

# Use and Care Guide

## Undercounter Dishwashers

TUD3000W  
TUD2000W

### Thank you for choosing an Estate appliance.

This Use and Care Guide will help you operate and maintain your new, quality-built undercounter dishwasher. Keep this Use and Care Guide in a safe place for future reference.

**Please complete and mail the Owner Registration Card provided with this product.** Then complete the form below. Have this information ready if you need service or call with a question.

- Copy model and serial numbers from label (see diagram on page 3) and purchase date from sales slip.
- Keep this book and sales slip together in a handy place.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Purchase Date \_\_\_\_\_

Service Company Phone Number \_\_\_\_\_

### You are responsible for

It is your responsibility to be sure your dishwasher:

- Is installed by a qualified installer.
- Has been installed where it is protected from the elements.
- Has been installed on a floor strong enough to support its weight.
- Has been properly connected to electricity, water and drain.\*
- Has been properly electrically grounded.\*
- Has had all hang tags and temporary labels removed.
- Is not used by children or anyone unable to operate it properly.
- Is properly maintained.

\*See Installation Instructions for complete information.

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## Important Safety Instructions

### **⚠ WARNING**

To reduce the risk of fire, electrical shock, or injury when using your dishwasher, follow basic precautions including the following:

- Read all instructions before using the dishwasher.
- Properly connect to electricity and water.
- **DISHWASHER MUST BE ELECTRICALLY GROUNDED.** Read the Installation Instructions for details.
- Be sure your dishwasher is installed on a level floor that will hold the weight, and in an area suitable for its size and use.
- When discarding an old dishwasher, always remove the door to prevent accidental entrapment or suffocation.
- **REMEMBER**, use your dishwasher only for the job it was designed to do.
- Store dishwasher detergent in a cool, dry place WHERE CHILDREN CAN'T REACH IT.
- Use **ONLY** detergents and rinse agents recommended for use in a dishwasher.
- Locate sharp items and knives so that they are not likely to damage door seal or cut the user.
- **DO NOT** let children play in or on the dishwasher.
- **DO NOT** reach into the area below the bottom rack until the heating element has cooled for at least 20 minutes.
- **DO NOT** wash plastic items unless marked "Dishwasher Safe" or the equivalent. If not marked, check manufacturer's recommendations.
- **DO NOT** use your dishwasher unless all enclosure panels are properly in place.
- **DO NOT** sit on, stand on or abuse the dishwasher door or dish racks.
- **DO NOT** tamper with controls.
- If hot water has not been used recently (usually two weeks or longer), hydrogen gases may build up in the water heater and the hot water pipes. **HYDROGEN GAS IS EXPLOSIVE.** To prevent injury or damage, before using your dishwasher, turn on all hot water faucets and allow water to run for several minutes. This will allow gases to escape. Do not smoke or use any open flame near the faucet while it is open.
- **Disconnect electrical power to the dishwasher before attempting to service.**
- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. The fumes can create a fire hazard or explosion.

**SAVE THESE INSTRUCTIONS**

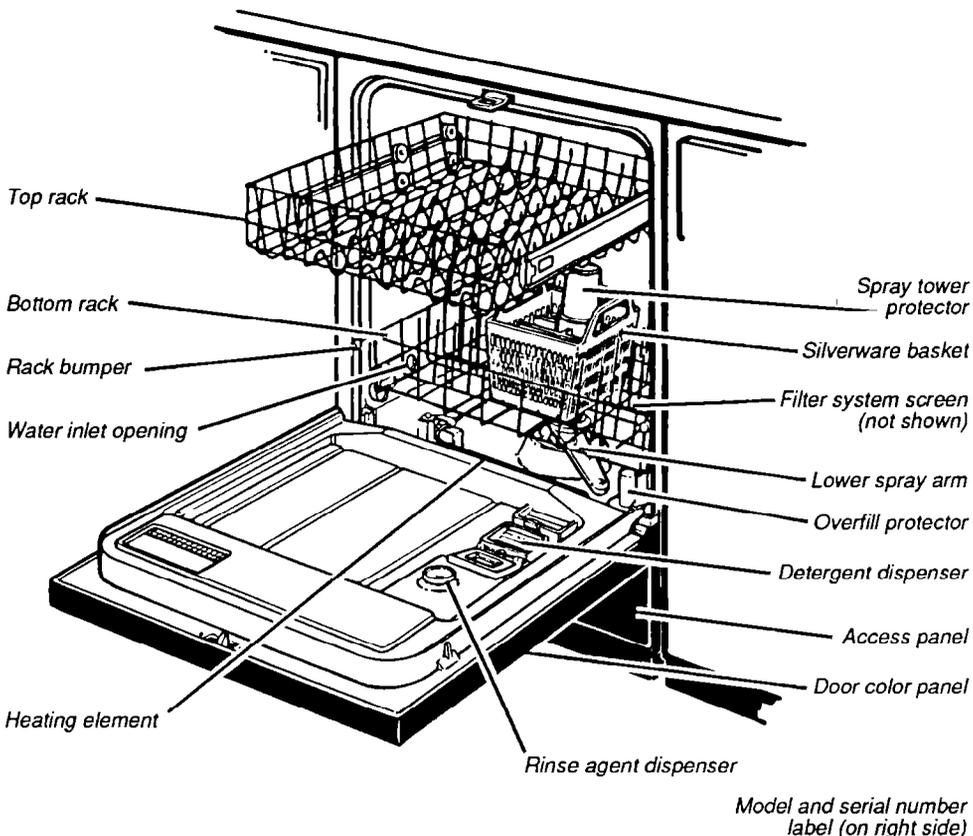
## Energy Saving Tips

You can help save energy if you:

1. Wash full loads. Running a half-filled dishwasher uses the same amount of electricity and hot water as a fully loaded machine.
2. Air dry dishes when you don't need a rapid drying cycle. Allow longer drying times (overnight). Use a rinse agent to improve drying.
3. Load correctly for best washing results. Incorrect loading may cause poor washing and the need to rewash all or part of the load.
4. Do not pre-rinse normally soiled dishes. Use the recommended amount of detergent for good washing results without hand rinsing.
5. Use your dishwasher during off-peak hours. Local utilities recommend this to avoid heavy usage of energy at certain times of day.
6. Kitchen cleanup can be done quickly and efficiently through the use of your dishwasher. Most appliance parts that can fit in the dishwasher can be cleaned by it. Burned-on soil, however, should be cleaned by hand.

# Using Your Dishwasher

Models TUD3000W (shown)  
TUD2000W



The drawings in this book may vary slightly from your dishwasher model. They are designed to show the different features of all the models covered by this book.

**NOTE:** Your model may not include all the features shown.

## Before starting dishwasher

1. Read "Important Safety Instructions" on page 2 before starting your dishwasher.
2. Properly load the top and bottom racks, and silverware basket. See pages 4 and 5.
3. Spin the lower spray arm to make sure nothing will stop it from turning freely.
4. Add detergent. See page 5.
5. Check rinse agent dispenser. See page 5.
6. Push door firmly when closing and it will automatically latch.
7. Run hot water at sink nearest dishwasher until it is hot. Turn it off.

## Starting dishwasher

**NOTE:** If the door is latched, you will hear cycles start and stop as the knob passes each cycle mark. This is normal and will not hurt the dishwasher. If you prefer, you can set cycles with the door unlatched.

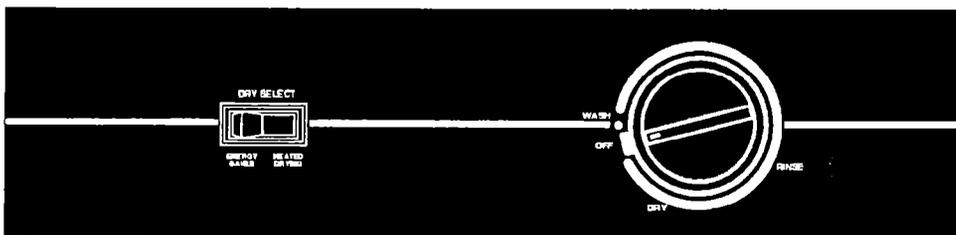
### Model TUD2000W

1. Select a drying option.
2. Turn the Cycle Control Knob clockwise to point to WASH. The dishwasher will automatically start the cycle.

### Model TUD3000W

1. When using any cycle except Pots & Pans, select a drying option. (Select AIR DRY for the Rinse & Hold Cycle.) Drying options may be changed by pushing an Option Selector Button again.
2. Turn the Cycle Control Knob clockwise to point to a desired cycle. When using the Pots & Pans Cycle, you must also push the POTS & PANS Selector Button. The dishwasher will automatically start that cycle.

## Cycle and options (Model TUD2000W)



### Wash cycle

A double wash for moderate to heavily soiled loads. (The Energy Guide Label data is based on this cycle.)

Select the mark next to WASH with the Cycle Control Knob. The cycle sequence will be:

Wash→Rinse→Rinse→Wash→Rinse→Rinse→Rinse→Dry→Off

### Dry Select options

If the HEATED DRYING Option Selector Button is pushed, air in the dishwasher is heated during the "dry" part of the cycle.

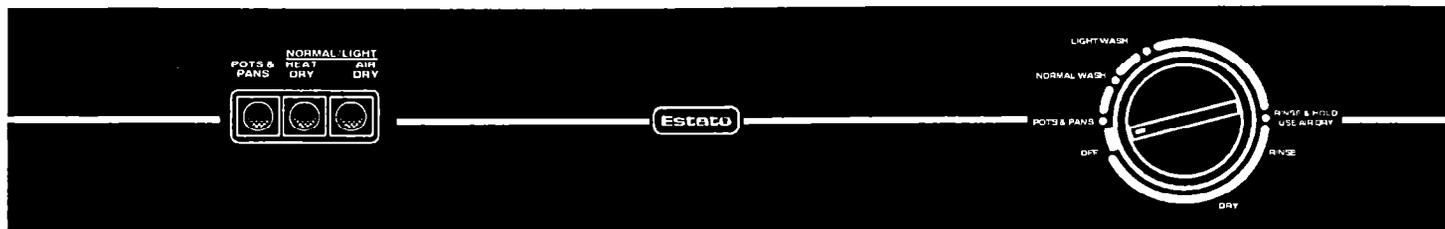
For best drying results, use a liquid rinse agent.

If the ENERGY SAVER Option Selector Button is pushed, air in the dishwasher is not heated. Using this option helps save energy, but dishes take longer to dry (overnight) and some water spotting may result. Some items (such as plastics) may need towel drying.

For best drying results, use a liquid rinse agent.

Continued on next page

## Cycles and options (Model TUD3000W)



### Pots & Pans Cycle

A double wash for maximum cleaning of cooked-on or baked-on foods. The Heat Dry Option is automatically selected during this cycle.

Push the POTS & PANS Cycle Selector Button and select the mark next to POTS & PANS with the Cycle Control Knob. The cycle sequence will be:

Wash→Rinse→Rinse→Wash→Rinse→Rinse→Rinse→Dry→Off

### Normal Wash Cycle

A double wash for moderate to heavily soiled loads. (The Energy Guide Label is based on this cycle.)

Push the HEAT DRY Option or AIR DRY Option Selector Button and select the mark next to NORMAL WASH with the Cycle Control Knob. The cycle sequence will be:

Wash→Rinse→Wash→Rinse→Rinse→Rinse→Dry→Off

### LIGHT WASH Cycle

A single wash for light to moderately soiled loads.

Push the HEAT DRY Option or AIR DRY Option Selector Button and select the mark next to LIGHT WASH with the Cycle Control Knob. The cycle sequence will be:

Rinse→Wash→Rinse→Rinse→Rinse→Dry→Off

### Rinse & Hold Cycle

For rinsing a few items to be washed one or more days later. Cycle time is about 10 minutes. Do not use detergent. Use Air Dry Option only. Heat Dry Option may cause food to bake on dishes.

Select the mark next to RINSE & HOLD with the Cycle Control Knob. Push the AIR DRY Option Selector Button. The cycle sequence will be:

Rinse→Rinse→Off

### Drying options

If the HEAT DRY Option Selector Button is pushed, air in the dishwasher is heated during the "dry" part of the cycle.

For best drying results, use a liquid rinse agent.

If the AIR DRY Option Selector Button is pushed, air in the dishwasher is not heated. Using this option helps save energy, but dishes take longer to dry (overnight) and some water spotting may result. Some items (such as plastics) may need towel drying.

For best drying results, use a liquid rinse agent.

### To add a dish after starting (Model TUD3000W)

1. To be sure the added item is washed and rinsed, make sure the Cycle Control Knob has not passed LIGHT WASH.

2. Lift up on the door latch to unlatch door and stop the cycle. Don't open the door until the spray arm stops spinning.

3. Open the door and add the dish.
4. Close the door. Do not latch it. Wait 30 seconds for air in the dishwasher to warm up. This helps reduce the amount of moisture that can come from the vent when restarting the cycle.
5. Press the door to latch it. The dishwasher will start from where it stopped.

### Changing a setting (Model TUD3000W)

You can change a setting anytime during any cycle.

1. Lift up on the door latch to unlatch the door and stop the cycle.
2. Turn the Cycle Control Knob clockwise to the cycle you want.
3. Be sure the detergent dispensers are filled properly for the new cycle. When changing the dial from LIGHT WASH to NORMAL WASH or POTS & PANS, detergent is released. Reload covered section of dispenser before starting Normal Wash or Pots & Pans Cycles (see page 5).
4. Press door firmly to latch it. The dishwasher will automatically start the new cycle.

## Proper Loading

### Preparation for loading

It is not necessary to rinse dishes before putting them into the dishwasher. Just remove large pieces and quantities of food and bones. The filtering system helps keep food particles out of the wash water. Small particles are flushed away as water is pumped out. Larger particles are trapped on the filter screen system. Refer to "Dishwasher care and cleaning" on page 6 for filter screen cleaning instructions.

Always load dishes so soiled surfaces are reached by spray from rotating spray arm. Water must be able to drain off completely for best drying results. Be careful to separate items so spray can reach all surfaces.

### Bottom rack loading

Items with cooked-on or dried-on food should be loaded in the bottom rack with soiled surfaces facing inward to the spray.

### Mixed load

- Make sure pot handles and other items do not stop rotation of spray arm. Spray arm must move freely.
- Load items so they do not block or cover the spray tower.
- Securely place heavily soiled cookware face down in rack.

### Dish load

- Place plates, soup bowls, etc., **between** prongs and facing the spray.
- Do not place items directly over spray tower.

### Utensil load

- Load cookie sheets, cake pans and other items at sides or back. Loading items in front may keep water spray from reaching detergent dispenser.

### NOTE:

- Do not load glasses, cups or plastic items in the bottom rack.
- When lower rack is removed, replace with bumpers in front.

## Top rack loading

The top rack is designed for cups, glasses and smaller items.

### Cup and glass load

- Place so open ends face down for cleaning and draining.
- **Load glasses in top rack only.** Bottom rack is not designed for glasses. Damage may occur.



- Place items in the rows **between** prongs. Placing them over the prongs can lead to breakage.
- Be sure lightweight items are held firmly in place.
- China, crystal and other delicate items must not touch each other during dishwasher operation. Damage may occur.

### Mixed load

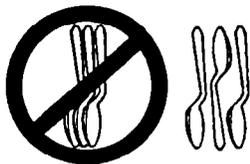
- Load plastic items **only in the top rack.** Only plastic items marked "Dishwasher Safe" are recommended. Plastic items can melt in the bottom rack.
- Load plastic items so the force of the spray does not move them during the cycle.

### Utensil load

- Small bowls, pans and other utensils can be placed in the top rack.

## Silverware basket loading

Load the silverware basket while in or out of the bottom rack. The loaded basket should be in the center front of the bottom rack.



Load forks and spoons so they don't nest together. Spray can not reach nested items.



Mix items in each section of the basket with some pointing up and some down. Small items—baby bottle caps, jar lids, etc.—can be put in any section.

## ⚠ WARNING

### Personal Injury Hazard

To avoid cuts from sharp items (knives, forks, skewers, etc.), make sure these items are put in point down.

Make sure sharp items (knives, forks, skewers, etc.) are put in point down.

## Adding Detergent

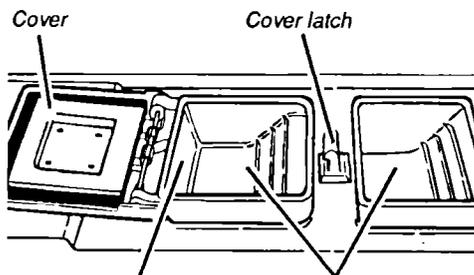
### What type of detergent to use

**Use automatic dishwasher detergent only.** Other detergents are too mild and much too sudsy to work in the dishwasher.

Different brands of dishwasher detergent have different amounts of phosphorus for softening water. If water is hard and phosphorus content is low (6.0% or less), you may need to use more detergent or use a brand with a higher phosphorus content (8.7% or higher).

Do not add detergent until you are ready to wash. **Fresh automatic dishwasher detergent is necessary for best washing results.** Store detergent tightly closed in a cool, dry place.

### The detergent dispenser



Use covered section alone for cycles with one wash

Use both sections for cycles with two washes

The detergent dispenser has one section with a cover and one without.

- Put detergent in both sections for cycles with two washes (see pages 3 and 4).
- Put detergent only in the covered section for cycles with one wash (see page 4).
- Push the cover down until it is latched.

Detergent in the open section falls into the dishwasher when the door is closed. The covered section opens automatically when the main wash starts.

**NOTE:** It is normal for cover to open partially when dispensing detergent. The cover will open fully when the door is opened.

### How much detergent to use

The amount of detergent to use depends on the hardness of your water. If too little is used, dishes won't be clean. However, if too much is used in soft water, glassware will begin to etch.

Find out your water's hardness by asking your local water department, water softener company or county extension agent.

- **HARD**—Fill 1 or both sections to top line if water hardness is 8 or more grains per gallon, or 136 or more parts per million.
- **MEDIUM**—Fill 1 or both sections to middle line if water hardness is 5 to 7 grains per gallon, or 85 to 119 parts per million.
- **SOFT**—Fill 1 or both sections to bottom line if water hardness is 0 to 4 grains per gallon, or 0 to 68 parts per million.

## Using Rinse Agent



Keep the rinse agent dispenser filled with a liquid rinse agent. **A rinse agent greatly improves the drying of dishes by helping water flow off of them during the last rinse.** A rinse agent also keeps water from forming droplets and drying as spots. A small amount of rinse agent is automatically released into the rinse water during the final rinse of each cycle.

**For best drying results, check the dispenser periodically to see if it needs refilling.** The center of the Fill Indicator Cap will be clear when dispenser needs refilling. An "E" will also be visible inside the dispenser when the cap is removed and the dispenser is empty.

The dispenser will hold 6 ounces of rinse agent. Under normal conditions, this will last about 3 months. You do not have to wait until the dispenser is empty to refill it, but do not overfill it.

Make sure the dishwasher door is fully open when filling the dispenser. Do not fill past the smallest opening in the lower part

of the dispenser. If you overfill, excess rinse agent can come out. This will not harm the dishwasher, but could cause over-sudsing. Clean up any spilled rinse agent with a damp cloth. Replace the Fill Indicator Cap and keep it tightly closed.

**NOTE:** Because your dishwasher is designed to use a liquid rinse agent, you do not need to use a solid or bar-type rinse agent.

## Dishwasher Care And Cleaning

### Exterior

Regular use of a soft, damp cloth or sponge and a mild detergent is all that is necessary, in most cases, to keep the outside of your dishwasher nice looking and clean.

### Interior

Hard water minerals may cause a white film to build up on the inside surfaces, especially just beneath the door area. To clean interior:

1. Apply powdered dishwasher detergent to a damp sponge to make a paste.  
or

2. Use liquid automatic dishwasher detergent and clean with damp sponge.

Wear rubber gloves. **Do not** use any type of cleanser other than dishwasher detergent because it may cause foaming or sudsing.

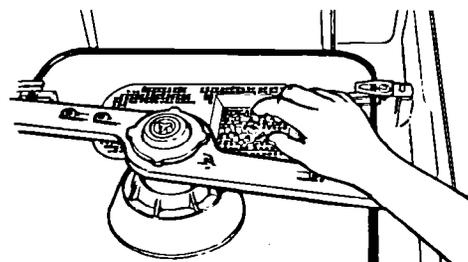
### Filter screen

The filter system requires periodic cleaning as needed. To clean screen:

## ⚠ WARNING

### Personal Injury Hazard

Wait at least 20 minutes after a cycle for the heating element to cool down. Failure to do so can result in burn injuries.



1. Unload and slide the bottom rack forward: (Remove bottom rack if necessary to reach filter screen.)
2. Remove collected particles from the screen with your fingers or paper towel.
3. Return the bottom rack to original position.

## For Best Results

### Hot water is a must

For best cleaning and drying results, water should be at least 140°F (60°C). To have a reliable hot water supply:

Maintain 140°F (60°C) water supply at central water heater. To check water temperature, turn on hot water faucet nearest the dishwasher. Let water run until it is as hot as possible, then check with a candy or meat thermometer. If the temperature at the faucet is below 135°F (57°C), have a qualified person raise the water heater thermostat setting.

### Quiet operating tips

To avoid thumping and clattering noises during operation:

- Make sure lightweight load items are secured in the rack.
- Make sure pot lids and handles, pizza pans, cookie sheets, etc. do not touch interior walls or interfere with the spray arm's rotation or cover the spray tower.
- Load dishes so they don't touch one another.

**NOTE:** Keep sink drain plugs inserted during dishwasher operation to prevent noise transfer through drains.

### Special tips on dishwasher use

Remember, use your dishwasher only for the job it was designed to do. Some items are not dishwasher safe or may require special care. Read these special tips for the following items:

**Aluminum:** Aluminum loses its bright, shiny appearance and darkens in color due to minerals in the water and the alkalinity of the dishwasher detergent. Colored aluminum may fade.

**TIPS:** If washed in the dishwasher avoid placing directly in front of detergent dispenser where it could be sprinkled with undissolved detergent, causing spotting, pitting, and discoloration. Follow utensil manufacturer's cleaning instructions.

**China:** Check with manufacturer for cleaning instructions. Hand-painted, metal-trimmed, and antique china fade due to high water temperatures and alkaline detergent solution in the dishwasher.

**NOTE:** Delicate, antique items should not be washed in the dishwasher.

**TIPS:** Load china carefully. Do not allow pieces to touch each other. Test one piece by washing it daily in the dishwasher for several weeks. Then compare it with the rest of the set to see if colors have changed.

**Crystal and decorative glasses:** Crystal can break from sudden exposure to high water temperature. Metal trim and colorful decoration on glass will fade in time when washed in the dishwasher.

**NOTE:** Delicate, antique items should not be washed in the dishwasher.

**TIPS:** Load crystal carefully in top rack only. Be sure to load a few larger items in the bottom rack to reduce amount of force of water spray reaching glassware from lower spray arm. Use the shortest cycle.

**Flatware:** Salty and acidic foods may tarnish silver and stainless flatware if allowed to remain on the utensils. A film may form on sterling silver and silver plate items washed in a dishwasher. This film is caused by a reaction of silver with chlorine in the detergent. **Gold flatware is not dishwasher safe.** The adhesive used in some flatware with hollow handles is not heat resistant, causing the handles to come off in the dishwasher. Wash by hand.

**TIPS:** Rinse flatware as soon as possible, especially if it is not to be washed right away. Dishwasher detergent may remove antique finishes. Wash by hand. Tarnish and film build-up can be removed with silver polish.

**Cast iron utensils:** The seasoned finish will be removed in the dishwasher. Rusting will result.

**TIPS:** Wash by hand. To re-season, coat with unsalted fat and heat in a slow oven for an hour or two.

**Plastics:** Many plastics will have "Dishwasher Safe" written on them. Some plastics are heat sensitive and may melt or warp.

**TIPS:** If in doubt, try one piece. Place in upper rack only. Drying without heat provides additional protection.

**Non-stick finish utensils:** Most can be washed in the dishwasher.

**TIPS:** Follow manufacturer's instructions.

**Wood:** Many wooden items will crack and warp or lose their finish.

**TIPS:** Do not wash cutting boards, wooden salad bowls or knives with wooden handles in the dishwasher.

**Pewter or pewter-like materials:** May streak, discolor, and pit.

**TIPS:** To keep pewter at its very best, hand wash with mild detergent.

## Common Dishwashing Problems

PROBLEM	CAUSED BY	SOLUTION
Spotting and filming	Hard water	<p>Fill detergent dispensers to capacity. Use dishwasher detergent with highest available phosphorus content. May be necessary to install water softener. To remove spots and film, try a vinegar rinse ...</p> <ol style="list-style-type: none"> <li>1. Wash and rinse load as usual. Dry without heat.</li> <li>2. Remove all metal items.</li> <li>3. Put 2 cups (500 mL) white vinegar in a container on the bottom rack.</li> <li>4. Run dishwasher through a complete washing cycle.</li> </ol>
	Water is not hot enough	<p>Water temperature should be at least 140°F (60°C). Set water heater thermostat to a higher setting. Run water at sink until hot before starting.</p>
	Not enough detergent, or improper detergent	<p>Use more dishwasher detergent. Use detergent with highest available phosphorus content ... especially with hard water.</p>
	"Old" detergent	<p>Use only fresh dishwasher detergent. Store tightly closed container in cool, dry place. Discard old detergent. Do not fill dispensers until ready to start dishwasher.</p>
	Improper loading	<p>Make sure dishes and glassware are loaded so spray reaches all surfaces and items drain properly. Do not overload. Do not nest items. Make sure large items do not block spray from reaching detergent dispensers.</p>
	No rinse agent	<p>Does the rinse agent dispenser need filling? See instructions on page 5.</p>
	Drying without heat	<p>Drying without heat may result in some spotting of glasses and silver. Dry with heat.</p>
Small particles deposited on items	Spray arm not rotating freely	<p>Check spray arm to make sure it turns freely after loading. Be sure a utensil has not prevented it from turning.</p>

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PROBLEM	CAUSED BY	SOLUTION
<p><b>Small particles deposited on items (continued)</b></p>	<p>"Old" detergent</p> <p>Not enough detergent, or improper detergent</p> <p>Water is not hot enough</p> <p>Water pressure may be low, dishwasher is not filling properly</p>	<p>Use only fresh dishwasher detergent. Store tightly closed container in cool, dry place. Discard old detergent. Do not fill dispensers until ready to start dishwasher.</p> <p>Use more dishwasher detergent. Use detergent with highest available phosphorus content ... especially with hard water.</p> <p>Water temperature should be at least 140°F (60°C). Set water heater thermostat to a higher setting. Run water at sink until hot before starting.</p> <p>If water pressure is low, do not use water for other purposes while dishwasher is running (to assure correct fills).</p>
<p><b>Dishes not dry</b></p>	<p>No rinse agent</p> <p>Water is not hot enough</p> <p>Improper loading</p> <p>Drying without heat</p>	<p>Does the rinse agent dispenser need filling? See instructions on page 5.</p> <p>Water temperature should be at least 140°F (60°C). Set water heater thermostat to a higher setting. Run water at sink until hot before starting.</p> <p>Make sure dishes and glassware are loaded so spray reaches all surfaces and items drain properly. Do not overload. Do not nest items.</p> <p>Allow more time when drying without heat, or dry with heat. Plastic items may need towel drying.</p>
<p><b>Black marks on dishes</b></p>	<p>Aluminum utensils rubbing against items during washing</p>	<p>Use care in loading aluminum utensils, especially any lightweight foil container. Place so they do not touch dishes. Remove black marks with plastic scouring pad and a mild abrasive cleanser.</p>
<p><b>Chipping or breaking glassware</b></p>	<p>Improper loading</p>	<p>Do not overload. Load glasses in the top rack only. Load between prongs, not over them. Glasses loaded over prongs will not be supported and may chip or break.</p>
<p><b>Dishes not washing clean</b></p>	<p>Water is not hot enough</p> <p>Improper loading</p>	<p>Water temperature should be at least 140°F (60°C). Set water heater thermostat to a higher setting. Run water at sink until hot before starting.</p> <p>Make sure dishes and glassware are loaded so spray reaches all surfaces and items drain properly. Do not overload. Do not nest items.</p> <p>Make sure large items do not block spray from reaching detergent dispensers.</p>

PROBLEM	CAUSED BY	SOLUTION
<p>Dishes not washing clean (continued)</p>	<p>Spray arm not rotating freely</p> <p>Not enough detergent or improper detergent</p> <p>"Old" detergent</p> <p>Water pressure may be low, dishwasher is not filling properly</p>	<p>Check spray arm to make sure it turns freely after loading. Be sure a utensil has not prevented it from turning.</p> <p>Use more dishwasher detergent. Use detergent with highest available phosphorus content ... especially with hard water.</p> <p>Use only fresh dishwasher detergent. Store tightly closed container in cool, dry place. Discard old detergent. Do not fill dispensers until ready to start dishwasher.</p> <p>If water pressure is low, do not use water for other purposes while dishwasher is running (to assure correct fills).</p>
<p>Cloudy film on glassware, etching—permanent corrosion</p>	<p>Too much detergent in soft water</p> <p>Inadequate rinsing</p>	<p>Check for rainbow hue on glasses. A rainbow hue is the first sign of etching (corrosion of glass). Reduce the amount of dishwasher detergent. Use a detergent with a lower phosphorus content.</p> <p>If water pressure is low do not use water for other purposes while dishwasher is running (to assure correct water fills). Make sure dishes and glassware are loaded properly to assure adequate rinsing and draining. Do not overload.</p>
<p>Dishes &amp; interior of dishwasher yellow or brown</p>	<p>Iron or manganese in water</p>	<p>Temporary remedy:</p> <ol style="list-style-type: none"> <li>1. Set empty dishwasher for a "one wash" cycle.</li> <li>2. Start dishwasher and unlatch door to stop it when it has filled for the wash part of the cycle.</li> <li>3. Add 1/4 to 1/2 cup (120 to 240 mL) of citric acid crystals (usually available in drugstores).</li> <li>4. Close and latch door to complete cycle.</li> </ol> <p><b>Permanent solution:</b> Install an iron or manganese filter to home water supply.</p>
<p>Rust spots on stainless steel -OR- Dark spots on flatware—stainless steel, silver plate, or sterling</p>	<p>Allowing salty or acidic foods such as mayonnaise, vinegar, fruit juices, salad dressings or milk products to remain on flatware.</p> <p>Undissolved detergent coming in contact with flatware</p>	<p>Rinse flatware that is to stand for several hours before washing. Clean stained items with silver polish and re-wash. Do not put stainless steel and silver flatware in the same silverware basket compartment. Direct contact between these metals can cause permanent damage to the silver.</p> <p>Remove spots with silver polish. Avoid spilling concentrated detergent on wet flatware.</p>

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PROBLEM	CAUSED BY	SOLUTION
<b>Bronze tarnish on silverplate</b>	Silverplate is worn off. Exposed base metal takes on a bronzed hue	Remove tarnish with silver polish. Have silver replated.
<b>Water left in bottom of dishwasher</b>	<p>Dishwasher cycle not completed</p> <p>Clogged drain air gap</p>	<p>Allow dishwasher to complete cycle. Some remaining water is normal and keeps seals from drying.</p> <p>Some plumbing codes require use of a drain air gap between an undercounter dishwasher and the drain system of the house. The air gap is usually located above the sink or on the top of the counter near the dishwasher to prevent the possibility of water backing up from the drain into the dishwasher due to a plugged drain. The drain air gap is NOT a part of the dishwasher and is NOT covered by the dishwasher warranty. The drain air gap should be kept clean to ensure proper draining of the dishwasher.</p>

## Before You Call For Service

If you are having an operating problem, check the list to see what the cause might be before you call for assistance.

OPERATING PROBLEM	CHECK IF	WHAT TO DO
<b>Dishwasher will not run, or stops during a cycle</b>	<ul style="list-style-type: none"> <li>• Dishwasher is properly connected to a live circuit with the proper voltage.</li> <li>• Fuse has blown or circuit breaker has tripped.</li> <li>• Water is turned on.</li> <li>• Motor has stopped because of an overload.</li> <li>• Door is tightly closed and securely latched.</li> <li>• Cycle has been correctly set.</li> </ul>	<ul style="list-style-type: none"> <li>• Contact qualified service technician to reconnect dishwasher to electrical supply. (See Installation Instructions.)</li> <li>• Replace fuse or reset circuit breaker.</li> <li>• Open water valve to dishwasher.</li> <li>• Motor will automatically reset itself within a few minutes. If the motor does not start, call for service.</li> <li>• Press firmly against door.</li> <li>• Reset cycle following steps on pages 3 and/or 4.</li> </ul>
<b>Dishwasher won't fill</b>	<ul style="list-style-type: none"> <li>• Overfill protector is stuck in "up" position.</li> </ul>	<ul style="list-style-type: none"> <li>• Overfill protector should move up and down freely. Press down to release.</li> </ul>
<b>Water remains in the dishwasher</b>	<ul style="list-style-type: none"> <li>• The cycle has completed.</li> <li>• Drain air gap is clogged.</li> </ul>	<ul style="list-style-type: none"> <li>• Wait for the cycle to finish. A small amount of remaining water is normal.</li> <li>• Clean drain air gap. (See Installation Instructions.)</li> </ul>
<b>Detergent remains in the covered detergent cup</b>	<ul style="list-style-type: none"> <li>• The bottom rack is in properly.</li> <li>• The dishwasher detergent is fresh and dry without lumps.</li> <li>• The cycle has completed.</li> </ul>	<ul style="list-style-type: none"> <li>• Place the rack with the rack bumpers at the front.</li> <li>• Replace old detergent with fresh.</li> <li>• Wait for the cycle to finish.</li> </ul>
<b>White residue appears on front of access panel</b>	<ul style="list-style-type: none"> <li>• Too much detergent is being used.</li> <li>• Your liquid detergent is developing excess foam and building up on exterior of access panel.</li> </ul>	<ul style="list-style-type: none"> <li>• See page 5 for recommended amounts of detergent.</li> <li>• Try a different brand to reduce foaming and eliminate build-up.</li> </ul>
<b>Dishes aren't as dry as you expected</b>	<ul style="list-style-type: none"> <li>• Rinse agent dispenser is empty.</li> </ul>	<ul style="list-style-type: none"> <li>• Fill rinse agent dispenser. Using a rinse agent greatly improves drying. (See page 5.)</li> </ul>

## If You Need Assistance, Service Or Replacement Parts

If you need service, first see the "Before You Call For Service" section of this book. After checking "Before You Call For Service," additional help can be found by calling our Consumer Assistance Center telephone number.

### 1. If you need assistance\*...

Call Whirlpool Consumer Assistance Center telephone number. Dial free from anywhere in the U.S.:

**1-800-253-1301**

and talk with one of our trained consultants. The consultant can instruct you in how to obtain satisfactory operation from your appliance or, if service is necessary, recommend a qualified service company in your area.

If you prefer, write to:

Mr. Donald Skinner  
Director of Consumer Relations  
Whirlpool Corporation  
2000 M-63  
Benton Harbor, MI 49022

Please include a daytime phone number in your correspondence.

### 2. If you need service\*...



Whirlpool has a nationwide network of authorized Whirlpool<sup>SM</sup> service companies. Whirlpool service technicians are trained to fulfill the product warranty and provide after-warranty service, anywhere in the United States. To locate the authorized Whirlpool service company in your area, call our Consumer Assistance Center telephone number (see Step 1) or look in your telephone directory Yellow Pages under:

APPLIANCES - HOUSEHOLD -  
MAJOR - SERVICE & REPAIR  
OR  
ELECTRICAL APPLIANCES -  
MAJOR - REPAIRING & PARTS  
OR  
WASHING MACHINES, DRYERS  
& IRONERS - SERVICING  
WHIRLPOOL APPLIANCES  
AUTHORIZED WHIRLPOOL SERVICE  
SERVICE COMPANIES  
XYZ SERVICE CO  
123 Maple.....999-9999

### 3. If you need FSP<sup>®</sup> replacement parts\*...

FSP is a registered trademark of Whirlpool Corporation for quality parts. Look for this symbol of quality whenever you need a replacement part for your Estate appliance. FSP replacement parts will fit right and work

right, because they are made to the same exacting specifications used to build every new Estate appliance.

To locate FSP replacement parts in your area, refer to Step 2 above or call the Whirlpool Consumer Assistance Center number in Step 1.

### 4. If you are not satisfied with how the problem was solved\*...

- Contact the Major Appliance Consumer Action Panel (MACAP). MACAP is a group of independent consumer experts that voices consumer views at the highest levels of the major appliance industry.

- Contact MACAP only when the dealer, authorized servicer or Whirlpool have failed to resolve your problem.

Major Appliance Consumer Action Panel  
20 North Wacker Drive  
Chicago, IL 60606

- MACAP will in turn inform us of your action.

\*When requesting assistance, please provide: model number, serial number, date of purchase, and a complete description of the problem. This information is needed in order to better respond to your request.

## ESTATE<sup>®</sup> Dishwasher Warranty

DWE15

LENGTH OF WARRANTY	WHIRLPOOL WILL PAY FOR
<b>FULL ONE-YEAR WARRANTY</b> From Date of Purchase	FSP <sup>®</sup> replacement parts and repair labor to correct defects in materials or workmanship. Service must be provided by an authorized Whirlpool <sup>SM</sup> service company.
<b>LIMITED NINE-YEAR WARRANTY</b> Second Through Tenth Year From Date of Purchase	FSP replacement of the DURAPERM <sup>™</sup> tub and/or inner door should they fail to contain water due to defective materials or workmanship.
WHIRLPOOL WILL NOT PAY FOR	
<p><b>A.</b> Service calls to:</p> <ol style="list-style-type: none"> <li>1. Correct the installation of the dishwasher.</li> <li>2. Instruct you how to use the dishwasher.</li> <li>3. Replace house fuses or correct house wiring or plumbing.</li> </ol> <p><b>B.</b> Repairs when dishwasher is used in other than normal, single-family household use.</p> <p><b>C.</b> Pickup and delivery. This product is designed to be repaired in the home.</p> <p><b>D.</b> Damage to dishwasher caused by accident, misuse, fire, flood, acts of God or use of products not approved by Whirlpool.</p> <p><b>E.</b> Any labor costs during limited warranties.</p> <p><b>F.</b> Repairs to parts or systems caused by unauthorized modifications made to the appliance.</p>	

WHIRLPOOL CORPORATION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages so this limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Outside the United States, a different warranty may apply. For details, please contact your authorized Whirlpool distributor or military exchange.

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Part No. 3369694 Rev. A

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