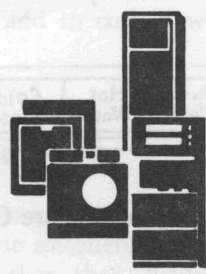


FACT SHEET



Today's automated modern laundry equipment, now a major time and energy saver, has revolutionized home laundry routines. But in considering the degree of automation to buy, the added cost of more automatic features should be balanced against the time and convenience gained.

Basic Types of Washers

When shopping for washers, the buyer must decide first whether a top loader or a front loader is more desirable.

Top loaders. In a top-loading washer, laundry is placed around an upright agitator in the center of the tub. The tub is stationary, and an agitator with finlike extensions circulates the water and detergent throughout the clothes to produce washing action.

WASHERS

Linda McCormack*

The top loader can be loaded and unloaded from a standing position, can use both high- or low-sudsing detergents, provides two speeds to adjust to fabric types, requires no extra floor space for the door to open and usually offers a greater load capacity than the front loader. Articles may be put in or removed at any point of the cycle without spilling water, but caution must be taken in keeping the load balanced.

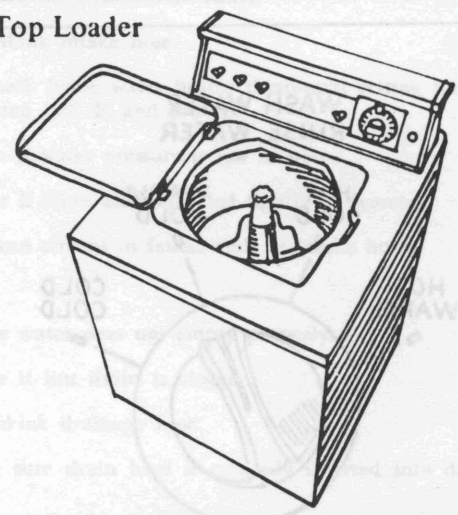
Front loaders. In a front-loading washer, baffle extensions in a rotating tub help tumble and lift the clothes to produce the washing action.

Front loaders usually use less water and detergent since high-sudsing detergents interfere with the washing action, but they usually offer only one wash and spin speed. Tops of the front loaders can be used as work surfaces, but clothes added during the cycle can cause water spillage or unbalance the load.

Front Loader



Top Loader



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Construction Features

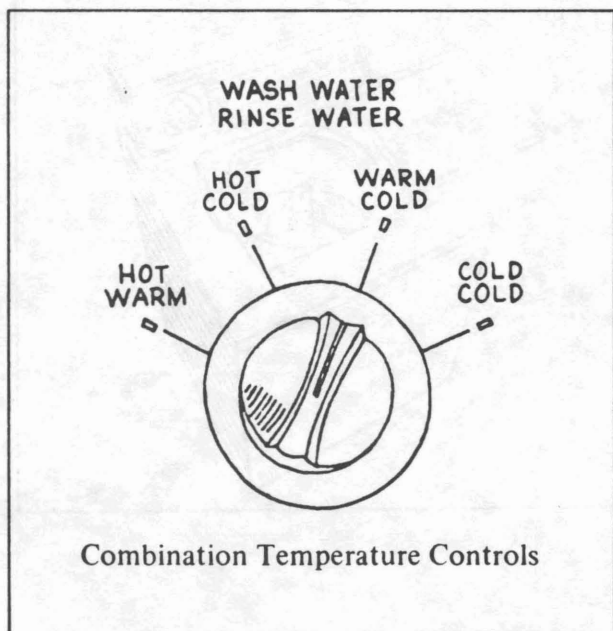
Quality, durability and safety of construction are important in a washer selection. Because of exposure to water, high humidity and laundry chemicals, a buyer should choose smooth and durable construction materials that resist chipping and rusting. Exteriors are usually porcelain enamel, with porcelain-on-steel lids and interiors.

- Since washers are available that handle up to 20-pound loads of dry wash, check the product hang-tag for the maximum load desired, or note the water-level indicators on the controls or examine the tub to see if the washer will be large enough to handle normal loads.
- Also, check controls to select those that are easy to read and operate.
- A washer should have a testing laboratory seal such as that issued by Underwriters' Laboratories to assure safe electrical and mechanical construction. Other added safety features are a lid cutoff switch and an unbalanced load switch.

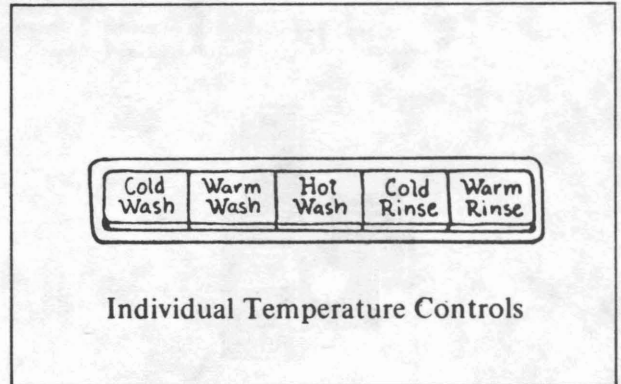
Selective Controls

Selecting a washer with controls that will provide the desired automation within budget limitations is a basic key to buying. Washers with maximum automation are the most expensive.

Water temperature. Most washers provide three water temperatures: hot, warm and cold, with some having combination or individual wash and rinse



temperature controls. The individual control is the most flexible type.



Water fill. The two methods for water fill are (1) pressure (meter) fill and (2) time fill.

Pressure Fill

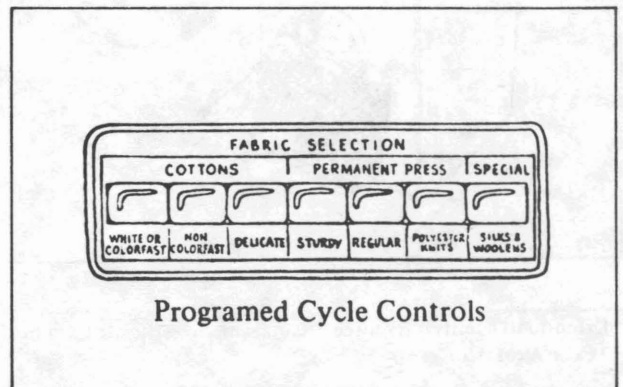
A mechanism allows water to run until the selected level is reached. If water pressure in your home is low, it is wise to buy this type washer.

Time Fill

Water runs for a predetermined period regardless of level reached. If water pressure is low, manual fill operation may be necessary.

It is wise to select a washer that permits a selection of water levels to match the size of the load. Though initial cost may be higher, savings are effected on water and laundry aids used, and clothes will look better and last longer.

Wash and rinse cycles. Washers provide a variety of wash and rinse cycles which may be selected manually or programed through controls labeled according to types of wash loads. In a regular cycle, clothes are washed for a period of 10-14 minutes, and water is then extracted through holes in a perforated tub or over the top in solid tubs. Clothes are rinsed by all or some combination of three types of rinses: spray, deep and over-



flow. This is followed by a spin cycle which extracts most of the water to allow for easier drying.

Some washers provide special cycles for permanent-press and delicate and knit fabrics; and for heavily soiled clothes, presoak and prewash cycles. These features add to cost of washers.

Special Features

Special dispensers allow you to add detergent, bleach and fabric softeners at the beginning of the cycle. The washer then dispenses these at the appropriate time. A mini-wash cycle using a basket which fits inside the larger tub or with controlled-water level permits smaller loads. Lint filters collect and keep lint from redepositing on the clothes. Other features may include leveling feet to insure proper balance, interior lights and suds-saver cycle allowing reuse of water and detergent.

Installation

Washers should be installed in accordance with local plumbing and electrical codes. Required are hot and cold water under pressure, a drain connection and a leveling device for proper spin balance of the tub. Washers should be plugged into a grounded, 3-hole outlet on a separate 15- or 20-ampere circuit.

Washer Care

For proper washer care, check for lint collected in tub and filter, and clean them frequently. Wiping up spills immediately will prolong the life of the exterior finish. Wash the outside with warm soapy water, but avoid using abrasive cleaners on porcelain. Always rinse and dry surfaces.

To keep machine in balance, check the leveling occasionally. Overloading a machine shortens its life considerably.

Washers exposed to weather can cause the water in pipes to freeze in winter. Manufacturers recommend burning a light bulb underneath washers in garages or on porches. Since hoses are usually made of rubber and can burst under continual pressure,

turn off water controls on the washer after each use.

The average life expectancy of a washer is 9 to 11 years, but proper care will insure a continued good appearance and longer performance.

Before Calling the Repairman

Forty percent of all service calls are about simple matters which you can check and correct without calling a serviceman, but machines with many controls require more service than simple machines. Consider ease of servicing when you buy your washer. Some machines have front and/or removable service panels that permit quick access to motors and pumps. Most washers have permanently lubricated motors.

If washer won't run:

- Fully depress control button or completely turn dial.
- Firmly insert electric plug into outlet.
- See if fuse is blown or circuit breaker tripped.
- Balance load.
- Decrease load in tub.

If you are not getting enough water or enough hot water:

- See that hoses are attached to right faucets.
- Turn both faucets on fully.
- Unkink intake hose.
- Check home water heater thermostat setting for level between 140° F. and 160° F.
- See if water pressure is low in house.
- See if hoses are connected tightly to faucets.
- Clean screens in faucet ends of intake hoses.

If the water does not empty properly:

- See if lint drain is clogged.
- Unkink drainage hose.
- Be sure drain hose is correctly inserted into drain pipe.

If the washer won't spin:

- Be sure lid and door are closed.
- Rearrange clothes if load is unbalanced.

Energy Tips for Efficient Use

Energy conservation techniques for clothes washers are closely related to sound use practices. Read the use and care manual provided for specific details.

The motor of a clothes washer uses a small amount of energy. However, the total energy used to wash clothes increases sharply when the water is heated. For the average household, water heating accounts for 15 percent of the total energy bill; a considerable portion of this is used for washing clothes. You can save energy and dollars by using an efficient machine.

Front-opening, rotating-cylinder washers use less water than top-opening, agitator washers. Top-opening washers use from 12 gallons (45 liters) of water to approximately 25 gallons (95 liters) each time they fill, depending on the size of the washer. If possible, adjust the water level to the size of the clothes load.

Efficient water-extraction saves energy too. The more water the washer spins out, the less the dryer has to work.

A "suds-saver" feature is available to allow the user to save and re-use the wash water. This is advantageous in areas having water shortages.

Locate washers near water heater to minimize heat loss in pipes. Use a low water temperature for the washing cycle that will clean satisfactorily. Cold and medium water temperature settings vary with the season. In the winter, the temperature of cold water may be 40 degrees F. (27 degrees C.) or below. More cleaning occurs in hot water than in warm or cold. Laboratory studies show that above 80 degrees F. (27 degrees C.) the increase in cleaning with higher temperatures is

small. Below 80 degrees F. (27 degrees C.), cleaning effectiveness drops. You may wish to use temperatures well above 80 degrees F. (27 degrees C.) for clothes with a high bacteria count (diapers and clothing or linens of family members with infectious illnesses) or for those heavily soiled. If cool water is used for heavily soiled clothes, you may need to pre-soak them and use extra detergent. Cold water should be used for rinsing. The temperature of rinse water has no effect on cleaning.

Check the owner's manual for instructions on maintenance such as cleaning lint filters, caring for motor, and checking belt tightness.

Follow good washing procedures to avoid double washing:

- Sort by color and type of fabric to avoid linting mixed loads.
- Pretreat stains and heavily soiled areas.
- Don't overload—items fit loosely in empty tub.
- Adjust washing time to degree of soil.

References

Energy Efficiency and Home Appliances: Save Energy, Save Dollars. Cooperative Extension. New York State. Information Bulletin 125, 1977.

"Washing Machines." *Consumer Reports*. Vol. 43, No. 10. October 1978.

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