

### **CLEANING & CARE**

Clean everything thoroughly with a good detergent upon taking your fermenter out of the box. Rinse until all traces of soap and chemicals are removed. Sterilize with any of the standard agents available.

We prefer 180 degree water as it sinks into the plastic, valves and fittings killing all bad bacteria. A diluted solution of bleach works well.

Clean all parts before assembly. Once assembled, remove the top and clean again. Rub the inside thoroughly with a soft cloth and a nonabrasive cleaner. A Teflon© type cleaning pad can be used. Always be careful to remove all residues from inside the MiniBrew fermenter after use.

The last step is to sterilize. Pour hot water at 180° temperature down the sides or use two gurgles of bleach diluted with water. Cleaning and sanitizing is extremely important!

Use hard streams of hot water to wash out anything left when cleaning after the fermentation process. Our plastic is completely inert and will not absorb any bacteria. All surface residue should be removed.

Now you can brew with all the convenience and the options of a Master Wine Maker or Brewer.



**ASSEMBLY INSTRUCTIONS** 

### THE EZ SEAL

STAINLESS STEEL WELD-LESS BULK HEAD FITTING
THREE PARTS TO THE EZ SEAL BULKHEAD ARE AS FOLLOWS:

- 1. THE NUT
- 2. THE RED FOOD GRADE WASHERS
- 3. THE HOLLOW DOUBLE THREADED BOLT

The nut on the outside of the bolt turns left to tighten. The threads inside the bolt are standard right hand threads. One Red Food Grade washer is placed on the inside the of the tank. Push the bolt and washer through the hole from inside the tank. Place the second Red Washer on the bolt. Turn the nut counterclock wise onto the bolt.

The nut at the end of the bolt consists of two flat areas for an adjustable wrench. Use this to tighten/loosen the nut and nipple that connects to the valve.

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For larger tanks where access is difficult, use a length of string, rope or the like to thread the Nut down to the hole. The Nut will slide through the hole. With a finger, hold the Nut in place and place the Second Washer on the Nut. Keep your finger in the Nut while you start the Bolt portion of the EZ Seal. Tighten as needed.

To attach a Ball Valve, thread the Hex Nipple into the outside end into the **EZ Seal Nut**. From there, thread the Ball Valve into the outside portion of the Hex Nipple. Now tighten, using an adjustable or crescent wrench.

Multiple washers can be used on the **EZ Seal**, both inside and outside the tank.

# MINBREW YOU CAN'T BUY WHAT YOU CAN BREW

You can attach an **EZ Seal**<sup>®</sup> to anything where you need a Sealed Threaded Fitting, by drilling the proper size hole. Drill a **1 1/8**, **1 3/8** and **1 5/8** inch hole respectively, for our **1/2**, **3/4** and **1** inch **EZ Seal**<sup>®</sup> **Bulk Head Fittings**.





**ASSEMBLY INSTRUCTIONS** 

### FERMENTER SET-UP

THE ORIGINAL HDPE CONICAL FERMENTER

#### THE COMPONENTS TO THE FERMENTERS ARE AS FOLLOWS:

- 1. THE FERMENTER
- 2. THE LID, CORK & AIRLOCK
- 3. THE RACKING PORT, LOCATED ON THE CONE
- 4. THE DUMP/FILL VALVE, LOCATED AT THE BOTTOM OF THE FERMENTER
- 5. THERMOMETER VALVE (ON TANKS LARGER THAN THE 6.5 GALLON MINIME)

The **Lid**, **Cork** & **Airlock** are simply put into place. The Lid does not need to be over-tightened, and the Cork & Airlock do not need to be deeply placed within the hole, provided on the top of the Fermenter. The top hole, may also be modified with an additional **1/2 inch EZ Seal**, for use with a multitude of attachments, including those which use Quick Connect Adapters & Tubing. See Photo.

The **Racking Port**, which is located on the Side Angle of the Fermenters is set-up by first installing one 1/2 inch EZ Seal (see EZ Seal Instructions Also Provided), then attach the 1/2 inch Hex Nipple followed by the 1/2 inch SS Ball Valve. The Thread Barb included can then be placed on the valve, making bottling and kegging clean and easy.

The **Dump/Fill Valve** is assembled in the same manner as the **Racking Port**. There is no need for an additional **Thread Barb** on the bottom valve.

If you purchased any Fermenter larger than the **6.5 Gallon Conical Fermenter**, the hole on the **Side Wall** of the **Fermenter** is used for a **Thermometer (Thermometer Sold Separately).** Install the included **EZ Seal**, and simply thread the thermometer into the threads on the inside of the **EZ Seal** or use the included Plastic Cap Plug.

Keep the **RIBS** on the **GASKETS AGAINST THE TANK WALLS**. Use Commercial Grade Tef lon Tape. Tighten by hand, and then just a little more to secure. Overtightening is not better.

- 1. EZ Seal Washers are placed on the Inside and Outside of the Fermenter.
- 2. The use of Teflon Tape on all Fittings Cannot be overstated enough.

# MINIBREW

## YOU CAN'T BUY WHAT YOU CAN BREW













# MINBREW YOU CAN'T BUY WHAT YOU CAN BREW





# MINIBREW

### YOU CAN'T BUY WHAT YOU CAN BREW

### FERMENTER STAND SET-UP

COMPONENTS TO THE FERMENTER STAND ARE AS FOLLOWS - TIGHT, NOT OVERTIGHTENED

- 1. FOUR LEGS
- 2. Two Hoops
- 3. FOUR WEDGES
- 4. SCREWS, CAP NUTS AND ANY WASHERS NEEDED ARE FOR THE TWO HOOPS.
- 5. BOLTS AND NUTS ARE FOR THE WEDGES. CAP NUTS ARE NOT NECESSARY.















### So Now What?

My suggestion to those Brewing for the first time is to get an Extract Kit. You can select anything you like, and can imagine...this will make Brewing Concepts and Methods easier for you to focus on, as you begin.

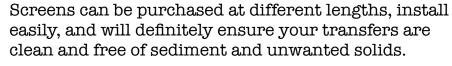
Upon getting the Kit, you will also find an included Ingredients List as well as a General Overview of Brewing that particular recipe.

There are very specific recipe instructions you will be following for that recipe, and those will guide you through the entire process of what takes place before the Fermenter is utilized.

Therefore, I would like to point out some things that should help make it a little easier the first time through, ensuring you get what were looking for - something to share, enjoy with a great home-cooked meal & friends, or something to bring home the Gold at a Home-Brew Competition!

Before you begin, I would like to mention a few items to consider. These items are typically not included on your Instruction Sheets.

The first is a Kettle Screen. This screen is an attachment you can install to the inside of your Brew Kettle. The screen will serve as a filter for what will eventually be passing through the Kettle and into the Fermenter.





The second item I find useful is a basic Kitchen Timer, or any other timer with a bell notifying you when that time is up. This will be helpful at several different points in the brewing process. Item number three is going to be a digital thermometer. If your Brew Kettle has a thermometer, great. If not, I suggest a digital thermometer. Hitting the right temperature is critical, and the digital thermometers seem to perform better than the metal thermometers that can be added to the inside of the brew kettle.

Assuming your Brew Kettle has a valve on it, another useful addition to make Transfers easier and cleaner is an Adapter Thread Barb. This same component was included for your Racking Port (Valve on the Angle of the Cone). Attach another Threaded Barb onto your Kettle Valve, and now you can transfer liquids with ease, and also without them coming in contact with air while being transferred which ensures less chance of contamination. At the end of the Barb, simply attach a length of tube that goes from the Kettle to the Fermenter. This length of tubing does not need to be very long, just long enough for transferring liquids.



The last piece of equipment that may be useful is a Wort Chiller. This is something that is helpful, especially when you begin larger batches. A Wort Chiller enables you to quickly cool your Wort down to a temperature where you can transfer it into your Fermenter and Pitch your Yeast as quickly as possible. Again, this helps reduce risk of contamination. If you do not use a Wort Chiller, make available a larger Container of Cold Ice and Ice Water so you can place your Brew Kettle into it to cool your Wort to a temperature where you can

Transfer and Pitch your yeast as quickly as possible. It might also be worth noting that some brewers transfer their wort without cooling it. In this case, the Wort would sit in the fermenter until it reached Pitching Temperatures. Preferences in brewing lead to your own Unique Style. Experiment and decide for yourself what works for you.

### Brewing Your Tea & Wort

Now that you have everything ready, it is time to put it all together! Depending on where you purchased your Extract Kit from, your Instruction Sheet may vary, but in essence all of them are accomplishing the same object - Creating a Sugary Herbal Tea.

The first item worth mentioning is as you are beginning to add your Grains to your Water, do not heat the water until you have all of the grains in the

kettle. Allow those grains to sit in the water until the temperature of the water reaches 170 degrees. While the temperature is rising, you can move the Grain Bag around, much like you would if you were brewing a cup of tea.

When your temperature reaches 170 degrees, pull the grain bag allowing most of it to drain back into the Kettle. Do not squeeze the Grain Bag, as this may transfer sediment which you do not want.

Once the Grain Bag has been removed, Bring the Wort to a boil, and then cut the heat entirely.

At this time, Specific Instructions for your Kit may vary. However, I would like to mention that you may want to Warm Up your Malt Extract prior to adding it to your Wort. You can place it in hot water, or place it close enough to the Brew Kettle to warm it enough to make it as liquid-like as possible.

The easier it is for your Malt to make it in to the Brew Kettle, the better. Remember, this Extract is going to be very thick.

Once you have your Malt Extract into the Brew Kettle, add the heat and continue stirring until it is fully dissolved. You do not want any Malt to burn on the bottom of the Kettle.

Return to your Instructions for your Hop Additions and any Specialty additions your recipe may call for.

As you are coming to a close on your Boil, and you cut off the heat, give it a minute or so, but soon after cutting the heat, Stir Your Wort Several times to create a Whirlpool Effect in the Kettle. This helps push unwanted solids and sediment to the center and bottom of the kettle.

From here, Cool your Wort as quickly as possible either using the Wort Chiller or the Container of Ice and Cold Water you set-up earlier.

As your Wort chills, and reaches it's Pitching Temperature, you can begin transferring it to your Fermenter. If you installed the Threaded Barb Adapter on the Brew Kettle, simply raise your Kettle above your fermenter and allow the Tubing and Valve to do the work (gravity).

Once transferred, and you are sure you have reached your final Gallon Amount in the fermenter, you can now check for your Specific Gravity.

Before Pitching the Yeast, aerate your Wort by simply spinning the Fermenter around some and allowing the Wort to spin around in the fermenter. At this time, you can Pitch the Yeast and close the Fermenter. Dip your Airlock in your Sanitizing solution and install the Cork on top the Fermenter.

#### You Made It!

Fermentation will begin shortly after adding the yeast, and you will be able to tell when you see bubbles in the airlock.

Allow your Wort to Ferment all the way through before you begin to think about removing any dead yeast from the Bottom Valve. Typically your Primary Fermentation is done when you stop noticing Bubbles in your Airlock.

Keep in mind, there is no need to rush removing any yeast. This is another point in the Brewing Process where your experience will help you determine how quickly or not you want to remove yeast. Your Wort is conditioning while it sits, and convection currents are at work within the Cone of the Fermenter. You may want to remove dead yeast daily, or not. Again, begin reading and experimenting and eventually you will arrive at what works best for you.

You can check for Specific Gravity by using the Racking Port on the Angle of the Cone. If your Gravity has hit the Final Gravity reading called for in your Recipe, you are done! Your Wort has fermented and you now have Beer! If it has not reached the Final Gravity you need, allow it to condition several more days before testing. If after several more days of testing, and it has reached the amount of time as per the Instruction Sheet, and it has not decreased beyond the last reading...it's typically done fermenting.

Congratulations! Brew #1 Done! Keg It. Bottle It. Cool It. Share & Drink Responsibly!



## Ball Lock Transfer Kit Assembly

- 1. (2) 1/2" EZ Seal Weldless Bulkheads
- 2. (1) 1/2" Adapter Coupler
- 3. (1) 1/2" Cap Plug

For use with a MiniBrew Conical Fermenter which has a Closed Style Top, this modification is very simple.

- 1. For the Cork hole, which already exists, install one of the two 1/2" EZ Seal Weldless Bulkheads. I always suggest using Commercial Grade Teflon Tape with any threads. Keep the ribs of the gasket against the Tank Walls. Tighten by hand is normally enough, and then a little more to secure.
- A. This can now be used for either the Ball Lock Post, or it will be utilized during fermentation as your Cork & Airlock hole by simply using the included 1/2" Adapter Coupler. Simply place your cork in the Coupler.
- B. When this EZ Seal is being utilized as a Cork & Airlock hole during fermentation, then when transferring under pressure you will use the included 1/2" Cap Plug to seal the hole.
- 2. For the hole that does not already exist, you will drill a hole in the top of the tank, opposite the Cork & Airlock hole. This is very simple. My suggestion is a Step Drill Bit. You'll need a hole 1 1/8" in size to allow the second 1/2" EZ Seal to be installed. If you do not have a Step Drill Bit, they are common and can be found at most any local Hardware Shop or Big Box Hardware Store.

The tank is very thick HDPE, but the drill bit will go through very easily. Not much force is needed at all.

- A. Once this hole is drilled, simply install the second included 1/2" EZ Seal Weldless Bulkhead. Again, use Commercial Grade Teflon Tape. It is better and you'll need less.
- B. After installing the Bulkhead, wrap the **Ball Lock Post Threads** with Teflon Tape and simply thread it into place into the **Internal Threads** on the **EZ Seal**. This Ball Lock Post is a Gas-In Only Post.

When using Pressure to Transfer Wort, into a Keg for example, there is no need to use any more than 2-3psi.

Although the tanks are tested to 10psi under water after they are molded, I do not advocate brewing under pressure with the HDPE tanks. Pressure can generate rapidly under fermentation, and often times exceed 10psi.

You do not want a mess to pick up, or worse risk injury. So, therefore be aware and use caution when using CO2 Pressure to Transfer.



Please see the Photograph above showing the kit installed on an 8g Conical Fermenter.

Use with caution and at your own risk.