



# PS-50

## Owner's Manual



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## Product Introduction

Thank you for purchasing a *Power Soak* ware washing system.

Your new *Power Soak* pot, pan and utensil washing system 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 system 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* system are of the highest quality. The faucets and drains are designed for quick filling and emptying of the system's sinks.

At Power Soak Systems, 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 **800-444-9624** or fax: **816-761-0544**.

## Explanation of Warning Messages

Be sure to read, understand and follow all DANGER, WARNING, and CAUTION messages located in this guide and on the equipment.

### Danger

Personal Injury and Property Damage hazard.  
May result in serious injury or death.  
May cause extensive equipment damage



### Warning

Property Damage Hazard.  
May result in property or equipment damage.



### Personal Injury Hazard

Hazard from sharp objects.  
May result in serious injury or death.



### Chemical Hazard

May 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 your cleaning chemicals are responsible for providing this information.



Power Soak Systems is not a chemical manufacturer, importer or distributor. Power Soak Systems, Inc. can assist your chemical representative but will not make specific brand recommendations.

## Requirements for Detergents and Sanitizers

### Detergents

Remember, improper detergents may damage equipment! Use of the correct detergent in your *Power Soak* system is critical to its washing performance. If you are having problems with cleaning results, please contact the factory.

Your new system requires a low-foaming, metal/aluminum-safe detergent that is safe for the hands. The detergent should have good grease cutting abilities but not have an excessively high pH level.



### Sanitizers

The method of sanitizing used in your *Power Soak* system is a "chemical sanitizing" method. There are a number of products on the market that work well. Your chemical sales representative should assist you in selecting the proper sanitizer for your application.

Check with your cleaning chemical provider to determine detergent concentration, sanitizer "parts per million" (ppm) and sanitizer submersion times to meet local health codes.

### Factory Assistance

If your chemical sales representative is having difficulty selecting a detergent or sanitizer, or if you are getting poor results with the chemicals your representative has recommended, please contact the factory at **800-444-9624**.



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# Operating Instructions





# Preparing the System

## Filling the System

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

- Wash sink (115°F / 48°C)
- Rinse sink (75°F / 24°C)
- Sanitizer sink (75°F / 24°C)

All sinks should be filled to, but not above, the “waterline” marks.

Fill the wash sink (the sink with the water jets) with water that is approximately 115°F / 48°C. You can use the hot and cold taps on the faucet to adjust the water to the appropriate temperature. A good rule of thumb is that the water should be hot to the touch but not so hot that it is uncomfortable.

## Rinse Water

If your method for rinsing wares is of the “submersion” type, fill the rinse sink (middle sink) with water that is approximately room temperature, 75°F / 24°C. There is no need to fill the rinse sink if your location uses a sprayer for rinsing wares.

## Sanitizer Water

Fill the sanitizer sink (the last sink) with water that is approximately room temperature, 75°F / 24°C.

## Your Chemical Company Should Be Aware of the Following:

The detergent must be low foaming, metal/aluminum-safe and not excessively caustic. Most standard sanitizers are acceptable.



# Adding Detergents & Sanitizers

## Manual Chemical Dispensing

After the sinks have been filled with water, add the proper amount of detergent and sanitizer. The detergent goes into the wash sink (the sink with the water jets) and the sanitizer goes into the sanitizer sink (the last sink).

Be sure to add the proper amount of chemicals to each sink. The amount to be used should be provided by your chemical supplier. Do not add the detergent or sanitizer to the sink 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 should be changed. Most chemical companies recommend changing wash water after a certain time frame. Those times vary, but are generally around four hours. Check with your chemical provider.

Check with your chemical provider on how often to replace your sanitizer.



## Controls and Features

### On/Off Switch

Starts and stops the washing action.

### Starting and stopping the wash action

To start the wash action, turn the ON/OFF switch until the red arrow points to “ON”. A strong “rolling” wash action should be present.

To stop the wash action, turn the ON/OFF switch until the red arrow points to “OFF”.

### 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* and put in the wash tank, the easier they are to clean!

### Properly Scrapping Pots and Pans

Excess soils should be removed from the pots and pans prior to dropping them in the wash sink.

Deposit the excess soils into a garbage can.

Some systems may have an optional pre-scrapping area with a pre-rinse spray. If so, soils may be deposited into the scrapper sink.



## Controls and Features - Continued

### Loading and Using the Wash Sink

The *Power Soak* is a “random loading” system. This means that *Power Soak* items are not racked for washing. Instead, they are randomly loaded one at a time.

As items are brought to the system and scrapped, they should be immediately dropped into the wash sink.

If there is no movement of items in the wash sink, or if items are stationary above the waterline, the system has been overloaded and some items must be removed.

It is very important not to overload the wash sink, as it reduces the effectiveness of the wash action.

Some pots and pans stack for storage. This is referred to as “nesting” when it occurs during a *Power Soak* wash cycle. Make sure that nested items are separated and loaded one at a time. Nested items in the wash sink will not be properly washed.

*Power Soak* is a “continuous motion” system. This means that the system does not operate on a set cycle time like cabinet-type washing systems. Instead, during normal operating hours where washing is required, the system 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.



## Controls & Features - Continued

### 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.

Do not wash knives or other sharp objects in the Power Soak. Doing so may cause bodily injury.

### 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.



## Controls & Features - Continued

### Rinsing Pots and Pans

Clean items that have been removed from the wash sink should be thoroughly rinsed. This is achieved by spraying them off or dipping them in the rinse sink (center).

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 sink.

### Sanitizing Pots & Pans

After items have been properly rinsed they must be sanitized in the sanitizing sink. (last).

It is necessary for each item to remain submersed in the 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 your chemical sales representative's instructions to ensure that all items are properly sanitized.

### Drying of Pots & Pans

After items have been sanitized, they should be thoroughly 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.



## Controls & Features - Continued

### Deep Cleaning and "Night Washing"

Extremely soiled items and pieces of cooking equipment that require regular, intensive cleaning can be washed in the *Power Soak* system overnight.

Load the items to be deep cleaned into the Power Soak's wash sink, turn the system on and leave it running overnight.

Items that have been cleaned overnight can be removed, rinsed, sanitized (if necessary) and put away or back in place.

Use your *Power Soak* as a "total cleaning system!" Remember, any item in your operation that can be submersed for cleaning and is not fragile can be washed without labor in your *PowerSoak!*

Here are some examples of items that are typically deep-cleaned overnight in the "Night Wash" cycle:

- Hood Filters
- Roasting Pans
- Stove Tops
- Frying Equipment

Many other items in your operation may qualify. Be creative and set up a regular "Night Wash" program for improved sanitation.

### 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.

## Preventive Maintenance

Your system requires minimal, routine preventive maintenance. As such, the following should be done on a routine basis to ensure that your system remains reliable:

### Monthly

**IMPORTANT:** Turn off the power to the unit at the main breaker prior to performing the following task!



Clean the pump motor fan shroud with a damp, soapy rag. 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.

De-lime the wash sink. Simply add a de-liming agent to a sink of warm, fresh water and run the system overnight.

Ask your chemical sales representative to recommend a specific de-liming agent.

There are no other preventive maintenance procedures that you will need to perform on your *Power Soak* system. You need not be concerned about greasing the motor bearings, as they are permanently sealed. If you have any questions regarding the preventive maintenance procedures, please contact the factory at **800-444-9624**.



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### Troubleshooting



## Authorized Service Agency Section

Hazard to untrained or unauthorized personnel.

The following procedures are provided for use only by an authorized service agency. No facility owner, manager, employee or other unauthorized person should attempt to perform any of these procedures. To obtain the name of a recommended service agent in your area, please call the Metcraft, Inc. *Power Soak* Service Department at **800-444-9624**.



When performing troubleshooting procedures, the authorized service agency will need to open the *Power Soak* system's main electrical enclosure.

Properly close the control panel before reconnecting the circuits.



Refer to the previous checklist under the "Facility Owner / Manager Section" before proceeding to the following checklist items:



### Pump does not work

Look For	Correction
1 No water in sink	Fill sink with water
2 No incoming power to unit	Reset customer's breaker in breaker control panel
3 Loose wires	Tighten wires
4 Motor overload tripped	See "Overload trips" (Next Section)



# Authorized Service Agency Section - Continued

## Overload trips

Look For	Correction
1 Low voltage to unit	Check with Volt meter while running
2 Debris in PUMP intake	Clean
3 Debris in IMPELLER	Remove PUMP and clean
4 Defective PUMP MOTOR	If amp draw is greater than 10% of motor rating and all of above check out, then replace MOTOR

## Component Operation and Checks

The following checks should only be performed by qualified technicians using extreme caution.

Electrical hazard to untrained personnel may result in electrical shock, burns, or death.



### ON / OFF Switch

TURN POWER OFF AT BREAKER PANEL. The On/Off switch should have continuity in the “ON” position and no continuity in the “OFF” position. Remove the wires before checking for continuity.



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# Installation





## Installation Guide

The installation and initial operational check of your new system must be performed only 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.



## Electrical Requirements

The electrical requirements of your new system are on the serial number plate located on the front of the wash sink, adjacent to the control panel enclosure and inside the enclosure itself.

All *PowerSoak* systems have a single point electrical connection, and a dedicated circuit is required.



## Providing Proper Electrical Service

The system is completely pre-wired and tested at the factory, and a hard-wired 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.

Specific part numbers and part information can be obtained from the factory by calling **800-444-9624**.

## Plumbing Requirements

Your unit requires the following plumbing connections:

- 3/4” (19mm) or 1/2” (12 mm) hot and cold water supply lines.
- One wastewater connection (minimum 1 1/2” / 38mm).







Power Soak is a registered trademark of Cantrell Industries, Inc.  
The Power Soak design and concept is fully patented.

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