Amana®

Model ERGW/ EBWC

Owners Manual For HTM PLUS - Remote Outdoor Unit Indoor Blower Hot Water Tank

IMPORTANT — PRECAUTIONS

It is Owner's responsibility to provide the following:

1. Electrical connections — All electrical connections to be properly sized with overcurrent devices and conductor wires in accordance with the National Electrical Code. Canadian Electrical Code Standard CSAC221 and all existing local codes.
2. Gas Connections — All gas connections to meet the National Fuel Code ANSI Z223.1-1980 or National Standards of Canada B-149-1 or 2 Installation Code for Gas Appliance must be followed in installing the gas piping.
3. Solution connections — All solution connections are to provide a continuous loop from the Amana Outdoor Section, to the Amana Indoor Section, and/or Amana Hot Water Tank, or both.
4. Hot water tank must not be used for or contain materials that are caustic, corrosive or flammable, and must be compatible with copper and polyethylene. Pressure must not exceed 100 psi.

IMPORTANT NOTICE TO THE OWNER

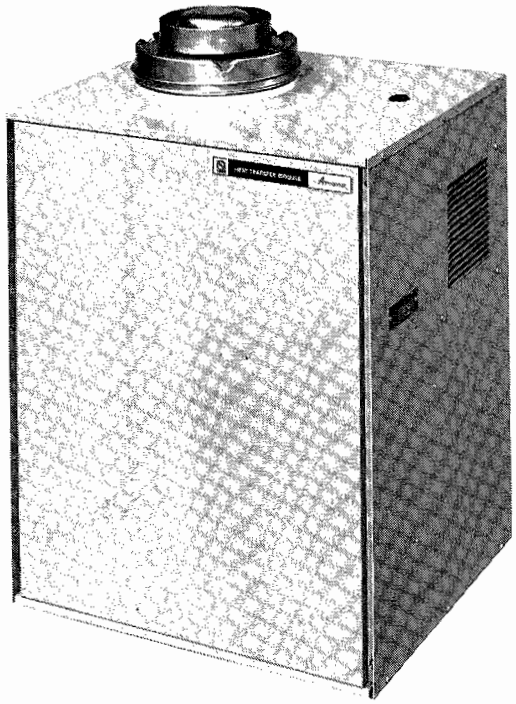
It is important that you fill out the owner's registration card and mail it today. When filling in the registration card, be sure to include the Model, Manufacturing and Serial Numbers, plus the installation date.

Your warranty certificate is also supplied with the unit. Read the warranty carefully and note what is covered. Keep the warranty certificate in a safe place, so you can find it if necessary.

IMPORTANT
To the Installer
PLEASE LEAVE THIS BOOKLET WITH THE OWNER INCLUDING THE INSTALLTION MANUAL

AMANA REFRIGERATION, INC.
AMANA, IOWA 52204

WARNING: Should overheating occur, or the gas supply fail to shut off, shut off the manual gas valve to the appliance before shutting off the electrical supply.



FOR YOUR SAFETY

If you smell gas:

1. **Open Windows**
2. **Don't Touch Electrical Switches**
3. **Extinguish Any Open Flame**
4. **Immediately Call Your Gas Supplier**

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

OUTDOOR UNIT LOCATION

This outdoor unit is approved only for an outdoor installation. An extension of the flue cap or addition of a flue pipe is not sanctioned or approved. The picture below illustrates the required clearances to the unit. No wood patio should be constructed over the unit at a later date.

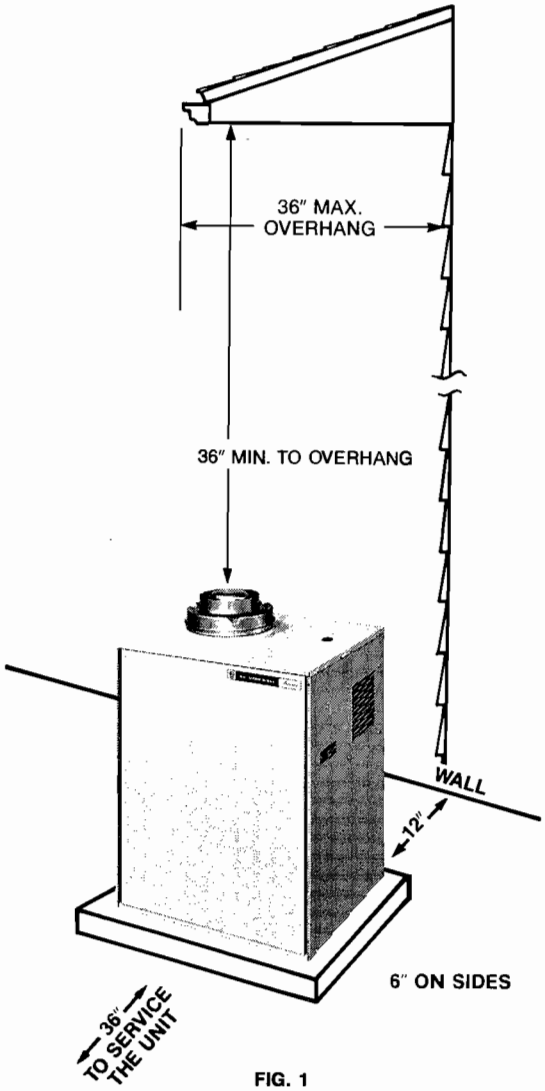


FIG. 1

While not all types of installation can be described in the manual, it nevertheless is important to take safety measures in the surrounding area of the unit.

1. An area must be available to reach the unit in a safe, clear and unobstructed path.
2. Do not store combustible material within 2 ft. of the unit.
3. Do not paint, varnish or lacquer any items near the unit, with inflammable finishes.
4. Do not store gasoline or other inflammable vapors and liquids in a close vicinity of the unit.

AIR FOR COMBUSTION AND VENTILATION

Normally the air for combustion, ventilation and dilution of flue gases for a furnace vented by a natural draft can be obtained from the basement area. Since the heating unit is installed completely in the outdoors, the depletion of combustion air is highly improbable.

Probably the only time precautionary measures must be taken is when there is a heavy snow. The rear and side louvers of the unit should be cleared of snow blockage.

Consult National Fuel Gas Code ANSI Z223.1-1980 for additional information regarding installation location.

LUBRICATION..INDOOR AIR CIRCULATING BLOWER MOTOR (See FIG. 2)

BEFORE OILING THE MOTOR, OPEN THE INDOOR AIR HANDLER POWER DISCONNECT SWITCH. The air circulating blower motor should be oiled annually or twice a year with air conditioning.

Remove the top door of the indoor air handler. The motor should be oiled with eight drops of S.A.E. 20 or 30 oil in each port. Do not use household type oil. Do not use oils with detergent. Do not over oil.

Re-install door.

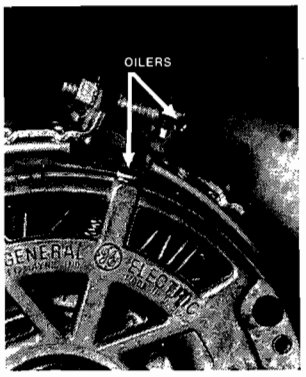
Engage the power disconnect switch.

The pump/combustion blower motor is permanently lubricated in the outdoor unit and does not require oiling.

STARTING AND SHUTTING DOWN THE OUTDOOR UNIT

NOTE: Do not attempt to manually light the outdoor unit.

Remove the door on the front of the unit, by removing 4 screws.



BLOWER MOTOR

FIG. 2

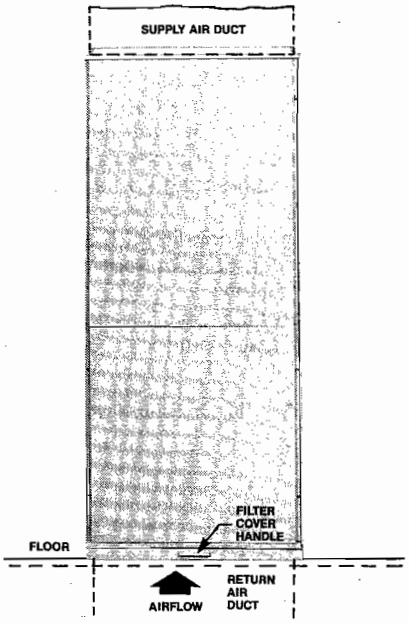
HEATING, STARTING PROCEDURE

1. Close the manual gas valve external to the outdoor unit.
2. Open the indoor air handling unit power supply switch.
3. Wait five (5) minutes.
4. Open manual gas shut off valve.
5. Turn knob on automatic gas valve to "ON". See Fig. 7.
6. Close indoor air handling unit and outdoor unit power supply switches.
7. Set room thermostat on HEAT and fan switch on AUTO. Adjust thermostat to above room temperature.
8. Let system run for five minutes and set room thermostat to desired temperature.
9. If a water heater tank is in the system, set its thermostat in the middle of the NORMAL range.
10. Install the door onto the outdoor unit.

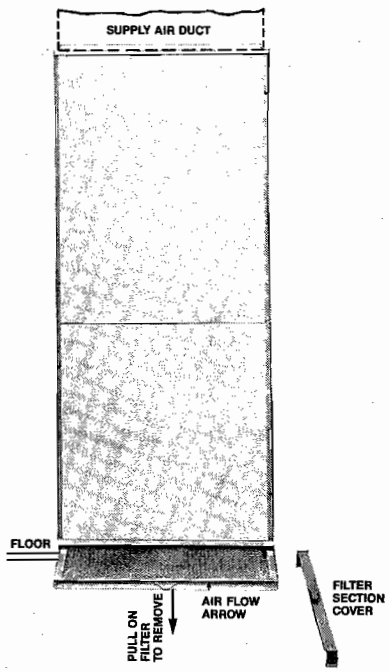
REPLACING OR CLEANING FILTERS MODEL EBWC6015M-A

The filters in this furnace are designed for a heating and cooling furnace. Filters are of the washable type and may be washed. After the filter is dry it should be sprayed with an adhesive. (Type may be shown on the filter frame.)

Filters should be inspected, cleaned or changed every two



Pull outward on filter cover handle to remove cover and gain access to filter.



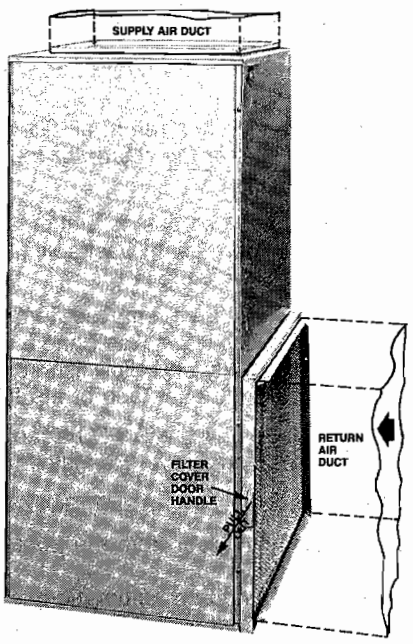


FIG. 5

months or as required.

The filter may be removed by grasping the lower portion of the filter, lift it upward to disengage it from the lower railing, move it towards the blower and lower it to the bottom of the furnace. Pull filter outward remove from furnace. See FIG. 3.

Use a vacuum cleaner to clean out the blower area and the adjacent area of the return air duct.

Install a new filter of the same size and type or clean, wash and dry the permanent filter, plus coating the media with a dust adhesive. Re-install filter by placing it into the furnace along

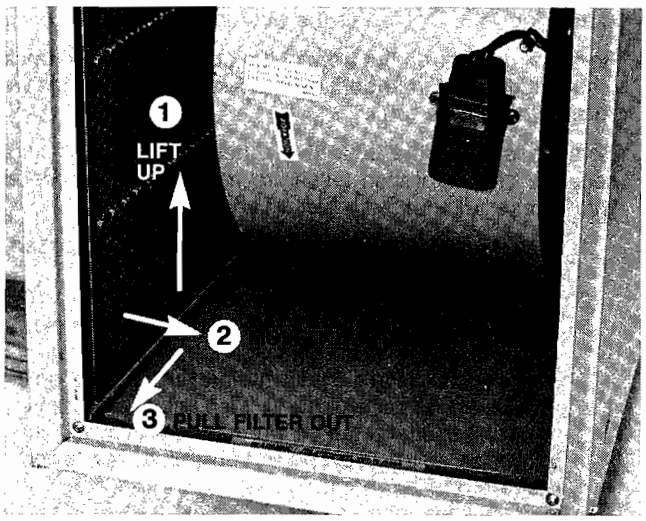


FIG. 3

FIG. 4

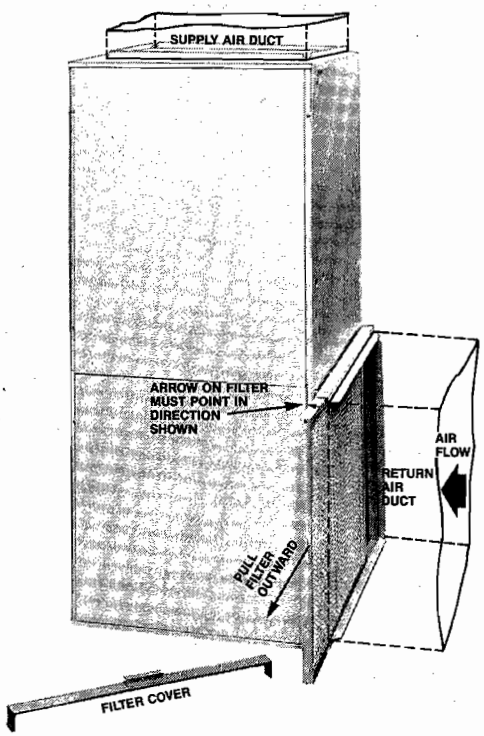


FIG. 6

the side of the blower. Engage filter into the top rail, move it towards the side of the furnace and drop it into the bottom rail. BE SURE AIRFLOW DIRECTION ARROW POINTS TOWARDS BLOWER. Filter size should be 16" x 25" x 1". Refer to FIG. 4.

When the filter is located in the bottom of the furnace on a bottom return system, the filter is held in its location by a sheet metal retainer strap. To remove the filter, merely slide one end of the retainer towards the front and remove the filter. Replace the filter with one of the same size. The recommended size filter is 10" x 25" x 1". Permanent type filter may be used. See FIG. 6.

Periodically check the blower wheel in your furnace and clean if necessary using a bristle brush.

FILTERS - MODEL EBWC3612M-A

Filters are not factory supplied with the indoor air handling unit. However, please note DO NOT OPERATE THE INDOOR AIR HANDLER WITHOUT A MEANS OF FILTERING ALL OF THE RETURN AIR.

Filter(s) may be in a return air filter grille(s), filter rack in the return air duct or the return air may be cleaned by an electronic air cleaner.

If the optional factory side, bottom or horizontal filter rack is applied, the permanent washable filter dimensions are 27⅝" x 21¾" x 1". (FIG. 5 & 6)

After filter has been removed from the filter section it should be cleaned with warm water and a detergent. Rinse filter with clean warm water and allow filter to dry before applying a filter adhesive on the inlet face of the filter.

Re-install filter with AIR FLOW indicating arrow as shown in the illustrations above. Re-install filter cover.

MANUAL HEATING SHUT DOWN

1. Remove door from the front of outdoor unit. (4 screws).
2. Turn knob on automatic gas valve to OFF. Figure 7.
3. Close manual gas shut off valve.
4. Disengage indoor air handling unit and outdoor unit power supply switches.
5. Re-install door to outdoor unit.
6. Set room thermostat to OFF and fan switch to AUTO.

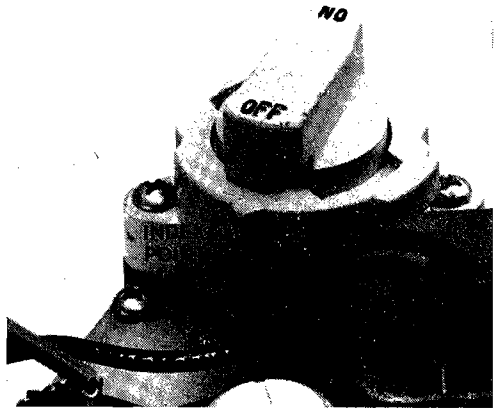


FIG. 7

HEATING RESET AFTER LOCKOUT

Turn thermostat to below room temperature or if the companion water heater is part of the system disengage the indoor unit electrical disconnect switch. Wait one minute and reset the room thermostat or engage the indoor unit electrical disconnect swtich.

ANNUALLY INSPECT FLUE PRODUCT CARRYING AREAS

The stainless steel burner in the HTM module is mounted vertical and the gas/air mixture is blown through thousands of openings. All lint, etc. is burned up and no rust can fall on the burner to plug openings.

Before performing the annual inspection of the flue cap and the flue gas carrying areas proceed as follows:

1. Turn the electrical disconnect switch to the "OFF" position to de-energize the outdoor unit.
2. Close the manual gas valve. Remove mounting screws and flue cap from unit. Lift it upward. See Fig. 8.
3. Remove the fiber glass and frame assembly from the top of the heat transfer module. Inspect the condition of the frame and fiber glass sound pad. if deteriorated replace the assembly. Obtain from the installing dealer. See Fig. 9.
4. Inspect the visual area of the module for dirt and debris and clean the interior of the flue cap if necessary. It is recommended that you call a qualified service man to clean and check your unit and perform preventive maintenance on a yearly basis.
5. Observe if there is a sooting condition. If sooting is evident it is a must that you contact your servicing dealer to correct the condition.
6. Re-install sound ring assembly and flue cap. Open manual gas valve and engage outdoor unit electrical disconnect switch.

BE SURE THAT AIR LOUVERS IN CABINET ARE CLEAN AND UNRESTRICTED.

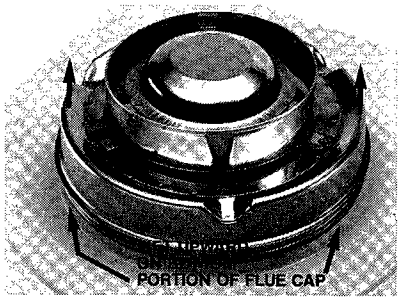


FIG. 8

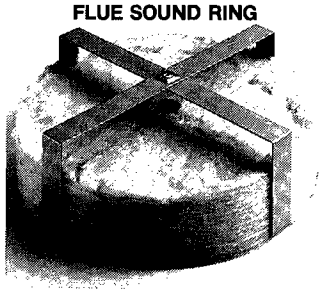


FIG. 9

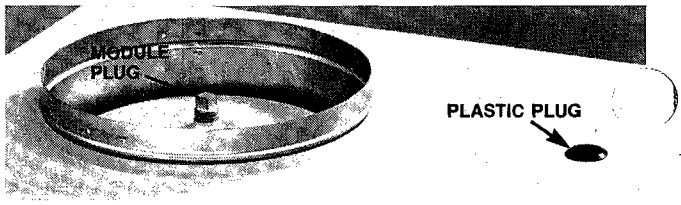


FIG. 10

CHECK HEATING SOLUTION

At the annual inspection observe the solution level in the plastic expansion tank located in the outdoor unit.

Remove the door on the front of the outdoor unit and observe the solution level. It should be between the two straps which secure the plastic tank.

Refer to label on the tank. If it is necessary to add solution because of evaporation losses or minute leaks proceed as follows after disengaging electrical disconnect:

1. Use Amana Heat Transfer Solution only, supplied by your Amana dealer or distributor.
2. Remove plastic plug from top of cabinet. Fig. 10.
3. Use a funnel with a ½" maximum O.D. flexible tubing. Tubing must be long enough so it will reach into top of plastic tank. Insert tubing through the split grommet. Be careful not to displace the grommet, it must be in place during normal operation to minimize solution evaporization. Fill to the lower edge of the top band.
4. Remove funnel and tube. Check if split grommet is in place. Replace plug on top of cabinet.
5. Re-install cabinet door and engage electrical disconnect.

MANUAL RESET LIMIT CONTROL

The manual reset limit control is secured to the lower portion of the heat transfer module. It will open its contacts and stop the entire system.

THE CONTROL SHOULD BE RESET ONLY ONCE. (See FIG. 11)

Call your servicing dealer to ascertain and repair the cause.

The cause for the control to trip is usually a low glycolsoltion charge or air in the heating solution system. If the limit must be replaced, a small amount of heat conductive compound M2755-20 must be applied to face of disc.

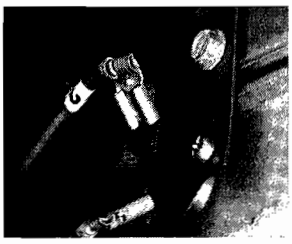
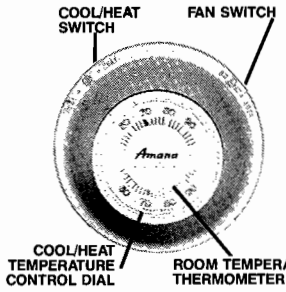


FIG. 11

BE SURE TO DISENGAGE INDOOR AND OUTDOOR UNIT DISCONNECT SWITCHES BEFORE PUSHING IN THE RESET BUTTON.



COOL/HEAT SWITCH	FAN SWITCH	
OFF	AUTO	System is off (except *)
COOL	AUTO	System in Cooling, fan cycles off and on.
COOL	ON	System in Cooling, constant fan
HEAT	AUTO	System in Heating, fan cycles off and on.
HEAT	ON	System in Heating, constant fan
OFF	ON	System is off, constant fan (except *)

*If installed, hot water tank and outdoor u will produce hot water.

BEFORE YOU CALL YOUR SERVICEMAN

There are several built-in safety fatures that may automatically shut off the unit under abnormal operating conditions. If your unit should become inoperative, here are some things you should check before you call the serviceman:

1. Wait a few minutes (30 minutes in heating) to see if it will resume operation.
2. Check thermostat to see if it is properly set.
3. Check fuses or bréakers on electrical supply for the outdoor unit and indoor air handling unit.
4. Check the filter(s) to see if it is clean.
5. (For heating). Lower thermostat setting below room temperature. Wait 1 minute. Set room thermostat to above room temperature. Set to heat, fan switch to auto. Gas must be on. See HEATING RESET AFTER LOCKOUT).
6. Check level of propylene or ethylene glycol distilled water solution in expansion tank. (for heating)

CLEAN COILS

The heating coil and cooling coil should be inspected annually and cleaned as frequently as necessary to keep the finned areas free of lint, hair and debris. BE SURE TO DISENGAGE THE ELECTRICAL DISCONNECT SWITCH BEFORE STARTING TO CLEAN THE COIL(S).

SOME THINGS YOU SHOULD DO:

Keep radios, electric lamps, or other heat sources away from thermostat. Superficial heat on the thermostat will give you false control. Do not cover up thermostat ... Allow free air to flow over it.

Do not let louvers on outdoor unit get blocked with leaves, shrubs or snow.

NOTES

Dealer's Name _____ Phone No. _____ Service Phone No. _____

Address _____ Model No. _____

City _____ State _____ Mfg. No. P _____ Serial No. _____