

Aprilaire®

Electronic Air Cleaner



90-1147

Owner's Manual

Model 5000 Safety, Operating and Maintenance Instructions

READ AND SAVE THIS MANUAL

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.aprlaire.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.aprlaire.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

Air cleaners are effective only when air is circulated through them. The Aprilaire Electronic Air Cleaner operates silently, removing a very high percentage of the pollutants from the circulated air while maintaining its level of efficiency with use. There is pollution in air everywhere – even in the air we normally consider to be fresh outdoor air. The infiltration of outside air into the home can be minimized by keeping doors and windows closed as much as possible, thereby increasing the indoor air quality.

You may have purchased your air cleaner for allergy relief. Allergy cases differ widely – and not even the Aprilaire Electronic Air Cleaner is a sure cure for any allergy. However, this air cleaner can be highly beneficial because it is over 98.5% efficient at removing particles the same size as allergy-causing pollen, fungus, mold, and spores (see **Figure 1**) from the air passing through it, which makes it the healthy choice for cleaner indoor air. It will also remove over 90% of particles the same size as many disease-causing airborne bacteria, and is 80% efficient at removing virus-size particles. These are typically about 1,000 times smaller than can be seen by the human eye.

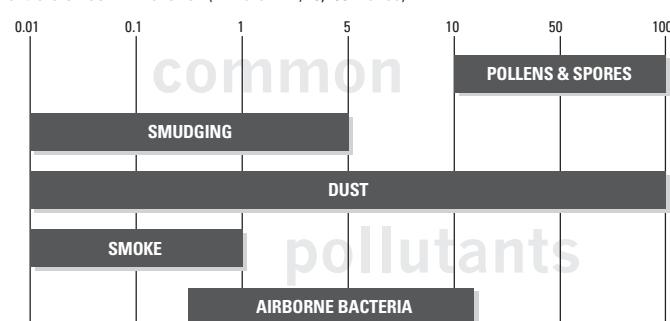
The reduction of household dust, tobacco smoke particulate, and smudging particles may have been the motivating influence in your decision to have an air cleaner installed. The Aprilaire Electronic Air Cleaner removes 86% of cigar and cigarette smoke particulate. Since this air cleaner reduces the amount of particles in the air, you can expect a reduction in the need for dusting and cleaning and a longer time interval between redecorating.

The efficiency of the Aprilaire Electronic Air Cleaner on the smallest particle which can be seen with the naked eye (approximately 10 microns) is never less than 99%.

The visible household dust particles, and nearly all pollen and spore particles, therefore, can be caught and permanently and easily held once they get to the air cleaner.

FIGURE 1 – COMMON POLLUTANTS

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



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

90-1148

RECOMMENDATIONS FOR OPTIMUM PERFORMANCE

The air movement function of a central air cleaner is performed with the blower of your heating/air conditioning system. Continuous air cleaning will be accomplished when your thermostat is set for continuous air circulation. If continuous air cleaning is not required, or desired, you can manually set your control for any time period you desire. Many thermostats have a switch position for manual fan. "Automatic" turns on the blower only when heating or cooling is required. "Fan" or "manual" allows you to control blower operation.

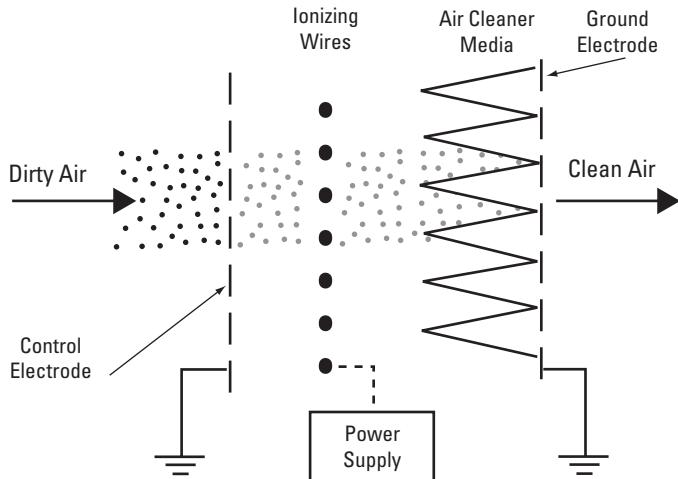
For those who choose periodic cleaning (as opposed to continuous cleaning through continuous furnace blower operation), the most important period is during – and for several hours after – vacuuming your home. The vacuuming process (unless you have a central vacuum system) stirs up a large volume of dust particles which must be drawn into your air cleaner.

Many of the dust particles generated while vacuuming are so heavy that they "fall" out of the airstream before they can be drawn out of your living area. This is why it is important to do household dusting several hours after vacuuming. Normally once the heavy particles "fall out," they are only reintroduced to the air by vacuuming, or similar vigorous activity.

PRINCIPLE OF OPERATION

The Aprilaire Model 5000 Electronic Air Cleaner is an electrically enhanced high efficiency air cleaner that uses an ionization and electric field. It is the first and only residential air cleaner that uses this patented technology. As shown in **Figure 2**, a particle passes a control electrode and enters an intense ionization and electric field. This intense electric field ionizes (applies an electrical charge to) the airborne particles. The charged particles are then attracted to and collected by the air cleaner media, which is maintained at ground by means of the ground electrode. The clean air is then distributed throughout your home.

FIGURE 2 – COMBINATION OF MEDIA AND ELECTRONIC TECHNOLOGIES IMPROVES EFFICIENCY



90-1149

A light on the power pack/door assembly will illuminate the word "FILTERING" when your Model 5000 is cleaning the air (see **Figure 3**).

FIGURE 3



Unit OFF
Blue Light OFF

Unit ON
Blue Light ON

90-1150

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" light.

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.

REPLACING THE FILTERING MEDIA

Most homes require replacement of the media once a year. How often replacement is needed will depend on many factors, including lifestyle, construction details and environment. A few homes may require replacement of the media more often. To check, examine the media six months after the installation of your air cleaner. If it is noticeably grey or brown, replace it every six months; otherwise replace it once a year.

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.

To replace the media, follow the directions on the box of the replacement media.

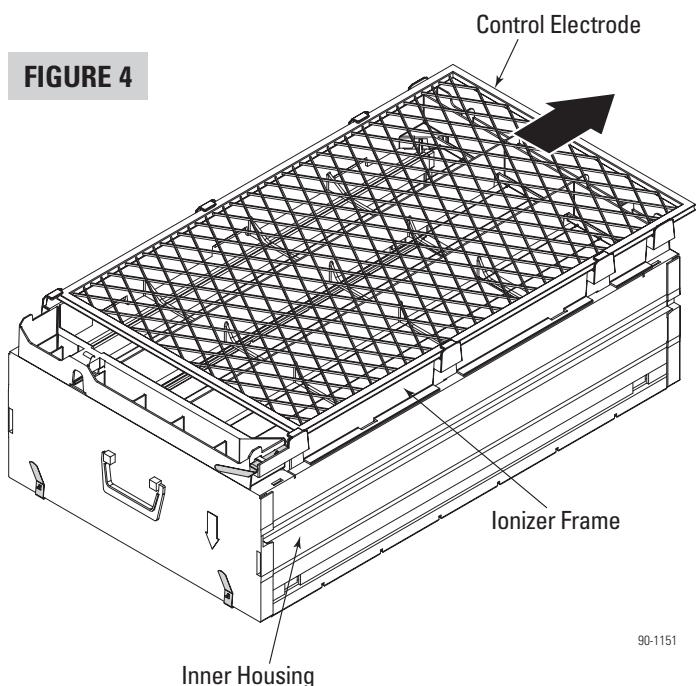
CLEANING THE CONTROL ELECTRODE

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:

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 (see **Figure 5**) 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.

FIGURE 4

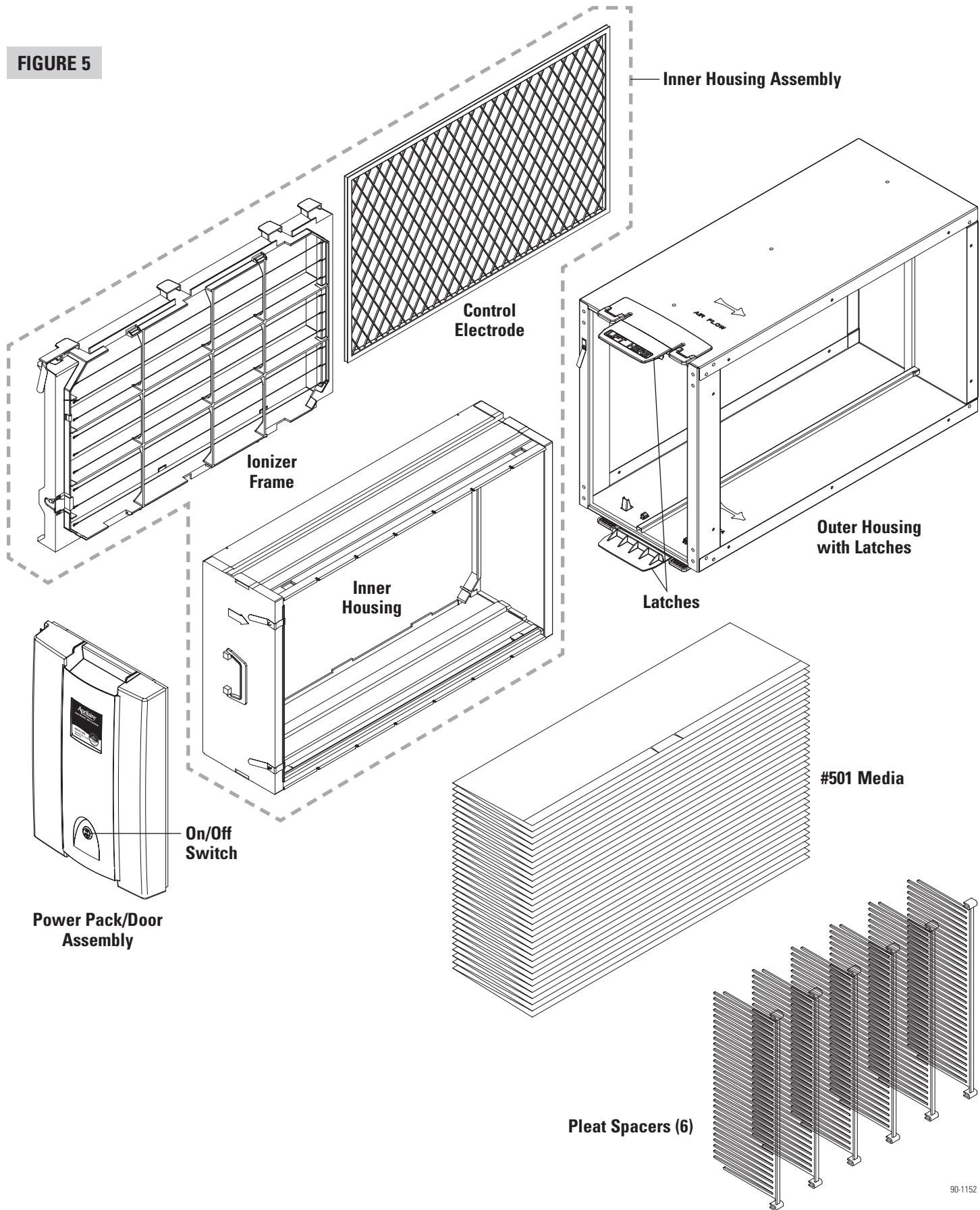


90-1151

5. If cleaning is needed, slide the control electrode out (see **Figure 4**) 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.

COMPONENTS OF THE MODEL 5000 APRILAIRE ELECTRONIC AIR CLEANER

FIGURE 5



MEDIA REPLACEMENT RECORD

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.aprlaire.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
- UV Germicidal Lamps • High Efficiency Air Cleaners • Whole-Home Dehumidifiers