

## **MDV-100 Installation Instructions**

The MDV-100 will effectively separate ozone bubbles from the ozonated water produced by the Solar Eclipse. When the flow enters the MDV-100, the ozone bubbles are allowed to float up and accumulate at the top as the water exits out the bottom. The separated ozone passes through a float valve and is sent through a carbon destruct and neutralized to safely vent to the atmosphere.

The MDV-100 should be used in all indoor, covered, and vinyl lined pools where there is a Solar Eclipse installed. It can also be used in outdoor applications to eliminate bubbles in your return flow.

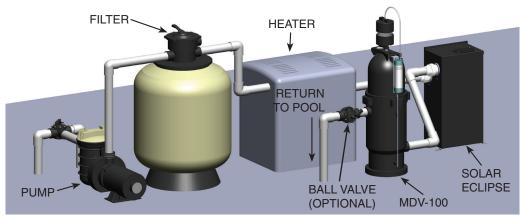
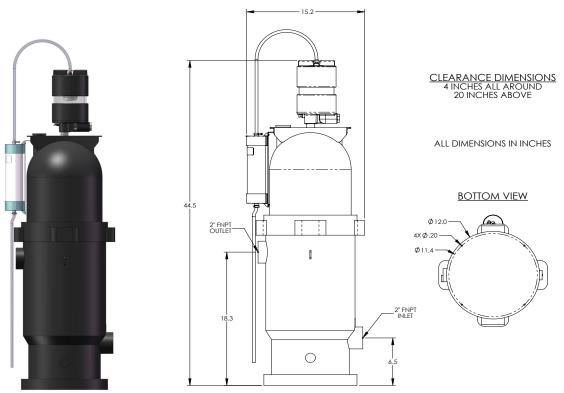


Figure 1: System View

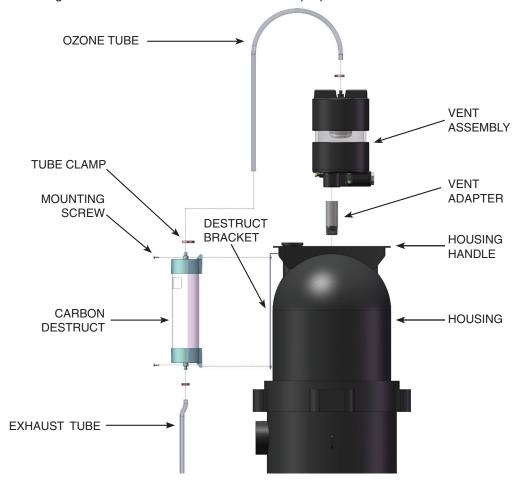
## **INSTALLATION:**

1. Plumb the MDV-100 downstream of the Solar Eclipse as seen in Figure 1. The MDV-100's inlet and outlet fittings are 2" FNPT, use the correct fittings and thread sealant to plumb into the circulation loop. Refer to Figure 2 for footprint and clearance dimensions before placing the MDV-100 on your equipment pad.



**Figure 2: Critical Dimensions** 

- 2. Apply thread sealant to Vent Adapter threads. Install Vent Adapter through the hole in the Housing Handle and into the Housing as shown in Figure 3.
- 3. Use PVC primer and PVC glue to attach the Vent Assembly to the open pipe end of the Vent Adapter. Orient the Vent Assembly as shown in Figure 3.
- 4. Mount the Carbon Destruct to the Destruct Bracket with the two Mounting Screws provided as shown in Figure 3.
- 5. Connect the Ozone Tube and Exhaust Tube using the Tube Clamps as shown in Figure 3. Tubing Clamps should be tightened behind the hose barb feature for proper attachment.



**Figure 3: Assembly Components** 

- 6. The Exhaust Tube will release small amounts of condensation and carbon under normal operation. To avoid water or carbon stains, route the Exhaust Tube to divert the condensation to a suitable location
- 7. If the MDV-100 is located well above the water line, an additional ball valve may be needed to maintain an adequate water level in the Housing. Install the ball valve just after the MDV-100 outlet as shown in Figure 1.

Note: In cases where the MDV-100 is located above the water line, bubbles will be seen in the return line upon startup. The bubbles will stop once the MDV-100 fills with water.



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