



The Chronical™

Quick Reference Guide

Stainless Steel Prep

Pre-Clean: Prior to first time use, thoroughly wash all surfaces of the Chronical, including all valves and fittings, with Tri-Sodium Phosphate (TSP) in hot water, mixed to the manufacturer's recommendations. Scrub with a soft terry cloth, and after the initial TSP wash, rinse thoroughly and dry all surfaces.

Passivation: It's good practice to periodically passivate all stainless steel equipment with an acid based solution to establish a uniform passive oxide layer that will maximize corrosion resistance. Following the pre-clean step, fill the Chronical with Star San at a concentration of 1 ounce per gallon at 70-80°F for 30 minutes. **Moving forward, for best stainless performance, passivation should be performed at least once a year or anytime you believe you may have inadvertently scratched the surface.**

Cleaning and Sanitizing: As part of a regular cleaning regimen both pre and post-fermentation, wash the interior surfaces of your Chronical with an alkali cleaner such as PBW at a ratio of 0.75 ounce per gallon. Then sanitize with Star San or another acid based sanitizer per the manufacturer's recommendations.

Chronical Set Up

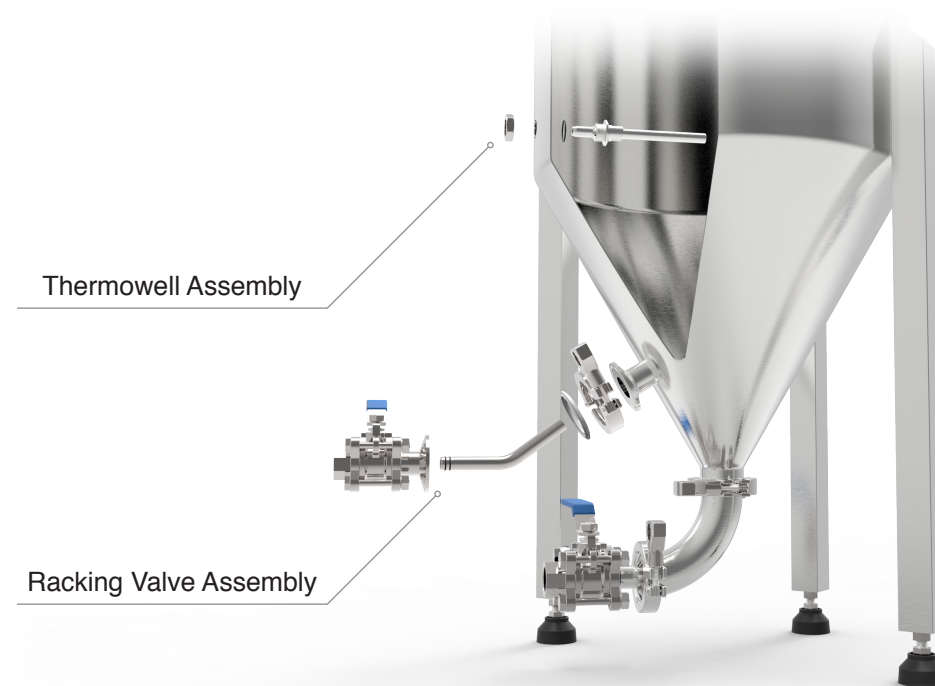
Installing the Ball Valves: Install the racking arm into the racking ball valve as shown. As a result of tight machining tolerances, and to reduce the chances of tearing, pinching, or displacing an O-ring, always use food-safe lubricant or Star San when inserting the racking arm into the racking valve. While we do include a spare set of O-rings in the event one is damaged, additional spare O-rings (and other supporting / related parts) are available for purchase on our website.

Once assembled, feed the racking valve and arm assembly into the upper 1" tri-clover ferule, then use the included silicone gasket and clamp to secure the ball valve to the ferule. Always use a silicone gasket between each tri-clover connection, as shown.

To complete the dump valve assembly, start by installing the included 90 degree tri-clover elbow onto the Chronical's lower 1.5" tri-clover ferule. Finally, install the dump valve onto the opposite end of the elbow, aligning the dump valve's orientation vertically with the racking valve.

Installing the Thermowell: Begin by removing the included locknut from the thermowell assembly. There will be two O-rings found on the threaded portion of the fitting. Remove one of the O-rings and retain it as a spare, the thermowell only requires ONE O-ring to form a liquid tight seal.

Next, feed the thermowell through the 17 mm punch found just below the Ss Brewing Technologies logo on the front of the Chronical. The O-ring should be seated against the interior sidewall of the vessel, as shown. Lastly, thread the locknut onto the fitting from the exterior and tighten.



What's in the Box

- Chronical Fermenter
- Lid with Gasket
- 1/2" Racking Ball Valve
- 3/4" Dump Ball Valve
- 90° Elbow
- Racking Arm
- (3) 1.5" TC Clamps
- (3) 1.5" TC Gaskets
- Silicone Stopper
- Thermowell Assembly
- Threaded Feet (14 gal & 1/2 bbl)
- Silicone Leg Inserts (7 gal)

Operation

Once the fermenter is cleaned sanitized and prepped for fermentation, we recommend that you position the racking arm so that it is aligned opposite to the ball valve's lever, as shown. Moreover, ensure that the racking arm is pointed down during active fermentation; a clog could ensue if trub and yeast settle into the racking arm's opening.

As a best practice to avoid contamination, we recommend you fill the fermenter from the bottom up using the racking or dump valve with the lid and air-lock in place. Hose barbs for both the ½" and ¾" ball valves are available for purchase on our website.

After fermentation is complete, when rotating the ball valve to reposition the racking arm in the upward position for kegging or bottling, take care to only loosen the tri-clamp slightly to allow for smooth rotation. Over-loosening the clamp could result in a leak and/or spillage.

Installing a Blow-off: As many home brewers are aware, high gravity beers require a blow-off tube to adequately vent the build-up of CO2 from within the vessel. At a minimum we recommend using a 1.5" tri-clover flange to ½" hose barb fitting installed on your Chronical's 1.5" tri-clover lid ferule, alongside the required gasket and clamp. Then a length of silicone tubing can be run to a small container of Star San solution to complete the air-lock.

Trub Dump and Yeast Harvesting: Two key features of all Chronical fermenters is the ability to dump trub and harvest yeast. Once primary fermentation has begun, we recommend that users dump trub using the lower dump valve within the first 48 hours to prevent solidification of break material. Typical purge rates usually result in the loss of 1-2 pints. Before dump operation, make sure to disengage your airlock to prevent Star San from getting drawn into the Chronical as a result of a vacuum forming.

Once fermentation is nearly complete, a cleaner yeast sample can be harvested once the majority of trub has been removed. To harvest yeast, begin with a small sanitized container, and then samples can be taken from either the dump valve or racking valve as long as the racking arm is orientated in the downward position.

Pressurized Transfers: While gravity racking works well for smaller 7 gallon Chronicals that can be easily lifted, larger sizes become cumbersome and prohibitive as a result of the additional weight. To lift a Chronical larger than 7 gallons while full, at least 2 people should lift the vessel using the legs and handles to avoid personal injury or damage to the vessel due to the excess weight.

For users that want to utilize their CO2 system to perform a pressurized transfer, it is highly recommended that a pressurized transfer fitting with the included pressure release valve be installed on the 1.5" TC lid ferule. This is to insure that an overabundance or buildup of pressure does not cause damage to the Chronical's lid clamps. The pressurized transfer fitting is available for purchase on our website.

Begin by completely depressurizing the CO2 system, typically by dialing the regulator down to its lowest setting. Next, run a length of tubing from the CO2 regulator to the Chronical's pressurized transfer fitting. Then run a length of sanitized tubing from the Chronical's racking valve to a freshly cleaned and sanitized keg. Begin by opening the racking valve first. Once the racking valve is open, slowly increase the regulator's pressure output until the gauge registers roughly 1-1.5 PSI.

Typically, only 1-1.5 psi is needed to transfer beer over to your keg(s). Excessive pressures pushed suddenly over to your fermenter may result in damage to the unit or in extreme cases personal injury. Also keep in mind that transferring to a keg/vessel that is located well above the fermenter and/or the use of an in-line filter greatly increases the pressure required to push the beer, and as such both of those situations should be avoided.

Following a successful transfer, always thoroughly clean all surfaces and parts. This includes the removal of the racking arm and complete disassembly of both ball valves to remove any potential contaminant before the next batch. Furthermore, the lid gasket should also be completely removed to clean both the gasket, in addition to the lid's gasket channel.

Ball valves should be disassembled following each use. To disassemble, remove all four bolts and pull the valve apart.



Before and after every brew you should remove all gaskets and O-rings for cleaning.



USE THE FOLLOWING WITH CAUTION:

- Stainless steel scrubbing pads or Scotch-Brite pads. If used too aggressively, abrasive pads can damage the surface and/or finish of the stainless
- Oxalic Acid cleaners such as Bar Keeper's Friend, Kleen King, or Revere Ware Stainless cleaners on the electrically etched volume markings and logo. They may cause the markings to fade.

NEVER USE THE FOLLOWING:

- Chlorine bleach or chlorine based products. Chlorine can cause pitting of stainless steel, or pin holes through the surface which cannot be repaired.
- OxiClean or other peroxide cleaners in combination with hard water. These can cause calcium carbonate to precipitate onto the surface. If this happens re-passivate your Chronical.

If you have any further questions about your Chronical go to our website and take a look at our extensive knowledge base in the FAQ section. Over the years it has become a treasure trove of information. If after searching our FAQs, you still can't find an answer to your specific question(s), please email us at support@ssbrewtech.com.

www.ssbrewtech.com

Warranty information can be found at www.ssbrewtech.com/warranty





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