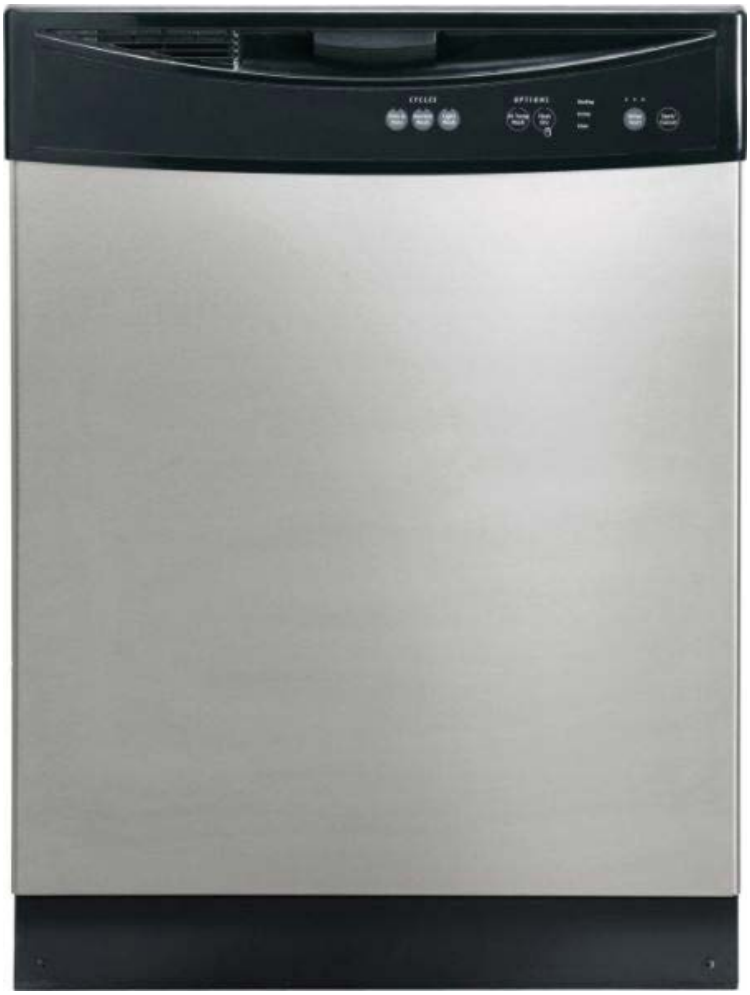
UNIVERSAL SCIENTIFIC
6210 Campbell Drive. Madison, OH 44057-2003
PHONE: 1-440-428-7800 or 1-440-829-8961 FAX: 1-440-428-8650
E-MAIL: tomheckman@universalscientificinc.com

Model 1502D

Use & Care Guide



For a more in depth description of your product's features and solutions to common laboratory dishwasher problems visit our Web Site at www.universalscientificinc.com to download a free copy of the Use and Care Manual or simply call at 1-440-428-7800 and one will be sent to you.

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Questions? 1-440-428-7800

Important Safety Instructions

⚠WARNING

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

⚠WARNING

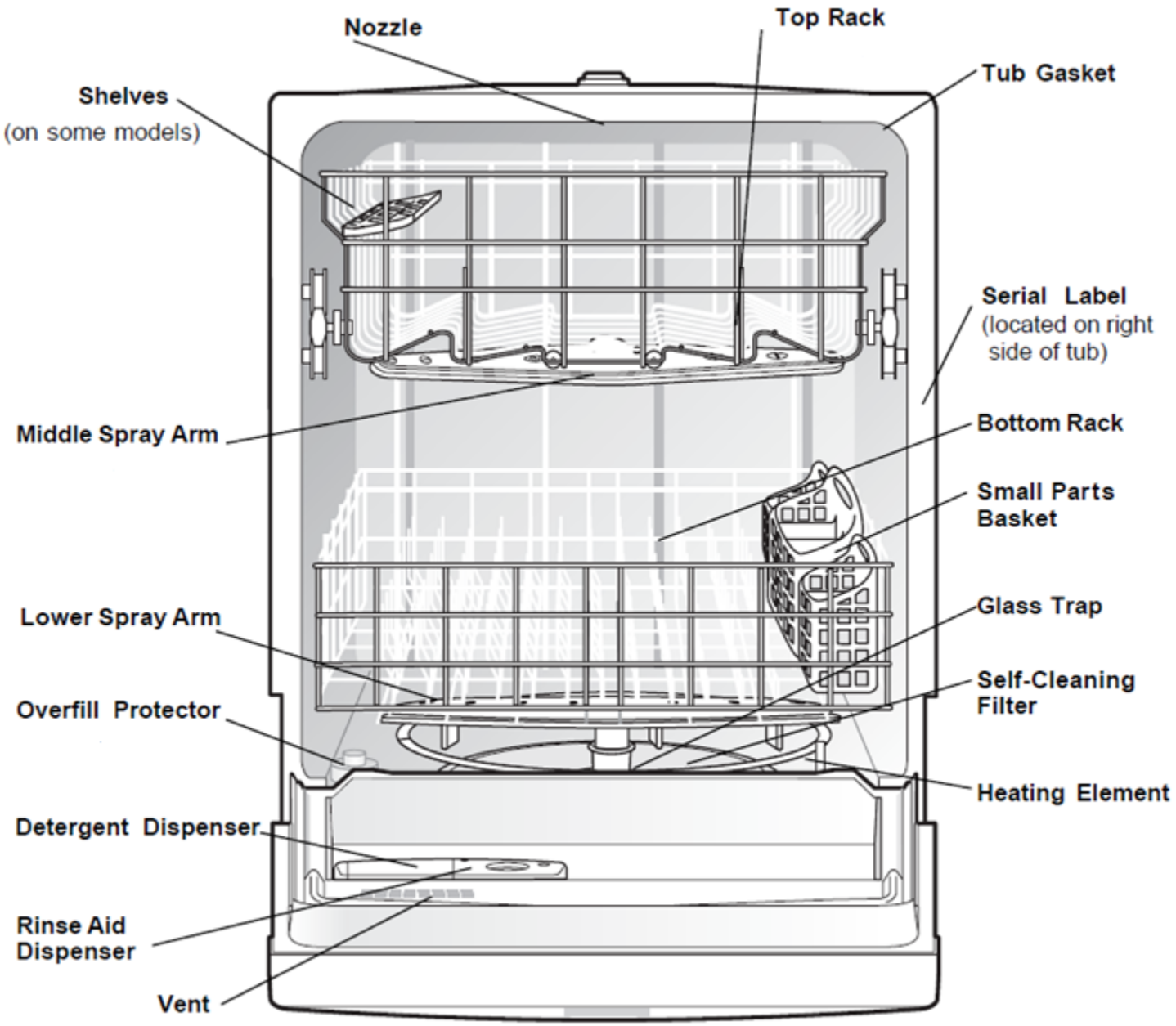
To reduce the risk of fire, electrical shock, or injury when using your laboratory dishwasher, follow basic precautions including the following:

- Read all instructions before using your laboratory dishwasher.
- Use your laboratory 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.
- LABORATORY DISHWASHER MUST BE ELECTRICALLYGROUNDED. Read the Installation Instructions for details.
- This laboratory dishwasher is designed to operate on regular house current (120 V, 60 Hz). Use a circuit equipped with a 15 ampere fuse or circuit breaker. Use a 20 ampere fuse if laboratory dishwasher is connected with a food waste disposer.
- Do not operate laboratory dishwasher unless all enclosure panels are in their proper place.
- Remove the door to the washing compartment when removing an old laboratory dishwasher from service or discarding it.
- Keep young children and infants away from laboratory dishwasher when it is operating.
- Do not let children abuse, sit, stand or play on door or racks of a laboratory dishwasher.
- Use only detergents and rinse agents recommended for use in a laboratory dishwasher.
- Store laboratory dishwasher detergent and rinse agents out of the reach of children.
- Do not wash plastic items unless marked “dishwasher safe” or the equivalent. Check with manufacturer for recommendations, if not marked. Items that are not dishwasher safe may melt and create a potential fire hazard.
- If the laboratory dishwasher drains into a food disposer, make sure disposer is completely empty before running laboratory dishwasher.
- Disconnect electrical power to laboratory dishwasher before servicing.
- 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 labware when the SANITIZE option has been selected. Contents may be hot to the touch immediately after the end of cycle.
- Water vapor from the vent may be hot to the touch when the SANITIZE option has been selected. Use care and do not let small children play around or touch the vent area of the laboratory dishwasher.
- When loading items to be washed:
  - Locate sharp items so that they are not likely to damage the door seal or tub.
  - Load sharp items 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 laboratory dishwasher, turn on all hot water faucets and let water flow from each 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.

SAVE THESE INSTRUCTIONS

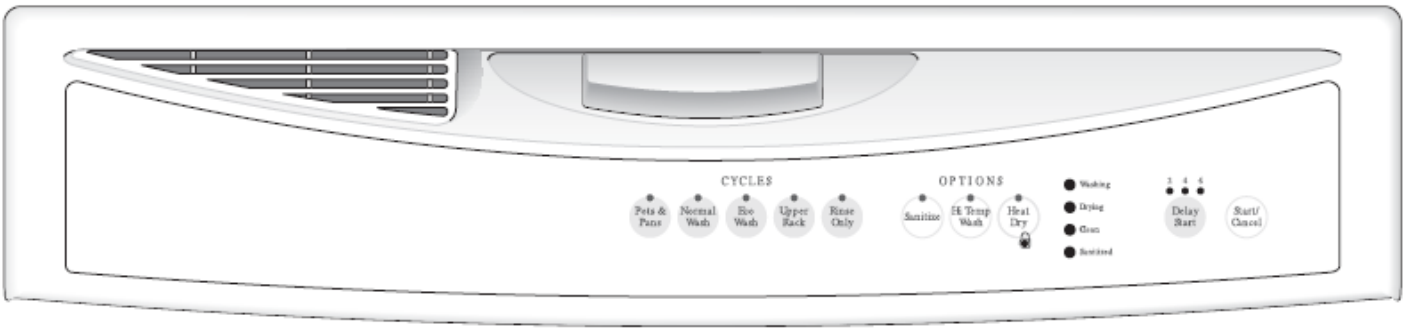
Laboratory Dishwasher Features

Your laboratory dishwasher cleans by spraying a mixture of hot water and detergent through the spray arms against soiled surfaces. First, the laboratory dishwasher fills with water covering the filter area. Water is then pumped through the filter and spray arms. Soil particles go down the drain as the water is pumped out and replaced with clean water. The number of water fills will vary with the cycle being used.



Appearance may vary from your model.

Operating Instructions



Appearance may vary from your model.

Very Important Information—Read Before Operating Your Laboratory Dishwasher!

Normal Operating Sounds

This laboratory dishwasher does not sound like most laboratory dishwashers—IT'S QUIETER.

Your laboratory dishwasher uses energy efficient motors for the wash and drain portions of the cycle you select. Each cycle has a series of water fills and drains for washing and rinsing labware. As each cycle begins, you may–or may not–hear the drain motor.

The next sound you will hear is the splashing water as it enters the tub. Then the lower arm rotates and circulates water. This is followed by a pause and a slightly different sound as the middle arm sprays water. If you listen closely, you will hear the change in sound as the wash action switches from one arm to the other.

PLEASE BE ADVISED: If you compare this laboratory dishwasher to previous models, you may be surprised at what you DON'T hear!

Getting Started

1. Load laboratory dishwasher (See Preparing and Loading Labware).
2. Add detergent (See Laboratory Dishwasher Dispenser & Detergents).
3. Add rinse aid, if needed (See Rinse Aid).
4. Close door to latch.
5. Select desired CYCLE (See Cycle Chart). The indicator light above the pad will glow when selected.
6. Select desired OPTIONS (See Energy Options). The indicator light above the pad will glow when selected.
7. Run hot water faucet nearest laboratory dishwasher until water is hot. Turn water off.
8. To start, press START/CANCEL pad.

Wash Cycle Selections

Note: Cycle times are approximate and will vary with options selected. Hot water is necessary to activate laboratory dishwasher detergent and break down soils. An automatic sensor will check the incoming water temperature and, if it is not hot enough, the timer will be delayed for automatic water heating in the main wash of all cycles. This happens even when HI-TEMP WASH option has not been selected. When HI-TEMP WASH is selected, an even higher temperature will be guaranteed to handle heavier soil loads.

Operating Instructions (continued)

Cycle Chart				
Cycle	**To Select Cycle**	**Water (approx.)**	**Time* (minutes)**	**Washes/ Rinses**
Heavy Wash For labware that is extremely soiled.	Select HEAVY WASH and desired OPTIONS. HI-TEMP WASH and SANITIZE will automatically be provided.	8.5 gal. 7.1 imp. gal. 32.2 liters	104	2 washes 5 rinses
Normal Wash For regularly soiled labware.	Select NORMAL WASH and desired OPTIONS.	6.1 to 8.4 gal. 5.1 to 7.0 imp. gal. 23.1 to 31.8 liters	89	2 washes 3 rinses
Eco Wash For lightly soiled and pre-rinsed labware.	Select ECO WASH and desired OPTIONS.	4.9 gal. 4.1 imp. gal. 18.6 liters	74	2 washes 2 rinses
Upper Rack For lightly soiled and pre-rinsed labware when you do not have a full load.	Select UPPER RACK and desired OPTIONS.	3.7 gal. 3.1 imp. gal. 14.0 liters	65	2 washes 1 rinses
Rinse Only For rinsing labware that will be washed later.	Select RINSE ONLY. DO NOT USE detergent.	2.4 gal. 2.0 imp. gal. 9.1 liters	18	2 rinses

*Includes drying time.

Operating Instructions (continued)

Options Selections

Hi-Temp Wash

When HI-TEMP WASH option is selected the laboratory dishwasher adds temperature, time, and water to the cycle. The laboratory dishwasher heats water in the main wash to approximately 140°F (60°C).

This increase in water temperature helps laboratory dishwasher detergent remove soil from labware more effectively and aids in drying. HI-TEMP WASH option can be used with all cycles except UPPER RACK, and RINSE ONLY. HI-TEMP WASH is automatically provided when HEAVY WASH cycle is selected.

When HI-TEMP WASH option is selected, the light above the pad will come on and remain on until end of cycle. To turn off the HI-TEMP WASH option, press the pad a second time. The light above the pad will turn off.

Sanitize Option

To sanitize your labware, select the SANITIZE option. When selected, the light above the pad will come on and remain on until end of cycle. The water temperature in the final rinse will be raised to 155°F (68°C) and will maintain that temperature for 9 minutes. This option is available in HEAVY, NORMAL and ECO WASH cycles.

The cycle time will be extended until the proper water temperature is reached. Washing action will continue during the water heating delay. For best results, the incoming water temperature should be at least 120°F (49°C).

The sanitize criteria may not be satisfied if there is an interruption of the cycle, power failure or if the incoming water temperature is below 120°F (49°C).

To turn off the SANITIZE option press the pad a second time. The light above the pad will turn off.

Heat Dry

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. You may choose not to select the HEAT DRY option; however you will have items in your dish load that will not be completely dry at the end of the cycle.

You may see water vapor coming from the vent during the drying portion of cycle. The vent is closed during washing to hold moisture and sound inside. The vent opens during the last few minutes of the final rinse and remains open for drying. The drying option may be changed at any time during the cycle and affects only the drying period.

Opening the door longer than one minute during the dry cycle cancels the selected dry program.

Delay Start

The DELAY START option allows you to automatically delay starting your laboratory dishwasher from 1-3 or 2-4-6 hours depending on your model.

On models with 2-4-6 hour delay, press the pad once for a 2 hour delay, twice for 4 hours and three times for 6 hours. A light will come on indicating the delay start hours and will remain on until cycle starts.

To cancel the DELAY START option and begin the cycle before the delay period is over, press the START/CANCEL pad.

To Cancel a Cycle

You can cancel a cycle anytime during the cycle. Press START/CANCEL pad and the dishwasher will start a 90 second drain. At the end of the drain, select the desired cycle.

Status Indicator Lights

The WASHING light (some models) comes on at the beginning of cycle and remains on until the end of the main wash.

The DRYING light (some models) indicates the drying portion of the cycle. The light will come on when either drying option is selected.

When the SANITIZE option is selected, the SANITIZED light will glow when the SANITIZE cycle is finished. If the laboratory dishwasher did not properly sanitize the dishes, the light will not come on. This can happen if the cycle is interrupted. The light will remain on until the door is opened.

The CLEAN light (some models) will come on at end of cycle and remain on until door is opened.

Adding Labware

To add or remove items after wash cycle starts:

• Unlatch door and wait a few seconds until wash action stops before opening.

• Add the item and wait a few seconds to allow cold air to slowly expand inside dishwasher.

• Close door firmly to latch and resume cycle.

Preparing and Loading Labware

Labware Preparation

Scrape away large pieces. The continuous filtered wash system will remove remaining particles.

Burned-on pieces should be loosened before loading. Empty liquids from glasses, beakers, petri dishes, cups, etc.

Some substances may cause discoloration of stainless steel and plastics if allowed to sit for a long period of time. Unless the laboratory dishwasher is to be operated at once, it is best to rinse off these soils.

• Load racks so that large items do not prevent the detergent dispenser from opening.

• Check manufacturer's recommendations before washing items in question.

• Check if the laboratory dishwasher drains into a food disposer, **be sure disposer is completely empty before starting laboratory dishwasher.**

Loading the Top Rack

Features and appearance of racks and small parts basket may vary from your model.

The upper rack is designed for flexibility in loading a wide variety of items including beakers, petri dishes, cups, glasses, stemware, small plates, bowls, etc.

Load glass items in top rack. 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 laboratory dishwasher operation.

Be sure nothing protrudes through the bottom of the top rack to block rotation of middle spray arm.

Some models have a fold-down beaker shelf. They can be used to load two levels of beakers, petri dishes, and other short items. Stagger items on upper level so that water can reach all inside surfaces. Fold up to load taller items.

Upper Rack Option

The UPPER RACK option can be used to wash a wide assortment of items when you don't have a full load. Also, when the upper rack fills up with glassware and the lower rack is still empty, you don't have to wait anymore for clean glassware.

Loading the Bottom Rack

Features and appearance of racks and small parts basket may vary from your model.

The lower rack is best for larger glassware. Large items should be placed along the edge so they do not block the spray arm rotation. For best results, place items face down or toward the center. Tilt slightly for better drainage.

Make sure tall items do not block spray arm rotation.

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

Loading the Small Parts Basket

⚠CAUTION

Cut Injury

Load sharp items pointing down.
Failure to do so may result in injury.

Features and appearance of racks and small parts basket may vary from your model.

Load the small parts basket while it is in the bottom rack or take the basket out for loading on a counter or table.

In some models small items can be placed in a covered section. Close the cover to hold small items in place.

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

Mix items in each section of the basket. Water spray cannot reach nested items.

Laboratory Dishwasher Dispenser and Detergents

Filling the Detergent Dispenser

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

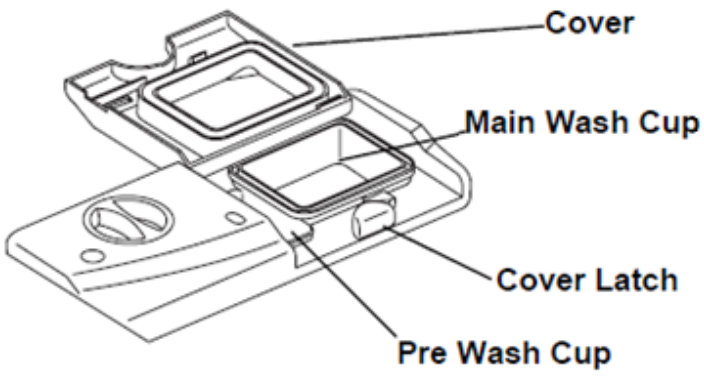
- Use only fresh automatic dishwashing detergent. Other detergents will cause oversudsing.
- When using automatic dishwashing detergent tabs, place one tab in main wash cup and close.
- Add detergent just before starting cycle.
- Store detergent in a cool, dry location. Moist or caked detergent will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

⚠CAUTION

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

How much Detergent to use

The amount of detergent to use depends on the water hardness. Water hardness 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 a permanent film called etching. Your local water company, water softener company or county extension agent can tell you the water hardness in your area.



Note: If the cover is closed on the Main Wash Cup, open by pressing the cover latch.

Detergent Usage Guide

Cycle	Soft Water (0-3 grains)	Medium Hard Water (4-8 grains)	Hard Water (9-12 grains)	Very Hard Water* (over 12 grains)
Heavy Wash or **Normal Wash**	**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)
Eco Wash or **Upper Rack**	**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)
Rinse Only	**No Detergent**	**No Detergent**	**No Detergent**	**No Detergent** (water softener recommended)

***Note:** For very hard water, detergent alone may not be enough. A water softener is recommended to improve water quality and dishwashing performance. 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 laboratory dishwasher will continue through the cycle.

Laboratory Dishwasher Dispenser and Detergents (Continued)

Rinse Aid

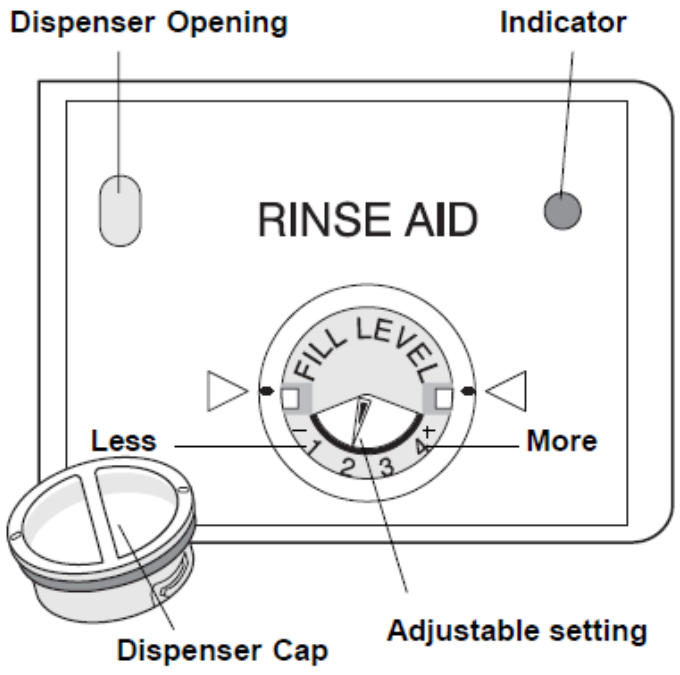
Rinse aid greatly improves drying and reduces water spots and filming. Water "sheets" off glassware rather than forming water droplets that cling and leave spots.

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 dispenser 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 setting.



Factors Affecting Performance

Water Pressure

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

Low water pressure may occur when other water dependent machines are in operation. Wait until water use is reduced before starting laboratory dishwasher.

Water Temperature

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

To check water temperature entering laboratory dishwasher:

- Turn on hot water faucet nearest laboratory dishwasher for several minutes to clear cool water from pipes.
- Hold a thermometer in stream of water 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. You may choose not to select the HEAT DRY option; however you will have items in your dish load that will not be completely dry at the end of the cycle.

Care and Cleaning

⚠WARNING

Burn Hazard

Allow heating element to cool before cleaning the interior.

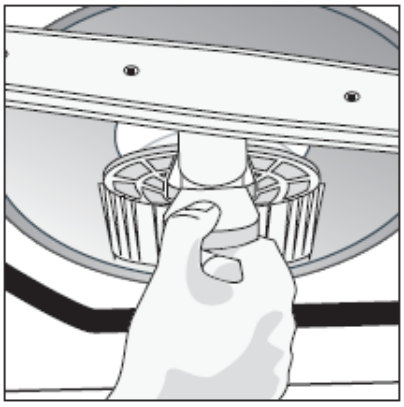
Failure to do so can result in burns.

Outside—Occasionally wipe with a mild nonabrasive detergent and water. Rinse and dry.

Models with Stainless Steel Door—Clean outer door with warm soapy water and a dishcloth or sponge. Rinse with clean water and a dry cloth. Do not use harsh cleaners.

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

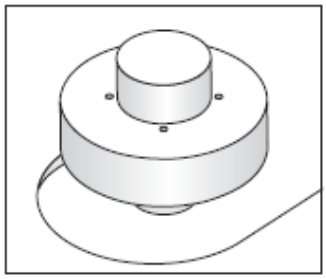
The filter is self-cleaning. A glass trap located in the center of the filter is designed to collect pieces. To remove items in glass trap, grasp handle, lift out, empty and replace.



Note: Hard water may cause lime deposit buildup on the interior of the laboratory dishwasher. For cleaning instructions see “Removing Spots and Film” section.

Overfill Protector—keeps laboratory dishwasher from overfilling 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.



Care of Drain Air Gap

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

Winterizing

A laboratory 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 laboratory 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.

Note: See Installation Instructions for more details.

To Restore Service:

1. Reconnect the water, drain, and electrical power supply.
2. Turn on water and electrical power supply.
3. Fill both detergent cups and run laboratory dishwasher through a HEAVY WASH cycle.
4. Check connections to make sure they do not leak.

Note: See Installation Instructions for more details.

Solutions to Common Problems

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 laboratory dishwasher.

Soils Left on Labware

- Choose another cycle for longer washing time.
- Avoid nesting items.
- Water pressure may be too low— should be 20 to 120 pounds per square inch (psi).
- Check incoming water temperature. It should be at least 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.
- Check to make sure funnel in top rack is not blocked.
- Make sure items are not blocking the spray arms, preventing them from rotating.

Labware not Dry

- Select heat dry option.
- Make sure the rinse aid dispenser is filled.
- Increase the amount of rinse aid. (See Rinse Aid.)
- Check the incoming water temperature. Be sure it is at least 120°F (49°C).
- Check for proper loading—avoid nesting items.
- Plastic items may need to be towel dried.
- Glassware with a concave bottom will collect water.

Glassware 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 Labware.)
- 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. Also, check phosphate level. (See Detergent Dispenser.)
- Water pressure may be too low—it should be 20 to 120 pounds per square inch (psi).

Labware Chipped

- Load with care and do not overload. (See Preparing and Loading Dishes.)
- Place delicate items in top rack.
- Place glassware securely against 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 items will clear top of tub when rack is pushed in.

Solutions to Common Problems (Continued)

Laboratory Dishware Stained or Discolored

- Some solutions can cause items to become stained. Remove the stains by hand washing in a solution of ½ cup (120 ml) bleach and one quart (1 L) 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 solutions can cause discoloration of stainless steel and plastics if allowed to sit for a long period. Use the

Rinse & Hold cycle or rinse by hand if not operating laboratory dishwasher at once.

- Mixing stainless steel and silver utensils in the small parts basket can cause pitting of the stainless steel. Avoid mixing stainless steel and silver.

Etching

- Using too much detergent in soft or softened water causes this film that cannot be removed.
- Adjust the amount of detergent based on the water hardness. (Check Detergent Chart.)
- Lower the water temperature.
- Use no heat dry option.

Detergent Left in Cups

- Detergent may be old. Discard and use fresh detergent.
- Be sure water action can reach the dispenser.
- Check to see if cycle has been completed.
- Make sure items do not prevent the detergent dispenser from opening.

Laboratory Dishwasher Leaks

- Use only fresh detergent designed for laboratory dishwashers. Measure detergent carefully. Try a different brand.
- 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 and motor sounds.
- There is a noticeable change in sound when the wash action switches between the lower and middle spray arm. This is normal since each spray arm has its own sound.
- It is normal for laboratory dishwasher to pause (no sound) when the wash action is switching between the lower and middle spray arms.

Water in Bottom of Tub

- Water left in bottom of tub after cycle is complete is not normal. If water remains in the bottom of the tub, laboratory dishwasher may not be draining properly. (See Laboratory Dishwasher Does Not Drain Properly.)

Vapor at Vent

- Water vapor escapes from the vent during the drying part of cycle. This is normal.

Laboratory Dishwasher Won't Run

- Check to see if 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.)
- Is laboratory dishwasher set for delay start option?
- Make sure door is closed and latched.

Solutions to Common Problems (Continued)

Laboratory 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.

Cycle Takes a Long Time

- Is cycle in a water heating delay?
- Has the delay start option been selected?
- Has the sanitize option been selected?

Laboratory Dishwasher Won't Fill

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

Laboratory Dishwasher Has an Odor

- Soiled glassware left in laboratory dishwasher too long can create an odor. Use Rinse Only cycle.
- There will be a "new" smell when first installed. This is normal.
- Check to see if unit is draining properly.

(See Laboratory Dishwasher Does Not Drain Properly.)

Stains on Tub Interior

- Washing certain solutions may cause staining of the interior. This will not affect performance and will gradually fade over time. Prerinsing or using the Rinse Only cycle will reduce the chance of staining. Using no heat dry option will lessen staining.

Removing Spots and Film

Hard water can cause lime deposit buildup on the interior of the laboratory dishwasher. Labware may also get spots and film for a number of reasons. (See Glassware Spotted or Cloudy section.) To remove buildup, spots and film, clean using the following instructions:

1. Load clean labware in normal manner. Do not load any metal utensils.
2. Do not add detergent.
3. Select the NORMAL WASH cycle. Close and latch door. Press START/CANCEL pad.
4. Allow laboratory dishwasher to run until it starts the second water fill (approximately 10 minutes).
5. Unlatch and open door and pour 2 cups of white vinegar into the bottom of laboratory dishwasher.
6. Close and latch door and allow cycle to finish.

Note: If these conditions persist, a water softener should be considered.

Warranty Information

Universal Scientific Inc. provides a full one (1) year warranty on all parts and factory workmanship. It expires one (1) year from the date of installation.

We have the option to void the warranty if:

- Non-authorized service group provides service work.
- Accident of abuse.
- Not following operating instructions
- Running the D.I. system without water.
- Product failures caused by the use of highly corrosive chemicals or materials.
- Installation does not comply with local codes.
- Washer is installed on a single circuit with other washers, appliances, and or outlets on that circuit.

SERVICE

Your Universal Scientific Inc. Laboratory Dishwasher is backed by a nationwide network of factory authorized service companies. If you need service please call us at 440-428-7800 and ask for the service department.