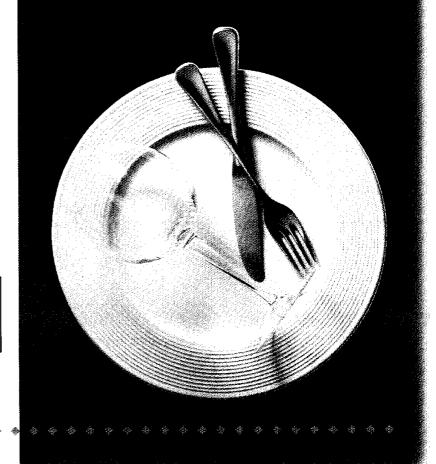
Dishwasher Guide MMJENN-AIR

Table of Contents

FOI FULUITE ASSISTANCE
Safety Instructions
Loading the Dishwasher 2-3
Dishwashing Essentials
Hot Water
Detergent
<i>Rinse Aid</i>
Operating Tips
Starting the Dishwasher
Adding a Forgotten Item
Controls At A Glance 4
What Can ⊕ Cannot Be Washed 5
Care ⊕ Cleaning5
Interior/Exterior
Door Panel Inserts
Common Questions & Answers 6-7

Note: In our continuing effort to improve the quality of our appliances, it may be necessary to make changes to the appliance without revising this guide.



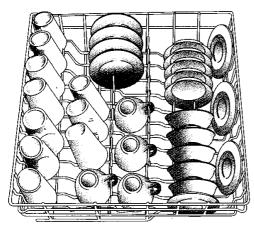
General Recommendations

- Don't Prerinse. Simply scrape off any bones or large food particles.
- ◆ If connected to a food waste disposer, make certain the disposer is empty before starting the dishwasher.
- ◆ Scrape off tomato-based food soils (see page 5).
- ◆ Remove certain foods (such as mustard, mayonnaise, lemon juice, vinegar, salt or dressings) from stainless steel flatware as soon as possible. These foods may cause rusting and pitting if allowed to remain in contact with the surface for an extended period of time.
- ◆ Place all items in the racks so they are separated and facing center.
- ◆ Items can be centered behind a single tine or loaded at an angle to maximize space.
- ◆ Load items so they do not rest over the top of the wash tower.
- ◆ Avoid blocking the upper and lower spray arms by not allowing items to extend beyond the racks.

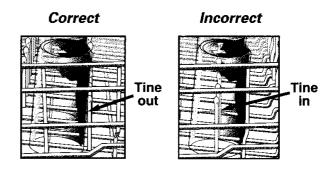
Recommended Loading

For best dishwashing results follow these guidelines to determine the best arrangement for your items.

Upper Rack

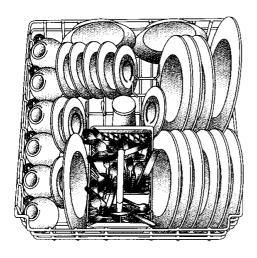


Glasses, cups, stemware, light-weight plastics, small plates, bowls, pans, long-handled utensils etc. can be loaded in this rack. **Do not load glasses over the tines.**



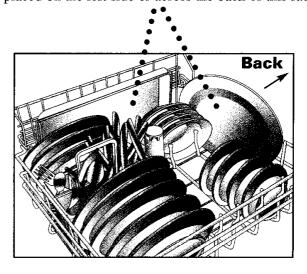
Lower Rack

A variety of large items such as dinner plates, mixing bowls, pots and pans and baking dishes can be loaded in this rack.



Note: Face soiled surfaces toward the center of the dishwasher.

Tall items such as bakeware and large platters can be placed on the left side or across the back of this rack.



${\it 3}_{ m Loading}$ the Dishwasher (cont.)

Removable Utensil Basket

For best cleaning results, prevent items from nesting together by placing some items in the basket with handles up and some with handles down. Load knives, handles up, through the slots in the covered section (when closed).

Be sure that thin, finely pointed items do not extend through the basket. This could block the lower wash arm. Small, lightweight items like baby spoons and plastic measuring spoons should be placed in the covered section of the basket for washing.



Dishwashing Essentials

Hot Water

For optimal cleaning and drying results, hot water is necessary. The incoming water temperature should be $120\text{-}140^{\circ}$ F (49-60° C) to properly activate the detergent and melt greasy food soils.

To check the incoming water temperature, turn on the hot water faucet nearest the dishwasher and let it run into a glass in the sink. Place a candy thermometer in the glass and check the temperature once it has stopped rising. If the temperature is below 120° F (49° C), have a qualified person raise the water heater thermostat setting.

Before starting the dishwasher, turn on the hot water faucet and let it run until the water is hot. This assures that the initial fill of water is hot.

Detergent

Use a detergent designed specifically for use in an automatic dishwasher. Be sure it is fresh and stored in a cool, dry place (not under the sink).

Recommended Amount

The amount of detergent to use depends on the water hardness* (measured in grains per gallon — gpg) and the amount of soil on the dishes. Too little detergent results in poor cleaning, hard water filming/spotting and poor drying. Too much detergent can cause permanent etching/cloudiness.

As a rule, use 1 teaspoon of detergent per grain of water hardness. In soft water, a minimum of 3 teaspoons is recommended.

Water Hardness*	Detergent Amount per Cup

Soft (0-3 gpg)	3 teaspoons	
Medium (4-9 gpg)	4-9 teaspoons	
Hard (10-12 gpg)	10-12 teaspoons	

^{*}Your local water utility or state university extension service can tell you the degree of water hardness in your area.

For water hardness of 13-14 gpg add more detergent (1 teaspoon for each gpg above 12) to the beginning of the main

wash portion of the cycle. Unlatch the door, open it slowly and add detergent to the bottom of the tub.

If water hardness is 15 gpg or harder, it is difficult to achieve good results with *any* dishwasher. The solution is a mechanical water softener to improve water quality, detergent effectiveness, and protect the dishwasher parts from the damage that hard water deposits can cause.

Detergent Placement

The recommended amount of detergent is the per cup dosage. Do not divide this amount between cups. Each line in the detergent cup represents 3 teaspoons. Add detergent just before starting the cycle and close the cover. The detergent automatically dispenses.

For **Heavy or Normal Wash**, place the recommended amount of detergent in both the PRE WASH and MAIN WASH cups.

Light Wash requires detergent in the MAIN WASH cup only.

Do not use detergent with Rinse Only. Leave the detergent cup lid open when running Rinse Only.

Rinse Aid

Regular use of a rinse aid improves drying, reduces spotting and filming, and reduces moisture left on the dishwasher interior.

Your dishwasher features an automatic rinse aid dispenser located near the detergent cups in the door.

The clear window in the center of the dispenser cap allows you to see if there is rinse aid in the reservoir. When the window is colored, there is rinse aid in the dispenser. When the window becomes clear, it is time to refill the dispenser. Check the dispenser monthly.

To add rinse aid to the dispenser, turn the cap counterclockwise to open. Remove the cap and pour liquid rinse aid into the opening. Replace the cap and turn it clockwise.

Starting The Dishwasher

- ◆ After loading the dishwasher and adding detergent, set the control knob to the desired cycle and press the appropriate option button(s).
- ◆ Press the door until it latches. The cycle will begin with a drain prior to fill.

Adding a Forgotten Item

For best cleaning, the forgotten item should be added early in the cycle.

- ◆ Unlatch the door.
- ◆ Wait for the water circulation to stop.
- ♦ Open the door and add the item.
- ◆ Close and latch the door.
- ◆ The cycle resumes automatically.

Controls At A Glance



Control panel style may vary by model.

Cycles

Located around the knob on the right side of the panel.

	•	-
CYCLE	SEQUENCE	WATER USAGE
Heavy Wash is for heavily soiled dish loads.	Prewash Prerinse Main Wash Prerinse Hi-Temp Rinse Dry	9.8 Gal.
Normal Wash is for loads containing dishes with normal amounts of food soils.	Prewash Main Wash Prerinse Hi-Temp Rinse Dry	7.8 Gal.
Light Wash is for washing lightly soiled loads.	Main Wash Prerinse Hi-Temp Rinse Dry	5,8 Gal.
Rinse Only is for runsing dishes being held until the dishwasher is full. This helps reduce the potential for odors.	Rinse	1.9 Gal.

Options

Located on the buttons on the left side of the panel.

Temp Boost turns on the heating element during portions of the prewash and final rinse. The **Temp Boost** option helps ensure proper water temperature for activating detergent and dissolving greasy food soils.

Heated Dry ON improves drying results by turning on the heating element during the dry portion of the cycle.

Heated Dry OFF turns the heating element off during the dry portion of the cycle. Towel drying of some items such as plastic and teflon may be necessary with this selection, and more moisture may be noticed on the dishwasher interior.

Note: With either dry option, it is normal to notice vapor coming out of the vent area.

5What Can & Cannot Be Washed

Most tableware, cookware and flatware can safely be washed in your dishwasher. If you have any doubts about an item, check with the manufacturer.

e Pengin		Special Instruktions : 18
Aluminum	Yes, except anodized.	High water temperature and detergents may affect finish.
Cast Iron	No	Seasoning will be removed, and iron will rust.
China & Stoneware	No, if antique or hand-painted.	Always check manufacturer's recommendation before washing. Antique, hand-painted or over-the-glaze patterns may fade. Gold leaf may discolor.
Crystal	No, if antique or delicate crystal.	Always check manufacturer's recommendation before washing. Some types of leaded crystal may etch with repeated washings.
Furnace Filters	Not recommended.	May leave a dingy deposit or stain on dishwasher interior.
Glass	Yes	Milkglass can yellow with repeated dishwasher washing.
Gold-Plated Flatware	No	Will discolor.
Pewter, Tin	No	
Plastics	Yes, top rack.	Always check manufacturer's recommendation before washing. Plastics vary in their capacity to withstand high water temperatures and detergents. Disposable plastic items are not dishwasher safe for this reason.
Stainless Steel	Yes	Run a Rinse Only cycle if not washing immediately. Prolonged contact with foods containing salt, vinegar, milk products or juice could damage finish.
Sterling Silver or Silverplate	No, if has commercial "darkening".	Always check manufacturer's recommendation before washing. Run a Rinse Only cycle if not washing immediately. Prolonged contact with food containing salt, acid or sulfide (eggs, mayonnaise and seafood) could damage finish. Commercial "darkening" may be removed by detergent.
Wood	No	Wood may warp, crack or discolor.

Care and Cleaning

Interior

The dishwasher interior is normally self-cleaning. Periodically check the bottom of the dishwasher tub to see if any large particles have not gone through the strainer portion of the module.

Wipe the edge of the inner door liner to remove any food soil splashes which occurred during loading.

The color from some tomato-based food soils has been known to occasionally adhere to today's dishwasher tubs, causing temporary discoloration. To help prevent this:

- Scrape excess tomato-based food soils off of dishes, prior to loading. Do not prewash the dishes, however.
- Run the Heavy Wash cycle.

Exterior

The front of the dishwasher can be cleaned with a soft damp cloth and liquid spray cleaner. Do not use abrasive powders or cleaning pads.

Storage/Moving

Fill both detergent cups with a fresh-scented dishwasher detergent or baking soda and select the **Normal Wash** cycle. Allow the dishwasher to complete the cycle. Then

turn the water supply off and drain the dishwasher. To drain, start any cycle as all cycles begin with a drain. Listen for the drain to complete, then open the door to interrupt the cycle prior to the fill. Operate the drain twice to ensure most of the water is removed. Last, disconnect the electrical supply and prop open the door. (See Important Safety Instructions, #14, page 1).

Change Door Panel Insert

WARNING: Disconnect electrical power to the dishwasher before changing the door panel insert.

- 1. Using a Phillips screw driver, remove either the right or left-hand door trim strips by removing the three screws.
- 2. Grasp the panel insert(s) and gently flex out slightly. Slide panel(s) out about two inches. Continue to flex insert panel(s) enough to remove them. Use care; edges may be sharp.
- 3. Select color and reinstall panel(s). Place insert panel(s) (notched corners at the top) on the inside of the lower door panel trim. Make sure the upper notched corners of the insert(s) are under the control panel.
- 4. Reinstall the side trim.



Check these points to help save you time and money:

Dishwasher Won't Fill?	 Be sure door is latched securely. Be sure the water is turned on. Check that the dial/pad is properly selected for a cycle. Allow time for select models to drain/pause before filling. Check your home's circuit breaker or fuse box. Check inlet hose for a kink. Check water valve inlet for sediment and clean if necessary.
Dishwasher Won't Drain/Water in Tub Bottom?	 Be sure the food waste disposer knock-out is removed from the disposer inlet. Be sure the drain hose is elevated at least 32" so water cannot drain back into the tub. Check for food obstruction in the drain or disposer. Check drain hose for a kink. Check your home's circuit breaker or fuse box. Check that the cycle is completed.
Detergent Cup Not Empty?	 Check that the cycle is completed. Be sure dispenser is not blocked. Use fresh detergent which has been stored in a cool, dry place.
Seems Noisy?	 A water valve hiss during fill is normal. Water circulation sounds are normal. A ticking noise is a normal timer sound. A thumping sound may be a wash arm bumping an item that is extending beyond the racks. Chopping or grinding sounds may be heard during drain as the internal food disposer chops hard items like fruit seeds, nuts, etc. Humming during drain is normal. A snap noise is the detergent cup lid hitting the door liner. This is normal. Proper installation affects the noise level.
Has an Odor?	 Run dishes being held in the dishwasher through a Rinse Only cycle. Many dishwashers have a "new" smell when first installed. This will dissipate with use. A chemical odor is usually the chlorine bleach in dishwasher detergents. Try another brand. Dishwasher may not be draining properly. (See "Won't Drain" section.) For a strong odor try placing baking soda in the detergent cup. Select Light Wash and allow the water to circulate for about 10 minutes. Interrupt the cycle by unlatching the door and let it stand overnight. Restart the dishwasher by latching the door and allow it to complete the cycle. Another alternative is to use a commercial dishwasher cleaning product such as Jet-Dry Dishwasher Cleaner*.
Dishwasher Leaks?	 Check that the dishwasher is level. (Refer to the Installation Instructions.) Suds can cause the dishwasher to overflow. Measure the detergent carefully and use only detergents designed for use in a dishwasher. Less detergent is needed in soft water. Try another brand if sudsing continues. Follow directions closely on how to add a forgotten item. (pg. 4) Be sure the rinse aid lid is securely attached and product is not leaking.

^{*} Brand names are trademarks of the respective manufacturer.

Common Questions & Answers (cont.)

Food Soil ♦ Check water temperature. (pg. 3) Run hot water at the sink before starting the dishwasher. Remains on Dishes? • Select Temp Boost. • Check water hardness and adjust detergent amount accordingly. (see pg. 3) • Use fresh detergent stored in a cool dry place. • Select proper cycle for the soil level. • Load items so they do not block the wash arms or center tower. (pg. 2) • Load the utensil basket with some handles up and some down to prevent nesting. ♦ Do not place glasses over tines. Prior to loading, scrape off burnt on foods and wipe the starchy film from utensils used with pasta, rice and oatmeal. These soils require more energy than the rest of the load to clean. ♦ Always use a rinse aid. Glasses are ♦ Check water temperature, incoming water should be 120-140° F (49-60° C). Cloudy/Spotted? ◆ Confirm that the cloudiness is removable by soaking the item in white vinegar for approximately 5 minutes. If removed, the problem is due to hard water. Adjust detergent amount being used to match water hardness (pg. 3). Be sure detergent is fresh, stored properly and a high quality brand. • If cloudiness is not removable, it is etching. This is an erosion of the surface of the glassware and can be caused by water that is too hot, from using too much detergent or by prewashing (the detergent needs food soil to act upon). If etching has occurred, the glassware is permanently damaged. To prevent further etching, adjust the detergent amount to match the water hardness, stop prewashing, and be sure incoming water temperature is not greater than 140° F (60° C). Use water heating options only when incoming water temperature is below 120° F (49° C). Items Washed in ♦ Aluminum utensils or pans can leave marks when they rub against other items. Leave a slight space between items. the Dishwasher or • Iron in the water can leave a yellow, brown or orange film on dishes or the dishwasher tub. A the Dishwasher Tub filter may be needed. Check with a water treatment company. RoVer Rust Remover (part no. Itself are Stained/ 057961)** can be used to remove rust. Do not use RoVer along with dishwasher detergent. Fill Discolored? both detergent cups with RoVer and complete a Normal Wash cycle. Follow with a short wash cycle using dishwasher detergent. • Color from tomato-based products may adhere to the tub (pg. 5). If light staining has occured, leave the door open to oxidize the stain away. For removal of heavier stains, try a citric acid containing dishwasher cleaning product such as Glisten (part no. 18001017)**. Change dishwasher detergent and be sure to use a dishwasher detergent that contains chlorine for better stain fighting. **Items Not** • Be sure Heated Dry is selected. **Properly** Water droplets may form on the inner door as part of the drying process. Dried/Moisture is ♦ Always use a rinse aid like Jet Dry* or Cascade Rinse Aid*. Present on the ♦ Check water temperature. (pg. 3) ♦ Select Temp Boost. Dishwasher • Increase detergent amount to match water hardness. (pg. 3) **Interior After the Dry Cycle?** ♦ Load properly. (pgs. 2-3) Plastic and teflon items are difficult to dry because the porous surface tends to collect water droplets. Towel drying may be necessary. • Glasses and cups with concave bottoms can hold water and may require towel drying. • Load dishes according to instructions so they do not strike each other. (pg 2) Dishware is • Washing antique china/crystal in the dishwasher is not recommended. Chipped? Do not load glasses over the tines. Do not overload.

^{*} Brand names are trademarks of the respective manufacturer.

^{**}To order call 1-800-688-8408