

BREWING EQUIPMENT® STEAM CONDENSER ASSEMBLY & MAINTENANCE MANUAL

**** PLEASE READ THOROUGHLY PRIOR TO USE FOR IMPORTANT SAFETY INFORMATION****

WARNING: Sections labeled "Warning" can lead to serious injury or death if not followed. Please thoroughly read these sections and understand them completely before use. If you do not understand them or have any questions, contact your retailer or Anvil Brewing Equipment (www.anvilbrewing.com) before use.

CAUTION: Sections labeled "Caution" can lead to equipment damage or unsatisfactory performance of the equipment. Please read these sections thoroughly. If you have any questions, contact your retailer or Anvil Brewing Equipment (www.anvilbrewing.com) before use.

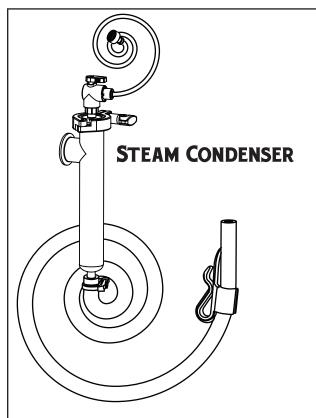
IMPORTANT: Sections labeled "Important" should specifically be followed to ensure satisfactory results with the product.

WARNING

- 1. Never operate this product unattended.
- 2. Never move this product during use.
- 3. ALWAYS install this product on a level solid surface such as concrete.
- Heated liquids remain at scalding temperatures long after the brewing process. Never touch the Steam Condenser until the surfaces have cooled to 115°F (45°C) or less. The use of heat protective gloves is recommended.
- 5. Operating the Steam Condenser in any fashion other than described in this manual can result in personal property damage, injury, electrocution, death, or loss of seriously good beer.

GENERAL PRECAUTIONS

- 1. Do NOT leave this product unattended while in use. The user must remain in the immediate area of the product and have a clear view of the product at all times during operation.
- Keep children and pets away from the steam condenser at all times.
- 3. The use of alcohol, prescriptions or non-prescription drugs may impair your ability to properly assembly or safely operate this product.
- 4. Use ONLY on-a level, stable surface.
- 5. Avoid bumping or impact with the product to prevent spillage or splashing of hot liquid.
- 6. This product will be hot during use.
- 7. In case there is a fire, call the local fire department. Stay clear from flames.
- 8. This product is not intended or warranted for commercial use.



TRI-CLAMP LID ADAPTER FOR THE FOUNDRY CONDENSER LID TUBE KIT

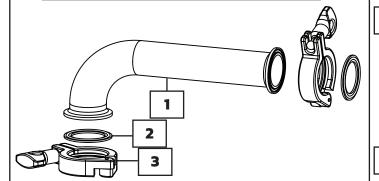
WARNING

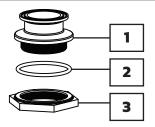
Steam is very hot and can cause severe burns! Surfaces will be hot during and after use. Only handle this product while using proper burn protection equipment.



LID TUBE KIT

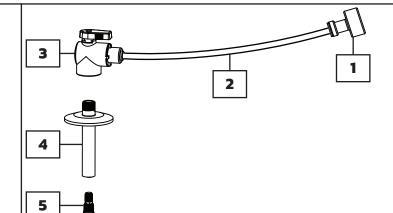
	Part #	Item	Quantity
1	BE-001845-01	Lid Tube	1
2	BE-000868-00	Tri-Clamp Gasket	2
3	BE-000633-00	Tri-Clamp	2





TRI~CLAMP LID ADAPTER FOR THE FOUNDRY

	Part #	Item	Quantity
1	BE-001827-02	Bulkhead Fitting	1
2	BE-001985-00	O-ring	1
3	BE-001828-01	Bulkhead Nut	1

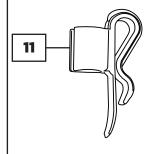








Note: Thread parts 3 and 5 into part 4. No thread tape is required between the fittings, however if you are experiencing leakage issues, thread tape can help.



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IMPORTANT SAFETY PRACTICES

- Opening the lid on the vessel during operation, will allow steam to rapidly escape. Do not lean over or locate any body parts in the escape path of the steam.
- Do not heat liquid in the vessel without water on and flowing through the steam condenser
- Always turn on the water supply to the steam condenser first, then provide power to heat the vessel after.
- Allow a clear path of escape flow for the drain of the steam condenser.
- Do not allow the drain water on the exhaust of the steam condenser to exceed 140°F. Above this, steam is not properly escaping from the vessel and being condensed.
- Never block the drain, this can cause the steam condenser to pressurize.
- Do not touch the steam condenser during or immediately after use, it will be hotter than boiling water and can cause severe burns.
- Always allow the condenser to cool off after operation, to allow safe handling.
- Monitor the condenser during operation to assure the unit is properly draining and not building pressure.
- Do not clamp down the lid on the vessel, as it can continually build pressure, resulting in a dangerous burn or serious bodily injury.
- A minimum ventilation port size matching that of the 1.5" standard tri-clamp port is required for proper steam flow.
- The entire hose should hang vertically with no loops or horizontal sections in the exhaust hose.
- If the exhaust water is above 140°F turn down the power being supplied to the heated vessel until a 120-130°F exhaust temperature is achieved.
- Never allow the exit of the drain tube to be submerged in liquid.
- If using the Foundry™-FOR YOUR OWN SAFETY, DO NOT BLOCK THE VENT HOLE.
- Contact your brew system manufacturer for the most current safety procedures.

Disassemble and wash all components with Powdered Brewery Wash (PBW) before use. Sanitize all surfaces with a home brewing sanitizer such as StarSan.

WARNING: Do NOT use any cleaner or sanitizer containing chlorine, such as bleach. This will pit and erode the stainless steel.

OPERATION

- Assemble the unit and connect it to a ventilation port on the vessel that you intend to use for boiling. Install the vessel lid without the use of clamps. A MINIMUM VENTILATION PORT SIZE MATCHING THAT OF A 1.5" STANDARD TRI-CLAMP PORT IS REQUIRED FOR PROPER STEAM FLOW.
- 2. Connect a pressurized water supply (30-80psi) to the water inlet of the condenser.
- 3. Route the ½" silicone drain hose into a bucket or to a closely located floor drain.
 - THE ENTIRE HOSE SHOULD HANG VERTICALLY, WITH NO LOOPS OR HORIZONTAL SECTIONS IN THE EXHAUST HOSE. THE END OF THE HOSE CANNOT BE SUBMERGED IN WATER.
 - A FREE FLOWING EXHAUST IS NEEDED FOR PROPER OPERATION. DO NOT PUT ANY ADAPTERS OR CONNECTIONS IN THE EXHAUST PATH ON THE EXHAUST HOSE.
- 4. Use the included hose mount to hold the hose securely to the bucket.
- 5. Turn on the water supply to the condenser and confirm that water is draining properly out of the exhaust hose.
- 6. Turn on the power to the vessel being heated, starting with a 50% power level compared to what you would normally use for an open, lid off, boil. LESS POWER IS NEEDED WHEN USING A STEAM CONDENSER, WHEN COMPARED TO AN OPEN BOIL.
- 7. Monitor the exhaust temperature of the liquid exiting the ½" silicone hose. IF THE EXHAUST WATER IS ABOVE 140° F TURN DOWN THE POWER BEING SUPPLIED TO THE HEATED VESSEL UNTIL A 120-130° EXHAUST TEMPERATURE IS ACHIEVED.
- 8. Allow the steam condenser to cool down after use, before cleaning and storing.

TIPS FOR USE

- 1. Clamping down a lid on the heating vessel is not needed and not recommended. This practice can pressurize the vessel causing a safety hazard.
- 2. A easy downward sloped exhaust hose, with no loops or catch points, will provide the best vacuum for the steam condenser to operate. Any loops in the exhaust hose can completely stop the vacuum which is needed to achieve the condensing action.
- 3. It is vital to ensure the end of the exhaust hose **IS NOT** submerged in water.
- 4. An exhaust temperature of 130 F is the ideal balance of water usage and steam reduction, tweak the power of your boil to achieve this exhaust temperature.
- 5. The flow out of the misting nozzle is dependent on your supply water pressure. If you have extremely high water pressure, you may want to purchase one of our low flow replacement nozzles for your condenser to reduce flow.
- 6. The nozzle supplied is recommended for use on 5 and 10 Gallon batch sizes. For smaller or large batches, getting a larger or smaller flow rate nozzle may be needed. The nozzle port is compatible with most 3rd party 1/8" NPT sprayer nozzles. The nozzel supplied with this condenser is specified at 9.5 GPH at 40 PSI.
- 7. Boil off rates will be significantly lower when using the Steam Condenser, airing around 5%.

ANVIL BREWING EQUIPMENT PRODUCT WARRANTY

- 1. ANVIL Brewing Equipment warrants to the original purchaser that this product will be free from manufacturing defects in material workmanship for a period of one (1) year from the date of purchase by the customer. Proof of purchase is required. ANVIL Brewing Equipment's obligation to repair or replace defective materials or workmanship is the sole obligation of ANVIL Brewing Equipment under this limited warranty.
- 2. This product is for home use only. The limited warranty covers only those defects that arise as a result of normal use of the product and does not cover any other problems, including, but not limited to, those that arise as a result of:
- Improper maintenance or modification;
- b. Damage due to incorrect voltage or improper wiring by customer;
- Operation outside of the product's specifications;
 Carelessness or neglect to operate the product in accordance with instructions
- provided with the product; Damaging the tamper label on the product;
- Damage by over-tightening the fasteners; Failure to follow cleaning and / or maintenance procedures; or
- Exceeding published operational temperatures
- ANVIL Brewing Equipment reserves the right to request delivery of the defective component for inspection before processing the warranty claim. If ANVIL Brewing Equipment receives, during the applicable warranty period, notice of a defect in any component that is covered by the warranty, ANVIL Brewing Equipment shall either repair or replace the defective component with a new or rebuilt component at ANVIL Brewing Equipment's option.
- 4. ANVIL Brewing Equipment must be notified within seven (7) days of the delivery date of any shipping damage. Customer is responsible for shipping damage outside of this time period. Approval for return must be provided by ANVIL Brewing Equipment prior to any return. Customer is responsible for keeping all original packaging material for warranty returns. ANVIL Brewing Equipment is not responsible for damage from improperly packaged warranty returns, and these repair costs will be the sole responsibility of the customer. Shipping costs for warrantee returns are covered only for the contiguous United States.
- 5. ANVIL Brewing Equipment's limited warranty is valid in any country where the product is distributed.

- 1. Any implied warranty that is found to arise by way of state or federal law, including any implied warranty of merchantability or any implied warranty of fitness, is limited in duration to the terms of this limited warranty and is limited in scope of coverage to this warranty. ANVIL Brewing Equipment disclaims any express or implied warranty, including any implied warranty of fitness for a particular purpose or merchantability, on items excluded from coverage as set forth in this limited warranty.
- 2. ANVIL Brewing Equipment makes no warranty of any nature beyond that contained in this limited warranty. No one has authority to enlarge, amend, or modify this limited warranty, and
- ANVIL Brewing Equipment does not authorize anyone to create any other obligation for it regarding this product.

 ANVIL Brewing Equipment is not responsible for any representation, promise, or warranty made by any independent dealer or other person beyond what is expressly stated in this limited warranty. Any selling or servicing dealer is not ANVIL Brewing Equipment's agent, but an independent entity.

C. Limitations of Liability

- The remedies provided in this warranty are the customer's sole and exclusive remedies.
 Except for the obligations specifically set forth in this warranty, in no event shall ANVIL Brewing Equipment be liable for direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory and whether or not advised of the possibility of such damages.
- 3. This warranty does not cover, and in no event shall ANVIL Brewing Equipment be liable for, travel, lodging, or any other expense incurred due to manufacturing defects in material and work manship, or any other reason.
- 4. Any performance of repairs after the warranty coverage period has expired or performance of repairs regarding anything excluded from coverage after this limited warranty 5. Shall be considered good-will repairs and they will not alter the terms of this limited warranty, or extend any warranty coverage period.
- 6. Venue for any legal proceedings relating to or arising out of this warranty shall be in Tippecanoe County, Indiana, United States, which courts will have exclusive jurisdiction.

D. Local Law

- 1. This warranty gives the customer specific legal rights. The customer may also have other rights that vary from state to state in the United States or other countries.
- 2. To the extent that this warranty is inconsistent with local law, it shall be deemed modified, only to the extent necessary to be consistent with such local la