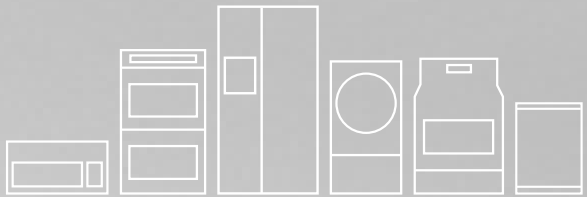


# FRIGIDAIRE®

All about the

# Use & Care

of your Dishwasher



## TABLE OF CONTENTS

Important Safety Instructions.....	2	Dishwasher Dispenser and Detergents .....	6-7
Product Registration .....	3	Factors Affecting Performance .....	7
Operating Instructions .....	3-4	Care and Cleaning .....	8-9
Preparing and Loading Dishes .....	5-6	Before you Call.....	9-11
		Major Appliance Warranty .....	12

# IMPORTANT SAFETY INSTRUCTIONS



## WARNING

Please read all instructions before using this dishwasher.

### For your Safety

- Use your dishwasher only as instructed in this Use and Care Manual.
  - This Manual does not cover every possible condition and situation that may occur. Use common sense and caution when installing, operating and maintaining any appliance.
  - **DISHWASHER MUST BE ELECTRICALLY GROUNDED.** Read the Installation Instructions for details.
  - The dishwasher is designed to operate on regular house current (120V, 60Hz). Use a circuit equipped with a 15 ampere fuse or circuit breaker. Use a 20 ampere fuse if dishwasher is connected with a food disposer.
  - Do not operate dishwasher unless all enclosure panels are in their proper place.
  - To avoid entrapment and/or suffocation, remove door or door latch mechanism from any dishwasher that is discarded or not in use.
  - Keep young children and infants away from dishwasher when it is operating.
  - Do not let children abuse, sit, stand or play on door or racks of a dishwasher.
  - Use only detergents and rinse agents recommended for use in a dishwasher.
  - Store dishwasher detergent and rinse agents out of the reach of children.
  - Do not wash plastic items unless marked: "Dishwasher Safe" or equivalent. Check with manufacturer for recommendations, if not marked. Items that are not marked dishwasher safe may melt and create a potential fire hazard.
  - Disconnect electrical power to dishwasher before servicing.
  - If the dishwasher drains into a food disposer, make sure disposer is completely empty before running dishwasher.
  - Repairs should be done by a qualified technician
- Do not tamper with controls.
  - Do not touch the heating element during or immediately after use.
  - Use care unloading the dishwasher. Contents may be hot to the touch immediately after the end of cycle.
  - Water vapor from the vent may be hot to the touch. Use care and do not let small children play around or touch the vent area of the dishwasher.
  - When loading items to be washed:
    - Locate sharp items and knives so that they are not likely to damage the door seal or tub.
    - Load sharp items and knives with the handles up to reduce the risk of cut-type injuries.
  - Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for 2 weeks or more. **HYDROGEN GAS IS EXPLOSIVE.** If hot water system has not been used for such a period, before using dishwasher, turn on all hot water faucets and let water flow for several minutes. This will release any accumulated hydrogen gas. **HYDROGEN GAS IS FLAMMABLE.** Do not smoke or use an open flame during this time.
  - Do not store or use combustible materials, gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.



## WARNING

To reduce the risk of fire, electrical shock or injury when using your dishwasher, follow the above basic precautions .



## WARNING

This symbols will help alert you to such dangers as personal injury, burns, fire and electrical shock.

# PRODUCT REGISTRATION/OPERATING INSTRUCTIONS

Thank you for choosing **Frigidaire**

This Use & Care Guide is part of our commitment to customer satisfaction and product quality throughout the service life of your new appliance.

We view your purchase as the beginning of a relationship. To ensure our ability to continue serving you, please use this page to record important product information.

---

Purchase Date

---

Model Number

---

Serial Number

Registering your product with Frigidaire enhances our ability to serve you. You can register online at [www.frigidaire.com](http://www.frigidaire.com) or by dropping your Product Registration Card in the mail.



## NOTE

Your Tower Wash System® dishwasher uses a proven single, rotating arm with a telescoping set of wash jets for targeting the upper rack.

Cycles begin with a drain to remove liquid that may have been added during loading. Following that, you may hear a series of wash segments for washing and later rinsing. These wash segments start with the addition of water, then follow by the spraying of dishes and then end by draining the wash or rinse fluid. Other actions will take place during the cycle that you will not be able to hear. These include addition of detergent, heating of the fluid, dispensing of rinse agent, and pulsed heating of the dishware after the final drain to improve drying.

## Getting Started

1. Load Dishwasher (See Preparing and Loading Dishes).
2. Add detergent (See Dishwasher Dispenser & Detergents).
3. Add Rinse Aid (See Rinse Aid).
4. Turn dial clockwise to select cycle (See Wash Cycle Selection).
5. Select desired OPTION (See Energy Options).
6. Run hot water faucet nearest dishwasher until water is hot. Turn water off.
7. To start, close door to latch.

## Wash Cycle Selection

### Heavy Wash

For heavily soiled dishware, pots, pans, casserole and dinnerware with dried-on or baked-on soils:

- Turn dial to HEAVY WASH.
- Select desired heating option (heat dry/air dry).

### Normal Wash

For daily, regular use to completely wash and dry up to a full load of dishes and silverware:

- Turn dial to NORMAL WASH
- Select desired heating option (heat dry/air dry).

### Drying/Plate Warmer

For adding an additional dry period to a cycle to obtain warm, dry dishes:

- Ensure the heat dry option is still selected.
- Within 15 mins after cycle completion, open the door slightly, rotate the knob clockwise to "DRYING/PLATE WARMER", and close the door.
- For the best drying: While the door is open briefly to re-set the timer gently move the racks in and out an inch or two to spill out some of the water that may be trapped in recessed areas of dishware.

## Recommended Cycle

The Normal cycle along with the heated dry option together provide the best all around performance. This cycle selection is recommended for everyday use and is suitable for a large range of both dish load sizes and food quantities remaining on those dishes.

## Water Heating Delay

This dishwasher is equipped with a thermostat to ensure that the water is heated to the proper temperature for optimal cleaning and drying results. The knob/timer on the dishwasher may pause at the position labeled "water heating". The dishwasher is not stuck here, but is simply heating the water to the proper temperature before advancing. A minimum water temperature of 120°F is recommended to minimize this water heating delay.

# OPERATING INSTRUCTIONS

## Using the Timer

The timer advances to complete the portion of the cycle between the dial position and OFF. Started at Heavy Wash it will run through Heavy, Normal and Dry. Set at Normal Wash it will run Normal and Dry, and so on.

- It is best to have the door unlatched while setting the timer.
- The timer dial should always be advanced in the clockwise direction.
- 4 positions are available for use, the OFF position and the start positions for Heavy Wash, Normal Wash and Drying.
- Other stops on the dial path are to allow the unit functions to be quickly checked during production but are of no practical use for washing or drying dishes in the home.
- The "Water Heating" text is to mark the position where the dial may pause while temperature is increased to make the wash effective - it is not a location for starting any cycle.
- The Heavy and Normal cycles start with a drain, then a fill, then spraying - you may not be able to hear that it has started at first.

## Energy Options

The toggle switch provided to choose between heat dry and air dry affects heater operation but only during the drying portion of the cycle. The selection may be made at any time prior to or during the cycle. It affects only the portion of the cycle's drying that follows the selection. With either option, you may see water vapor coming from the vent near the top of the door - this is normal.

## Heat Dry Option

Selecting the Heat Dry option will cause the heating element to be on during the drying portion of the cycle.

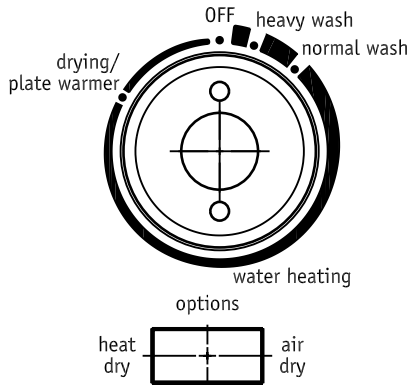
The Heat Dry option in combination with rinse aid will improve drying results. The energy to use Heat Dry is greater than if Air Dry is selected but costs just pennies per cycle.

Turning off the Heat Dry option, will result in more of the dish load being wet at the end of the cycle.

## Air Dry Option

Selecting the Air Dry option reduces energy use and lowers costs by preventing the heating element from coming on during the drying portion of the cycle.

With this option drying may be improved by using rinse aid and opening the door slightly immediately after the cycle is complete.



## Cycle Chart

Cycle	Water (Approx.)	Time (Approx.)	Washes/Rinses
<b>Heavy Wash</b>	5.2 gal. 4.4 imp. 19.8 Liters.	68 mins*	4 Washes    2 Rinses
<b>Normal Wash</b>	4.4 gal. 3.6 imp.gal. 16.5 liters	64 mins*	3 Washes    2 Rinses
<b>Drying/Plate Warmer</b>		14 mins*	

\* Includes dry time.

# PREPARING AND LOADING DISHES

## Dish Preparation

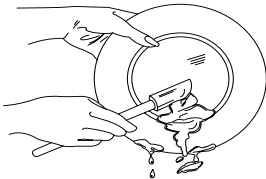
Prior to loading dishware into the dishwasher:

Scrape away large pieces of food, bones, pits, toothpicks, etc. Loosen burned-on foods. Empty liquids from glasses and cups.

Foods such as mustard, mayonnaise, vinegar, lemon juice and tomato-based products may cause discoloration of stainless steel and plastics if allowed to sit for a long period of time. Unless the dishwasher is to be operated at once, it is best to rinse off these food soils before loading the dishwasher.

This unit uses very little water. Generally, running the cycle - even with half of a load is more economical than rinsing by hand and waiting to run the unit when a full load is ready to wash.

- If the dishwasher drains into a Food Disposer, **be sure disposer is completely empty before starting dishwasher.**



## Loading the Dishwasher

- Load racks so that large items do not block the detergent dispenser door from opening.
- Check manufacturer's recommendations before washing items in question.

## Loading the Top Rack

*Features and appearance of racks and silverware basket may vary from your model.*

The top rack is designed for cups, glasses, small plates, saucers and bowls.

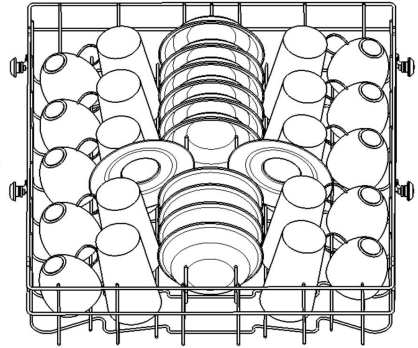
Load glasses in top rack for better support. Damage may occur if placed in bottom rack.

Load plastic items in top rack only. Melting may occur if placed in bottom rack.

Load items with open ends facing down for better cleaning and draining.

Damage may occur if delicate items touch each other during dishwasher operation.

Long-handled knives and utensils can be placed in top rack.



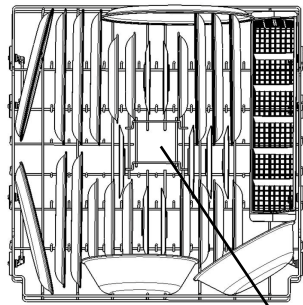
## Loading the Bottom Rack

*Features and appearance of racks and silverware basket may vary from your model.*

The lower rack is best for plates, saucers, bowls, and cookware. Large items should be placed along the edge so they do not block the spray arm extension. For best results, place bowls, casseroles, and sauce pans with soiled surface facing down and toward the center. Tilt items slightly for better drainage.

Make sure tall items will not block the detergent dispenser's door.

Be sure pan handles do not protrude through the bottom of the rack and block the spray arm rotation.



Do not block tower protector

# PREPARING AND LOADING DISHES

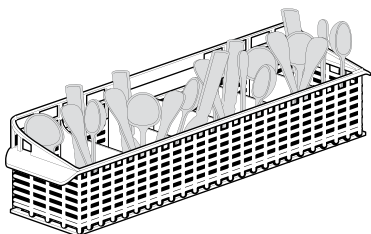
## Loading the Silverware Basket



### CAUTION

Load sharp items (knives, skewers, etc.) pointing down.

Failure to do so may result in injury.



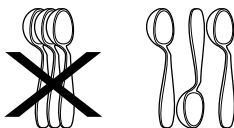
*Features and appearance of racks and silverware basket may vary from your model.*

Mix spoons, forks and knives to prevent nesting. Mixing items gives better cleaning and drying.

For safety, load sharp knives and forks with handles up.

Be sure nothing protrudes through bottom of basket or rack to block the spray arm.

To avoid damaging the silver finish, do not mix silver and stainless

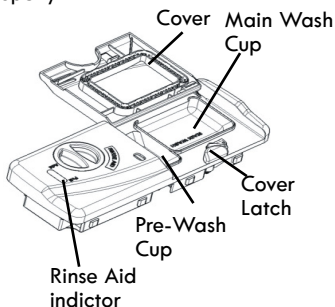


## DISHWASHER DISPENSER & DETERGENTS

### Filing the Detergent Dispenser

The detergent dispenser has one covered and one uncovered cup. Detergent in the uncovered cup falls into the dishwasher when the door is closed. The covered cup opens later automatically to release detergent during the main wash.

- Use only fresh automatic dishwashing detergent. Other detergents may cause oversudsing.
- When using automatic dishwashing detergent tabs, place one tab in main wash cup and close.
- Add detergent just before starting cycle.
- Store detergent in a cool, dry location. Moist or caked detergent will not wash effectively and may not dissolve properly.



**If the cover is closed on the Main Wash Cup open by pressing the Cover Latch.**

### How much Detergent to use

The amount of detergent to use depends on the water hardness, which is measured in grains per gallon. Using too little detergent can result in poor cleaning and hard water filming or spotting. Using too much detergent in soft water can cause etching, a permanent surface damage that looks like a film on the dishware. Your local water company, water softener company or county extension agent can tell you the water hardness in your area.



### CAUTION

The use of industrial grade detergent can damage the heating coil and other parts of the dishwasher leading to damage to the unit and surrounding property. Use only household grade automatic dishwasher detergents.

# DISHWASHER DISPENSER & DETERGENTS

Detergent Usage Chart			
Soft Water (0-3 grains)	Medium Hard Water (4-8 grains)	Hard Water (9-12 grains)	Very Hard Water (Over 12 grains)
2 teaspoons (each cup- 1/4 full)	5 teaspoons (each cup- fill to line above "Regular")	8 teaspoons (each cup- completely full)	Each Cup- Completely Full (water softener recommended)

**Note:** For very hard water, detergent alone may not be enough. A water softener is recommended to reduce detergent use and to improve water quality and dishwashing performance. Otherwise, try adding more detergent at the beginning of the main wash portion of the cycle. As a rule, use 1 teaspoon for each grain above 12. Unlatch the door, open slowly and add detergent to the bottom of the tub. Close the door to latch and the dishwasher will continue through the cycle.

## FACTORS AFFECTING PERFORMANCE

### Rinse Aid

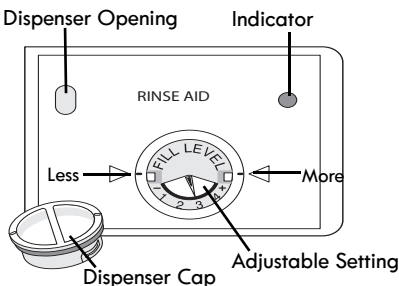
**Rinse aid greatly improves drying and reduces water spots and filiming. It also lubricates wash arm bearings for proper rotation.** When used, it causes water to "sheet" off dishes rather than forming water droplets that cling. Any minerals, or fine solids that may be in the water are left as spots when the droplets dry.

A dispenser, located next to the detergent cup, automatically releases a measured amount of rinse aid during the last rinse. If spotting and poor drying are problems, increase the amount of rinse aid dispensed by rotating the dial to a higher number. The dial is located under the dispenser cap. The indicator will be dark when full and will show clear when it is time to refill.

To add liquid rinse aid, turn dispense cap 1/4 turn counterclockwise and lift out. Pour in rinse aid until liquid touches the indicated fill level. Replace cap.

Do not overfill since this can cause oversudsing. Wipe up any spills with a damp cloth.

The dispenser holds enough for 35 to 140 washes, depending on the dial setting.



### Water Pressure

The hot water supply line to dishwasher must provide water pressure between 20 and 120 psi.

Low water pressure may occur when laundry or showers are in operation. If you experience poor wash performance you may need to wait until water use is reduced before starting the dishwasher.

### Water Temperature

Hot water is needed for best dishwashing and drying results. Water entering the dishwasher should be at least 120°F (49°C) to give satisfactory results.

To check water temperature entering dishwasher:

- Turn on hot water faucet nearest dishwasher for several minutes to clear cool water from pipes.
- Hold a candy or meat thermometer in the water stream to check the temperature.
- If temperature is below 120°F (49°C), have a qualified person raise the hot water heater thermostat setting.



### IMPORTANT

Before starting a cycle, run hot water to clear cool water from pipe.

The HEAT DRY option in combination with rinse aid will enhance drying performance. The energy required to use the HEAT DRY option costs pennies per cycle. Turning off the HEAT DRY option; will result in more of the dish load being wet at the end of the cycle.

# CARE AND CLEANING



## WARNING

### Burn Hazard

Allow heating element to cool before cleaning the interior.

Failure to do so can result in burns.

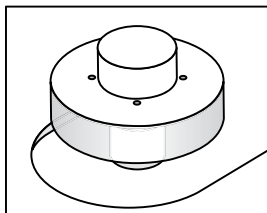
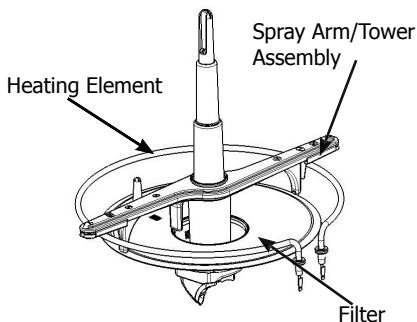


**Overfill Protector-** keeps dishwasher from overflowing and is located in the left front corner of the tub.

- Clean occasionally with household cleaner containing vinegar or bleach to dissolve any buildup.
- Overfill Protector should move up and down freely about one inch. If it does not move, lift and clean underneath.

**Outside** - Occasionally, use a soft cloth to wipe the outside with a mild nonabrasive detergent and water. Then rinse and dry.

**Inside** - The inside of the dishwasher, including the filter, is self-cleaning with normal use. If needed, clean around the tub gasket area with a damp cloth.



## Care of Drain Air Gap

If a drain air gap was installed for your built-in dishwasher, check to make sure it is clean so the dishwasher will drain properly. A drain air gap is usually mounted on the countertop and can be inspected by removing the cover. This is not part of your dishwasher and is not covered by warranty.



## CAUTION

### Property Damage Hazard

Freezing temperatures may cause water lines to rupture. Be sure all supply lines to and circulating lines within dishwasher are protected.

Failure to do so could result in property damage.



## NOTE

Hard water may cause lime deposit buildup on the interior of the dishwasher. For cleaning instructions see "Removing Spots and film" section.



## NOTE

See Installation Instructions for more details on disconnecting and restoring service to your dishwasher.



## Winterizing

A dishwasher left in an unheated place should be protected from freezing. Have a qualified person do the following:

### To Disconnect Service:

1. Turn off electrical power to the dishwasher at the supply source by removing fuses or tripping circuit breaker.
2. Shut off water supply
3. Place a pan under the inlet valve. Disconnect water line from inlet valve and drain into pan.
4. Disconnect drain line from pump and drain water into pan.

### To Restore Service:

5. Reconnect the water, drain, and electrical power supply.
6. Turn on water and electrical power supply.
7. Fill both detergent cups and run dishwasher through a NORMAL WASH cycle.
8. Check connections to make sure they do not leak.

## BEFORE YOU CALL

**Before calling for service, review this list. It may save you both time and expense. This list includes common experiences that are not the result of defective workmanship or material in your dishwasher.**

### Food Soils Left on Dishes

- Choose another cycle for longer washing time.
- Check rack loading section for proper loading - avoid nesting items.
- Home water pressure may be too low - should be 20 to 120 pounds per square inch (psi).
- Check incoming water temperature. It should be about 120°F (49°C). (See Factors Affecting Performance.)

- Check water hardness. For extremely hard water, it may be necessary to install a water softener. (See Detergent Chart).
- Use Fresh Detergent.
- Make sure items are not extending below the lower rack and preventing the spray arm from rotating.
- Assure that dishware is not extending over the square area in the middle of the lower rack and so preventing the arm from telescoping up to spray into the upper rack.

### Dishes not Dry

- Select heat dry option.
- Make sure the rinse aid dispenser is filled.
- Increase the discharge setting of rinse aid. (See Rinse Aid).
- Check the incoming water temperature. Be sure it is about 120°F (49°C).
- Check for proper loading - avoid nesting items.
- Plastic items may need to be towel dried.
- Cups with a concave bottom will collect water. Load them at the far left and right sides of the upper rack so they will be held in a tilted position.
- Unload the lower rack first. During unloading any liquid left in depressed areas of mugs or other dishware in the upper rack may fall onto any dishware left in the lower rack.

### Glassware/Flatware Spotted or Cloudy

- Check water hardness. For extremely hard water, it may be necessary to install a water softener. (See Detergent Chart).
- Water temperature may be low. Avoid extremely low or high temperatures. (See Factors Affecting Performance).
- Avoid overloading and improper loading. (See Preparing and Loading Dishes).

# BEFORE YOU CALL

- Use fresh detergent. Old detergent is ineffective.
- Make sure rinse aid dispenser is filled.
- Check to see that proper amount of detergent is being used for cycle selected. (See Detergent Dispenser).
- Home water pressure may be too low-it should be 20 to 120 pounds per square inch (psi).
- Wipe cloudy glass with a rag moistened with vinegar. If it cannot be wiped off it is probably etched and is most likely due to the use of too much detergent.

## Dishware Chipped

- Load with care and do not overload. (See Preparing and Loading Dishes).
- Place delicate items in top rack.
- Place glasses securely against pins and not over pins.
- Load items so they are secure and don't jar loose when moving racks in and out. Move racks in and out slowly.
- Make sure tall glasses and stemware will clear top of tub when rack is pushed in.
- Fine antique china and crystal should be hand-washed.

## Dishware Stained or Discolored

- Tea and coffee can stain cups. Remove the stains by hand washing in a solution of 1/2 cup (120 ml) bleach and one quart (1L) of warm water. Rinse thoroughly.
- Iron deposits in water can cause a yellow or brown film. A special filter installed in the water supply line will correct this problem. (See Removing Spots and Film).
- Aluminum utensils can leave gray/black marks when they rub against other items. Load Properly.
- Certain high acid foods can cause discoloration of stainless steel and plastics if allowed to sit for a long period. Rinse by hand if not operating dishwasher at once.

## Water in Bottom of Tub

- Water left in the bottom of tub after cycle completion is not normal. If seen it may indicate that the dishwasher is not draining properly. (See Dishwasher Does Not Drain Properly.)

## Etching

- Using too much detergent especially in soft or softened water causes damage that looks like a film but cannot be removed. This is called Etching
- Adjust the amount of detergent based on the water hardness. (Check Detergent Chart).
- Use heat dry option and do not leave dishware in unit longer than necessary.

## Detergent Left in Cups

- Detergent may be old. Discard and use fresh detergent.
- Be sure the dish load doesn't block spray from entering the detergent cup.
- Check to see if cycle has been completed.
- Make sure items do not block the detergent dispenser door from opening.

## Dishwasher Leaks

- Use only fresh detergent designed for automatic dishwashers. Measure detergent carefully. Try a different brand.
- Check that the seal for the door is seated.
- Check that the hoses are free of cracks and still connected at each end.
- Check that the unit is installed in a level position according to the installation instructions that were provided with the unit or can be found on line.
- Check that the float is free to move up and down.

## Vapor at Vent

- Water vapor escapes from the vent during the cycle. This is normal and is essential for drying.
- Spilled rinse aid can cause foam and lead to overflowing. Wipe up any spills with a damp cloth.
- Check to see that dishwasher is level. (See Installation Instructions).

## Normal Sounds You Will Hear

- Normal sounds include water fill, water circulation, motor sounds, and fluid draining.

## Cycle Takes a Long Time

- Is cycle in a water heating delay?
- Assure that the incoming water temperature is about 120°F (49°C).

## Dishwasher Won't Run

- Check to see if a circuit breaker is tripped or if a fuse is blown.
- Make sure water supply is turned on.
- Check to see if cycle is set correctly. (See Operating Instructions).
- Make sure door is closed and latched.

## Dishwasher Won't Fill

- Is water supply turned on?
- Does overflow protector move up and down freely? (See Overflow Protector section).

## Dishwasher Does Not Drain Properly

- If unit is hooked up to a food waste disposer, make sure the disposer is empty.
- Check to see if the knockout plug has been removed from inside the food waste disposer inlet.
- Check to see if drain hose is kinked.
- Make sure cycle is complete, not in a pause.

## Dishwasher has an Odor

- Run the dishwasher regularly - whether a full load is available or not. Soiled dishes left in dishwasher too long can create an odor.
- There will be a "new" smell when first installed. This is normal.
- Check to see if unit is draining properly. (See Dishwasher Does Not Drain Properly).

## Stains on Tub Interior

- Washing large amounts of dishware with tomato-based soil can cause a pink/orange appearance. This will not affect performance and will gradually fade over time. Pre-rinsing will reduce the chance of staining. Using no heat dry option will lessen staining.

## Removing Spots and Film

Hard water can cause lime deposits to build up on the interior of the dishwasher. Dishes and glasses may also get spots and film for a number of reasons. (See Glassware/Flatware Spotted or Cloudy section). To remove buildup, and film, clean using the following instructions:

1. Load clean dishes and glasses in normal manner. Do not load any metal utensils or silverware.
2. Do not add detergent.
3. Turn dial to NORMAL WASH. Close and latch door to start.
4. Allow dishwasher to run for 20 minutes to reach the main wash portion of cycle.
5. Unlatch and open door pour 2 cups of white vinegar into the bottom of dishwasher.
6. Close and latch the door allow the cycle to finish.