

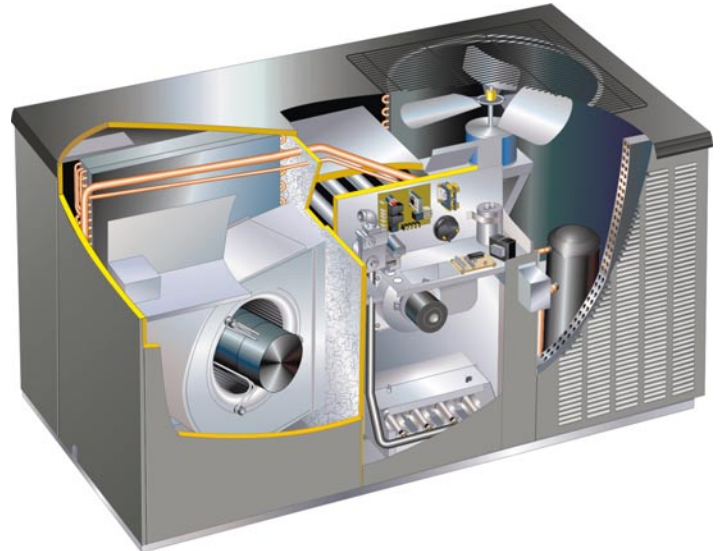


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Dallas, Texas, USA

# USER'S INFORMATION MANUAL

## 15GCSX Series Units

505,040M  
08/05  
Armstrong #38152A066



### ⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier

READ ALL INSTRUCTIONS IN THIS MANUAL  
AND RETAIN FOR FUTURE REFERENCE

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### ⚠ WARNING

**FIRE OR EXPLOSION HAZARD.**



Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

GAS-FIRED



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

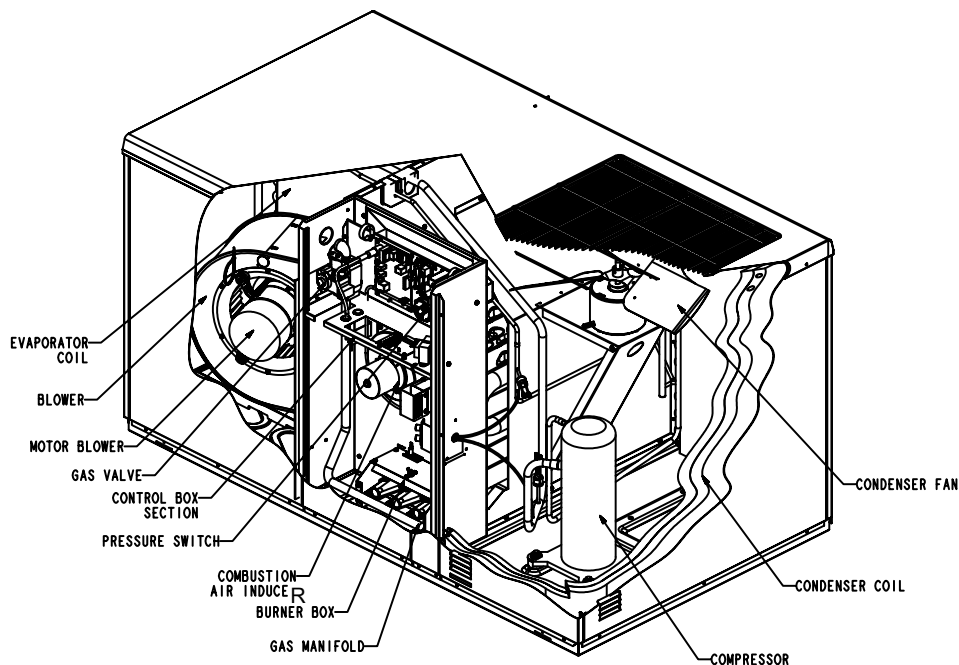
Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Leave the building immediately.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.



**15GCSX Parts Arrangement**



**Safety Information**

- 1 - Keep unit area clear and free of combustible materials, gasoline and other flammable vapors and liquids.
- 2 - Inspect return air duct to ensure duct is sealed to the unit and terminates outside the space containing appliance.
- 3 - This unit requires air for combustion and ventilation to ensure both proper and safe operation. Combustion air is brought in through the condenser section. Do not block or obstruct the condenser coil or condenser fan opening.
- 4 - Examine the unit periodically to ensure that the physical support of the unit is sound without sagging, cracks, gaps, etc. There must be no obvious signs of deterioration of the unit.

**⚠ WARNING**



**Electric shock hazard. Can cause injury or death. Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at disconnect switch(es). Unit may have multiple power supplies.**

**⚠ WARNING**



**Danger of explosion. Can cause injury or product or property damage. Should the gas supply fail to shut off or if overheating occurs, shut off the gas valve to the unit before shutting off the electrical supply.**

**⚠ WARNING**

**Product contains fiberglass wool. Disturbing the insulation in this product during installation, maintenance, or repair will expose you to fiberglass wool. Breathing this may cause lung cancer. (Fiberglass wool is known to the State of California to cause cancer.)**  
**Fiberglass wool may also cause respiratory, skin, and eye irritation.**  
**To reduce exposure to this substance or for further information, consult material safety data sheets available from address shown below, or contact your supervisor.**

P.O. Box 799900  
 Dallas, TX 75379-9900

**⚠ WARNING**



**Danger of electrical shock, explosion and fire. Improper servicing could result in dangerous operation, serious injury, death or property damage.**

**⚠ WARNING**



**Danger of explosion and fire. Failure to follow safety warnings exactly could result in dangerous operation, serious injury, death or property damage.**

## **⚠ WARNING**

Do not use this unit if any part has been under water. A flood-damaged unit is extremely dangerous. Attempts to use the unit can result in fire or explosion. A qualified service agency should be contacted to inspect the unit and to replace all gas controls, control system parts, electrical parts that have been wet or to replace the unit if deemed necessary.

### Unit Operation

## **⚠ WARNING**



Danger of explosion and fire. Can cause injury or product or property damage. You must follow these instructions exactly.

### FOR YOUR SAFETY READ BEFORE LIGHTING

BEFORE LIGHTING smell all around the unit area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

This unit is equipped with an automatic spark ignition system. There is no pilot. In case of a safety shutdown, move thermostat switch to **OFF** and return the thermostat switch to **HEAT**. An electro-mechanical thermostat is shown in figure 1. On units with electronic temperature controls, shut main disconnect off and back on to reset ignition control.

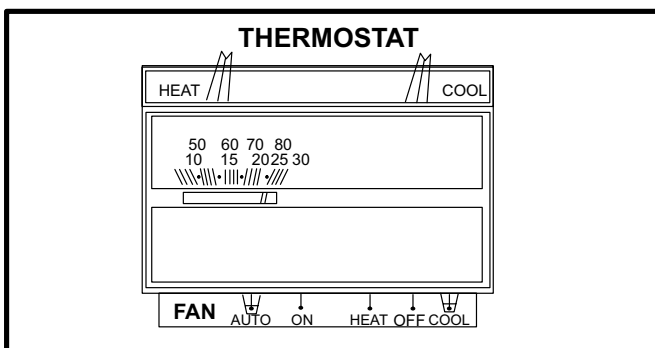


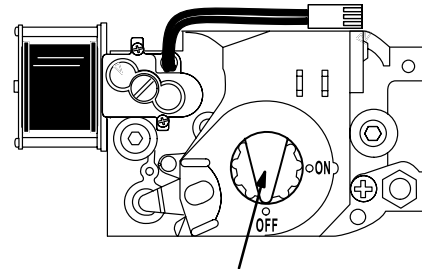
Figure 1

### To Place Unit into Operation:

- 1 - Turn off electrical power to unit.
- 2 - Set thermostat to lowest setting.
- 3 - Remove heat section access panel.

- 4 - Turn the gas valve knob to the ON position. Refer to figure 2.
- 5 - Replace heat section access panel.
- 6 - Turn on electrical power to unit.
- 7 - Set room thermostat to desired temperature. (If thermostat setpoint temperature is above room temperature after the pre-purge time expires, main burners will light).

### Honeywell VR8205 Series Gas Valve



GAS VALVE SHOWN IN OFF POSITION

Figure 2

### To Shut Down:

- 1 - Set the thermostat to the lowest setting.
- 2 - Turn off electric power to unit.
- 3 - Remove heat section access panel.
- 4 - Turn the gas valve knob to the OFF position.
- 5 - Replace heat section access panel.

## **⚠ WARNING**



Danger of explosion. Can cause injury or death. Do not attempt to light manually. Unit has a direct spark ignition system.

### Thermostat Operation

There are many styles of thermostats. Though their appearances may be different, there are many similarities. System Switch

The thermostat system switch allows you to choose whether you wish the unit to operate in either the HEAT or COOL mode. When the HEAT mode is selected, the unit will operate to satisfy a heating demand. When the COOL mode is selected, the unit will operate to satisfy a cooling demand. Some thermostats feature an AUTO system mode, which automatically switches between the HEAT and COOL modes to ensure comfort.

#### Fan Operation

The thermostat fan switch allows you to choose whether you wish the circulating air blower to operate in either the AUTO or ON mode. When the AUTO mode is selected, the circulating air blower will cycle on and off with the cooling or heating demand. When the ON mode is selected, the circulating air blower will operate continuously.

## Maintenance

To maintain efficiency and longevity, your equipment must be serviced yearly by a qualified service technician. Failure to provide proof of proper service can void the warranty.

### **⚠ WARNING**



**Electric shock hazard. Can cause injury or death. Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at disconnect switch(es). Unit may have multiple power supplies.**

### Filters

Filter(s) must be installed in the return air system. Filters should be checked monthly and replaced when necessary. Take note of air flow direction marking on filter frame when reinstalling filters. Replace disposable or clean permanent type as necessary. DO NOT replace permanent type with disposable.

*NOTE - Filters must be U.L.C. approved or equivalent for use in Canada.*

### Motors

All motors are permanently lubricated and require no further lubrication. Motors should be cleaned yearly to prevent the accumulation of dust and dirt on the windings or motor exterior.

### Coil

Dirt and debris should not be allowed to accumulate on the coil surfaces or other parts in the air conditioning circuit. Cleaning should be performed as often as necessary. Use a brush, vacuum cleaner attachment, or other suitable means. If water is used to clean the coil, be sure the power to unit is shut off prior to cleaning.

*NOTE - Care should be used when cleaning the coil so that the coil fins are not damaged.*

Do not permit the hot condenser air discharge to be obstructed by overhanging structures or shrubs.

### Burners

### **⚠ WARNING**



**Danger of explosion and fire. Can cause injury or product or property damage. Periodically inspect burner flame to ensure proper unit operation.**

Inspect the burner flame periodically during heating season to ensure proper burner operation.

Light the burners and allow unit to operate for a few minutes to establish normal burning conditions. Observe the burner flames. Flames should be predominantly blue in color and strong in appearance. Verify that all burners are lit and that the flame does not impinge on the sides of the heat exchanger. See figure 3.

Distorted flame or yellow tipping of the natural gas flame (or long yellow tips on LP/propane flame) may be caused by one or more of the following: lint or dirt inside the burner or burner ports; lint or dirt at the air inlet between the burner and manifold pipe; or an obstruction over the burner orifice.

Use a soft brush or vacuum to clean the affected areas.

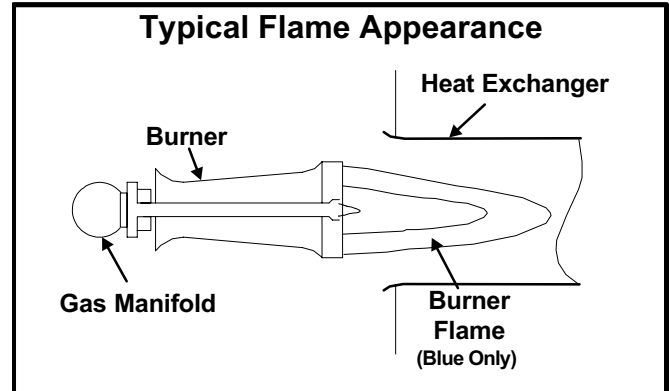


Figure 3

### Vent Outlet

Visually inspect vent outlet periodically to make sure that there is no buildup of soot and dirt. If necessary, clean to maintain adequate opening to discharge flue products.

## Service Reminder

Call a qualified service technician if the unit is inoperative. Before calling, always check the following to be sure service is required:

- 1 - Be sure electrical disconnect switches are ON.
- 2 - Check room thermostat for proper setting.
- 3 - Replace any blown fuses or reset circuit breakers.
- 4 - Gas valve should be ON.
- 5 - Air filters should not be plugged, limiting air flow.
- 6 - Make sure all access panels are in place.

## Repair Parts List

The following repair parts are available through Lennox dealers. When ordering parts, include the complete unit model number listed on the unit rating plate.

### CONTROL PANEL PARTS

Ignition control board  
Contactor  
Transformer  
Capacitor

### BLOWER PARTS

Blower wheel  
Blower Motor  
Motor mounting arm  
Blower housing

### COOLING PARTS

Compressor  
Condenser fan motor/blades  
Coils  
Drain pan

### HEATING PARTS

Heat exchanger assembly  
Combustion air inducer  
Orifices  
Burners  
Gas valve  
Manifold  
Ignitor  
Limit control  
Rollout switch  
Pressure switch