# General Loading Guidelines

- Load all items so that the force of the water and the detergent reach soiled surfaces
- DO NOT let china, crystal, and other delicate items touch each other during dishwasher operation.
- DO NOT use door to push racks in.
- DO NOT put stainless steel of different qualities close to each other. Contact can damage metals.
- Rinse stainless steel items if they will not be washed immediately. Prolonged contact with salty or acidic foods will cause stains.

Note: DO NOT load dishes in a manner that would block the detergent dispenser lid from completely opening. The detergent dispenser could be

**Note: DO NOT** put sterling silver or silver-plated flatware in the same compartment with stainless steel. Contact between the metals can damage silver.

#### **Extra Quiet Operation Hints**

Your dishwasher has been designed and engineered to give superior cleaning results and to operate very quietly. To avoid any extra clattering or thumping noises during operation:

- Keep sink drain plugs inserted during dishwasher operation to prevent noise transfer through drains.
- Load dishes so they do not touch each other.
- Make sure lightweight items are secured in
- Make sure pot lids and handles, pizza pans, cookie sheets, etc., DO NOT touch interior walls.

## The Silverware/Cutlery Basket

Tips for Best Cleaning Results:

- Distribute items evenly and mix knives, forks, and spoons so that items will avoid nesting.
- ALWAYS place forks and spoons with eating portions up and handles down.
- Each compartment has a lid which will separate the silverware for the best cleaning and drying results. The lids also hold small, lightweight items in place.
- IMPORTANT: Sharp or pointed items, such as knives, should always be put in with the point down to protect your hands.
- Basket can be moved to upper rack or lower rack.

# Adjusting Racks

## The Lower Rack

The lower rack is best for dinner plates, smaller plates, serving plates, larger bowls, pots, and pans.

- Securely place heavily soiled cookware face down in the rack.
- Use the fold-down tines to provide space for large items such as
- pots and pans. • Make sure pot handles and other items **DO NOT** stop rotation of lower wash arm by hanging below the rack.



## The Upper Rack

The upper rack is best for glasses, cups, bowls, small plates, and saucers and can accommodate full-sized plates up to 10-1/4".

• Make sure small plastic items are held firmly in place with Hold Tight™ dividers.

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fold-down tines

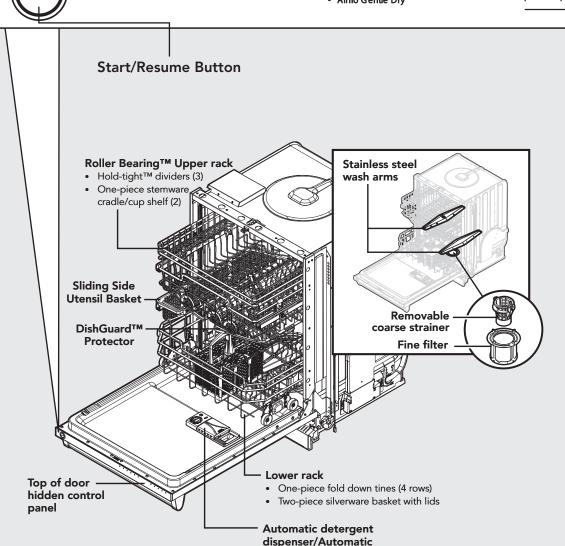
- Arrange stemware between pronas of stemware cradle so that the stemware
- cannot move easily.

• Make sure items hanging below

the rack **DO NOT** block the rotation of the wash arm.

# Dishwasher Controls/Wash Cycles/Wash Options





rinse agent dispenser

## Wash Cycles

#### POTS/PANS

Heavily soiled pots, pans and casserole dishes. Intense pressure, added wash time and high temperatures.

## **NORMAL WASH**

Normally soiled plates, glasses, bowls, and lightly soiled pots and pans. Energy usage label is based on this cycle.

#### LIGHT/CHINA

Lightly soiled items, china and crystal. Lower temperatures and pressure levels for cleaning

#### **FAST WASH**

To remove light films and residue on dishes and glassware. Short wash times and varying pressures.

#### RINSE/HOLD

All dishware. Short rinse with no heat.

## **Wash Options**

#### **TOP WASH**

Washes dishes on top rack only. Available on Normal Cycle.

#### HI TEMP WASH

Increases the temperature, adding heat, time and water for improved cleaning performance. Available only with POTS/PANS and NORMAL

**Note:** Periods of soaking will occur to aid in removal of baked on food soils.

## SANITIZED 155°F RINSE

Raises water temperature to 155°F in the final rinse. Adds heat and time to the cycle. This high temperature rinse sanitizes your dishes and glassware in accordance with NSF/ANSI STANDARD 184 for Residential Dishwashers.

Certified for residential dishwashers and not intended for licensed food establishments. Available only with POTS/PANS and NORMAL

## **DELAY START**

Lets you delay running the dishwasher. To set "Delay Start", select the desired wash cycle and option(s). Press the "Delay Start" key once and the number "2" will light, indicating a two hour delay. If you desire a longer delay, continue pressing the "Delay Start" key to the desired delay time. The corresponding number on the key will light. Once you have set the desired delay time, press the "START" button and close the door. "Delay Start" is not available with the Rinse/Hold cycle.

## **AUDIBLE SOUND SIGNAL**

A single beep will occur when you select cycles, options and press the "START" key. If the "START" button is not pressed or if the door is not closed within 4 seconds of pressing the "START" button, 3 short beeps will occur. The end-of-cycle signal consists of 2 long beeps and activates 30 minutes after the last drain, when the condensate dry portion of the cycle is completed. For all other error messages and to deselect the audible sound signal, see the Troubleshooting/Fault Codes section in the Use and Care Guide.

#### **ILLUMINATION OF BUTTONS** Option, Cycle and Start buttons will only

illuminate after they are selected. The "SANITIZED" indicator will illuminate when the cycle has been completed. If your dishwasher did not properly sanitize your dishes, the indicator light will not illuminate. This can happen if the cycle is interrupted or the water could not be heated to the required temperatures. The "SANITIZED" indicator light goes off after you have opened and closed the door or if you press and hold the START/RESUME button.

# Changing a Program

#### Changing a program after the unit has started

The dishwasher is programmed to stop operating if the door is opened during a cycle. To change a program or option after starting the machine, open the door slightly to let the spray arms stop rotating and avoid getting sprayed with water. Press and hold "START" for four seconds to cancel the current selection. Then press the touchpad(s) for your desired selection.

Press "START" again and close the door. The drain pump will run to remove any dirty water from the dishwasher before starting the newly selected cycle. Check to make sure there is still detergent in the detergent dispenser.

#### Opening the door after Cycle has started

If the door is opened for longer than five seconds, after the cycle has started, the "START" button will flash to indicate that the dishwasher is in Standby Mode. Press the "START" button before closing the door and the cycle will resume.

## Power On Light

A blue light will illuminate from the bottom middle of the dishwasher kickplate when a cycle is running.

# Cycle Data

Cycle name	Recommended dish types/ soil level	Temperatures	Total water (gal.)	Wash Time (minutes) 120F° (49C°)
Pots/ Pans	Heavily soiled pots, pans and casserole dishes	Main–145° F (63°C) Rinse–150° F (66°C)	8.4	138 (min.)
Normal Wash	Normally soiled plates, glasses, bowls, and lightly soiled pots and pans	Main–120° F (49°C) Rinse–140° F (60°C)	4.25	110 (min.)
Light/ China	Lightly soiled china and crystal	Main–125°F (51.7°C) Rinse–130°F (54°C)	5.4	112 (min.)
Fast Wash	Lightly soiled dishware and glassware	Main–130°F (54°C) Rinse–135°F (57°C)	5.8	60 (min.)
Rinse/ Hold	All dishware	Rinse	1.4	10 (min.)

Note: Will perform properly if connected to "cold" water - 50°F (10°C). Cycle times will be extended.

Note: All cycle times, temperatures and fills are approximate and are dependent on installation and environmental conditions.

**Note:** Heating delays to meet set temperatures may extend cycle times.

**Note:** AirFlo™ Gentle Drying will add approximately one hour to the total cycle time.

# Washing Recommendations

Most household plates, saucepans, and flatware are dishwasher safe. If you are unsure, check the manufacturer's recommendations before washing. You are responsible for what is washed in the dishwasher.

Materials	Dishwasher safe?	Comments
Aluminum	Yes Exceptions: anodized and disposable aluminum	Anodized aluminum may fade or darken. Disposable aluminum may contact other dishes and cause dark spots.
Cast iron	Not recommended	Seasoning will be removed and the cast iron will rust.
China/stoneware	Yes Exceptions: antique, hand-painted, or gold leaf	China without decoration or with glaze covered patterns is usually dishwasher safe. Antique, hand-painted and gold-leaf china may discolor or fade.
Crystal	Yes Exceptions: antique, some lead crystal	Position crystal so that it will not fall over or knock against other dishes. Some types of lead crystal may etch in dishwasher.
Flatware with glued handles	Not recommended	Certain adhesives may loosen and cause the handles to come off.
Glass	Yes Exceptions: milk glass (not recommended)	Milk glass may discolor with repeated washing.
Gold-plated flatware	Not recommended	Gold-plated flatware may discolor.
Knives	Yes	Position knives in large items tray so that blades are not touching. Knives may become dull if the blades contact other items.
Non-stick coatings	Not recommended	Coating may wear off with repeated washing.
Pewter/brass/ bronze	Not recommended	Pewter, brass, and bronze may tarnish or pit.
Plastic	Yes	Disposable plastic cannot withstand high water temperature or dishwasher detergent.
Stainless steel	Yes	Rinse stainless steel items if they will not be washed immediately. Prolonged contact with salty or acidic foods will stain. Position stainless steel pieces so they do not contact dissimilar metals.
Silver/ silverplate	Yes	Rinse silver/silverplate items if they will not be washed immediately. Prolonged contact with salty or acidic foods and foods containing sulfur will stain. Position stainless steel pieces so they do not contact dissimilar metals.
Tin	Not recommended	Tin may rust.
Wood	Not recommended	Wash wood items by hand. Wood may warp, crack, or lose its shape or finish in the dishwasher.

# Important Safety Instructions (Please Read and Save these Instructions)

Warning and Important Safety Instructions appearing in this guide are not meant to cover all possible conditions and situations that may occur. Common sense, caution, and care must be exercised when installing, maintaining, or operating the appliance.

**ALWAYS** contact the manufacturer about problems or conditions you do not understand.

Recognize Safety Symbols, Words, Labels



Hazards or unsafe practices which WILL result in severe personal injury or death



Hazards or unsafe practices which COULD result in death severe personal injury or death

## **A** CAUTION

Hazards or unsafe practices which COULD result in minor personal injury.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

Read all instructions before using the dishwasher.

## **AWARNING**

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

- This dishwasher must be properly connected to an appropriate electrical supply, water supply, and drain.
- The dishwasher must be securely mounted to the cabinet.
- Use the dishwasher only for its intended function.
   Use only detergents and rinse agents recommended for use in household dishwashers, and store them in a safe and dry environment away
- from the access of children.

   When loading items to be washed, place sharp items so that they are not likely to damage the door seal and load sharp knives with the handles up to avoid the risk of personal injury.
- DO NOT wash plastic items unless marked "dishwasher safe" or the equivalent.

- **DO NOT** operate your dishwasher unless all enclosure panels are properly in place.
- DO NOT abuse, sit on or stand on the door or dish rack of the dishwasher.
- DO NOT tamper with controls.
- To reduce the risk of injury, **DO NOT** allow children to play in or on a dishwasher.
- If hot water has not been used recently (usually two weeks or longer), hydrogen gases may buildup 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 before using your dishwasher. This will allow gases to escape. DO NOT smoke or use any open flames near the faucet while it is open.
- When discarding an old dishwasher, ALWAYS remove the door to prevent accidental entrapment.
- To prevent electrical shock, disconnect electrical power supply to dishwasher before attempting to service.
- For Grounding Instructions, please refer to Installation Instructions or Installation Summary.
- DO NOT use door to push racks in.

It is your responsibility to be sure your dishwasher

- has been installed by a qualified installer
- has been properly grounded
- has been properly connected to electricity, water and drain lines
- is properly maintained
- has had all shipping materials, packaging and temporary labels removed.

# **A** WARNING

Depending on cycles/options selected, the dishwasher operates at very high water temperatures 155°F (68°C). Use extreme caution when opening unit or handling dishes.

# **A** WARNING

**DO NOT** repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a qualified authorized technician.

# **MARNING**

**NEVER** operate the dishwasher without the filters in place.



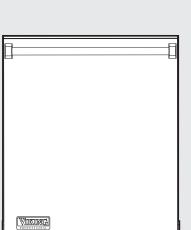
To avoid the risk of personal injury due to steam burns, open door slowly to allow steam to escape before opening completely

# A GFI shall be used if required by NFPA-70 (National Electric Code), federal/state/local laws, or local ordinances.

- The required use of a GFI is normally related to the location of a receptacle with respect to any significant sources of water or moisture.
- Viking Range Corporation will NOT warranty any problems resulting from GFI outlets which are not installed properly or do not meet the requirements below.

#### If the use of a GFI is required, it should be:

- Of the receptacle type (breaker type or portable type NOT recommended)
- Used with permanent wiring only (temporary or portable wiring NOT recommended)
- On a dedicated circuit (no other receptacles, switches or loads in the circuit)
- Connected to a standard breaker of appropriate size (GFI breaker of the same size NOT recommended)
- Rated for Class A (5 mA +/- 1 mA trip current) as per UL 943 standard)
- In good condition and free from any loose-fitting gaskets (if applicable in outdoor situations)
- Protected from moisture (water, steam, high humidity) as much as reasonably possible



451 Series Built-In Dishwashers

Viking Quick Reference Guide

