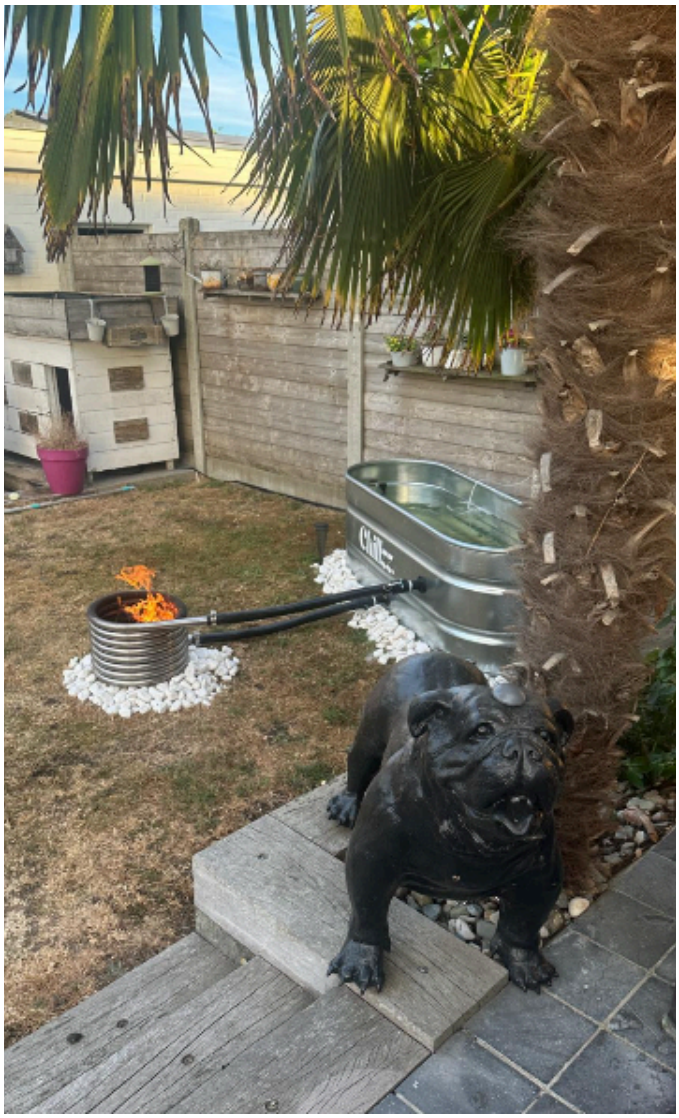
# Wood Fired Coil Hot Tub Installation Manual

### For Chillzz stock tank pools with an external stainless steel coil heater

This guide shows how to assemble the water connections, prepare both hoses, connect the external coil and safely start heating. Read the complete manual before lighting a fire.



**IMPORTANT** The coil must be completely connected, filled with water and circulating freely before any fire is lit. Never block or close either water line while the heater is hot.

## Water flow direction

Connect the lower opening of the tub to the lower connection of the coil. Connect the upper connection of the coil back to the upper opening of the tub. Hot water rises naturally and returns to the tub through the upper hose.

# Before You Begin

## Choose a safe position

- Place the stock tank on a flat, clean and load-bearing surface.
- Position the coil beside the tub on a stable, non-combustible base.
- Keep the coil well away from walls, plants, furniture, covers and other combustible materials.
- Keep both hoses as short and straight as practical. Avoid kinks, loops and high points that can trap air.
- Allow the metal parts to cool completely before touching, disconnecting or draining them.

## Parts and tools

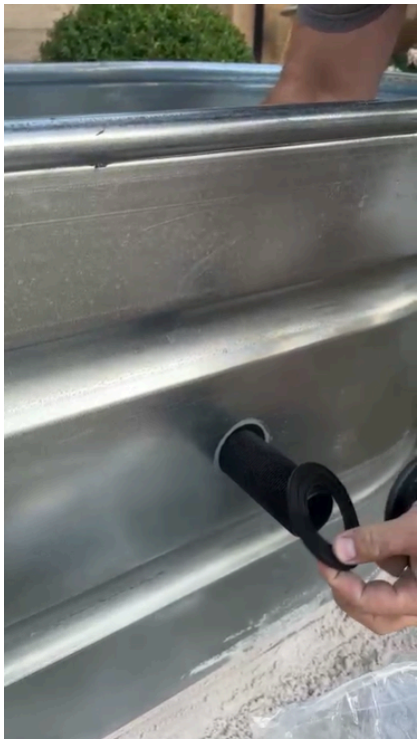
- Two pre-drilled tub openings with bulkhead fittings
- Two hose adaptors and two camlock coupling sets
- Heat-resistant hose of the correct diameter
- External stainless steel coil heater
- PTFE thread-seal tape, hose clamps, screwdriver or nut driver, measuring tape and a suitable hose cutter

**IMPORTANT** Only use hoses, seals and fittings rated for hot water. Do not substitute ordinary garden hose.

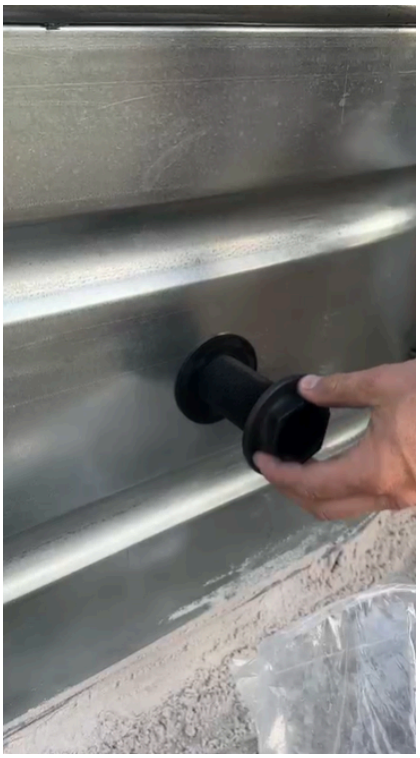
## Before filling

Check that the tub, coil, fittings and hoses are undamaged. The lower and upper ports must remain unobstructed.

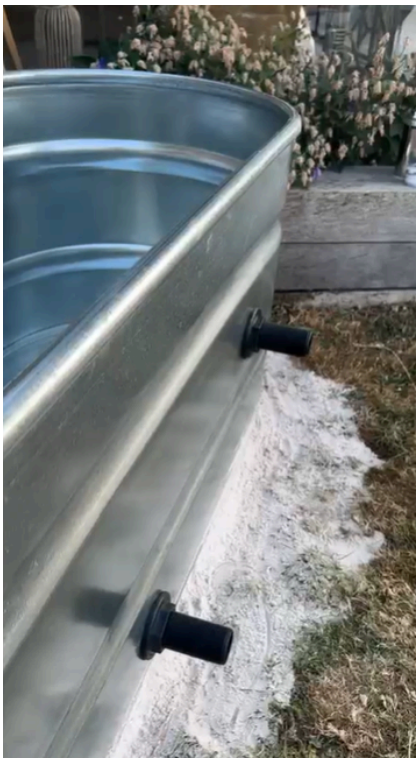
# Step 1 Install the Tub Fittings



*Insert and tighten the first fitting.*



*Seat the second fitting correctly.*



*Both outlets installed and aligned.*

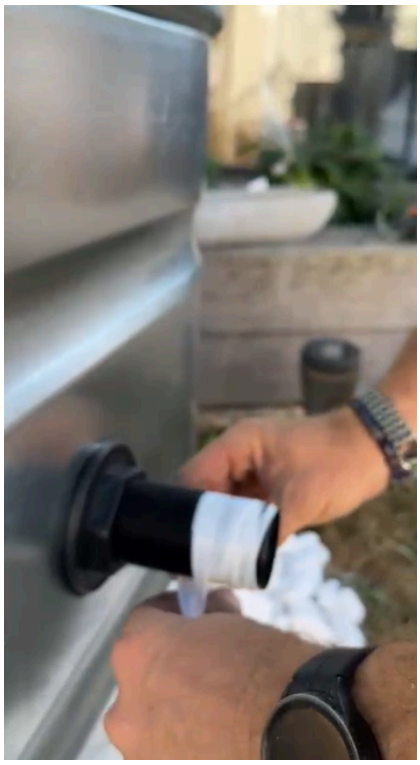
Fit the supplied bulkhead connections into the two pre-drilled openings. Make sure every rubber gasket sits flat against the tank wall and is not twisted. Tighten firmly by hand, then apply only a small additional turn if required.

**IMPORTANT** Do not overtighten. Excess force can distort the gasket or fitting and cause leakage.

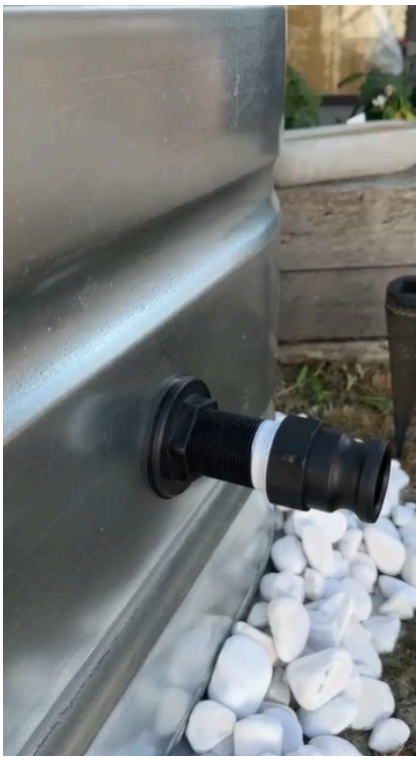
## Check the two connections

- The lower port supplies cooler water from the tub to the bottom of the coil.
- The upper port receives heated water from the top of the coil.

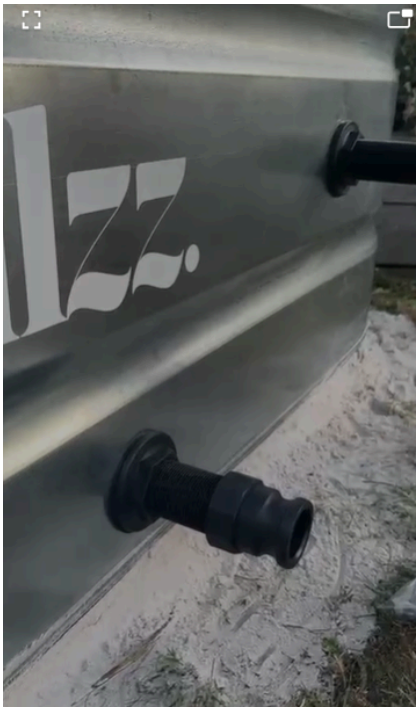
# Step 2 Add the Threaded Hose Adaptors



*Wrap the male thread with PTFE tape.*



*Screw the adaptor into the fitting.*



*Repeat for the second connection.*

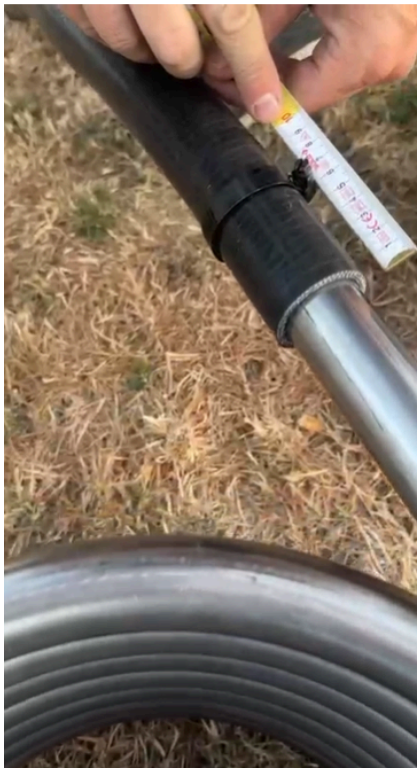
Wrap PTFE tape clockwise around each male thread when viewed from the threaded end. Keep the first thread clear so tape does not enter the water circuit. Screw each hose adaptor into its tank fitting until snug and correctly aligned.

**IMPORTANT** Seal threaded joints only. Do not put PTFE tape on camlock faces or hose tails; those seal with their gasket or clamp.

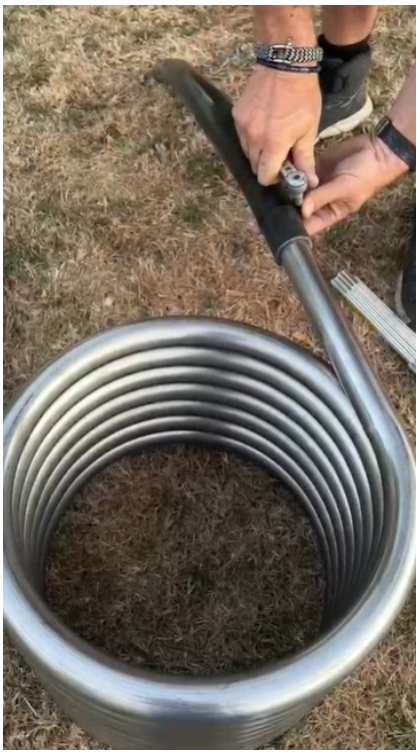
## Alignment

Aim both adaptors toward the coil without forcing them sideways. Side loading can loosen the bulkhead connection or deform the hose.

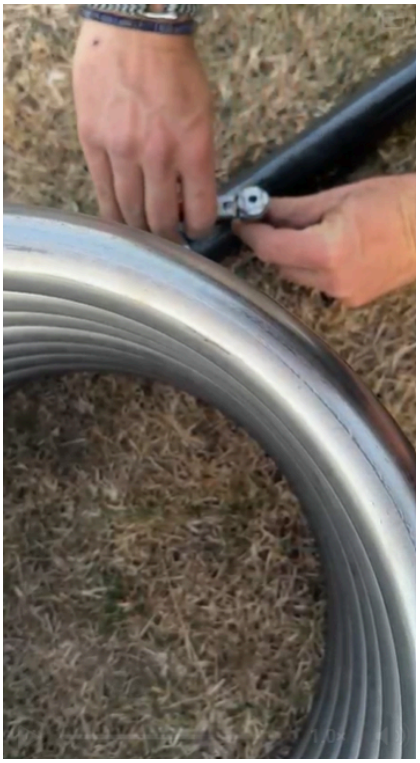
# Step 3



*Measure the required hose length.*



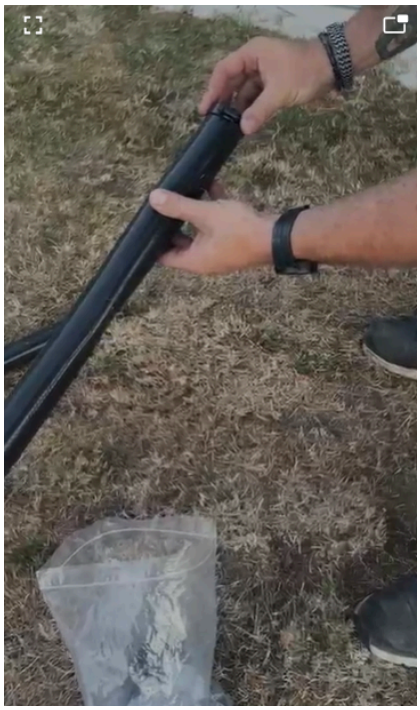
*Cut the hose squarely.*



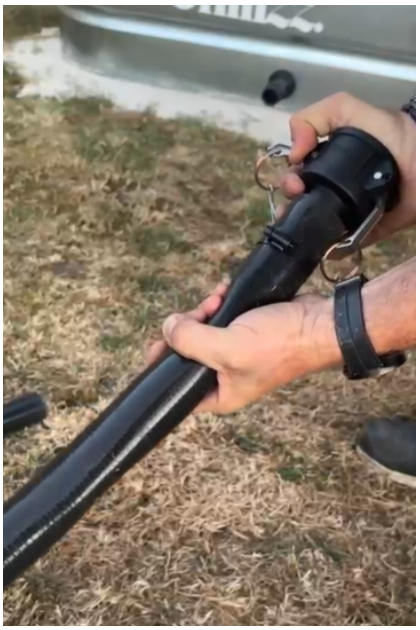
*Slide on the hose clamp first.*

- Slide the hoses on the steel coil and  tighten the clamp

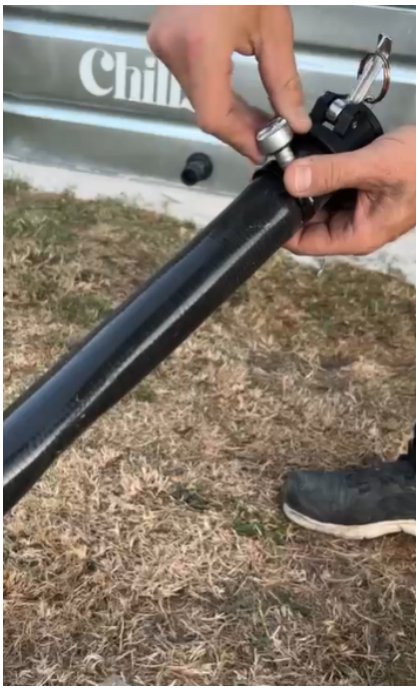
# Step 4 Fit the Camlock Couplings



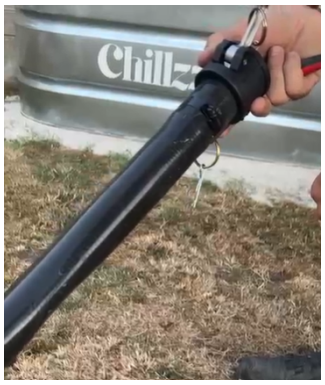
*Push the hose fully onto the tail.*



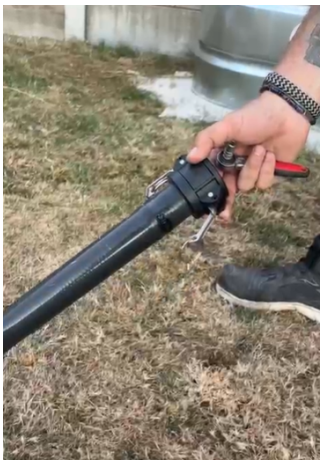
*Position the clamp behind the barb.*



*Prepare the camlock connection.*



*Tighten the clamp evenly.*



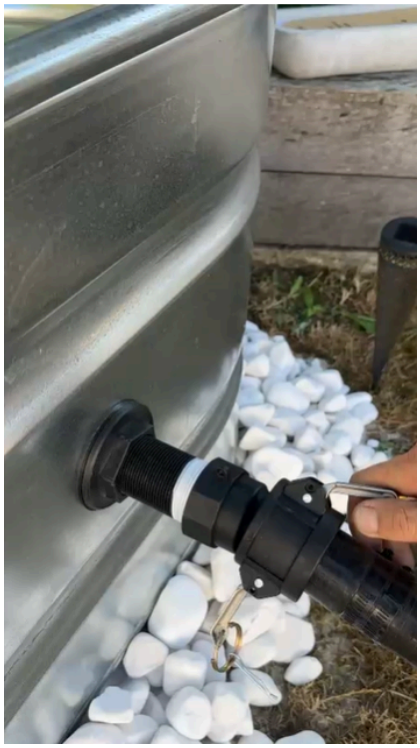
*Close both camlock arms fully.*

Push the hose completely over the barbed tail of the camlock fitting. Position the hose clamp behind the final barb and tighten it evenly. Insert the male camlock into the female coupling and close both arms fully until they lock symmetrically.

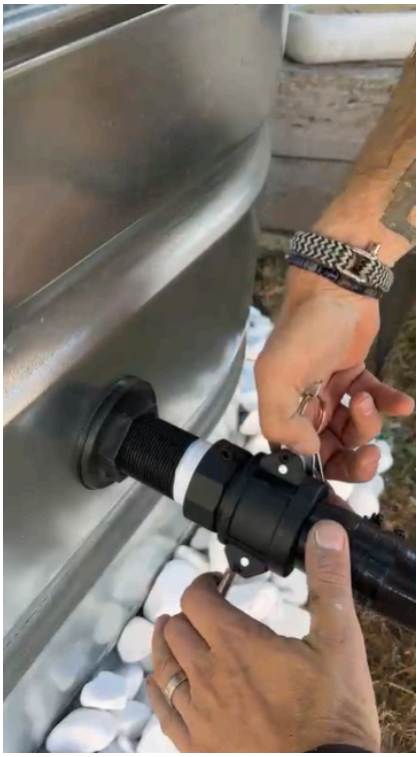
## Repeat for both hoses

Prepare one complete hose for the lower water path and one for the upper return path. Check that the camlock gasket is present, clean and seated flat before closing the arms.

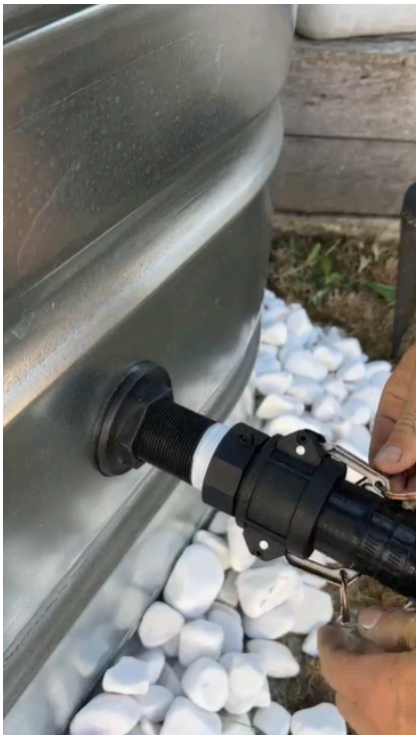
# Step 5 Connect the Coil to the Tub



*Connect the first hose.*



*Lock both cam arms.*



*Connect the second hose.*

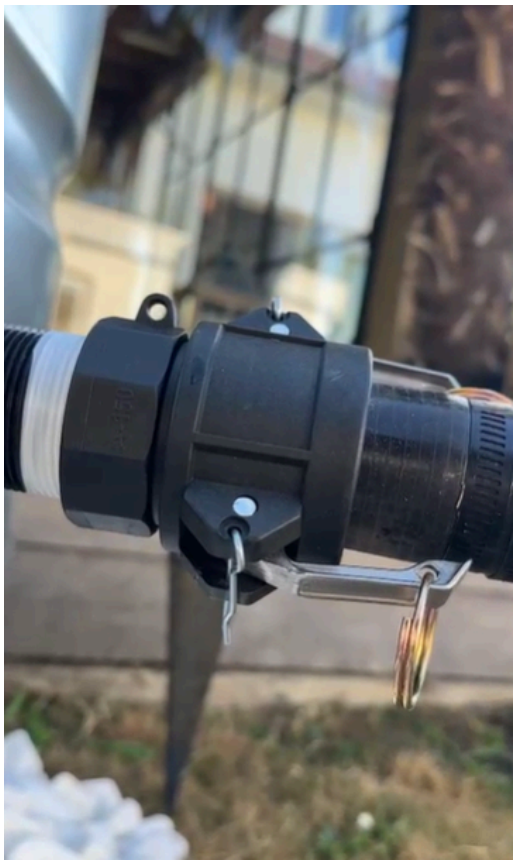
Connect the lower tub port to the lower coil connection. Then connect the upper coil connection to the upper tub port. Close every camlock arm completely and check that the hoses cannot pull the fittings sideways.

## Correct circuit

- Tub lower port → coil lower connection
- Coil upper connection → tub upper port

**IMPORTANT** Never install a closed valve, plug or other restriction in either line while the heater is operating. Heated water must always have an open route back to the tub.

# Step 6 Fill and Leak Test



*Fill the tub and inspect every joint.*

Fill the tub until the water level is safely above the upper return opening. Allow the coil and hoses to fill completely. Gently move or squeeze the hoses to help trapped air escape.

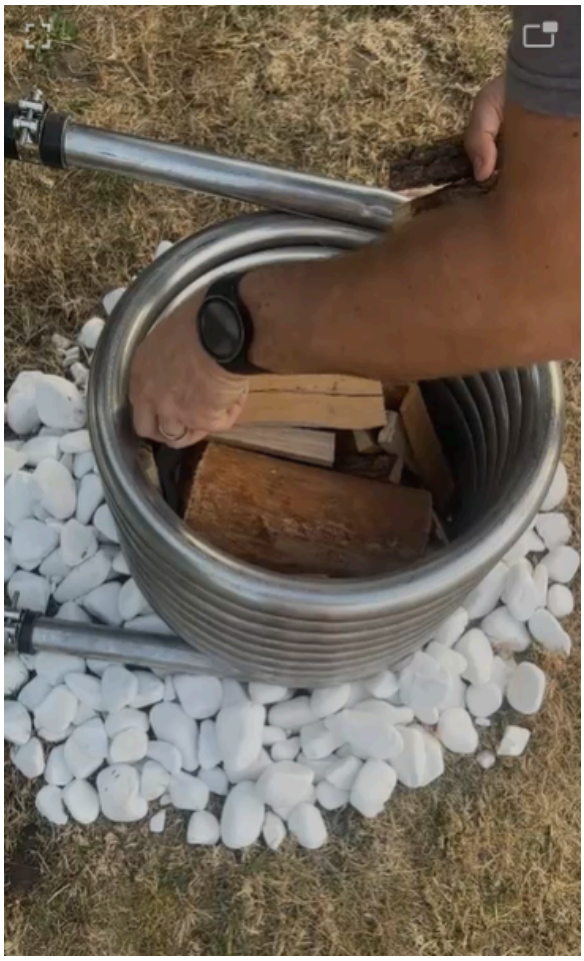
## Inspect every connection

- Bulkhead fitting against the tub wall
- Threaded adaptor connection
- Hose and clamp connection
- Camlock gasket and coupling
- Both coil connections

If you find a leak, do not light the heater. Drain below the connection, reseat or reseal the joint, refill and test again.

**IMPORTANT** Do not use the heater unless the tub, both hoses and the coil are full of water and free from air locks.

# Step 7 Light and Operate the Heater



*Use dry wood and maintain a controlled fire.*

Once the system is full and leak-free, place a small amount of wood inside the centre of the coil. Light a small fire and increase it gradually. Confirm that warmer water begins returning through the upper tub port.

## During heating

- Stir the water and check its temperature regularly in more than one place.
- Use a smaller fire as the target temperature approaches.
- Supervise the heater continuously and keep children and pets away.
- Keep suitable fire-extinguishing equipment nearby.

**IMPORTANT** The coil, connections and return water can cause severe burns. Never touch hot metal. Never sit or stand close to the heater. Do not exceed the temperature limit of the tub or liner.

# Shutdown Care and Troubleshooting

## Safe shutdown

- Stop adding wood and allow the fire to burn down naturally.
- Keep both water lines open and the tub filled until the fire is completely out and the coil is cold.
- Do not drain the tub, disconnect a camlock or close a line while embers or hot metal remain.

## If water does not circulate

- Extinguish the fire safely and stop using the heater.
- Check that the water is above the upper return port.
- Check for kinked hoses, closed or blocked fittings and trapped air.
- Confirm the lower-to-lower and upper-to-upper connection layout.
- Restart only after free circulation has been restored.

## Regular checks

- Inspect hose condition, clamps, seals and camlock gaskets before each use.
- Replace hardened, cracked or heat-damaged hose immediately.
- Keep the coil clean and dry between periods of use.
- In freezing weather, drain the coil and hoses completely after they have cooled.

For product-specific replacement parts or support, contact Chillzz and include photos of the complete setup and the relevant connection.

**IMPORTANT** This guide supports installation of the supplied Chillzz system. Local fire-safety rules, placement distances and water-use requirements always apply.