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**Service in
ACTION****Electric blenders: selection,
use and care**Joann Hallaway¹**Quick Facts**

A blender is a versatile appliance; it is available as a separate appliance or an attachment to a food preparation center.

Basic features of a blender should include sturdy, rustproof blades; easy-to-grip handle; and a container with a two-piece cover and pouring lip.

A blender should have the Underwriters' Laboratory Certification Seal (UL) on the nameplate to indicate an electrically safe design.

Take time to learn how to safely use and care for a blender appliance.



will it be used for, and how frequently will it be used for these tasks? Will it be used frequently enough to justify the space and cleaning it needs?

Is an electrical outlet available near the place where it will be used? Will adding a blender overload the circuit?

Selection

The first factor to consider when purchasing a blender is type—a separate appliance or an attachment to a food preparation center. A separate appliance can be a good choice if: only a few of the attachments to a food preparation center will be used, storage space is limited, and the cost of the desired separate appliance is less than the cost for

Blenders were first developed to make milkshakes and frozen drinks. Today, whether a separate appliance or part of a food preparation center, an electric blender is a versatile appliance. It can perform the following tasks² well: stirring, whipping liquids, pureeing fruits and vegetables, crumbing crackers, dry bread and cookies, blending mayonnaise, making peanut butter, liquefying solids, and making ice slush from chipped ice. Other tasks that it can perform, but less well, are shredding or chopping vegetables and fruits, chopping nuts, grating hard cheese and grinding coffee.

Before making a decision to purchase a blender, whether as a replacement or as an appliance not previously used, ask: "Is it really needed and/or wanted?"

Will other appliances do the tasks equally well or better? (See Service in Action sheet 9.707 *Selecting stand food mixers* and Service in Action sheet 9.727 *Selecting electric food processors*.) If no, how many of the tasks that a blender does well

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²The American National Standard (ANSI/ASHAM FB-1-1978) method for measuring performance of blenders includes tests for grinding, crumbing, reconstituting, chopping—water method, chopping—dry method, and liquefying.

a food preparation center.

Selection of a blender that is a separate appliance is discussed here, but many of the same characteristics and features apply to blenders that are attachments to food preparation centers.

The second factor to consider before purchase is what features are available. Basic features should include sturdy, rustproof blades; easy-to-grip handle; and a container with a two-piece cover and pouring lip.

A separate blender consists of four basic parts.

1) a base that houses the motor and perhaps the cord and/or heating element, 2) the cutting blade assembly, 3) a container that fits on the base, and 4) a cover for the container.

Accessories often are available for specialized tasks.

Base

Housing—The base that houses the motor should be heavy and stable. Rubber-tipped feet, if the rubber is not hard, can minimize sliding during operation. The housing may be made from chrome-plated steel or plastic, or plain plastic. The chrome-plated housing shows soil more readily than a plain plastic housing. The plain plastic is not electrically conductive.

Motor—The number of motor speeds available on a blender can vary from 2 to 16. A blender with two but no more than 6 to 8 speeds, meets most needs even for a wide variety of tasks. A pulsing feature (rapid on/off) is a convenience but when present, it may not operate on all speeds. Solid state circuitry may be used to produce speed and/or time functions, but it is not considered essential. The motor should be permanently lubricated so no oiling is needed.

The rated wattage is an indication of the power that the blender will have—the higher the wattage the more power. Wattages range from 125 to 1200 watts. At least 700 watts is recommended for a blender to be used to make peanut butter or perform other heavy food preparation.

Cords—The cord should be at least two feet (.6 meter) long. Storage in the base is convenient.

Controls—Most blenders have push-button speed controls. These should be labeled with functions (blend, puree, etc.) rather than numbers. The label should be easy to read while the blender is in use. On most models, the motor starts when one of the push buttons is pressed. On a few models a separate rotary on/off control is available. The on/off control is safer, but less convenient to use than a push button that turns the motor on to the selected speed. A few models have a rotary control dial. Timers are available on some models.

Cutting Blade Assembly

The cutting blades should be made of stainless steel. The cutting blade assembly is removable on most blenders for easy cleaning and for

removal of thick foods through the bottom of the container. Most are designed to prevent the container from loosening and leaking liquid or exposing the blades in operation. The gasket should make a tight seal between the container and the blade assembly holder.

Container

The container, when placed on the base, increases the height of most blenders from 13¾ to 15¼ inches (34.9-38.9 centimeters). One model with a domed container is 21 inches (53.3 cm) tall. It will not fit under a wall cabinet for storage.

Materials—There is a choice of glass, plastic or stainless steel containers. Glass resists scratching and staining and generally can be washed in a dishwasher. Plastic containers are lighter than glass, are less likely to break when dropped, but do scratch and stain. Not all are dishwasher safe and those that are may require precautions when put in the dishwasher. Stainless steel does not permit viewing the action in the container. A stainless steel container is not necessarily designed to be put in a dishwasher.

Capacity and design—Many containers hold 5 cups (40 ounces, 1.2 liters). The container should have a pouring lip, a comfortable handle and fit securely onto the base. Containers with few vertical ridges are easier to clean.

Container Cover

The cover should fit securely to prevent leakage. Most are two-piece with a removable center cap. The opening should be large enough to allow adding solids or liquids easily. When the cap is removed, liquid should not splash out as additional ingredients are added. The cap on many models is marked to measure small quantities (2 ounces, 60 milliliters) of ingredients.

Other Factors

Safety—The blender should have the Underwriters' Laboratory Certification Seal (UL) on the nameplate to indicate an electrically safe design. When used properly, blades are not likely to cause cuts. The blades on some models rotate clockwise to tighten the container as they turn, therefore the container does not loosen and expose the blades. A non-conductive blender housing, such as plastic, reduces the risk of electric shock when liquids are on the counter or spilled on the blender.

Noise—Although blenders are on for short periods of time, the noise level may be irritating when the blender is operating.

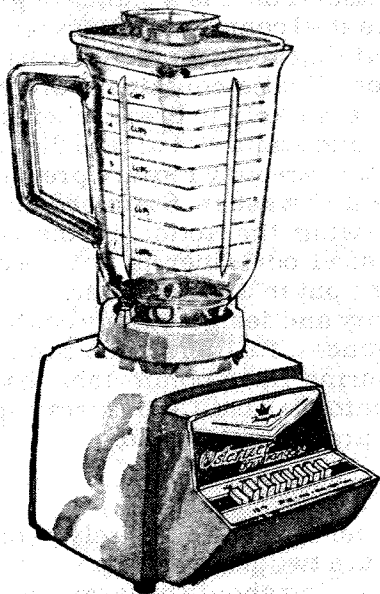
Special Design Features

Some blenders are designed to be mounted under wall cabinets. Capacity of the container for these units should be checked to determine if it meets your needs. If the under-cabinet unit is designed to be used in place (without removal to a

counter), check how easily the controls can be seen and used. Also check if ingredients can be easily added.

Accessories

Accessories available for models in one or more brand lines include: various sizes of containers—1 cup (.22 l), 1½ cup (.33 l), and 2 cup (.44 l), juice extractor, coffee grinder, strain-and-serve lid and can opener.



Use and Operation

Before using,

- Read the use/care booklet thoroughly.
- Check the operation of the controls.
- Check the step-by-step instructions for each blending operation.
- If needed, wash the container, its cover and cutting blade assembly in hot, sudsy water.

While using,

- Operate the blender on a dry, clean surface to prevent pulling dust and other particles into the motor. Be sure the motor vents have air circulation around them.
- Check that the container and the cover are firmly in place before starting the blender.
- Follow recipe instructions, don't over-blend. The blender performs tasks in seconds, not minutes. Stop and check consistency of mixture after a few seconds. Use the pulsing on/off feature or technique to prevent over-blending.
- Stop the blender motor before scraping down the ingredients from the sides of the con-

tainer. Use only a rubber or vinyl scraper. Never use a knife or other metal utensil.

- Avoid overworking the motor with heavy mixtures or large quantities.
- Remove the container from the base only after the motor has stopped.

After using,

- Unplug blender when not in use.

To improve the blender's performance note these hints and also those stated in the use/care booklet.

- Unless otherwise directed in a recipe, put liquid ingredients into the container first, then add the dry ingredients.
- Solid, raw vegetables may be covered with water before blending.
- Cut firm foods such as cheese, fruit, vegetables, cooked meats and seafood into pieces no larger than one inch (2.5 cm) before blending. To chop, it often helps to turn the control off and on several times.
- **Don't** use the blender to whip egg whites, crush ice (unless the manufacturer provides instructions), mash potatoes, chop raw meat, knead stiff doughs, or to extract juices from fruits and vegetables.

The blender can be useful in food preparation for persons needing specially prepared foods. Baby food can be prepared by pureeing cooked fruits, vegetables and meats. A liquid or semi-liquid diet can be prepared with a blender. Milkshakes and other beverages can be easily prepared.

Take time to teach children and other household members how to safely use the blender.

Care and Cleaning

Avoid spilling or dropping food on the push-button controls. They and grooves in the housing trap spills and dust. Wipe up spills immediately (be sure the blender is off). Chrome-plated bases show fingerprints and soil readily. Frequent polishing is needed.

To clean the container, fill one-half full with warm water, put in a few drops of liquid detergent, cover and run on high speed for a few seconds. Empty, rinse and thoroughly dry the container, cover and cutting blade assembly.

Remembering the following points on care will increase satisfaction from use of a blender.

- Clean all parts as soon as possible after use.
- Keep blades clean and dry when not in use. Store away from other metal objects to prevent dulling.
- Check the gasket to be sure it is clean and in good condition. If it is stretched or cracked, replace it.
- Unplug the blender before cleaning. Do not immerse the base in water. Wipe it with a damp cloth and dry.
- Check cord to be sure it is clean and in good repair.

References

An American National Standard. ANSI/AHAM FB-1-1978. Chicago: Association of Home Appliance Manufacturers, June 1978.

"Blenders." *Consumer Reports*. 49 (August 1984) 427-430.

Caselman, Marilyn W. *Use and Care of Blenders: Home Economics Guide*. Columbia, University of Missouri Extension, 1975.

Cunningham, Marialice and Mangel, Margaret.

Foods: The Blender Way. Bulletin 626. Columbia, University of Missouri Agricultural Experiment Station, July 1954.

Thurlow, Sandra, Paula Knaus and Mary G. Shaffer. *Selecting Electric Blenders*. Service in Action sheet 9.704, Fort Collins, Colorado State University Cooperative Extension, April 1978.



Electric blenders selection
use and care

A blender is a kitchen appliance used for blending, mixing, and pureeing ingredients. It typically consists of a motor base and a glass or plastic jar. The motor base is connected to an electrical outlet and contains the blades that rotate to mix the contents of the jar. The jar is usually removable and can be used for storage or serving. Blenders are commonly used for making smoothies, soups, dips, and dressings. They are also useful for chopping vegetables and fruits. When using a blender, it is important to follow the manufacturer's instructions to ensure safe and effective use. Regular cleaning and maintenance are also essential for the longevity of the appliance.

Blenders are used for a variety of tasks in the kitchen, including blending, mixing, and pureeing. They are commonly used for making smoothies, soups, dips, and dressings. Blenders are also useful for chopping vegetables and fruits. When using a blender, it is important to follow the manufacturer's instructions to ensure safe and effective use. Regular cleaning and maintenance are also essential for the longevity of the appliance.

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