



Model 4200, 4300 & 4400 Owner's Manual

INTRODUCTION

Thank you for your recent Aprilaire[®] Air Cleaner purchase. 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 currently available. Research Products Corporation is the largest manufacturer of central air cleaners and humidifiers and a recognized leader in the heating and air conditioning industry today.

Please be assured that in addition to product quality, we are also committed to performance as well as customer satisfaction. **IMPORTANT:** Scheduled replacement of the Aprilaire[®] filtering media is necessary. See page 6 for details. Now, 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.

Your Aprilaire[®] Air Cleaner is an investment in healthful comfort for your family and protection for your home and furnishings. With this purchase, you have invested in an air cleaner that is many times more efficient than ordinary furnace or air conditioning filters with which you may be familiar. There are many benefits you may expect from your Aprilaire[®] Air Cleaner. This booklet is furnished to acquaint you with these benefits, and with operation and maintenance information to insure the high level of performance this high efficiency air cleaner is designed to provide.

PERFORMANCE

A whole-house air cleaner, like the Aprilaire model 4200, 4300 or 4400, 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 model 4200, 4300 or 4400 with genuine Aprilaire SelfSeal[™] filters is a highly efficient air cleaner. The removal efficiency defines the percent of particles entering the air cleaner that are trapped (see **Table 1**).

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 4200, 4300 or 4400 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

TABLE 1 – Particle Removal Efficiency		
Particle Size (microns)	Removal Efficiency	
1	76%	
3	93%	
5	91%	
7	93%	
10	97%	

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.

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 4):

- 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 4



TABLE 2 – Filter Change Frequency	
Jumper Position	Filter Change Setting
OFF	One calendar year (365 days)
A	6570 hours of use
В	4380 hours of use
С	2190 hours of use

MAINTENANCE (CONTINUED)

CHANGING THE FILTER

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

- Replace the filtering media with genuine Aprilaire SelfSeal[™] filters, available from your installing contractor. **IMPORTANT:** Follow the step by step directions on the filter carton to ensure that it is installed in the proper orientation – the outlet side of the filtering media is the expanded metal.
 - Use Model 213 filtering media for the Model 4200 Air Cleaner.
 - Use Model 313 filtering media for the Model 4300 Air Cleaner
 - Use Model 413 filtering media for the Model 4400 Air Cleaner



The model number for your air cleaner can be found on the door label (see **Figure 5**). Record this information on your replacement record found on the following page.

2. 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.

REPLACE BATTERY

When "REPLACE BATTERY" appears on the display, remove the battery cover (see **Figure 7**) and replace both AA alkaline batteries.



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.

FILTERING MEDIA REPLACEMENT RECORD

Check one:

- Air Cleaner Model 4200, Replacement Filter Media Model 213
- Air Cleaner Model 4300, Replacement Filter Media Model 313

Air Cleaner Model 4400, Replacement Filter Media Model 413

Date	Dealer Name

LIMITED WARRANTY

Your Research Products Corporation Aprilaire Media 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 Media 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 Media 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.

For fulfillment of warranty parts, call Aprilaire at 1-800-334-6011.

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