



**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.

### **A** 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 6 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**

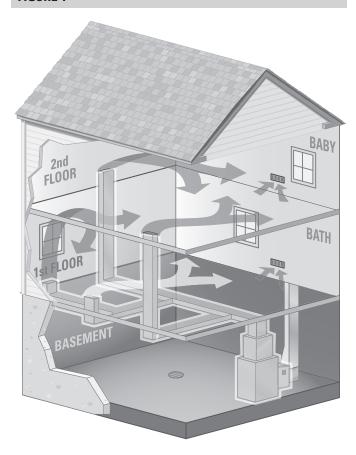
A whole-house air cleaner, like the Aprilaire model 5000 is installed by your heating and air conditioning contractor as one of the components in your heating and cooling system. It cleans the air that circulates through your home (see **Figure 1**).

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. Your thermostat turns on your heating and cooling equipment and so, essentially, the thermostat determined when you clean your air. Your model 5000 air cleaner comes with an exclusive Air Cleaner Control that allows you to clean your air when you want! Not only does the Air Cleaner Control allow you to actively clean the air, it will show you when the air cleaner is filtering the air and when it is time to change the filter.

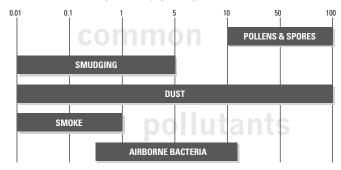
#### FIGURE 1



#### FIGURE 2

#### **Common Pollutants**

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



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

90-1148

### **OPERATION**

The exclusive Aprilaire Air Cleaner Control (see **Figure 3**) is installed by your contractor at a location that is convenient for you. It may be located next to your thermostat, on the air cleaner or near your heating and cooling equipment.

# 1 Filtering

When the air cleaner is cleaning the air, either at your command or when the heating and cooling system is operating, bars on the display will sequence on and off to let you know that it is working

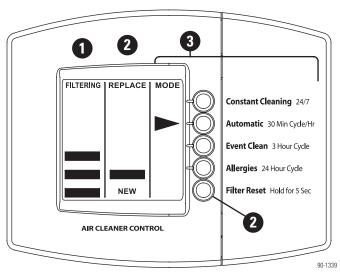
## 2 Filter Life Indicator

This area of the display indicates filter usage. Bars will build indicating usage increments of 20%, based on how the Air Cleaner Control was set up. When all bars are filled and begin to flash, it is time to change the filter. See the Maintenance section on page 5 for more details.

## 3 Active Cleaning

Four selections are available to choose the Air Cleaner Control option that is best for you, beyond the cleaning that occurs whenever your equipment is heating or cooling.

### FIGURE 3



#### **ACTIVE CLEANING OPTIONS**

To select any of the options below, simply press the corresponding button, and an arrow will appear next to the button indicating which option has been selected. To cancel a selection, simply press the button again.

#### **Constant Cleaning:**

This option will provide the maximum amount of air cleaning available. The air cleaner will be active for 24 hours a day, seven days a week.

#### Automatic (30 min./hr):

The air cleaner will run a minimum of 30 minutes every hour. The Air Cleaner Conrol will monitor the amount of time your heating and cooling system runs; if 30 minutes is not reached the Air Cleaner Control will automatically turn on the air cleaner. This will maximize the amount of air cleaning while minimizing energy consumption.

#### **Event Clean (3 hour cycle):**

When selected, the air cleaner will run for 3 hours continuously and then turn off. This option only cleans the air when needed; an example would be after vacuuming.

#### Allergies (24 hour cycle):

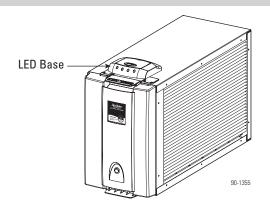
When seasonal allergies spike and outside air quality is at its worst, choose this option to run your air cleaner continuously for 24 hours then turn off.

#### WHEN YOUR AIR CLEANER IS OPERATING

When the Model 5000 is cleaning the air, the lights on the LED Base will sequence on and off (see **Figure 4**). In addition, a light on the power pack/door assembly will illuminate the word "FILTERING" when your Model 5000 is cleaning the air (see **Figure 4**).

### **OPERATION** (CONTINUED)

#### FIGURE 4







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**

#### FILTER LIFE INDICATOR - SETTING THE REPLACEMENT FREQUENCY

Bars are added to the filter life indicator section of the display in increments until it is time to change the filter, at which time all the bars will flash. Your filter will generally last a year, but this depends on a number of factors including your environment, construction details, pets, how often you run your air cleaner and of course personal choice. Because the life of the filter is dependent on so many factors, the amount of time between filter changes is selectable.

#### To change the setting (see Figure 5):

- 1. Remove the front of the Air Cleaner Control from the base.
- 2. Move the jumper to the desired position.
- 3. Replace the front of the Air Cleaner Control on to the base.

#### **OFF**

Filter change frequency is once per year

#### A, B & C

**If you run your fan continuously,** these settings will result in filter change reminders more frequently than once per year (A = 9 months, B = 6 months, C = 3 months).

**If you do not run your fan continuously,** these settings can be used to have the filter change reminders optimized to what you feel is best for your home (A is less frequent, C is more frequent).

Again, how often you should change your filter is dependent on a number of factors, and a little experimenting may be required to set it to your optimum change frequency.

# FIGURE 5

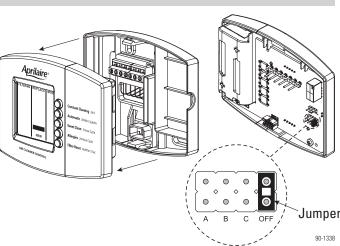


TABLE 1 – Filter Change Frequency	
Jumper Position	Filter Change Setting
OFF	One calendar year (365 days)
А	6570 hours of use
В	4380 hours of use
С	2190 hours of use

### **MAINTENANCE** (CONTINUED)

### **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.

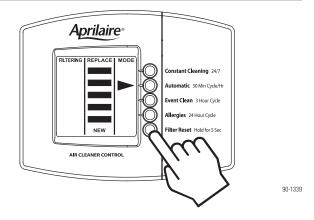
#### **REPLACING THE FILTERING MEDIA**

When the last bar on the Filter Life Indicator section of the display fills up, this section of the display will flash.

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.
- 3. Press and hold the Filter Reset button for 5 seconds (see **Figure 6**) and the Filter Life Indicator section of the display will return to the "NEW" condition.

#### **FIGURE 6**



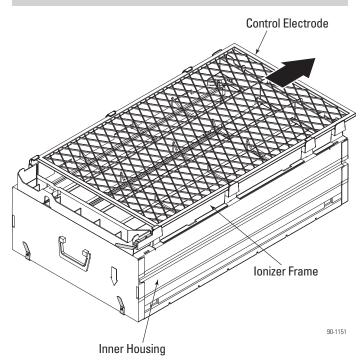
#### **CLEANING THE CONTROL ELECTRODE**

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.

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

- 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.
- Lay the inner housing assembly on a flat surface with the control electrode facing up (see **Figure 7**) and examine the control electrode.

#### FIGURE 7



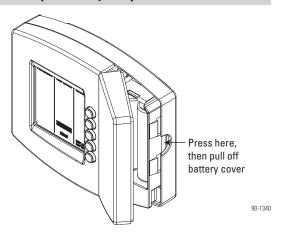
- 5. If cleaning is needed, slide the control electrode out (see **Figure 7**) and wipe off with a clean cloth.
- 6. Slide the control electrode back into place.
- 7. Return the inner housing assembly into the outer housing and replace the door.
- 8. Plug in the door and turn the ON/OFF switch to the ON position.
- 9. Return the Fan and Mode settings on your thermostat to their original positions.

# MAINTENANCE (CONTINUED)

#### **REPLACE BATTERY**

When "REPLACE BATTERY" appears on the display, remove the battery cover (see **Figure 8**) and replace both AA alkaline batteries.

FIGURE 8 - Open Battery Compartment



#### **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**

Please... Take a few minutes to visit us on-line at www.aprilaire.com to register your Aprilaire product.

If you do not have on-line access, please mail a postcard with your name, address, phone number, product purchased and date of purchase to:

Research Products Corporation, P.O. BOX 1467, Madison, WI 53701

# Thank you!

YOUR WARRANTY REGISTRATION INFORMATION WILL NOT BE SOLD OR SHARED OUTSIDE OF THIS COMPANY.



# **Intelligent Solutions for Indoor Environments**

An entire line of indoor air quality products that are the best in their categories. Together they set a new standard for intuitive use, performance and reliability.

Aprilaire products enhance your comfort, health and energy efficiency:

- Zoned Comfort Control Automatic Humidifiers Electronic Thermostats
- Ventilation High Efficiency Air Cleaners Whole-Home Dehumidifiers