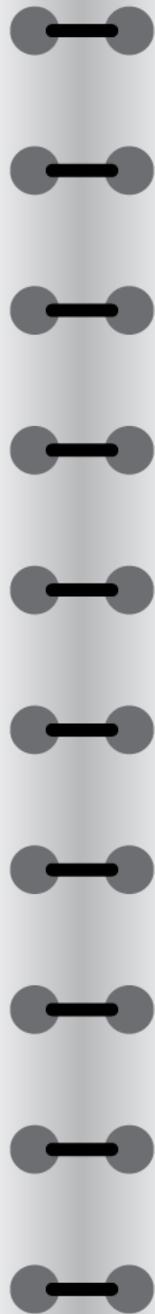


PICO C INTERACTIVE INSTRUCTION MANUAL

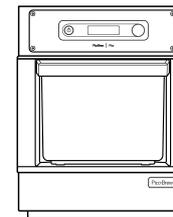
You can navigate through chapters by clicking on the tabs here. 

Clicking on the PicoBrew logo will take you back to the Table of Contents. 



PICO ^C INSTRUCTION MANUAL

CRAFT
BEER
YOUR
WAY.



Produced by:
PicoBrew Inc.
2121 N 35th St.
Seattle, WA 98103

www.picobrew.com

© 2017 PicoBrew

All rights reserved. No part of this publication may be reproduced, stored in retrieval systems or transmitted in any form or by any means electronic or mechanical, including photocopying, record or any information storage and retrieval systems, without the written permission in writing from the copyright owners.

Printed and bound in Seattle, WA, USA

IMPORTANT SAFETY INFORMATION

- Exercise common sense while operating the Pico.
- Always use the keg cozy to shield the hot metal of the keg.
- Close supervision is needed when used around children.
- Allow machine to fully cool before removing or replacing parts.
- Do not operate with a frayed cord or broken plug.
- Do not remove Step Filter from the Pico unless in pause mode or brew cycle is completed.
- The Step Filter and contents may be hot when removing from the machine.
- Do not immerse or soak the machine.
- Make sure all hoses are connected properly before starting a brewing, rinse, or cleaning cycle.
- To avoid risk of electrical shock hazard do not disassemble the Pico. There are no user serviceable parts inside.
- Various surfaces can get extremely hot during the brewing cycle, use caution when handling the keg, hoses and components.
- Do not remove the hose clamps, hot liquid spray may result.
- Do not remove the keg attachments while brewing.
- The product is intended for household use only.
- The appliance is not to be used, or played with, by children.
- The appliance is not to be used by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- If the power supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.



- Per FCC 15.19(a)(3) and (a)(4) This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- Per FCC 15.21 Change or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.
- Per RSS-Gen, Section 8.4 This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- Par RSS-Gen, Section 8.4 Cet appareil est conforme à Industrie Canada exempts de licence standard(s) RSS. Le fonctionnement est soumis aux deux conditions suivantes: (1) ce dispositif ne peut pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.



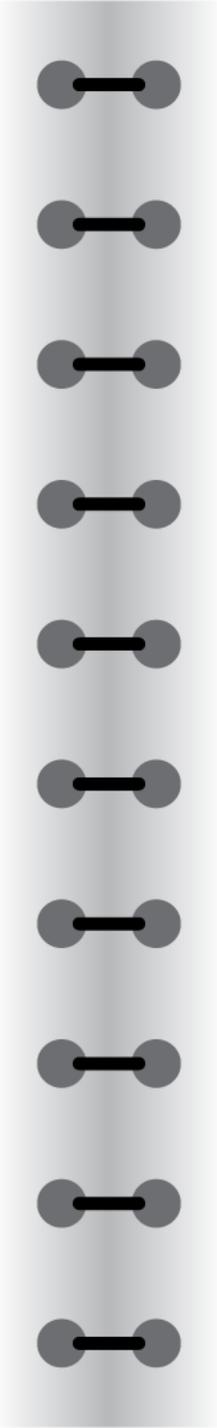


TABLE OF CONTENTS

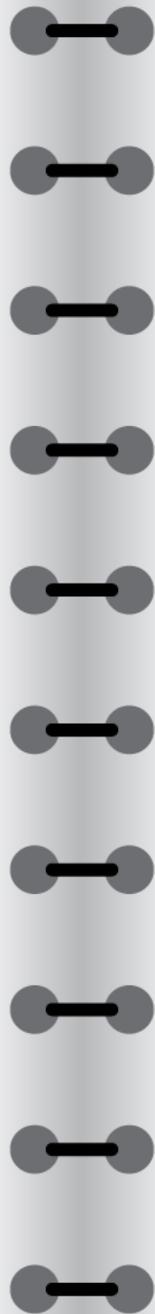
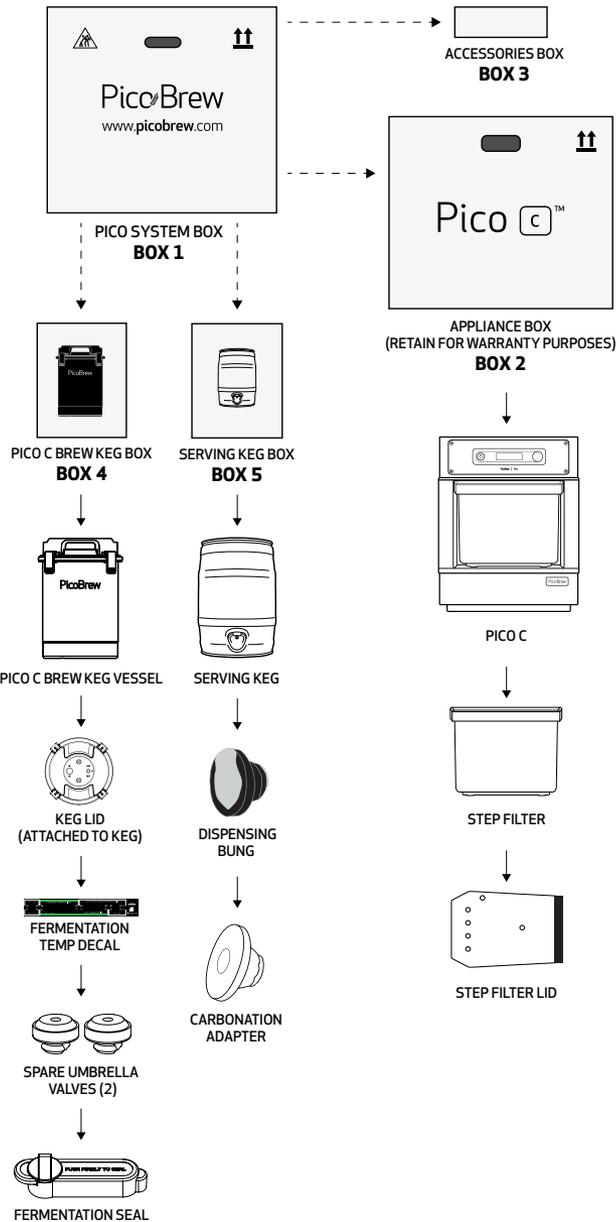
INTRODUCTION	8
UNBOXING	10
SETUP	17
FIRST RINSE	25
LET'S BREW	35
AFTER BREWING	47
FERMENTATION	57
DRY HOPPING	65
RACK & CARBONATE	71
SERVING	89
USAGE & CARE	97
SOUS VIDE	129
GLOSSARY	143

WELCOME TO THE EASIEST COUNTERTOP BREWING APPLIANCE, EVER.

**SERIOUSLY.
IT'S REALLY
EASY TO USE.**



**THIS IS YOUR NEW
BEST FRIEND.
(IT MAKES BEER)**



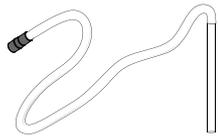
PICO UNBOXING GUIDE

CONGRATULATIONS!

You are about to experience the joy of homebrewing using Pico, the most advanced homebrewing appliance in the world! We know you're eager to get started so let's make sure you have everything to brew and that each item arrived in perfect condition.

- Inside your Pico system box you will find 4 smaller boxes:
- Pico C Appliance
 - Accessories
 - 1 Serving Keg
 - 1 Brew Keg

BOX 3



(A) RACKING TUBE

For transferring your beer from Brewing to Serving Keg.



(B) KEG COZY

To keep your keg warm during brewing.



(C) KEG BRUSH

To clean your Brew Keg and Serving Keg.



(D) HOPS PAK CRADLE

The cradle for your Hops Pak, used during the brewing cycle.



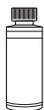
(E) CLEANING TAB

Used when Deep Cleaning to thoroughly clean your Pico after every 3 brew sessions.



(F) BUCKET

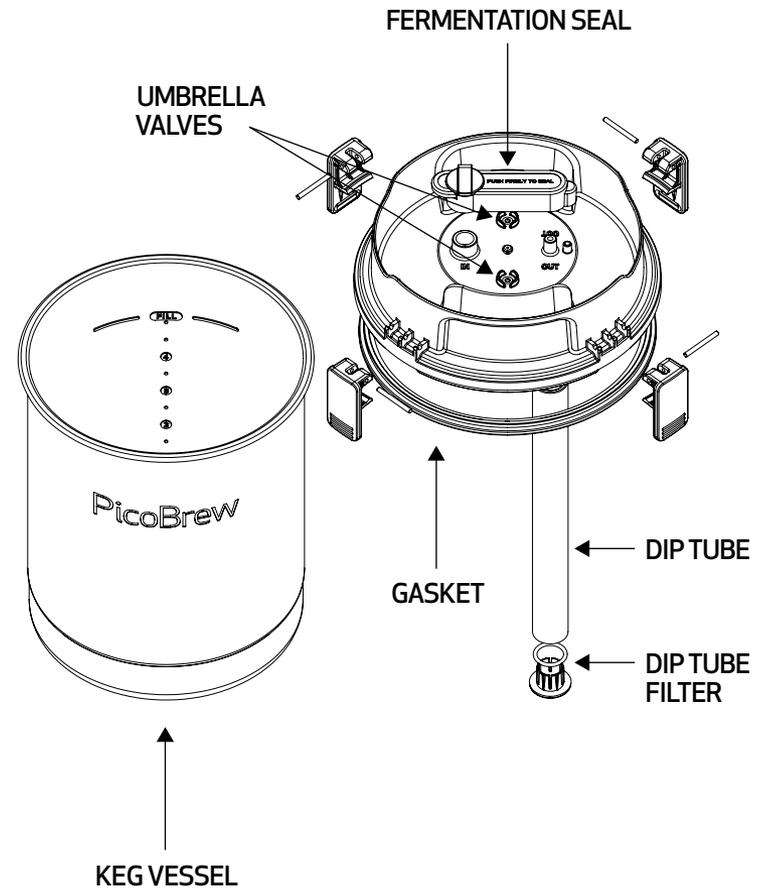
Used for measuring and during brewing and cleaning steps.



(G) STAR SAN

Used for sanitizing brewing equipment.

BOX 4



BOX 5



(G) DISPENSING BUNG

Used on the Serving Keg during serving or if doing Keg Conditioning.



(H) CARBONATION ADAPTER

For your Serving Keg during Forced Carbonation. Not used if Keg Conditioning.



(I) SERVING KEG

For serving your beer.

DOUBLE CHECK YOUR SUPPLIES AND INVENTORY.

If any boxes look damaged or parts appear to be missing, please contact us immediately anytime via email at info@picobrew.com. We're here for you and want you to have a great Pico brewing experience!

YOU WILL NEED:

- Wi-Fi connection (used in: **Setup, Let's Brew**)
- Access to an internet browser
- 11 liters of distilled or reversed osmosis filtered water (used in: **First Rinse, Let's Brew**)
- Access to clean tap water
- Fragrance-free powdered dishwashing detergent (used in: **Usage & Care**)

PICO SETUP

**ESTIMATED TIME:
5 MINUTES**

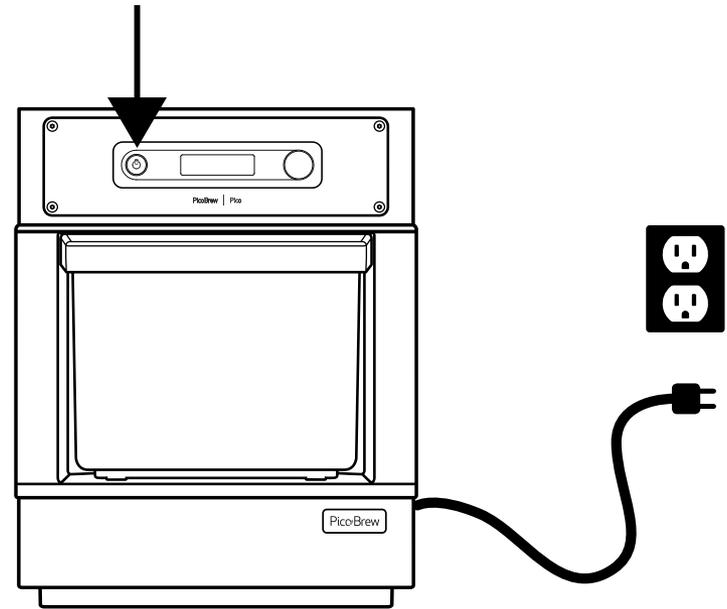


1

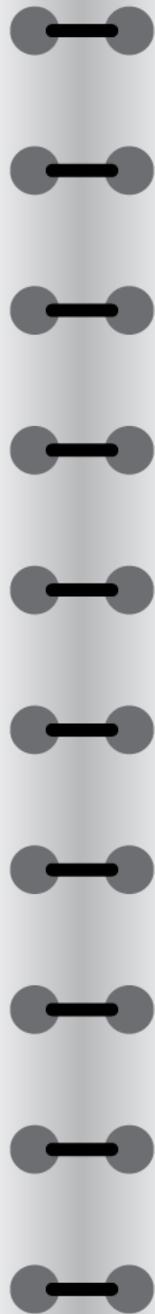
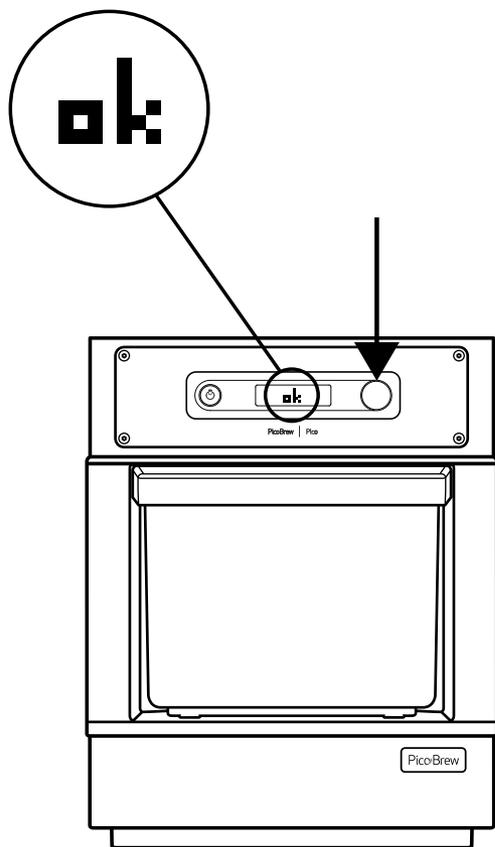
Remove the blue packing tape from your Pico.

2

Plug the power cord into a standard grounded household outlet. Press the power button to turn on your Pico.

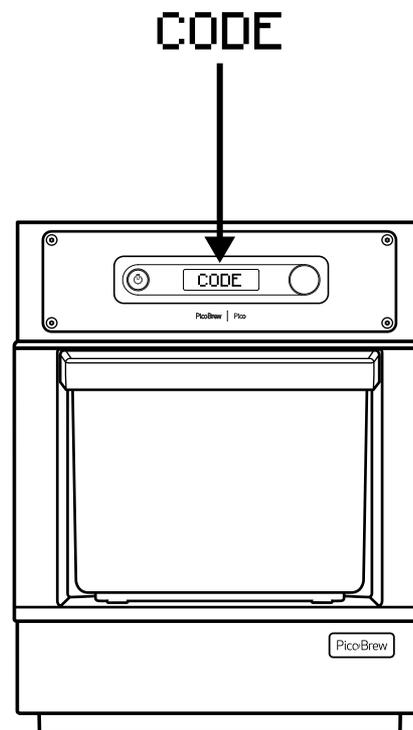


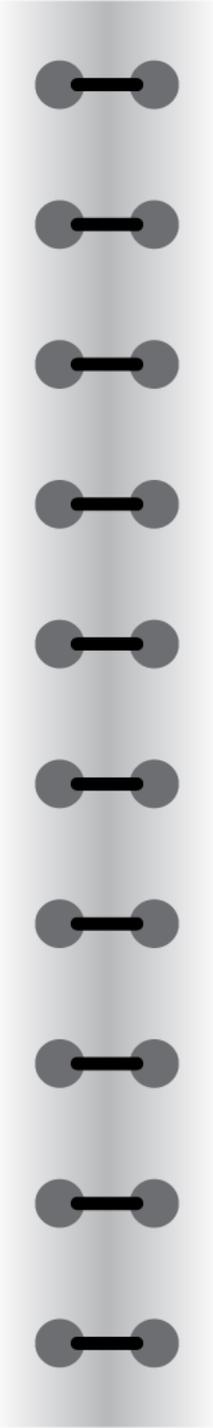
3 Connect to your home WiFi network by selecting it with the Control Knob, then enter your WiFi password. Once you enter your password, select the OK icon.



4 Once connected, note the registration code displayed on screen.

Go to: www.picobrew.com/newpico Sign in to your account or create an account if you do not already have one, and enter the registration code displayed on your Pico.





**NOW IT'S
TIME TO
GIVE YOUR
PICO THE
FIRST
RINSE.**

**AFTER THAT
YOU ARE
READY TO
BREW!**

PROCEED TO NEXT SECTION: FIRST RINSE

FIRST RINSE

**ESTIMATED TIME:
 10 MINUTES**

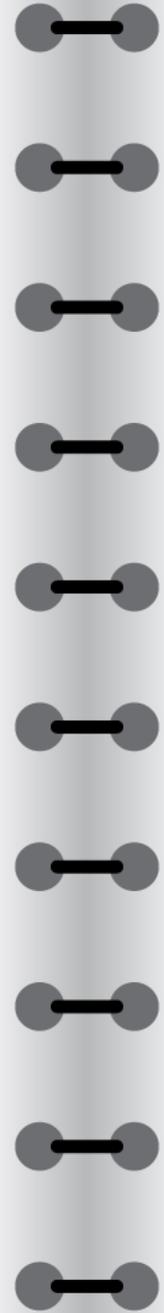
YOU WILL NEED:

- 2 liters distilled water (or reverse osmosis)
- Brew Keg

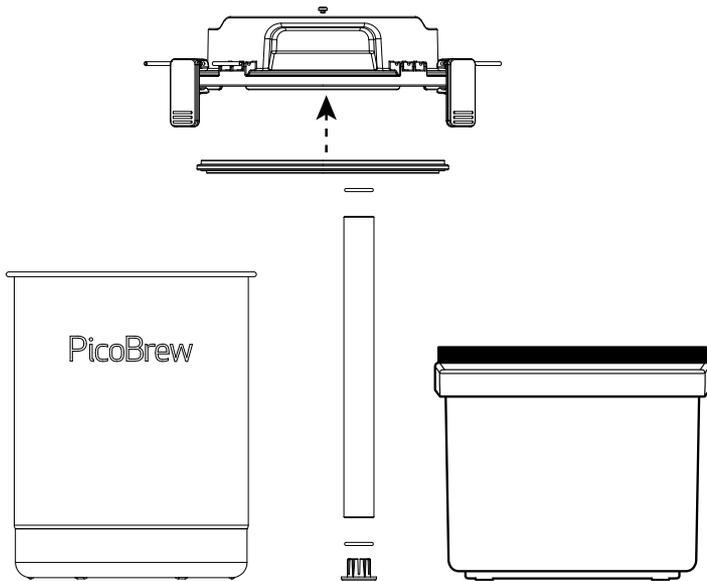
IAN'S PRO TIP:

Clean equipment is critical to crafting great beer.

This first rinse ensures you start brewing with a sparkling clean Pico and accessories.



1 After connecting up your Pico to the internet, rinse the Brew Keg and Step Filter with tap water. The Step Filter is located in the front of your Pico. To remove it lift it up and slide it out. After rinsing the Step Filter and lid slide them back into the Pico until the Step Filter clicks into place. Make sure the Gasket is attached to the keg lid after rinsing.

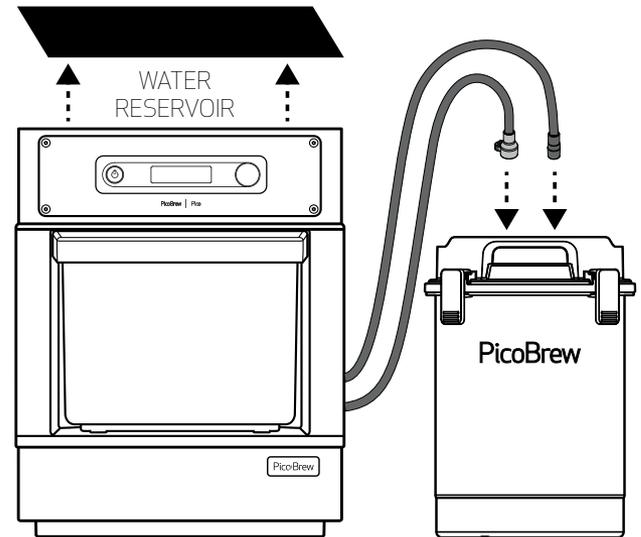


Pico C Brew Keg

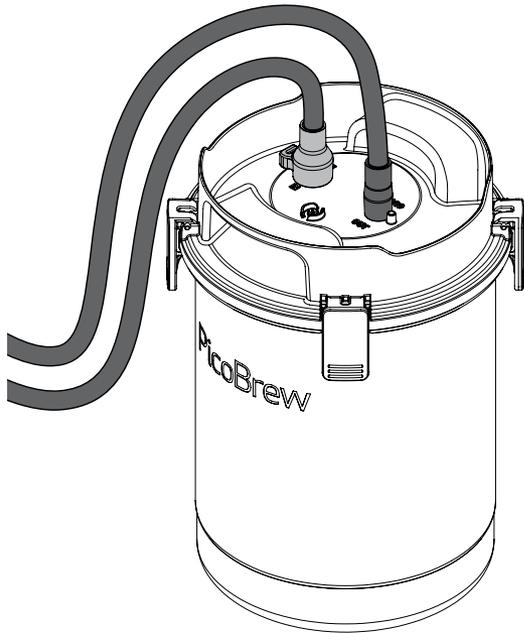
Step Filter

2 Check that the Water Reservoir stopper is in place. This is located in the Water Reservoir in the center back area. Add 2 liters of distilled or reverse osmosis water to the Water Reservoir. Add 2 liters of clean tap water to the Brew Keg. Attach the Keg Lid on the Brew Keg.

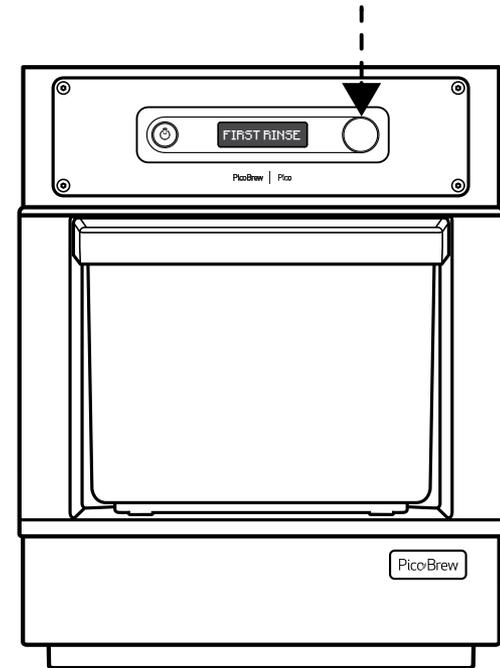
Note: If using tap water inside the Pico Water Reservoir, remember to descale every 20 brews. Tap, distilled, or reverse osmosis water is fine inside the Brew Keg.



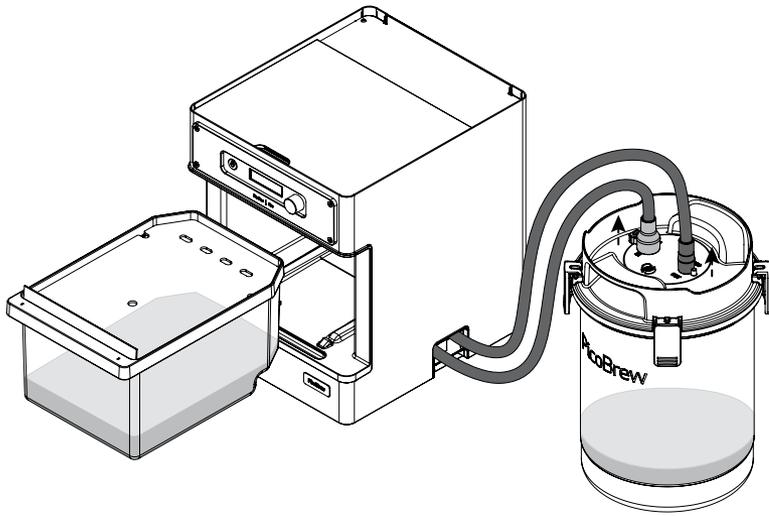
3 Connect the black OUT hose to the OUT post on the Keg Lid and the gray IN hose to the IN post.



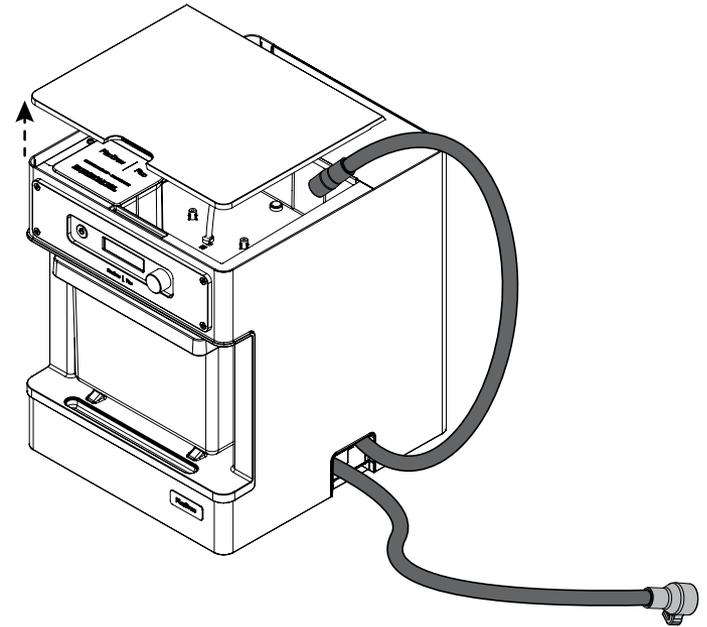
4 Use the Control Knob to select Utilities. Press Control Knob to select **First Rinse**. After approximately 7 minutes the Pico First Rinse Cycle will complete.



5 The Step Filter will be mostly empty and there will be a little over 2 liters of water in the Brewing Keg. The Water Reservoir will still contain almost all of the water you put in originally. Disconnect the IN and OUT hoses from the Brew Keg.



6 Press the Control Knob to begin pumping water out of the Water Reservoir and into the Step Filter. Follow on-screen instructions and press Control Knob between steps. Press the Control Knob when the Water Reservoir is empty.



7 Empty your Brew Keg and Step Filter. Rinse the Brew Keg, Step Filter and Keg Lid.

You are now ready to begin your first Pico brew session!

If you experience any problems during your First Rinse, brewing session, or any other step of the process please contact us immediately at info@picobrew.com.





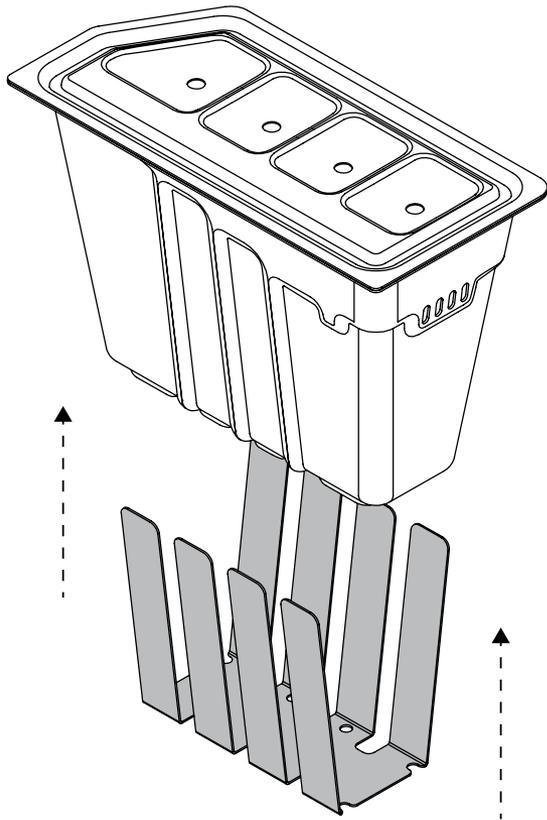
LET'S BREW

**ESTIMATED TIME:
HANDS ON 10 MINUTES
(TOTAL TIME: 2.5 HOURS)**

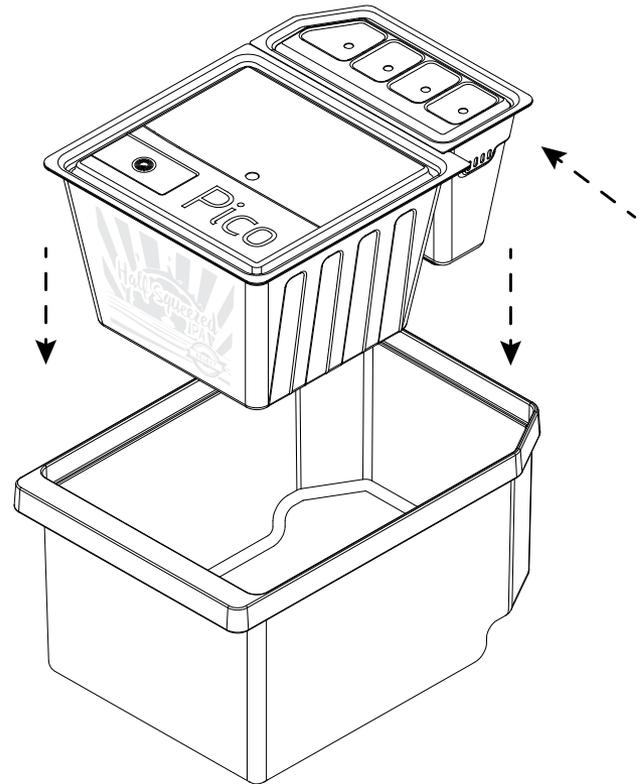
YOU WILL NEED:

- PicoPak
- 9 liters distilled water (or reverse osmosis)
- Hops Cradle
- Brew Keg
- Keg Cozy

- 1** Remove the vacuum-sealed wrapping and insert the Pico Hops Pak all the way into the metal Hops Pak Cradle. The fingers of the Cradle fit in the grooves of the Hops Pak.

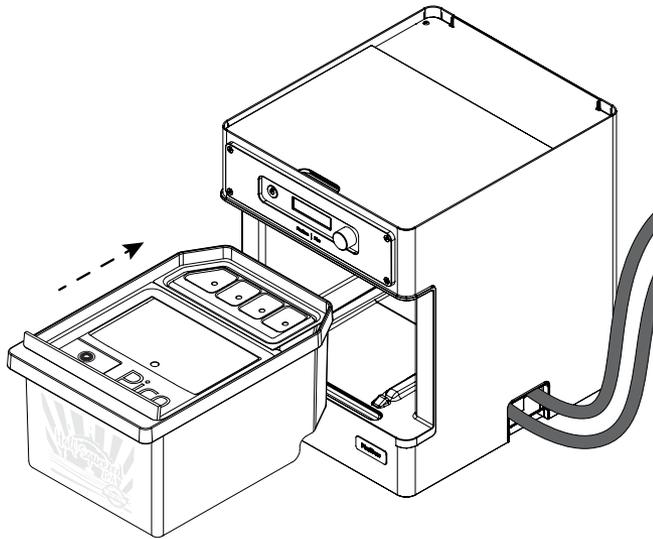


- 2A** Unwrap and set the Grain Pak in the front of the Pico Step Filter, with the beer design facing the front. Place Hops Pak and Cradle in the rear of the Step Filter, pushed all the way to the left.



2B

Cover the Step Filter with the lid, with the black Steam Deflector in the front and facing up. When putting the Step Filter lid on make sure all lid holes match up to all Hops Pak holes.

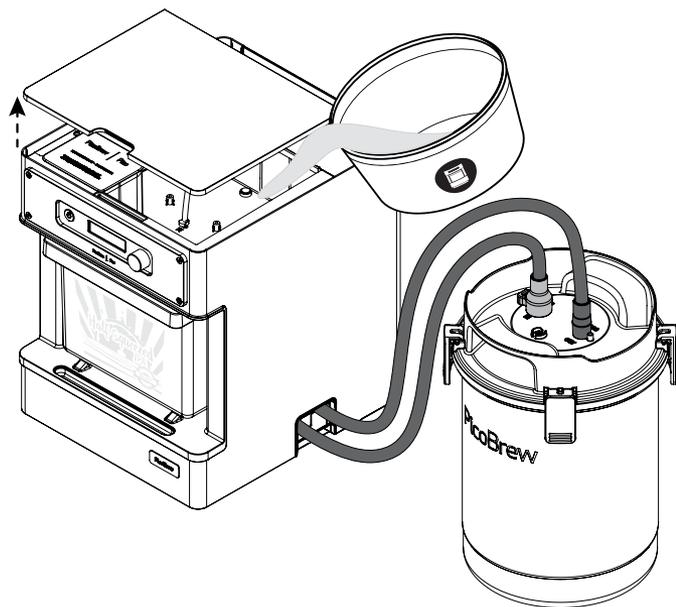


3

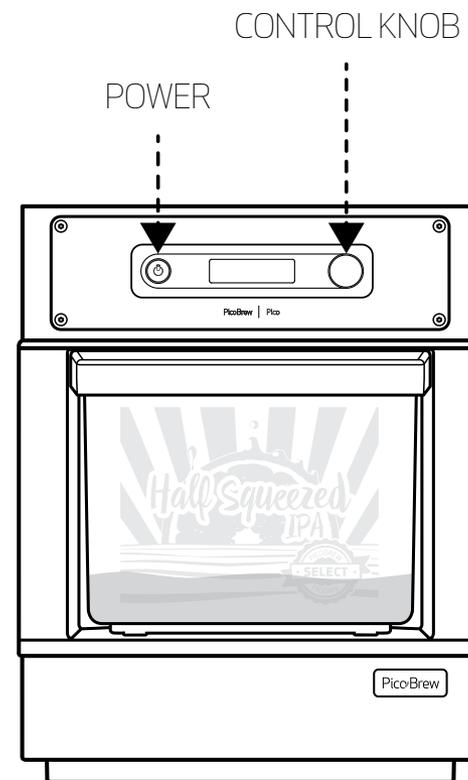
Add distilled or reverse osmosis water until it reaches the fill line on the inside of the Pico C Brew Keg. (Alternatively, you can measure out 5.2 liters of distilled or reverse osmosis water). Make sure the Gasket is attached to the Keg Lid and place the Keg Cozy on the Brew Keg. Attach the Keg Lid on the Brew Keg. Connect the black OUT hose to the OUT post on the Keg Lid and the gray IN hose to the IN post.



- 4** Remove the Water Reservoir lid from the top of the Pico. Look inside and check to make sure the black rubber Drain Plug is secured inside the reservoir drain located in the center of the back of the reservoir. Fill the reservoir with approximately 3.5 liters of distilled or reverse osmosis water. Replace the Water Reservoir lid.



- 5** Press the Power Button on the front of the Pico. The display will illuminate. Select Brew PicoPak and press the Control Knob. The Pico will automatically detect and display the PicoPak.



6

You can optionally change a beer's alcohol percentage and bitterness from the PicoPak defaults. To do so, turn Control Knob to the right when screen says "Start Brewing". This will give you the ability to adjust the alcohol and bitterness. Once finished, you can select Start Brewing by pressing the Control Knob and your brew session will begin.

Note: This option is only available for select PicoPaks at this time.

7

Pico will begin brewing and complete in approximately 2-3 hours, depending on the beer recipe and any adjustments you might have made. You do not need to monitor the Pico during the brew session.

Notes:

- You can track the progress by signing in at www.PicoBrew.com and clicking on **BrewHouse**.
- It is normal for only a small amount of liquid to show in the bottom of the Step Filter during brewing.
- Pico heats the water using steam, and occasional hissing or growling noises are normal. Don't worry, Pico is not upset, only heating!

**PROCEED TO NEXT SECTION:
AFTER BREWING**



**CONGRATS!
YOU CAN
NOW
SIT BACK,
RELAX
AND
ENJOY
YOUR
FIRST
BREW
CYCLE.**

GOOD JOB.

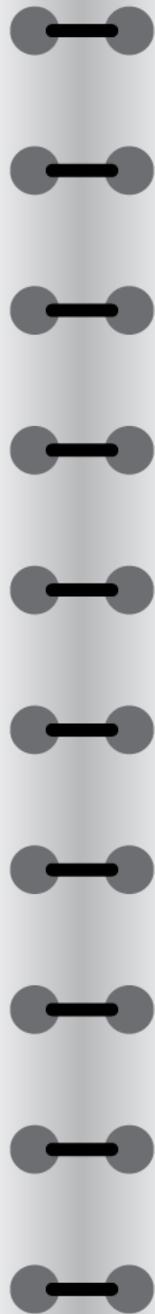


AFTER BREWING

**ESTIMATED TIME:
HANDS ON 9 MINUTES
(TOTAL TIME: 24 HRS)**

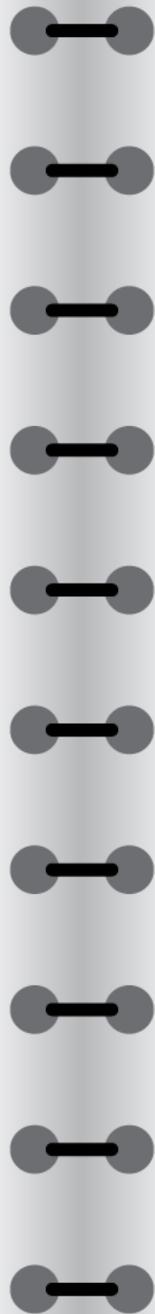
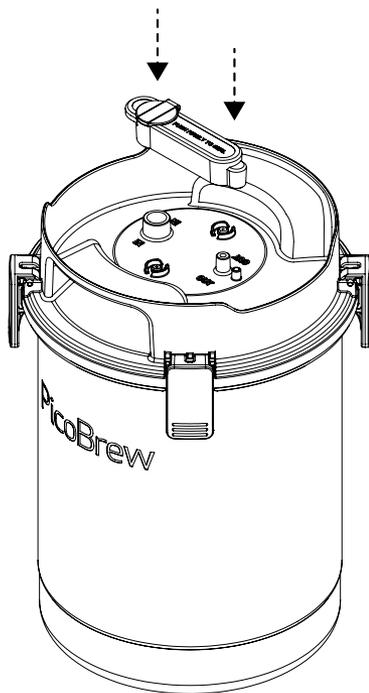
YOU WILL NEED:

- Fermentation Seal
- Bucket



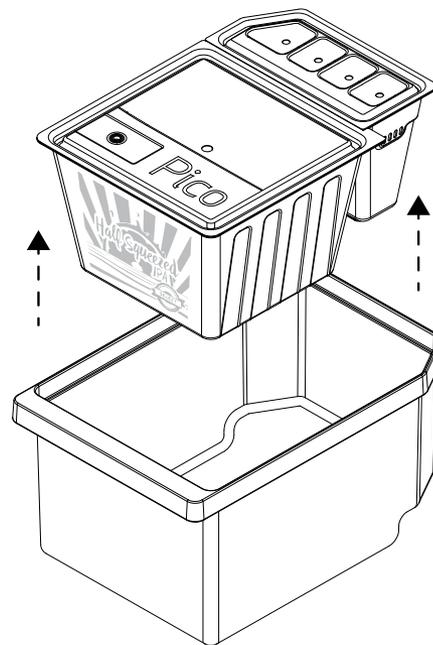
1 After brewing finishes, disconnect both the hoses from the Brew Keg. Wipe away any foam off the Keg Lid using a damp paper towel. Attach the Fermentation Seal on the Keg Lid so that the keg is airtight. Carefully remove the Keg Cozy from the Brew Keg.

Note: The Brew Keg will be very HOT so please be careful and do not touch the Keg Vessel.



2 Set the Brew Keg aside to cool overnight to room temperature. You will need to pitch the yeast within 24 hours after the brew session is completed.

Now remove the Step Filter from the Pico and dump the biodegradable PicoPak into a compost bin. **Remember to keep the Metal Hops Cradle and set it aside for future brewing sessions.**

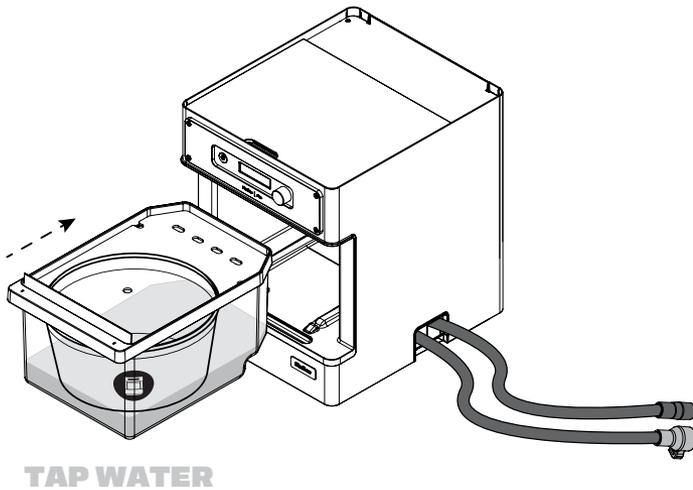


ANNIE'S PRO TIP:

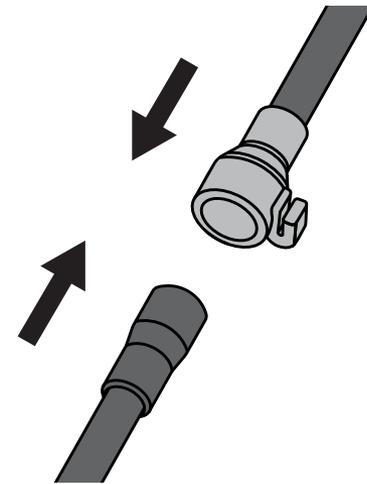
Be careful!
The Hops Cradle is hot directly after brewing. Give it chance to cool before you touch it.

PicoPaks fit perfectly into an 8"x8" square baking dish. Flip the Step Filter upside down so the PicoPak goes into dish upside down, use tongs to take the metal Hops Pak Cradle out to reuse for future brewing sessions. Use the dish to carry the PicoPak to your compost bin!

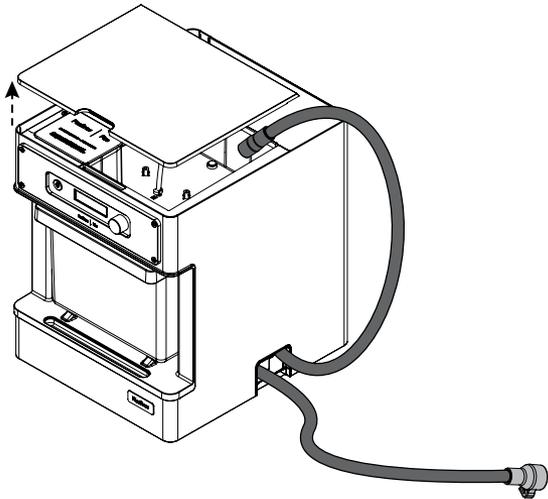
3 Rinse the Step Filter and lid with clean tap water. Fill the clean Step Filter with 1 liter of tap water. Place the empty Bucket in the center of the Step Filter. Put the lid on the Step Filter and insert the Step Filter back into the Pico until it clicks.



4 Connect the hoses of the Pico by firmly inserting the OUT hose connector into the IN hose connector. Press the Control Knob to start the Rinse Cycle. Pico will clear the drain line into the Bucket in the Step Filter, then prompt you to empty the reservoir.



5 Press the Control Knob to run the pump to drain the Reservoir. If water is still in the Reservoir use the OUT hose to drain out the remaining water. Follow on-screen instructions and press Control Knob between steps. Press the Control Knob when the Water Reservoir is empty.



6 Remove the Step Filter and lid from the Pico and rinse thoroughly with tap water, they are both dishwasher safe.

Note: Do NOT use the Heat Dry or Sanitize option on your dishwasher. Condensation or Air Dry options are fine to use.

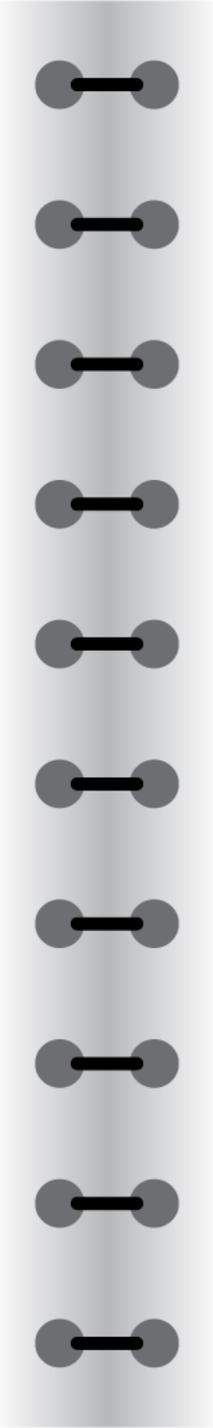
**PROCEED TO NEXT SECTION:
FERMENTATION**



**AWESOME!
IT WOULD
APPEAR
THAT
YOUR PICO
IS CLEAN
AS A
WHISTLE.**

**A CLEAN MACHINE
MEANS BETTER
BREWING.**





FERMENT YOUR BEER

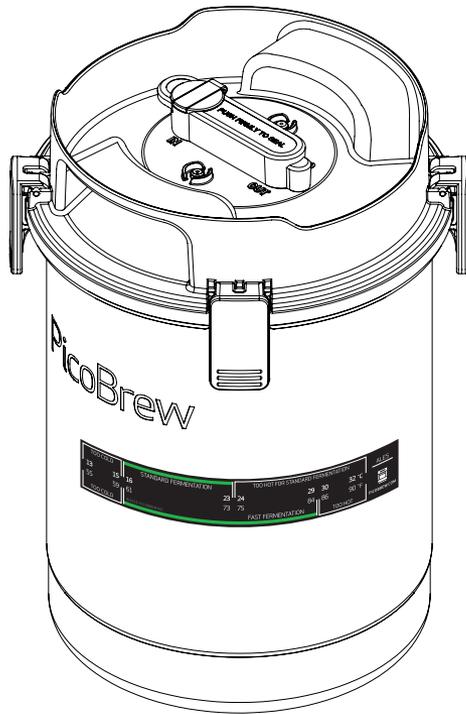
**ESTIMATED TIME:
6 MINUTES**

YOU WILL NEED:

- Your keg of brewed wort, cooled to room temperature
- Fermentation Temperature Decal
- Yeast Packet
- Clean spoon sanitized with Star San (follow manufacturer's instructions)

1 After brewing, allow the Brew Keg to cool to room temperature, this may take up to 24 hours depending on ambient temperature.

Stick the Fermentation Temperature Decal on the outside of the cooled Brew Keg. Do not stick the Fermentation Temperature Decal on the Brewing Keg if it is still warm.



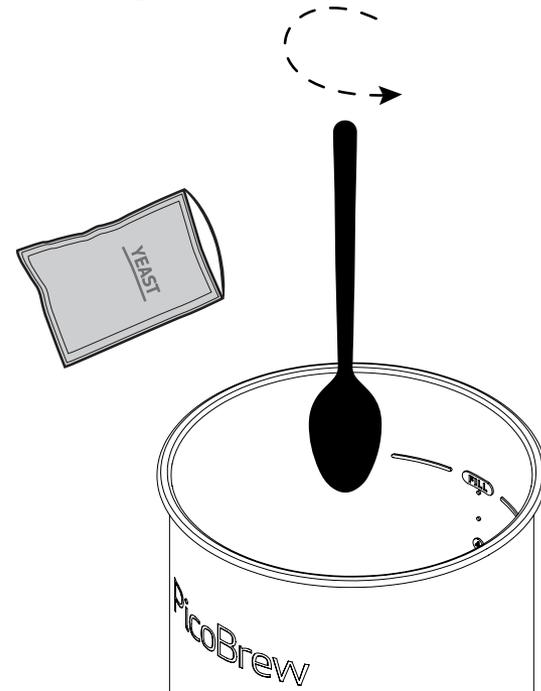
PicoBrew



2 Release pressure by lifting the latch on the Fermentation Seal and remove the Keg Lid. Stir the wort (unfermented beer) inside the Brewing Keg with a clean sanitized spoon for about 30 seconds, this will help aerate the wort.

Open the provided Yeast Packet and slowly sprinkle all of the contents into the Brewing Keg. You do not need to stir the yeast into the wort.

Note: Yeast should be pitched within 24 hours of brewing session. Make sure the Keg Lid does not come in contact with unsanitized surface when pitching yeast.



3 REFER TO THE FERMENTATION TEMPERATURE DECAL:

The wort can properly ferment at any temperature in the Fast Fermentation range indicated on the decal, however, you only speed up fermentation by keeping the keg temperature at the higher end of the range, above standard fermentation temperatures.

TOO COLD		STANDARD FERMENTATION				TOO HOT FOR STANDARD FERMENTATION			ALES
13	15	16	23	24	29	30	32	°C	
55	59	61	73	75	84	86	90	°F	
TOO COLD		FAST FERMENTATION				TOO HOT			PICOBEW.COM

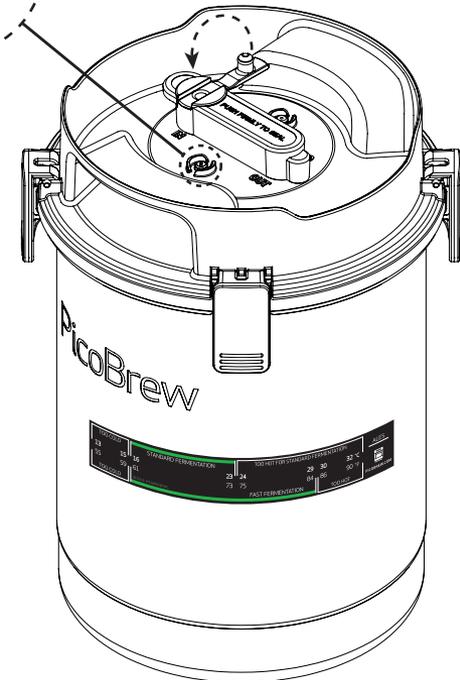
FAST FERMENTATION ↑

4

Attach the Keg Lid on the Brew Keg. Confirm that the two clear Umbrella Valves are installed on the Keg Lid and the latch on the Fermentation Seal is closed. Carefully place your Brew Keg in a temperature-controlled area where it will remain at the "Fast Fermentation" range indicated on the Temperature Decal on the Brew Keg.

UMBRELLA VALVE

CLOSE LATCH



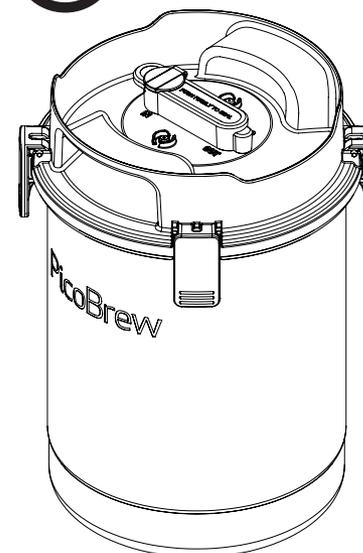
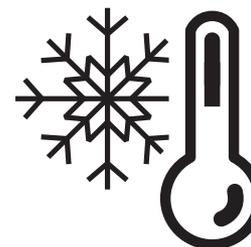
5 Read the temperature indicated by your Fermentation Temperature Decal on the side of the Brew Keg and consult the tables below to see how long Fast Fermentation should take to complete for your beer recipe.

6.5% ABV AND BELOW	
KEG TEMPERATURE (F)	DAYS TO FAST FERMENT
75° - 84°	4 - 5
70° - 74°	5 - 6
65° - 69°	6 - 7

6.5% - 8.5% ABV	
KEG TEMPERATURE (F)	DAYS TO FAST FERMENT
75° - 84°	6 - 8
70° - 74°	7 - 9
65° - 69°	9 - 12

8.5% ABV AND ABOVE	
KEG TEMPERATURE (F)	DAYS TO FAST FERMENT
75° - 84°	9 - 10
70° - 74°	10 - 12
65° - 69°	12 - 14

6 After your beer is done fermenting, move your Brew Keg into the refrigerator. This will cold crash the yeast and also help with racking the beer. Allow the beer to sit for 1-3 days at colder temperatures before racking.

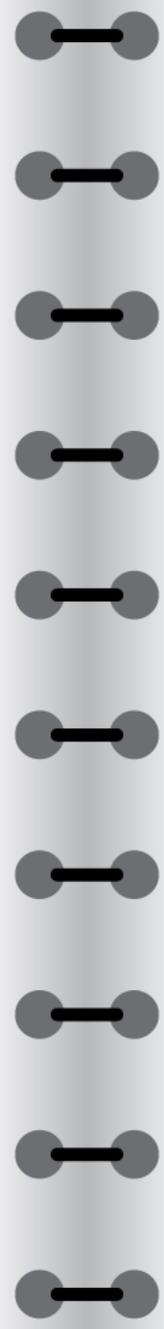


DRY HOPPING

**ESTIMATED TIME:
1 MINUTE**

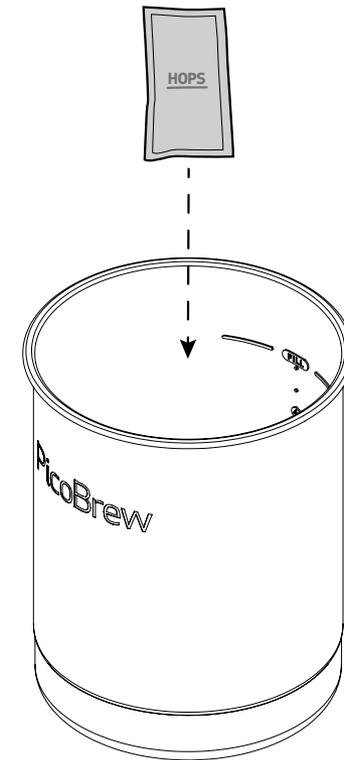
**THIS STEP IS OPTIONAL.
CERTAIN BEERS WILL COME
WITH A DRY HOP SACHET.
YOU WILL NEED:**

- Your keg of fermenting beer
- Dry Hop Sachets



7 If your PicoPak contains a Dry Hop Sachet (packaged inside the same box with the Yeast Packet) there is an extra step in order to dry hop your beer to add maximum hop flavor and aroma. Store the Dry Hop Sachet packet in your refrigerator while your beer ferments.

8 After your beer is done fermenting, remove the Keg Lid from the Brew Keg. Remove the Dry Hop Sachet from your refrigerator and open the clear vacuum-sealed bag, do NOT open the paper sachet bags. Place the paper Dry Hop Sachet bags into the Brew Keg with your beer. The paper sachets are designed to work inside your Brewing Keg while preventing clogging during the racking process.



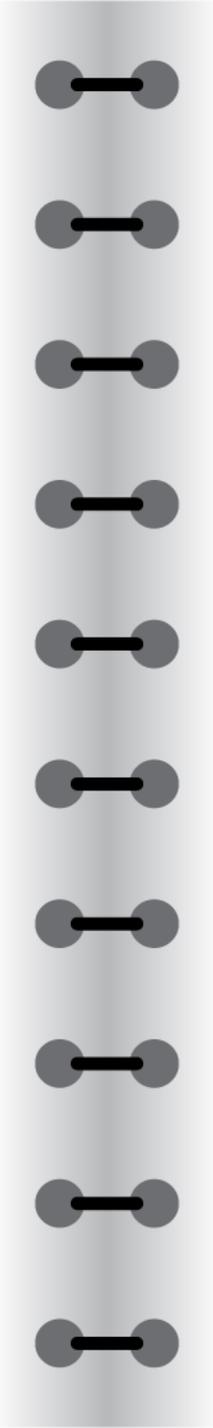
9

Place the Keg Lid on the Brew Keg.

Allow your beer to continue to ferment with the Dry Hops for a minimum of 4 more days.

**PROCEED TO NEXT SECTION:
RACK & CARBONATE YOUR BEER**





RACK & CARBONATE YOUR BEER

**ESTIMATED TIME:
15 MINUTES**

YOU WILL NEED:

- Your keg of completed fermented beer at room temperature or chilled
- Star San solution prepared according to manufacturer's instructions
- Bucket
- Serving Keg
- Racking Tube
- Carbonation Sugar Packet
- Dispensing Bung

1 Remove the white plastic shipping plug from the center of the Serving Keg Bung Hole.

Sanitize the Serving Keg by pouring 0.5 cups of diluted Star San solution (recommended ratio is 1 1/4 teaspoon Star San to 1 gallon of water). Close the serving keg with the shipping plug. Shake the keg and let it sit for 2 minutes. Empty the keg contents into the bucket and set aside to dry.

Note: Star San is included with the accessories and also available on www.picobrew.com/BrewGear. Follow all manufacturer's instructions. Use caution while using Star San and do not soak plastic components in solution for more than 5 minutes. Do not rinse after using Star San - don't fear the foam!

Alternatively you can sanitize using a hydrogen peroxide solution (1.5 cups of clean tap water and 1.5 cups of 3% hydrogen peroxide).

2 Soak the Racking Tube for 2 minutes in the bucket of Star San solution you set aside earlier.

**PROCEED TO NEXT SECTION:
RACK THE BEER**



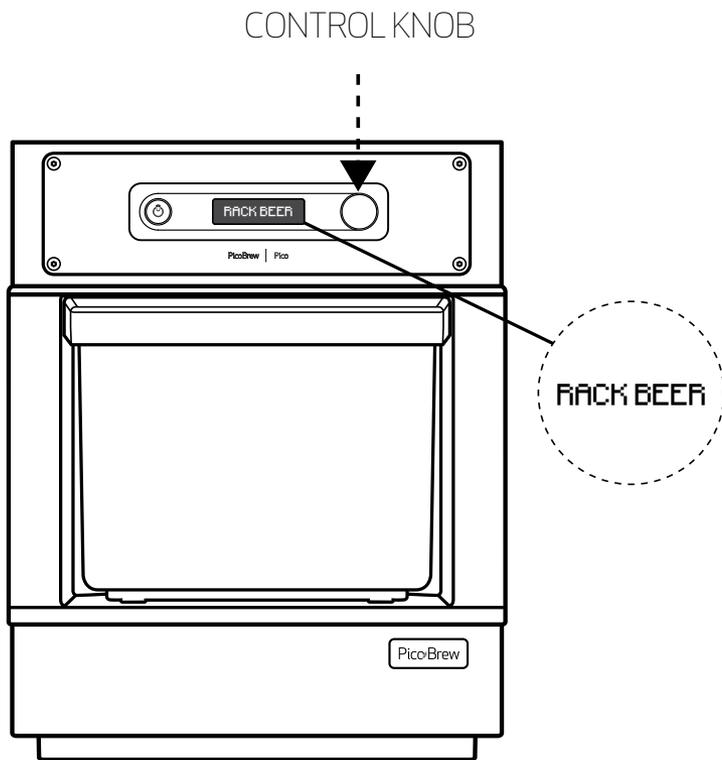
RACK & CARBONATE YOUR BEER

STEP 1: RACK THE BEER



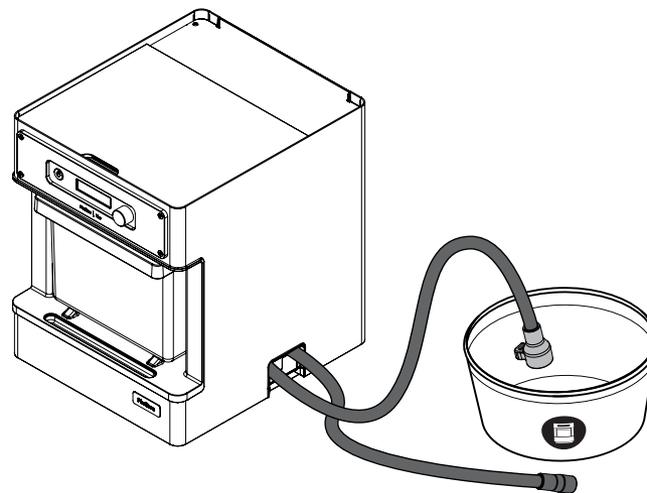
3 Remove Brew Keg from your refrigerator. From the Pico main menu select **Utilities** then select **Rack Beer** on the Pico display. This will provide step-by-step instructions on screen.

Press the Control Knob between each step.



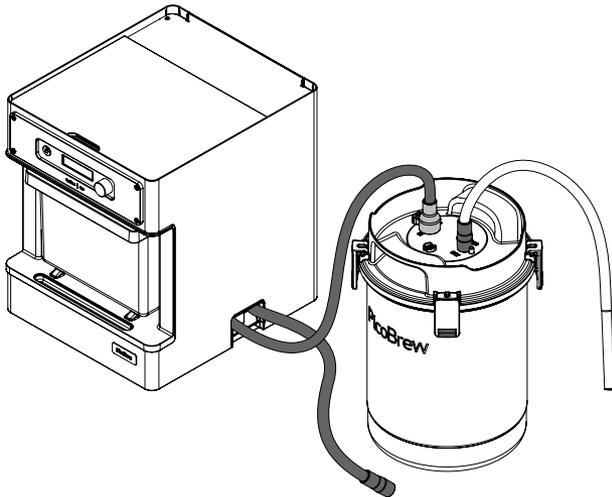
4 Direct the GRAY hose to the empty bucket. Press the Control Knob to clear the drain hose.

When liquid stops flowing into the bucket press the Control Knob to stop the pump, this should take no more than 1 minute.

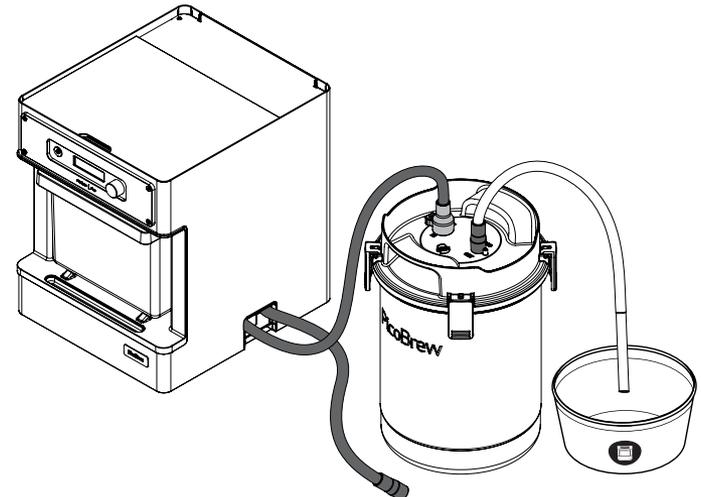


5 Remove the Fermentation Seal on the Brew Keg. Connect the GRAY hose to the Brew Keg IN post, this will allow the Pico to pressurize the Brew Keg with air.

Connect the Racking Tube's connector the Brew Keg OUT post.

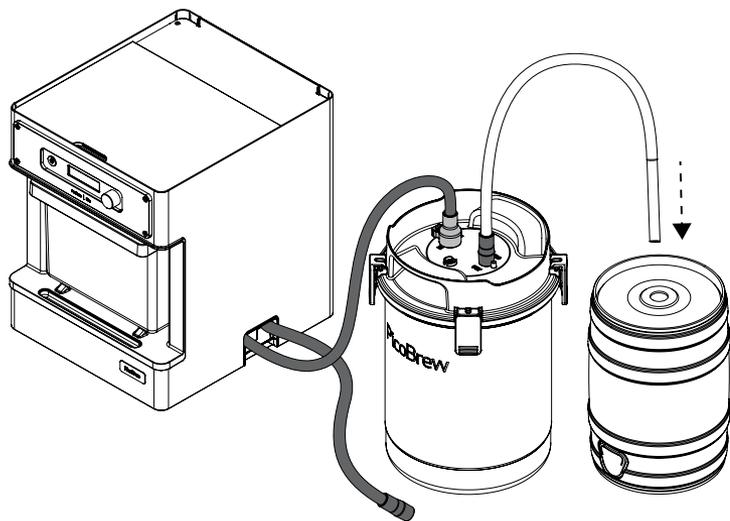


6 Direct the Racking Tube to the bucket and press the Control Knob. The initial beer coming from the Racking Tube may contain trub (sediment). When no more trub flows into the waste container press the Control Knob to stop the drain, this should take no more than 30 seconds if needed at all, this is only to clear out any trub.



7 Insert the Racking Tube in the Serving Keg Bung Hole and press the Control Knob, this will begin to transfer beer from the Brew Keg to the Serving Keg. While the chilled beer in the Brewing Keg transfers into the room temperature Serving Keg you will begin to see condensation on the outside of Serving Keg. This will help you see the liquid level inside the keg.

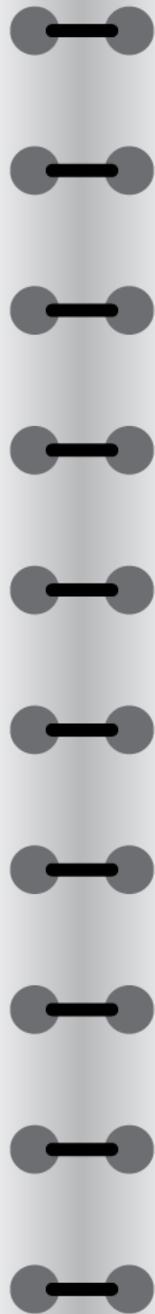
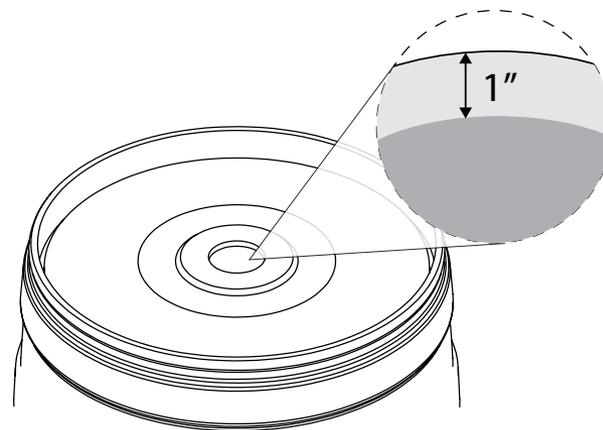
Do not leave this unattended. You will fill to just under 1" from top of Serving Keg.



8 When air begins to enter the Racking Tube, or if the Serving Keg fills to within 1" of the top,* remove the Racking Tube from the keg and then press the Control Knob to turn off the pump and stop the process.

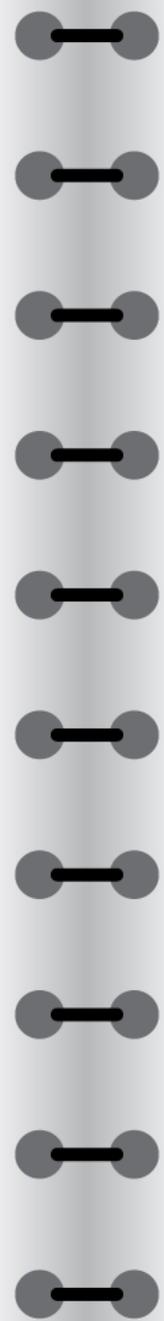
Once racking is complete it is safe to remove Racking Tube from Serving Keg.

***DO NOT OVER FILL**

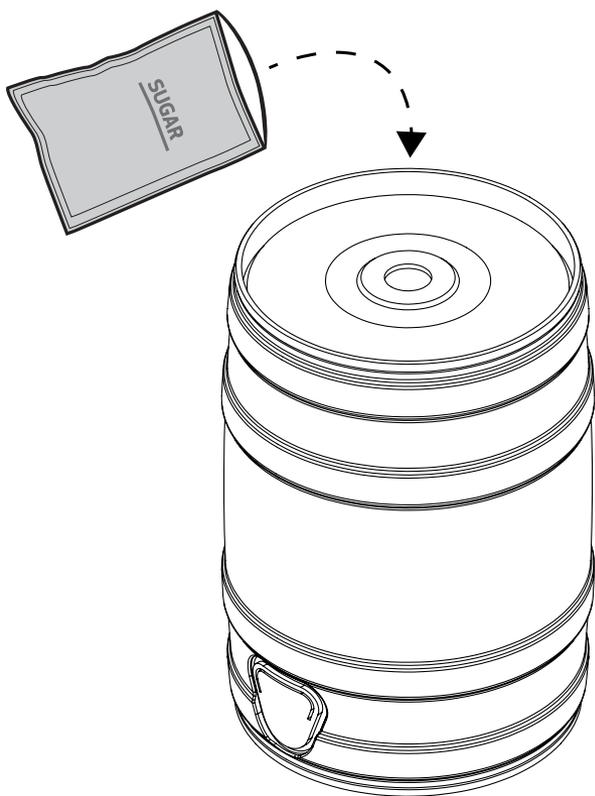


RACK & CARBONATE YOUR BEER

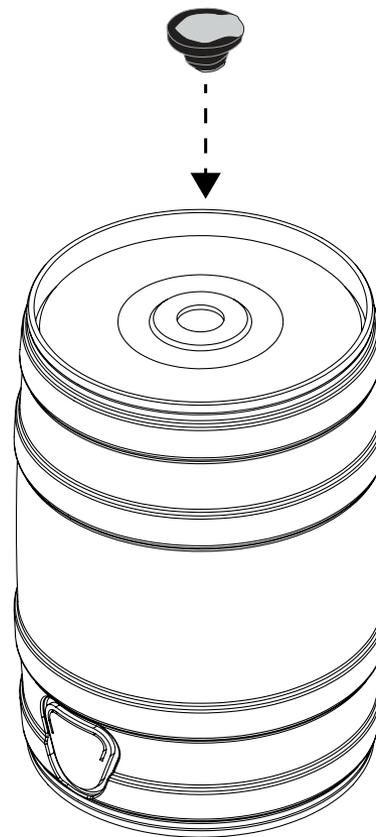
STEP 2: KEG CONDITION THE BEER (NATURAL CARBONATION)



9 After Racking is complete pour all contents from the Carbonation Sugar packet into the Serving Keg with your beer.



10 Press the Dispensing Bung into the Serving Keg Bung Hole. Swirl the keg so the Carbonation Sugar and beer are well mixed.



11

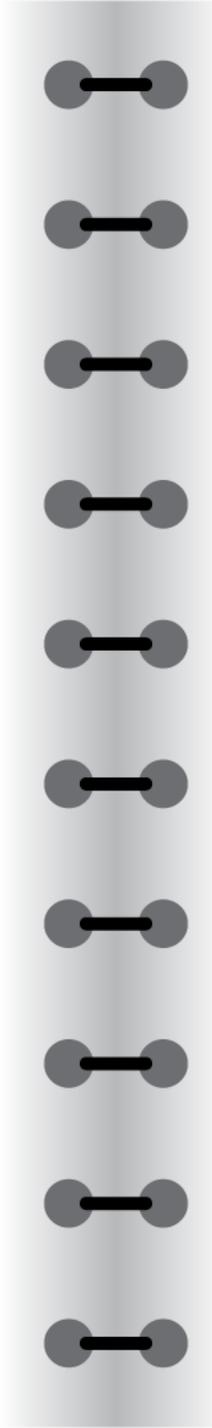
Set the Serving Keg aside to carbonate in the same area that you fermented the beer.

Note: The amount of time it takes to carbonate should be about twice the amount of time it took for original fermentation. This is based on the carbonation being done at the same temperature as the original fermentation.

Once carbonated, chill for a minimum of 12 hours to allow the carbonation to fully diffuse into the beer.

**PROCEED TO NEXT SECTION:
SERVE YOUR BEER**





SERVE YOUR BEER

**ESTIMATED TIME:
1 MINUTE**

YOU WILL NEED:

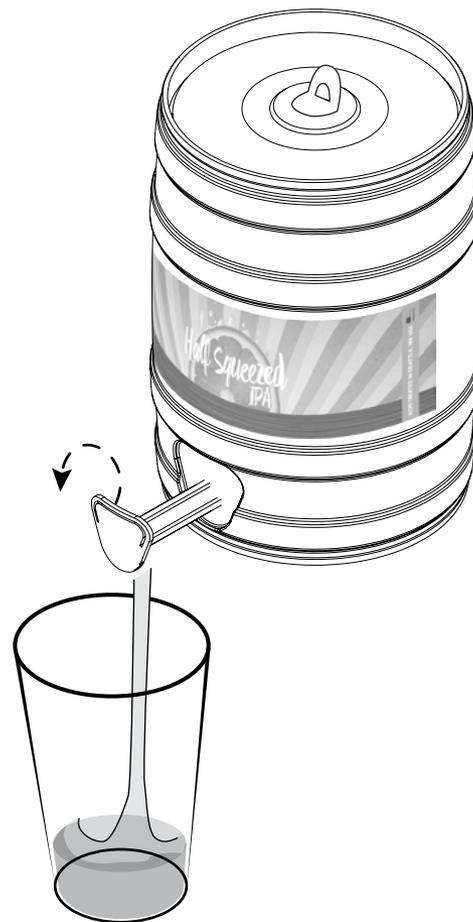
- Your keg of cold, carbonated, delicious beer
- Keg Label
- Glassware

1 Stick your Keg Label on to the Serving Keg. Lift the red tab on the Dispensing Bung and turn it a quarter turn **counter-clockwise** to the "1" position, this will open the vent for serving and release the carbonation pressure inside

Firmly pull the spout of the Serving Keg outward.



2 Twist the Serving Keg Spout **counter clockwise** to dispense beer from the keg. Twist Serving Keg Spout **clockwise** to stop dispensing beer.



- 3** When finished serving the beer, close the Dispensing Bung vent by turning it **clockwise** to the “0” position and push the spout back into the keg. Refrigerate the Serving Keg when not serving from it.



WELCOME TO THE HOMEBREW FAMILY

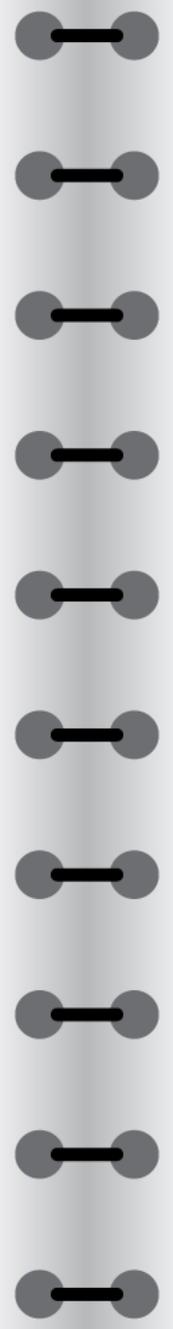
WE'RE A REALLY FUN CROWD.



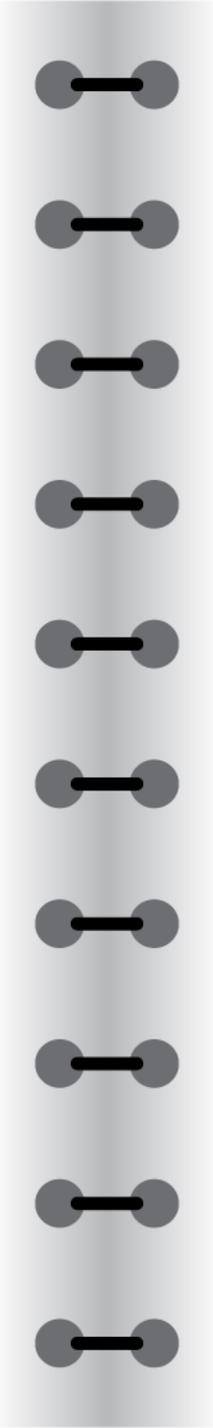
**LET'S
STOP
FOR A
LITTLE
REFLECTION.**

**YOUR
FIRST
OF
MANY
BEERS.**

**THE FLOOD
GATES ARE NOW
OPEN FOR MORE
DELICIOUS
HOMEBREW
GOODNESS.**



↑
CHEERS



USAGE & CARE

**ESTIMATED TIME:
20 MINUTES**

RECOMMENDED OCCURRENCE:

Should be performed after every brewing session, completed fermentation, or when keg is empty.

- Remove Step Filter from Pico. Wipe down any condensation that has formed inside Pico where Step Filter usually sits.
- Wipe down the inside of the Water Reservoir.

KEG CLEANING:

KEGS SHOULD BE CLEANED EVERY TIME THEY ARE DONE BEING USED, AFTER FERMENTING OR WHEN KEG IS EMPTIED.

YOU WILL NEED:

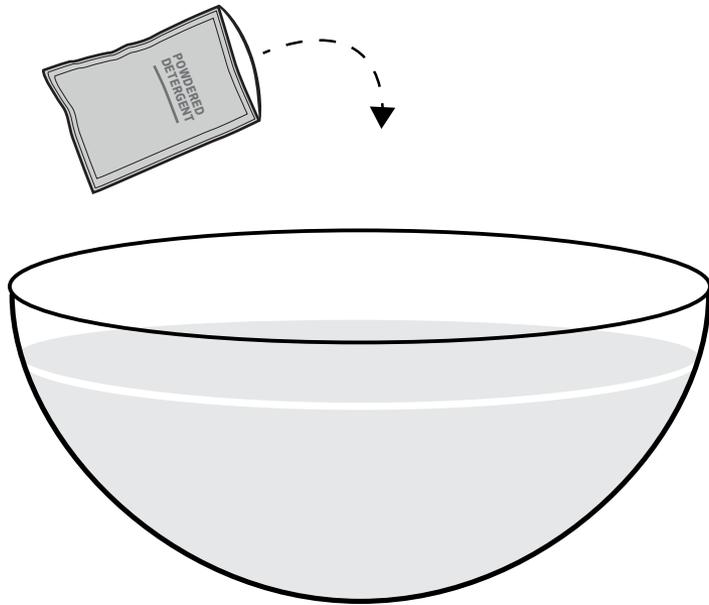
- Brew Keg
- Serving Keg
- Fermentation Seal
- Keg Brush
- Large-sized container
- Fragrance-free powdered dishwasher detergent, or other homebrewing cleaning agent
- Racking Tube

LET'S START THIS ADVENTURE WITH OUR BREWING KEG.

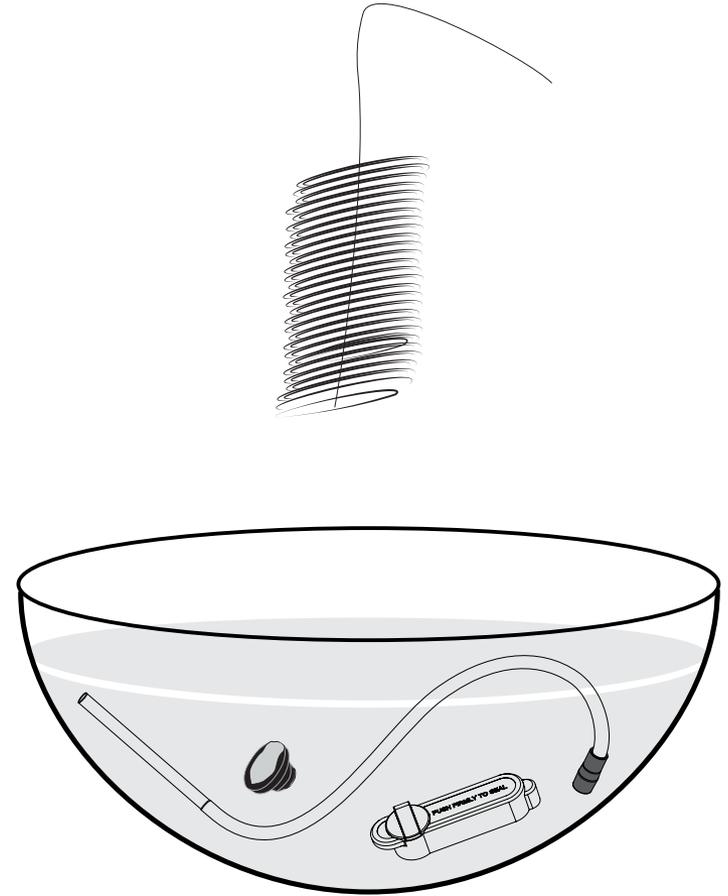
LINDSEY'S PRO TIP:

After a keg has kicked give the keg a quick rinse with hot water, put the lid on and give it a good shake. This will make clean up easier if you can't get to cleaning the keg right away. Never leave old beer in the keg to clean later!

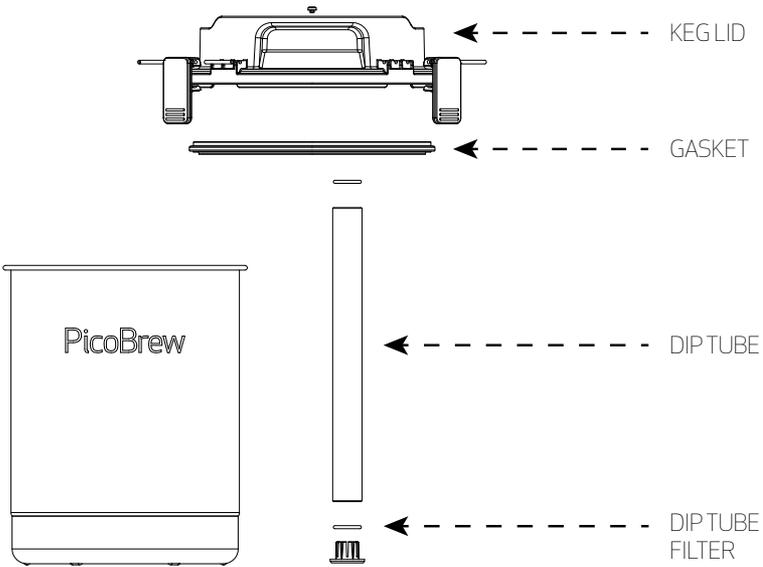
- 1** Fill a large container with $\frac{1}{4}$ teaspoon fragrance-free powdered dishwasher detergent and enough hot tap water to almost fill container.



- 2** Place all accessories used during brewing or fermentation in to the container to soak. Use Keg Brush to clean all items inside container, making sure to scrub any surface that may have had any contact with beer.



3 Remove the Keg Lid from the Brew Keg. Detach the Dip Tube, Dip Tube Filter, and Gasket from the Keg Lid.



4 Rinse the Keg Lid, Gasket, Dip Tube, Dip Tube Filter, and Keg Vessel thoroughly with tap water and place in dishwasher.

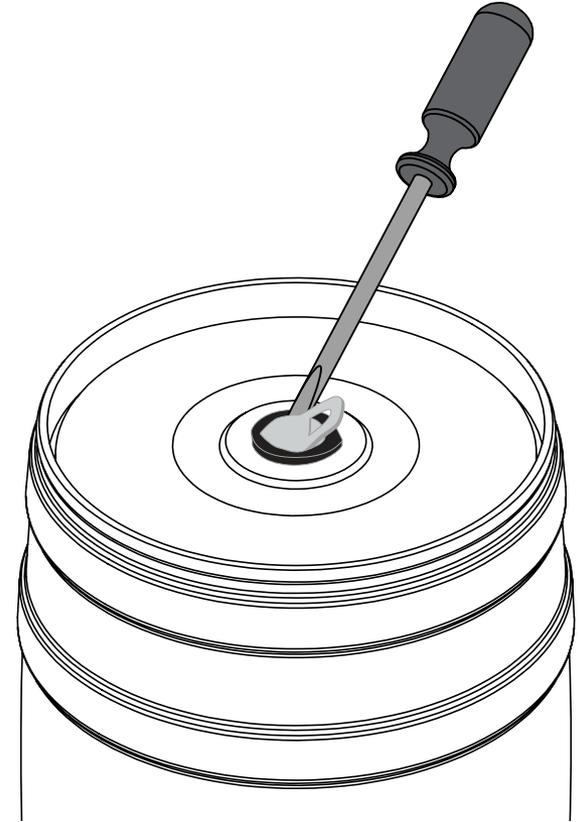
Note: Do NOT use the Heat Dry or Sanitize option on your dishwasher. Condensation or Air Dry options are fine to use.



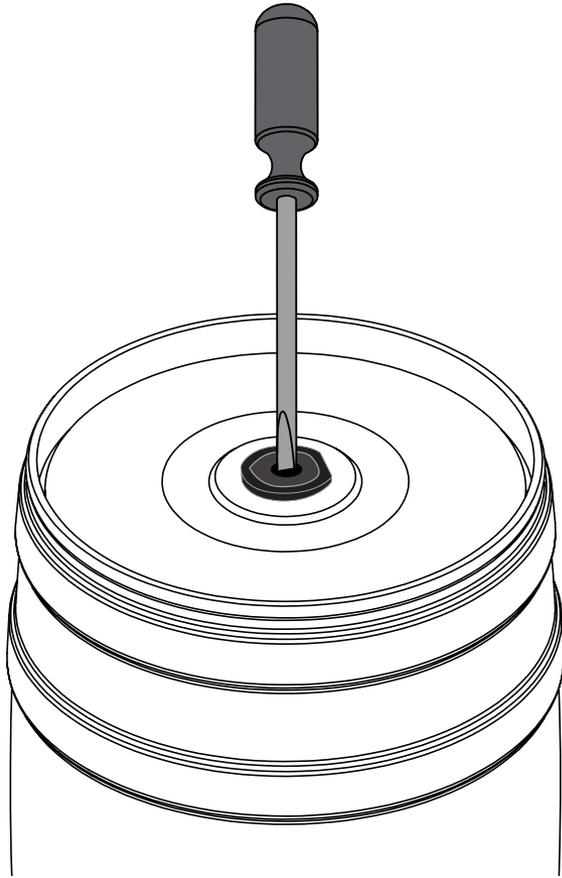
SERVING KEG CLEANING:



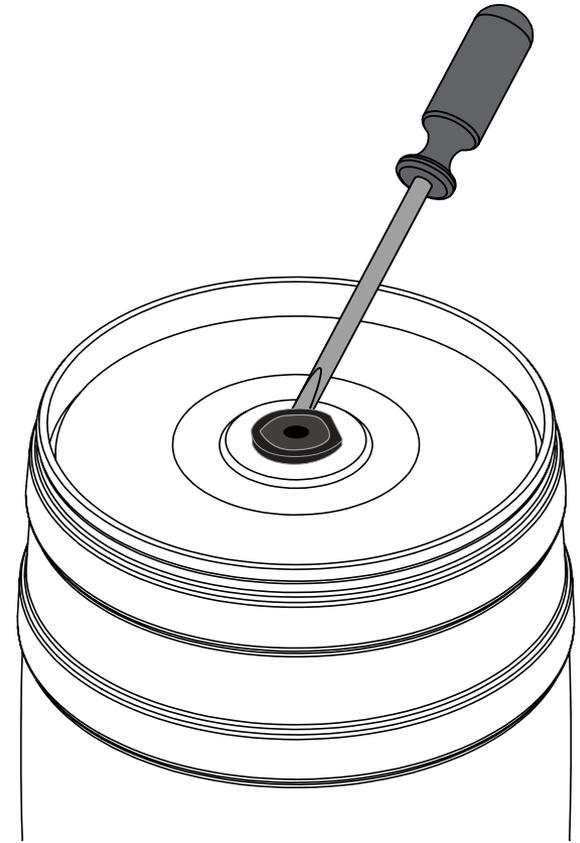
5 Remove the Dispensing Bung from the Serving Keg. Rotate vent piece to release pressure. Insert flat-head screwdriver between vent piece and rubber stopper. Twist and pry slightly with screwdriver to pop vent piece out.



6 Use the screwdriver to punch the center red plastic piece down into the Serving Keg.



7 Use the screwdriver to pry out the rubber stopper. Be careful to not damage it or the Serving Keg.

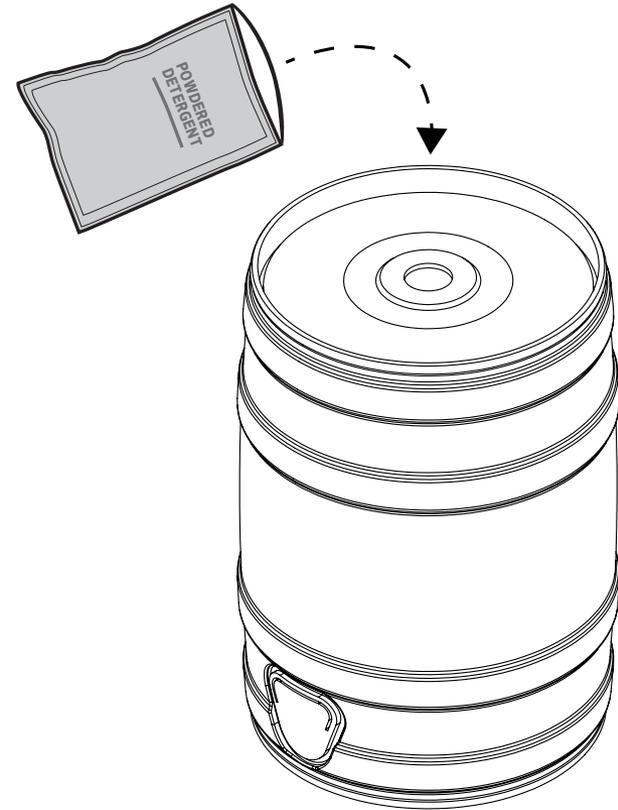


8

Turn the Serving Keg upside down and shake it until the center red plastic piece falls out of the opening.

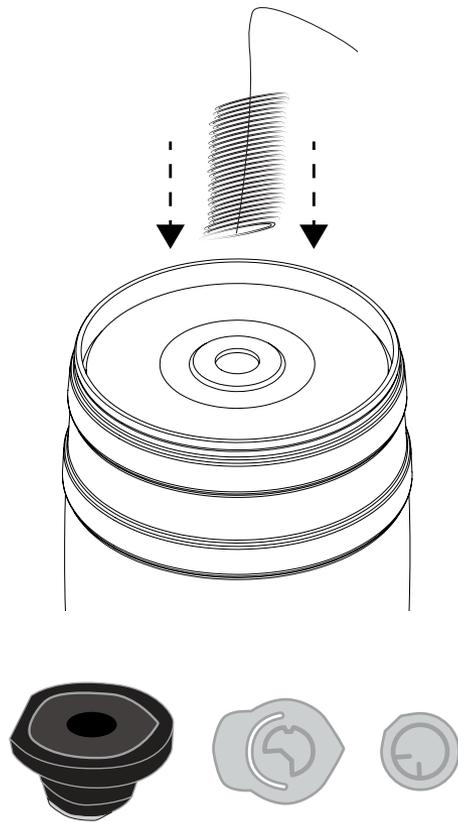
9

Inside the Serving Keg mix $\frac{1}{2}$ teaspoon powdered dish washing detergent with enough hot tap water to almost fill the keg. Let it soak for 10 minutes, longer if there is hardened build-up.



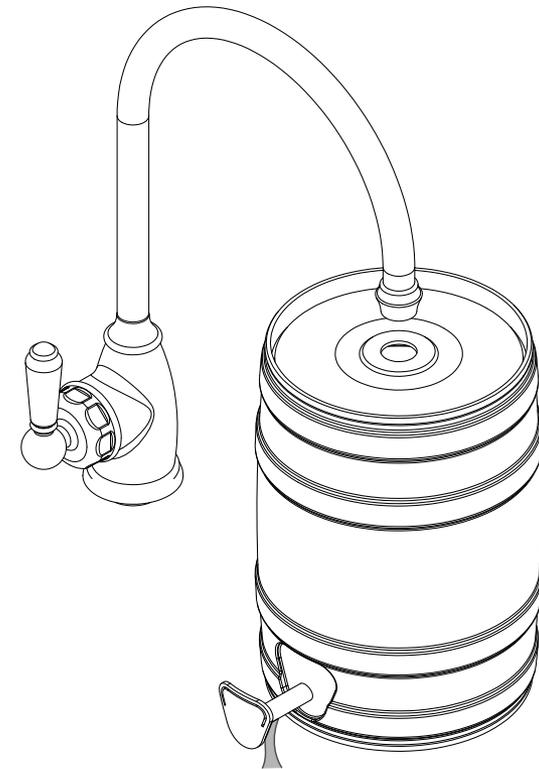
10

Use the Keg Brush to scrub the inside of the Serving Keg, making sure to get in contact with all internal walls and crevices of keg, and the outside of the keg making sure to get the top opening and any spot that had contact with beer. Scrub the Dispensing Bung and rinse with clean water. Re-assemble the Dispensing Bung Plug. The plastic pieces are molded so that they fit into each other.



11

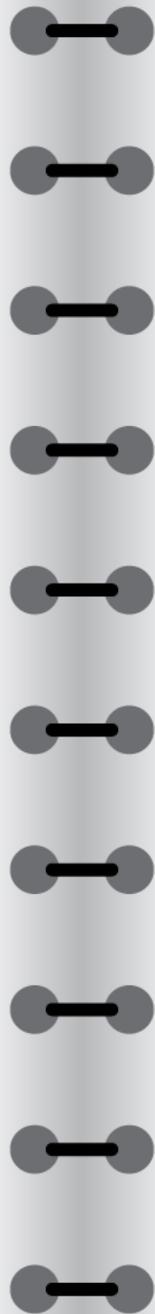
Place Serving Keg over a waste container or sink. Pull the spout of Serving Keg outward. Twist the spout counter clockwise to start dispensing the cleaning agent water from keg and through the spout. Let flow into sink or waste container for approximately 10 seconds. Turn spout clockwise to stop dispensing water.



12

Empty all water inside Serving Keg, give a quick rinse with clean water. Turn spout counter-clockwise to allow clean water to flow out for about 5 seconds. Turn clockwise to stop, then push spout back into keg. Dump all of the water out of the serving keg. Let air-dry upside down until dry.





PICO DEEP CLEAN

**ESTIMATED TIME:
HANDS ON 10 MINUTES
(TOTAL TIME: 45 MINUTES)**

RECOMMENDED OCCURRENCE:

Should be performed every 3 brew sessions.

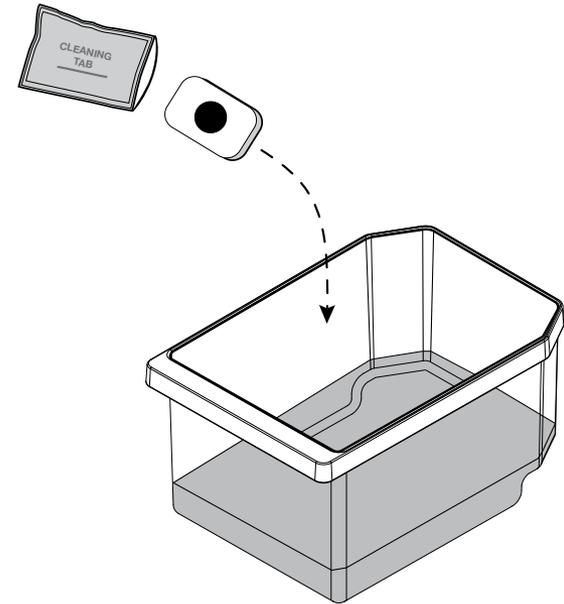
YOU WILL NEED:

- Bucket
- 3.5 liters of clean tap water
- 2 liters of distilled water (or reverse osmosis)
- 1 solid dishwashing cleaning tablet
(do NOT use liquid or gel pouches or any common homebrew cleaning agents)

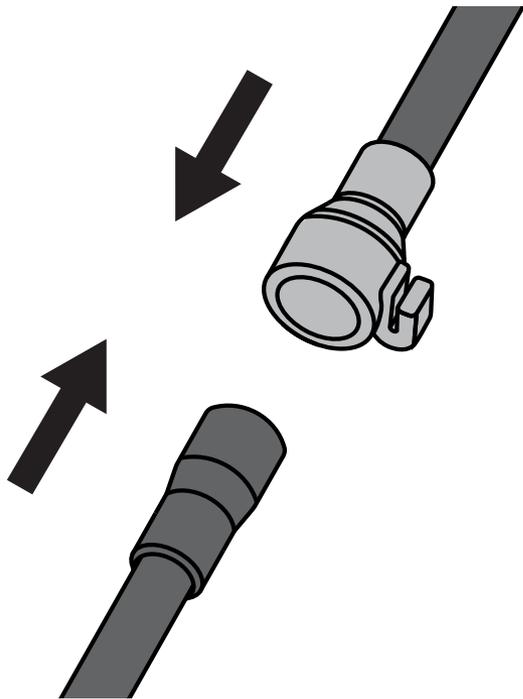
DEEP CLEAN CYCLE:

1

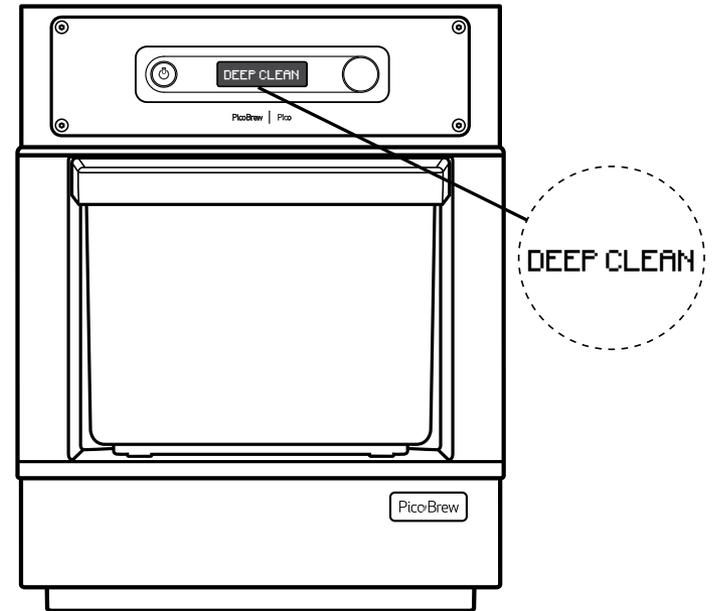
Fill the Step Filter with 2.5 liters of clean tap water.
Drop the solid cleaning tablet into the Step Filter.



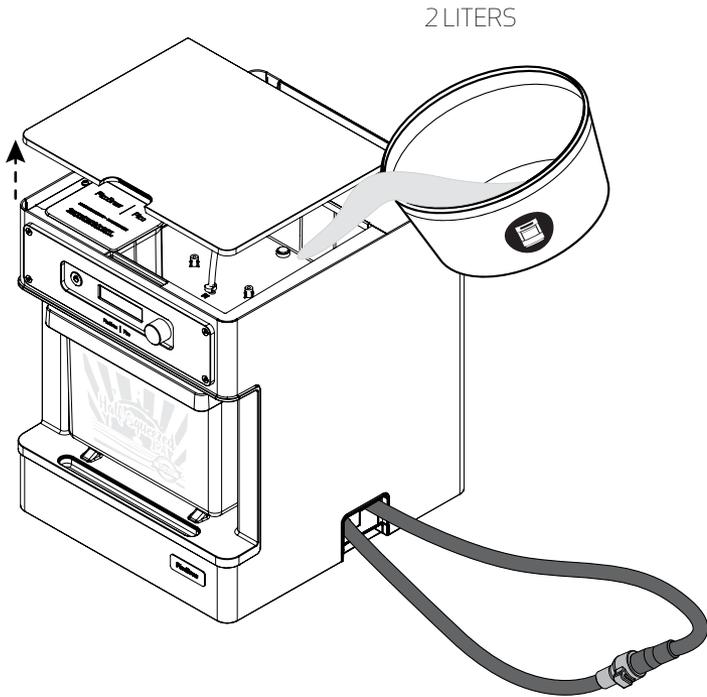
2 Connect the hoses of the Pico by firmly inserting the OUT hose connector into the IN hose connector.



3 Insert the Step Filter with lid into Pico. Turn Pico on. Click Utilities and select DEEP CLEAN.



4 Pour 2 liters of distilled or reverse osmosis water into the Water Reservoir.

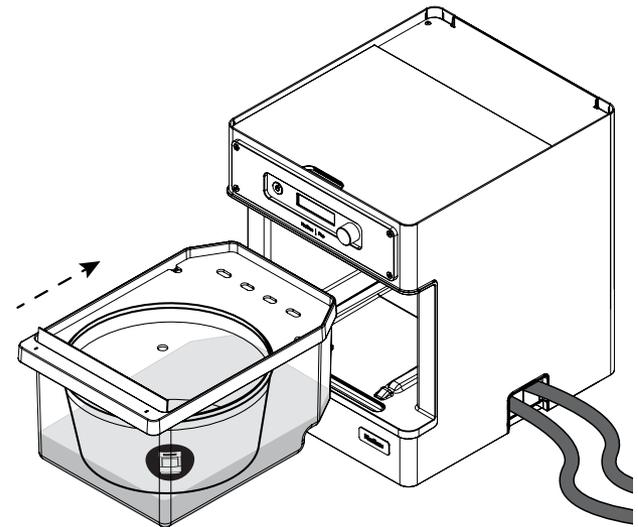


5 Once the Deep Clean cycle begins it will take roughly 35 minutes to complete.



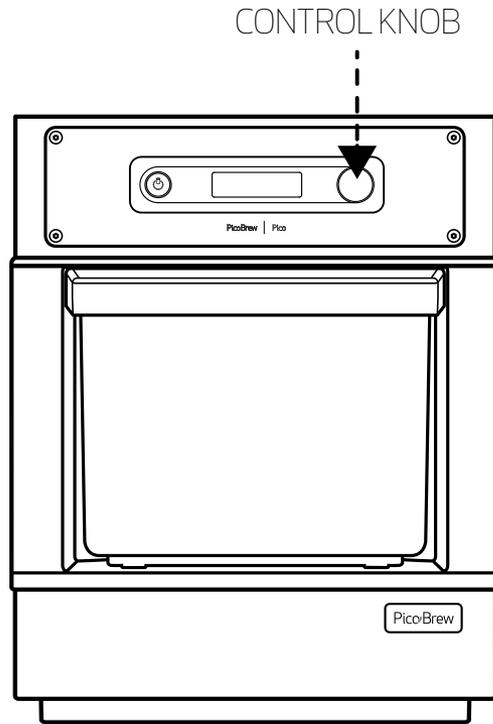
RINSE CYCLE:

- 6 Once Deep Clean cycle finishes, carefully empty all liquid from the Step Filter. Liquid will be HOT so use caution! Rinse thoroughly with clean water. Fill the Step Filter with 1 liter of tap water. Place the empty Bucket in the center of the Step Filter. Insert the Step Filter with lid back into Pico until it clicks into place.

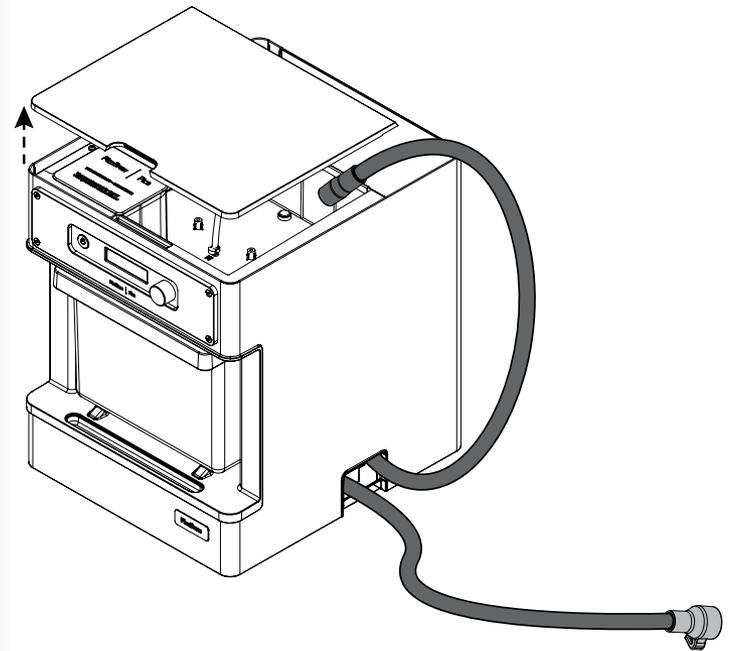


TAP WATER

7 Press Control Knob to start Rinse Cycle and run the pump to clear the drain line.

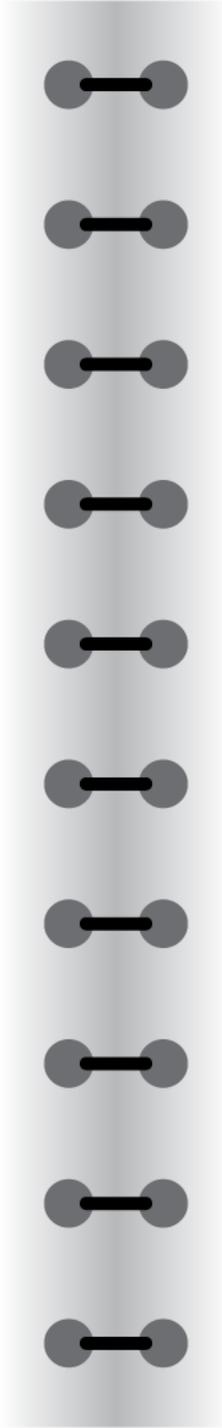


8 If water is still in the Reservoir use the OUT hose to drain out the remaining water. When the Reservoir is empty stop the pump by pressing the Control Knob.





Remove the Step Filter and lid from the Pico and rinse thoroughly with tap water.



SAMPLE RECIPES:

			RARE	MED	WELL
	SIZE	TIME	TEMP	TEMP	TEMP
STEAK	1" Thick	1:00	129	136	154
	1.5" Thick	1:30	129	136	154
	2" Thick	2:00	129	136	154
PORK CHOP	1" Thick	1:30	136	143	158
BONELESS CHICKEN BREAST	0.5 lb	1:30	140	150	165
SALMON	1" Thick	0:40	105	123	131
	1-2" Thick	1:00	105	123	131
		TIME	SOFT	MED	HARD
EGGS	(4)	0:20	167		
		0:25		168	
		0:40			168

RECOMMENDED:

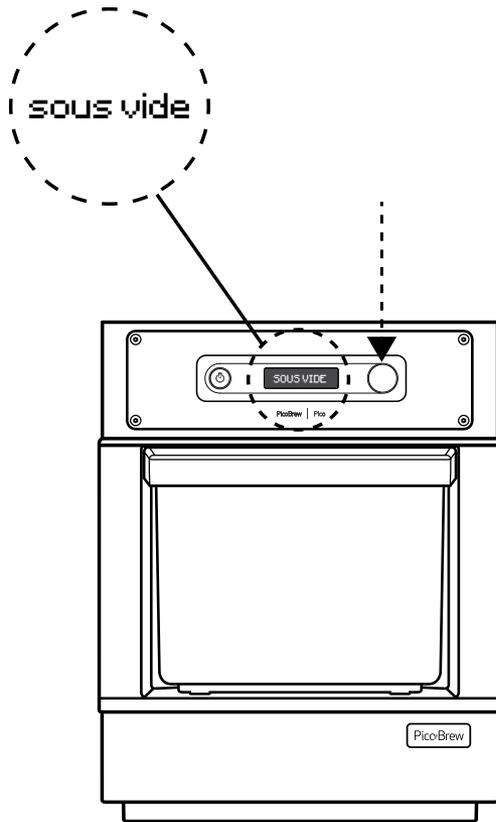
All temperatures are listed in degrees Fahrenheit.

SOUS VIDE INSTRUCTIONS.

YOU WILL NEED:

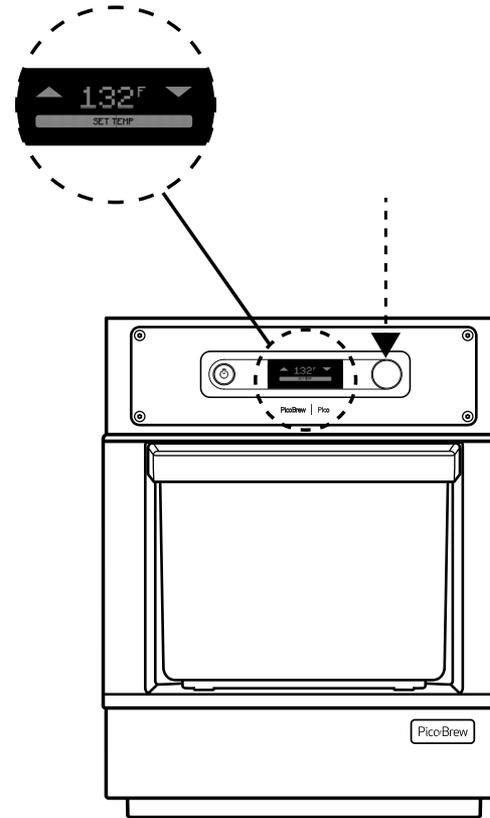
- Pico C, with Step Filter and lid
- Keg Cozy
- 3 liters distilled water (or reverse osmosis)
- Tap water
- 1 gallon heavy duty Ziploc® bag or a food vacuum sealer system
- Food to cook

- 1** Turn the Pico on. Using the Control Knob scroll to **Sous Vide** and press Control Knob to select.

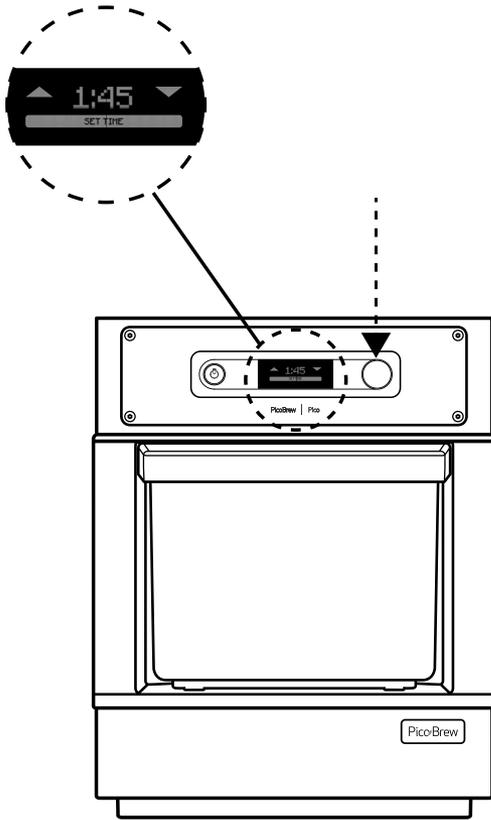


- 2** Consult the Sous Vide Recipe Table on page 160 for the food you are cooking.

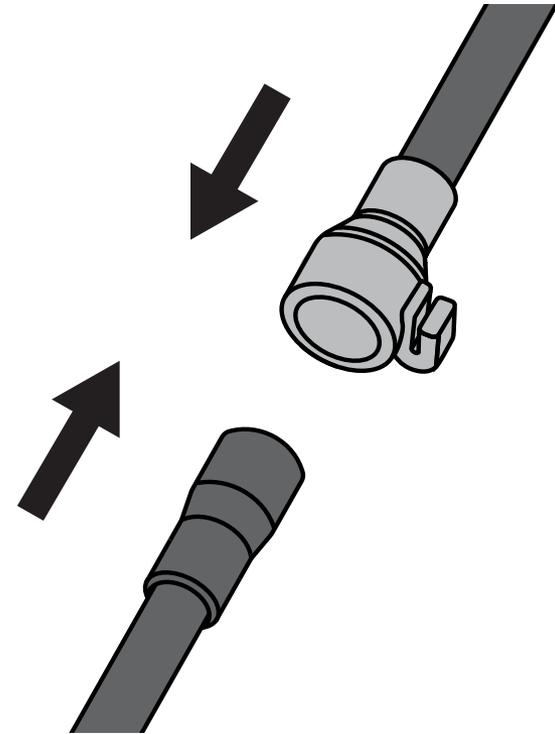
Set the desired water temperature for cooking by turning the Control Knob to scroll to the correct temperature and pressing the Control Knob to select and continue to the next step.



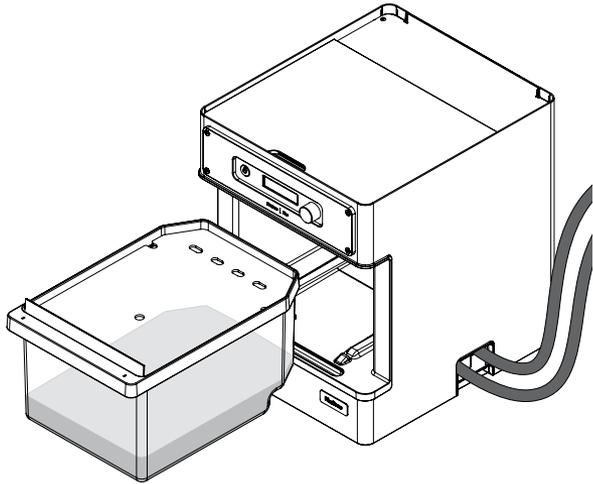
- 3** Enter the cooking time of your recipe in **Hours:Minutes** format by turning the Control Knob to scroll to the correct hour or minute and pressing the Control Knob to select and continue to the next step.



- 4** Connect the hoses of the Pico by firmly inserting the OUT hose connector into the IN hose connector.



5 Fill the Step Filter no more than half way full with tap water. There should be enough water in the step filter to fully submerge your food. Insert the Step Filter with lid back into Pico until it clicks into place. Press the Control Knob to continue to the next step.



6 Fill the Water Reservoir with 3 liters of distilled (or reverse osmosis) water. Press the Control Knob to begin heating up the water to the designated cooking temperature. For sous vide recipes or cooking sessions that go over 3.5 hours you might need to add more distilled water to the reservoir during the cooking process, check on it as needed.



7

Begin preparing your food:

Trim and prepare food for cooking. Thicker cuts of meat or vegetables may require longer cooking time. Add any spices or aromatic to the food before sealing the bag(s).

Vacuum seal the food or insert into a 1 gallon heavy duty freezer Ziploc® bag with the air squeezed out and fully sealed.

8

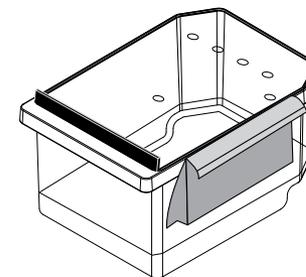
When the water has reached cooking temperature the Pico will beep. Press the Control Knob to silence the alarm. Remove the Step Filter and its lid from Pico. Place food bag(s) in Step Filter. If using a Ziploc® bag, place bag(s) against the side of the Step Filter with the top hanging out over the edge of Step Filter. Once you place the Step Filter lid on it will clamp the bag(s) into place. Vacuum sealed bags should sink to bottom. If necessary, place a food-safe object on top of bag(s) to make sure they will stay fully submerged in the water during the entire cooking process.

Place lid on Step Filter, clamping any Ziploc® bags in place. Make sure the lid holes are in the correct places (see diagram) and that the black steam deflector is towards the front and facing upward.

Insert Step Filter with lid into Pico.

LINDSEY'S PRO TIP:

To get most of the air out of a Ziploc bag seal the bag but leave about 1" of bag unsealed. Submerge Ziploc® bag of food in water and as the bag submerges the water pressure will squeeze the air out for you. Right before the bag is fully submerged seal up that last 1" of the bag and pull out of water. The bag should be mostly air-tight and ready to sous vide.



9

Select "Start Cooking" on-screen by pressing the Control Knob. This will begin the sous vide cooking process using the time and temperature you selected. You will be able to view the temperature and remaining cooking time on the Pico screen. If at any time you need to pause the cooking process turn the Control Knob to reveal the "Pause System" option and press Control Knob to select and pause cooking. When ready to resume cooking make sure the Step Filter is inserted correctly then select "Continue Cooking" on-screen using the Control Knob.

When Pico is finished cooking the screen will say "Finished" and an alarm will sound for 60 seconds. You can turn the alarm off by pressing the Control Knob.

If you plan on searing any food after cooking make sure to prepare the pan or grill a few minutes before the Pico is finished cooking your food. A simple way to sear meat is to use a heavy pan on your stovetop. Heat the pan on high until hot, add butter/oil and then sear the meat 1-2 minutes per side until the desired sear is achieved.



When the sous vide process is finished:

- You can select "Hold Temperature" option on-screen to hold the cooking temperature and allow your food to continue cooking.
- Or, select "Exit" on-screen and carefully remove Step Filter from Pico, be cautious as the water inside will be warm. Use tongs to take food out of Step Filter.
- Cut open vacuum-sealed bag(s) or open Ziploc® bag(s). Dispose of bag(s).
- Season food to preference. Sear on hot pan or grill (optional).

Note: If you do not exit after the cooking is finished Pico will automatically hold the cooking temperature. Any food still in the Pico will continue to cook.

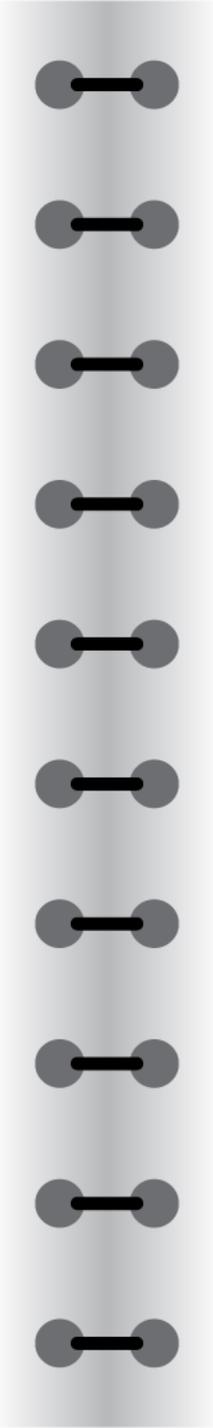
10

Disconnect IN and OUT hoses. Dispose of water in Step Filter.

Select "Start Vacuum" and use the OUT hose to begin suctioning out the remaining water. Press the Control Knob to stop the vacuum when there is no more water in the reservoir.

Consuming raw or undercooked meats, poultry, seafood, shellfish or eggs may increase your risk of foodborne illness.





MANUAL GLOSSARY

**EVERYTHING
YOU NEED TO
IMPRESS
YOUR FRIENDS
AND BREW
CORRECTLY.**

ADJUNCT A fermentable addition to the mash that includes sugars, syrups, and unmalted cereal grains such as corn, rice, oats that provide extra sugars in the wort.

AERATE Introducing oxygen into the wort to make sure yeast can reproduce abundantly.

ALE A generic term used for beers that are created using a top-fermenting yeast strain at a higher temperature than lager yeast strains.

BACTERIA Single-celled organisms that reproduce quickly in specific environments. Integral to specific beer styles, particularly sours, and considered an off-flavor and flaw in the majority of all other beer styles.

BUNG A plug inserted into the Bung Hole at the top of a cask or keg.

CARBONATION Carbon dioxide (CO₂) is a naturally occurring by-product of fermentation. Keg Conditioning is natural carbonation created during fermentation when yeast metabolize sugars. Forced carbonation is the addition of CO₂ to the final beer.

DOUGH IN Part of the mash process where grains soak to activate and distribute temperature-specific enzymes.



DRY HOP The addition of hops after initial fermentation to increase hop aroma without increasing hop bitterness.

ESTERS Aromatic flavor compound created by yeast during fermentation. Esters contribute fruity aromas to beers.

FERMENTATION The process where yeast break down sugars into carbon dioxide (CO₂) and alcohol.

HOPS Hops are the flower cones of a the hop plant, used to contribute bitterness, aroma, and anti-microbial qualities to beer. Commercially available in pellet, plugs, whole cone, or extracted forms.

KRAUSEN Thick, moussy foam on the top of fermenting wort that occurs during the beginning of fermentation.

LAGER A generic term used for beers that are created using a bottom-fermenting yeast strain at a lower temperature than ale yeast strains. Also a term for cold-storing a beer for an extended amount of time.

MALT Barley, or other grains, used during the mash and brewing process. Contributes a wide range of flavors from uncooked bread to roasted coffee, depending on its kiln or roasted level.

MASH The process of steeping milled grains in hot water in order to activate enzymes and extract sugars from the malt.

PHENOLS Chemical compounds derived from yeast activity during fermentation. Vary from spicy, peppery, smoky, medicinal, and many more.

PITCH The process of adding yeast to cooled wort to start fermentation.

PRIMING The act of adding a small amount of sugar to fermented beer in order to restart fermentation and create carbonation inside bottle or keg.

PSI Pounds per square inch.

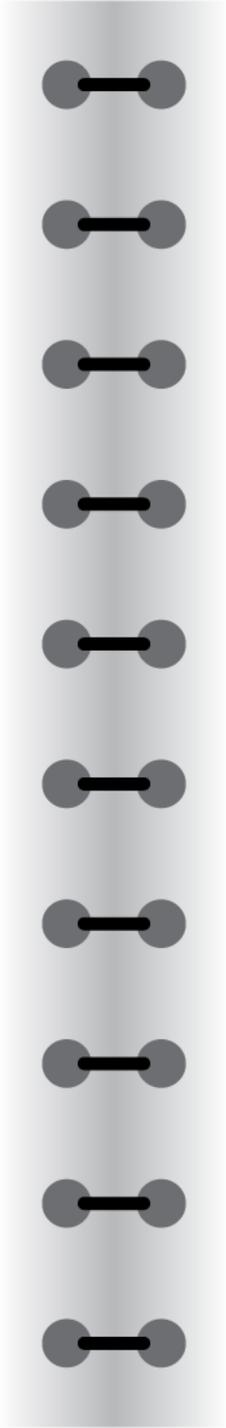
TRUB A solid material composed of yeast, proteins, and hop particles that fall out of solution during brewing and fermentation

WILD YEAST Yeast that is naturally airborne and ubiquitous. Typically used in sours or wild ales, considered an off-flavor in a majority of other beer styles.



WORT Unfermented liquid containing sugars extracted from the malt grain during the mash process. Adding yeast to wort starts the fermentation process which transforms the wort into beer.

YEAST Single-celled fungus that breaks down sugars in the wort during fermentation into carbon dioxide, alcohol, and creates various phenols or esters.



17-0914

© PicoBrew Inc, 2017

www.PicoBrew.com