

# Hoppy's Garden Art

*Artisan Copper Sprinklers*

***Thank you for purchasing this hand-made art!***

## **Easy assembly instructions:**

1. Twist together one male threaded end into the female threaded end to make one long pole
2. Twist the copper pole tightly into the steel base assembly
3. Spread the legs wide on the base assembly. Tighten the lock nuts as needed to reduce wobble

## **For long life and optimum operation follow these simple suggestions:**

For optimum operation **these sprinklers require 50 PSI of water pressure at the sprinkler-end of the hose.** The base assembly should be positioned in the ground so the copper pole is vertical and not leaning in any direction.

When inserting the sprinkler into the ground, **DO NOT USE THE COPPER POST AS A LEVER** to work the base assembly into the ground. Instead, step evenly on the base pushing it firmly and evenly into the ground. Do not stomp or pound the base into the ground. If your ground is hard, you may need to first loosen the soil in order to fully insert the base assembly. Because of its top-heavy nature, a minimal degree of wobbling while operating is normal, just keep the base secure and vertical, and the lock nuts tight to keep wobbling minimal.

Ease the water on to start the spray, then, slowly turn the pressure up. Do not “pop” on the water all at once or you risk ejecting and damaging the hoops. For this reason, the sprinklers cannot be connected to an automated watering system. It can however be on it’s own system line, and turned on/off manually.

When relocating/removing the sprinkler base assembly from the ground, **DO NOT USE THE COPPER POLE AS A LEVER TO LOOSEN OR PULL OUT THE ASSEMBLY.** Instead, pick it up by the base. You may need to use a pry tool to loosen it from the ground before removing it.

## **Maintenance Tips:**

**ROTATION** - It’s not uncommon for water to leave mineral deposits, especially if the sprinkler is used intermittently. If the hoops become “sticky” and do not spin properly or freely, as necessary, clean the hoops’ brass stems with steel wool until they’re shiny. Other than the water itself, no other lubrication is required. However in low pressure situations, a waterproof lubricant will help the spinning stay consistent. Simply dab a little lube on each brass stem.

**BALANCE** - Your inner copper hoop with the spiral/glass is balanced at creation to spin evenly and consistently. If the hoop is dropped or roughly handled the glass ball held by the copper spiral may become off-center resulting in an out of balance spin and not operate properly. If this occurs, please do the following: remove the base and pole assembly from the soil and place on solid ground or floor. Remove the large hoop and insert the small hoop into the top of the pole. Brace with one hand (or have an assistant help) the side of the pole against the edge of a table, workbench or other stable surface – the pole must not move. Allow enough room for the small hoop to be spun. Kneel, squat or sit with your eyes at glass ball height, and look past the glass ball at any vertical line, such as a wall corner or post – if none, reposition yourself and sprinkler until you see one.

*continued*

Now, keeping the pole braced, look through and past the copper spiral at your vertical line and slowly spin the hoop. You will see the glass ball and the spiral rotating off-center. Your goal is to make them centered. As you slowly spin the hoop, manipulate the spiral and glass by pushing and pulling on each into a re-centered position (the copper and glass will not break), continuing to use your vertical line as a centering measurement.

Keep slowly spinning the hoop and manipulating the spiral and glass until the outside edge of the glass ball stays aligned with your vertical line. *Take your time.* Further the rebalancing by adjusting the spacing between the spiral's coils.

Squeeze or spread apart the coils until the coils are symmetrically spaced and even, and the outside edge of the spiral also is aligned with your vertical line. Once you have everything re-centered, your sprinkler is ready to be placed outside.

**STABILITY** - The base assembly's steel legs must remain parallel to each other, and go straight into the ground. If after moving and inserting into the soil several times the legs start to spread wide, remove the hoops, remove the base/pole assembly from the soil, flip the assembly so the legs point upward, grasp and bend the legs back into a straight, parallel shape. As necessary, tighten the lock nuts.

**APPEARANCE** - The copper is uncoated, and will naturally age, or "patina" to approximately the color of an old penny, with hints of green.

You have three options for continued appearance:

1. Let the copper patina naturally by doing nothing;
2. Enhance the patina process: *search online for "homemade patina for copper" and follow the instructions;*
3. Keep the copper shiny and gleaming: *polish the copper with steel wool (it won't scratch), then apply a liquid car wax as directed on the package, or, mask the ball and lightly mist the copper with clear spray acrylic 3-5x, letting each coat dry*

For suggestions 2 and 3, also do the copper pole but keep the product off of the brass stems and from inside the brass collars. When finished poke the spray holes clear with a toothpick or small nail.

**NOT SPINNING CONSISTENTLY** - If your sprinkler doesn't spin properly (and you've polished the stems) you may be in a low water pressure situation. In many cases marginal water pressure situations can be resolved! To improve performance here are a few things to try:

1. Reduce the length of your hose run: due to the friction of the interior, the water pressure decreases as it travels the length of the hose. Shortening the hose increases the water pressure at the sprinkler end of the hose. Also, do not use hoses thin in diameter.
2. Try some waterproof grease or lubricant: dab a small amount of lube on the brass stem(s) to increase the ability of the water spray to spin the hoops.
3. Increase the amount of pressure from the hoops' side holes: the hoops spin because the water pressure coming out of the side hoop holes propels the hoops in a circular motion. To increase the pressure from the sides, plug 1 - 4 of the hoops' upper holes temporarily with tape, then test until your hoops spin satisfactorily. Once you have achieved the desired performance make the blockage unnoticeable by permanently closing the holes with a tiny dab of epoxy or solder.

*Now, turn on the water,  
get the kids playing,  
sit back with your favorite adult beverage,  
and be mesmerized by the hypnotic motion,  
spray and beauty of your wonderful new sprinkler!*

**[www.HoppysGardenArt.com](http://www.HoppysGardenArt.com)**

**Satisfaction guaranteed.** *If you have any performance issues, contact the artist, Steve Hopkins  
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**Additional color selections available at [www.HoppysGardenArt.com](http://www.HoppysGardenArt.com)**