

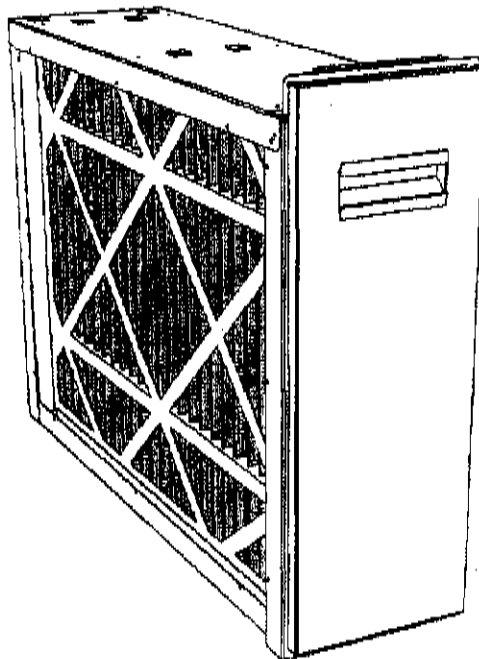
INSTALLATION AND MAINTENANCE INSTRUCTIONS

MODELS

**GMU1620-A, GMU1625-A, GMU2020-A, GMU2025-A
AMU1620-A, AMU1625-A, AMU2020-A, AMU2025-A**

HIGH EFFICIENCY MEDIA RETROFIT AIR CLEANERS

IMPORTANT: PLEASE READ MANUAL BEFORE OPERATING UNIT



Features

- Comes with High Efficiency MERV 11 Media Filter for removal of airborne pollutants as small as 0.3 micron
- Carbon Filters (optional) available for odor removal (not included)
- No maintenance except for filter replacement
- No electrical hook-up required
- Heavy gauge galvanized steel cabinet and powder-coat paint finish resist corrosion and provide trouble-free installation
- Easily upgrades to a High Efficiency Electronic Air Cleaner

**FOR QUESTIONS REGARDING INSTALLATION, OPERATION & SERVICE,
CALL THE AIR CLEANER HOTLINE TOLL-FREE**

1-800-267-8305

SAFETY CONSIDERATIONS

Read and follow instructions carefully. Improper installation may damage Air Cleaner.

Understand the signal words **WARNING** and **CAUTION** which are present in the Owner's Manual. **WARNING** and **CAUTION** signify a hazard which could result in personal injury, property damage or death.

WARNING

Before beginning any installation or modification, be certain that the main line electrical disconnect switch is in the OFF position. Electric shock could result. Tag disconnect switch with suitable warning labels.

Only a heating/air conditioning installer or qualified service person should install your Air Cleaner, unless you are completely familiar with the necessary tools, equipment and potential hazards involved. If you plan to install this Air Cleaner yourself, please be aware that the improper use of any tool can be dangerous. The manufacturer will not assume any responsibility for failures due to incorrect installation procedures.

Homeowners can perform the basic maintenance functions of replacing filters.

When working on the Air Cleaner, observe precautions in the Owner's Manual, labels attached to the unit, and other safety precautions that may apply. Follow all safety codes. Wear safety glasses and work gloves.

WHAT THE AIR CLEANER DOES

Your Air Cleaner has been designed to remove atmospheric and household dust, coal dust, insecticide dust, mites, pollen, mold spores, fungi, bacteria, pet dander, cooking smoke and grease, tobacco smoke and more down to 0.3 micron (1/84,000 of an inch).

BENEFITS

- Helps provide relief from allergy and asthma suffering.
- Helps prevent damaging black dust from staining walls, upholstery and window coverings, reducing the amount of time and money spent cleaning and redecorating.
- Helps eliminate unpleasant odors with optional carbon filters.
- Helps protect costly heating/cooling equipment, prolonging operating efficiency.

HOW IT WORKS

Millions of airborne pollutants are carried through the return air ducts of the heating/cooling system to the Media Air Cleaner. Here the particles are captured by the media filter.

The media filter is constructed of continuous hydrophobic polyolefin fibers that will not shred or absorb moisture. The media's unique design features a structured density gradient with an electret charge for higher initial and sustained efficiency. The media is supported by an open steel mesh and enclosed by a high wet-strength beverage board. The filter has an Underwriter's Laboratories Class 2 rating.

The efficiency of the filter is MERV 11, based on the ASHRAE Standard 52.2. Maximum test velocity is 492 feet/minute. An arrow indicates direction of air flow.

Composite Average Efficiency Value	Composite Minimum Range (Microns)	Average Composite Minimum Values
E1	0.3 - 1.0	26.0%
E2	1.0 - 3.0	65.5%
E3	3.0 - 10.0	85.4%

The clean air then passes through the carbon filters (3), where odors are adsorbed (optional). The carbon filter is a polyester pad impregnated with activated carbon. An aluminum frame is used to support the filter. Activated carbon with its naturally unique porous structure, allows excellent odor removal.

INSTALLATION

IMPORTANT: This media filter will cause more of a restriction on your air handling system than a regular equipment filter, because of its increased efficiency. The pressure drop of a clean filter (Model A/GMU1625-A) at 50% of rated air flow is 0.066 inches W.C. The same filter at 100% of rated air flow is 0.217 inches W.C. As the filter collects contaminants, the pressure drop increases. This media filter is not recommended where the pressure drop is critical.

LOCATION

Your Air Cleaner is adaptable to all residential forced air furnaces or cooling systems. The Air Cleaner must be installed in the return air duct close to the blower compartment. This location provides the most even air flow across the filter and allows the Air Cleaner to keep the system motor and fan clean.

HUMIDIFIERS

A humidifier should be installed in the furnace warm air duct. However, it may be installed in the return duct without causing problems to your Air Cleaner. Care must be taken that the humidifier does not leak, as this may damage the media filter or cause mineral deposits to build up on the filter.

AIR CONDITIONING

Whenever possible, your Air Cleaner should be installed upstream of the cooling coil. This will clean the air before it reaches the evaporator coil.

GENERAL INSTALLATION STEPS

1. **Remove existing equipment filter and clean blower compartment:** Thoroughly clean the blower compartment, since your Air Cleaner cannot remove dirt from the blower chamber and distribution ducts.
2. **Leave sufficient room around your Air Cleaner:** There must be adequate room to remove the filter. Additional room must be left above the Air Cleaner, if it is to be upgraded to a High Efficiency Electronic Air Cleaner.

NOTE: Once your Air Cleaner has been installed, do not allow the placement of a new hot water heater, water softener, gas pipe, or electrical cable to be put in front of or within 12 in (30 cm) from the top of the Air Cleaner. Otherwise, this will not allow for the removal of the Air Cleaner filters, which are necessary for maintenance or upgrading later.

3. **Installing the cabinet:** Make sure rivets or screws do not protrude into the cabinet, causing filters to catch.
4. **Transitions:** When the air duct does not fit the Air Cleaner opening, a gradual transition is recommended to reduce air turbulence through the Air Cleaner and to increase its efficiency. There should not be more than 20° of expansion used on each side of the transition fitting, approximately 4 inches per running foot (10 cm per 30 cm).

Do not reduce ductwork to fit a smaller Air Cleaner. This will increase the velocity of air flow and may decrease cleaning efficiency.

5. **Turning vanes:** If the Air Cleaner is installed adjacent to an elbow or angle fitting, turning vanes are recommended to improve air distribution across the filter.
6. **Seal the joints in the return air system:** All joints between the Air Cleaner and the heating/cooling equipment should be sealed to prevent dust from entering the clean air stream.

To improve the performance of your Air Cleaner, these simple steps should be followed:

- Run your heating/cooling system fan continuously, on low speed if available, since your Air Cleaner only removes particulate matter which passes through to the filter.
- Remove furniture or carpets from the front of the return air grilles so that air moves freely to the heating/cooling equipment.
- Check the fan belt on the furnace blower and see that there is no more than approximately 1/2 in (1.3

cm) of play on each side. A loose belt slips on the pulley.

MAINTENANCE

CAUTION

Turn off your heating/air conditioning system fan before performing maintenance to your Air Cleaner.

The media filter needs to be replaced once or twice a year depending on the amount of contaminants in the air. If the filter is allowed to become too clogged, it may cause a restriction to the air flow through the system. This may cause poor circulation of conditioned air or the evaporator coil of the air conditioning system to freeze.

1. Remove Air Cleaner door.
2. Remove filter and discard.
3. Install new filter. Arrow must point toward the system fan.
4. Close Air Cleaner door.

Replacement Media Filters

GMU1620-A/ AMU1620-A	Part #M0-1056
GMU1625-A/ AMU1625-A	Part #M1-1056
MERV 14 Upgrade Filter	Part #G1-1056
GMU2020-A/ AMU2020-A	Part #M2-1056
GMU2025-A/ AMU2025-A	Part #M8-1056
MERV 14 Upgrade Filter	Part #G8-1056

ACTIVATED CARBON FILTERS

Activated Carbon filters are used for the removal of household odors. Carbon filters should be replaced every 3 to 6 months. Remove plastic bag from filters before installing. **Carbon filters are not washable.**

1. Turn off system fan.
2. Remove the filter from Air Cleaner.
3. Slide out old carbon filters.
4. Space the new carbon filters at equal distance across the discharge opening. Never put more than three (3) carbon filters in the unit.
5. Turn on system fan.

When replacement filters or carbon filters are required, contact your original installer or dealer.

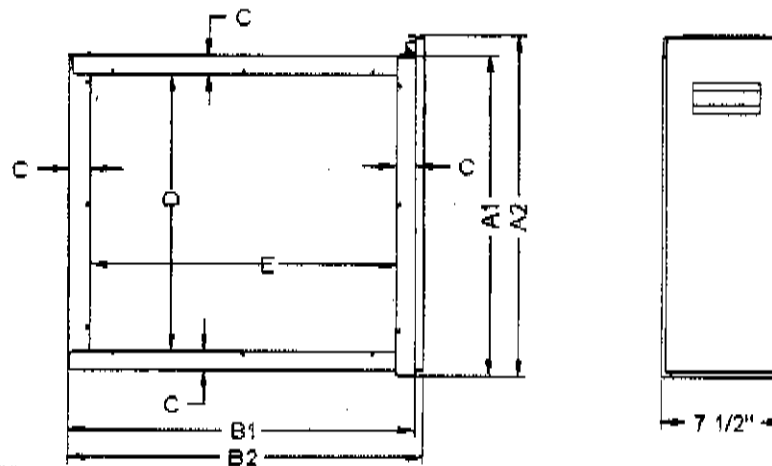
Replacement Carbon Filters

GMU1620-A/ AMU1620-A	Set of 3	Part #1156-3
GMU1625-A/ AMU1625-A	Set of 3	Part #1156-3
GMU2020-A/ AMU2020-A	Set of 3	Part #1856-3
GMU2025-A/ AMU2025-A	Set of 3	Part #1856-3

UPGRADE TO ELECTRONIC AIR CLEANER

Your Media Air Cleaner can be easily upgraded to an Electronic Air Cleaner, utilizing the existing cabinet for installation savings. Remove particulate such as tobacco smoke, bacteria and viruses down to 0.01 micron (1/2,540,000 of an inch). Contact your Dealer for the following upgrade kits.

GEACK1620-A upgrades to GSASD-10
 GEACK1625-A upgrades to GSASD-11
 GEACK2020-A upgrades to GSASD-12
 GEACK2025-A upgrades to GSASD-18



MODEL	DIMENSIONS In (cm)						
	A1	A2	B1	B2	C	D	E
GMU1620-A AMU1620-A	15.94 (40.5)	17.41 (44.2)	23.18 (58.9)	23.7 (60.2)	1.25 (3.2)	13.12 (33.3)	20.68 (52.5)
GMU1625-A AMU1625-A	15.94 (40.5)	17.41 (44.2)	26.11 (66.3)	26.64 (67.7)	1.0 (2.6)	13.62 (34.6)	24.11 (61.2)
GMU2020-A AMU2020-A	20.83 (52.9)	22.3 (56.6)	21.21 (53.9)	21.74 (55.2)	1.25 (3.2)	18.0 (45.7)	18.71 (47.5)
GMU2025-A AMU2025-A	20.83 (52.9)	22.3 (56.6)	25.76 (65.5)	26.29 (66.8)	1.25 (3.2)	18.0 (45.7)	23.26 (59.1)

HIGH EFFICIENCY MEDIA AIR CLEANER LIMITED LIFETIME WARRANTY

This GOODMAN product is warranted to be free from defects in material and workmanship, under normal use and maintenance, for the lifetime of the product except, however, for the disposable media filter which will have to be replaced from time to time, depending upon the use. The manufacturer's exclusive obligation under this warranty shall be to supply, without charge, a replacement for any part of the Air Cleaner which is found to be defective and is returned by the home owner or a qualified servicing GOODMAN dealer prepaid, together with the serial number, date of installation, and proof of purchase.

THIS WARRANTY DOES NOT INCLUDE ANY ADDITIONAL LABOR ALLOWANCE OR OTHER COSTS incurred for diagnosis, repairing, removing, installing, shipping, servicing, or handling of either defective parts or replacement parts.

LIMITATIONS OF WARRANTY - THE EXPRESS WARRANTIES CONTAINED HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES. IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY ARE LIMITED TO THE DURATION OF THE WARRANTY DESCRIBED HEREIN. CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OF ANY WARRANTY WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO LOSSES TO PERSONS OR PROPERTY ARISING OUT OF THE FAILURE OF THIS EQUIPMENT TO OPERATE FOR ANY REASON WHATSOEVER ARE EXCLUDED. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER OR OTHER PERSON WHATSOEVER.

Some states do not allow limitations on how long an implied warranty lasts or the exclusions of consequential or incidental damages, so the above limitations and exclusions 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.

GOODMAN MANUFACTURING COMPANY, L.P. WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance including replacement of filters, as outlined in the installation And Maintenance Instructions.
2. Damage or repairs needed as a consequence of any misapplication, faulty installation, abuse, improper servicing, unauthorized alteration, or improper operations.
3. Damage as a result of floods, winds, fires, lightning, accidents, corrosive atmosphere, or other conditions beyond the control of GOODMAN MANUFACTURING COMPANY, L.P.
4. Parts, including filters not supplied or designated by GOODMAN MANUFACTURING COMPANY, L.P.
5. GOODMAN MANUFACTURING COMPANY, L.P. products installed outside the continental U.S.A., Alaska, Hawaii and Canada.

Model No.

Serial No.

Date Of Installation

Installed By

Owner's Name & Address

ATTENTION INSTALLING CONTRACTOR: IF FAILURE SHOULD OCCUR, DO NOT RETURN PRODUCT TO THE DISTRIBUTOR. CALL THE TOLL-FREE HOTLINE 1-800-267-8306 FOR TECHNICAL ASSISTANCE.

GOODMAN MANUFACTURING COMPANY, L.P.,
2550 North Loop West, Suite 400, Houston, Texas 77092
FOR MORE INFORMATION, CALL THE AIR CLEANER HOTLINE TOLL FREE 1-800-267-8306