

4 Keg Automatic Keg Washer

Description:

Custom built automatic 4 keg washer with pump, heated 24 gal cleaning reservoir, and 17.5 gallon sanitizer reservoir. Only requires CO2 tank & air compressor.

Specs:

- Dimensions 56" H x 25.5" D x 43" L (61" with retractable 4th keg extension)
- 120VAC single phase power, 30 amps

Main Components:

- (1) Programmable Logic Relay, TECO SG2 Series, 8 inputs & 12 outputs, 24VDC
- (1) Power supplies, enclosure, relays, LED indicators, Liquid Tight Flex
- (1) 24 Gal Stainless Steel Cleaning Reservoir
- (1) 17.5 Gal Stainless Steel Sanitizer Reservoir
- (1) 1.5 HP 20 GPM Low Temp Pump 70PSI 120VAC 10amp Single Phase
- (9) Solenoid Valves 24VAC- (1) 1" Stainless Steel, (5) ¾" SS, (3) ½" Plastic Hose Barb
- (4) Sanke Keg Coupler, SS
- (1) CO2 Primary Double Regulator, 60lbs & 200lbs
- (1) CO2 Secondary Regulator, 60lbs
- (1) Electric Heating Element & Temperature Controller, 120VAC 1375Watts 10amps
- (8) ¾" Flex tubing & PVC shutoff valve

Not included:

- Air Compressor (Oil Free 7scfm @ 40psi recommend, Home Depot 33 gal Husky \$279)
- CO2 Tank (for sanitizer cycle blow out and pressurization cycle)
- Power screwdriver (for quickly removing hose clamps)

Pump Valve Sequencing (fully programmed for 4 min 30 sec & can be adjusted as needed):

Full Wash Sequence (big green button labeled "START")

- 1) 1st Air blow (blows out residual beer)- 15 Seconds
- 2) 1st H2O Rinse- 20 Seconds
- 3) 2nd Air blow (blows out residual water)- 33 Seconds
- 4) 2nd A. Delay (depressurizes kegs)- 3 Seconds
- 5) Clean cycle (Acid #6 @ 120-139 deg F)- 40 Seconds (up to 120 seconds recommended)
- 6) 3rd Air blow (blows out residual cleaner & reclaims in reservoir)- 45 seconds
- 7) 3rd A. Delay- 5 Seconds
- 8) 2nd H2O Rinse (flushes out cleaner)- 15 Seconds
- 9) 4th Air blow (blows out residual water)- 20 Seconds
- 10) 4th A. Delay- 3 Seconds
- 11) Sanitizer (Star-Xene)- 15 Seconds
- 12) CO2 blow (blows out & reclaims sanitizer in reservoir)- 28 Seconds
- 13) CO2 Delay- 8 Seconds
- 14) CO2 fill (pressurizes keg to 12-15 psi for storage)- 10 Seconds

Rinse Sequence (Small green button labeled "Start Rinse")

- 1) 1st Air blow- 15 Seconds
- 2) H2O Rinse- 20 Seconds
- 3) 2nd Air blow- 33 Seconds

4) 2nd A. Delay- 3 Seconds

How to use:

First Start-up

- 1) Check cleaning reservoir level (fill as needed with water and Acid #6, use protective gear)
- 2) Turn on heating element for cleaning reservoir (verify temp controller set for 135 deg F)
- 3) Check Sanitizer reservoir level (fill as needed with water and Star-Xene sanitizer)
- 4) Turn on water supply feed
- 5) Verify drain hose is secure in drain
- 6) Reconnect 4 keg hoses
- 7) Turn on Air Compressor set to 40 psi & connect air hose to keg washer
- 8) Turn on CO2 tank & verify correct regulator pressures (40 psi blow & 12 psi fill)
- 9) Turn on circuit breaker in controller enclosure

To Use:

- 1) Connect Sanke coupler to kegs 1-4 & open PVC ball valves on hoses in use
- 2) Close PVC ball valves on hoses not in use (if washing less than 4 kegs at a time)
- 3) Carefully flip keg upside down and onto keg racks
- 4) Push big green button labeled "START" to wash or "Rinse Start" to rinse (Red LED will turn off & sequence LED's on)

When finished with cleaning sequences:

- 1) Red LED will be on (meaning it's finished)
- 2) Close all PVC ball valves on hoses
- 3) Take down kegs and remove Sanke Couplers

To Drain Reservoirs, if needed:

- 1) Connect at least 1 empty keg, open PVC ball valves on hose in use
- 2) Close PVC ball valves on hoses NOT in use
- 3) Press "Drain Clean Tank" or "Drain Sani Tank"
- 4) Monitor tank level. Press "Emergency Stop" immediately when empty. Don't run pump dry.
- 5) Press "Rinse Start" to flush keg and empty

Final clean-up:

- 1) Take off hoses, open PVC ball valves & hang to dry
- 2) Turn off Circuit Breaker in controller enclosure
- 3) Turn off air compressor
- 4) Turn off CO2 tank
- 5) Turn off heating elements for cleaning tank
- 6) Turn off water supply to keg washer

Note:

- At any time, if needed, press the red emergency stop button to stop all sequences and reset.
- Keep temperature below 140 deg F (above this temp PVC is not rated for drinking)
- Never run the pump dry. It can burn out. Press stop button, if needed.
- ALWAYS wear protective gear around Acid #6 cleaner (goggles, gloves, boots, sleeves, etc)
- Use 1-2 oz per gallon of Acid #6 as per manufacturers instructions
- Test PH of Sanitizer as per manufacturers instructions and replace when needed
- Use 2-3 oz per 31 gallon (25-40ppm) of Star-Xene as per manufacturers instructions

- Keep solenoid valves covered and free of dripping or splashing water
- Never turn on heating element without liquid in reservoir. It could burn out.
- Programming back up file is “Keg Washer 2_Kegs_Delay_Final1.gen” and can be reloaded with the programming cable and a laptop.