This manual provides information for:

**PS-100**

**INTRODUCTION AND CONVENTIONS**

**PRODUCT INTRODUCTION**

Thank you for purchasing a Power Soak ware washing machine. Your new Power Soak pot, pan and utensil washing machine will provide years of dependable, efficient and trouble-free service. As a Power Soak owner, you will benefit in numerous ways:

- Your ware washing operation will be more efficient.
- Pots, pans and utensils will be cleaner.
- The overall level of sanitation in your scullery area will improve.
- Ware washing hours will decrease as employee morale increases.
- Chemical and water usage will decrease.

Every machine is manufactured to last, with only high-quality, heavy-duty, 14 gauge stainless steel used in its construction. All electrical components used in a Power Soak machine are of the highest quality. The faucets and drains are designed for quick filling and emptying of the machine's tanks. At Unified Brands, we take pride in manufacturing the Power Soak line and are committed to standing behind our customers and products 100%. Should you ever need assistance, please contact us directly at the factory by dialing 888-994-7636 or fax: 601-371-9732.

**EXPLANATION OF WARNING MESSAGES**

Read, understand and follow all DANGER, WARNING, and CAUTION messages located in this guide and on the equipment.

- **Personal Injury and Property Damage Hazard** Will result in serious injury or death. Will cause extensive equipment damage.
- **Property Damage Hazard** Will result in property or equipment damage.
- **Chemical Hazard** Will result in serious injury or death. Instructions, labels and Material Safety Data Sheets (MSDSs) should be supplied with all detergents and sanitizing chemicals. The manufacturers, importers and distributors of the cleaning chemicals are responsible for providing this information.

**REQUIREMENTS FOR DETERGENTS AND SANITIZERS**

**The Power Soak PS-100 Requires a Low-Foaming Detergent That Is Safe for Human Hands. The Detergent Should Have Good Grease Cutting Abilities But Not Have an Excessively High or Low PH Level. A Metal/Aluminum-Safe Formula Is Recommended. Consult a Chemical Provider for a Suitable Deep Cleaning Chemical.**

**Detergents**

The PS-100 can use two types of detergents, one type for normal cleaning and one type for “Deep Cleaning” for more effective deep cleaning. The materials to be cleaned and the type of debris to be removed will be a factor in selecting the proper detergent. Provide this information to a chemical supplier when selecting the type of detergent. Use of the correct detergent in the Power Soak machine is critical to its washing performance. Improper detergents could damage the equipment. If there are problems with cleaning results, please contact the Power Soak service department 888-994-7636.
Sanitizers
The method of sanitizing used in the Power Soak PS-100 is a “chemical sanitizing” method. There are a number of products on the market that work well in this application. A chemical sales representative should assist in selecting the proper sanitizer. Ask the cleaning chemical provider to determine detergent concentration, sanitizer “parts per million” (ppm) and sanitizer submersion times to meet local health codes.

Power Soak Service Assistance
If a chemical sales representative is having difficulty selecting a detergent or sanitizer, or if there are poor results with the chemicals that a representative has recommended, please contact Unified Brands at 888-994-7636.

CONTROL FEATURES

The illustration shows the PS-100 Control Panel Overlay. The overlay is adhered to the front of the control panel box and contains buttons and lights that are imbedded into the overlay. Communication with the UPM is accomplished with cables that extend from the back side of the overlay.

CONTROL PANEL & FEATURES

START Button The green “Start” button is used to start the normal Power Soak wash cycle.
STOP Button The red “Stop” button is used to stop the wash cycle.

PREPARING THE MACHINE

BE SURE TO ADJUST KNOBS ON THE SPRAY RINSE AND ALL WATER FAUCETS SO THAT THE WATER TEMPERATURE IS BELOW 120°F (49°C). TEMPERATURES HIGHER THAN WHAT IS RECOMMENDED CAN CAUSE SCALDING OR BURNS IF CONTACT IS MADE WITH A PERSON’S SKIN.

Filling the Machine
At the beginning of each day, shift, or designated time fill the sinks with water that is metered to approximately the correct operating temperatures:

- Wash tank (115°F / 48°C)
- Rinse tank (75°F / 24°C)
- Sanitizing tank (75°F / 24°C)

All tanks should be filled to, but not above, the “waterline” marks. If your wash sink has dual waterlines, fill to the upper waterline when washing sheet pans held in racks and to the lower waterline for all other purposes. If your wash sink has dual waterlines, fill to the upper waterline when washing sheet pans held in racks and to the lower waterline for all other purposes.

Rinse Water
Submersion Rinsing If the wares are to be rinsed by submerging them in fresh water, fill the rinse tank (middle tank) with water that is approximately room temperature, 75°F/24°C. The hot and cold taps on the faucet are used to adjust the water to the appropriate temperature. Drain and refill this tank as necessary to maintain clean water in the tank.
Spray Rinsing When using the faucet or hand held spray nozzle to rinse the wares, leave the wash tank empty, with the drain open.
Sanitizer Water
Direct Dispensing Fill the sanitizing tank using the faucet with water that is approximately 75°F / 24°C prior to adding chemicals. The hot and cold taps on the faucet are used to adjust the water to the appropriate temperature. When the tank is full, the chemical can be manually added to the water. Never place concentrated chemicals into an empty tank.
Manually Adding Detergents & Sanitizers
After the tanks have been filled with water, add the proper amount of detergent and sanitizer. The detergent goes into the wash tank (the tank with the water jets) and the sanitizer goes into the sanitizer tank (the tank furthest from the wash tank).

It is important to add the proper amount of chemicals to each tank. The amount to be used should be provided by the chemical supplier. Do not add the detergent or sanitizer to the tank prior to or during filling.

Most detergents and sanitizers lose effectiveness as time goes on. Some local health departments have requirements limiting the amount of time water can be used for cleaning before the water must be changed. Most chemical companies recommend changing wash water after a certain time frame. Those times vary, but are generally around two to four hours. Check with the chemical provider for recommended time for effective use.
Sanitizing solutions also have a limited safe use period. Check with the chemical provider on how often to check and or replace the sanitizing fluid.

Acceptable Normal Wash Chemicals:
- Chemicals must be safe for contact with human skin.
- The detergent must be low foaming, not excessively caustic and metal/aluminum-safe are recommended.
- Cleaning solutions need to be selected for the type materials to be cleaned.
- Most standard sanitizers can be used with the PS-100, however; consult with a chemical provider to be sure the chemical that is selected is a good choice.

OPERATING THE POWER SOAK

Starting and Stopping the Wash Action

To start the wash action, press and release the green “START” button. A strong “rolling” action should be present in the wash tank. To stop the wash action, press the red “STOP” button.
Introducing Pots and Pans to the Power Soak
Dirty pots and pans should be brought to the Power Soak in a timely manner. Do not allow items to sit and air dry. The quicker that items are brought to the Power Soak, rinsed and put in the wash tank, the easier they are to clean!

Properly Scraping Pots and Pans
Excess soils should be removed from the pots and pans prior to dropping them in the wash tank in order to reduce the amount of debris circulating in the wash tank. Deposit the excess soils into a garbage can. Some machines may have an optional pre-scraping area with a pre-rinse spray; soils may be deposited into the scraper tray. Empty the scrap collection tray regularly.

Loading and the Wash Tank
The Power Soak is a “random loading” machine. This means that Power Soak items are not racked for washing. Instead, they are randomly loaded one at a time and circulate in the wash tank. When items are brought to the machine and the scraps removed, they should be immediately dropped into the wash tank. The Power Soak is a “continuous motion” machine, meaning that the machine does not operate on a set cycle time like a cabinet-type washing machine. During normal operating hours where washing is required, the machine is (normally) left running. The Power Soak is energy efficient, and it does not cause excessive wear to leave it running continuously. Typically, it takes between three to fifteen minutes to wash items. Some heavily soiled or burnt-on items may take longer to clean and should be allowed to circulate in the wash tank until they are clean.

Loading and Washing Utensils
Each Power Soak system comes with a utensil basket that hangs in the wash sink. All utensils and other small wares should be loaded into and washed inside this basket.

Unloading the Wash Sink
The employee responsible for pot washing should routinely pass by the Power Soak and remove clean items from the wash sink. Items that are not 100% clean can be quickly finished off with a scrub pad or dropped back into the wash sink for additional cleaning. Remember: it is not necessary to turn the wash action off to load or unload items from the wash sink. There are no moving parts within the wash sink that could cause bodily harm.

Rinsing Pots and Pans after Wash is Complete
Clean items that have been removed from the wash tank or utensil area should be thoroughly rinsed. This is achieved by spraying them off or dipping them in the (center) rinse tank. It is important that any remaining detergent residue is removed from the items prior to sanitizing. If items are rinsed by the “dipping” method, it is important to keep the water “fresh” by frequently draining and filling the rinse tank.

Sanitizing Pots & Pans
After items have been properly rinsed they must be sanitized in the sanitizing tank. It is necessary for each item to remain submerged in a correctly titrated sanitizing solution for a specific amount of time. The amount of time varies according to the type of sanitizer being used and local health codes. Be sure to follow the chemical supplier’s instructions to ensure that all items are properly sanitized.

Drying of Pots & Pans
After items have been sanitized, they should be thoroughly air dried on a clean drain board or on adjacent drying shelves. Be sure to adhere to all local health codes and recommendations for proper drying and stacking of items.

Wash, Rinse and Sanitizer Clean-Up
Between each water change and at the end of each night, all tanks and drain boards should be thoroughly cleaned with hot, soapy water. It is also recommended to wipe down all the tanks and drain boards with a sanitizing agent. Ask your chemical provider to recommend a sanitizer for this application.

PREVENTATIVE MAINTENANCE
The Power Soak PS-100 requires minimal, routine preventative maintenance. The following procedures should be done to ensure that the PS-100 remains reliable. If there are any questions regarding the preventative maintenance procedures, please contact the factory at 888-994-7636.

IF THE LIQUID LEVEL SENSORS ARE NOT CLEANED REGULARLY, THE MACHINE MAY FAIL TO OPERATE; OR IT MAY BE POSSIBLE TO RUN IT WITHOUT WATER, WHICH WILL CAUSE SERIOUS DAMAGE TO THE UNIT.

DAILY
Clean the liquid level sensors that are located on the side walls of the wash and sanitizer tanks. They are the white plastic discs with metal centers. Clean the sensor faces thoroughly. If cleaned regularly, a washcloth and soapy water are all that is required.

MONTHLY
Clean the pump motor fan shroud with a damp, soapy cloth. The motor shroud is the “vented” cover located at the end of the motor (closest to the control panel). This will prevent grease and dust from accumulating in the cover’s openings, which can obstruct the airflow that cools the motor.

AS NEEDED
De-lime the wash tank. Simply add a recommended titration of de-liming agent to a tank of warm, fresh water and run the system overnight. Ask your chemical sales representative to recommend a specific de-liming agent.
TROUBLESHOOTING

THE ONLY TROUBLESHOOTING PROCEDURE THAT THE FACILITY OWNER OR MANAGER CAN PERFORM IS LISTED IMMEDIATELY BELOW. ALL OTHER PROCEDURES MUST BE PERFORMED BY AN AUTHORIZED SERVICE AGENCY. TO OBTAIN THE NAME OF A RECOMMENDED SERVICE AGENT IN YOUR AREA, PLEASE CALL THE UNIFIED BRANDS SERVICE DEPARTMENT AT 888-994-7636.

DEFINITION OF RESPONSIBILITIES

Facility Owner/Manager Section

Wash Pump/Heater Will not Operate If after reviewing the status of the control panel LED’s, there is still an operating problem, refer to the following troubleshooting guidelines:

- Check to make sure the main electrical power breaker for the Power Soak system is in the “ON” position.
- Check to make sure the wash sink is filled to the waterline.
- Check to make sure that the liquid level sensors are clean and free of any debris or grease. The liquid level sensors are located on the side walls of the wash and sanitizer sinks (the white plastic disc with a metal center).
- Push ON / Push OFF Start and Stop Buttons 

Overload Trips

The thermal overload can be checked as follows:

- Make sure the thermal overload is not tripped. If the thermal overload is tripped, remove the wires from terminals T1 and T2 on the thermal overload.
- Push the contactor closed manually and check for continuity across pump contactor terminals L1 and T1, L2 and T2, L3 and T3. If no continuity on any of these, the contactor is defective.

Liquid Level Control and Sensor

- The liquid level control sends a trickle current (1/1000 amp) out terminal LCO to the liquid level sensor. If there is water in the wash sink, the current passes through it to the wash sink wall and back to the liquid level sensor to terminal GND. After the circuit is complete, the relay in the liquid level control will close sending current to operate the various components in the control panel. If the red indicator light is “on” the liquid level control senses water. A 10 second time delay is timed after the control has not sensed water. The purpose of this delay is to prevent rapid cycling of the relay should the water rise and fall below the sensor while the sink is filling or running. At the end of the time delay, the relay in the liquid level control will open to stop the pump.
- If the above trouble shooting procedures do not correct the problem, contact Unified Brands at 888-994-7636 or an authorized service agency. Have the serial number of the machine ready when the call is placed.

Pump Contactor

- The thermal overload can be checked as follows:
  - Make sure the thermal overload is not tripped. If the thermal overload is tripped, you must wait at least 10 minutes for it to cool down before it will reset.
  - Check for continuity across terminals 95 and 96.

INSTALLATION & DECOMMISSIONING

THE INSTALLATION AND INITIAL OPERATIONAL CHECK OF THE POWER SOAK MUST BE PERFORMED BY LICENSED AND CERTIFIED PLUMBERS AND ELECTRICIANS.

BE SURE TO FOLLOW ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL CODES WHEN INSTALLING THE ELECTRICAL SUPPLY AND/OR A NEW BREAKER. DO NOT CONNECT THE SYSTEM USING A POWER CORD AND PLUG OR AN EXTENSION CORD OF ANY KIND.

Please refer to the detailed installation instructions that were sent with the Power Soak PS-100.
ELECTRICAL REQUIREMENTS

The electrical requirements of the PS-100 are on the serial number plate located on the front corner of the wash tank, adjacent to the control panel enclosure and inside the enclosure itself.

- All Power Soak systems have a single point electrical connection, and a dedicated circuit is required.
- The system is completely pre-wired and tested at the factory, and a hardwired connection from an appropriate power source junction box is all that is required.
- The installer is to provide a disconnect that should be incorporated in the fixed wiring.
- Properly sized watertight conduit, fittings and parts are required, as well as the appropriate gauge wire.
- If your system is a “left-to-right” unit, you should locate the power source junction box at the left end of the system. (The opposite would be true for a “right-to-left” system.) Ideally, the junction box should be located on the wall directly behind the pump motor and control panel.
- A wiring diagram is located in the machine’s control panel enclosure.
- An equipotential bonding terminal is provided on the side of the wash tank and identified with the symbol shown at the right of this statement.
  
  This terminal is used to make a connection for properly grounding the machine.
  This connection must be completed by a qualified electrical technician.

Specific part numbers and part information can be obtained from the factory by calling 888-994-7636. Service information is also found on the Unified Brands, Inc. website (http://unifiedbrands.net).

PLUMBING REQUIREMENTS

The PS-100 requires the following plumbing connections:

- One 3/4” (19mm) or 1/2” (12 mm) cold water supply line.
- One 3/4” (19mm) or 1/2” (12 mm) hot water supply line.
- One waste water connection minimum 1-½” (38mm).

DO NOT USE HOSES to make the pressure connections to the faucets. Maximum water inlet pressure is not to exceed 125 psi (8.6 Bar), minimum water pressure to be not less than 20 psi (1.4 Bar).

DECOMMISSIONING

When it is time to decommission the PS-100 the components of the machine are to be recycled. The electrical control panel and motor have materials that must not be discarded into common trash disposal. Dispose of the control panel contents and the motor through a proper waste electrical and electronic source or return the contents and the motor to the source where the PS-100 was purchased.

The metal in the sinks and control panel enclosure has a value in the recycled metals market. The owner of the PS-100 can recover this value by directly contacting a metal recycling facility and making arrangements to recycle the metal.

If any or all of the PS-100 is returned to the source where it was purchased, there will be no obligation for the Power Soak representative to make any compensation for the returned materials.