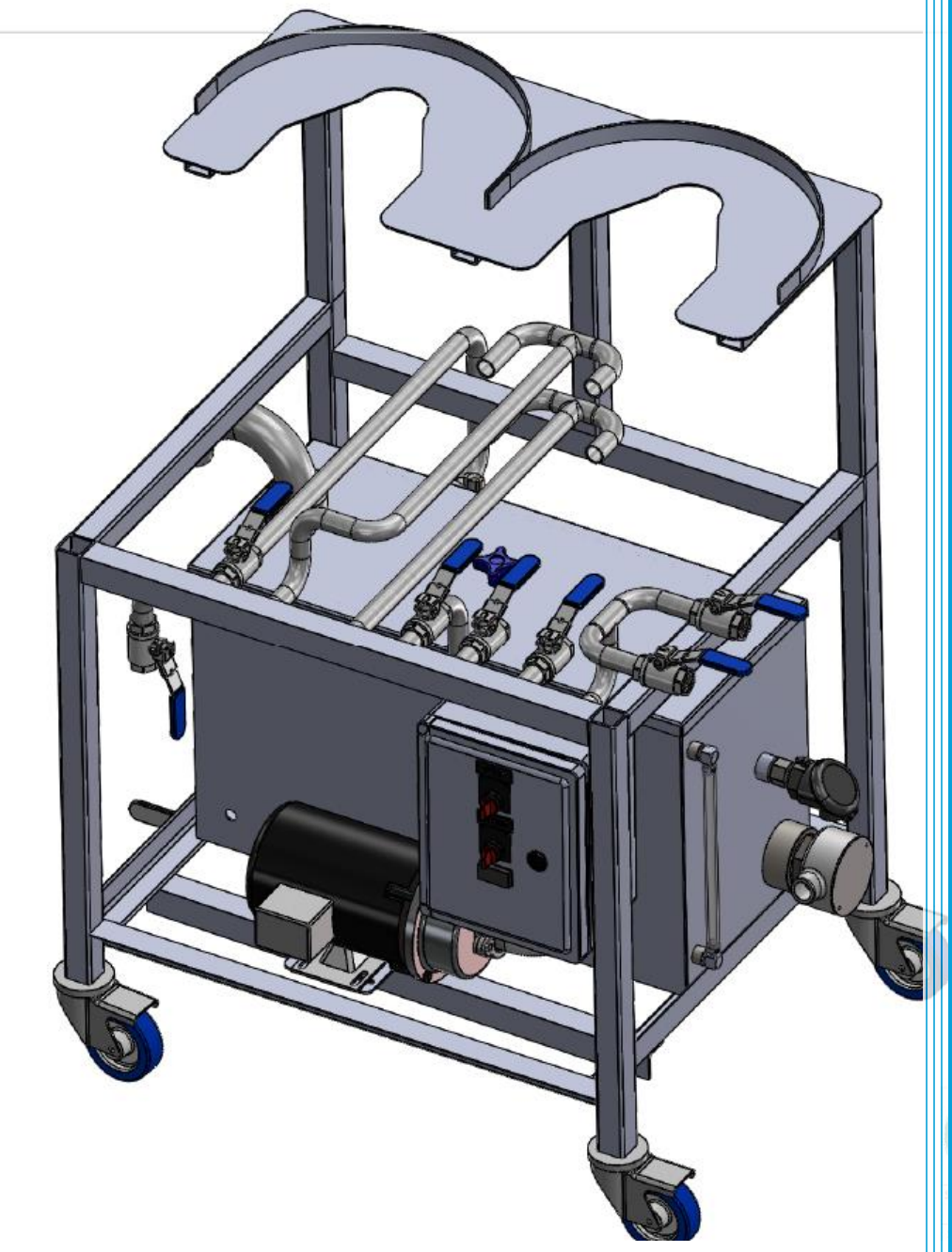
PREMIER
STAINLESS SYSTEMS

Operations Manual

Model KGW-M-02



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Version 4 Revised 1 - 2019

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- **ALWAYS WEAR SAFETY GLASSES WITH EYE SPLASHGUARDS AND/OR FACE SHEILD**
- **ALWAYS WEAR RECOMMENDED PROTECTIVE WEAR WHEN USING CHEMICALS/DETERGENTS**
- **NEVER RESTRICT OR BLOCK OVERFLOW (VENT) TUBE ON DETERGENT TANK SERIOUS PERSONAL INJURY COULD RESULT!**
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- **CHECK DETERGENT LIQUID LEVELS AND CONCENTRATIONS OFTEN**
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- **TO AVOID INJURY OR WORSE, ALWAYS FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND GUIDELINES**
- **KEEP A CONSTANT WATCH ON THE KEG PRESSURE AND NEVER GO ABOVE THE PRESSURE RATING ON THE KEGS BEING CLEANED.**

2. Introduction

2.1 Overview

The **Premier Stainless KGW-M-02** is an efficient, easy to use, versatile keg washer for even the smallest pub or microbrewery. Two Sankey style kegs of the same size, any capacity, can be rinsed and washed same time. Cleaning can be done with cold or hot detergents.

2.2 Description

The machine is a stainless steel constructed unit with one stainless tank with immersion heater, seven manual valves, two stainless Sankey valves, one DEMA sanitizer dosing valve, one 3/4 HP wash pump and control panel with digital temperature controller and switches for pump and heater. The 3.0 KW detergent tank heating element is controlled by the digital thermostat and is factory set at 150 degrees F; it can easily be accessed and changed (lowered) to suit your specific requirements. Maximum temperature rating for the hose supplied with the unit is 150 degrees F. Higher temperatures will cause the hoses to fail. If higher temperatures are desired the hose MUST be replaced with hoses rated for higher temperatures.

SERIOUS INJURY COULD RESULT IF HIGHER TEMPERATURES ARE SET WITH THE STOCK HOSES!

SERIOUS INJURY AND/ OR DEATH CAN OCCUR IF ALLOWING KEGS TO OVER PRESSURIZE! BE SURE TO KEEP PRESSURE BELOW KEG MAXIMUM WORKING PRESSURE!

2.3 Best Practices

Below is a list of best practices to follow when operating your keg washer:

- Always be sure to follow and perform everything on both the safety and preparation list before operating the keg washer.
- Each day run one or more cycles with clean water in your detergent tank and pump. This will help extend the life of all non-metal parts on your keg washer.
- When cleaning heavily soiled kegs, run multiple cleaning cycles instead of a single, longer cycle. The keg washer accomplishes cleaning, rinsing and sanitizing by having liquids cascade down the shell and spear, not by filling the keg. If you extend the time of the cycle, the keg will simply fill more and not be cleaned as well as it could be with multiple short cycles.
- Ensure that all compressed air and requirements on the *Compressor Guide for Keg Washers* on page 7.
- Always run two kegs of the same size/capacity per cycle.
- Pull random spears to inspect for proper cleanliness.

- *IMPORTANT: Before draining liquid from tanks containing immersion heaters, ensure the power/ breaker to the heater is off and the temperature is set for 32*F for personnel and equipment safety!*

2.4 Limited Warranty

Seller warrants that the Equipment manufactured by Seller will be free from defects in material and workmanship for a period of one (1) year from the date of manufacture. This warranty will be limited to the repair or replacement, at Seller's option, on any product manufactured by Seller, and deemed to be defective upon reasonable inspection from Seller's representative. Seller is responsible for any labor costs associated with the repair of any defective manufactured item. Seller may contract, by way of written purchase order, a repair of defect, by others, at our option.

Other Equipment, not manufactured by Seller, is warranted for a period of one (1) year. Seller will assist in honoring any warranty for other Equipment. This Limited Warranty does NOT include liability for any interruption of service, nor does it include liability for any work, services, or parts supplied by Others, nor does it include liability for any labor charges from others for replacement or repair of defective product, nor does is cover costs for parts, fluids, or shipping, Purchaser's product or materials for production and it contains no contingent liabilities of any kind.

This warranty does not cover damages caused by Purchaser's negligence, neglect, improper maintenance, or cleaning, accident, abuse, freezing, or for ordinary wear and tear. Purchaser is responsible for normal maintenance of the Equipment. Equipment finishes are not covered under warranty.

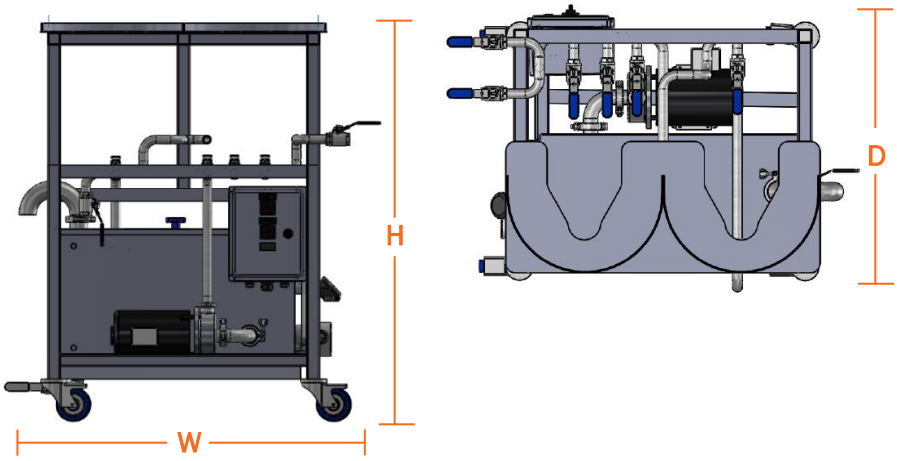
3. Specifications

3.1 Dimensions

Height- 50” (1270mm)

Depth- 26” (660mm)

Width- 34” (864mm)



(Dimensions above are rounded up to nearest whole number. Castors shown are *optional* feature)

3.2 Capacities

Detergent tank- Tank capacity = 23 gallons (87 L). Operational capacity 16 gallons (60.6 L)

Water Consumption- 1-3 g (3.8-11.4 L) per keg

3.3 Electrical

Maximum electrical load: 12.5 AMPS @ 208-240 V, 3 Phase

Detergent heater element: 3000W @ 240V, 2600W @ 208V

Detergent pump: 3/4 HP, 3.2 AMP

Control circuit draws: <1.0 AMP

3.4 Recommended Utility Supplies

Air supply to the machine: 30-40 PSI, 7.15 SCFM, oil free

CO2 supply to the machine: 30-40 PSI, 7-15 SCFM

City Water: 50-70 PSI, 15-30 GPM, minimum ¾” supply

3.4- 4.8 B, 56- 114 LPM,

Electrical: 15 AMPS, 208-240V 3 Phase, 60 Hz

3.5 COMPRESSOR GUIDE FOR KEG WASHERS

In the case of compressors for keg washers, bigger is better. If other machinery using air or similar increased air demand exist, or are planned, size the compressor accordingly. Oil free is ideal, but also very expensive, so a .01 micron, coalescing filter is required on oil lubricated compressors. A general purpose filter upstream of the coalescing filter is also recommended. Air dryers are a matter of personal preference and are not required for keg washers. However, other machinery using air may require dry air so you may want to plan accordingly. A minimum of 3/8" ID, appropriately rated supply line is required from the compressor to the keg washer for proper operation. All filters, valves, fittings, hoses, etc. should be at least 3/8" ID.

A commercial grade, 60 gallon, 12-14 SCFM, 3 hp compressor is our **MINIMUM** recommendation for the 2 station, manual keg washer. You may be able to use a smaller compressor if budget is a big issue, but, this may result in diminished performance of keg washer and excessive wear to compressor.

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 (4.13 B).
4. This machine can be modified to accept European kegs and different supply voltages.

3.6 Set- up

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

The keg rinser/ washer will come equipped with 3/8" NPT valves for air and CO2 fittings, ½" NPT for water and 1 ½" tri-clamp connection for the drain hose. The 10' length of flexible, non-metallic electrical conduit supplied with the machine is to be terminated with the 15A, 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.

4. System Operations

4.1 Valves and Connections

Manifold- Valving

Drain: Connect 1 ½" Tri- clamp hose to drain
Detergent return: Connected to Detergent tank
Pump outlet: Connected to detergent pump outlet
Sanitizer: Connect to sanitizer dosing device and city water supply
Water: Connect to city water
Air: Connect to filtered air supply, 30-40 PSI
CO2: Connect to CO2 supply, 30-40 PSI

4.2 Cleaning Preparations

- Connect water supply to water connections on back of unit. Be sure to use full port valves on water supply.
- Fill detergent reservoir 2/3 full with water and appropriate chemicals.
- Be sure to shut OFF all valves.
- Be sure all switches are in the OFF position.
- Connect power.
- Set temperature controller to appropriate temperature.
- Turn ON heater switch.
- Allow cleaning solution to reach proper cleaning temperature.

IMPORTANT: ALWAYS KEEP LIQUID LEVELS ABOVE HEATING ELEMENT AND TEMPERATURE PROBE FOR ACCURACY AND SAFETY!

4.3 Operations Preparations

- Prime pump for proper operations.
- Ensure proper pump rotation.
- Ensure sanitizer supply is connected with proper concentration in an appropriate sanitizer container
- Connect drain hose to appropriate drain.
- Ensure correct CO2 and air supply

5. Rinsing/ Cleaning/ Sanitizing

Before you start:

- ***Follow and check all set-up procedures***
- ***Do not exceed pressure rating for keg when using compressed gas***
    - *As this machine is Operator- Based, Operator must be constantly watching the main pressure gauge to ensure proper operations as it will not automatically shut off incoming pressure without manually shutting off the supply valve.*
- ***Always wear protective clothing such as rubber aprons, boots, and safety glasses***
- ***Ensure all Tri-clamp and NPT fittings are closed, tight, not leaking, and all valves are closed***

5.1 Install Kegs onto Rack

- Raise coupler handle to the UP position
- Attach keg coupler to kegs by placing the coupler within the Sankey ring until seated flat, then twisting the coupler in a clockwise, downward motion.
- Push in the coupler handle release button (or pull-out in the case of S-style couple units) and lower the keg coupler handle until you hear a locking click
- Open Sankey coupler shut off valves
- Position kegs upside down on rack

5.2 Purge Residual Beer and CO2 Pressure From Keg

- Open drain valve.
- Allow residual beer and CO2 pressure to drain from the keg
- Apply short burst of air to keg by opening and closing the air valve
- Repeat above step until all CO2 is purged from keg

5.3 Pre- Rinse Kegs Using Rinse Water

- Open drain valve
- Open water valve to rinse keg
- **In cases of low water pressure* Apply several short bursts of air to keg with air valve.*
- Rinse for about 10-15 seconds.
- Manually close water valve to about ½ shut for several seconds, choking the water enough to thoroughly rinse the outer surface of the stem.
- Close water valve

- Apply air until liquid is removed from kegs.
- Allow all rinse water and air pressure to completely drain from keg.
- Repeat as needed.
- Close drain valve.
- ***Ensure all valves are closed when step 3 is completed***

5.4 Clean Kegs Using Solution In System Reservoir:

- Open detergent return valve
- Ensure pump outlet valve is CLOSED, then start detergent pump for 2-3 seconds before opening pump outlet valve.
- Open pump outlet valve.
- Wash for about 15-20 seconds.
- Manually close pump outlet valve about ¾ shut for several seconds to ensure thorough stem wash
- Close pump outlet valve and proceed to turn off pump
- Apply air until liquid is removed from kegs.
- Allow all cleaning solution and air pressure to completely drain from keg.
- Close return valve.
- Repeat as needed.
- ***Ensure all valves are closed when step 4 is completed***

5.5 Rinse Kegs of Cleaning Solution:

- Open drain valve
- Open water valve to rinse keg
- **In cases of low water pressure* Apply several short bursts of air to keg with air valve.*
- Rinse for about 10-15 seconds
- Manually close water valve about ½ shut for several seconds to ensure thorough stem rinse
- Close water valve
- Apply air until liquid is removed from kegs
- Allow all rinse water and air pressure to completely drain from keg
- Close drain valve
- ***Ensure all valves are closed when step 5 is complet***e

5.6 Sanitize Kegs with Water & Sanitizer

- Open drain valve
- Open sanitizer valve

- Apply several short bursts of air to the keg throughout the sanitizer cycle to have thorough rinse.
- Cycle for about 20-30 seconds
- Manually close sanitizer valve about ½ shut for several seconds to ensure thorough stem rinse.
- Close sanitizer valve.
- Wait 30 seconds or recommended sanitizer contact time.
- Apply CO2 until liquid is removed from kegs
- Allow all sanitizer water and CO2 pressure to completely drain from keg.

5.7 Pressurize Kegs with CO2:

- Open drain valve
- Open CO2 valve to apply CO2
- After 10-15 seconds of purging the air with CO2, close drain valve
- Apply 5-15 PSI CO2 pressure to kegs (determined by your BBT tank pressure)
- Close CO2 valve.

IMPORTANT: DO NOT EXCEED PRESSURE RATING OF KEG!

5.8 Remove Kegs from Rack

- Close Sankey coupler feed and gas valves
- Push coupler handle release button (or Pull-out in S-style couplers) and lift handle into the UP position.
- Remove keg couplers with a counter-clockwise twisting, upward motion

***Repeat Steps 1 through 8 for remaining kegs to be Cleaned/ Sanitized*

5.9 Prep System for Storage

- Flush coupler tubing, fittings, manifolds, pump and reservoir thoroughly with rinse water after cleaning/ sanitizing operations are complete.
- Sanitizer can be run through and left in lines until system is used again.
- Close all valves.
- Disconnect power chord from outlet.

6. Maintenance

The KGW-M-02 Keg washer/ Rinser is simple in design with minimal moving parts. Very little maintenance is required outside of routine inspection of the hoses and Sankey valves that carry hot water/ caustic to the kegs. In addition, periodic checks of the air and CO2 supplies to ensure pressures and regular replacement of air filter or desiccant dryer material is advised.

- Check the immersion heater for any mineral build up and remove as necessary. Excess mineral build up can cause slower heating times, but also can cause the elements to overheat and fail. Mineral build up can also occur in the pumps and, if excessive, can diminish their performance. Running an acid mix occasionally through the detergent tank and pump would be good if you have hard water issues.
- Testing the drain water periodically after the sanitize cycle to confirm proper mixture is also recommended. A weak/ diluted solution can indicate wear or improper performance to the dosing unit and/ or the check valve.
- Flushing all lines, including the sanitizer tube, with water after each keg run could prolong the life of the lines, rubber tubes, and check valve.
- Check for nicks/ cuts/ abrasions on the braided hose and replace as needed.
- When operating the keg washer, be observant for any abnormal activity, such as sudden spikes in pressure, and report to proper personal.

7. Troubleshooting

WARNING:

When performing any troubleshooting requiring the control panel to be opened while powered up, be EXTREMELY careful to have water sources shut off, and surroundings as dry as possible!

No power to machine

- Ensure there is power at your outlet
- Check circuit breaker at the main power panel feeding to the machine
- Check the internal circuit breakers in the control panel of the machine
- Check wire connections in power plug

Machine operates but hoses vibrate violently when air blow valve is opened

- Air blow pressure may be too high. Air blow regulator should not exceed 40 PSI
- Check drain hose for kinks or restrictions

Machine operates but solution remains in kegs after cleaning

- Operator may not be opening the air blow valve long enough.
- Drain hose may have a restriction or kink in the hose
- Air and/ or CO2 pressures may be not high enough, check regulators for proper settings.

Sanitizer not dispensing

- Check sanitizer hose for restrictions or blockage
- Ensure the sanitizer hose is inside of the sanitizing liquid
- Inspect sanitizer check valve for wear and tear.

Detergent tank heating element not working

- Keg washers are shipped with the heating element circuit breaker turned off so the user will not accidentally turn the heater on without filling tank first. Verify the circuit breaker (inside the main panel) is set to the ON position (12 o'clock position, rather than 9 o'clock position).
- Ensure temp controller is set to temperature.

APPENDICES

APPENDIX A:

Setting up the DEMA 204BS chemical siphon dispenser:

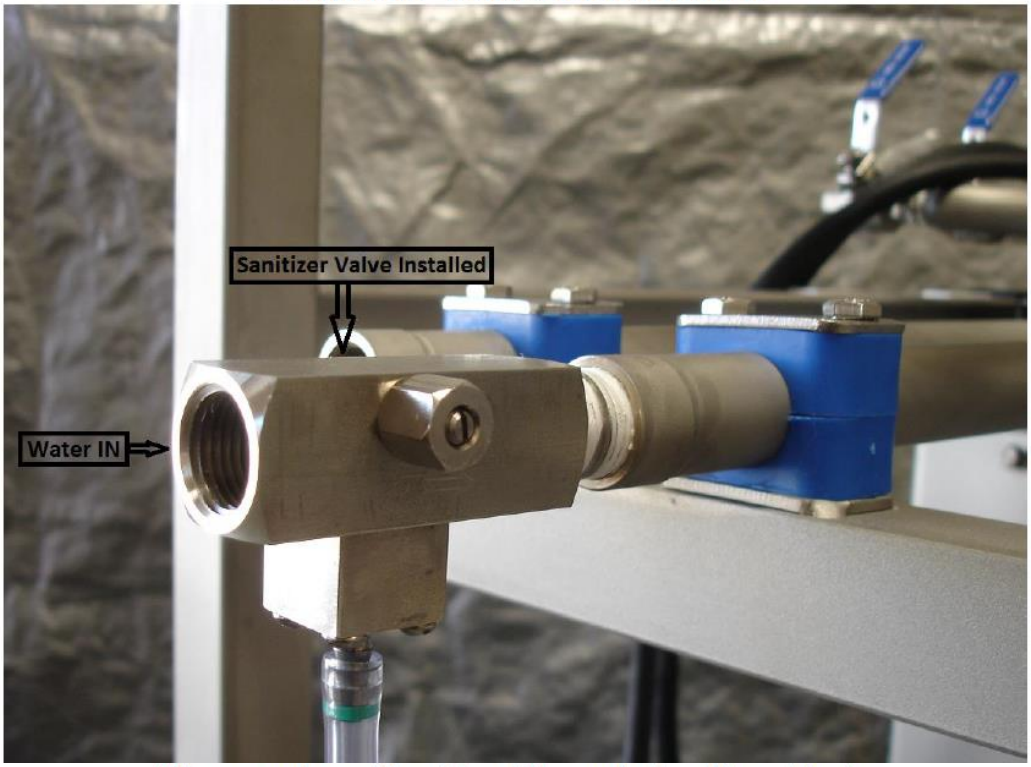
(See http://www.demaeng.com/wp-content/uploads/pdf/instructions/I119RevB.pdf for complete information on the dispenser)

The chemical dispenser is installed into the "Sanitizer" pipe at the rear of the keg washer (refer to photo below). When installing the injector use Teflon tape on the threads of the two ½" nipples (included) and make sure the arrow on the injector body is pointing in the correct direction for water flow. Cut the siphon tube to the desired length, slip the ceramic weight over the tube, insert a metering tip (Tan or Orange are good starting tips) and then attach the tube to the dispenser valve body at the barb fitting. In house testing has shown that the "Water By Pass Screw on the side of the injector needs to be in the fully open position (backed out counterclockwise) to provide proper flow to the kegs. The dispenser Premier Stainless supplies does not use a "Fine Metering Adjustment Screw" as indicated in the documentation, disregard references to it.

Fine tuning the correct amount of chemicals being siphoned is a trial and error process using the correct metering tip and/or dilution of the sanitizer. Factors such as water pressure and viscosity of the chemical being injected make it impossible for Premier Stainless to advise customers on the ideal setup over the phone. Refer to the tables below to get initial settings close, then fine tune using the metering tips included. A graduated cylinder, measuring cup or similar measuring container will be necessary to figure out how much product is being dispensed. A bucket marked for various volumes will be needed to capture the drain water. Use a pressure gauge to determine water pressure going into the unit to estimate the flow rates. The tables below assume a water pressure of 40 psi. 60 psi is recommended.

EXAMPLE:
If the sanitizer product you are using shows a viscosity on the packaging, you can use that and the tables below to come up with a starting point that should be close to correct. Most sanitizer is roughly the consistency of water (represented in the tables as "1 cps"). Start with the TAN metering tip on the siphon hose and a graduated cylinder or measuring cup filled with a known level of liquid and bucket to capture total fluid used at the end of the test. Make sure the sanitizer piping and siphon tube is full of water prior to starting the test. Run the keg washer through a normal sanitization cycle. Determine the amount of fluid siphoned from the measuring cup/graduated cylinder, fully drain the kegs/lines into the bucket and measure the total amount of liquid captured. As an example, if the desired goal was 1 ounce of sanitizer to 5 gallons of water, but 2 ounces were used for 5 gallons, the sanitizer should be diluted with water (1 to 1 ratio) to obtain the goal. On the other hand, if only ½ ounce of sanitizer were used for 5 gallons, selecting a different siphon tip (for this example the Turquoise or Pink tip would be good choices at roughly twice the flow rate of the Tan tip) would be in order.

Sanitizer Valve Installation

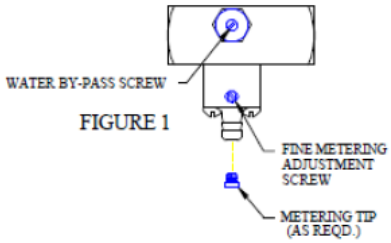


Measuring the Sanitizer Injection Rate

DEMA ADJUSTABLE SINGLE STAGE INJECTOR

MODEL 204BS

INSTALLATION INSTRUCTIONS



1. PARTS

A. Injector
B. Ceramic Weight.
C. Plastic tubing 8' long with foot strainer.

2. INSTALLATION

The injector may be installed in any position in the water line with the arrow in the direction of flow. Drop end of plastic tubing with strainer into fluid product container. Cut tubing to convenient length, and slip open end over injector fitting.

3. OPERATION

Warning: Use care when handling hazardous chemicals.

Note: The injector will not operate if the input water temperature exceeds 160 degrees F.

See Fig. 1 for location of water bypass screw and fine metering adjustment screw. Turn on water supply valve. The injector may draw momentarily as the system is filling but normally will stop as the system builds up to full pressure. To actuate injector, turn the bypass screw clockwise until product begins to be drawn from the container. After the fluid reaches the injector, the feed rate may be adjusted to the desired rate by turning the bypass screw. The maximum injection rates are shown in Table 2. For low injection rates, it is advisable to set the bypass screw for more injection than required; then turn the fine metering screw clockwise to reduce injection to the desired rate. Table 1 shows the operation range of the injector. If the injector will not draw with the bypass screw full in, then the water flow is below the range of the injector. If the injector draws with the screw full out but pressure loss is excessive, then flow is above the range of the injector. Table 3 shows the injection rates for model 204 B, using metering tips at various viscosities.

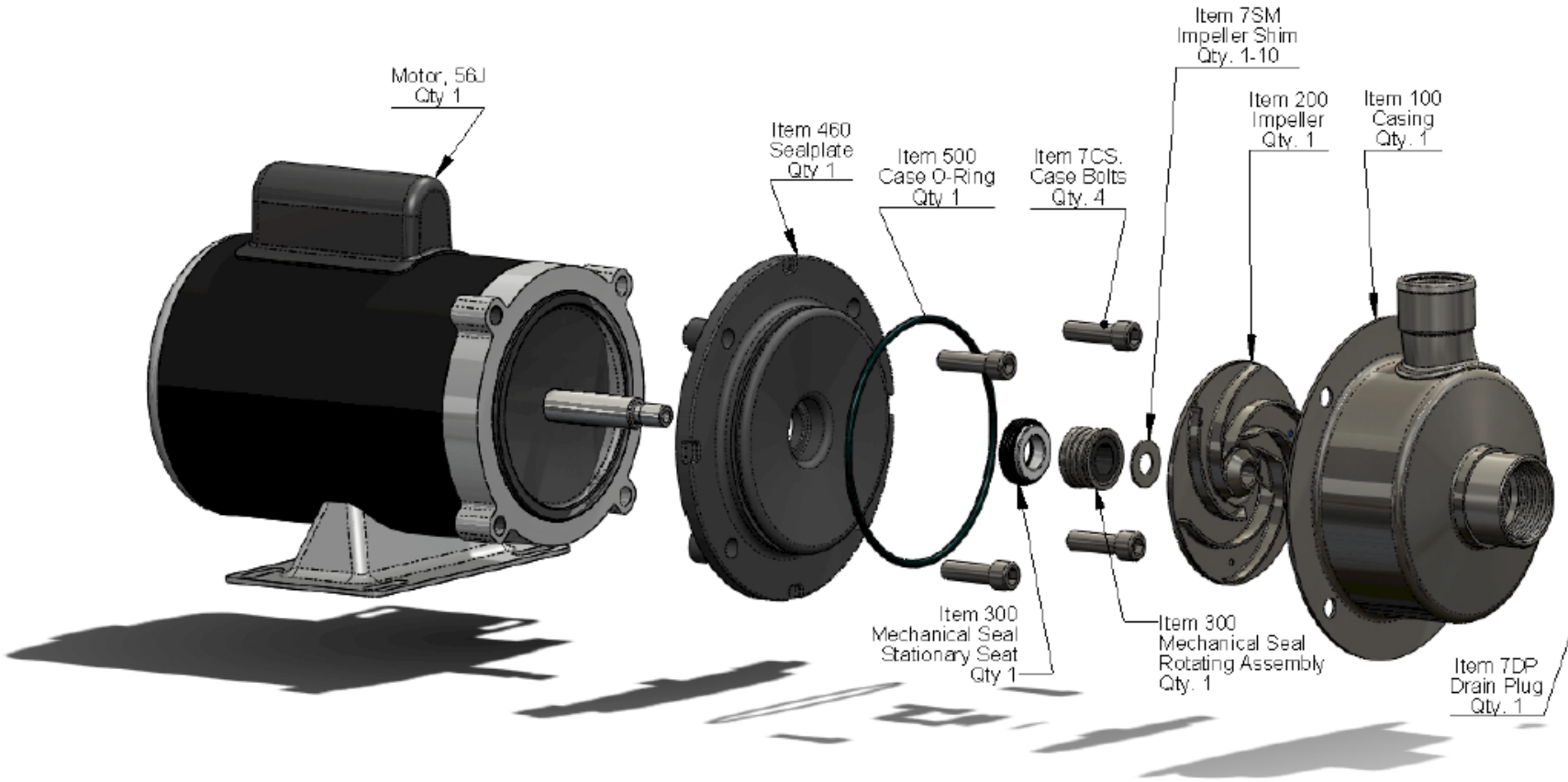
TABLE 1

Water Pressure (psi)	Operating Range - Gallons Per Minute
	Model 204B
10	2.00-6.40
20	2.30-7.50
40	2.90-9.50
60	3.40-11
100	4.20-14.00
200	5.70-19.00
400	7.90-26.00
500	8.90-29.00

TABLE 2	
Fluid Viscosity	Maximum Injection (Oz/Min)
	Model 204B
1	40
75	8
200	4

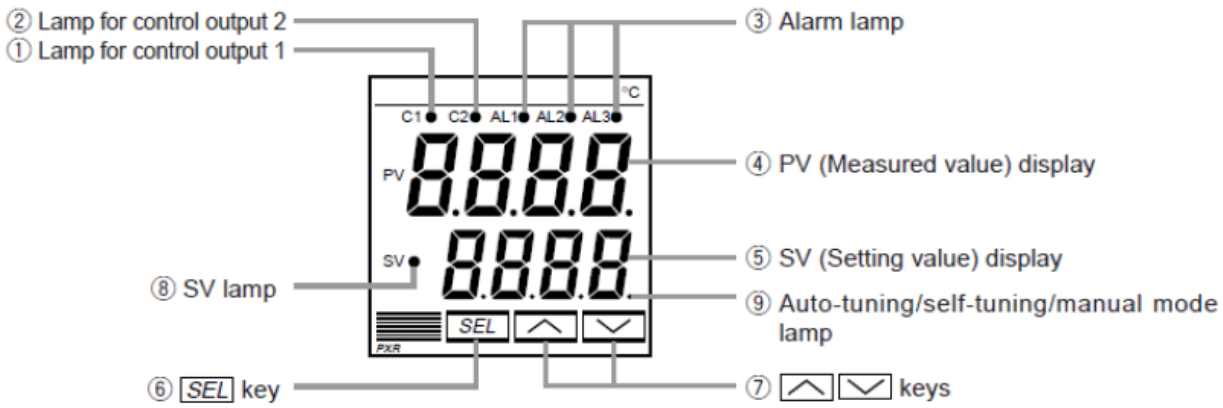
TABLE 3			
Metering Tip Color	Model 204B		
	Injection Rates (Oz/Min)		
	Viscosity (cps)		
	1	75	200
Tan	1.1	0.8	0.5
Orange	1.4	0.9	0.6
Turquoise	1.9	1.2	0.9
Pink	2.6	1.7	1.3
Clear	3.4	2.4	1.6
Brown	4.0	2.4	1.9
Red	4.9	2.9	2.2
White	6.0	3.4	2.4
Green	6.8	3.8	2.5
Blue	8.4	4.3	3.1
Yellow	13.1	5.2	3.4
Black	18.2	6.1	3.5
Purple	27.5	6.8	3.5
Gray	32.9	7.0	3.5
No Tip	39.8	7.9	3.7

Model FSP Exploded View



APPENDIX B: KEG WASHER PUMP

APPENDIX C: TEMPERATURE CONTROLLER



① Lamp for control output 1

Lights up while control output 1 stays ON.

② Lamp for control output 2

Lights up while control output 2 stays ON.

③ Alarm lamp

Lights up on detecting an alarm. The alarm output is turned ON at the same time.

If the optional heater break alarm is provided, the AL3 lamp lights up on detecting a heater break.

④ PV (Measured value) display

Displays the PV. When setting a parameter, its name appears.

⑤ SV (Setting value) display

Displays the SV. When setting a parameter, its value appears.

⑥ SEL key

Used to select a parameter block and a parameter, and register a set value.

⑦ keys

Used to change the SV, call parameters, and change parameter values.

⑧ SV lamp

Lights up while the SV is displayed in the SV display. When parameters and data are displayed, the SV lamp goes out.

⑨ Auto-tuning/self-tuning/manual mode lamp

Flashes under an auto-tuning or self-tuning operation. The lamp is kept on in manual mode.

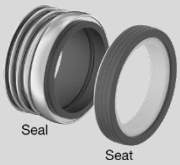
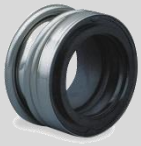
Replacement Parts

American Stainless Pumps (ASP) Links for Seal Kit Replacement

Home website: www.aspumps.com

Troubleshooting: http://www.aspumps.com/troubleshooting/sspcrepair.htm

Information/parts: http://www.aspumps.com/products/sspc/model-ssp-sspc/

Call Premier or ASPumps	**Pump Seal Replacement kit, including O-ring**	KMS01012 (EPR, Carbon, Ceramic)
Call Premier or ASPumps	**Pump Seal Replacement kit, including O-ring**	KMS01017 (EPR, SiC, SiC)
 **McMaster***	**Mechanical Seal**	9281K62 (Viton, Phenolic, Ceramic)
 **McMaster***	**Lg. O-ring**	9464K556 (Viton)
 **Grainger***	**Mechanical Seal**	1R300 (Viton, Carbon, Ceramic)
 **Grainger***	**Mechanical Seal**	3ACE8 (Viton, SiC, SiC)
 **Grainger***	**Lg. O-ring #258 round**	1KAK9 (Viton)

SANKEY COUPLERS

www.micromatic.com

Special Order through either MicroMatic or Premier Stainless	SS Washing Head, Complete	7485-CC
	SS Straight Shutoff Valve	7419-1
	Neoprene Washer	759
	White Probe Washer	102-579
	Black Bottom Seal	102-521
	Ergo Handle	762-101-F001
	Sankey D & S- style Cleaning Cup	2S2-005
	Other Cleaning Cups	A
		G

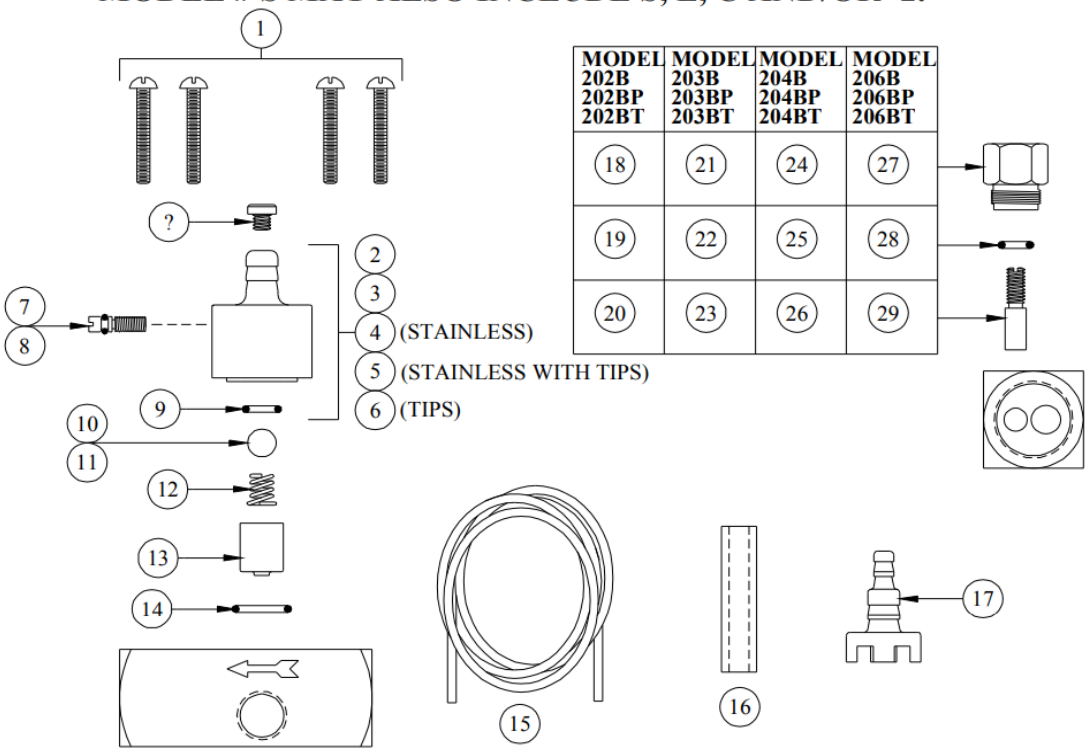
Order parts: https://car-wash.kleen-ritecorp.com/

DEMA ADJUSTABLE SINGLE STAGE INJECTORS

MODELS 202B, 202BP, 202 BT, 203B, 203BP, 203 BT, 204B, 204BP, 204 BT, 206B, 206BP, 206BT

INSTALLATION INSTRUCTIONS

MODEL #'S MAY ALSO INCLUDE S, E, C AND/OR -2.



MODEL 202B 202BP 202BT	MODEL 203B 203BP 203BT	MODEL 204B 204BP 204BT	MODEL 206B 206BP 206BT
18	21	24	27
19	22	25	28
20	23	26	29

NO.	PART NO.	DESCRIPTION
1	24-33	Screw #8-32 x 7/8" Lg. (4-Reqd.)
2	24-32	Metering Knob Assy.
3	24-32PS	Metering Knob Assy.
4	24-32S	Metering Knob Assy. (Stainless)
5	24-32ST	Metering Knob Assy. (Stainless Steel with Tips
6	24-32T	Metering Knob Assy. (Tips)
7	100-24	Metering Screw
8	100-24PS	Metering Screw (-BP Injectors)
9	24-25	Check Valve O-Ring (EP)
10	24-24P	Check Valve Ball (Teflon)
11	24-24S	Check Valve Ball (Stainless)
12	24-23	Check Valve Spring
13	24-34-	Check Valve Core (Specify Model No.)
14	25-29	O-Ring (EP)
15	100-12	Vinyl Tubing (3/8" OD x 8' Lg.)
16	61-107-2	Ceramic Weight (1/4" ID 3/8" OD Tubing
17	24-11P	Foot Strainer

NO.	PART NO.	DESCRIPTION
USED ON 202B, 202BP, 202BT		
18	24-48	By-Pass Screw Retainer
19	24-49	O-Ring (Buna) (3/16x5/16x1/16)
20	24-47	By-Pass Screw
USED ON 203B, 203BP, 203BT		
21	24-36	By-Pass Screw Retainer
22	24-25	O-Ring (EP) (7/32x11/32x1/16)
23	24-35	By-Pass Screw
USED ON 204B, 204BP, 204BT		
24	24-40	By-Pass Screw Retainer
25	26-17	O-Ring (Buna) (3/4x7/8x1/16)
26	24-39	By-Pass Screw
USED ON 206B, 206BP, 206BT		
27	24-38	By-Pass Screw Retainer
28	25-29	O-Ring (EP) (3/8x1/2x1/16)
29	24-37	By-Pass Screw

ACCESSORIES

NO.	PART NO.	DESCRIPTION
30	100-15-	Metering Tip (Specify Color)
31	100-15K	Metering Tip Kit

More Info: http://www.demaeng.com/wp-content/uploads/pdf/instructions/I119RevB.pdf

Pump and Sanitizer Rinsing/ Acid Wash

Basic rinsing procedures can be done after every use if you wish, while an acid wash is a preventative maintenance step that you can use as needed in relation to build up of hardwater/ beer stone.

2 station manual Pump Rinsing

- Follow normal shut down procedures, shut off all valves, shut off pump and heater switch.
- Ensure Sankey coupler valves are both shut.
- Drain detergent tank, leave drain port open.
- Open water valve, then open pump outlet valve.
    - Water should flow through the pump and out into the tank, thereby the drain.
- Flush for 15-20 seconds.
- Shut off the water valve.
- Let a few short bursts of air in by opening and closing the air valve a few times.
- Once the pump has been cleared of most of the water, close the air valve and pump outlet valve.
- Open the liquid-in (top valve) on both Sankey Couplers and hold them pointing away from yourself, and towards a drain or bucket. Always wear protective equipment. (This will spray violently!)
- Let a few short bursts of air in by opening and closing the air valve a few times.
    - This clears any additional liquid/ water out of the lines.
- Close the air valve, and once the pressure has been released from the lines, close the valves on the Sankey Coupler.
- Rinse detergent tank and leave drain open until all liquid has cleared.

DEMA Sanitizer dosing unit rinsing

1. Follow normal shut down procedures, shut off all valves, shut off pump and heater switch.
2. Ensure Sankey coupler valves are both shut OFF
3. Remove the sanitizer tube with ceramic weight from sanitizing chemical receptacle.
    - Use caution when dealing with chemicals, including wearing all safety/ protective equipment recommended
4. Place end of sanitizer tube with ceramic weight into a bucket of water.
5. Open both Sankey coupler Liquid-In valves (top valve only)
6. Point couplers away from yourself and towards a drain or bucket. *Always wear protective equipment.*
7. Open sanitizer valve, allowing the water to flow out through the bottom of the Sankey coupler into either the drain or a bucket (This will spray violently!)
8. Continue to let water flow through until pH from coupler is neutral to incoming water.
9. Shut OFF sanitizer valve, as well as water feeding into the DEMA sanitizer dosing unit.
10. Let a few short bursts of air in by opening and closing the air valve a few times.
    - This clears any additional liquid/ water out of the lines.

11. Once all liquid is clear or lines, shut OFF air valve
12. Shut drain valve and Sankey coupler valves
    - Detach Sankey couplers from cleaning caps.

Be aware of the dosage rate of sanitizer for your next use as there may be residual water in the line

Acid Wash for Pump and Tank – with Sankey cleaning caps

https://www.micromatic.com/accessories/series-cleaning-cup-fits-inchd-inch-and-s-systems-2s2-005

- Follow normal shut down procedures, shut off all valves, shut off pump and heater switch.
- Ensure Sankey coupler valves are both shut.
- Drain detergent tank, leave drain port open.
- Rinse out detergent tank thoroughly with water.
- Fill up (2/3 full as recommended) detergent tank with clean water and proper amount of acid solution.
- Place Sankey couplers in Cleaning Cups and seal the same as standard keg
- Once properly sealed, open Sankey coupler valves
- Open Drain valve
- Ensure pump outlet valve is closed, start pump and let run for 2-3 seconds
- Open pump outlet valve and let flow for 10-20 seconds or until water level runs low.
    - Water should flow through the system the same as rinsing a keg, emptying out of the drain.
- Switch off pump, and turn to OFF pump outlet valve.
- Let a few short bursts of air in by opening and closing the air valve a few times.
    - This clears any additional liquid/ water out of the lines and out through the drain.
- Shut off the Sankey coupler valves, lift up handles and undo the Cleaning Caps.
- Close drain valve.
- Open detergent tank drain to empty out any additional water.
- Open Pump outlet valve
- Let a few short bursts of air in by opening and closing the air valve a few times.
- Once the pump has been cleared of most of the water, close the air valve and pump outlet valve.
- Let any remaining water drain out of the detergent tank.