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# CWS 5g/hr. Ozone Generator with Diffuser System



# CWS 5g/hr. Ozone Generator with Diffuser Set-up Guide


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Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your system will be providing iron free water for many years.

**Please review this start-up guide entirely before beginning to install your system and follow the steps outlined for best results.**

**For indoor installation. Protect from sunlight, rain, and freezing.**

## Questions?

 **Call us toll-free:** 1-888-600-5426 or 1-831-462-8500

 **Email us:** [support@cleanwaterstore.com](mailto:support@cleanwaterstore.com)

 **See more information on our website:** [www.cleanwaterstore.com/resources](http://www.cleanwaterstore.com/resources)

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# CWS 5g/hr. Ozone Generator with Diffuser Set-up Guide

## Packing Lists

Ozone Generator Unit 5 gr/hr.

### Optional:

- **Diffuser Stone Assembly**

Qty1 Diffuser Stone 9"

Qty1 Kynar 1/4" MPT x 3/8" compression fitting

Qty1 Kynar 1/2" FPT x 3/8" compression fitting

20' PTFE tubing (3/8" diameter)

- **Ozone Air Dryer**

Qty 1 Cartridge (White)

Qty 1 Cartridge (Blue)

Qty 6 3/8" x 1/4" MPT JG fittings

Qty 1 5' 3/8" tubing

- **Oxygen Separator**

Qty 1 5' clear tubing with hose clamp

Qty 1 Stainless Steel barb x 1/4" x MPT fitting

Qty 2 Hose Clamps

## How your Ozone Generator Works

### System with External Drying Cartridges

The CWS 5gr./ hr. Ozone generator has an internal pump. The pump pushes ambient air through the external dryer cartridges and then into the Ozone corona discharge tube. The Ozone is then sent out of the unit through PTFE tubing and into a diffuser stone located inside the storage tank.

### System with Optional Oxygen Separator

This configuration does not use the internal CWS 5gr./ hr. Ozone pump but uses the Oxygen Separator pump. The Oxygen separator connects directly to the air input of the Ozone Generator. The Separator pump pushes clean Oxygen into the Generator Ozone corona discharge tube. The Ozone is then sent out of the unit through PTFE tubing and into a diffuser stone located inside the storage tank.

## Best Practices for System Location and Plumbing Installation

1. Pick a suitable spot for your system installation.
2. Install on a level floor or surface.
3. System must be installed at least 10 feet ahead of inlet to water heater to prevent damage due to back-up hot water or use a check valve to prevent hot water back-up.
4. DO NOT install the unit in an area of direct sunlight, rain, or exposure to freezing temperatures.
5. Locate the unit near 110v electrical service.
6. Locate unit above contact tank when possible.
7. Use 1 ½ to 2 wraps of Teflon tape on all pipe fittings unless specified.
8. Do not use any thread tape or sealant on compression fittings.

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### System Installation Steps for use with External Dryer Cartridges

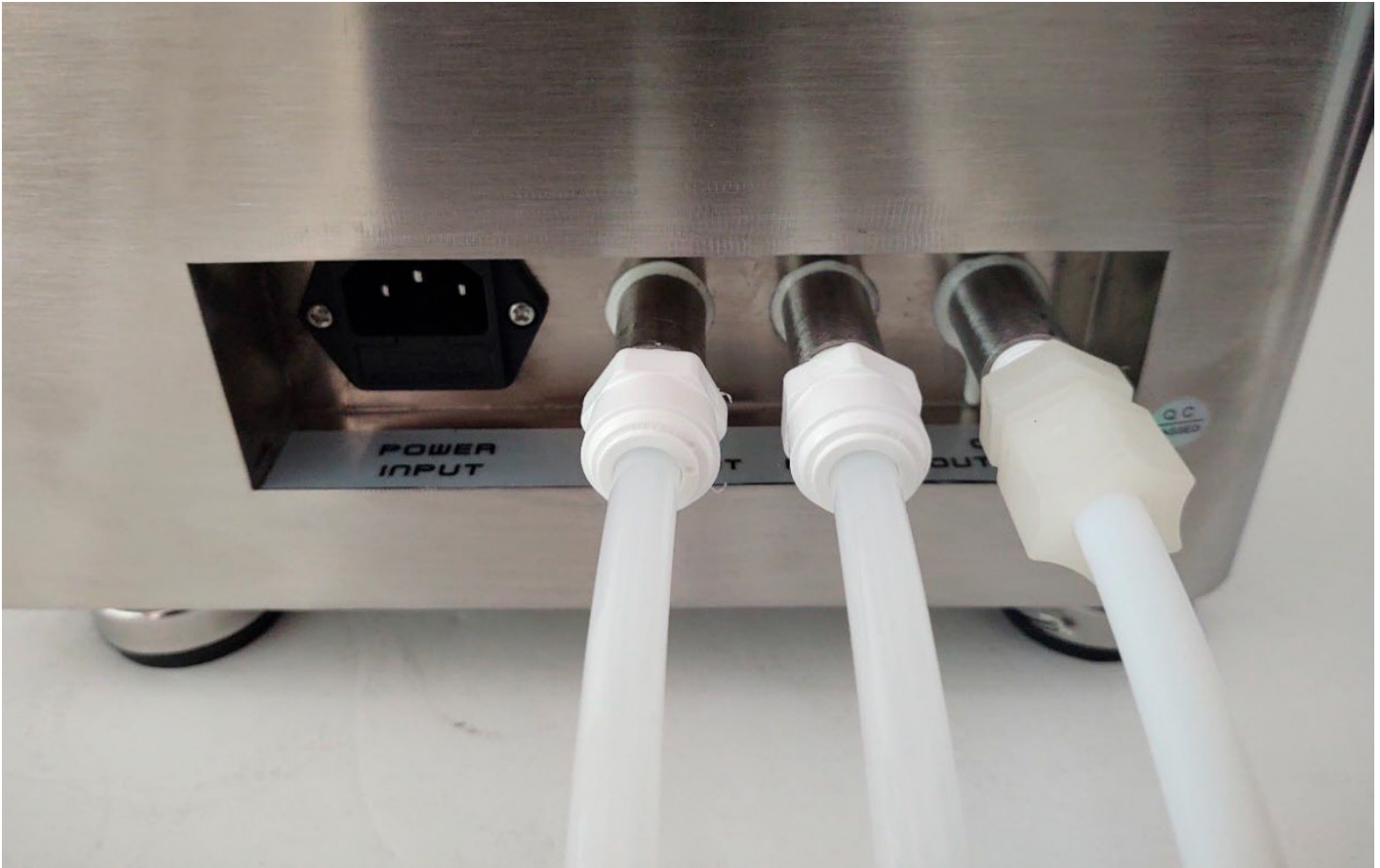
1. Mount Ozone Generator to the wall or on a shelf. Mount the two external air dryer cartridges near the generator (using the provided clips). Air will be pushed through the white filter first, then the blue filter, then into the Ozone generator.
2. Install Qty. 4 provided 1/4" NPT x 3/8" quick connect fittings into the inlets and outlets of both the white and blue filter housings using 1-2 wraps of Teflon tape. (Note flow direction on the filter housings).
3. Install Qty. 2 provided 1/4" NPT x 3/8" quick connect fittings into the Ozone generator air inlet and air outlet ports using 3-4 wraps of Teflon tape.
4. Connect the dryer assembly using the provided 3/8" poly tubing into the QC fittings and secure. (Note flow direction on the filter housings). The outlet of the blue filter goes into the (AIR INPUT PORT) and the inlet of the white filter goes into the (AIR OUTPUT PORT) This completes the air-drying system.



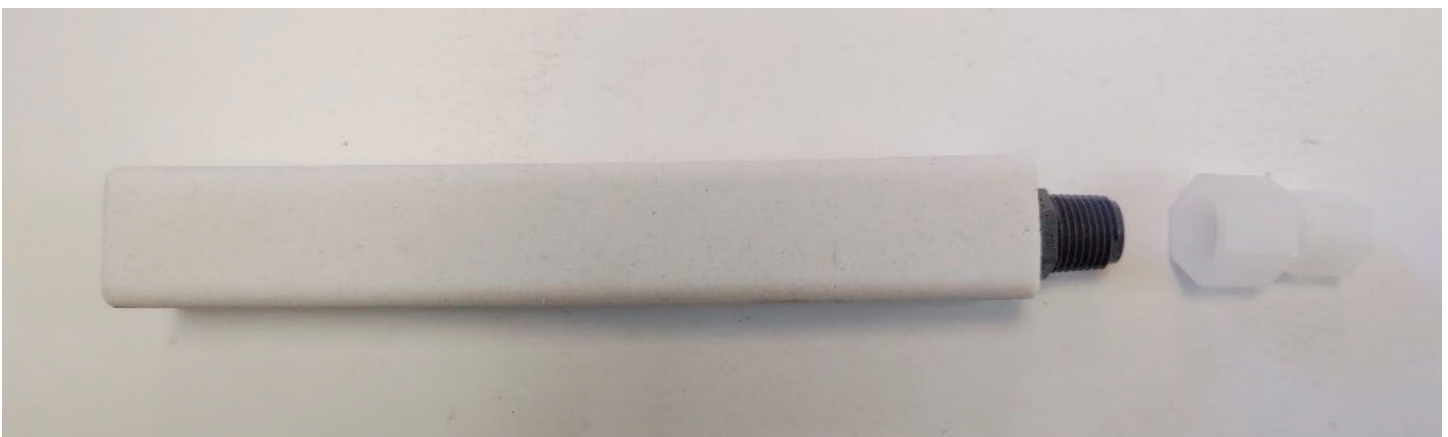


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5. Install the Qty. 1 provided 1/4" MPT x 3/8" compression Kynar fitting to the O3 outlet port using 3-4 wraps of Teflon tape.



6. Install the 1/2" FPT Kynar fitting to the diffuser stone using 1 1/2-2 wraps of Teflon tape. Connect the 20' of 3/8" PTFE tubing between the diffuser stone and the O3 outlet on the Ozone Generator. Make a loop in the tubing between the generator and the diffuser going into the tank to prevent water getting into the Ozone generator.

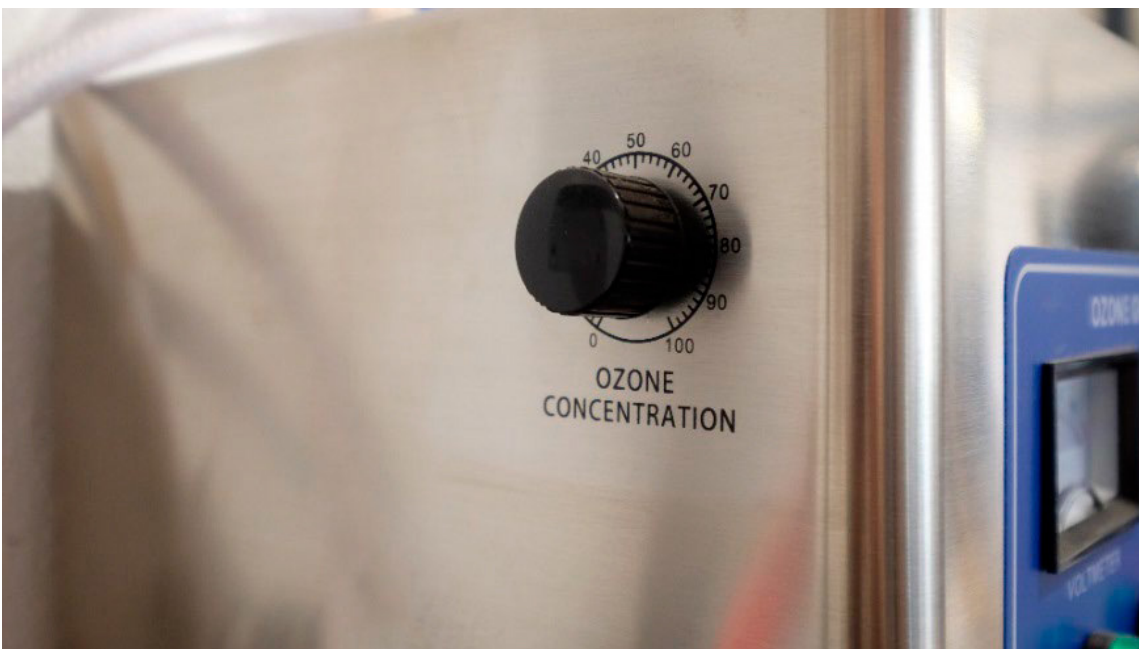


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7. Turn off both the air pump and the Ozone switch on the front of the Ozone Generator.
8. Plug in the Ozone Generator and turn on power to the entire system (Note, the system will not be creating Ozone with the switches turned off).
9. Verify the timer is in manual mode. The light on the upper left corner should be illuminated. If it is not, depress the manual button until the light come on. You are now in manual mode.



10. Turn on the Ozone and Pump switches. You will start injecting Ozone through your diffuser stone. You can adjust the Ozone concentration by adjusting the control knob on the side of the unit.

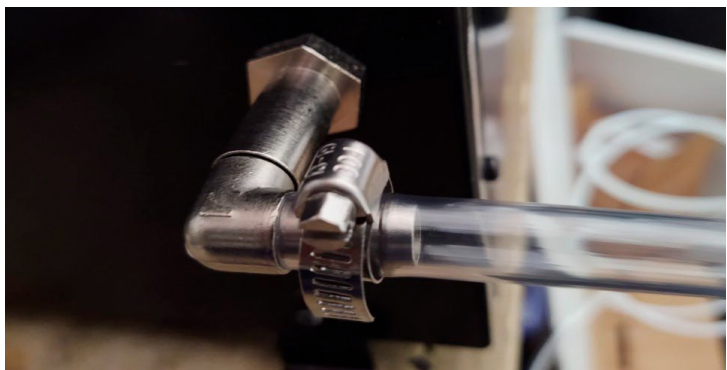




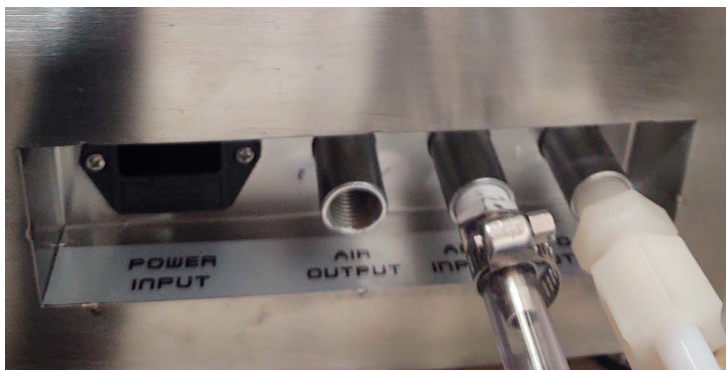
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## System Installation Steps for use with Oxygen Separator

**Note:** External drying cartridges are not required if you are using the Oxygen Separator. In addition, when using the Oxygen Separator, the pump in the ozone generator is not used.



1. Install 3/8" ID tubing to the outlet of the Oxygen Separator and secure with a hose clamp as shown.



2. Install the other end of the tubing to the air inlet port of the O3 Generator as shown



3. With the Ozone Generator internal pump off and the ozone on, plug in the Oxygen Separator and adjust flow using the flow meter mounted on the front of the unit.

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## Limited Warranty

### Ozone Generator

The CWS Ozone Generator is warranted to be free of defects in materials and workmanship for a period of one (1) year, subject to the manufacturer's conditions and/or the conditions shown below.

### Conditions

1. Installation must be made in accordance with legal or local codes and manufacturer's recommendations.
2. Failure must not result from exposure to weather, rodents, misuse, alteration, fire, lightning, power surges or neglect.
3. Subject to the above terms and conditions we will replace and/or repair, at our option, any parts of the water conditioner found defective in materials and workmanship. Defective parts must be returned, freight pre paid for repair or replacement.
4. This warranty does not cover labor, shipping charges, damages caused by delays of consequential damages or other causes beyond our control. Warranty does not cover pipes, fixtures or appliances. Warranty extends to the actual water conditioner components only.
5. This warranty is to the original purchaser and is not transferable after the third year to any subsequent owner(s).
6. No other guarantees or warranty, expressed or implied, is applicable to our product. No repair or replacement made under the terms of the warranty shall extend this warranty.