NOTE: To tell what speed drive motor you have, look at the colored wires coming from the drive motor.

<u>ONE-SPEED</u>	<u>TWO-SPEED</u>	<u>THREE-SPEED</u>
BLACK	BLACK	BLACK
BLUE	BLUE	BLUE
WHITE	VIOLET	WHITE
WHITE/BLACK	WHITE	WHITE/BLACK
YELLOW	WHITE/BLACK	YELLOW
	YELLOW	WHITE/ORANGE
		WHITE/VIOLET

THE FOLLOWING TEST MUST BE MADE ON ONE, TWO AND THREE SPEED DRIVE MOTORS



STEP 8 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 9 Touch the other ohmmeter probe to the terminal on the white wire from the motor.

STEP 10 The ohmmeter should show ZERO resistance (continuity). If not, the drive motor is bad and needs replacing.

START WINDING

STEP 11 Touch one ohmmeter probe to the terminal on the black wire from the motor.

STEP 12 Touch the other ohmmeter probe to the terminal on the yellow wire from the motor.

STEP 13 The ohmmeter should show between 4-10 ohms.

STEP 14 If you do not get this reading, the drive motor is bad and needs replacing.

HIGH WINDING

STEP 15 Touch one ohmmeter probe to the terminal on the white wire from the motor.

STEP 16 Touch the other ohmmeter probe to the terminal on the blue wire from the motor.

STEP 17 The ohmmeter should show between 0-4 ohms.

STEP 18 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 19 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 20 Touch the other ohmmeter probe to the terminal on the blue wire from the motor.

STEP 21 The ohmmeter should show between 1-5 ohms.

STEP 22 If you do not get this reading, the drive motor is bad and needs replacing.

THE FOLLOWING TEST MUST BE MADE ON TWO SPEED DRIVE MOTORS—PLUS STEPS 8-22

LOW WINDING

STEP 23 Touch one ohmmeter probe to the terminal on the violet wire from the motor.

STEP 24 Touch the other ohmmeter probe to the terminal on the white wire from the motor.

STEP 25 The ohmmeter should show between 1-7 ohms.

STEP 26 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 27 Touch one ohmmeter probe to the terminal on the violet wire from the motor.

STEP 28 Touch the other ohmmeter probe to the terminal on the blue wire from the motor.

STEP 29 The ohmmeter should show between 1-7 ohms.

STEP 30 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 31 Touch one ohmmeter probe to the terminal on the violet wire from the motor.

STEP 32 Touch the other ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 33 The ohmmeter should show between 1-7 ohms.

STEP 34 If you do not get this reading, the drive motor is bad and needs replacing.

THE FOLLOWING TEST MUST BE MADE ON THREE SPEED DRIVE MOTORS—PLUS STEPS 8-34

EX-LOW WINDING

STEP 35 Touch one ohmmeter probe to the terminal on the white wire from the motor.

STEP 36 Touch the other ohmmeter probe to the terminal on the white/orange wire from the motor.

STEP 37 The ohmmeter should show between 1-5 ohms.

STEP 38 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 39 Touch one ohmmeter probe to the terminal on the white wire from the motor.

STEP 40 Touch the other ohmmeter probe to the terminal on the white/violet wire from the motor.

STEP 41 The ohmmeter should show between 1-5 ohms.

STEP 42 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 43 Touch one ohmmeter probe to the terminal on the blue wire from the motor.

STEP 44 Touch the other ohmmeter probe to the terminal on the white/orange wire from the motor.

STEP 45 The ohmmeter should show between 1-5 ohms.

STEP 46 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 47 Touch one ohmmeter probe to the terminal on the blue wire from the motor.

STEP 48 Touch the other ohmmeter probe to the terminal on the white/violet wire from the motor.

STEP 49 The ohmmeter should show between 1-5 ohms.

STEP 50 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 51 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 52 Touch the other ohmmeter probe to the terminal on the white/orange wire from the motor.

STEP 53 The ohmmeter should show between 1-5 ohms.

STEP 54 If you do not get this reading, the drive motor is bad and needs replacing.

STEP 55 Touch one ohmmeter probe to the terminal on the white/black wire from the motor.

STEP 56 Touch the other ohmmeter probe to the terminal on the white/violet wire from the motor.

STEP 57 The ohmmeter should show between 1-5 ohms.

STEP 58 If you do not get this reading, the drive motor is bad and needs replacing.

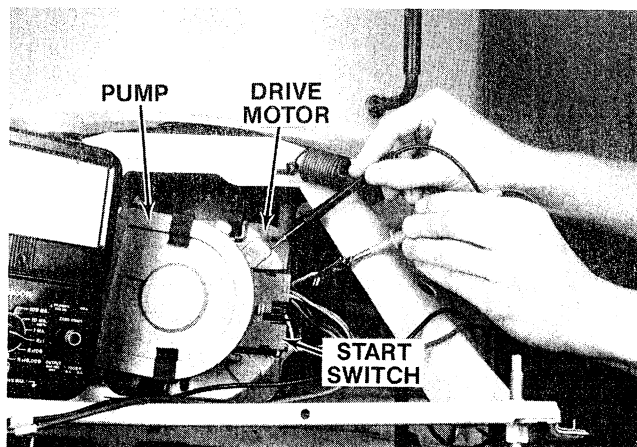
STEP 59 Touch one ohmmeter probe to the terminal on the white/orange wire from the motor.

STEP 60 Touch the other ohmmeter probe to the terminal on the white/violet wire from the motor.

STEP 61 The ohmmeter should show between 2-8 ohms.

STEP 62 If you do not get this reading, the drive motor is bad and needs replacing.

THE FOLLOWING THREE CHECKS MUST BE MADE ON ALL ONE, TWO AND THREE-SPEED DRIVE MOTORS TO CHECK FOR AN INTERNAL FAILURE (SHORT).



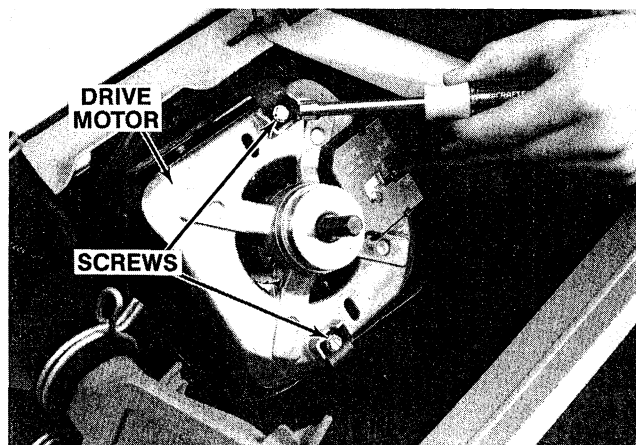
STEP 63 Touch one ohmmeter probe to the drive motor housing.

STEP 64 One at a time touch the other ohmmeter probe to each of the wires (terminals) coming from the drive motor.

STEP 65 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 66 Remove the pump (section N, proc. 1).



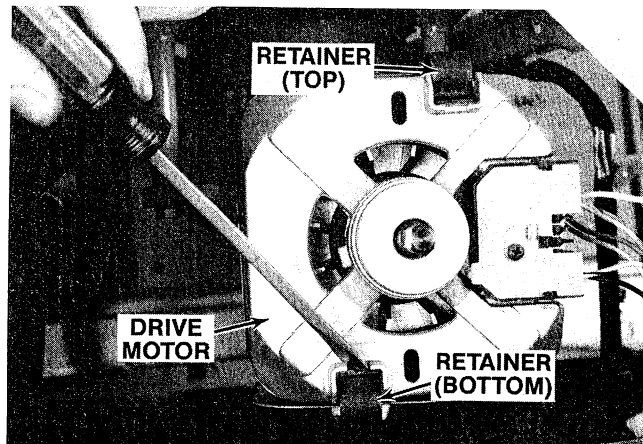
STEP 67 Using a screwdriver, remove the screws (if used) holding the top and bottom retainers to the front of the drive motor.

NOTE: These screws are not needed anymore, they were mainly used during shipping.

⚠ WARNING

Personal Injury Hazard

- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.

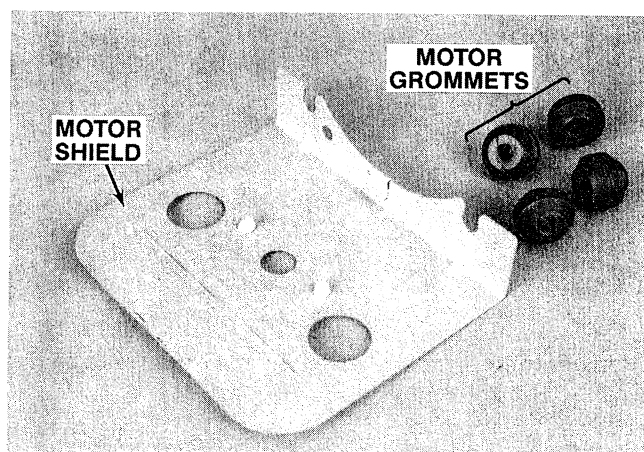


STEP 68 Using a screwdriver or your hand, unsnap the bottom retainer from the drive motor.

STEP 69 Place one hand under the drive motor to support it when removing the top retainer.

STEP 70 Using a screwdriver or your hand, unsnap the top retainer from the drive motor.

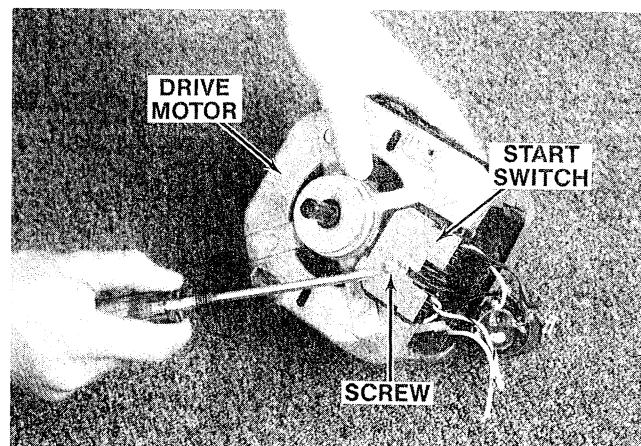
STEP 71 Carefully pull the drive motor straight out.



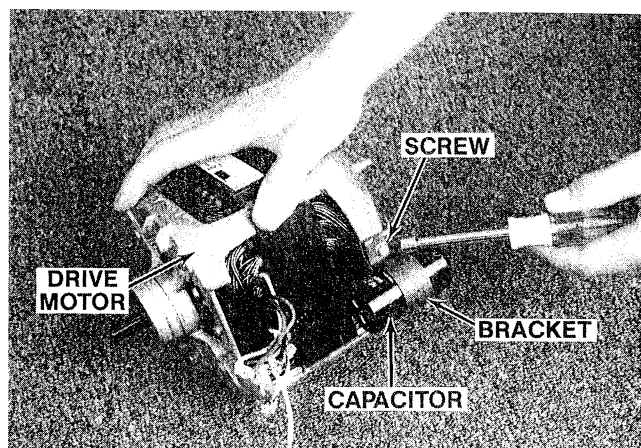
STEP 72 There is a motor shield which will fall when the drive motor is removed. We will replace this later.

STEP 73 There will be (4) four motor grommets which may come off when the drive motor is removed, or they will stick on the mounting plate. Remove these.

STEP 74 There will be a rubber isolation which will come off when the drive motor is removed, or it will stick on the gearcase coupling. Remove this.



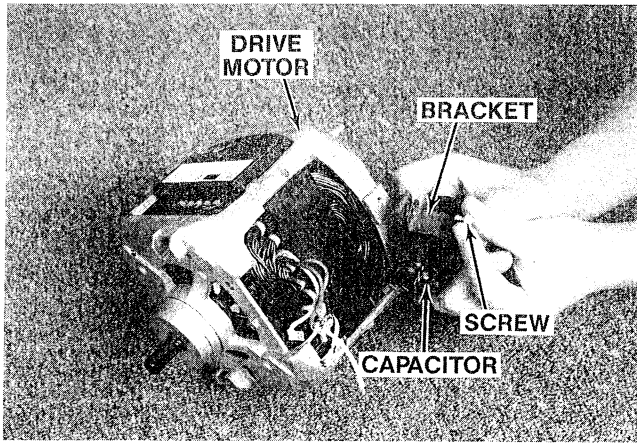
STEP 75 Using a screwdriver, remove the screw holding the start switch to the drive motor.



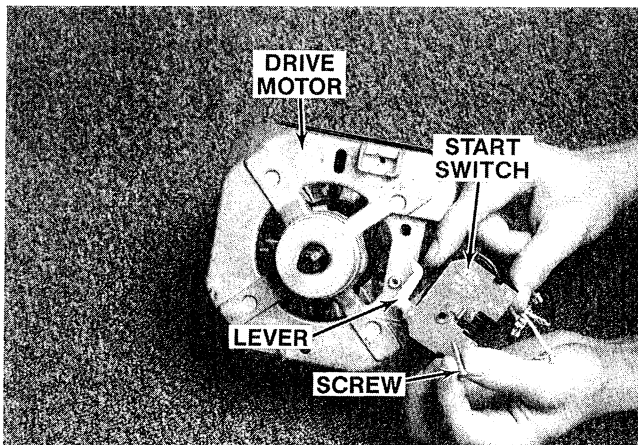
STEP 76 Using a screwdriver or nutdriver, remove the screw holding the capacitor and bracket (if used there) to the drive motor.

STEP 77 Carefully remove the bracket and capacitor.

STEP 78 Replace the bracket and capacitor (if used there) on the new drive motor.

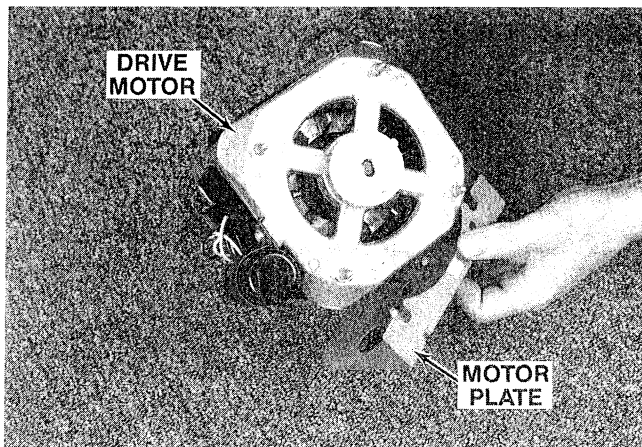


STEP 79 Using a screwdriver or nutdriver, insert the screw through the capacitor bracket into the new drive motor and tighten.

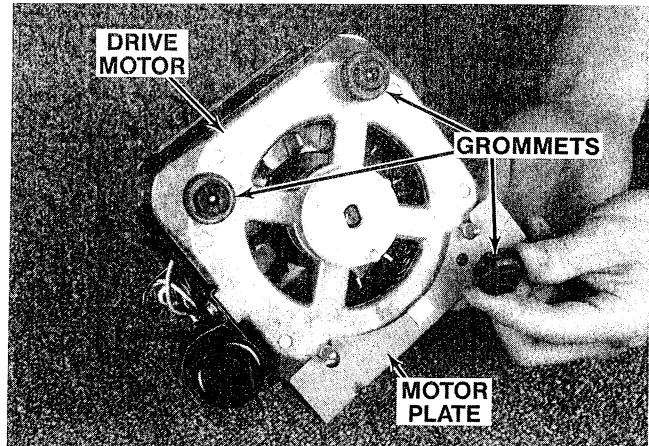


STEP 80 Place the start switch on the new drive motor with the lever from the start switch resting on the sleeve inside the drive motor.

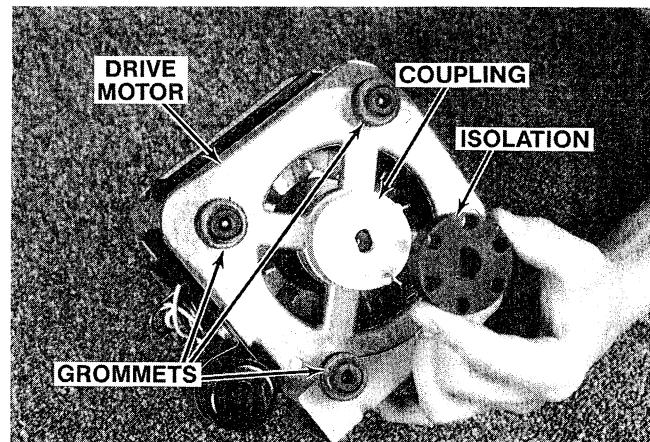
STEP 81 Using a screwdriver, insert the screw through the start switch into the drive motor and tighten.



STEP 82 Slide the bottom motor plate on the bottom studs on the new drive motor.



STEP 83 Place the (4) four rubber grommets on the studs in the back of the new drive motor, with the large end facing the motor.



STEP 84 Place the rubber isolation, on the coupling on the new drive motor by lining up the holes in the isolation with the studs on the coupling, then push on.

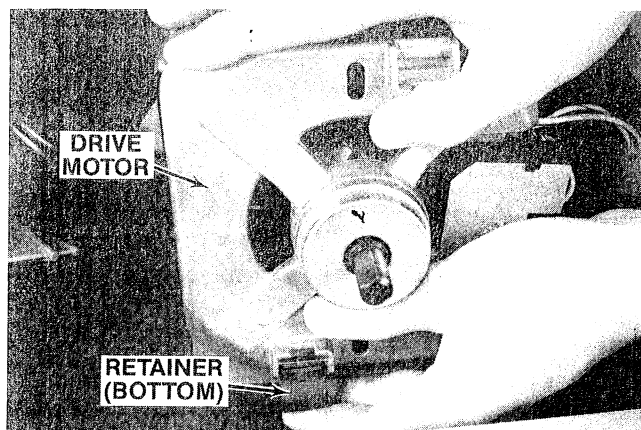
STEP 85 Turn the isolation and coupling on the new drive motor lining up the holes with the studs on the other coupling on the gearcase.

⚠ WARNING

Personal Injury Hazard

- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.

STEP 86 Place the new drive motor on the motor mounting plate, so the isolation and rubber grommets fit in place.



STEP 87 Using a screwdriver or your hand, snap the bottom retainer over the new drive motor.

STEP 88 Using a screwdriver or your hand, snap the top retainer over the new drive motor.

NOTE: The screws are not needed anymore, they were mainly used during shipping.

STEP 89 Reconnect the wires from the drive motor to the proper terminals on the start switch as previously marked.

STEP 90 Reconnect the (2) two wire connectors (only one might be used) to the proper terminals as previously marked.

STEP 91 Reconnect the capacitor wires (if used) as previously marked.

STEP 92 Replace the pump (section N, proc. 1).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

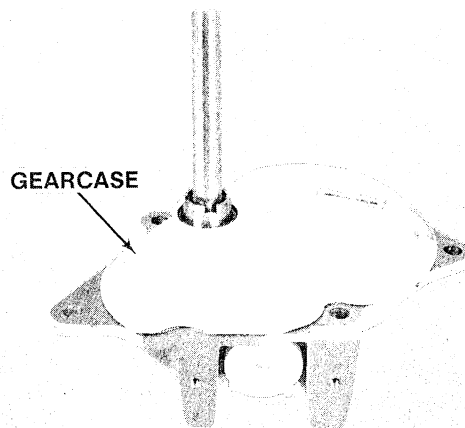
STEP 93 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 94 Reconnect the electrical power supply. See section B for the proper reconnection.

STEP 95 Run a cycle check (section F, proc. 2, or section I, 1-4).

PROCEDURE 4

Gearcase Replacement



See page 175, illus. no. 9 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

NOTE: This repair manual will not cover servicing of any parts inside the gearcase. Call your authorized WHIRLPOOL FACTORY SERVICE BRANCH for servicing inside this part.

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

STEP 1 Disconnect the electrical power supply (section B).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

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 and cold water inlet hoses with a piece of tape. This procedure will be easier when placing them back on the ports on the inlet mixing valve.

STEP 5 Using pliers, remove the top hose (cold) from the inlet mixing valve port.

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

STEP 7 Using pliers, remove the bottom hose (hot) from the inlet mixing valve port.

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

STEP 9 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

STEP 10 Tape the lid shut.

⚠ CAUTION

Product / Property Damage

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

STEP 11 Lay the automatic washer on its back.

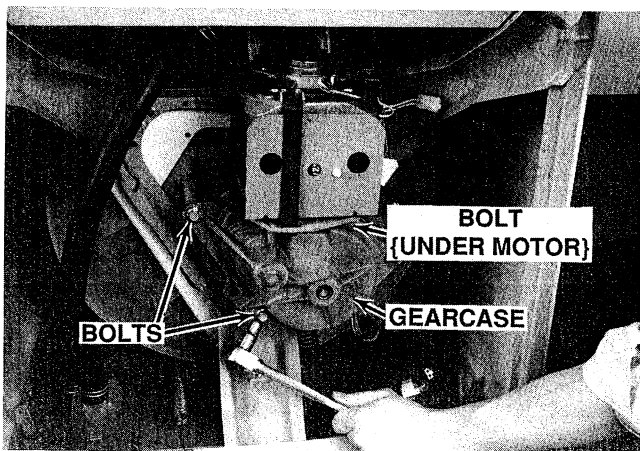
STEP 12 Using a screwdriver or nutdriver, remove the screw (one on each side) from the bottom pan (if used).

STEP 13 Tilt the front of the bottom pan (if used) down, then pull it from the rear mounting clips.

STEP 14 Remove the pump (section N, proc. 1).

STEP 15 Remove the top and bottom pump retainers from the slots in the motor.

STEP 16 Remove the (2) two motor harness connectors (only one might be used) by pushing in on the locking tab, located in the middle, then pull apart.



STEP 17 Using a socket wrench, remove the (3) three mounting bolts holding the gearcase to the tub support.

NOTE: Care should be taken when removing this part as it has grease on it.

⚠ WARNING

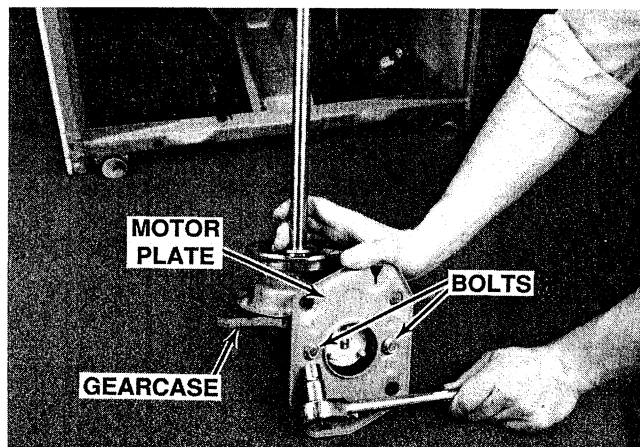
Personal Injury Hazard

- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.

STEP 18 Carefully remove the gearcase and motor by pulling straight out.

STEP 19 Remove the drive motor (section N, proc. 3).

STEP 20 Remove the top and bottom drive motor retainers from the slots in the motor mounting plate.



STEP 21 Using a socket wrench, remove the (2) two bolts holding the motor mounting plate to the gearcase.

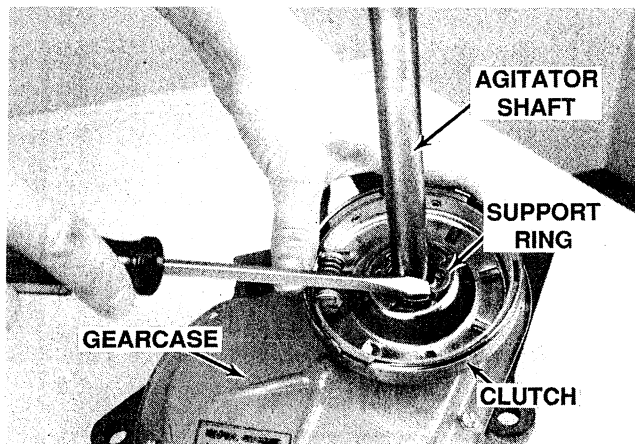
NOTE: The spin tube thrust washer may come off or stay on the clutch. We will reuse this.

STEP 22 Remove the spin tube thrust washer by pulling straight off and over the agitator shaft.

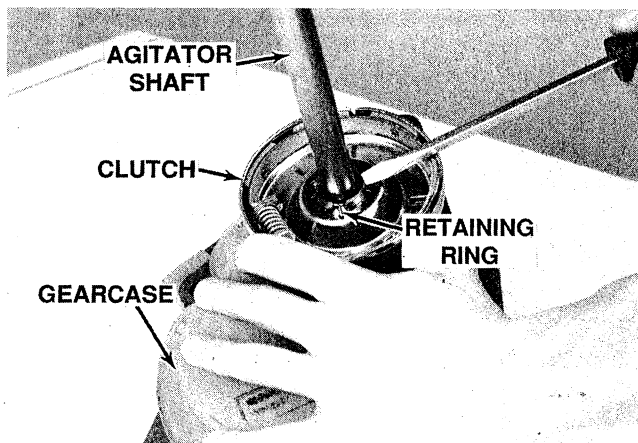
⚠ WARNING

Personal Injury Hazard

- We recommend wearing safety glasses when hitting or prying.
- Failure to do so could result in personal injury to the eyes.



STEP 23 Using a flatblade screwdriver, remove the support ring (by prying), from the groove in the agitator shaft.

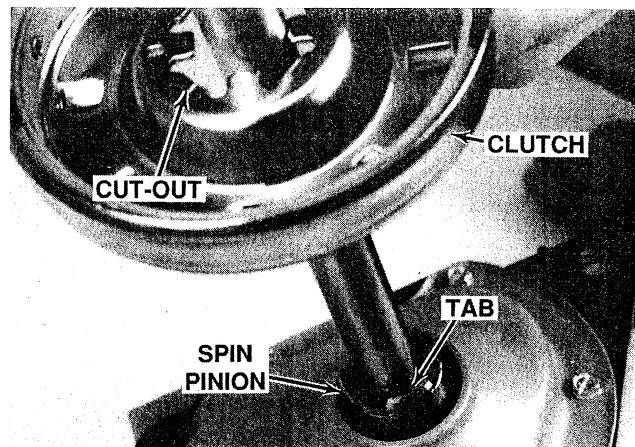


STEP 24 Using a flatblade screwdriver, remove the retaining ring holding the clutch to the spin pinion.

STEP 25 Remove the clutch by sliding up and off the agitator shaft.

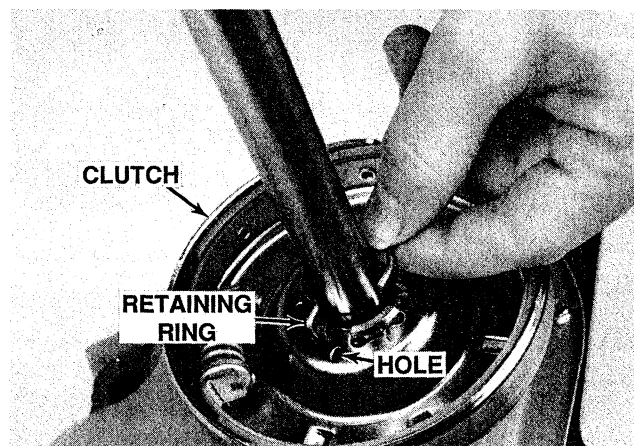
REPLACEMENT

STEP 26 Place the clutch over the new gearcase shaft and slide down to the spin pinion.



STEP 27 Line-up the cut-outs in the clutch and tabs on the spin pinion, then press down on the clutch until it snaps into place.

STEP 28 Place the retaining ring (hook down) over the agitator shaft and slide down to the clutch.



STEP 29 Place the hook end of the retaining ring into the hole in the clutch.

⚠ WARNING

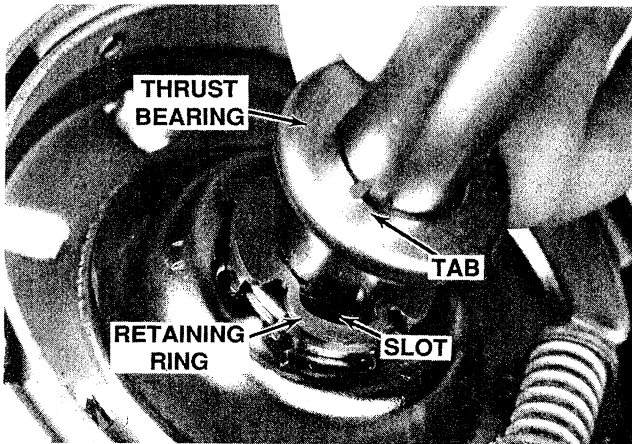
Personal Injury Hazard

- We recommend wearing safety glasses when hitting or prying.
- Failure to do so could result in personal injury to the eyes.

STEP 30 Using a flatblade screwdriver, snap the retaining ring into the grooves in the spin pinion.

STEP 31 Using a flatblade screwdriver, place the support ring in the grooves in the agitator shaft and push-in until it snaps into place.

STEP 32 Place the spin tube thrust bearing (tab down) over the agitator shaft, then slide down.



STEP 33 Place the tab on the spin tube thrust bearing in the slot in the retaining ring.

STEP 34 Using a socket wrench, insert the bolts through the motor mounting plate into the gearcase and tighten.

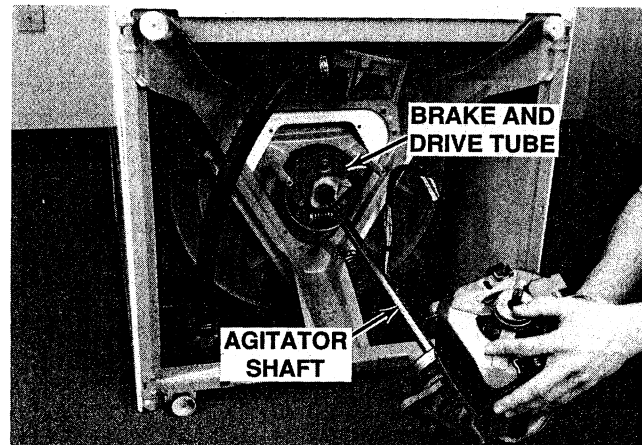
STEP 35 Place the top and bottom retainers in the slots in the motor mounting plate.

⚠ WARNING

Personal Injury Hazard

- The drive motor and/or gearcase is very heavy. Be careful when lifting or moving.
- Failure to do so could result in personal injury.

STEP 36 Replace the drive motor (section N, proc. 3).



STEP 37 Place the new gearcase into the brake and drive tube with the drive motor up if it was located there or on the side if it was located there.

NOTE: Make sure the brake cam driver on the bottom of the brake and drive tube, does not rest on the clutch spring on the new gearcase. You may have to turn the driver to clear the spring.

NOTE: Be sure the spin tube thrust washer is on top of the clutch. The tab must be facing down and in the slot on the ring.

STEP 38 Very carefully push, lining up the holes in the gearcase with the studs in the tub support.

STEP 39 Using a socket wrench, insert the (3) three bolts through the gearcase into the tub support and tighten.

STEP 40 Reconnect the (2) two wire connectors (only one might be used) to the proper connectors.

STEP 41 Replace the pump (section N, proc. 1).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 42 Replace the bottom pan by placing the back edge into the clips, then push back and up.

STEP 43 Using a screwdriver or nutdriver, insert the screws through the bottom pan, into the cabinet and tighten.

STEP 44 Stand the automatic washer upright.

STEP 45 Using pliers, hand turn the inlet hoses (until tight) to the proper ports on the inlet mixing valve, then turn 1/4 turn with the pliers to tighten.

STEP 46 Remove the tape.

STEP 47 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

⚠ CAUTION

Product Damage

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 48 Move the automatic washer back to its proper place.

STEP 49 Reconnect the electrical power supply. See section B for the proper reconnection.

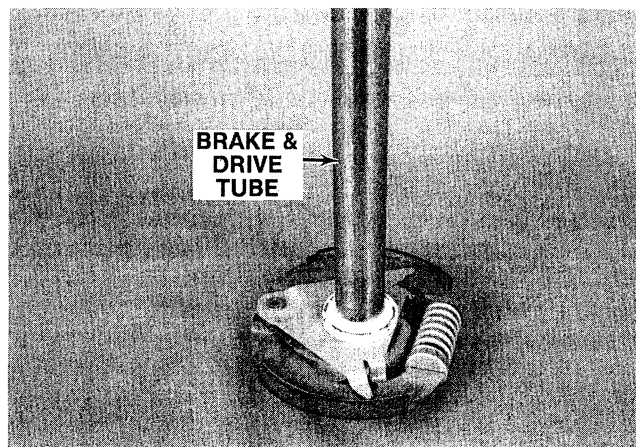
STEP 50 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 51 Using an open end wrench, tighten the locknuts.

STEP 52 Drain the water if you had to level it this way.

PROCEDURE 5

Brake and Drive Tube Replacement



See page 175, illus. no. 1 for location of part.

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

NOTE: This repair manual will not cover servicing of any parts on the brake and drive tube. Call your authorize WHIRLPOOL FACTORY SERVICE BRANCH for servicing of these parts.

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

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Remove the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

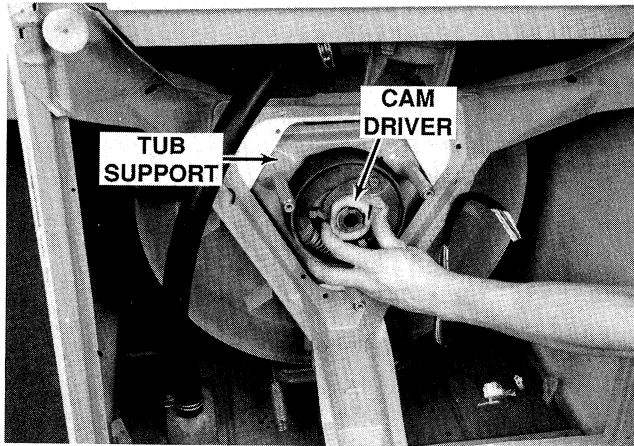
⚠ WARNING

Personal Injury Hazard

- We recommend wearing safety glasses when hitting or prying.
- Failure to do so could result in personal injury to the eyes.

STEP 3 Remove the spanner (lock) nut (section L, proc. 4).

STEP 4 Remove the gearcase (section N, proc. 4).



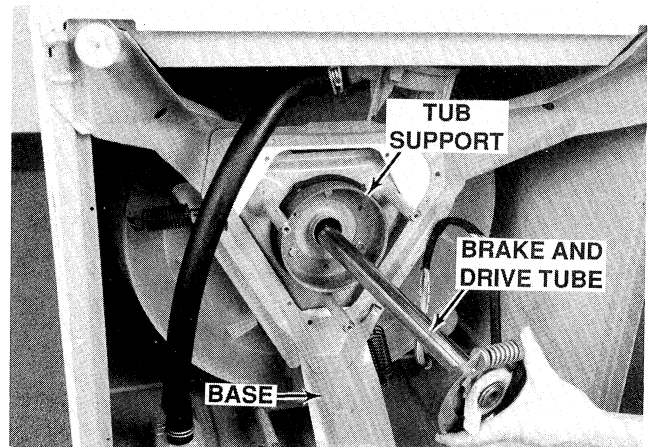
STEP 5 Turn the cam driver counterclockwise and pull to remove the brake and drive tube from the tub support.

REPLACEMENT

NOTE: When inserting the new brake and drive tube, be very careful not to catch the seals.

NOTE: You will need some help on step 7. Have someone reach-in through the lid and lift up on the basket and guide you while you are pushing in on the brake and drive tube.

If the drive tube can not be pushed into the tub support, the cabinet and basket will have to be removed. Do steps 6-8 first, otherwise (section L, proc. 4, steps 2-4, 9, 11-13).



STEP 6 Place the end of the brake and drive tube into the tub support.

STEP 7 Very carefully push while turning the cam driver counterclockwise, until the brake is inside the round part of the tub support.

STEP 8 Open the lid and make sure the drive block is securely seated on the drive tube. The tabs on the spin tube must be in the notches in the drive block.

STEP 9 Replace the gearcase (section N, proc. 4).

NOTE: Make sure the brake cam driver on the bottom of the new brake and drive tube, does not rest on the clutch spring on the gearcase. You may have to turn the cam driver to clear the spring.

NOTE: Be sure the spin tube thrust washer is on top of the clutch. The tab must be facing down and in the slot on the ring.

STEP 10 Replace the spanner (lock) nut (section L, proc. 4).

STEP 11 Replace the agitator and parts (section L, proc. 2; Type A, Type B or Type C).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

⚠ CAUTION**Product Damage**

- Do not use the console as a hand support when moving the appliance.
- Personal property or appliance damage may result.

STEP 12 Move the automatic washer back to its proper place.

STEP 13 Reconnect the electrical power supply. See section B for the proper reconnection.

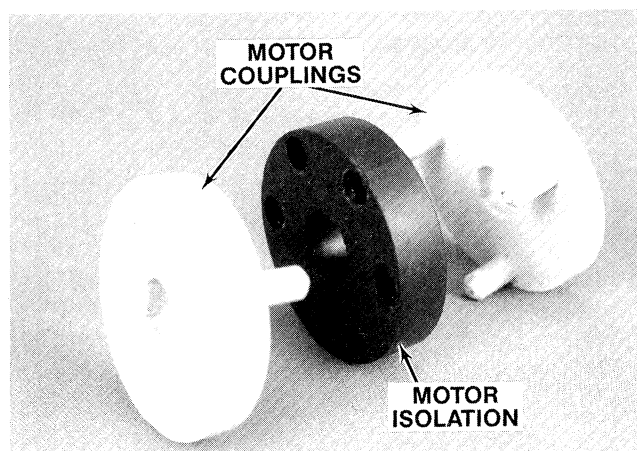
STEP 14 To level your washer, take a level and place it on top of the washer, first side to side, then front to back. If you do not have a level, fill the washer basket with cold water to the second or third row of holes in the bottom of the basket, then stop the washer. Check to see if the water meets 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, then carefully lower.

STEP 15 Using an open end wrench, tighten the locknuts.

STEP 16 Drain the water if you had to level it this way.

PROCEDURE 6

Motor Isolation and Couplings Replacement



See page 175, illus. no. 13 for location of part.

⚠ WARNING**Electrical Shock Hazard**

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

These three parts connect the drive motor and gearcase together. If for any reason the gearcase should lock-up, this coupling will break before the drive motor is damaged.

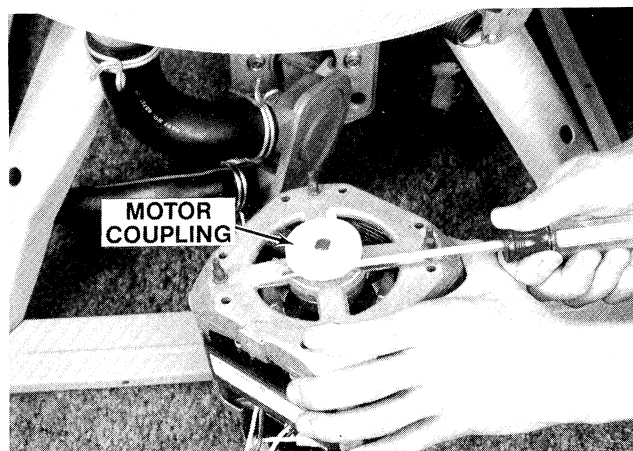
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 3 Remove the pump (section N, proc. 1).

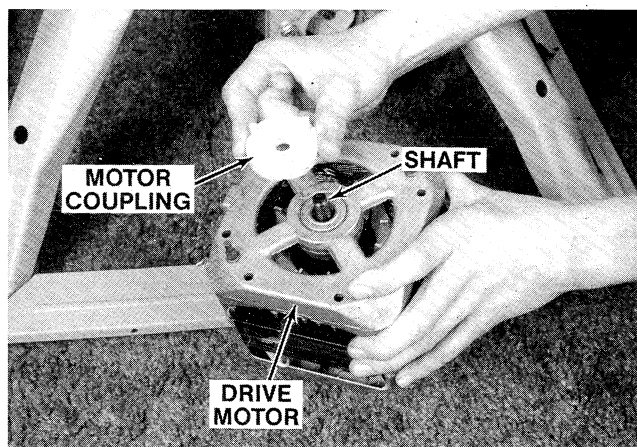
STEP 4 Remove the drive motor (section N, proc. 3).

NOTE: The two plastic motor couplings (one on the drive motor and one on the gearcase) are pressed-on at the factory.

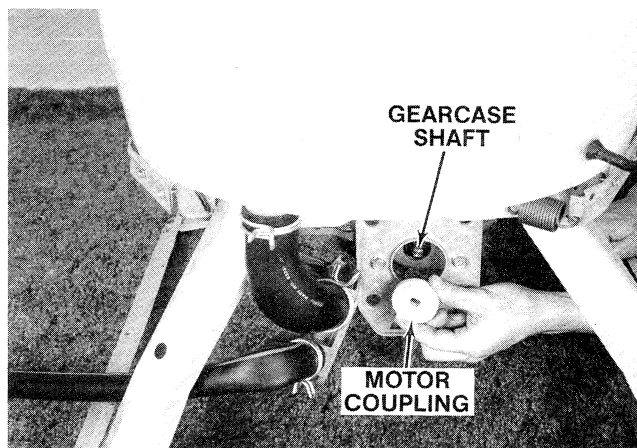


STEP 5 These will have to be removed by prying or breaking them off.

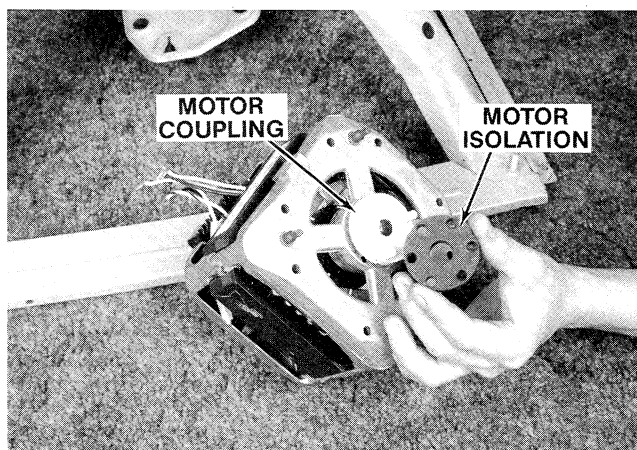
REPLACEMENT



STEP 6 Push one of the new plastic motor couplings on the shaft of the drive motor.



STEP 7 Push the other new plastic motor coupling on the shaft of the gearcase.



STEP 8 Place the new rubber isolation coupling on the drive motor coupling by lining up the holes in the isolation with the studs in the coupling, then push-on.

STEP 9 Turn the isolation and coupling on the drive motor lining up the holes with the studs on the other coupling on the gearcase.

STEP 10 Replace the drive motor (section N, proc. 3).

STEP 11 Replace the pump (section N, proc. 1).

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 12 See access to parts in the console, rear panel and cabinet areas (section J, proc. 4).

STEP 13 Reconnect the electrical power supply. See section B for the proper reconnection.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

SECTION 0

Water flow Area

**SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR
OR TESTING PROCEDURES ARE ATTEMPTED.**



PROCEDURE

PAGE

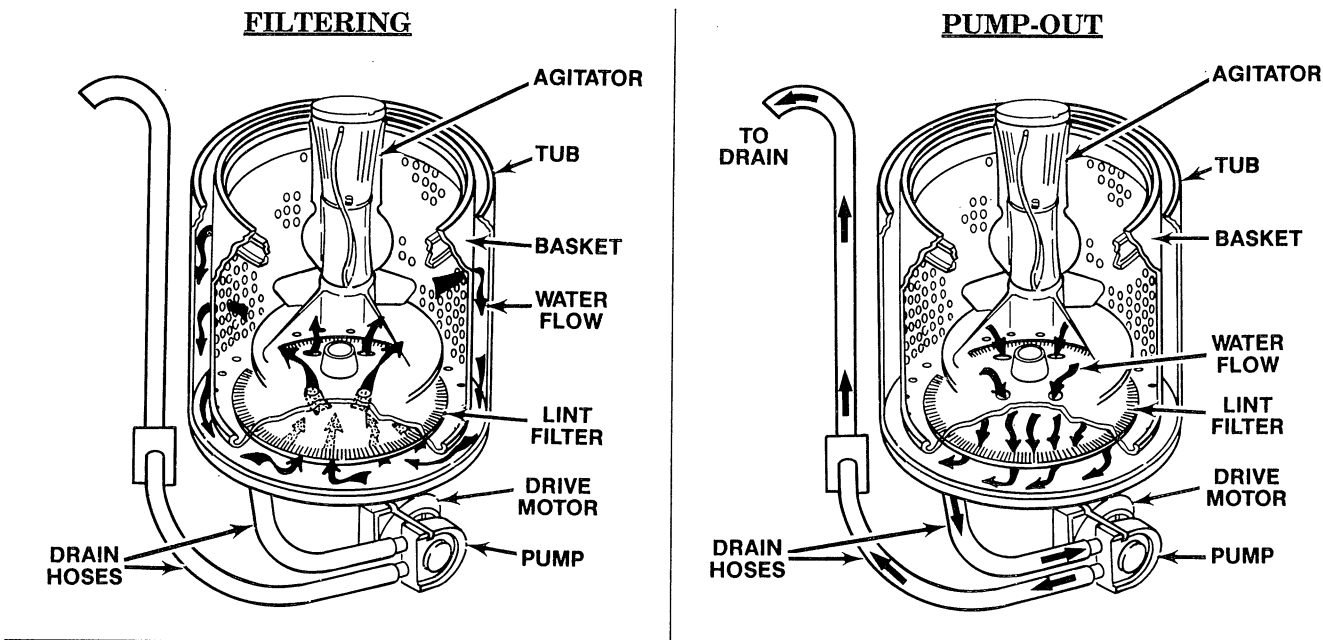
1	Water Flow Illustrations	154
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PROCEDURE 1

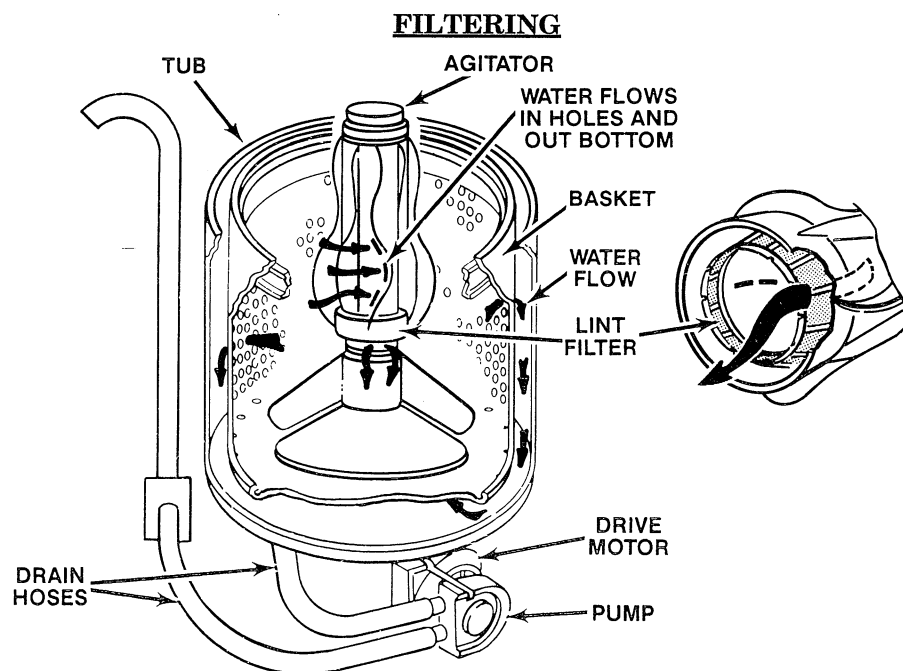
Water Flow Illustrations

Water systems contain pumps, filters and hoses. Their function is to fill the tub with water, filter the water through recirculation, then drain the water from the tub. Shown are two ways the filtering systems work on the direct drive automatic washer.

SELF-CLEANING FILTER WATER FLOW



MANUAL CLEAN FILTER WATER FLOW



SECTION P

Compact/Portable Automatic Washer Area

SECTION A MUST BE CAREFULLY READ BEFORE ANY REPAIR OR TESTING PROCEDURES ARE ATTEMPTED.



PROCEDURE

PAGE

1	Top Access	157
2	Side Panel Access	158
3	Front Panel Access	159
4	Suspension Spring	162

NOTICE

The compact/portable automatic washer has many of the same parts and operates basically the same as the regular size direct drive automatic washer.

We will cover:

How to get to parts under the top, sides and front panels plus any special parts used, which are not covered in the regular size direct drive automatic washer procedures.

Once you have gotten to the part you are after, refer to sections J through O using some of the steps for removing and replacement. The testing of that part will be the same.

PROCEDURE 1

Top Access

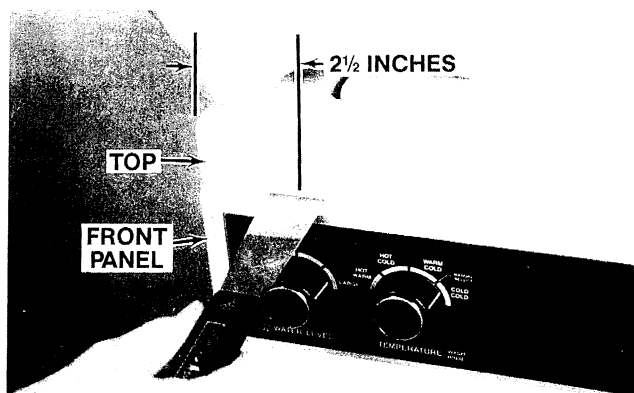
⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 1 Disconnect the electrical power supply (section B).

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

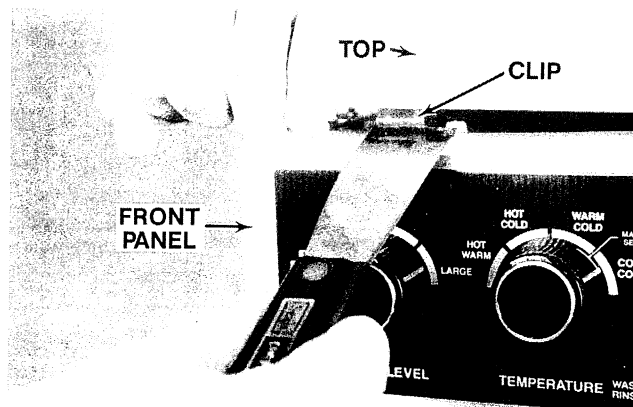


STEP 3 Using a putty knife, place the blade between the top and cabinet in one corner, about 2 1/2 inches in from the edge

⚠ CAUTION

Product Damage

- Do not pry. This may cause you to ruin the finish.



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 thing to the other side of the top.

STEP 6 Slowly raise the top.

STEP 7 Support the top against the wall.

REPLACEMENT

⚠ WARNING

Electrical Shock Hazard

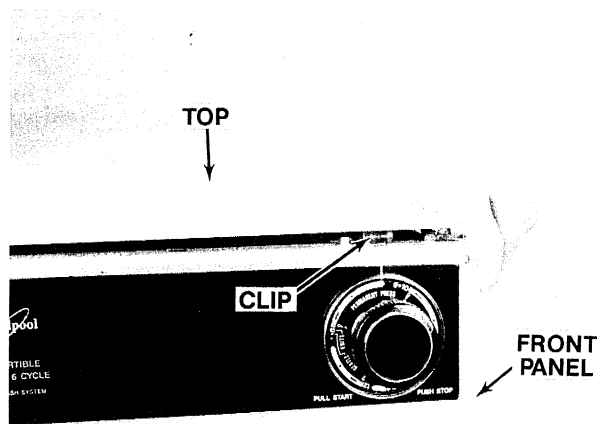
- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

⚠ WARNING

Personal Injury Hazard

- Be careful when lowering the top.
- Failure to do so could result in pinched fingers or hand.

STEP 8 Slowly lower the top.



STEP 9 Press down on the front corners of the top until they snap into place.

STEP 10 Remove the tape.

STEP 11 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 2

Side Panel Access

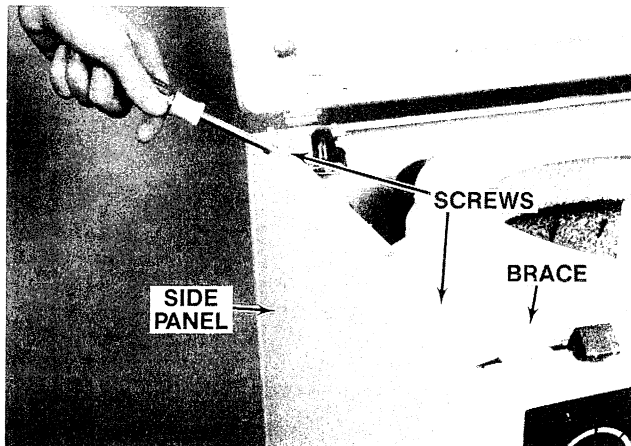
⚠ WARNING

Electrical Shock Hazard

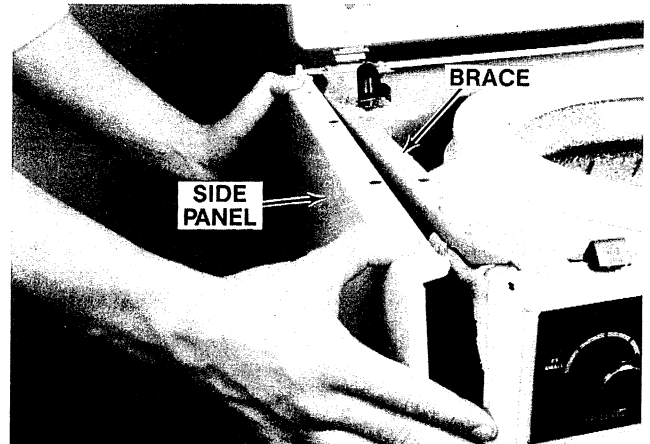
- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Raise the top (section P, proc. 1).



STEP 3 Using a screwdriver or nutdriver, remove the two top screws holding the side panel to the brace.

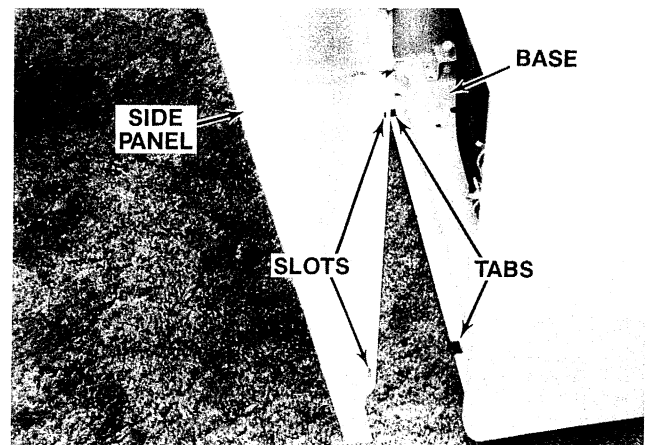


STEP 4 Carefully move the top of the panel away from the brace and lift.

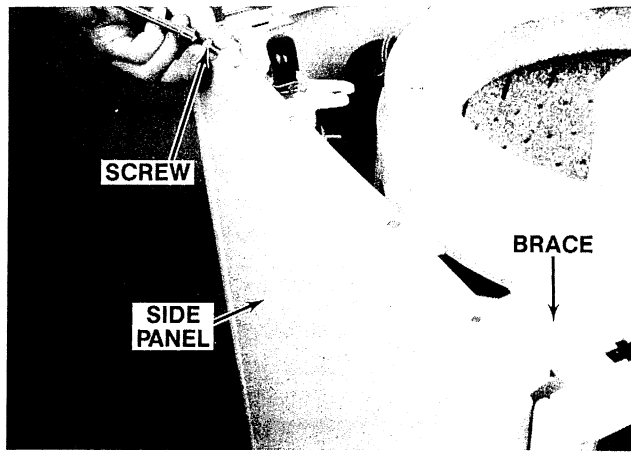
This removes the bottom panel slots, from the tabs in the bottom of the base.

STEP 5 Do the same thing to the other side panel.

REPLACEMENT



STEP 6 Place the bottom slots in the side panel flange, over the tabs in the base, then move the top of the side panel toward the brace.



STEP 7 Using a screwdriver or nutdriver, insert the top screws through the side panel, into the brace and tighten.

STEP 8 Do the same thing to the other side panel.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 9 Lower the top (section P, proc. 1).

STEP 10 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 3

Front Panel Access

⚠ WARNING

Electrical Shock Hazard

- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

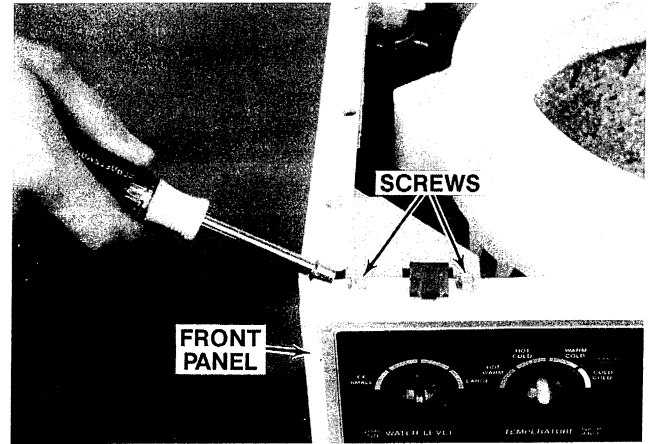
STEP 1 Disconnect the electrical power supply (section B).

STEP 2 Remove the control knobs (section J, proc. 3; Type A).

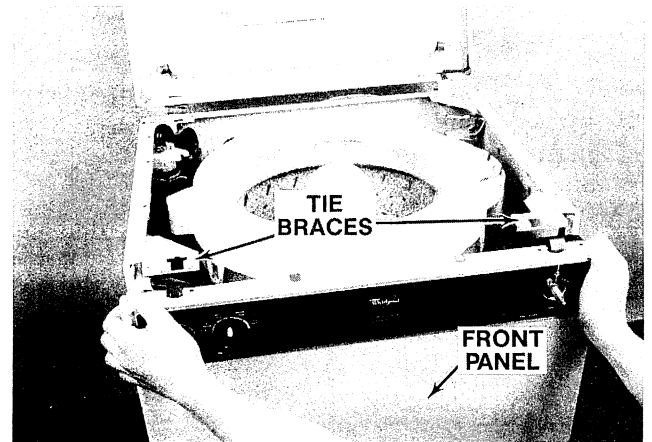
STEP 3 Remove the timer knob (section J, proc. 1).

STEP 4 Remove the timer dial (section J, proc. 2).

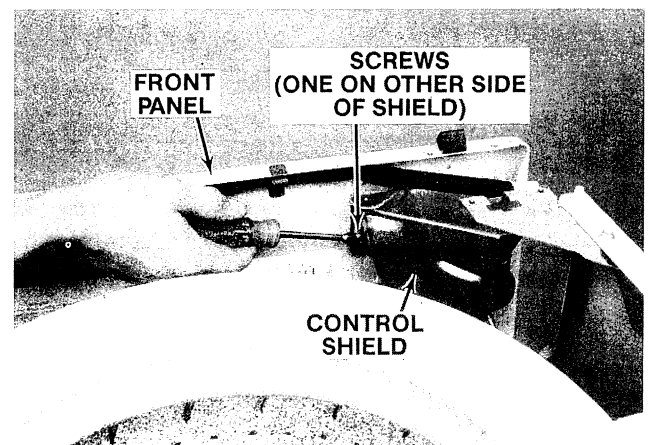
STEP 5 Raise the top (section P, proc. 1).



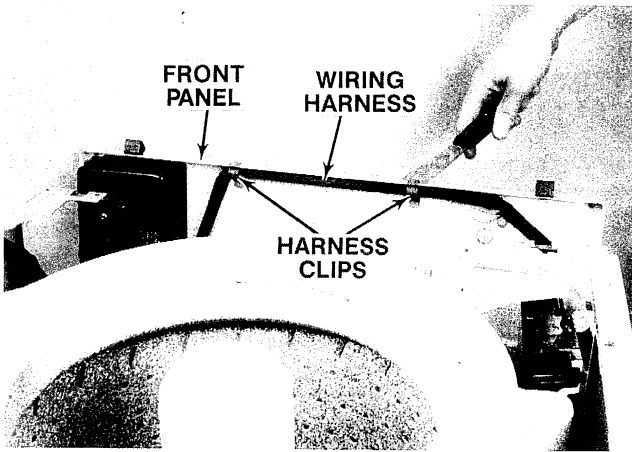
STEP 6 Using a screwdriver or nutdriver, remove the top screws (two on each side) holding the front panel to the side braces.



STEP 7 Carefully pull the top of the front panel away from the tie braces.



STEP 8 Using a nutdriver, reach-in and remove the two screws holding the control shield (water level switch and temperature switch), to the back of the front panel.

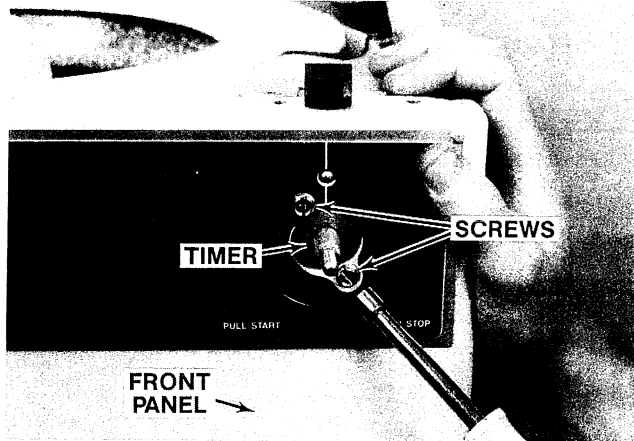


STEP 9 Using a putty knife, place the blade between the harness clip(s) and flange located on the top of the front panel, then push.

STEP 10 Using a putty knife, place the blade between the harness clip(s) and flange located on the side of the front panel, then push.

STEP 11 Using a screwdriver or nutdriver, remove the screw holding the green ground wire to the back of the front panel.

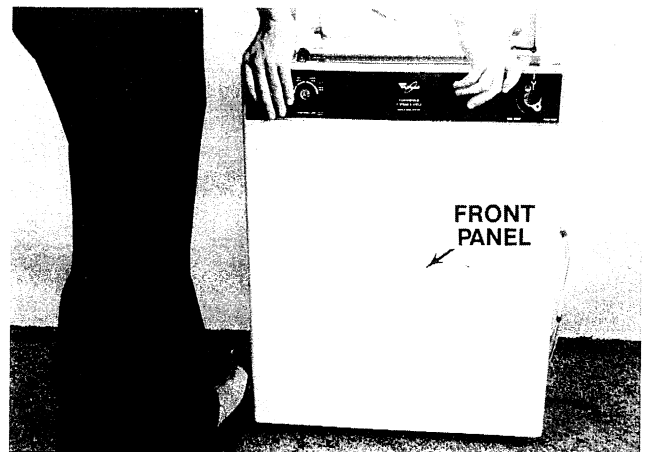
NOTE: Support the front panel, when the timer screws are removed the front panel will tilt forward.



STEP 12 Using a nutdriver or screwdriver, remove the two screws (in the front) holding the timer to the front panel.

STEP 13 Pull the top of the front panel forward until its about half way between the floor and the top of the cabinet.

This releases two tabs on the base that stick into holes in the bottom flange of the front panel.



STEP 14 Using your left foot, lightly kick the bottom of the front panel all the way to the right.

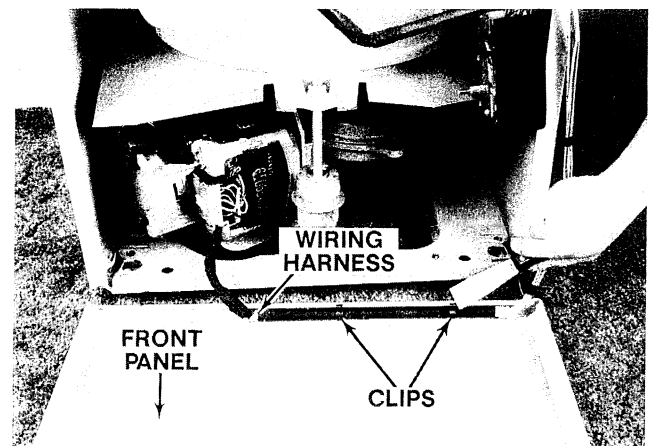
This releases two more tabs on the base that stick into long slots (holes) in the bottom flange of the front panel.

⚠ CAUTION

Product Damage

- Lay a pad (blanket or rug) on the floor in front of the washer, to protect the finish on the front panel.

STEP 15 Carefully lay the front panel down on the blanket.



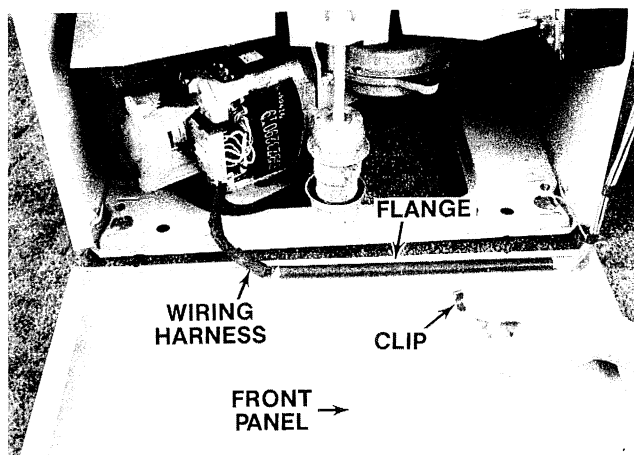
STEP 16 Using a putty knife, place the blade between the harness clip(s) and flange located on the bottom of the front panel, then push.

STEP 17 Move the front panel and blanket out of the way so you can work inside the washer.

REPLACEMENT

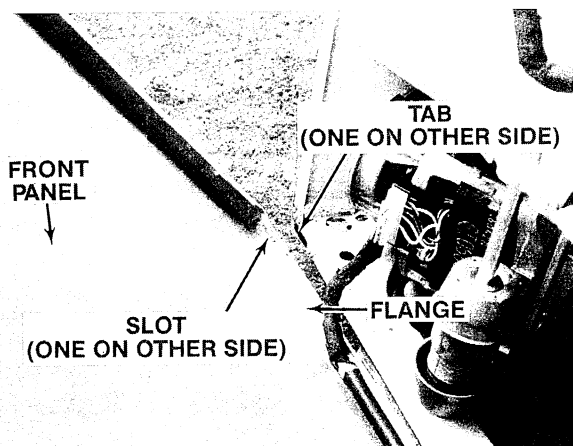
STEP 18 Move the front panel and blanket back to the front of the washer.

STEP 19 Place the bottom wiring harness on the inside flange on the front panel.



STEP 20 Place the harness clip(s) over the wiring harness (located on the side), then push the clip on the bottom flange of the front panel.

STEP 21 Lift the front panel half way between the floor and the top of the cabinet.



STEP 22 Place the long slots (holes) in the bottom flange of the front panel, over the long tabs on the base.

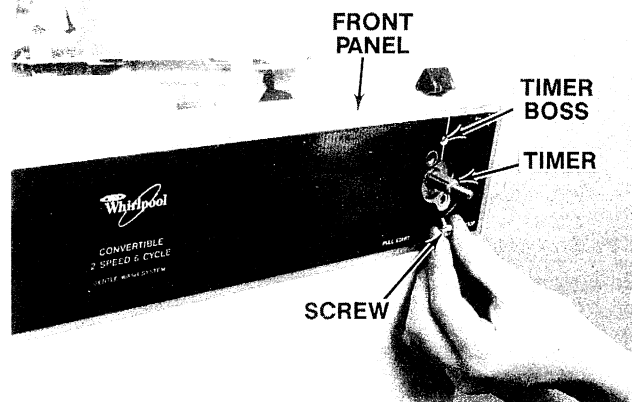
STEP 23 Using your right foot, lightly kick the bottom of the front panel all the way to the left.

STEP 24 Slowly tilt the top of the front panel toward the washer.

STEP 25 Place the harness clip(s) over the wiring harness, then push the clip(s) on the side flange of the front panel.

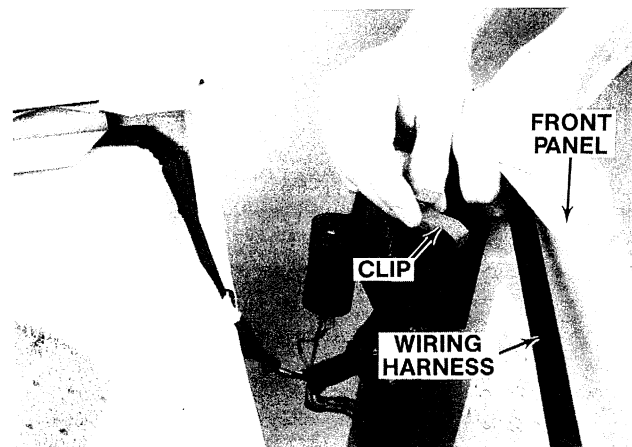
STEP 26 From the back, place the timer shaft through the hole in the front panel.

STEP 27 Line up the holes in the front panel with the holes in the timer, plus the boss on the top of the timer will fit in the hole in the front panel.

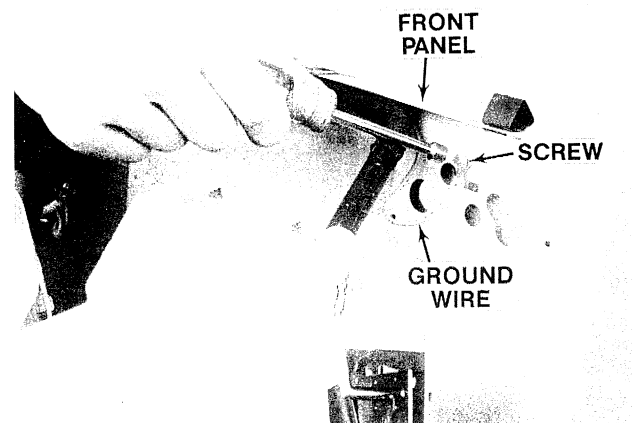


STEP 28 Using a nutdriver or screwdriver, insert the two screws from the front, through the front panel, into the timer and tighten.

STEP 29 Place the top wiring harness on the inside flange on the front panel.



STEP 30 Place the harness clip(s) over the wiring harness, then push the clip(s) on the top flange of the front panel.

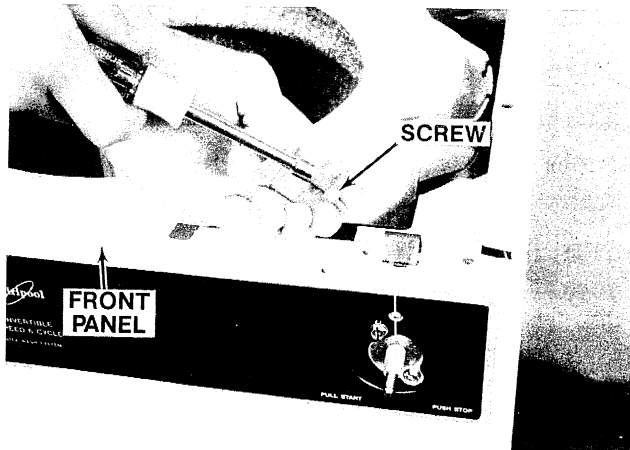


STEP 31 Using a nutdriver or screwdriver, insert the screw through the green ground wire into the hole in the back of the front panel and tighten.

STEP 32 From the back, place the shafts of the water level switch and temperature switch plus the control shield, through the holes in the front panel.

STEP 33 Using a nutdriver, insert the screws, one through the water level switch and one through the temperature switch, through the control shield, into the front panel and tighten.

STEP 34 Push the top of the front panel over the tie braces.



STEP 35 Using a nutdriver or screwdriver, insert the screws (two on each end) through the top flange on the front panel, into the tie braces and tighten.

⚠ WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

STEP 36 Lower the top (section P, proc. 1).

STEP 37 Replace the control knobs (section J, proc. 3; Type A).

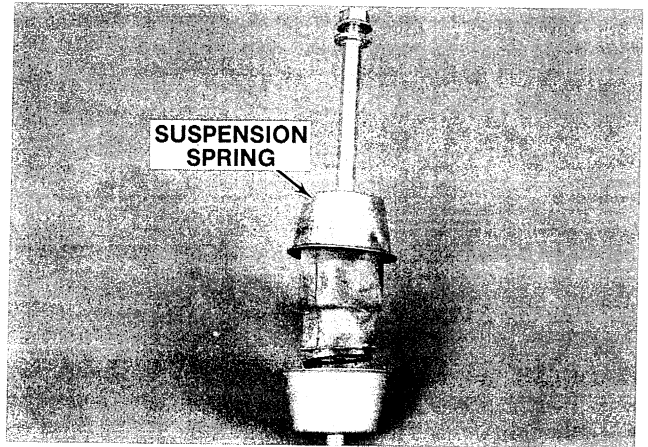
STEP 38 Replace the timer dial (section J, proc. 2).

STEP 39 Replace the timer knob (section J, proc. 1).

STEP 40 Reconnect the electrical power supply. See section B for the proper reconnection.

PROCEDURE 4

Suspension Spring Replacement



⚠ WARNING

Electrical Shock Hazard

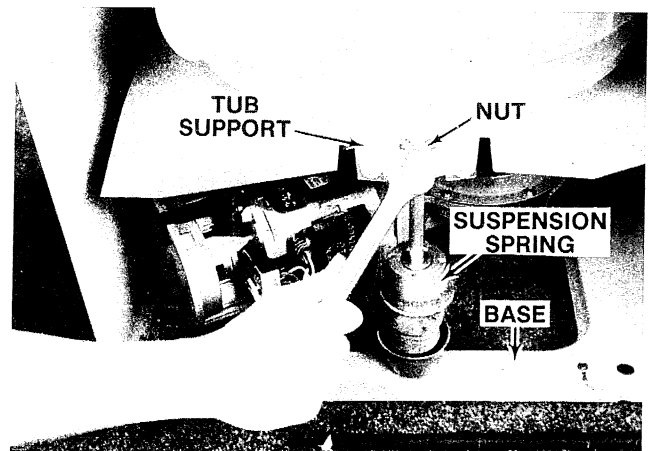
- Disconnect power before servicing (section B).
- Failure to do so could result in personal injury or death.

There are (3) three suspension springs used on this automatic washer. One (1) located on each side and (1) one located in the front.

STEP 1 Disconnect the electrical power supply (section B).

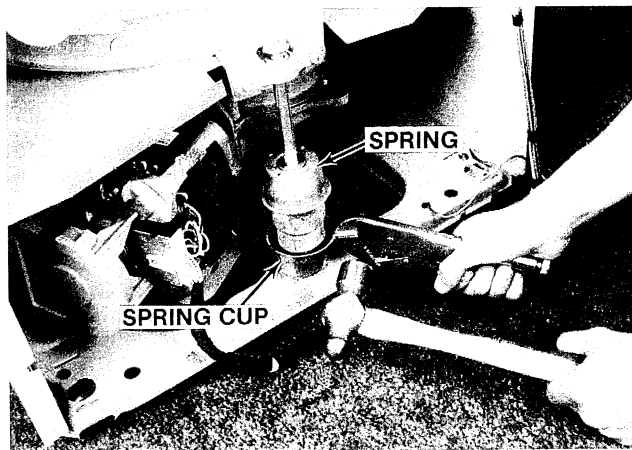
STEP 2 Raise the top (section P, proc. 1).

STEP 3 Depending on which spring is bad, remove the left or right side panel (section P, proc. 2 or remove the front panel (section P, proc. 3).



STEP 4 Using an open end wrench, loosen the top nut (3/8 inches) holding the top of the spring, to the tub support.

STEP 5 Using locking pliers, place it on the flange on the bottom of the spring cup.



STEP 6 Using a hammer, tap the side of the locking pliers to start unscrewing the spring cup from the base.

STEP 7 Using your hands, unscrew the rest of the spring cup, from the base.

NOTE: Be careful when removing the spring as the tub will fall somewhat.

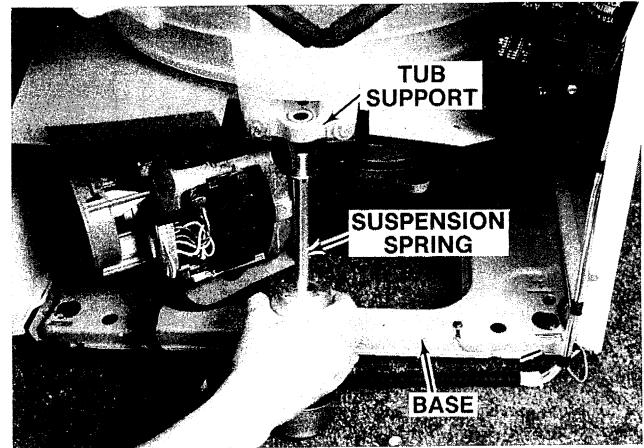
STEP 8 For the front spring, slide the bottom of the spring toward the front and off the base.

STEP 9 For the side springs, slide the bottom of the spring toward the hole in the middle of the washer.

STEP 10 Unscrew the top nut, the rest of the way off the top of the spring.

STEP 11 Carefully remove the nut and spring.

REPLACEMENT



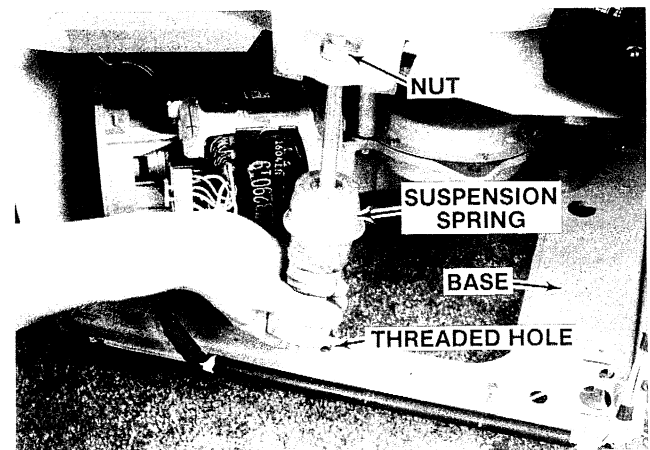
STEP 12 For the top spring, slide the top of the new spring up through the hole in the tub support.

You may have to lift the basket somewhat.

STEP 13 For the side springs, place the bottom of the new spring, in the hole in the middle of the washer.

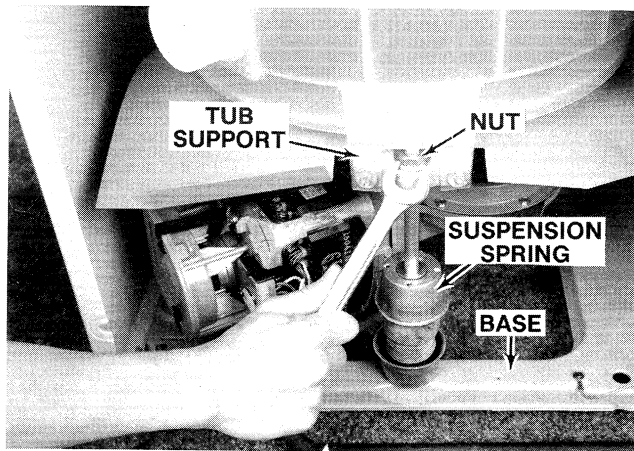
STEP 14 For the side springs, slide the top of the new spring up through the hole in the tub support.

STEP 15 Place the nut on top of the spring, then hand screw this down as far as it will go.



STEP 16 Lift the tub, support and basket while sliding the bottom of the spring in the threaded hole in the base.

STEP 17 Using your hands, screw the bottom of the spring cup in the base until tight.



STEP 18 Using an open end wrench, tighten the top nut holding the spring to the tub support, until tight.

! WARNING

Electrical Shock Hazard

- Make sure all ground wires are properly attached.
- Make sure all wiring is not pinched or laying on sharp edges.
- Failure to do so could result in personal injury or death.

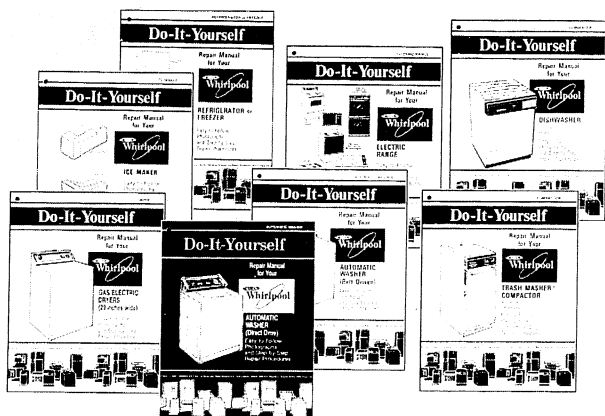
STEP 19 Replace the side panel (section P, proc. 2 or the front panel (section P, proc. 3).

STEP 20 Lower the top (section P, proc. 1).

STEP 21 Reconnect the electrical power supply. See section B for the proper reconnection.

SECTION Q
Automatic Washer Accessories

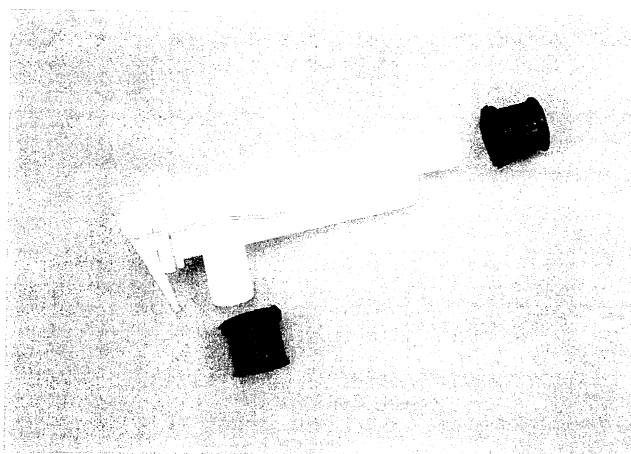
DO-IT-YOURSELF REPAIR MANUALS



With these manuals, you will learn how to diagnose a problem that may crop up in your WHIRLPOOL Home Appliance...and how to correct it.

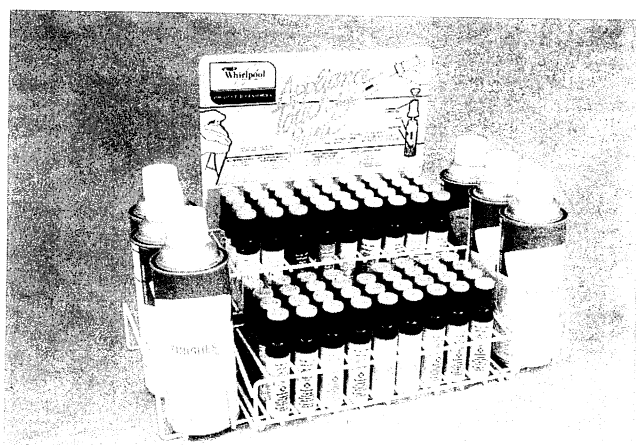
We have eight manuals now available: Automatic Washer (Belt Drive), Automatic Washer (Direct Drive), Dryer (gas & electric), Dishwasher, Compactor, Ice Maker, Refrigerator/Freezer and the Electric Range.

DRAIN PROTECTOR



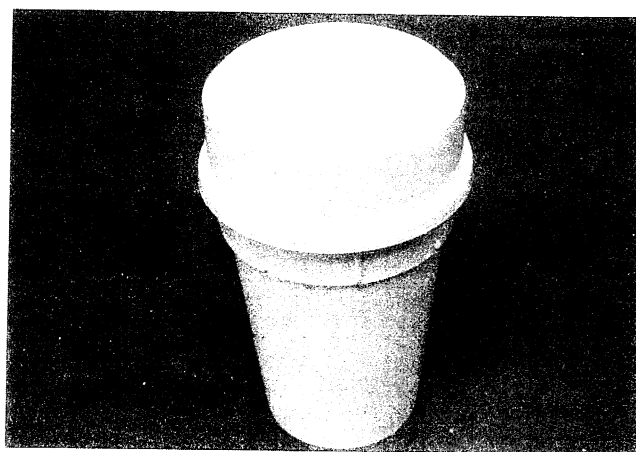
Designed to break up excessive amounts of lint into smaller particles and catch threads and strings from shag rugs and chenille spreads that could clog the drain.

TOUCH-UP PAINT



Quick and easy way to keep your appliance looking like new. Touch up scratches and chips when they occur.

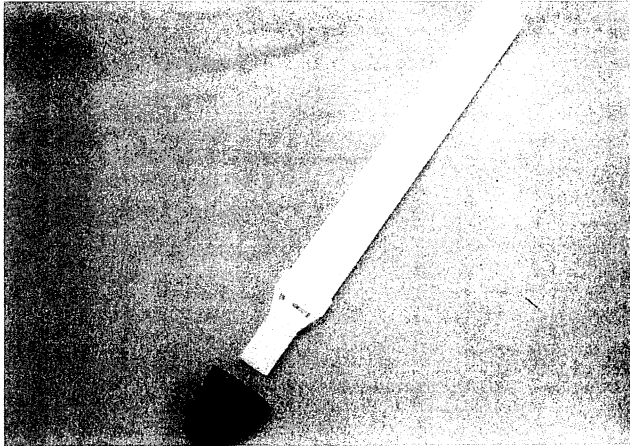
DISPENSER



This plastic dispenser will automatically add liquid fabric softener during the deep rinse cycle. For non-electric dispenser WHIRLPOOL automatic washers. The dispenser attaches to the top of the agitator.

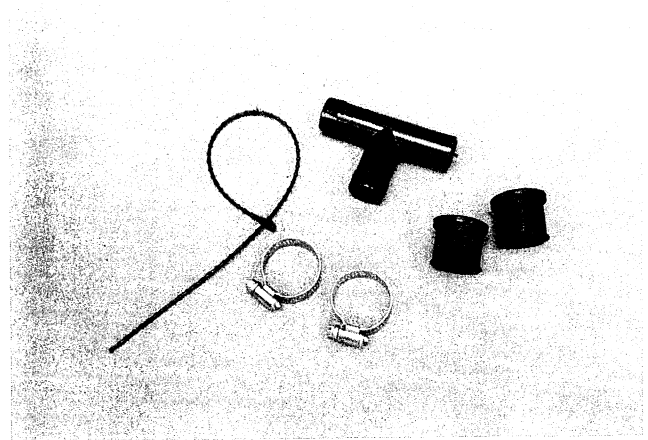
SEE YOUR AUTHORIZED WHIRLPOOL FACTORY SERVICE
BRANCH FOR ORDERING

STANDPIPE



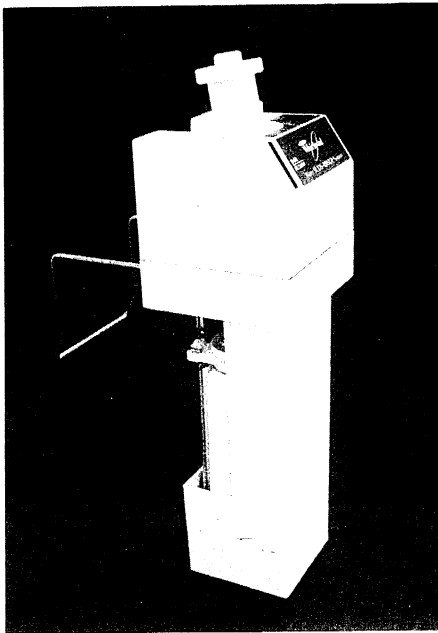
Used on all WHIRLPOOL Suds-Miser System automatic washers using a single laundry tub.

SIPHON BREAK



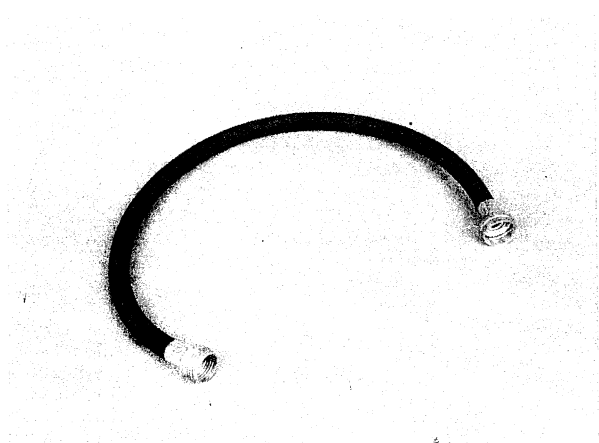
Provides an air gap in the drain line to prevent siphoning of dirty water back into the washer. Can be used with rubber or plastic drain hoses.

WATER SUDS-MISER® SYSTEM



This water Suds-Miser System is used on two-speed automatic washers and helps save energy, detergent and water by pumping the wash water into a storage tub rather than down the drain. The sudsy water will remain in the storage tub, allowing soil to settle to the bottom. After this occurs, the water may be pumped back into the washer for the next wash load.

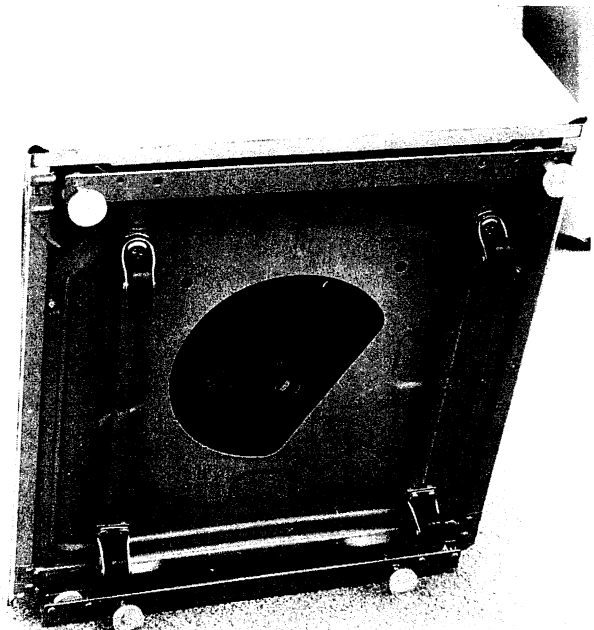
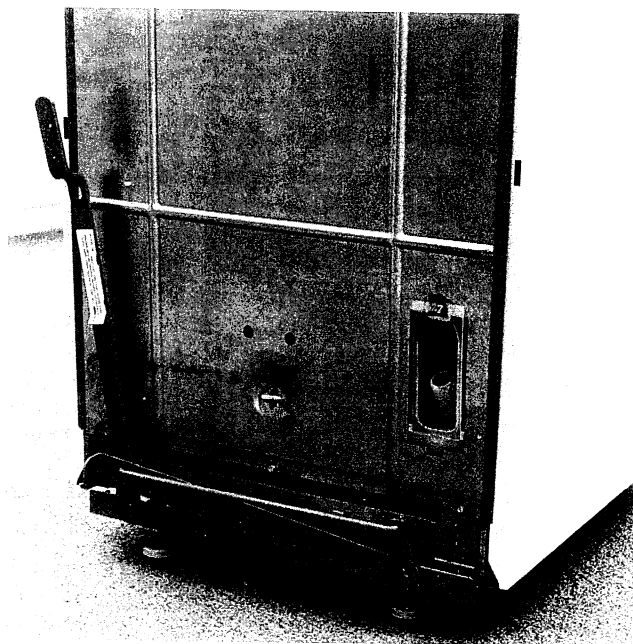
FILL HOSE EXTENSION



This two foot extension hose has a male fitting on one end and a female fitting on the other end. Used in lengthening your current hose(s) already on the washer.

SEE YOUR AUTHORIZED WHIRLPOOL FACTORY SERVICE
BRANCH FOR ORDERING

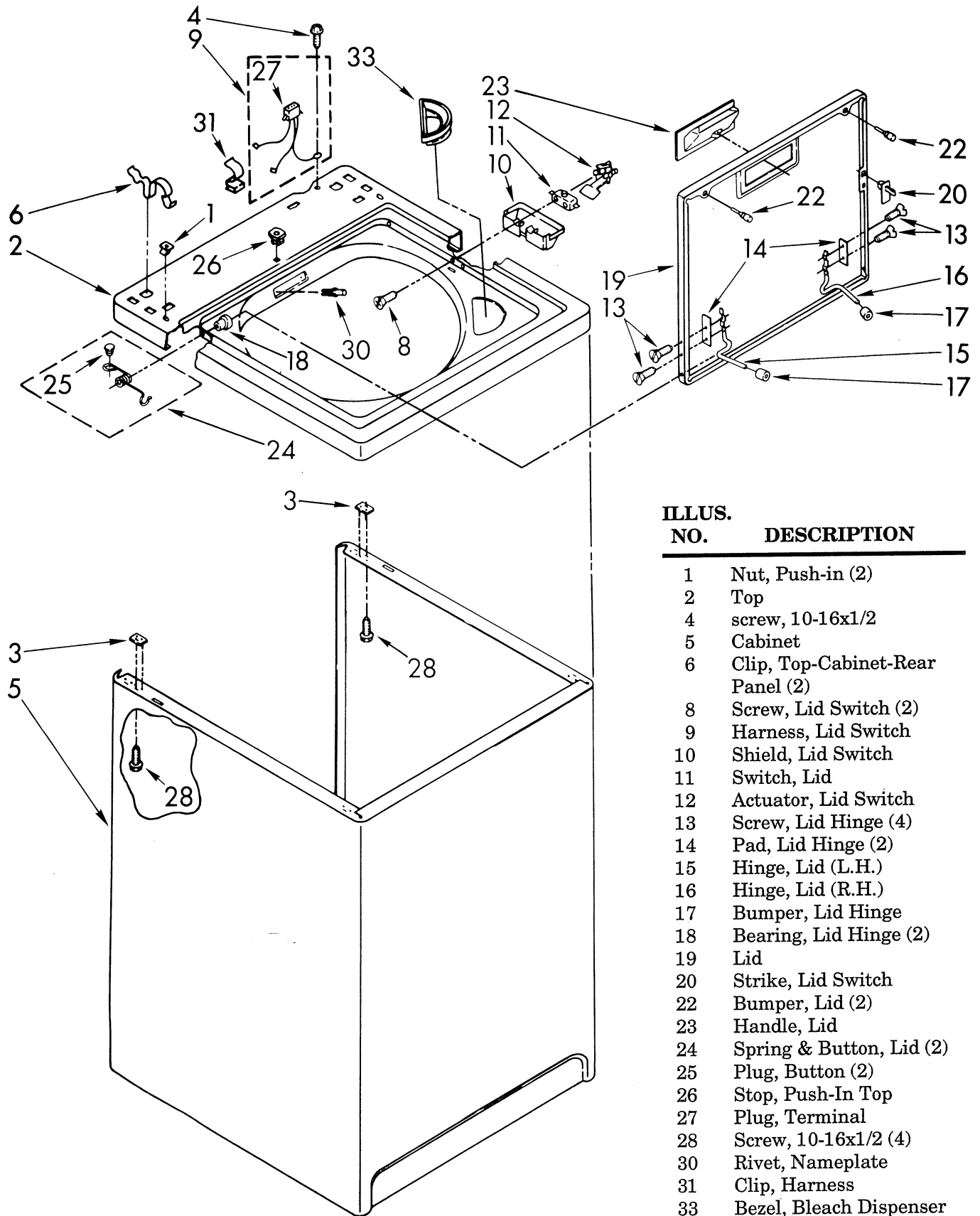
CASTERS



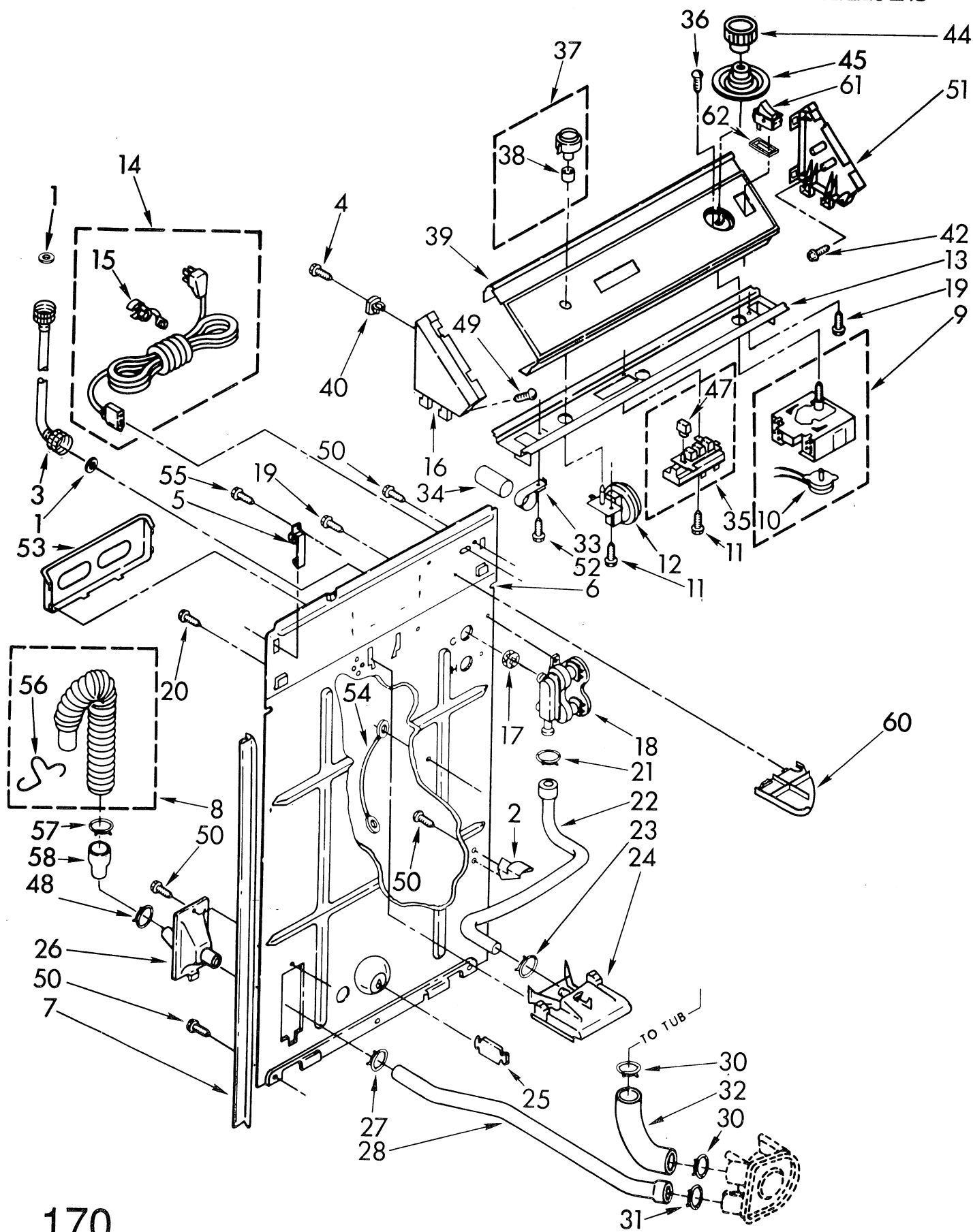
Used in moving your washer around easier.

SEE YOUR AUTHORIZED WHIRLPOOL FACTORY SERVICE
BRANCH FOR ORDERING

TYPICAL TOP AND CABINET PARTS



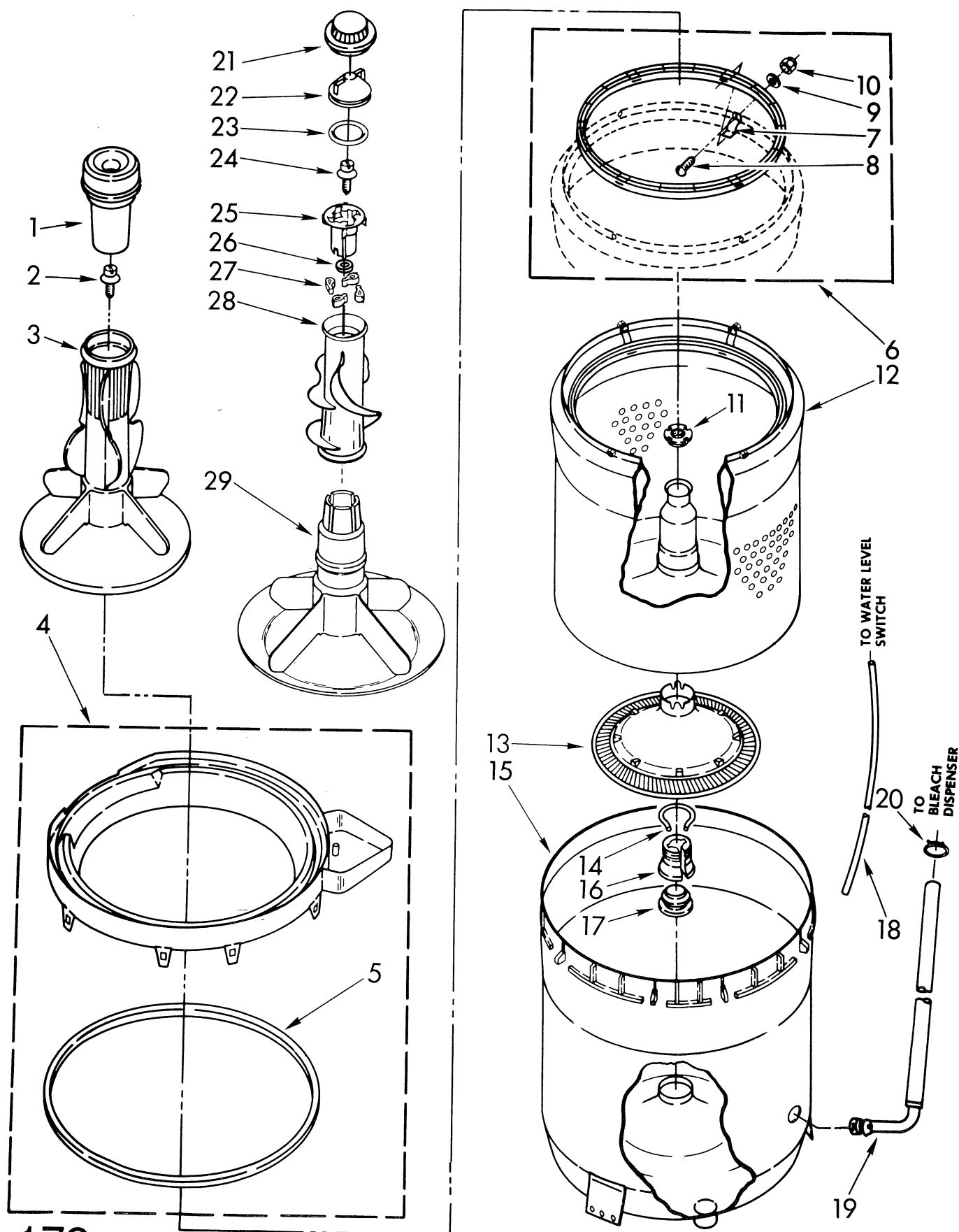
TYPICAL CONTROLS AND REAR PANEL PARTS



TYPICAL CONTROLS AND REAR PANEL PARTS

ILLUS. NO.	DESCRIPTION	ILLUS. NO.	DESCRIPTION	ILLUS. NO.	DESCRIPTION
1	Washer, Water Inlet Hose (4)	19	Screw, 10-24x3/8 (2)	38	Clip, Control Knob
2	Pin, Cabinet Guide (2)	20	Screw, Ground 10-16x 1/2	39	Panel, Console
3	Hose, Water Inlet (2)	21	Clamp, Hose	40	Nut, Push-In (2)
4	Screw, 10-16x1/2	22	Hose, Vacuum Break	42	Screw, 13-16x5/8 (4)
5	Hinge, Console (2)	23	Clamp, Hose	44	Knob, Timer
6	Panel, Rear	24	Break, Vacuum	45	Dial, Timer
7	Pad, Rear Panel	25	Support, Rear Panel	47	Button, Water Tempera- ture
8	Hose, Corrugated Plastic Drain	26	Connector, Drain Hose	48	Clamp, Hose
9	Timer (60 Hz.)	27	Clamp, Hose	49	Screw, Panel To Top 8- 18 (2)
10	Motor, Timer	28	Hose, Pump To Drain Connector	50	Screw, 10-16x3/8
11	Screw, 8Ax3/8	30	Clamp, Hose	51	Cap, End (R.H.)
12	Switch, Water Level	31	Clamp, Hose	52	Screw, 10-16x1/2
13	Bracket, Control	32	Hose, Pump To Tub	53	Rack, Literature
14	Cord, Power	33	Clamp, Capacitor	54	Wire, Ground
15	Relief, Power Cord Strain	34	Capacitor, Motor Start	55	Screw, Hinge
16	Cap, End (L.H.)	35	Switch, Water Tempera- ture	56	Retainer, Wire
17	Screen, Filter (2)	36	Screw, 10-32x1 (2)	57	Clamp, Hose
18	Valve, Water Inlet	37	Knob, Water Level	58	Coupling, Hose
				60	Shield, Suds
				61	Switch, Rinse
				62	Gasket

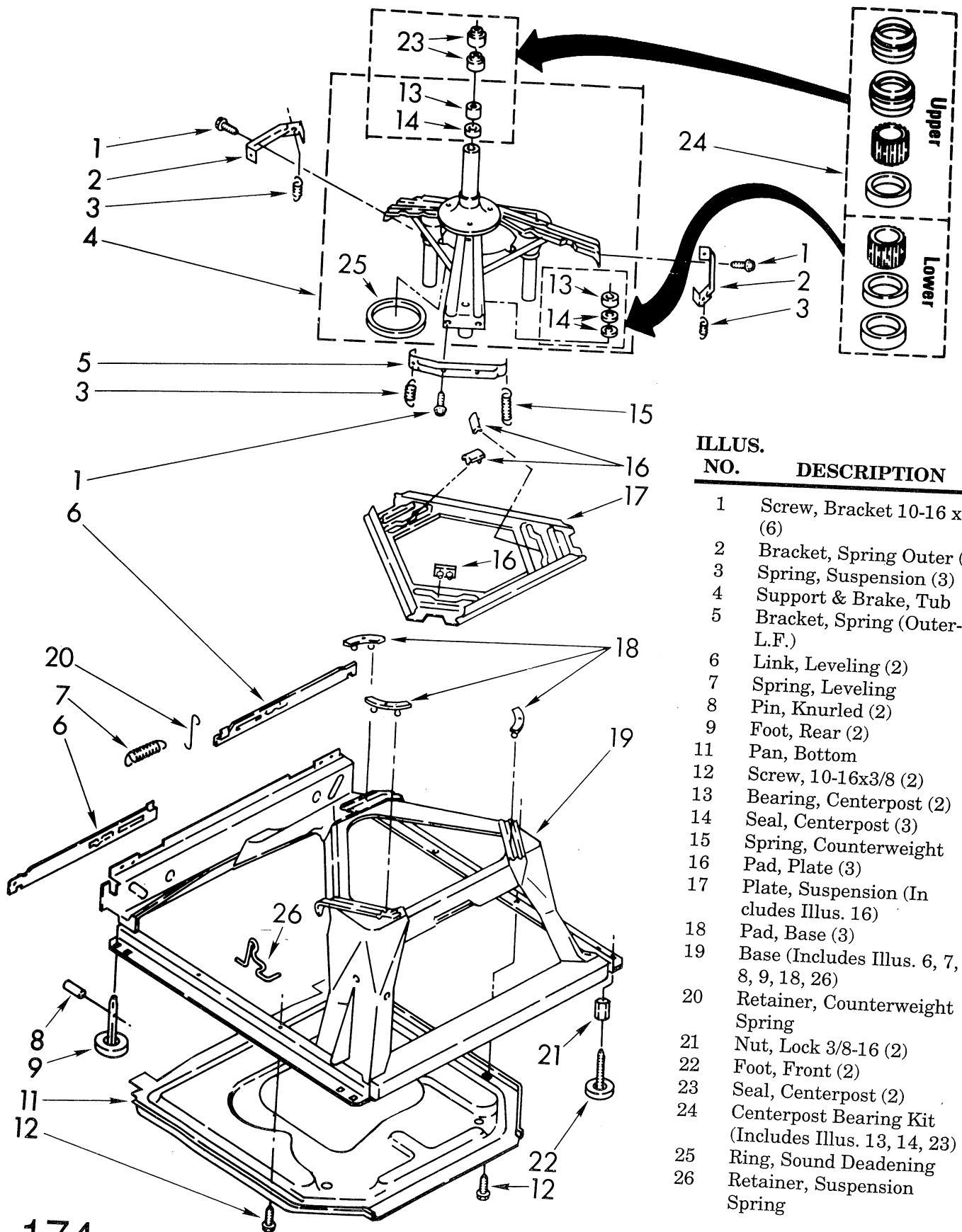
TYPICAL AGITATOR, BASKET AND TUB PARTS



TYPICAL AGITATOR, BASKET AND TUB PARTS

ILLUS. NO.	DESCRIPTION
1	Dispenser
2	Screw & Washer, 5/16-24 x1
3	Agitator
4	Ring, Tub
5	Gasket, Tub Ring
6	Clothes Guard Repair Kit
7	Clip, Clothes Guard (6)
8	Screw, 6-32x3/8 (6)
9	Washer, Nylon (6)
10	Locknut (2)
11	Nut, Spanner
12	Basket & Clothes Guard (Includes Illus. 6)
13	Filter (Includes Illus, 14)
14	Lock, Filter
15	Tub
16	Block, Basket Drive
17	Gasket, Centerpost
18	Hose, Pressure Switch
19	Hose, Bleach
20	Clamp, Hose
21	Cap, Agitator
22	Cap, Barrier
23	Seal, Inner Auger
24	Screw & Washer, 5/16-24 x1
25	Cam
26	Seal
27	Dogs, Agitator Clutch
28	Mover, Agitator
29	Agitator

TYPICAL MACHINE BASE PARTS

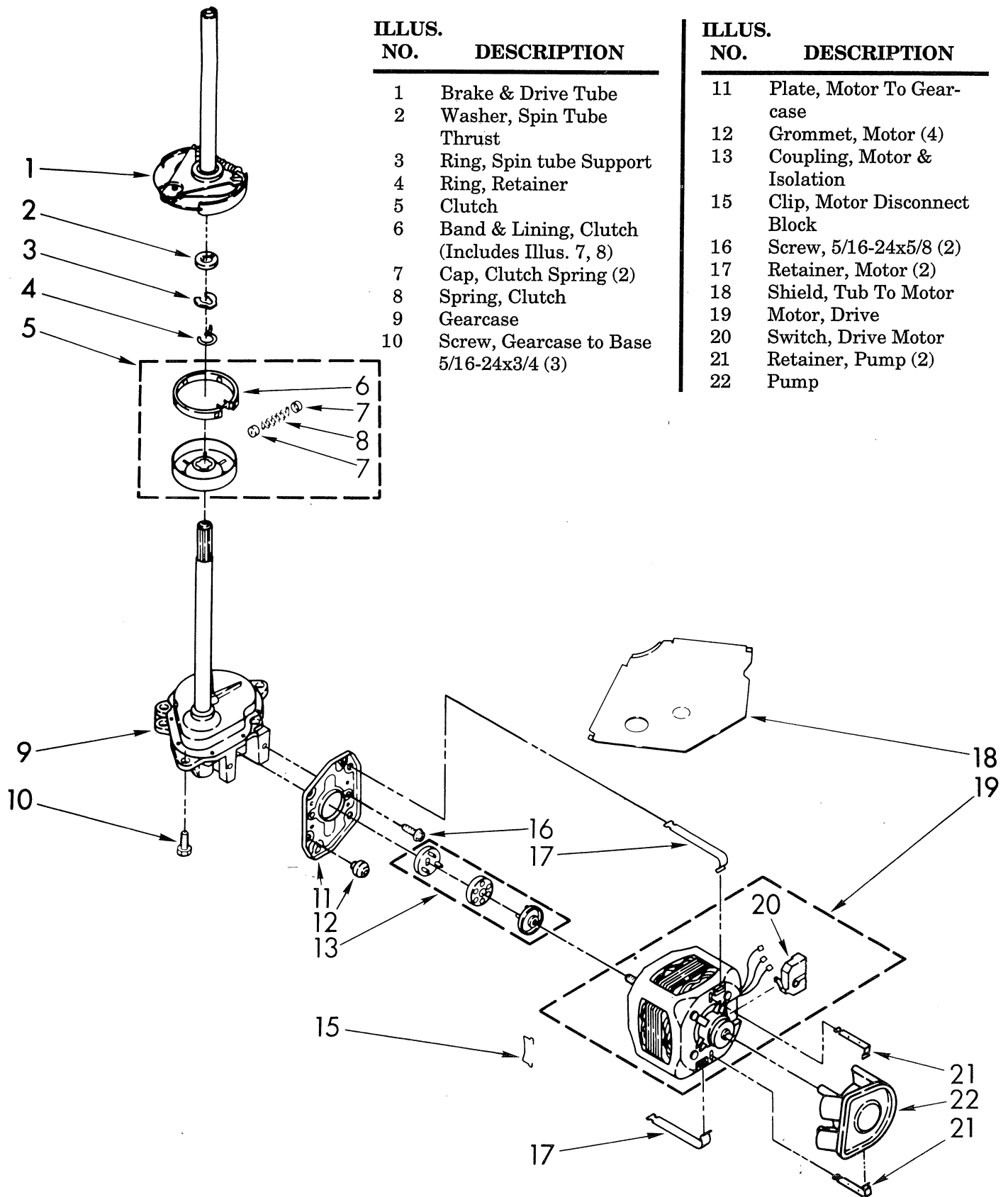


ILLUS.
NO.

DESCRIPTION

- | | |
|----|---|
| 1 | Screw, Bracket 10-16 x 5/8 (6) |
| 2 | Bracket, Spring Outer (2) |
| 3 | Spring, Suspension (3) |
| 4 | Support & Brake, Tub |
| 5 | Bracket, Spring (Outer-L.F.) |
| 6 | Link, Leveling (2) |
| 7 | Spring, Leveling |
| 8 | Pin, Knurled (2) |
| 9 | Foot, Rear (2) |
| 11 | Pan, Bottom |
| 12 | Screw, 10-16x3/8 (2) |
| 13 | Bearing, Centerpost (2) |
| 14 | Seal, Centerpost (3) |
| 15 | Spring, Counterweight |
| 16 | Pad, Plate (3) |
| 17 | Plate, Suspension (Includes Illus. 16) |
| 18 | Pad, Base (3) |
| 19 | Base (Includes Illus. 6, 7, 8, 9, 18, 26) |
| 20 | Retainer, Counterweight Spring |
| 21 | Nut, Lock 3/8-16 (2) |
| 22 | Foot, Front (2) |
| 23 | Seal, Centerpost (2) |
| 24 | Centerpost Bearing Kit (Includes Illus. 13, 14, 23) |
| 25 | Ring, Sound Deadening |
| 26 | Retainer, Suspension Spring |

TYPICAL BRAKE, CLUTCH, GEARCASE, MOTOR AND PUMP PARTS



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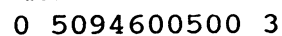
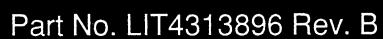
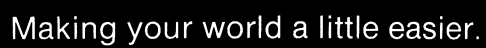
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