



**TWO STATION, SEMI-AUTO,
KEG RINSER, CLEANER, SANITIZER**

Model KW-SA1V-CS-01



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KW-SA1V-CS-01 Operations Manual

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1. Introduction

1.1 Overview

The **Premier Stainless KW-SA1V-CS-01** is an efficient, easy to use, versatile keg washer for even the smallest pub or microbrewery. Up to two straight sided sankey fitting kegs of any size can be rinsed, washed and sanitized. Cleaning can be done with cold detergent or hot detergent, as well as sanitizing with an appropriate non-rinse sanitizer. The variable speed pump also allows for an efficient way to thoroughly clean the keg stem and inner shell every time.

1.2 Description

The machine is a stainless steel constructed unit with one stainless detergent tank, detergent heater, seven air actuated valves, two stainless sankey valves, one peristaltic pump, one 3/4 hp wash pump and automated touch screen control panel with digital temperature controller and disconnect. The 3.0 KW detergent tank heater element is controlled by the digital thermostat and is factory set at 150 degrees F and can easily be accessed and changed to suit your specific requirements. The wash cycles can be completely customized by the user to match any keg washing situation. This unit also employs a CO2 pressure switch to allow accurate keg pressurizing of CO2 before the end of the cycle. This is factory set to 12-15 PSI.

CAUTION: DISCONNECT POWER BEFORE OPENING THE ELECTRICAL CONTROL BOX.

CAUTION: BE SURE TO USE A LICENSED ELECTRICIAN FOR MAIN POWER CONNECTION.

2. Specifications

2.1 Dimensions

Length - 35"
Depth - 26"
Height - 60"

2.2 Capacities

Detergent tank - 23 gallons
Water Consumption - 4-8 gallons per keg

2.3 Electrical

Maximum electrical load: 13 Amps @ 208-240 V, 3 phase.
Detergent heater element: 3000 W @ 240 V, 2600 W @ 208V.
Wash pump: 3/4 HP, 2.4 amps.
Control circuit draws: 2.0 Amps.

2.4 Recommended Utility Supplies

Air supply to the machine: 30-40 psi, 7-15 SCFM, oil free
Air supply to the air valves: 80-100 psi, dry, clean air
CO2 supply to the machine: 30-40 psi, 7-15 SCFM
City water: 60-80 psi, 30 gpm, 3/4" full port supply
Electrical: 20 Amps, 208-240 VAC, 3 phase, 60 Hz

Notes:

1. Water separator required at the compressor is not included with machine.
2. Air & CO2 high flow regulators required but not included.
3. Most Sankey kegs are rated for a maximum of 60 psi.
4. This machine can be modified to accept European kegs and different supply voltages.

**CAUTION: NEVER RESTRICT OR BLOCK OVERFLOW (VENT) TUBE ON
DETERGENT TANK. MAY CAUSE SERIOUS PERSONAL INJURY.**

2.5 Set-Up

The keg rinser/washer must be located near the supplies required for the machine. A good drain must also be located close by.

The keg rinser/washer will come equipped with 1/2" NPT connections for air and CO2 fittings, 3/4" NPT valve for water and 1 1/2" tri-clamp connection for the drain hose. The 15' length of flexible non-metallic electrical conduit supplied with the machine is to be terminated with a 20A, 250V, 3P, 4W, Grounded twist-lock receptacle or equivalent. Hard wiring is also acceptable. Main disconnect and branch circuit protection to be provided and installed to N.E.C. and local codes by installer, as required.

2.6 Sanitizer Set Up

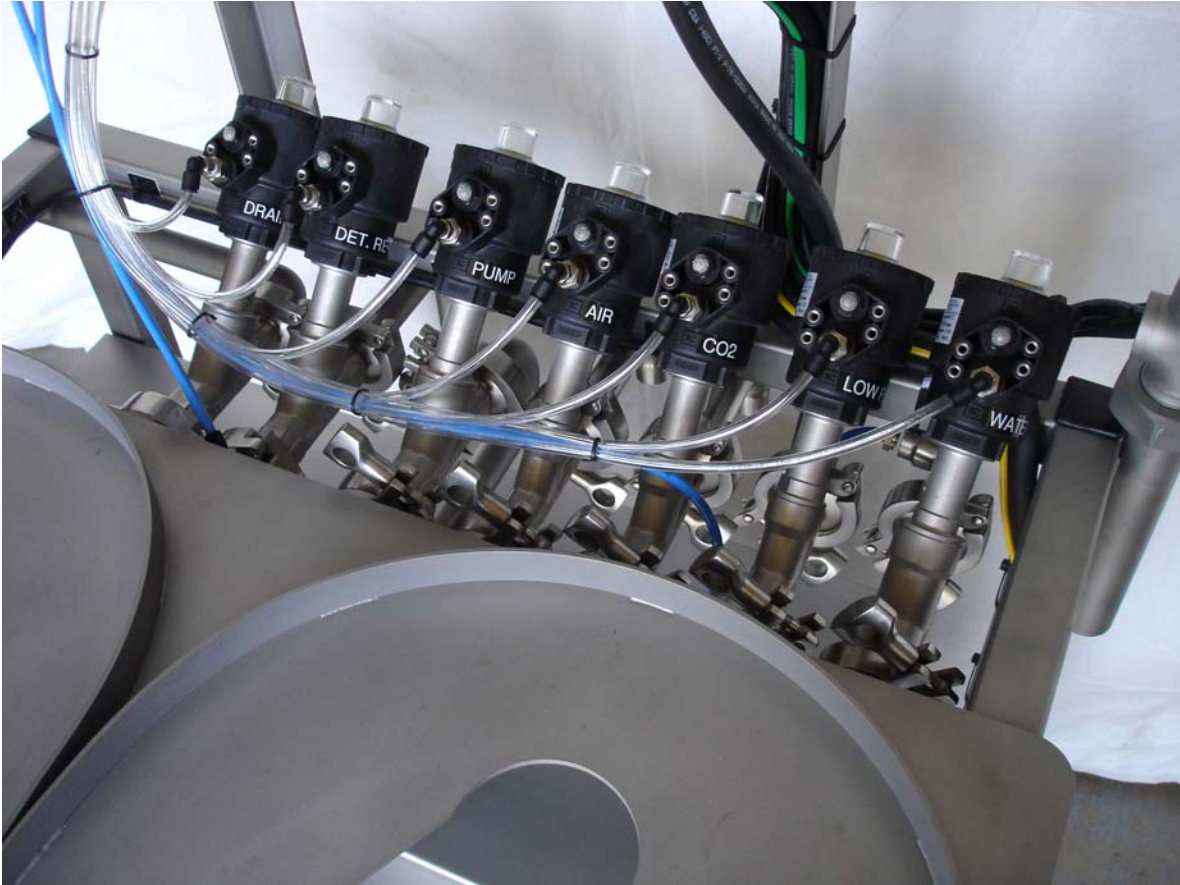
The peristaltic sanitizer pump, located on the top of the control panel, delivers approximately 8 oz. / minute of sanitizer to the keg washer manifold. A ¼" OD semi-rigid plastic tube (provided and installed) is to be used as the siphon from the sanitizer container to the pump inlet. The initial factory sanitizer cycle is approximately 60 seconds, with approximately 30 seconds (50% of the preset time) dedicated to a "Sanitizer Hold" rest. During a normal 60-second sanitizer cycle, the sanitizer pump runs for approximately 30 seconds, where it delivers about 3.5 - 4 oz. of sanitizer. Approximately 6-8 gallons of water is delivered between the 2 kegs during this cycle. Based on this volume, the user can determine how to dilute the sanitizer.

For example, if the no rinse sanitizer calls for 1-2 oz per 5 gallons of water, then 1.5 – 3 oz would be required for 8 gallons. As the sanitizer pump will inject 3.5 – 4 oz of liquid into the 8 gallons of water, a 50% dilution of the sanitizer would meet the manufacturers requirement for the sanitizer ratio.



3. System Operations

3.1 Valve Description



All valves are clearly marked and require 60-100 psi of clean, dry air. Inspect the supplied air valve regulator regularly. Always be certain all air hoses are securely inserted into the proper air valve fitting.

Supply Manifold

Full flow water valve. For keg shell rinsing.

Low flow water valve. For keg stem rinsing.

CO2 valve.

Air valve.

Pump valve. For keg detergent washing solution from pump.

Return Manifold

Detergent return. Returns detergent to the tank.

Drain. Drains kegs between cleaning cycles.

3.2 Cleaning Preparations

- Connect water supply to water valve.
- Fill detergent reservoir to about 75% capacity (about 18 gallons) with water and appropriate cleaning chemicals. **DO NOT OVERFILL.**
- Connect all air and CO2.
- Inspect and drain the air valve regulator, if needed.
- Connect appropriate drain hose. **1 1/2" ID HOSE RECOMMENDED.**
- Immerse 1/4" sanitizer tube into the sanitizer container. Be sure tube is completely immersed in sanitizer.
- Connect power and turn on main control panel disconnect.
- Set temperature controller to appropriate temperature.
- Allow cleaning solution to reach proper cleaning temperature.

CAUTION: ALWAYS KEEP LIQUID LEVELS ABOVE HEATING ELEMENT

CHECK DETERGENT LIQUID LEVELS AND CONCENTRATIONS OFTEN

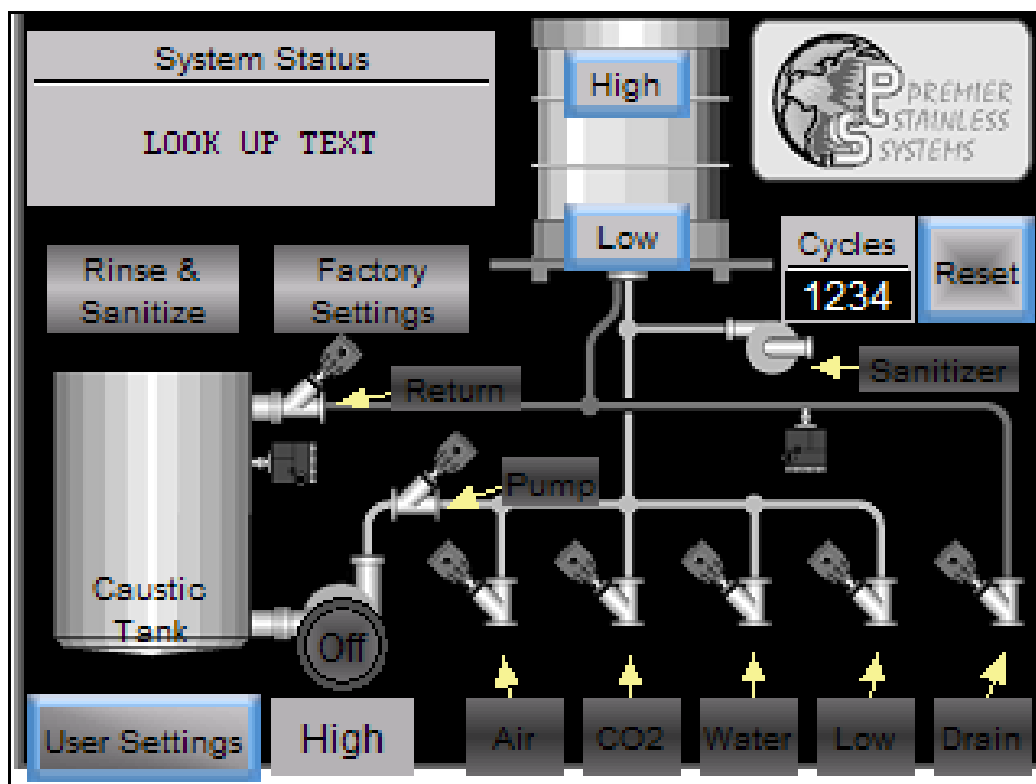
3.3 Operations Preparations

- Prime pump for proper operations.
- Ensure proper pump rotation.
- Ensure peristaltic pump sanitizer supply with proper concentration.
- Connect drain hose to appropriate drain.
- Ensure correct CO2 and air supply pressure.

4. Operator Interface Panel Description (6" touchscreen):

The operator interface panel is used to monitor keg washing cycles, change user and factory cleaning programs, count cleaning cycles, count cleaning cycles.

Upon startup of power, the keg washer program will default to the factory "Rinse & Sanitize" cycle. To change to the full wash cycle, touch the "Rinse & Sanitize" text button to bring up the wash cycles available. You can toggle between the factory and user pre-sets by touching the "Factory or User" buttons. The operator can customize the user cleaning program to match the current requirements. The selected cycle will be listed on the screen.



The Premier Stainless keg washer allows the user to easily adjust their cleaning times through the "User Settings" page.

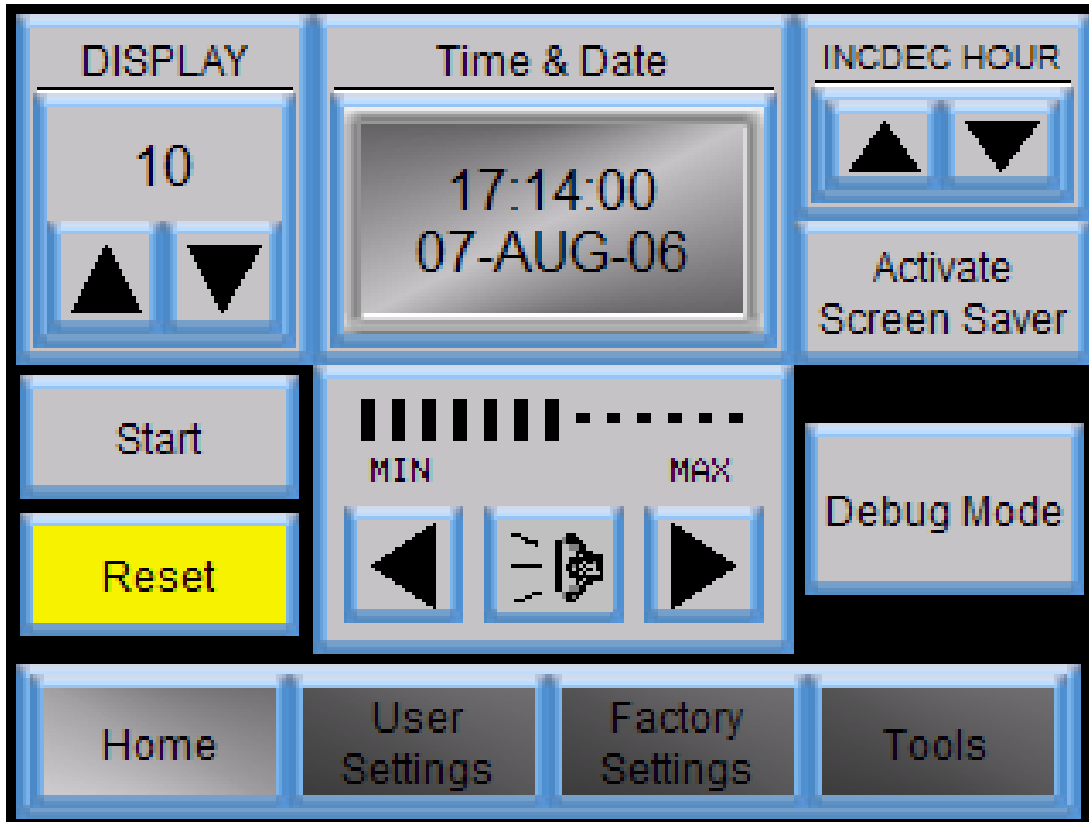


Press the “User Settings” button to access the user changeable parameters. The initial settings are similar to the factory settings, but with a longer “Detergent Wash” cycle. To change any parameter, touch the time button and enter the desired cycle time.

The factory parameters are not changeable by the user. Please consult the factory to change these parameters.

Press the home button to get back to the main menu.

The "Tools" button is used to access the menu to adjust the real time clock, screen display brightness, and screen saver. Push the home button to return to the main menu.



5. Rinsing / Cleaning / Sanitizing / Racking Procedure

Before you start:

Follow set up procedures on previous pages.

Do not exceed pressure rating for keg when using compressed gasses.

Protective clothing such as rubber aprons and boots must be worn.

Ensure all tri clamp and air fittings are tight.

CAUTION: ALWAYS WEAR SAFETY GLASSES WITH EYE SPLASHGUARDS

BE SURE EMERGENCY STOP BUTTON IS NOT ENGAGED

1. Install Kegs on to Rack:
 - Raise the coupler handle to the up position.
 - Attach keg couplers to kegs using a twisting (CW), downward motion.
 - Pull out and lower keg coupler handles.
 - Open sankey coupler shut off valves.
 - Position kegs upside down on rack.
2. Select appropriate keg washing program from the “Operator Interface Panel.”
3. Turn the “Cycle Start” switch.
4. Cycle will start with the appropriate valve operation displayed on the “Operator Interface Panel.”
5. Once cycle is complete, remove kegs from the rack, close valves on keg couplers and remove kegs.
6. Load new kegs, turn the “Reset” switch, and turn the “Cycle Start” to begin the cycle over again.

THE USER CAN USE THE CYCLE COUNTER TO MONITOR THE NUMBER OF KEGS WASHED WITH THE CURRENT DETERGENT RESERVOIR LEVEL. THE USER CAN THEN CHECK AND TEST THE DETERGENT LIQUID LEVEL AND CONCENTRATIONS AT SPECIFIC POINTS DURING THE CLEANING DAY FOR MAXIMUM CLEANING EFFICIENCY.