



# S40 BREWING SYSTEM

## INSTRUCTIONS



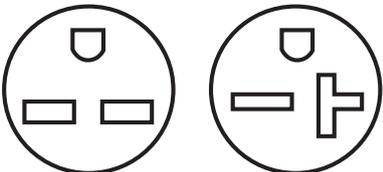
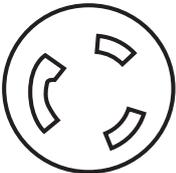
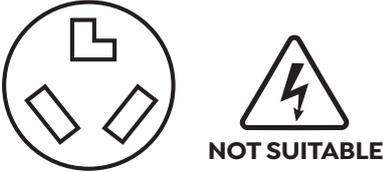
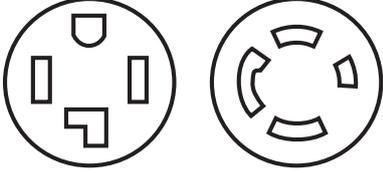
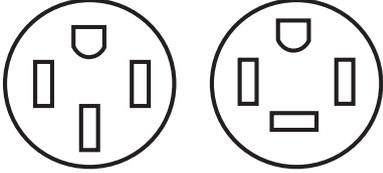
# THANK YOU FOR CHOOSING THE GRAINFATHER S40 BREWING SYSTEM

The S40 has been developed for small batch brewing. Get started by following these quick and easy instructions on how to assemble and use your S40 Brewing System. We recommend reading the following safety information before use. Please also find enclosed, advice for cleaning and storing your S40.

## WARNING! (NORTH AMERICA 220 V ONLY)

Please check your unit rating label for the voltage. If your unit is a North American 220 V product, the Power Cord, Control Box and Boiler Body included in the box are designed to be used together with a 220 V supply. Using any of these components with another product (including the 110 V S40) may result in hazards and equipment damage.

### SOCKET GUIDE (NORTH AMERICA 220 V ONLY)

POWER SUPPLY SOCKET	DESCRIPTION	COMPATIBILITY
 <p>NEMA 6-15R      NEMA 6-20R</p>	3-pin workshop and power tools supply.	Brewing system is compatible using power cord supplied in-box.
 <p>NEMA L6-20R</p>	3-pin workshop and power tools supply.	Brewing system is compatible by using an adapter that includes a ground connection and has appropriate electrical certification.
 <p>NEMA 10-30R      NOT SUITABLE</p>	3-pin laundry dryer supply, most common installation prior to 1996.	This power supply socket is <b>NOT SUITABLE</b> for use with the brewing system. This socket provides hot-hot-neutral connections. The brewing system requires a ground connection to perform safely in the event of an electrical fault.
 <p>NEMA 14-30R      NEMA L14-30R</p>	4-pin modern laundry dryer supply, commonly installed after 1996.	Brewing system is compatible by using an adapter that includes a ground connection and has appropriate electrical certification.
 <p>NEMA 14-50R      NEMA 14-60R</p>	4-pin electric oven supply.	Brewing system is compatible by using an adapter that includes a ground connection and has appropriate electrical certification.

## SAFETY INFORMATION

- Read all instructions before using the S40.
- Do not use the appliance for any purpose other than its intended use.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or a similarly qualified persons to avoid hazards.
- This appliance is intended to be used in household and similar applications, such as staff kitchen areas in shops, offices and other working environments; farm houses and by clients in hotels, motels and other residential type environments; bed and breakfast type environments; catering and similar non-retail applications.
- Always unplug the unit before cleaning, during storage or in the event of a fault.
- To protect against fire, electric shock, and injury, do not immerse cord/plugs in water or other liquid.
- The boiler, lid and pipes reach temperatures of up to 100°C (212°F) and therefore must be handled with caution.
- Never move the unit while it is in operation. The handle on the side of the unit is only meant for moving the S40 when it's not in use, empty and no longer hot.

**NOTE:** Not following the safety information above may void your warranty.

## SAFETY CUTOUT

The S40 features a boil dry protection system, which will automatically switch off the heating element if the water level is too low or a film of debris has built up on the base. To reset the safety cutout, switch off and unplug the unit. Empty any liquid and press the reset button located at the bottom, underneath the boiler. If there is a film on the bottom of the boiler, remove and clean it, then try again.

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# DIAGRAM

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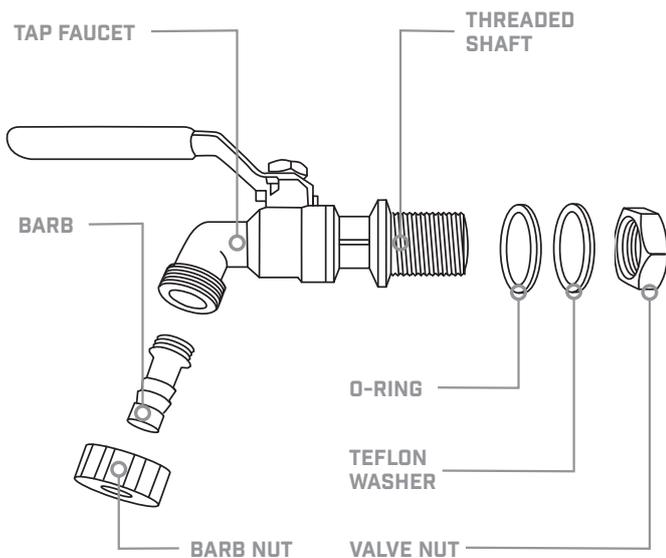
- 1. Lid handle
- 2. Lid
- 3. Support ring
- 4. Boiler body
- 5. Grain basket
- 6. Tap and nut
- 7. Immersion chiller
- 8. Immersion chiller hoses
- 9. Hose clamps
- 10. Recirculation arm and wort sprayer
- 11. Tap adapter
- 12. Digital controller
- 13. Recirculation pipe



## ASSEMBLY

### ASSEMBLING THE TAP

1. Place the o-ring over the threaded shaft on the tap and place the shaft through the hole in the boiler.
2. From the inside of the boiler, place the Teflon washer over the threaded shaft and then screw the valve nut onto the shaft. Tighten it by hand at first then gently use a spanner, but avoid over tightening.
3. Then attach the barb onto the tap faucet. Place the barb nut over the top and screw it on by hand.



### ASSEMBLING THE LID

1. Place the handle washers on the top and bottom of the lid where the holes are. Put the screws through the bottom of the lid through the handle and screw on the nuts provided. Be careful not to over tighten.

### ASSEMBLING THE IMMERSION CHILLER

1. Connect the hoses to the inlets of the chiller so there is about 2 cm of hose overlapping the pipes of the chiller.
2. Thread the hose clamps onto the hose and use a screwdriver to tighten the clamps on the overlapped section.



3. Check which hose is connected to the immersion chiller where the coil goes straight to the bottom (see image below). On the other end of that hose, attach the tap adapter and push the final clamp onto the end.



## HOW TO USE

Before use, we recommend cleaning your S40 and all of its components using the Grainfather High Performance Cleaner.

### ADD THE MASH WATER

1. Make sure that your S40 is on a stable, flat surface before you start brewing.

**NOTE:** We recommend placing the S40 on a solid table that allows you to position your fermenter underneath the tap on the side of the unit.

2. Add the volume of mash water required by your recipe – you can use the advanced calculators available on the free Grainfather App.

### SET THE STRIKE TEMPERATURE

1. Insert the grain basket and cover with the lid.
2. Plug in the unit, set for 2300 W, and push the 'on' button. Now press 'on/off' on the digital controller and press 'set'. The default strike water temperature of 72°C (162°F) will flash.
3. Use the Grainfather App to calculate your strike temperature based on your recipe.
4. To change the temperature, press the '+' or '-' button, otherwise, press 'set' to agree to this strike temperature.

**NOTE:** A strike temperature is necessary as you are adding a large portion of grains at room temperature to the hot water, so the temperature will drop initially. You will use this to set your mash temperature.

### SET THE MASH TEMPERATURE

1. Once your water reaches the set strike temperature, add the grain to the grain basket.
2. Mix thoroughly to avoid any dry clumps and for even heat distribution. Continue until the mash develops a porridge like consistency.
3. Now with the lid removed, change the set temperature on the controller to the mash temperature as per your recipe, and then press 'set'.
4. The strike water temperature will flash, press the '+' or '-' button to adjust the temperature. Press 'set' to confirm your mash temperature.

### INSTALLING THE RECIRCULATION ARM

1. Attach the silicone hose to the barbed end of the recirculation arm. On the other end of the silicone hose, insert the wort sprayer.



### ATTACH THE RECIRCULATION PIPE

1. Now attach the recirculation arm to the valve at the top of the boiler so the silicone hose and wort sprayer are in the centre of the grain basket.
2. Connect the immersion chiller to your cold water tap by attaching the hose with the tap adapter. Leave the tap switched off until you're ready to chill your wort.
3. With the blue handled valve all the way open (vertical) turn on the PUMP switch on the side of the unit to start the pump.

**NOTE:** Use the valve to adjust the flow of recirculation so that the unit maintains about 2 - 3 cm of water above the grain bed. Leave to recirculate for 1 hour. Using the Grainfather App, we also recommend measuring and heating your sparge water at this point.

## LIFTING THE GRAIN BASKET

1. When the mash has finished, turn off the pump. Close the ball valve and remove the recirculation pipe.
2. Lift the grain basket, and then turn it 45 degrees so that the feet at the bottom of the basket rest securely on the support ring.
3. Press 'set', the temperature will flash. Press the '+' or '-' button to set the temperature to 98°C (208°F) and press 'set' again to confirm your temperature.



## CAUTION!

**BE VERY CAREFUL** not to twist the basket while the basket is in the sparge position which could knock it off the support ring. If the sparge is "stuck" (not draining), then remove the top plate (if applicable), lower the basket and slice the grain bed with a stainless steel paddle or similar. Cut through the stuck grain from the centre towards the outside repeatedly until it loosens. Then return the basket to the sparge position to continue sparging. Always ensure the Support Ring fits tightly into its groove and is held in place by the Support Ring Retainer. If you remove the Support Ring for cleaning, ensure that it is correctly reinstalled along with the Support Ring Retainer.

## SPARGE YOUR MASH

1. Gently and evenly pour the sparge water all over the grains, and allow to drain.

## BOIL YOUR WORT

1. After removing the grain basket, press 'set' and the temperature will flash on the digital controller.
2. Press the '+' or '-' button to set the temperature to 103°C (218°F) and press 'set' again to confirm your temperature.
3. Allow to boil for 1 hour.  
**NOTE:** Refer to your recipe for when to add hop additions during your boil.
4. When there's 5 minutes boil time remaining, add the immersion chiller to the boiler to sanitise it.

## CAUTION!

During the boil, do not fit the lid as you may cause a boil-over. Check that the immersion chiller contains no water after the first use, to ensure that water doesn't shoot out when lowered into the hot wort.

## COOLING WITH THE IMMERSION CHILLER

1. Place the hose where the water will exit from the immersion chiller into a drain or bucket to divert the water.
2. Once you are ready to cool your wort, turn on the cold water tap and leave it to run through the immersion chiller until your wort reaches fermentation temperature.  
**NOTE:** The final wort temperature will be within approximately 5 degrees of your ground water temperature.
3. To increase the cooling speed, stir the wort with a sanitised spoon.

## TRANSFERRING TO YOUR FERMENTER

1. Allow the cooled wort to settle.
2. Place your clean and sanitised fermenter under the tap on the side of the boiler.
3. Open the tap and allow the wort to drain into your fermenter.
4. Once all of your wort has been transferred into your fermenter, add yeast, and leave to ferment for the specified time, depending on your recipe.

## ADVICE FOR CLEANING AND STORAGE

- Always disconnect the appliance before cleaning.
- Before first use, rinse with clean water to remove any dust and cardboard debris.
- Immediately after use, the S40 and all of its components should be cleaned and dried thoroughly. If the remnants of wort and malt appear on the surfaces, do not let these dry out as this will significantly complicate the cleaning process.
- We recommend using the Grainfather High Performance Cleaner as it removes the need for tedious scrubbing.
- Do not store in a damp area as this could cause damage to the product.

## IMPORTANT SAFEGUARDS:

### READ AND FOLLOW ALL INSTRUCTIONS

**CAUTION** – Risk of fires and electric shock.  
– Do not immerse in water.

**SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE**

**FOR COMMERCIAL AND FOR INDOOR USE ONLY**



**RESOURCES:** Check out our YouTube Channel for helpful videos. For more information visit our FAQ's page [shop.grainfather.com/index.php/faq](https://shop.grainfather.com/index.php/faq)

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