

# **Model 5000 Electronic Air Cleaner**

**Owner's Manual** 



Model 5000 Safety, Operating and Maintenance Instructions

### **WARNING**

- 120 Volts may cause serious injury from electrical shock. Disconnect power to the air cleaner before servicing.
- Arcing in electrical components may cause an explosion. Do not install unit where explosive gasses will be present.
- To reduce the risk of electrical shock, this equipment has a grounding-type (three prong) plug. This plug will fit only into a grounding-type power outlet. If the plug does not fit into the outlet, contact qualified personnel to install the proper outlet. Do not alter this plug in any way.
- To reduce the risk of electrical shock, locate product so that the power cord can be plugged into an electrical outlet without the use of an extension cord.

## **CAUTION**

Do not plug any other device into the outlet in which the air cleaner is plugged. This is a current sensitive outlet. Damage to circuit components may occur if a device other than the air cleaner is operated from the air cleaner outlet.

Thank you for your recent purchase of an Aprilaire\* Electronic Air Cleaner. We sincerely appreciate your business and are pleased to add your name to our growing list of customers. With this purchase, you have invested in the highest quality equipment available. Absolutely no other whole-house air cleaner on the market today can provide cleaner, healthier indoor air. Research Products Corporation is one of the largest manufacturers of indoor air comfort products and a recognized leader in the heating and air conditioning industry.

In addition to product quality and performance, we're also committed to customer satisfaction.

IMPORTANT: Scheduled replacement of the Aprilaire Electronic Air Cleaner filtering media and cleaning of the control electrode is necessary. See page 5 for details.

Please take a few minutes and read this booklet. This will familiarize you with the benefits you will receive from the equipment you just purchased and help you understand the routine maintenance that will be required. Be sure to register your warranty with us for our records and your protection. You can do this by registering on line at www.aprilaire.com/warranty.

Your Aprilaire Electronic Air Cleaner delivers the cleanest, healthiest air ever available from a whole-house air cleaner! It is an investment in healthful comfort for your family and protection for your home and furnishings.

Your Aprilaire Electronic Air Cleaner features patented, breakthrough "electrically enhanced air filtration" technology that provides a unique combination of both electronic and media air cleaner qualities. It permanently traps even the smallest particles so they cannot re-enter the air stream.

### To obtain service parts and/or replacement media, please proceed with any of the following options:

- Call the installer of your Aprilaire Electronic Air Cleaner. This information is often found on your equipment.
- Call your heating and air conditioning contractor.
- Use our Dealer Locator at www.aprilaire.com.
- Look for the Aprilaire brand name in the Yellow Pages under air cleaning and purifying equipment.
- Look in the Yellow Pages under heating and air conditioning contractors. Many contractors can order service parts or media replacements for you.

# **PERFORMANCE**

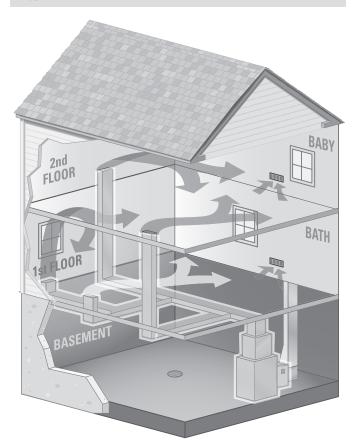
A whole-house air cleaner, like the Aprilaire model 5000 is installed by your heating and air conditioning contractor as one of the components in your heating and cooling system. It cleans the air that circulates through your home (see **FIGURE 1**).

When the heating or cooling equipment turns on, the air in your home travels through the registers and return duct(s) to the heating and cooling equipment where it is conditioned and sent back into the rooms of your house through the supply ducts. Small particles from numerous sources are suspended in your home's air, just as they are suspended in the air outdoors. The largest of these particles will eventually come to rest and appear as dust. Smaller particles may come to rest, but with even the slightest disturbance will re-suspend into the air. These particles are very small, and come from natural sources such as dust and pollen and from manmade sources such as tobacco smoke or exhaust. The air cleaner is installed on or near the furnace/air handler and removes the particles that travel with the air that circulates through your heating and cooling system. Removing these particles keeps the equipment components clean and more importantly removes particles from the air you breathe. Particles are measured in microns, which is a unit of measure used for very small things (1 micron = 1/25,400 inch). For reference, the diameter of a human hair is approximately 100 microns. **FIGURE 2** shows the size of various particles that can be found in the air.

Your Aprilaire Electronic Air Cleaner will remove over 90% of particles the same size as many disease-causing airborne bacteria, and is 80% efficient at removing virus-size particles.

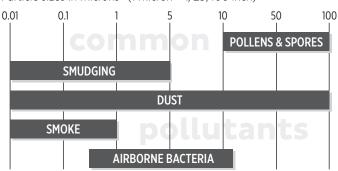
Until now, the air cleaner has been a passive component of your heating and cooling system; when the equipment turned on to heat or cool your home, the air cleaner was doing its job whether you were aware of it or not.

#### FIGURE 1



### FIGURE 2

Particle sizes in microns\* (1 micron = 1/25,400 inch)

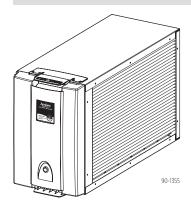


\*American Society of Heating, Refrigeration and Air Conditioning Engineering Guide

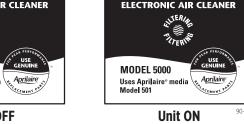
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# **OPERATION**

### FIGURE 3







**Unit OFF**Blue Light OFF

Blue Light ON

The Model 5000 is designed to clean the air only when the furnace/air handler blower is running, so make sure the ON/OFF switch is in the ON position, and that the blower is operating before checking for the "FILTERING" indicators.

# **MAINTENANCE**

# **WARNING**

120 Volts may cause serious injury from electrical shock. Disconnect power to the air cleaner before servicing.

Maintenance of your Model 5000 is simple, involving only periodic replacement of the filtering media, and cleaning of the control electrode, ionizer wires and inner assembly.

### **REPLACING THE FILTERING MEDIA**

Always use genuine Aprilaire Model 501 replacement media. The Model 5000 is designed to work only with genuine Aprilaire Model 501 replacement media. Use of other media will damage your Model 5000 Electronic Air Cleaner.

- **1.** To replace the media, follow the directions on the box of the replacement media.
- **2.** Record information on your replacement record found in this manual.

### CLEANING THE CONTROL ELECTRODE, IONIZER WIRES AND INNER ASSEMBLY

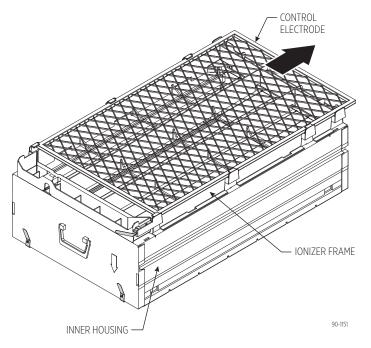
#### TO CHECK AND/OR CLEAN THE CONTROL ELECTRODE:

Most homes require cleaning of the control electrode only once a year. A few homes may require cleaning of the control electrode more often. To check, examine the control electrode six months after the installation of your air cleaner. If there is buildup of large particles that partially block the air, clean it every six months; otherwise clean it once a year.

#### Procedure:

- **1.** At the thermostat, turn the **Fan** to **Auto** and the **Mode** (Heat-Off-Cool) to **Off. Fan** and **Mode** setting changes are usually done with a switch or button on the thermostat.
- **2.** Turn the ON/OFF switch on the power pack/door to **OFF** and unplug the door.
- **3.** Lift up one of the latches to release and remove the power pack/door, and use the handle to pull the inner housing assembly out of the outer housing.
- **4.** Lay the inner housing assembly on a flat surface with the control electrode facing up (see **FIGURE 4**) and examine the control electrode.
- **5.** Slide the control electrode out (see **FIGURE 4**) and wipe off with a clean cloth.

#### FIGURE 4



#### TO CLEAN THE IONIZER WIRES:

Particles will normally build up on the positively charged ionizer wires during operation. The ionizer wires should be cleaned to maintain the highest level of filtration.

• Clean the ionizer wires at least once a year.

#### **Procedure:**

**6.** Using 200 grit sandpaper or an abrasive dish scrubber, clean each of the nine ionizer wires. Even if the wires don't appear dirty, clean each one. Do not use steel wool as this material readily sheds. See **FIGURE 5**.

#### TO CLEAN THE INNER ASSEMBLY:

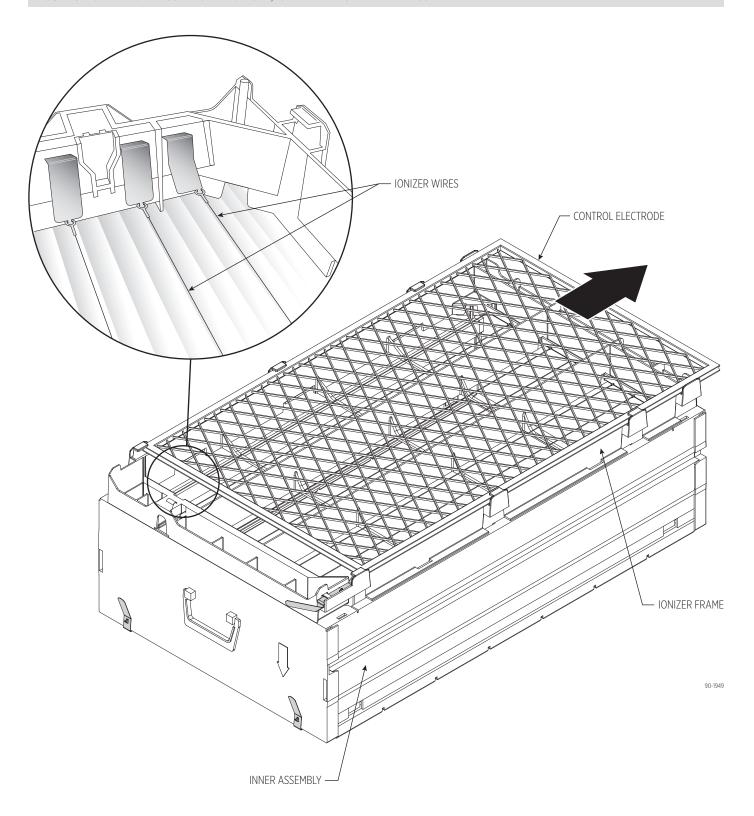
Dust will collect on all parts of the air cleaner, which is normal.

• Clean the inner housing and ionizer frame once a year.

#### **Procedure:**

- **7.** Use a vacuum with a brush attachment or a cloth to wipe off collected dust on the inner housing and ionizer frame.
- **8.** Slide the control electrode back into place.
- **9.** Return the inner housing assembly into the outer housing and replace the door.
- **10.** Plug in the door and turn the ON/OFF switch to the **ON** position.
- **11.** Return the **Fan** and **Mode** settings on your thermostat to their original positions.

FIGURE 5 - CLEANING THE CONTROL ELECTRODE, IONIZER WIRES AND INNER ASSEMBLY



### **APRILAIRE 10 YEAR CLEAN COIL COMMITMENT**

Aprilaire Air Cleaners are so effective at removing particles and contaminants that are harmful to your family and your HVAC equipment, we offer you this guarantee. Should your new indoor air conditioning coil require professional cleaning in the next 10 years while properly using an Aprilaire Air Cleaner, we will pay \$100 toward the cost of having the indoor coil cleaned by a licensed contractor.

This commitment applies to new HVAC equipment with a new indoor air conditioner coil (less than six months old) installed with an Aprilaire Air Cleaner. The Aprilaire Air Cleaner must be installed by a licensed HVAC contractor. The Aprilaire Air Cleaner must be properly maintained as per directions in the owner's manual including use of only Aprilaire brand media replacement.

For redemption details, please visit www.aprilaire.com/cleancoil or call 1-800-334-6011.

# **MEDIA REPLACEMENT RECORD**

DATE	DEALER NAME

# **LIMITED WARRANTY**

Your Research Products Corporation Aprilaire Electronic Air Cleaner is expressly warranted for five (5) years from the date of installation to be free from defects in materials or workmanship, except, however, for the disposable media which will have to be replaced from time to time depending upon the use, and the inner housing seals. Research Products Corporation's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any part of the Electronic Air Cleaner which is found to be defective within such five (5) year period and which is returned not later than thirty (30) days after said five (5) year period by you or your original supplier to Research Products Corporation, Madison, WI 53701, together with the model number and installation date of the Electronic Air Cleaner.

THIS WARRANTY SHALL NOT OBLIGATE RESEARCH PRODUCTS CORPORATION FOR ANY LABOR COSTS AND SHALL NOT APPLY TO DEFECTS IN WORKMANSHIP OR MATERIALS FURNISHED BY YOUR INSTALLER AS CONTRASTED TO DEFECTS DISCOVERED IN THE AIR CLEANER ITSELF.

IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE AFORESAID FIVE YEAR PERIOD. RESEARCH PRODUCTS CORPORATION'S LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, OTHER THAN DAMAGES FOR PERSONAL INJURIES, RESULTING FROM ANY BREACH OF THE AFORESAID IMPLIED WARRANTIES OR THE ABOVE LIMITED WARRANTY IS EXPRESSLY EXCLUDED. THIS LIMITED WARRANTY IS VOID IF DEFECT(S) RESULT FROM FAILURE TO HAVE THIS UNIT INSTALLED BY A QUALIFIED HEATING AND AIR CONDITIONING CONTRACTOR. IF THE LIMITED WARRANTY IS VOID DUE TO FAILURE TO USE A QUALIFIED CONTRACTOR, ALL DISCLAIMERS OF IMPLIED WARRANTIES SHALL BE EFFECTIVE UPON INSTALLATION.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages so the above exclusion or limitations 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.

#### **WARRANTY REGISTRATION**

Visit us online at **www.aprilaire.com** to register your Aprilaire product. If you do not have online access, please mail a postcard with your name, address, phone number, email address, product purchased, model number, date of purchase, and dealer name and address to: Research Products Corporation, P.O. Box 1467, Madison, WI 53701.

Your warranty registration information will not be sold or shared outside of this company.

