

# F50F and F300E Electronic Air Cleaners



## CONTENTS

Operating Your Electronic Air Cleaner .....	2
Getting the Most From Your Electronic Air Cleaner .....	2
Cleaning Prefilter(s), Cell(s) and Postfilter(s) .....	3
How Electronic Air Cleaning Works .....	5
Before You Call for Service .....	6
Honeywell 10 Year Ultraclean Coil Guarantee™ .....	6
Limited Five-year Warranty .....	7
Product Registration .....	8



## OPERATING YOUR ELECTRONIC AIR CLEANER



Turn the On-Off switch on the power box to On.

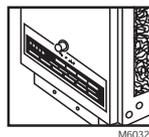
**NOTE:** Set the switch to 1 for On and set the switch to 0 for Off.



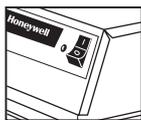
The air cleaner now operates whenever your furnace/air conditioning system fan operates. For maximum air cleaning benefit and cleaner air conditioner coils, leave the air cleaner switch turned on at all times and the thermostat fan switch set to On. Of course, continuous fan operation adds to your electric bill each month. Check your equipment for the amount of electricity needed to run your System fan.

When the fan and air cleaner come on, the neon indicator lights.

You may hear a snapping (electrical arcing) sound occasionally as the air cleaner operates. This is usually caused by a larger dust particle that causes a high voltage discharge. The snapping sound means that your air cleaner is working as it should. To hear the snapping sound, momentarily press the test button near the bottom of the door. Use the test button any time you want to prove air cleaner operation.



The switch remains in the On position to keep the air cleaner running.



When the fan and air cleaner stops, the neon light goes off. The air cleaner is off until the heating or air conditioning and fan start again.



If you do not want the air cleaner to run, set the On-Off switch to Off to turn off the air cleaner. Your furnace and air conditioner continue to operate normally, but without the added benefit of air cleaning. Normally, this switch should be turned On at all times.

## GETTING THE MOST FROM YOUR ELECTRONIC AIR CLEANER

### Run the electronic air cleaner as much as possible

For greatest efficiency, the air cleaner should run all the time. To do this, set the Fan switch on your thermostat to On, and make sure the air cleaner is turned on. The fan and air cleaner run even when the furnace or air conditioner is off.

**NOTE:** A manual fan switch may be built into the furnace or furnace fan controller.

The air cleaner uses less power than a 40 watt light bulb (two-cell model—33 watts; single cell model—22 watts). Many believe that the added cost is more than offset by the added benefits of full-time air cleaning and full-time air circulation. And you may feel that the room temperature stays more even when the fan is always on.

Even if your thermostat does not have a Fan On position, you can obtain maximum available air cleaning benefit by making sure the air cleaner is always turned on so it operates whenever the furnace or air conditioner is on.

### Keep the cell(s) and prefilter(s) clean

Although the air cleaner is designed to be efficient over a wide range of cell dirt loading conditions, regular cleaning is your best assurance of consistent performance. Also, a very dirty prefilter and cell reduces air flow and, in turn, this reduces the efficiency of the furnace or air conditioner. The cell wash reminder schedule or the optional W8600 Air Cleaner Indicator should be used to maintain a regular wash schedule.

### Replace postfilter regularly

A high-efficiency postfilter is sometimes installed in the air cleaner. This filter increases the efficiency of the air cleaner and should be changed every six months of usage.

### If you have a humidifier

All Honeywell whole house humidifiers can be used in a system with the Honeywell Electronic Air Cleaner without any additional filters or system modification.

If your system includes an atomizing humidifier, you may want to install a standard furnace filter between the humidifier and the air cleaner. This filter would keep the humidifier spray mineral deposits from collecting on the air cleaner. This filter should be checked regularly and changed when it shows signs of mineral or dirt buildup. If you do not install a filter, you will probably need to wash the cell(s) and prefilter(s) more often to remove the mineral buildup.

If an ultrasonic room humidifier is used often, especially if filled with tap (undistilled) water, the cell(s) and prefilter(s) require more frequent washing. A white residue accumulates on the cell(s) from the minerals in the water. This residue may also contribute to "white dust." See About lint or "white dust" section for more information.



**CAUTION****Burn Hazard.****Can cause personal injury.**

Allow cell(s) to cool completely in dishwasher and at end of wash cycle or wear protective gloves.

**Washing the cell(s) in your automatic dishwasher**

Hot water can accumulate in the tubes supporting the collector plates. Tip the cell(s) so these tubes can drain.

**IMPORTANT**

- Check your dishwasher Owner's manual. Some manufacturers do not recommend washing electronic cell(s) in their dishwashers.
  - If the dishwasher has upper and lower arms, position the cell(s) carefully to allow good water circulation.
  - Be careful to avoid damaging the cell(s) when placing them in the dishwasher. Broken ionizer wires or bent collector plates are not covered under the Warranty.
  - Very dirty cell(s), especially from tobacco or cooking smoke, can discolor the plastic parts and the lining of some dishwashers. This discoloration is not harmful. To minimize it, wash the cell(s) more frequently or try a different brand of detergent.
  - Do NOT allow the dishwasher to run through the dry cycle. This bakes on any contaminants not removed during the wash cycle and reduces air cleaner efficiency.
1. Put the cell(s) on the lower rack of the dishwasher with the airflow arrow pointing up. It may be necessary to remove the upper rack. Do not block water flow to the upper arm.

**HINT:** Lay a few large water glasses between the spikes on the lower rack, and rest the cell(s) on them so the spikes do not damage the aluminum collector blades.

2. Using your regular dishwashing detergent, allow the dishwasher to run through the complete wash and rinse cycle. *Do not use the dry cycle.* To avoid burns, let the cell(s) cool completely before removing, or wear protective gloves when removing the cell(s). Remember that water may be trapped inside the cell(s) plates. Tip the cell(s) so these tubes can drain.
3. Wipe the ionizer wires and contact board on the end of the cell using your thumb and forefinger with a small, damp cloth.
4. Inspect the dishwasher. You may want to rerun the wash and/or rinse cycle with the dishwasher empty if you see dirt or residue from washing the cell(s). If dirt or residue seems excessive, wash the cell(s) more often or try a different detergent.

**CAUTION****Hazardous Chemical.****Can cause personal injury.**

Do not splash detergent solution in eyes.

**Washing the cell(s) in a tub**

- Wear rubber gloves to avoid prolonged detergent contact with your skin.
- Keep detergent and solution out of reach of children.

**NOTE:** Always wash the cell(s) first, then the prefilter(s), to keep heavy prefilter lint from getting caught in the cell(s).

1. Use a large enough container, such as a laundry tub or trash container, to hold one or both cell(s).

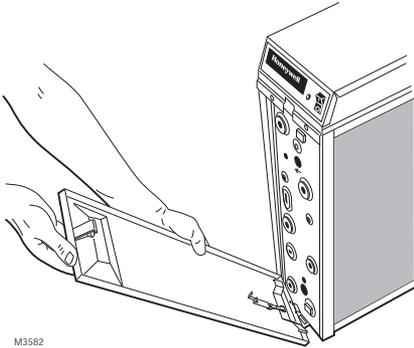
**NOTE:** Sharp corners on the cell(s) can scratch the surface of a bathtub.

2. Dissolve about three-fourth cup of automatic dishwasher detergent per cell in enough hot water to cover the cell(s). If the detergent does not dissolve readily, or forms a scum on the water, try another brand, or use softened water.
3. After the detergent has completely dissolved, place the cell(s) in the container and allow to soak for 15 to 20 minutes or until water cools. Agitate them up and down a few times and remove. Repeat steps 2 and 3, if necessary, for very dirty cells.
4. Next, wash the prefilter(s) the same way. Empty and rinse the wash container.
5. Rinse the cell(s) with a hard spray of very hot water; rinse the tub clean, then fill the tub with clean hot water and soak for 5 to 15 minutes. Rinse until the water draining from the cell(s) and prefilter(s) no longer feels slippery.
6. Soak cell(s) in a final clear water rinse for ten minutes.
7. Wipe the ionizer wires and contact board on the end of the cell using your thumb and forefinger with a small, damp cloth.

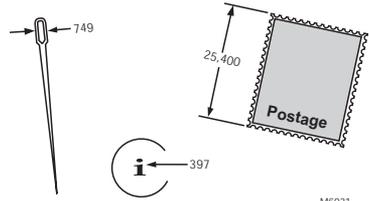
**Replacing electronic air cleaner components**

1. Inspect the cell(s) for broken ionizer wires and bent collector plates. Repair, as necessary, or call your contractor for service.
2. Slide the prefilter(s) into the upstream prefilter guides.
3. Slide the air cleaner cell(s) in so the air flow arrow points downstream and the handle(s) face outward.
4. Firmly close the access door.

- Turn on the air cleaner. If the cell(s) and prefilter(s) are wet, the neon light may not come on and you may hear arcing. If the arcing is annoying, simply turn the air cleaner off for two to three hours or until the cell(s) are dry.



M3582



M6031

## How the electronic air cleaner works

First, large particles (lint, hair) are caught by the prefilter(s). Then, as the dirty air passes through the intense high voltage electric field surrounding the ionizer wires, all particles, even the smallest particles down to 0.3 micron are given an electric charge. The air then passes into the collector where the alternate parallel plates are charged positive and negative, creating a uniform electrostatic field. Since opposites attract, the charged particles stick to the collector plates, having an opposite electric charge. The precharged postfilter continues to remove small particles from the air. The air leaving the air cleaner contains very few particles.

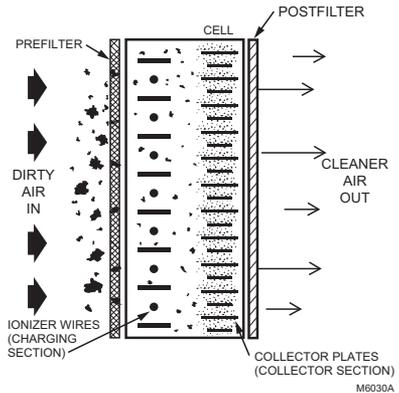
## HOW ELECTRONIC AIR CLEANING WORKS

### A word about particle size

The particles removed by the electronic air cleaner tend to be very small—less than ten microns. But what is a ten-micron particle? The eye of an average size sewing needle is about 750 microns across, and the dot in the *i* in the word micron is about 400 microns. Generally, particles smaller than ten microns can be seen only with a microscope, except in very large concentrations, such as a puff of smoke. Your electronic air cleaner can remove even smaller particles that can be seen only with an electron microscope.

Although particles one micron and smaller make up only about 20 percent of the total weight of particles in unfiltered air, they account for over 99 percent of the numbers of particles.

Because they are so tiny, these particles tend to remain suspended in the air unless they collide with a solid surface. Then they attach by molecular adhesion and stick like glue, staining walls and furniture and coating your air conditioning coils. And of course, some of these particles can cause allergic reactions or simply make the environment less pleasant.



M6030A

Each time the air circulates through the heating/air conditioning system and air cleaner, more particles are removed. These particles are generated by normal household activities and also enter the house from outside. That is the reason we recommend that you use the air cleaner as much as possible.

## Electronic air cleaner vs standard furnace filter

The regular furnace filter collects mainly large, visible particles that reach the filter. Its main purpose is to protect the furnace and air conditioner blower. The electronic air cleaner collects these large particles plus many of the smaller, mostly invisible particles. Its purpose is to reduce indoor air pollution as well as to protect the blower, air conditioning coils and heat exchanger.

## Ozone and the electronic air cleaner

Electronic air cleaners generate a very small amount of ozone, about 0.005 to 0.010 parts per million (ppm). The amount is highest when the air cleaner is new.

The average person can detect the odor of ozone in concentrations as low as 0.003 to 0.010 ppm. The U.S. Food and Drug Administration, and Health and Welfare Canada recommend that indoor ozone concentration should not exceed 0.050 ppm. As a comparison, the outdoor ozone level in major cities is sometimes higher than 0.100 ppm.

If desired, the ozone generated by the air cleaner can be reduced by asking your dealer to:

- Install an activated carbon filter downstream of the air cleaner, or
- Adjust the air cleaner power supply to reduce ozone production. This adjustment reduces ozone production about 20-25 percent, but also reduces air cleaning efficiency about seven to ten percent.

## About lint or “white dust”

White dust is made up of particles that settle out of the air before they get to the return air duct. You can help prevent this white dust from settling by running your fan constantly and:

- Be sure the return registers are not blocked with furniture.
- Be sure the discharge ducts are clean (best done before installing the air cleaner).
- Be sure your clothes dryer is vented to the outside and is not plugged.
- If you have new rugs or drapes or new woolen blankets, be aware that the lint from these items will reduce with age.
- In new or remodeled homes, plaster dust or paint pigment may contribute to white dust, but will reduce with time.
- Use of a humidifier may contribute to *white dust*, especially if filled with undistilled water.

## BEFORE YOU CALL FOR SERVICE

### If...

### Then...

#### Electronic air cleaner doesn't seem to be working

1. Make sure the furnace or air conditioner blower is running.
2. Make sure the access door is firmly closed and latched. If door is not closed properly, an interlock keeps the air cleaner off.

#### Arcing (snapping) seems too frequent

1. If the electronic cell(s) are wet from washing, turn the air cleaner off for two to three hours.
2. Check the cell(s) for broken ionizer wires or bent plates. Repair if necessary.
3. Wash cell(s) and prefilter(s) if dirty.

#### Neon light on air cleaner does not come on

1. Make sure the furnace or air conditioner fan is running.
2. Make sure the access door is firmly closed.
3. Make sure the On-Off switch is in the On position.
4. On models without the Solid State Performance Indicator, if the electronic cell(s) are wet, check again in two to three hours.

#### You smell ozone and find it objectionable

Call your heating and air conditioning dealer.

## HONEYWELL 10 YEAR UltraClean COIL GUARANTEE™

Send to:  
Honeywell 10 Year  
UltraClean Coil Guarantee  
Customer Care, MN10-1461  
1885 Douglas Drive North  
Golden Valley, MN 55422

### Guarantee

If you properly maintain your new Honeywell Electronic Air Cleaner (EAC), Honeywell guarantees that if your indoor coil requires

cleaning within the next 10 years, Honeywell will pay to have it professionally cleaned by a qualified contractor:

- 75% of the cost (up to \$150) when installed with a Honeywell Coil Irradiation Ultraviolet Air Treatment System or
- 50% of the cost (up to \$100) if a Honeywell EAC is installed without a Honeywell Coil Irradiation Ultraviolet Air Treatment System).
- The UltraClean Coil Guarantee™ applies to any Honeywell Electronic Air Cleaner properly installed with a heat pump, air conditioner or high efficiency furnace that is: brand new, less than one year old; or more than one year old with the indoor coil professionally cleaned by a qualified contractor prior to installation.
- Proper maintenance on the EAC means: keep the power switch in the On position, periodically verify power operation, and wash electronic cells periodically as specified in this Owner's Guide.
- Proper maintenance on the Electronic Air Cleaner means: periodically clean the lamp glass and replace UV lamps as specified in the Owner's Guide.

### How to register your guarantee

The UltraClean Coil Guarantee™ begins the day you move into your new home, or the day the Air Cleaner is installed. To register your guarantee, complete the Registration Card in the back of this Owner's Guide and enclose:

- Proof of purchase of a Honeywell duct-mounted Electronic Air Cleaner and Coil Irradiation Ultraviolet Air Treatment System.
- Proof of purchase of a new heating/cooling system within the last year, or...
- Proof of professional coil cleaning services on existing equipment.
- If your home is new and invoices are not available, simply complete the form.

# LIMITED FIVE-YEAR WARRANTY

Honeywell warrants this product to be free from defects in the workmanship or materials, under normal use and service, for a period of five (5) years from the date of purchase by the consumer. If, at any time during the warranty period, the product is defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option) within a reasonable period of time.

If the product(s) is defective, please contact:

- a. dealer where you purchased it, or
- b. local Honeywell Authorized Repair Station.

If you do not have a dealer, locate one in your area at [www.honeywell.com/yourhome/](http://www.honeywell.com/yourhome/).

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage that occurred while the product was in the possession of a consumer.

Honeywell's sole responsibility shall be repair or replace the product within the terms stated above. HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY,

EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, WORKMANSHIP, OR FITNESS FOR A PARTICULAR PURPOSE.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If you have any questions concerning this product or warranty, please write to Honeywell Customer Care, 1985 Douglas Dr. N, MN 10-1461, Golden Valley, MN 55422. In Canada, write to Honeywell Limited/Honeywell Limitée, 36 Dynamic Drive, Scarborough, Ontario, M1V 4Z9.

## Warranty Registration

Register your warranty on-line at [www.honeywell.com/yourhome/](http://www.honeywell.com/yourhome/) under Product Registration or send the following form to:

Honeywell Customer Care  
MN10-1461  
1885 Douglas Dr N  
Golden Valley, MN 55422

## Honeywell 10 Year UltraClean Coil Guarantee™

Your Name \_\_\_\_\_  
 Street Address \_\_\_\_\_ City \_\_\_\_\_  
 State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Phone: Day \_\_\_\_\_ Evening \_\_\_\_\_  
 email \_\_\_\_\_  
 Date you moved in (for new home) \_\_\_\_\_

Please check UltraClean Coil Guarantee™ or Clean Coil Guarantee™ (see program details for explanation):

- UltraClean Coil Guarantee™.
- Clean Coil Guarantee™.

Your heating/cooling contractor or builder \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Phone: \_\_\_\_\_

Attn Mailroom: Please direct to Customer Care, MN10-1461.

## Product Registration

(Register online @ [www.honeywell.com/yourhome](http://www.honeywell.com/yourhome))

1. Mr\_\_\_ Mrs\_\_\_ Ms\_\_\_ Miss\_\_\_  
First Name:\_\_\_\_\_ Initial:\_\_\_ Last Name:\_\_\_\_\_   
Address (Number and Street):\_\_\_\_\_ Apt:\_\_\_\_\_   
Zip or Postal Code \_\_\_\_\_   
City:\_\_\_\_\_ State/Province:\_\_\_\_\_   
email Address:\_\_\_\_\_
2. Phone Number:\_\_\_\_\_
3. Date of Purchase (month/day/year) ex: January/18/98:  
Purchase Price: \$ \_\_\_\_\_ (excluding tax)
4. Where did you purchase this Honeywell product:  
Heating/cooling contractor \_\_\_\_\_ Utility company \_\_\_\_\_   
Builder/came with new home \_\_\_\_\_ Other \_\_\_\_\_
5. Model Number \_\_\_\_\_
6. How many other Honeywell products do you own:  
None\_\_\_ One\_\_\_ Two\_\_\_ Three\_\_\_ Four or more\_\_\_
7. Your date of birth (month/day/year) ex. January/18/69:  
\_\_\_\_\_
8. Education: High School\_\_\_ Some College\_\_\_   
Technical School\_\_\_ Completed College\_\_\_   
Graduate School\_\_\_ Other \_\_\_\_\_
9. For your primary residence, do you:  
Own\_\_\_ Rent\_\_\_
10. Including yourself, what is the total number of people  
living in your household? (Ex. 01, 02, 03 ... xx): \_\_\_\_\_
11. Your marital status: Married\_\_\_ Single\_\_\_
12. Which best describes your family income?  
Under \$15,000\_\_\_ \$15,000 - \$24,999\_\_\_   
\$25,000\_\_\_ \$35,000\_\_\_ \$50,000\_\_\_ \$75,000\_\_\_   
\$100,000 - \$149,999\_\_\_ Over \$150,000\_\_\_

### Automation and Control Solutions

Honeywell International Inc.  
1985 Douglas Drive North  
Golden Valley, MN 55422  
[customer.honeywell.com](http://customer.honeywell.com)

# Honeywell