

RainSoft Division of Aquion Partners, L.P.®

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RainSoft®

Water Treatment Systems

*AIRMASTER*_{plus!}

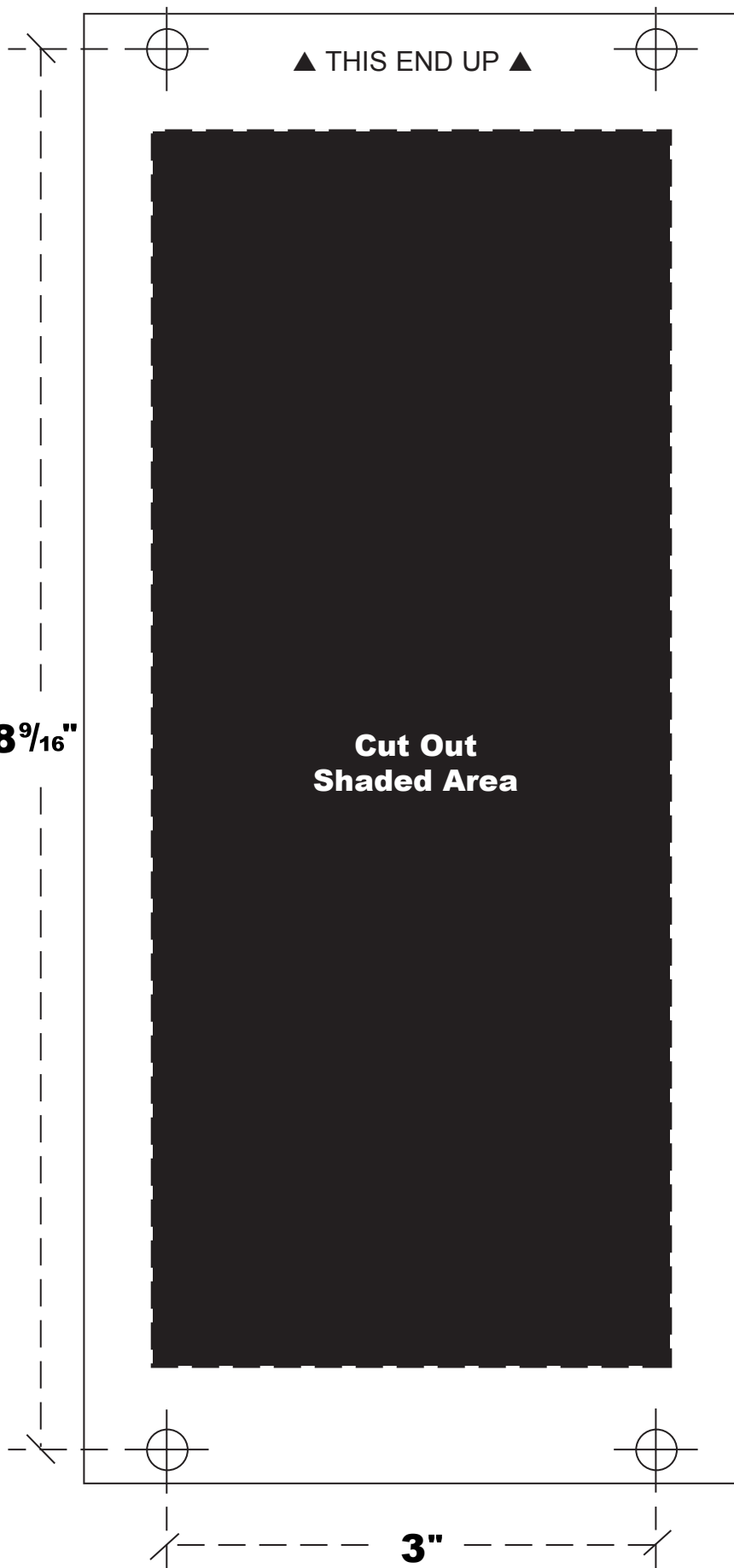
Installation & Owners Manual

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8⁹/₁₆"



INSTALLATION TEMPLATE

Limited Lifetime Warranty

Rainsoft Division of Aquion Partners L.P.[®], believing its **Airmaster Plus Treatment System** to be of exceptional quality, hereby warrants said equipment to its first purchaser at retail as follows:

AIRMASTER PLUS IS WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR THE LIFETIME OF THE FIRST PURCHASER AT RETAIL.

ELECTRICAL ITEMS are warranted against defects in manufacture for a period of **FIVE YEARS**.

EXPENDABLE ITEMS such as germicidal lamps and ozone lamps are **NOT** warranted for any length of time.

This warranty begins at the time the equipment is first connected for use, and is contingent upon the return of a signed owner's registration card.

This warranty does not require replacement of the entire unit. If the equipment does not perform properly, you should request service from the dealer that sold you the equipment. If you are not satisfied, you should notify our Customer Service Manager. If the manager is not able to arrange local servicing, you should send the defective part(s) directly to the manufacturer, freight prepaid, with proof of purchase and a copy of this warranty. The defective part(s) will either be repaired or new AIRMASTER PLUS part(s) furnished, for a nominal charge to cover labor, handling, packing and the increase, if any, in the retail price of the part(s) since the date of purchase. Broken lamps due to shipping or installation handling are not covered. Genuine AIRMASTER PLUS parts must be used. Failure to use genuine AIRMASTER PLUS parts will void the warranty and certifications.

This warranty does not include labor charges, and does not cover installation, transportation, or any other claims or torts. Some states do not allow the exclusion or limitation of incidental or consequential damages, so parts of the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You also have implied warranty rights. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, a state court, or a Federal District Court.

This warranty is void if equipment is not installed and operated according to instructions. It does not apply to damage caused by abuse, accident, neglect, fire, or other abnormal conditions beyond our control. This warranty is void on any part from which the manufacturing date has been removed or made illegible.

Benefits will be provided by various types of RainSoft equipment when installed and operated according to the manufacturer's recommendations. Operational, maintenance and replacement requirements are essential for the product to perform as advertised. All claims are based on the best available information at the time of printing. Manufacturer makes no representations as to the suitability of this equipment for a particular application. Buyer relies entirely on the dealer's recommendations in the purchase of this equipment.

Independent RainSoft dealers may include, together with your RainSoft product, a product or component that is not manufactured by RainSoft or their parent company, Aquion Partners, L.P. Any non-RainSoft product may be covered by the manufacturer of that product and is not covered by the RainSoft warranty. Aquion Partners, L.P. does not warrant that your RainSoft product and the non- RainSoft product will perform properly when used together, and assumes no liability therefore.

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ENJOYING YOUR AIRMASTER PLUS UNIT

Congratulations! You now have the finest whole-house air treatment system available. It will provide you with years of fresh, clean air with a minimal amount of attention.

To make operating and maintaining your unit as simple as possible, please read this Owner's Manual. It contains all of the information you will need and retain for future reference.

This unit was shipped from the factory ready for operation and will begin delivering cleaner, fresher air the instant your heating/cooling system is turned on.

This unit is designed to help remove household odors ranging from food, tobacco smoke, pets and other objectionable smells that may be present in your home.

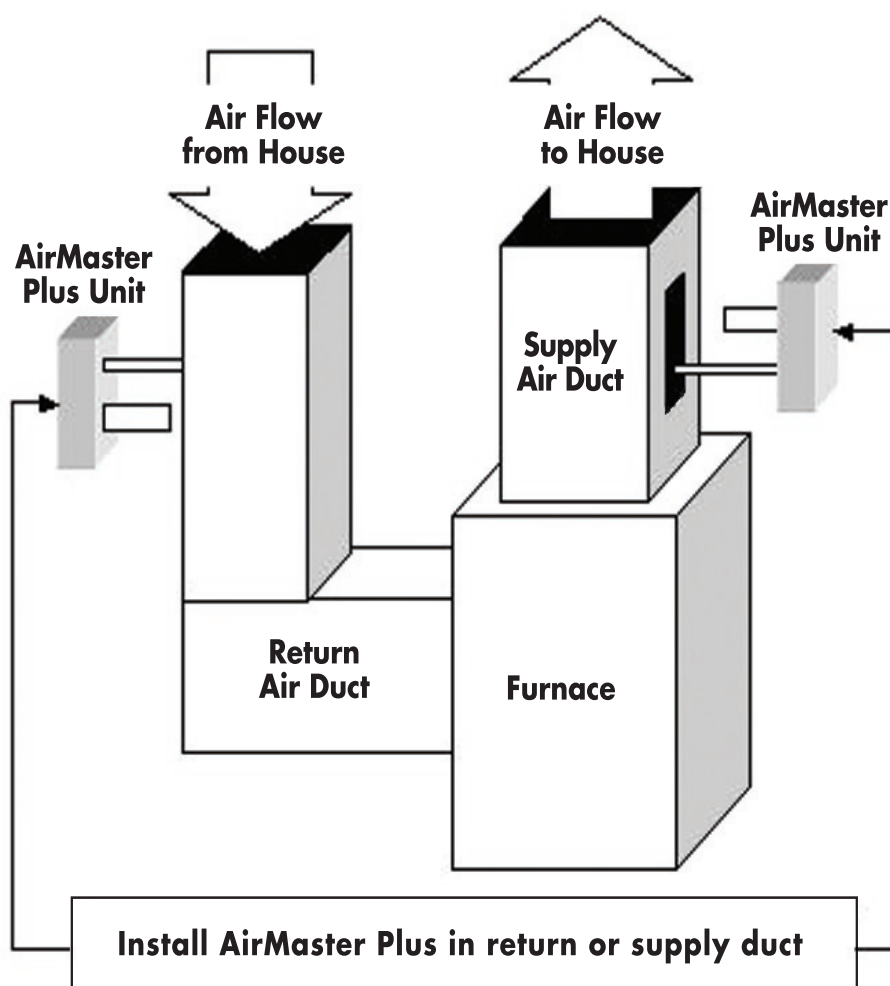
To receive optimal benefit and performance from the unit, your furnace or air conditioner fan should be in the "ON" position at all times.

IMPORTANT SAFETY INSTRUCTIONS

Always make sure the system is unplugged during installation or service procedures.

The ultraviolet light produced by the UV lamps is harmful to the eyes. Do not look directly at the lamps. Should it become necessary to look at the lamps, use UV-protected sunglasses.

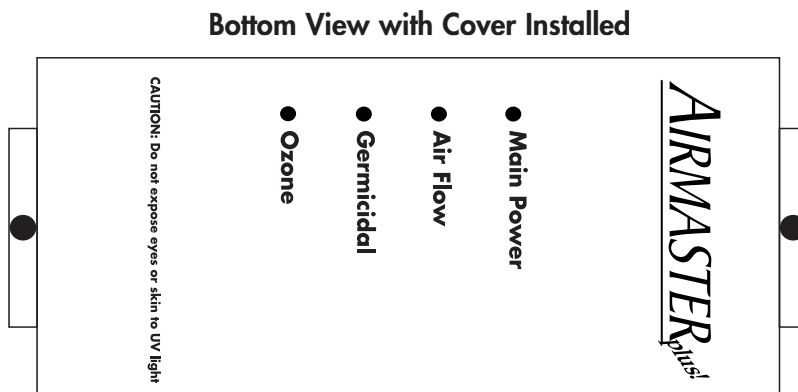
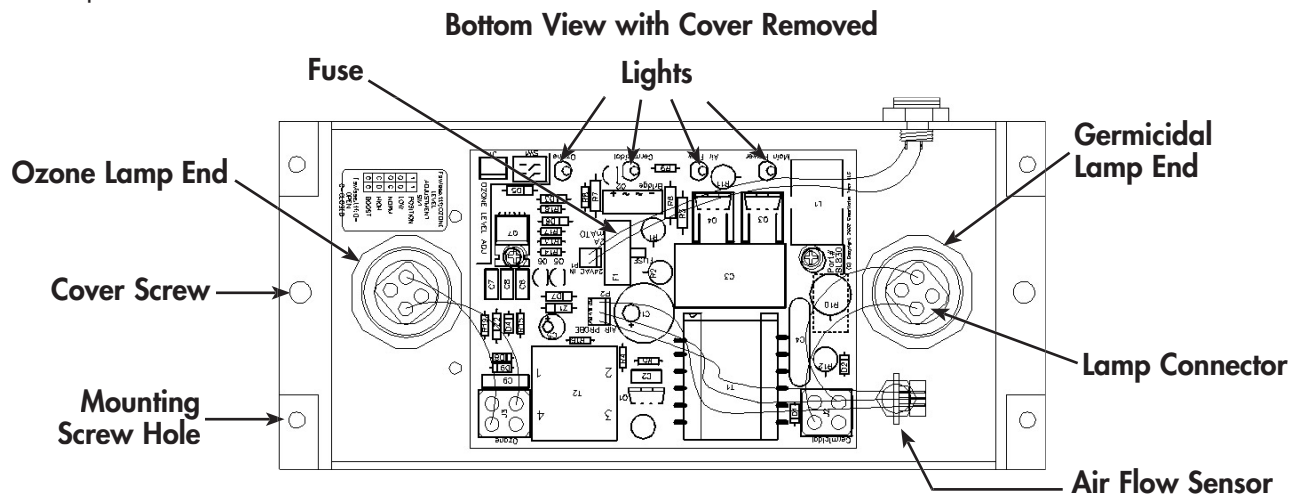
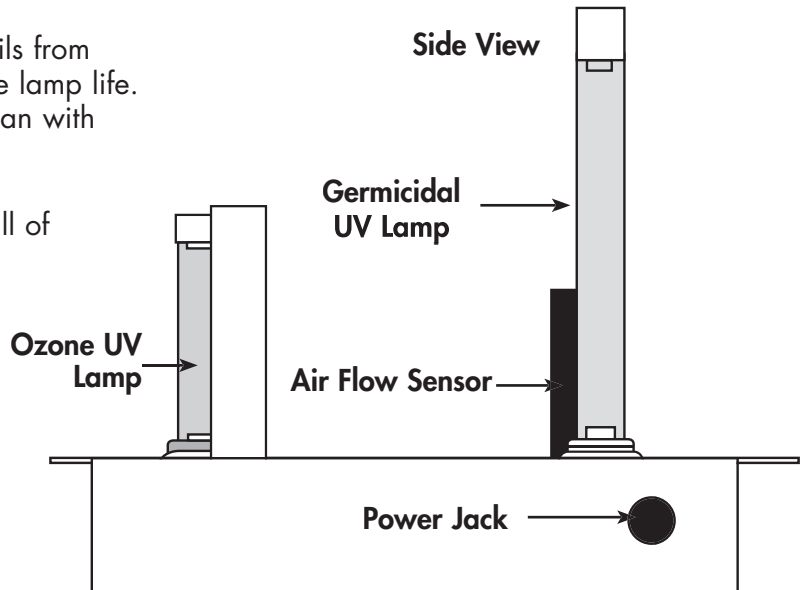
The AirMaster Plus may be installed either in the main return duct or main supply duct as shown in the diagram. When installing on the supply side, locate it as far away from the heating source as practical while remaining in the main air stream.



UNPACKING YOUR AIRMASTER PLUS UNIT

Unpacking the AirmasterPlus unit.

1. Each unit is shipped ready to install.
2. Carefully remove unit from the package. The lamps are fragile and proper care must be taken when removing packaging that is placed around them.
3. Do not touch the lamps with your bare hands, as oils from your hands can create "hot spots" which reduce the lamp life. In case of contact with the lamp, wipe the lamp clean with a soft cloth dampened with rubbing alcohol.
4. Check the parts list below to make sure you have all of the components.
 - One AirmasterPlus air treatment system
 - One wall-mount transformer
 - Four self-tapping screws.
 - Installation/owners manual
 - Warranty card
 - Wiring to connect from transformer to unit (20', two-conductor cable with plug)
 - 2 crimp terminals



TROUBLESHOOTING GUIDE

SYMPTOM

SOLUTION

No power

Verify that the transformer is properly plugged into wall outlet and the power cord into the power jack on unit.

If the cord is properly connected, test the wall outlet with AC tester to make certain it is functioning properly. If not working, consult an electrician.

If unit still does not function

If there is power to the wall outlet, unplug the power cord from the power jack on the AirmasterPlus unit. Using a voltmeter, measure the AC voltage from the transformer. Make sure the voltage is 21 to 26 volts. If not, replace the transformer. (Item # 7, Page 8).

If unit is still not working, remove cover from the Airmaster unit and check the fuse on the circuit board. If fuse is blown, replace (Item # 4, Page 8).

Check the power light. If light is still not on, replace the ballast. (Item # 6, Page 8).

Air flow test

For the following tests make sure there is no air flow across unit.

Unplug the power cord from the power jack for 1 to 2 minutes. Plug the power cord back into the power jack. The airflow light will illuminate for 30 to 120 seconds. After the light turns off, start the system fan. The airflow light should illuminate within 30 seconds. If not, replace the air flow sensor (Item # 5, Page 8). If that does not work, replace the ballast. (Item # 6, Page 8).

Testing the lamps

Testing the lamps requires the HVAC blower to be running.

If ozone lamp is not lit, replace (Item # 2, Page 8).

If the germicidal lamp is not lit, replace (Item # 3, Page 8).

If this does not work, replace the ballast (Item # 6, Page 8).

If above testing does not work, contact your local RainSoft Dealer.

AIRMASTER PLUS PARTS LIST

- 1 AirmasterPlus Assembly 65046
- 2 AirmasterPlus Ozone Lamp 65501
- 3 AirmasterPlus Germicidal Lamp 65048
- 4 AirmasterPlus Fuse 65005
- 5 AirmasterPlus Flow Sensor 65006
- 6 AirmasterPlus Ballast (Board) 65049
- 7 AirmasterPlus Transformer 65047

SPECIFICATIONS

Ozone Lamp

Ozone lamp is 185 nm, cold cathode.
Average life is 20,000 hours.

Germicidal Lamp

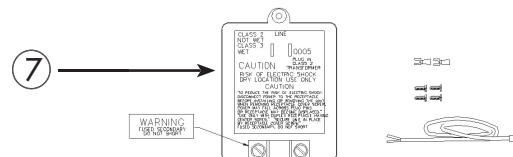
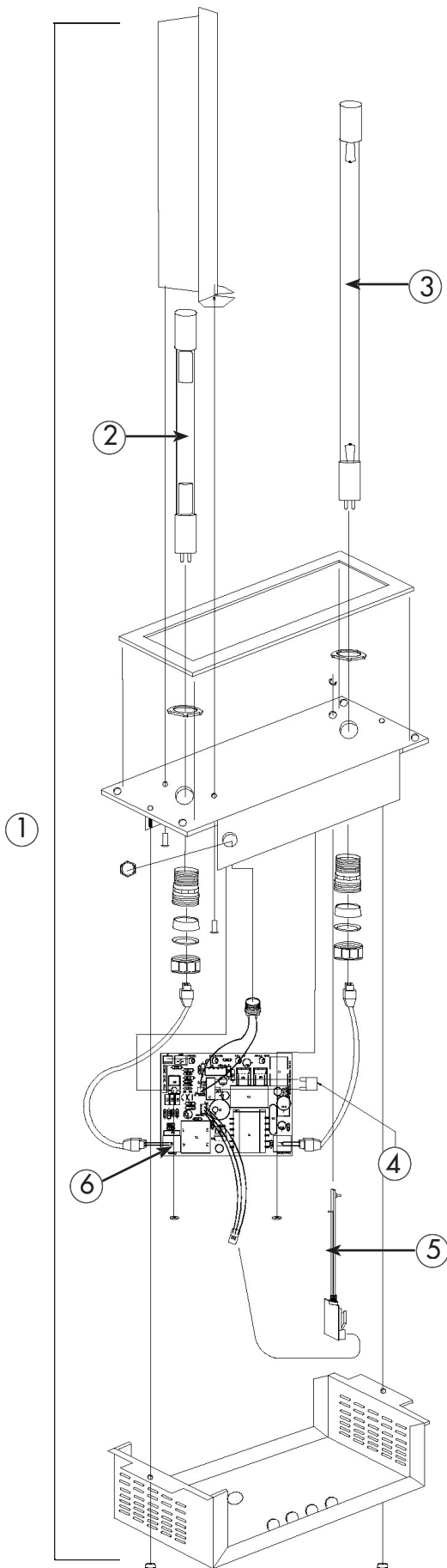
Germicidal lamp is 254 nm, filament.
Average life is 20,000 hours.

Input

120 Vac, 60 Hz

Output

24 Vac, 50 VA



INSTALLING YOUR AIRMASTER PLUS UNIT

1. Cut out the shaded area of the template located on page 11, or use the hole saw template on page 12.
2. Center the template on the ductwork using tape.
3. Trace the hole pattern for the system and mark the centers for the mounting screws. The unit must be oriented lengthwise on the ductwork as shown on page 3. Note: Orientation of the unit with respect to "air flow". Germicidal UV lamp is upstream. Ozone UV lamp is downstream.
4. Cut out the openings for the unit. Position unit in openings.
5. Insert and tighten self-tapping screws with 5/16" nut driver.

Start up of the system:

6. Cut the two-conductor power cords to desired length and strip the ends back 3/8".
7. Slide crimp-on spade terminals on to ends of low voltage two-conductor power cord; crimp in place.
8. Slide spade connectors under transformer screw heads and tighten.
9. Plug the power cord into the unit's power jack, then plug the transformer into a non-switched 120 Vac outlet. All of the lights will remain on from 30 to 120 seconds. After the lights turn off, only the main power and germicidal lights will be illuminated. Assuming there is no air flow at this time, turn on the heating/cooling system fan to initiate air flow. All of the lights should illuminate.
10. Allow the heating/cooling system to operate for several minutes.
11. Turn the unit off. The AirmasterPlus unit will shut down within 5 to 30 seconds. The main power and germicidal lights will remain illuminated.
12. The unit is now ready to operate and the ozone system will turn off and on automatically by the built-in air flow sensor.

Note: Ozone air treatment occurs only when air is circulating through the heating/cooling system. For maximum effectiveness and continuous air purification, turn the thermostatic controller switch from the AUTO position to the ON position. The switch is located on the thermostat. Open windows or doors and dirty ductwork can affect the system's ability to function properly.

ADJUSTING THE OZONE OUTPUT LEVEL

Note: The unit is factory adjusted to the low power setting.

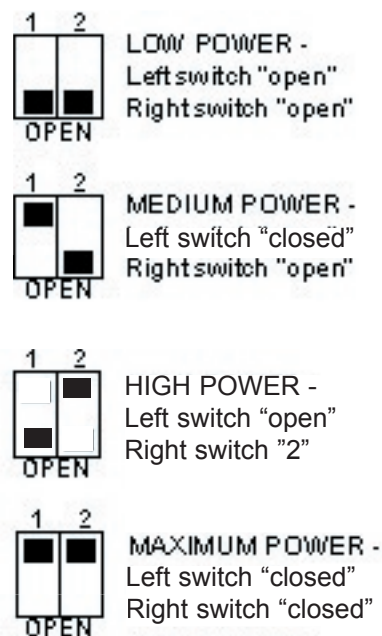
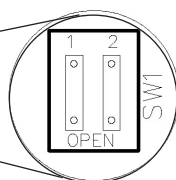
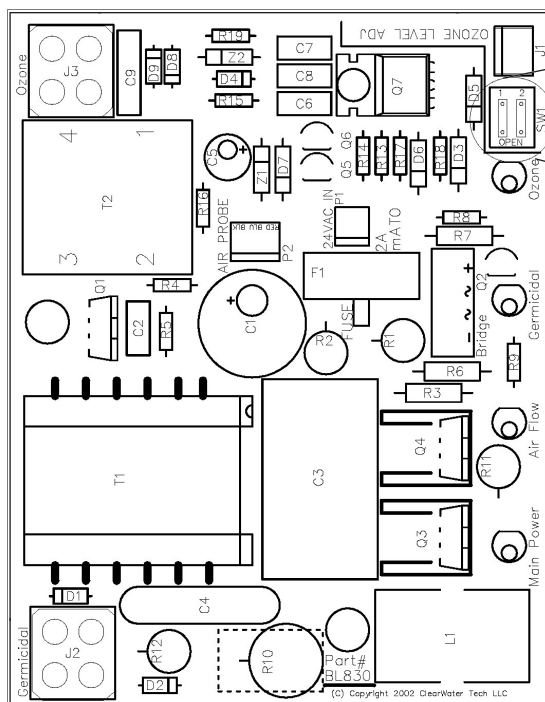
1. Remove the two retaining nuts from the cover and remove the cover.
2. Set the output adjustment switches according to your ozone requirements. Refer to the diagram below for location of switches on the printed circuit board.
3. Replace the cover and re-install the retaining nuts.

LOW POWER – Use in an average-sized home with no pets, no tobacco smoke odors and minimum household odors.

MEDIUM POWER – Use in an average-sized home with pets, confined tobacco smoke odors and minimum household odors.

HIGH POWER – Use in an average-sized home with pets, heavy tobacco smoke odors throughout the home and moderate household odors.

MAXIMUM POWER – Use when the “High Power” setting is not achieving desired results. May be required when used in above average-sized home with pets, heavy tobacco smoke and heavy household odors.



■ = Switch is pushed down

MAINTENANCE REQUIREMENTS

The lamp cleaning schedule is determined by air quality. The recommended cleaning interval is every 12 months. The lamp replacement schedule is based on running time. The recommended replacement interval is 24 months. Note: Do not touch the lamps with bare hands, oils from the hands can create "hot spots" which reduce the lamp life. Handle by either the end caps or use a soft cloth. In case of contact with the lamp, wipe the lamp clean with a soft cloth dampened with rubbing alcohol.

CLEANING THE LAMPS: Recommended every 12 months

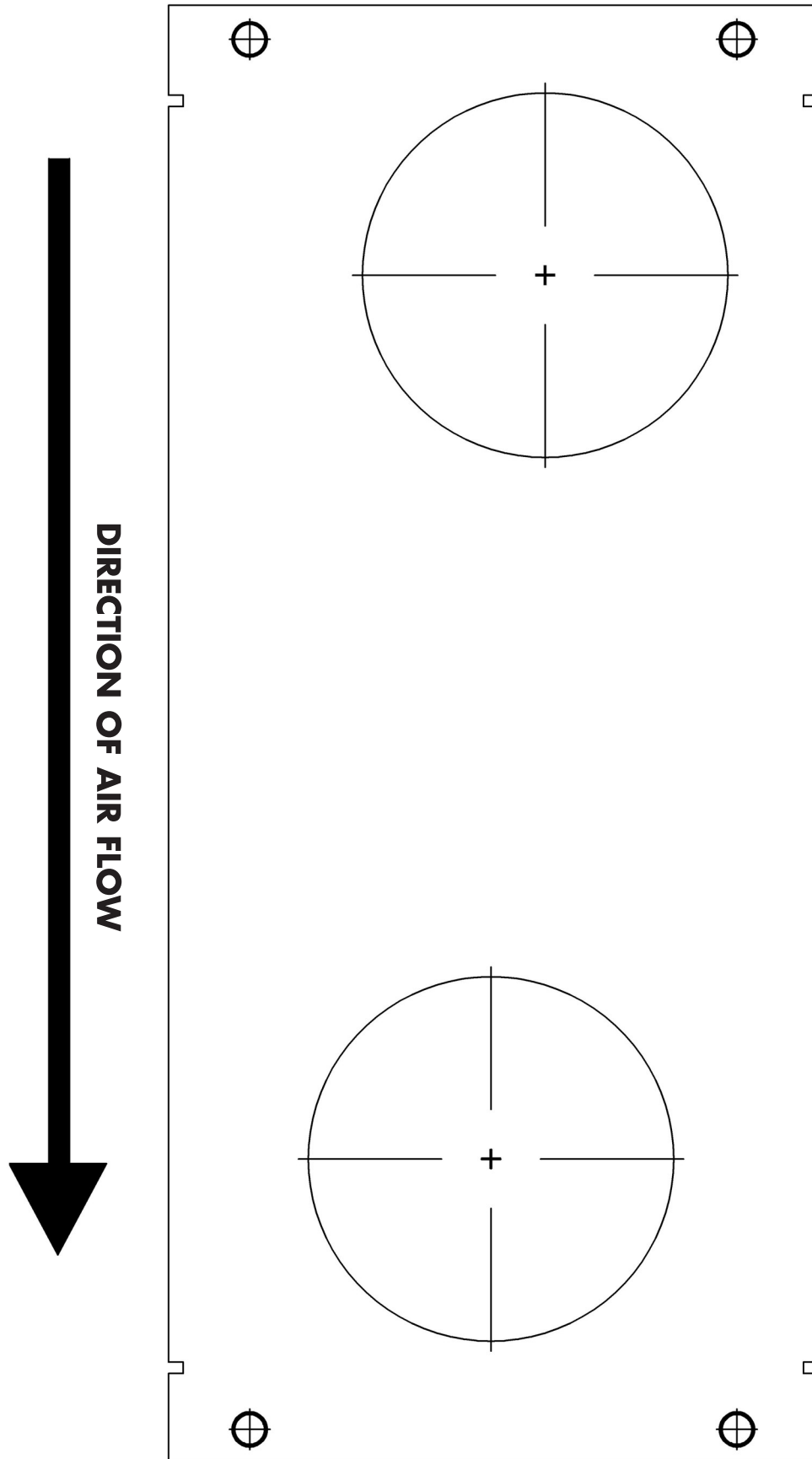
1. Unplug the transformer from the wall outlet.
2. Remove the four sheet metal mounting screws from air duct.
3. Carefully remove the unit from the air duct.
4. Using a soft cloth dampened with rubbing alcohol, wipe down the unit and the lamps. If there is a large buildup of dust particles, you may wish to use a can of compressed air first to remove the majority of the dirt.
5. Carefully replace unit into air duct.
6. Replace sheet metal screws and plug the transformer into the wall outlet.

REPLACING THE LAMPS: Recommended every 24 months

NOTE: Use only RainSoft-approved lamps for replacement. Standard off-the-shelf lamps are not compatible with your RainSoft AirmasterPlus unit.

1. Unplug the transformer from the wall outlet.
2. Remove the two nuts from the cover of the unit and remove the cover.
3. Disconnect the lamp connector from the end of a lamp.
4. Loosen the lamp lock ring from around the end of the lamp by turning it counterclockwise and remove (pliers may be required).
5. Remove the metal washer.
6. Remove lamp by grasping the rubber bushing around the end of the lamp. With a gentle rocking motion, loosen the bushing from its seat and carefully slide it straight out.
7. Remove the rubber bushing from the old lamp and install it on the new lamp.
8. Slide the new lamp back into the lamp opening. Handle by the end cap(s).
9. Reinstall the metal washer and lamp lock ring. Carefully tighten the lamp lock ring.
10. Reconnect the lamp connector to the end of the lamp.
11. Repeat steps #3 to #10 when replacing the other lamp.
12. Replace the cover and secure it with the two nuts.
13. Plug the transformer into the wall outlet.

HOLE SAW INSTALLATION TEMPLATE



1. Place the template on the return path of the HVAC system. Unit should be oriented so that lamps line up with direction of airflow.
2. Using 2 1/4" hole saw, drill holes at centers as indicated.
3. Attach unit to air duct using the four self-tapping sheet metal screws provided.