

FASTFERMENT™



USER MANUAL

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Congratulations on your *FastFerment* Purchase!

Now you will be able to make the best beer, wine, cider or mead in the comfort of your own home with the least amount of effort. Thank you for allowing us to help!

What is Homebrewing?

Every year thousands of people become homebrewers and winemakers. Homebrewing & winemaking is fun and a great hobby to enjoy with friends. Whether you have taken up this hobby to save money, improve on flavor or test your personal skills, you have made the right choice by purchasing a *FastFerment* for your homebrewing & winemaking activities.

What is *FastFerment*?

The *FastFerment* System is a one-stage fermenter, which allows brewers and winemakers to do primary and secondary fermentation in the same unit.

FastFerment:

- Saves 80% of the time and labor needed to make a batch of beer or wine compared to conventional buckets and carboys
- Is more sanitary by reducing the contact surface of the product with sediment by 99%. This ensures the product is clear and of premium quality!

Standard *FastFerment* Kit Contents:

29 Total Pieces for your unit for complete assembly

Parts List (- Quantity)

- | | |
|-----------------------------------|--|
| 1) Conical Fermenter Body - 1 | 10) Hose - 1 |
| 2) Collection Ball - 1 | 11) Thermowell - 1 |
| 3) Left and Right Wall Mounts - 2 | 12) 6" Gasket - 1 (this will be inside the 6" Screw Top) |
| 4) 1" Union Valve - 1 | 13) Wall Mount Bolts and Washers - 4 each |
| 5) 6" Screw Top - 1 | 14) Hose Clamp - 1 |
| 6) 3 Piece Airlock - 1 | 15) Union Valve Fittings for Collection Ball & Hose Barb - 4
(2 pieces will be attached to the Union Valve) |
| 7) Rubber Grommet - 1 | 16) Spare O'Ring for Union Valve - 1 |
| 8) Hose Barb - 1 | 17) Side Insert Bolts - 2 |
| 9) Teflon Tape - 1 | |

*Wall Mounts are located at the bottom of the box under a cardboard insert to protect the *Conical Fermenter Body**



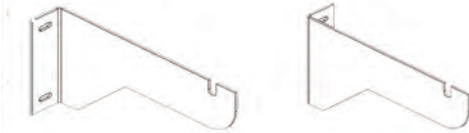
Description of *FastFerment* Parts

- 1) *Conical Fermenter Body* - Main vessel for fermentation
- 2) *Collection Ball* - Small vessel to collect trub and sediment
- 3) *Left and Right Wall Mounts* - Mounts to hold the *FastFerment* on the wall
- 4) *Wall Mount Bolts and Washers* - Used to attach the *Wall Mounts* to the wall
- 5) *Side Insert Bolts* - Holds the *Conical Fermenter Body* in the *Wall Mounts*
- 6) *1" Union Valve* - Valve that allows contents to flow into the *Collection Ball*
- 7) *Union Valve Fittings for Collection Ball & Hose Barb* - Interchangeable fittings to attach the *Union Valve* to the *Hose Barb* or *Collection Ball*
- 8) *Spare O'Ring for Union Valve* - Replacement part for *Union Valve*
- 9) *6" Screw Top Lid* - Lid to seal the top of the *FastFerment*
- 10) *6" Gasket* - Seals the *Conical Fermenter Body* and the *Lid*
- 11) *3 Piece Airlock* - Allows CO₂ to escape during primary and secondary fermentation
- 12) *Rubber Grommet* - Holds and seals the *Airlock* in the *Lid*
- 13) *Hose* - Fills bottles or kegs from the open *Union Valve*
- 14) *Hose Barb* - Attaches the *Valve* to the *Hose*
- 15) *Hose Clamp* - Pinches off the *Hose* when filling bottles or kegs to stop flow
- 16) *Teflon Tape* - Seals off threads on the *Thermowell*, *Conical Fermenter Body* and *Collection Ball*
- 17) *Thermowell* - Holds the thermometer in place
- 18) *Double Lever Capper** - Place bottle caps on beer bottles
- 19) *Star San 4oz Bottle** - Sanitizer for all brewing equipment
- 20) *Triple Scale Hydrometer** - Takes gravity readings in beer and wine
- 21) *Plastic Spoon** - To stir beer and wine ingredients in the *FastFerment*
- 22) *Bottle Brush** - To clean bottles
- 23) *Dual Scale Liquid Crystal Thermometer** - Stick-on thermometer to monitor temperatures in the *FastFerment*
- 24) *Double Lever Corker** - To insert corks in wine bottles
- 25) *2oz PBW Packets** - Powdered Brewery Wash - Cleaning agent for all brew equipment
- 26) *Corks** - To seal wine bottles

* **Parts found only in *FastFerment* Starter Kits**

Setting Up the Wall Mounts

The lip of the *Wall Mount* (where the hole for the screws are) go to the **OUTSIDE**.



LEFT SIDE (when looking at *FastFerment*)

RIGHT SIDE (when looking at *FastFerment*)

IMPORTANT NOTE:

Screwing the *side insert bolts* too tight into the *FastFerment* will pop the insert out and ruin the wall mounting capabilities.

Use **only** the provided *Wall Mounts* and other *FastFerment* Accessories to hang, hold or transport your *FastFerment*. We cannot guarantee other parts that we haven't provided.

- Step 1:** Determine the area where you will mount the *FastFerment* by locating two adjacent wall studs. Drill holes 16" (40.64 cm) apart for the studs. You will need a stud for each *Wall Mount*. The actual distance between the inside of the *Wall Mounts* is 14.25" (36,30 cm). Buy the stand accessory if mounting is not possible.
- Step 2:** For homebrewers who are bottling, mark a spot on each stud at 40" (101.6 cm) in height. If you are kegging - mark spots at 52" (132.08 cm) in height. Ensure the marks are exactly the same height to keep the unit level for mounting.
- Step 3:** Line the top of each *Wall Mount* up with the line drawn on the stud. Make marks in the 4 bolt holes in the *Wall Mount* for where you will screw in the *Wall Mount Bolts*. Drill pilot holes and mount both *Wall Mounts*.
- Step 4:** Hand tighten the two *Side Insert Bolts* into the side of the *FastFerment* until they are snug. Do not over-tighten.
- Step 5:** Place *FastFerment* onto the *Wall Mounts* with the *Side Insert Bolts* snug in the mount holes.

Setting Up *FastFerment*

***FastFerment* parts have not been cleaned prior to shipping. All of your equipment and surfaces should be cleaned and sterilized before beginning the brewing or winemaking process.**

Cleanliness should be the foremost concern of a homebrewer or winemaker. Providing good growing conditions for the yeast in the wort or must also provides good growing conditions for other microorganisms, especially wild yeast and bacteria. Cleanliness to prevent contamination must be maintained throughout every stage of the brewing & winemaking process.

Step 1 - Cleaning:

Use a cleaner recommended for brew equipment. Wash with cleaner by spraying or soaking every part with a contact time of at least 2 minutes. Empty or drain the vessel and let air dry. All parts and equipment should be reassembled wet after soak to minimize contamination. Then spray all parts with a sanitizing solution for brew equipment.

Rinse with water if the supply is clean, fresh and soft.

Step 2- Breaking in Threads:

Take the grey *Union Fitting* or *Valve* and screw it on and off of the *Collection Ball* to breakin the white threads. Do this 10 times with the 6" *Lid* on the top threads of the *Conical Fermenter Body* and remove any excess plastic.

Setting Up *FastFerment* Continued:

Step 3: Taping

Take the supplied *Teflon Tape* and wrap the threads in the same direction as the threads rotate (clockwise direction when looking at the thread - see picture below)

Apply *Teflon Tape* to:

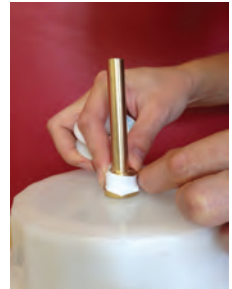
1. Threads at the bottom of the *Conical Fermenter Body* (white to grey)
2. Threads on the *Collection Ball* (white to grey)
3. Threads on the *Thermowell* (brass to white) [Note: *Thermowell* is not attached, you must tape the *Thermowell* threads and screw it into the unit]

When putting on *Teflon Tape*, ensure you wrap the tape in a clockwise direction with 4-6 layers.

ALERT: Be very careful with the threads. Crossthreading will damage the parts.

Step 4: Leak Test Before Using:

Fill the taped *FastFerment* with water and leave for 2-6 hours. If the unit leaks, take apart and add another 2-4 layers of *Teflon Tape* on top of the existing *Teflon Tape*. Reassemble and test for leaks. Repeat until it seals.



Always tape in a clockwise direction

Setting Up *FastFerment* Continued:

- Step 3:** Attach the solid end of the *Union Valve* to the *Conical Fermenter Body*
- Step 4:** Attach one of the *Union Valve Fittings* to the *Collection Ball*
- Step 5:** Attach the *Hose* to the *Hose Barb*
- Step 6:** Attach the *Collection Ball* to the *Union Valve* and open the *Union Valve*
- Step 7:** Insert the *Grommet* into the hole on the top of the *6" Screw Top*
- Step 8:** Insert the *Airlock* into the *Grommet*
- Step 9:** Place the *FastFerment* into the *Wall Mounts* using the *Side Insert Bolts*
- Step 10:** Fill *FastFerment* and screw on the *6" Screw Top* with the *Gasket*
- Step 11:** Do a leak test by filling the *FastFerment* with water to ensure that everything seals properly. We suggest leaving it for a minimum of 5-6 hours.
- Step 12:** Sanitize and begin your first batch



Visit our Website for Additional Set-Up Videos and Tips:

www.FastBrewing.com

Simple Steps for Using *FastFerment*



1. Pour ingredients into *FastFerment*



2. Screw on lid with *airlock*



3. Allow time for primary fermentation



4. When primary fermentation is done, close the *valve*



5. Remove the *collection ball*



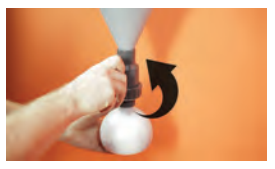
6. Dump and clean the *collection ball*



7. Or, harvest the yeast to reuse



8. Reattach the *collection ball*



9. Open the *valve*



10. Allow time for secondary fermentation



11. When primary fermentation is done, close the *valve*



12. Remove the *collection ball*



13. Attach the *filling hose*



14. Adjust the *hose clamp*



15. Bottle or keg and enjoy!

Visit our Website for Additional Set-Up Videos and Tips:

www.FastBrewing.com

Making Wine with *FastFerment*

Suggested Equipment for WineMaking

- FastFerment 7.9Gal/30L Conical Fermenter
- Cleaning Agent
- Sanitizing Agent
- Bottle brush (long handled nylon bristle brush)
- Thermometer
- Hydrometer
- Graduated Cylinder (optional – for sampling Starting Gravity)
- Plastic Stirring Spoon
- Corks
- Corker
- Wine Bottles

***It is recommended that you make wine with fresh juice and concentrates only.**



WineMaking Instructions - Option 1

The following guidelines are to be used with a standard wine kit.

We advise that you adjust waiting dates based on your hydrometer readings and the time duration that the kit provides you with. Please ensure that you read all instructions before beginning to guarantee maximum efficiency and best results.

Note - "Filling Hose Attachment" refers to the *Hose on the Hose Barb with the Union Fitting and the Hose Clamp* (see picture - 5 pieces total)

Winemaking – Option 1:



Filling Hose Attachment

Day 1: Primary Fermentation

Step 1: Clean and sanitize all equipment

Step 2: Assemble *FastFerment*

Step 3: Pour the contents of the bag into the *FastFerment* and add water to desired volume

Step 4: Slowly sprinkle the packet of Bentonite, stirring constantly

Step 5: Put some water in the bag, swirl it around and dump it into the *FastFerment*

Step 6: Add 4 liters of water, adjusting the temperature so that the inside temperature once full is between 20-25° C (At this point you have an option to add a mash bag to add more flavor if the kit provides one)

Step 7: Stir vigorously

Step 8: Check the specific gravity of must

Step 9: Add the yeast as per instructions

Step 10: Screw the lid on the *FastFerment* with the *Grommet* and *Airlock* installed

Step 11: Let primary fermentation occur (approx. 7 days)

Primary Fermentation is complete when the Specific Gravity is around 1.030 The number of days suggested is a general guideline.

Winemaking – Option 1 Continued:

Days 7-10: Secondary Fermentation

- Step 12:** Once primary fermentation is complete, close the *Union Valve*, remove and empty the contents of the *Collection Ball*
- Step 13:** Clean and sanitize the *Collection Ball* before reattaching (at this point you should also remove the mash bag if you are using one)
- Step 14:** Reattach the *Collection Ball*
- Step 15:** Re-open the *Union Valve*
- Step 16:** Leave *FastFerment* in a warm, dark area for the duration of secondary fermentation (approx. 12 days)

Days 20-22: Degassing and Stabilizing

- Step 17:** Take a hydrometer reading. The S.G must be 0.995 or lower for secondary fermentation to be complete. If the S.G is higher, wait a few more days

At this point you have the option of continuing the next few steps on the same day or waiting 5-7 days

Day 24-32: Clearing

- Step 18:** It is time to clear the wine by adding the last fining agents. Refer to your kit for clearing instructions (Please see FAQ page 28 for more information)
- Step 19:** Degas - using either a plastic stir spoon or degassing equipment, degas wine vigorously for 2-5 mins. You can repeat this step 2-4 times a day over the next 2 days or once really well is good enough
- Step 20:** Add the Metabisulphite and the Potassium Sorbate packages and stir vigorously

Winemaking – Option 1 Continued:

Day 33- 40: Filtering and Bottling

- Step 23:** Clean and sanitize wine bottles and *Filling Hose Attachment*
- Step 24:** Remove collection ball and attach sanitized *Filling Hose Attachment*
- Step 25:** Make sure the *Hose Clamp* is closed. Then open the *Union Valve* to start filling wine into bottles. Try to minimize the exposure to the air. Fill the bottles so that the wine is about 1 cm from the bottom of the cork (FAQ page 25)
- Step 26:** Keep wine bottles upright for 1-3 days
- Step 27:** Keep your wine in a temperature controlled environment, out of direct sunlight for the suggested amount of months prior to consuming
- Step 28:** Clean and sanitize your equipment
- Step 29:** Get ready for your next batch using *FastFerment!*

Wine Making Instructions - Option 2, Even Easier

This Option 2 reduces the workload *even more* and has been proven successful for many years in Wine-on-Premise locations by the Inventor.

Winemaking – Option 2:

Day 1: Primary and Secondary Fermentation

- Step 1:** Clean and sanitize all equipment
- Step 2:** Assemble *FastFerment*
- Step 3:** Pour the contents of the bag into the *FastFerment* and add water to desired volume
- Step 4:** Slowly sprinkle the packet of Bentonite, stirring constantly
- Step 5:** Put some water in the bag, swirl it around and dump into *FastFerment*
- Step 6:** Adjust the temperature so that the inside temperature once full is between 20-25° C (at this point you have an option to add a mash bag to add more flavor if the kit provides one)

Winemaking – Option 2 Continued:

- Step 7:** Stir vigorously
- Step 8:** Check the specific gravity of the must
- Step 9:** Sprinkle in the yeast - do not stir
- Step 10:** Put the lid on *FastFerment*
- Step 11:** Do not open or touch for the duration of primary and secondary fermentation (approx. 20-22 days)

Days 20-22: Degassing and Stabilizing

- Step 12:** Take a hydrometer reading. The S.G must be 0.995 or lower for secondary fermentation to be complete. If the S.G is higher, wait a few more days

**It is important that the wine is thoroughly de-gassed.
The S.G must be between 0.990 and 0.995**

Day 24-32: Clearing

- Step 13:** It is time to clear the wine by adding the last fining agents. Refer to your kit for clearing instructions (Please see FAQ section page 28 for more information)
- Step 14:** Degas - using either a plastic stir spoon or degassing equipment, degas wine vigorously for 2-5 mins. You can repeat this step 2-4 times a day over the next 2 days or once really well is good enough
- Step 15:** Add the Metabisulphite and the Potassium Sorbate packages and stir vigorously

**If you choose to clear your wine on the same day as your degassing and stabilizing, degas wine again for another 5 minutes.
If you waited to clear wine, reseal lid and let it sit for 6 days**

Winemaking – Option 2 Continued:

Days 33-40: Filtering and Bottling

Check to see if wine is clear - if it is not clear, it is not ready to bottle.

Step 17: Clean and sanitize the wine bottles

Step 18: Rinse and sanitize the *Filling Hose* (recommended)

Step 19: Remove the *Collection Ball* (this should be your first time removing the ball)

There is no need to remove the *Collection Ball* until this point. It is designed to hold sediment with an approximate foot of clearance from the wine.

Step 20: Attach the sanitized *Filling Hose Attachment*

Step 21: Make sure the *Hose Clamp* is closed. Then open the *Union Valve* to start filling wine into bottles. Try to minimize the exposure to air. Fill the bottles so that the wine is about 1 cm from the bottom of the cork (FAQ page 25)

Step 22: Keep wine bottles upright for 1-3 days

Step 23: Store wine in a temperature controlled environment, out of direct sunlight for suggested amount of months prior to consuming

Step 24: Clean and sanitize all equipment

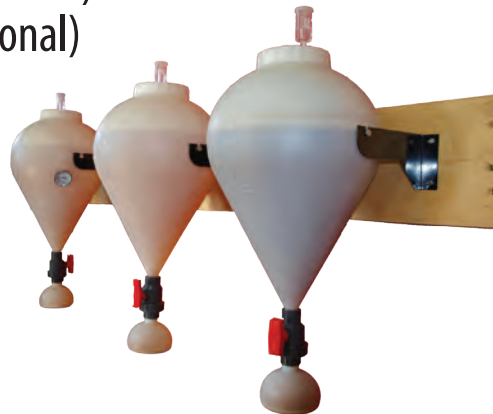
Step 25: Get ready for your next batch using *FastFerment!*



Homebrewing with *FastFerment*

Suggested Equipment for Homebrewing

- *FastFerment*
- Cleaning agent
- Sanitizing Agent
- Thermometer
- Hydrometer
- Graduated Cylinder (optional – for sampling S.G)
- Bottle brush (long handled nylon bristle brush)
- Plastic Stirring Spoon
- Caps (check if your kit provides them)
- Capper
- Large Boiling pot
- Wort Chiller or ice to put in a bathtub/large sink
- 200ml/7oz container (prepare yeast)
- Mashtun (optional)
- Brew-in-a-bag (optional)
- Bottle Washer (optional)
- Pen and Notepad



Homebrewing Instructions

FastFerment produces dramatically better results. The closed vessel conical shape ensures that there is minimal contact between sediment and beer. *FastFerment* minimizes the risk of oxidation and contamination by eliminating the need to transfer the wort to a second vessel. This prevents off-flavors and infection, giving you a clearer, better tasting beer.

Please read the instructions **entirely** before starting on your brew day to ensure maximum efficiency and the best results. We also advise you to adjust dates and measurements according to your specific recipe.

The three most important things to keep in mind every time you brew are: **Cleanliness, Preparation** and **Good Record Keeping**.

Note - "Filling Hose Attachment" refers to the Hose on the Hose Barb with the Union Fitting and the Hose Clamp (see picture - 5 pieces total)



Filling Hose Attachment

Homebrewing – Option 1: Malt Extract Syrup

Day 1 - Brew Day (Follow Instructions on Ingredient Kit):

- Step 1:** Clean and sanitize all equipment – the worst enemy of beer is contamination by microorganisms
- Step 2:** Assemble *FastFerment*
- Step 3:** Gather ingredients purchased from your favorite homebrew shop
- Step 4:** Boil suggested amount of water
- Step 5:** Once boiling, remove pot from the heat and stir in the malt extract syrup, make sure it doesn't collect at the bottom (stir until completely dissolved)
- Step 6:** Once dissolved, return liquid to boil for a total of 1 hour
- Step 7:** Once liquid reaches a rolling boil, proceed to adding hops by following instructions given to you (within boiling hour)

Homebrewing– Option 1: Malt Extract Syrup Continued

- Step 8:** Once the hour is up, it is time to chill the wort. Attach chiller to a cold-water source and cool wort. Cool until wort has reached pitching temperature (65-90 °F [18-32 °C])
- Step 9:** Take a sample of the wort and record a hydrometer reading
- Step 10:** Re-hydrate yeast
- Step 11:** Add wort into *FastFerment* and then add yeast

You have the option of sealing the lid and gently shaking the conical to aerate the wort for the yeast to grow or stir vigorously

Fermentation:

- Step 12:** Seal the lid tight and place *FastFerment* on the *Wall Mounts* or in the optional stand accessory. Leave undisturbed for the duration of primary fermentation (time varies depending on the type of beer)

Depending on the type of beer, choose a location that has a stable temperature. If brewing Ale, room temperature is recommended (65-70 °F [18-21 °C])

- Step 13:** Once primary fermentation is complete, close the *Union Valve*, remove and empty the contents of the *Collection Ball*

**There is the option to harvest the yeast for reuse.
Check out page 32 for Tips!**

- Step 14:** Sanitize and clean the *Collection Ball* before reattaching (at this point you should also remove the mash bag if you are using one)
- Step 15:** After re-attaching the *Collection Ball*, re-open the *Union Valve*
- Step 16:** Allow brew to sit for remainder of secondary fermentation (times vary)
- Step 17:** When secondary fermentation is complete, turn off the *Union Valve* and remove the *Collection Ball* to discard the contents or harvest the yeast (See page 32)
- Step 18:** Your beer is now ready to bottle!

Homebrewing– Option 1: Malt Extract Syrup Continued

Bottling/Kegging Day:

**A typical 5Gal/20L batch requires two cases (48)
of 12oz/350ml bottles for bottling**

- Step 19:** Sanitize and clean beer bottles and the *Filling Hose Attachment*
- Step 20:** Prepare priming solution
- Step 21:** Add priming solution to *FastFerment* and stir gently
- Step 22:** Wait for sediment to settle for 15-30 minutes before proceeding
- Step 23:** Attach the *Filling Hose Attachment*
- Step 24:** Put *Hose Clamp* on the *Hose* and make sure it is closed. Then open the *Union Valve* to start filling beer into bottles. Try to minimize the exposure to the air. Fill the bottles so that the wine is about 1 inch from the top and cap (FAQ page 25)
- Step 25:** Clean *FastFerment* and other equipment
- Step 26:** Place bottles in a room-temperature area and let them sit to allow carbonation to take place
- Step 27:** Wait 2-3 weeks. Cool Beers and crack one open with a friend!

Homebrewing– Option 2: Brew-in-a-Bag

Brew Day (Follow Instructions on Ingredient Kit):

- Step 1:** Clean and sanitize all equipment – the worst enemy of beer is contamination by microorganisms
- Step 2:** Assemble *FastFerment*
- Step 3:** Gather ingredients purchased from your favorite homebrew shop
- Step 4:** Line boiling pot with a grain bag
- Step 5:** Fill boiling pot with water (you will be mashing with the full volume of water)
- Step 6:** Heat your water to 1° more than the target mash temperature of the recipe to allow for cooling caused by the grain addition

Homebrewing— Option 2: Brew-in-a-Bag Continued

- Step 7:** Add grain to pot and stir the mash very gently until the grains are submerged and wet (if the temperature has cooled significantly during the previous step, add more heat to bring wort back to the desired temperature)
- Step 8:** Put the lid on and leave it according to the mash schedule
- Step 9:** After the waiting period, lift the bag from the wort slowly and allow it to drain (hold it close to the beer's surface to eliminate splashing and introducing air)
- Step 10:** Bring wort to a boil
- Step 11:** Keep on a rolling boil for 1 hour. Begin adding hops according to provided schedule
- Step 12:** Once the hour is up, it is time to chill the wort. Attach chiller to a cold water source and cool wort. Cool until wort has reached pitching temperature (65-90 °F [18-32 °C])
- Step 13:** Take hydrometer reading and record
- Step 14:** Re - hydrate yeast
- Step 15:** Add wort into *FastFerment* and then add yeast

Fermentation:

- Step 16:** Seal the lid tight and place *FastFerment* on *Wall Mounts* or the optional *Stand* accessory. Leave undisturbed for duration of primary fermentation (time varies depending on the type of beer)

Depending on the type of beer, choose a location that has a stable temperature. If brewing Ale, room temperature is fine (65-70 °F [18-21 °C])

- Step 17:** Once primary fermentation is complete, close the *Union Valve*, remove and empty the contents of the *Collection Ball*

**There is the option to harvest the yeast for reuse.
Check out page 32 for Tips!**

- Step 18:** Sanitize and clean the *Collection Ball* before reattaching (at this point you should also remove the mash bag if you are using one)

Homebrewing— Option 2: Brew-in-a-Bag Continued

- Step 19:** After re-attaching the *Collection Ball*, re-open the *Union Valve*
- Step 20:** Allow brew to sit for the remainder of secondary fermentation (times vary)
- Step 21:** When secondary fermentation is complete, turn off the *Union Valve* and remove the *Collection Ball* to discard the contents
- Step 22:** Your beer is now ready to bottle!

Bottling/Kegging Day:

- Step 23:** Sanitize and clean beer bottles and the *Filling Hose Attachment*
- Step 24:** Prepare priming solution
- Step 25:** Add priming solution to *FastFerment* and stir gently
- Step 26:** Wait for sediment to settle for 15-30 minutes before proceeding
- Step 27:** Attach the *Filling Hose Attachment* and the *Filling Hose*
- Step 28:** Put *Hose Clamp* on the *Hose* and make sure it is closed. Then open the *Union Valve* to start filling beer into bottles. Try to minimize the exposure to the air. Fill the bottles so that the wine is about 1 inch from the top and cap (FAQ page 25)
- Step 29:** Clean *FastFerment* and other equipment
- Step 30:** Place bottles in a room-temperature area and let them sit to allow carbonation to take place
- Step 31:** Wait 2-3 weeks. Cool Beers and crack one open with a friend!

Homebrewing— Option 3: All- Grain

Brew Day (Follow Instructions on Ingredient Kit):

- Step 1:** Clean and sanitize all equipment – the worst enemy of beer is contamination by microorganisms
- Step 2:** Assemble *FastFerment*
- Step 3:** Gather ingredients purchased from your favorite homebrew shop
- Step 4:** In a Mashtun, steep your milled grain in hot water (152°F [67°C])
- Step 5:** Steep for one hour and pour into a boiling pot

You may re-add this wort through the Mashtun to get out more sugar or run new water through sugar and pour into boiling pot

Homebrewing– Option 3: All- Grain Continued

Brew Day (Follow Instructions on Ingredient Kit):

- Step 6:** Take a sample of the wort and record a hydrometer reading
- Step 7:** Bring wort to a boil
- Step 8:** Keep on a rolling boil for 1 hour then begin adding hops according to provided schedule
- Step 9:** Once the hour is up, it is time to chill the wort. Attach chiller to a cold water source and cool the wort. Cool until wort reaches pitching temperature (65-90 °F [18-32 °C])
- Step 10:** Take hydrometer reading and record
- Step 11:** Re-hydrate yeast
- Step 12:** Add wort into *FastFerment* and then add yeast

You have the option of sealing the lid and gently shaking the conical to aerate the wort for the yeast to grow or stirring vigorously

Fermentation:

- Step 13:** Seal the lid tight and place *FastFerment* on the *Wall Mounts* or the optional stand accessory. (Leave undisturbed for duration of primary fermentation. Time varies depending on type of beer)

Depending on the type of beer, choose a location that has a stable temperature. If brewing Ale - room temperature is fine (65-70 °F [18-21 °C])

- Step 14:** Once primary fermentation is complete, close the *Union Valve*, remove and empty the contents of the *Collection Ball*

There is the option to harvest the yeast for reuse. Check out page 32 for Tips!

- Step 15:** Sanitize and clean the *Collection Ball* before reattaching (at this point you should also remove the mash bag if you are using one)

Homebrewing– Option 3: All- Grain Continued

- Step 16:** After re-attaching the *Collection Ball*, re-open the *Union Valve*
- Step 17:** Allow brew to sit for remainder of secondary fermentation (times vary)
- Step 18:** When secondary fermentation is complete, turn off the *Union Valve* and remove the *Collection Ball* and discard the contents
- Step 19:** Your beer is now ready to bottle

Bottling/Kegging Day:

- Step 20:** Clean and sanitize beer bottles, *Hose*, *Hose Barb* and *Hose Clamp*
- Step 21:** Prepare priming solution
- Step 22:** Add priming solution to *FastFerment* and stir gently
- Step 23:** Wait for sediment to settle for 15-30 minutes before proceeding
- Step 24:** Attach the *Filling Hose Attachment*
- Step 25:** Put the *Hose Clamp* on the *Hose* and make sure it is closed. Then open the *Union Valve* to start filling beer into bottles. Try to minimize the exposure to the air. Fill the bottles so that the beer is about 1 inch from the top and cap (FAQ page 25)
- Step 26:** Clean *FastFerment* and other equipment
- Step 27:** Place bottles in a room-temperature area and let them sit to allow carbonation to take place

**A typical 5-gallon batch requires two cases
(48) of 12-oz bottles for bottling**



Frequently Asked Questions (FAQs)

For updated FAQs, check our website out at:

<http://www.fastbrewing.com/products/fastferment/frequently-asked-questions>

Cleaning

Always ensure to clean the unit thoroughly before use with a soft sponge or cloth. Never use anything hard like a brush or scraper to clean the unit. It is important to not scratch the inside of *FastFerment* to ensure everything funnels down properly. Tap water has micro-organisms, which can contaminate your brew. After cleaning and rinsing your equipment, we suggest spraying with Star San Sanitizer and do NOT RINSE. Leave to air dry.

It is advised to completely disassemble the unit and clean it thoroughly every 12 months. This will help ensure the longevity of the parts and the quality of your beer and wine. Extra care and attention must be taken to ensure the plastic threads are not damaged when taking apart or putting the unit back together.

The *Union Valve* can be disassembled very easily for cleaning (see page 28 for pictures)

Bottling

When bottling, it's best to use a combination of the *Union Valve* and the *Hose Clamp* to control the flow rate. The conical design creates more pressure/force/volume than traditional racking and transferring via siphoning. We suggest when you are ready to bottle, to only turn the valve on 1/8 of the way open to help ease the pressure off the *Hose Clamp*.

Stirring

The best way to stir *FastFerment* is to use a long plastic spoon or rod that has been sanitized. Do not use a metal one as it will scratch the inside walls of *FastFerment*.

Fluid Volume

The fluid volume calculated on the side of the *Conical Fermenter Body* is correct when the *Union Valve* is closed, it does not include the *Collection Ball* volume. The *Collection Ball* can hold 24oz/700ml.

Frequently Asked Questions (FAQs)

For updated FAQs, check our website out at:

<http://www.fastbrewing.com/products/fastferment/frequently-asked-questions>

Clogging

To unclog the *Union Valve*, close the *Union Valve* and remove the *Collection Ball*. Dump and clean the *Collection Ball* before reattaching it. When you reopen the *Union Valve*, the air bubbles that shoot up should dislodge the clog. To have the best results when doing this, we suggest that you use something soft such as the palm of your hand or rubber spatula (do not use a hard object like a hammer) and knock the clogged contents of the *Conical Fermenter Body* at the same time that the air bubbles pass through **OR** stick something down into the clog such as a plastic rod to push the clog through.

Be careful to ensure that you do not scratch the inside of the *Conical Fermenter Body* or the *Union Valve*.

Collection Ball

Dumping and cleaning the *Collection Ball* is based on each brew or batch of wine. Heavier batches might require more purging and dumping to get rid of all of the yeast, sediment and trub. Ensure you have let primary fermentation happen before starting to purge the sediment and trub. Ensure everything is settled in the collection ball before removing it from the vessel. This may require letting it sit overnight. Always turn off the *Union Valve* before removing the *Collection Ball*. We recommend putting a plate underneath the *Collection Ball* when removing in case of spillage.

Thermowell

The *Thermowell* is removable from the unit. The *Thermowell* is threaded into the plastic wall of *FastFerment*. Extra care and attention must be taken to ensure the plastic female threads are not damaged when taking the *Thermowell* out for cleaning, which is suggested every 12 months. Make sure to use *Teflon Tape* on the threads of the *Thermowell* when putting it back in. Do not over tighten.

Frequently Asked Questions (FAQs)

For updated FAQs, check our website out at:

<http://www.fastbrewing.com/products/fastferment/frequently-asked-questions>

Union Valve

While using your *FastFerment*, you may run into the issue of over tightening your *Union Valve* when installing the *Collection Ball*. If you look at the bottom of the *Union Valve* when unscrewed, there is a black *O-Ring*. This is the part that seals the *Union Valve* so you do not need to forcefully crank it tight. If the *Union Valve* is over tightened during fermentation the sugars will seal it very tight. We suggest getting two pairs of pipe wrenches to unscrew it. Additionally, some forum posts state that people have had good results putting keg lube on the grey union threads before attaching the *Collection Ball*. Disassemble, clean and reassemble the *Union Valve* as needed. But we do not think this is necessary due to the outstanding results of long term testing of NOT disassembling the valves for cleaning. If the *Union Valve* is damaged while disassembled, it is no longer under warranty for replacement

Suggestions for Wine

On occasion, we find that some of the higher quality kits contain cleaning agents that sometimes turn into a thicker sludge and can block the valve. Visit our website for more suggestions.

Kits to Use: Lagering

When lagering with *FastFerment* we have found there a couple yeast strains that work really well. You do not necessarily need to have traditional low temperatures for Lagering. Some homebrewers have brewed great Lagers at the mid 60's temperature range in *FastFerment*. They have done this by using these yeasts:

Wyeast Laboratories: 2124 Bohemian Lager
Fermentis - SAFLAGER S-23



Bags



Hook in Lid

Using Dry Hops or Skins for Fermentation

Use a muslin or cloth bag to add any solids

Some users have put hooks in the top of their lids to hold the bag (see picture above)

Frequently Asked Questions (FAQs)

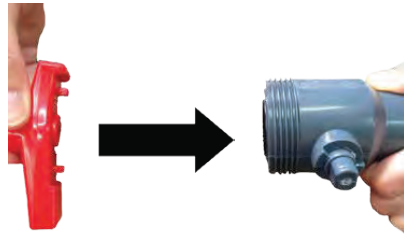
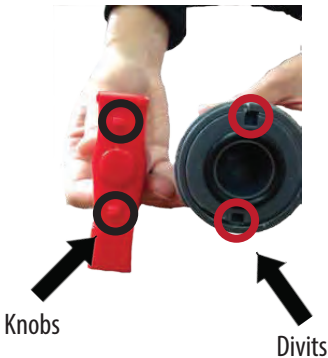
For updated FAQs, check our website out at:
<http://www.fastbrewing.com/products/fastferment/frequently-asked-questions>

If the *Union Valve* is leaking the closed position, it needs to be tightened.
 Follow the following instructions for cleaning and/or tightening:

1. Pull off the red handle.

The knobs in the top act as a wrench.

2. Place the knobs in the divits found on the inside of the valve



3. You can now remove the middle piece for cleaning by unscrewing it in the counter- clockwise direction. **To tighten, screw the middle piece back in a clockwise direction until it is flush with the outside piece.**



Handle Acts as a Key



Counter - Clockwise to Loosen



Clockwise to Tighten

Frequently Asked Questions (FAQs)

For updated FAQs, check our website out at:

<http://www.fastbrewing.com/products/fastferment/frequently-asked-questions>

Location of the *FastFerment*

Mount *FastFerment* out of direct sunlight and try to keep in a temperature controlled room.

Oxygen Exposure

To ensure there is absolutely no O₂ exposed to your fermenting contents when reattaching the *Collection Ball*, try these ideas:

- Fill the *Collection Ball* with finished beer, wine, or whatever you are fermenting and then reattach (Ex. if fermenting Lager, fill with a finished Lager)
- Fill the *Collection Ball* with distilled water and then reattach
- Fill the *Collection Ball* with CO₂ and then reattach

When the *Collection Ball* is switched out and reattached there will be a small amount of O₂ sucked back into the unit. Our tests show it is around 0.7-1.35oz/20-40ml of O₂ that is sucked back. BUT there is no fluid from the airlock that is sucked into to the unit with the *3 Piece Airlock* design that comes with each *FastFerment*. If you are using the standard *3 Piece AirLock* that comes with the *FastFerment* you do not need to remove the airlock while switching and reattaching the *CollectionBall*. Anything Fermenting will be fine.

Temperature

Your *FastFerment* can handle 80°C or 176°F temperatures.

Yeast Sediment

If the dead yeast sediment does not reach the *Union Valve* or there is no intention to harvest the yeast, you can allow the fermentation to run its course till it's complete and you're ready to either bottle or keg. This minimizes work and lost product.

Hydrometer Readings

A hydrometer is an instrument used to measure the specific gravity of liquids. Measuring gravity is the same as measuring the density.

We use it to determine how much fermentable sugar the wort or must contains. Sugar is more dense than water, so a solution such as wort with lots of sugars will have a higher reading. The more alcohol content in the liquid, the lower the reading will be.

You should always try and take your reading using a sample of your liquid that is around 68°F/20° C. If the liquid is 5°C higher, add 0.001 and similarly, if its 41°F/5°C lower, take off 0.001.

Why Use A Hydrometer?

Taking a hydrometer reading allows you to accurately test whether fermentation is complete. A hydrometer reading (taken before mixing with yeast) will also help you at the end when you are interested in calculating your alcohol content level.

The first reading should be at the start of fermentation. Ensure your sample is 41°F/5°C. If not, wait until the sample is closer to this temperature for the most accurate reading.

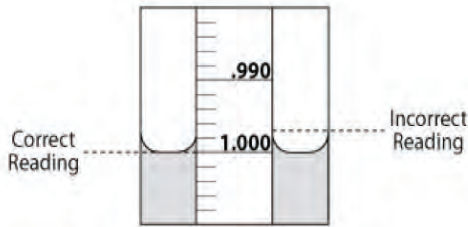
Starting/Original Gravity (OG)

All beer and wine vary on their starting gravity. For wine, an average OG should be 1.070 to 1.090. For beer, the OG starts in the 1.030-1.060 range.

Hydrometer Readings Continued:

Taking Hydrometer Readings

- Step 1:** Begin by pouring some wort or must into a hydrometer test jar leaving 2"/5.1cm of space from the top for when inserting the hydrometer.
- Step 2:** Insert your hydrometer into the test jar, giving it a little swirl to remove any bubbles from sticking to the sides. When recording your reading, ensure that you are at eye level and recording the lower of the two levels (see picture below).



- Step 3:** Take a second reading after primary fermentation
- Step 4:** Take a third reading at the end of secondary fermentation

Finish Gravity (FG)

The FG Should be 0.990 (for dry wines) to 1.005 (for sweet wines). A typical beer will have a FG at 1.012.

Calculating Alcohol Content

To calculate the alcohol content, subtract the original gravity (OG) by the finish gravity (FG) and multiply that number by 131 ($OG - FG * 131$).

Harvesting Yeast

How to Harvest Yeast from *FastFerment*

These are just our suggestions and not the Bible of yeast harvesting, please consult multiple sources

- Step 1:** Attach the *Collection Ball*, open the *Union Valve*, add the wort and pitch the yeast
- Step 2:** Let fermentation start for 1 - 3 days
- Step 3:** As the trub settles over the first few days of fermentation, it can be discarded by cleaning out the *Collection Ball*. You should always wait 24 hours before switching out the the *Collection Ball* again so everything can settle. Trub will be characterized by a dark colour
- Step 4:** You should only change out the collection ball if the trub/sediment line is above the *Union Valve*. Try not to waste any beer.
- Step 5:** Once most of the trub has been discarded, wait 6-12 days for primary fermentation to be over. The *Collection Ball* should be filled with flocculated and dormant yeast ready to harvest
- Step 6:** Close the *Union Valve* and disconnect the *Collection Ball*
- Step 7:** Take the *Collection Ball* contents and put the rubber bung on tight to seal and store in fridge or cold dark area. You should use this live yeast within 2-4 weeks of harvesting maximum
- Step 8:** Sanitize the second the *Collection Ball* and reattach it to the *FastFerment*
- Step 9:** Open *Union Valve* to start secondary fermentation
- Step 10:** Small amounts of yeast and trub will continue to collect in *Collection Ball*. This can all be discarded at the end of complete fermentation
- Step 11:** To reuse your harvested yeast, simply pitch into your next batch by pouring the contents from the *Collection Ball* into the *Conical Fermenter Vessel* when it calls for yeast



STARSAN HB

Manufactured by: Five Star Inc
4915 E 52nd Ave, Commerce City, CO 80022
P: (303) 287-0186 F: (303) 287-0391

ACTIVE INGREDIENTS:	
Dodecylbenzensulfonic Acid	15%
Phosphoric Acid	50%
Inert Ingredients	35%
Total	100%
Phosphate content by weight percent as expressed as %P.....	15.8%
Phosphate content expressed as grams P per ounce	6.5 gm/oz

DANGER: KEEP OUT OF REACH OF CHILDREN - Emergency Telephone Infotrac 1-800-535-5053

DIRECTIONS FOR USE:

Use as a final acid rinse after removing all gross soil deposits with a good alkaline cleaner such as PBW. Use Star San HB at a rate of 1 oz in 5 gallons of water. Apply by spray or soak with a contact time of at least 2 minutes. Empty or drain the vessel and let air dry. All parts and equipment should be reassembled wet after soak to minimize contamination. Let air dry. (Local state health departments may require a potable water rinse after using all chemicals.)

FIRST AID

If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Call a Poison Control Center or doctor for treatment advice. If Swallowed: Call a Poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the Poison Control Center or doctor. Do not give anything by mouth to an unconscious person. If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice. If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a Poison Control Center or doctor for treatment advice.

LIMITATION OF LIABILITY

Full Throttle Parts Inc. and Axle Plastic Inc. shall not be liable for any liabilities, damages, costs, claims, suits or actions resulting from any breach, violation, or non-performance of any covenant, condition or agreement, whether in contract, tort, or any other action, resulting from any damages of any nature, including, but not limited to, damages for any loss of use, time, profits, savings, investment, or revenues to the extent that the same may be claimed at law for the use and enjoyment of FastFerment or any accessories, parts or any other material aspects associated with FastFerment.

FastRack Speed Challenge: A Worldwide Competition using a *FastRack24*



Why Host a Speed Challenge?

It's Fun!

Everyone likes friendly competition especially when bottles are flying! Compete against hundreds of stores & clubs around the world.

It's Easy!

Set-up is minimal & we've got everything you need to record & submit your times.

It Promotes You!

Hosting an event gets your store or club all over our website & social media to reach hundreds of potential customers.

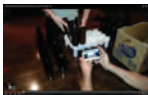
Win Tickets to the National Homebrewers Conference

Every year we purchase 10 tickets to the National Homebrewers Conference to bring the fastest participants and a few wildcards as our guests to partake in the World Speed Challenge Championships *AND* the winner is sponsored to come back the next year to defend their title.

5 SIMPLE STEPS



Set it up



Quickly Fill the *FastRack24*



Put a Box on It



Flip It Over!



Send us the Videos!



Learn more at: <http://www.fastbrewing.com/fastrack/speed-challenge/how-it-works>

Ken Marechek
Current Champ!

FAST BREWING & Wine Making

Contact Information

World Headquarters

Unit 105 - 264 Queens Quay W. Toronto, ON, Canada, M5J 1B5
1 800 549 5763 - Info@TheFastRack.ca - www.FastBrewing.com

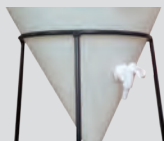
Check out our *FastFerment* Accessories



Stand



Thermometer



Sample
Port



Insulated
Jacket



Carrying
Strap



Extra
Collection Ball

... And More on the Way!

Other Great *FastBrewing* & *WineMaking* Products



FastRack24



FastRack12

The Best Drying &
Stacking System
for Bottles



FastLabels

Non-adhesive,
Customizable Label
Sleeves for Bottles