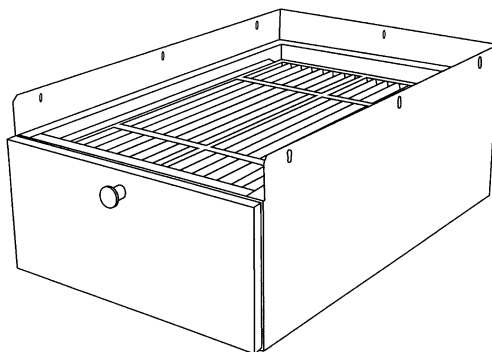


# INSTALLATION, OPERATION, & MAINTENANCE INSTRUCTIONS

## AHIC Fan Coil Media Air Cleaner



**Models: AHIC0014A, AHIC0017A, AHIC0021A, AHIC0024A**


**These instructions must be read and understood completely before attempting installation.**

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### Safety Considerations

Installing and servicing air conditioning equipment can be hazardous due to system pressures, electrical components, and fuel gases. Only trained and qualified personnel should install, service, or repair air conditioning equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils, or cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment, observe precautions in the literature, on tags, and on labels attached to unit.

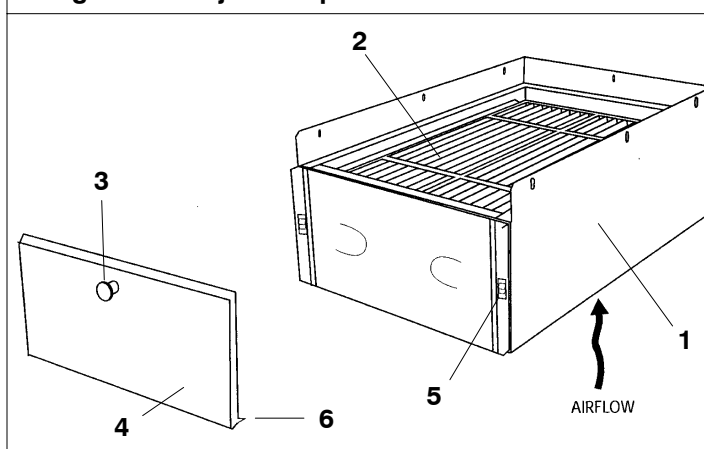
Recognize safety information.  This is the safety-alert symbol. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies a hazard which could result in serious injury or death. CAUTION is used to identify unsafe practices which may result in minor personal injury or product and property damage. NOTE is used to highlight suggestions that offer installation tips or which may result in enhanced installation, reliability, or operation.

Follow all safety codes. Wear safety glasses and work gloves. Have a fire extinguisher available.

MAJOR COMPONENTS - See Fig. 1	
All Models	Part Description
1	Cabinet
2	Filter
3	Access Handle
4	Access Door
5	Door Latch Hardware
6	Door Alignment Tabs

**Figure 1 - Major Components**



**Introduction** - These instructions cover the installation, operation and maintenance of an AHIC Fan Coil Media Air Cleaner.

**Application** - This Fan Coil Media Air Cleaner must be used in a forced air heating, cooling or ventilation system. This Fan Coil Media Air Cleaner should be installed in the system so that all the system air is circulated through this air cleaner. The Fan Coil Media Air Cleaner will only remove the airborne contaminants delivered to it. Maximum performance is obtained when the system blower is set for continuous operation.

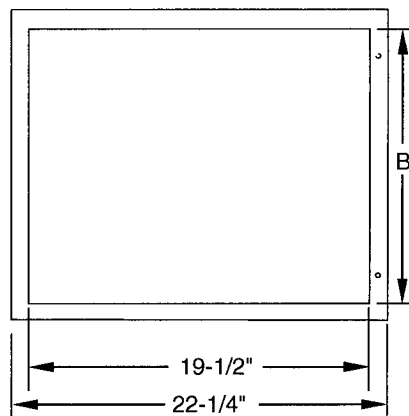
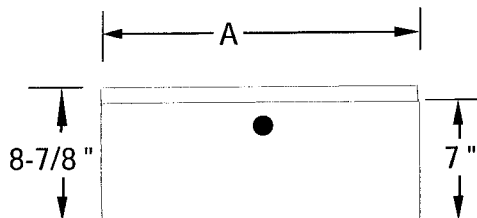
**Installation Requirements** – The location for the Fan Coil Media Air Cleaner is on the return side of the fan coil next to the blower compartment. In this location, both the blower motor and cooling coils will be kept clean. Do not install the air cleaner in the discharge (supply) air duct. The front of this unit must be readily accessible for periodic inspection and replacement of filter to maintain maximum efficiency and trouble-free operation.

readily accessible for periodic inspection and cleaning. Allow a minimum of 26 in. in front of the access panel for filter removal and replacement. For complete unit dimensions refer to Fig. 2. **IMPORTANT:** Failure to replace filter can cause damage to the system.

This High Efficiency Air cleaner can be mounted in several positions. See Fig. 3 for proper air cleaner mounting with a variety of installation styles.

Select Location for the Air Cleaner – Select a location that is

**Figure 2 - AHIC DIMENSIONS**



Media Filter Cabinet	Airflow Range	Opening A	Opening B
AHIC0014A	600-900	14-5/16"	11"
AHIC0017A	600-1350	17-5/8"	14-11/32"
AHIC0021A	600-2000	21-1/8"	17-7/8"
AHIC0024A	600*2200	24-5/8"	21-11/32"

#### PRESSURE DROP AT VARIOUS AIRFLOWS (CLEAN)

SIZE	Typical Factory Supplied Filter	FAIC0014A	FAIC0017A	FAIC0021A	FAIC0024A
Airflow (CFM)	Resistance (inches of water) (Clean Filter)*				
600	.044	.125	.060	.040	.015
800	.075	.150	.090	.060	.030
1000	.072	.250	.125	.070	.040
1200	.100	-	.180	.090	.060
1400	.092	-	.250	.140	.090
1600	.120	-	-	.187	.125
1800	.152	-	-	.230	.150
2000	.187	-	-	.280	.190
2200	-	-	-	-	.250

\* Pressure drop tested with complete AHIC cabinet and FAIC filter.



## CAUTION

### UNIT OPERATION AND SAFETY HAZARD.

Failure to follow directions in the instructions may damage the product or cause a hazardous condition.

Prior to installing this product you should read these entire instructions and follow all directions.



## CAUTION

### CUT HAZARD.

Failure to follow this caution may result in personal injury.

Sheet Metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling these parts.



## WARNING

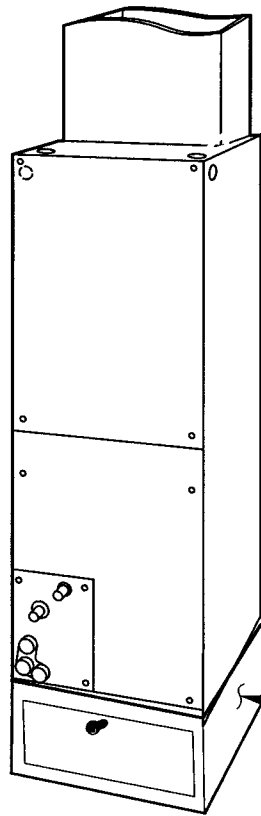
### ELECTRICAL SHOCK HAZARD.

Failure to follow this warning could result in personal injury or death.

Only a trained, experienced service person should install this air cleaner. A thorough checkout of the unit installation should be completed before unit operation. Before performing installation, service or maintenance operations on unit, turn off all power to unit.

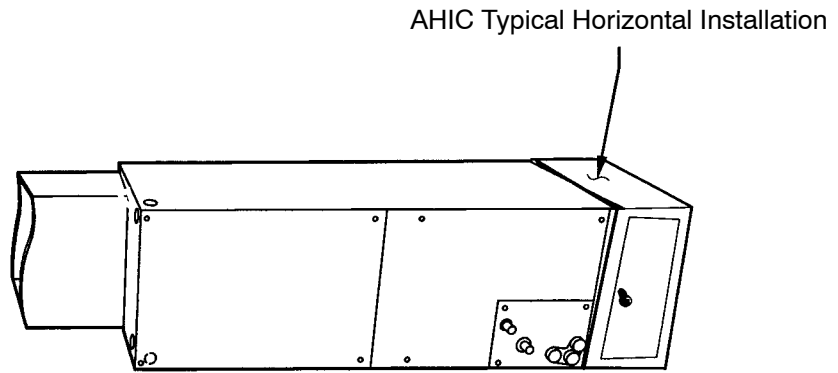
**TAG DISCONNECT SWITCH WITH LOCKOUT TAG.**

**Fig 3. - Typical Installations**

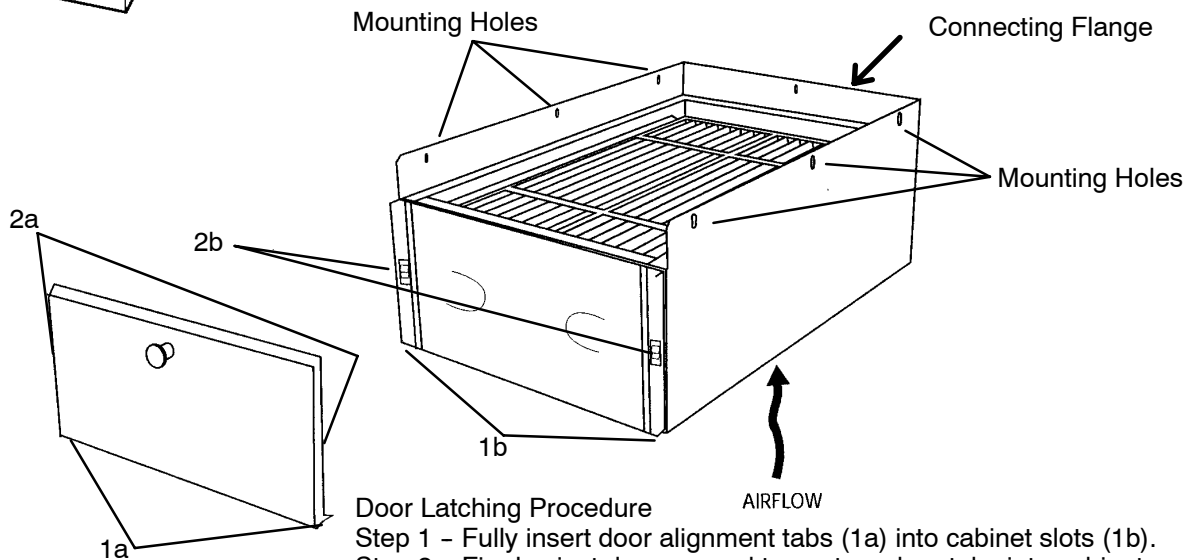


**Typical Vertical Upflow Installation**

AHIC can also be configured in a Vertical Downflow Installation. Fan Coil Unit must be reconfigured so the air cleaner is on the return side of the fan coil and blower compartment.



**AHIC Typical Horizontal Installation**



**Door Latching Procedure**

Step 1 - Fully insert door alignment tabs (1a) into cabinet slots (1b).  
Step 2 - Firmly pivot door upward to capture door tabs into cabinet latching mechanism (2b).

## INSTALLATION

1. Turn off power disconnect and install lockout tag.
2. Check the airflow rating given on this product to make sure it is suitable for your application.
3. Remove the fan coil filter door and the factory supplied 1-in air filter. Discard filter and reinstall filter door.  
NOTE: The air cleaner cannot remove existing dirt from the blower and ducts.  
NOTE: The following is a typical installation of this air cleaner on an upflow furnace. You may have to alter the installation to fit your specific application.
4. Remove screws from the fan coil edge (return side) and retain for use once AHIC is in place.
5. Slide AHIC installation connecting flange over fan coil cabinet (return side) edge
6. Mounting holes are provided for simple connection to unit cabinet. The clearance slots/holes are sized for # 10 sheet metal screws or pop rivets. If the adjoining duct work is flanged, install the screws so that the screw heads are inside the cabinet. This will prevent damage to the filter during removal and installation.
7. After the cabinet is secured, use caulk or tape to seal connecting seams airtight to the bottom opening as required.
8. If not already installed, slide filter into mounted AHIC.
9. Install access door and ensure a tight seal.

## OWNERS MANUAL SECTION

### Maintenance

#### HOW TO MAINTAIN YOUR AIR CLEANER

The filter media in your cabinet **MUST** be replaced periodically. The frequency of filter replacement is best determined by visual examination.

On average, filters of this type should be replaced before each heating and each cooling season under normal usage (or at least yearly under minimum usage).

#### STEPS FOR REPLACING FILTER

1. Turn off power to blower.
2. Open access door by pulling the handle. Remove door completely.
3. Pull used filter straight out of cabinet and discard.
4. Remove new filter from packaging.
5. Slide new filter into cabinet with Air-Flow arrow pointing in the direction of air flow (toward fan coil cabinet).
6. Replace access door (See Fig. 3).

#### REPLACEMENT FAIC FILTERS (Two per carton)

MODEL NUMBER	Used On	Dimensions (in.) Tolerance +/-0.125"
FAIC0014A	AHIC0014A	19.8125 x 12.175 x 4.3125
FAIC0017A	AHIC0017A	19.8125 x 15.625 x 4.3125
FAIC0021A	AHIC0021A	19.8125 x 19.125 x 4.3125
FAIC0024A	AHIC0024A	19.8125 x 22.625 x 4.3125

### WARRANTY

**Five-Year Limited Warranty** – The cabinet on this product is warranted to be free from defects in material and workmanship for a period of five years from the date of original installation, whether actual use begins then or later. If the cabinet does not meet this warranty, a new or remanufactured part, at the manufacturer's sole option, to replace any defective part will be provided without charge for the part itself; PROVIDED the defective part is returned to the distributor through a qualified servicing dealer.

THIS WARRANTY DOES NOT INCLUDE LABOR OR OTHER COSTS incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts. Such costs may be covered by a separate warranty provided by the installer.

THIS WARRANTY APPLIES ONLY TO PRODUCTS IN THEIR ORIGINAL INSTALLATION LOCATION AND BECOMES VOID UPON REINSTALLATION.

**LIMITATIONS OF WARRANTIES** – ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH THE LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MANY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER. ALL WORK UNDER THE TERMS OF THIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME AS THEIR WARRANTY PERIOD ONLY THE REMAINING TIME PERIOD OF THIS WARRANTY.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation and servicing instructions or owners manual including replacement of Air Filters.
2. Damage or repairs required as a consequence of faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
3. Damage as a result of floods, winds, fires, lightning, accidents, corrosive environments or other conditions beyond the control of the Manufacturer.
4. Parts not supplied or designated by the Manufacturer, or damages resulting from their use.
5. Manufacturer products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
6. Electricity or fuel costs or increases in electricity or fuel costs from any reason whatsoever including additional or unusual use of supplemental electric heat.
7. ANY SPECIAL INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion of incidental or consequential damages, so the above may not apply to you.

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

Model No. \_\_\_\_\_

Serial No. \_\_\_\_\_

Date Installed \_\_\_\_\_

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