

# FACT SHEET

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## DECISIONS ABOUT DISHWASHERS

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Dishwashers are one of the most popular major appliances. This helpful cleanup appliance has many advantages. It provides relief from a monotonous, repetitive and time-consuming daily task. A dishwasher saves water, using an average of only 10 to 15 gallons per load. Using a water temperature of at least 140 degrees is more sanitary than washing dishes by hand. Less breakage occurs because dishes are handled less. Kitchen clutter is reduced by stashing dirty dishes out of sight.

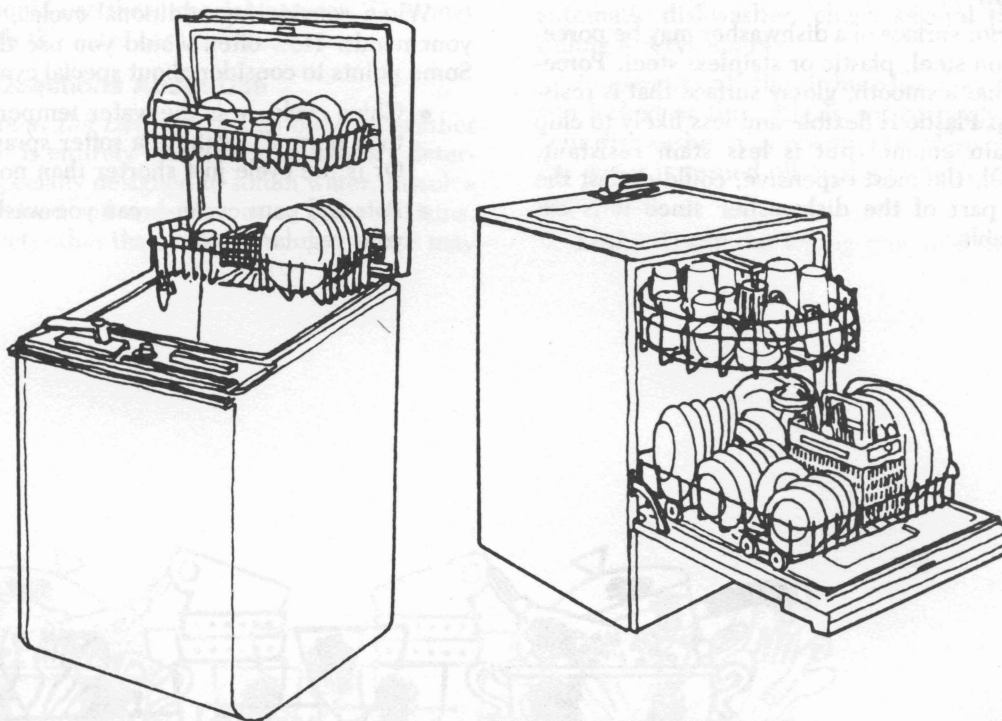
Before buying a dishwasher, consider the following points.

### The Model for You

Many dishwasher models and types are on the market. Consider your family size, needs and wants in selecting the model for you. Generally, dishwashers come in two styles — portable and built-in. No special plumbing is needed for portables, but built-ins require separate drain and water connections.

*Portables.* Portables are rolled to the sink and attached to the hot water faucet with hoses. Helpful features for all portables include:

- A water take-off to make hot or cold water available when dishwasher is connected



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- A cord in a convenient length with a three prong grounding plug for safety
- Casters to allow easy movement

Portable dishwashers are available in both top-opening and front-opening designs.

Requiring the smallest overall storage space and the least space for loading and unloading, top-opening portables are convenient in small kitchens with little room for doors or racks to pull out. Bending may be required for access to the bottom of the dishwasher. The loading capacity may be less than in front-loading models.

Many front-opening portables are designed to be converted to built-ins if the family moves or the kitchen is remodeled. Because it is loaded from the front, more space is required than for top-loading dishwashers. Rack design tends to permit loading more items than in top-loading portables.

Generally, portable dishwashers are easily moved, ready to work without plumbing installation and practical for renters.

*Built-in Models.* Generally the most convenient, built-in dishwashers operate without further connecting and disconnecting to the water source once installed. Built-ins may be quieter than portables because surrounding cabinets help muffle the sounds of water action.

## Construction

The interior surface of a dishwasher may be porcelain enamel on steel, plastic or stainless steel. Porcelain enamel has a smooth, glossy surface that is resistant to stains. Plastic is flexible and less likely to chip than porcelain enamel but is less stain resistant. Stainless steel, the most expensive, could outlast the mechanical part of the dishwasher since it is extremely durable.

All dishwashers have some arrangement of "arms" to wash the dishes. Models with several arms may not necessarily provide better washing action than those with only one arm.

Some models are noisier than others. If possible, ask a dealer for a demonstration, or ask about the insulation materials. A few models claim to be "sound-proof." If noise is a big consideration for you, question the dealer or manufacturer.

## Cycles

All dishwashers clean in much the same way. You load the machine, add detergent and select a cycle. Once the cycle is selected, the dishwasher does the rest.

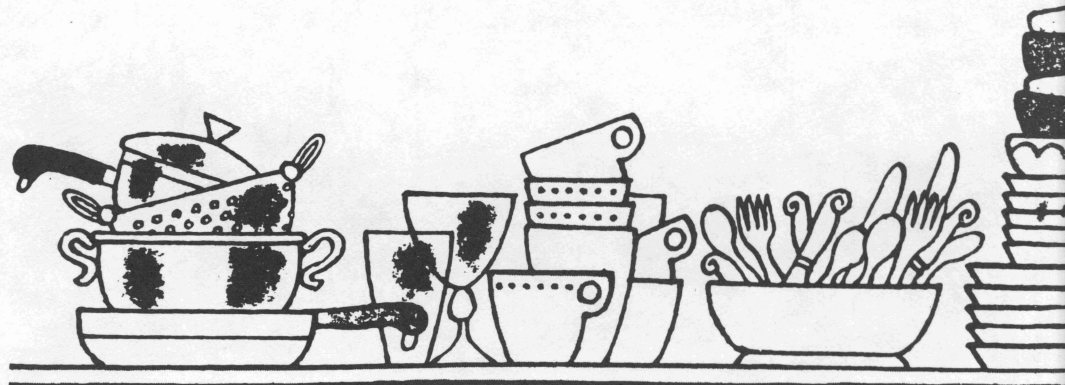
As you shop for a dishwasher, be cycle wise. Before selecting the model for you, be sure it offers cycles that will be genuinely useful. Many customers, dazzled by a vast array of push buttons, spend extra money on features they seldom use.

A regular or normal wash cycle will spray dishes with two detergent washes and several rinses and then dry the dishes. This cycle is used most often.

You may find a rinse and hold cycle convenient — especially if you will run the dishwasher infrequently. This cycle rinses light soil from the dishes and keeps them moist until there is a full load for a regular wash. If you do not have this cycle and do not run the dishwasher soon after eating, you can simply rinse your dishes before loading them in the dishwasher.

When considering additional cycles, think about your needs. How often would you use these cycles? Some points to consider about special cycles include:

- China cycle — is the water temperature lower than normal? Is there a softer spraying action? Or is the cycle just shorter than normal?
- Pots and pans cycle — can you wash them with your regular cycle?





- A sanitizing cycle — does the water actually get hotter than for a normal cycle? Regular cycles have been shown effective in removing germs and bacteria.

### Other Features to Consider

Some models feature energy-saving drying cycles that eliminate the use of heat during the drying cycle. This feature conserves a considerable amount of energy.

Some dishwashers have a soft food disposer to grind food scraps and eliminate scraping and rinsing the dishes before they are washed. Other dishwashers have a filter which catches food particles. The food is flushed away, or with some models you must clean the filter yourself.

Some models have automatic rinse-aid dispensers to condition the water in the final rinse; the rinsing aid works to prevent spots and film. If you have hard water, or water with a high mineral content, this feature may be quite useful. If your dishwasher is not equipped with a rinse-aid dispenser, you can purchase a solid form of rinse aid.

Some dishwashers come with a cutting board top. Some of these cutting surfaces are reversible so the used side can be kept out of sight. Evaluate the usefulness and ease of cleaning of these boards. Some dishwashers feature a heated serving panel on top as well.

Before you purchase a dishwasher, consider how often you would use these special features. They may not be worth the extra cost to you.

### Common Questions About Use

*What About the Detergent?* Use only dishwasher detergent; it is entirely different from laundry detergent. It is specially designed to soften water, dissolve and remove food soil and prevent or remove stains. Using products other than dishwasher detergents may

cause poor cleaning results, too much foam and possible appliance damage. Add the detergent immediately prior to using the dishwasher. If allowed to remain in the dispenser very long, it may lump or cake and fail to dissolve. Using dishwasher detergent for hand washing is not recommended because of its high alkaline content.

*What's the Best Way to Load?* Follow manufacturer's directions for loading. Alternate large and small flat dishes, invert bowls, cups and glasses so water will drain. Place knives and other silverware with points down for safety.

*What Should Not Go in a Dishwasher?* Wash hand-painted china, soft plastic, fine crystal, anodized aluminum, bone or hollow-handled knives and wooden or cast iron items by hand. Many plastic items are dishwasher-proof, but some plastic storage containers may lose their shape when repeatedly exposed to high temperatures.

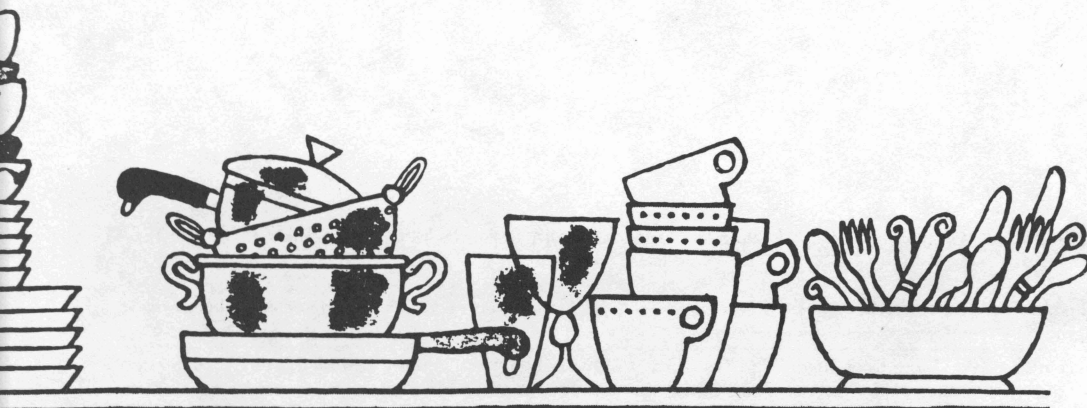
*Will Flatware Tarnish or be Damaged?* To keep flatware looking its best, avoid spilling detergent directly on flatware or aluminum utensils. Don't let flatware cluster when overloaded. Rinse flatware before putting it into the machine if it is to stand for several hours before washing.

### Problems

Dishwashers cause the fewest complaints of any major home appliance. When problems occur with an automatic dishwasher, check several things before calling a serviceperson.

*Inoperative.* If the dishwasher door is not closed and locked or the cycle is not correctly set to start, your dishwasher may not operate. Also check to see if the water is turned off or if a portable dishwasher is unplugged.

*Leaks.* Using the wrong type of detergent or too



much detergent may cause leaks. Other possible causes include a kink or twist in the drain hose for portables, a damaged door seal or a clogged filter screen. A dishwasher that is not level may also cause leaks.

*Spots and Film.* Spotting can be caused by low water temperature, low water pressure, hard water or use of too much detergent. Check the water temperature to be sure it is at least 140 degrees. If low water pressure seems to be the problem, use the machine when water is not in use elsewhere in the home. Excessive mineral deposits from hard water can be avoided by using a water softener and a rinse aid. Check the quantity of detergent recommended, and make sure the dispenser is not moist before being filled.

*Etching.* If glassware shows an iridescent or rainbow hue, it's an early sign of etching. Check the amount of detergent used, the water pressure and the temperature, as discussed under the topic *Spots and Film*.

*Dirty Dishes.* If dishes are still dirty after washing, look for the same causes as for spots and film. Inadequate scraping or rinsing, improper loading or a filter in need of cleaning could also be causes.

*Wet Dishes.* Check for controls set on a non-dry cycle, water that is not hot enough or improper load-

ing. If dishes are left in the dishwasher overnight, moisture may resettle; leave the door open slightly to solve this problem. Also check to see if the rinse-aid dispenser needs refilling.

If other problems occur, call a reputable serviceperson or authorized dealer.

### Energy Tips for Efficient Use

- Wash full loads. Instead of washing a small number of dishes, wait for a full load if possible. Do as little pre-rinsing as necessary.
- Follow the manufacturer's instructions for loading to prevent poorly cleaned dishes that must be re-washed. Avoid placing large items where they might shield smaller items from the washing action.
- Maintain a water temperature of at least 140 degrees. Cooler water will not clean dishes as efficiently.
- Select a model with a cycle that omits the use of heat during the drying cycle or stop the dishwasher yourself to eliminate the drying period. Leave the door slightly ajar to allow the moisture to escape.
- Use the shortest cycle that will clean your dishes.

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