

**INSTALLER / CONSUMER
SAFETY INFORMATION**

Please read this manual before installing and using the heater.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- 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.
 - Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
 - Installation and service must be performed by a qualified installer, service agency or the gas supplier.

Installer: Leave this manual with the heater.

Consumer: Retain this manual for future reference.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to the Installation section on page 3.

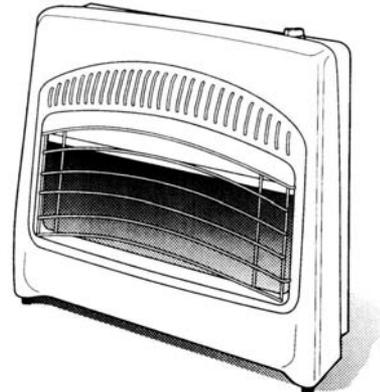


LEGACY

Unvented Gas-Fired Room Heater

Blue Flame Heaters

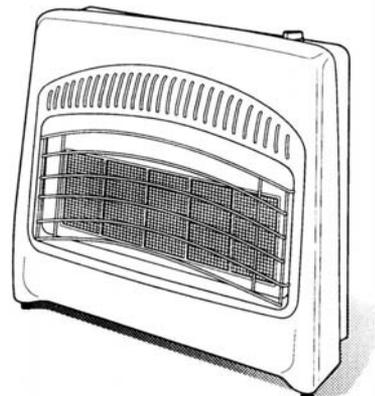
| | | | |
|---------|--------------------|-------------------|------------------|
| Models: | RMC-LC10NG, | RMC-LC10LP | - 10,000 Btu/hr. |
| | RMC-LC20NG(F), | RMC-LC20LP(F) | - 20,000 Btu/hr |
| | RMC-LC30NG(F), | RMC-LC30LP(F) | - 30,000 Btu/hr |
| | RMC-LC10NG(T), | RMC-LC10LP(T) | - 10,000 Btu/hr. |
| | RMC-LC20NG(T),(F), | RMC-LC20LP(T),(F) | - 20,000 Btu/hr |
| | RMC-LC30NG(T),(F), | RMC-LC30LP(T),(F) | - 30,000 Btu/hr |



(F)=Fan, (T)=Thermostat Gas Control

Infra-Red Heaters

| | | | |
|---------|--------------------|-------------------|-----------------|
| Models: | RMC-LI10NG, | RMC-LI10LP | - 10,000 Btu/hr |
| | RMC-LI18NG(F), | RMC-LI18LP(F) | - 18,000 Btu/hr |
| | RMC-LI30NG(F), | RMC-LI30LP(F) | - 30,000 Btu/hr |
| | RMC-LI06NG, | RMC-LI06LP | - 6,000 Btu/hr. |
| | RMC-LI10NG(T), | RMC-LI10LP(T) | - 10,000 Btu/hr |
| | RMC-LI18NG(T),(F), | RMC-LI18LP(T),(F) | - 18,000 Btu/hr |
| | RMC-LI30NG(T),(F), | RMC-LI30LP(T),(F) | - 30,000 Btu/hr |



(F)=Fan, (T)=Thermostat Gas Control

General Information

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SAFETY: Accidents are always tragic especially because so many of them could have been prevented with a little care and attention. These are some basic good practices we hope you will follow for safe use of your gas fired room heater.

IMPORTANT: Read this user's manual carefully and completely before trying to assemble, operate or service this heater. Improper use of this heater can cause serious injury or death from burns, fire, explosion, electrical shock (fan models) or carbon monoxide poisoning.

Early signs of carbon monoxide poisoning resemble the flu with headaches, dizziness or nausea. If you have these signs, the heater may not be working properly. Get fresh air at once! Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol or those at high altitude.

Begin by ensuring proper installation and servicing. Ensure that your qualified technician who installs this heater follows the installation instructions provided with this product. Have the installer show you where the gas supply shut off valve is located so that you know where to shut off the gas to the heater. If the connections are not perfectly sealed or tightened, you may have a leak and therefore a faint gas smell. Finding a leak is NOT a do-it-yourself procedure. Some leaks can only be found with the main burner gas on and this must be done by a qualified technician.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases. Any change to this heater or its controls can be dangerous.

PRECAUTIONS

- Never use natural gas in a unit designed for propane gas.
- Never use propane in a unit designed for natural gas.
- Check all joints and connections. To avoid the danger of fire, accident or explosion, never check a potential gas leak with an open flame.
- An unvented room heater having an input rating of more than 10,000 BTU per hour shall not be installed in a bedroom or

bathroom and an unvented room heater having an input rating of more than 6,000 BTU per hour shall not be installed in a bathroom.

- Do not install RMC-LC30, LI30, LC20 or LI18 heaters in a bedroom or a bathroom.
- Do not install RMC-LC10 or LI10 heaters in a bathroom, they are allowed in bedrooms.
- LI06 heaters are allowed in bathrooms or bedrooms.
- This appliance is intended for supplemental heating.
- Do not use a blower or other accessory not approved for use with this heater.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies. Keep flammable objects more than 36" from the front and top of the heaters and more than 10" from the sides of the heater (8" for the L106 heater).
- Provide adequate clearances for accessibility for purposes of servicing the heater.
- Maintain adequate clearances around the air openings to allow for proper and safe operation of the heater.
- **WARNING:** Do not allow fans to blow directly into the heater. Avoid any drafts that alter the burner flame patterns.

SAFE OPERATION OF YOUR LEGACY VENT FREE HEATER

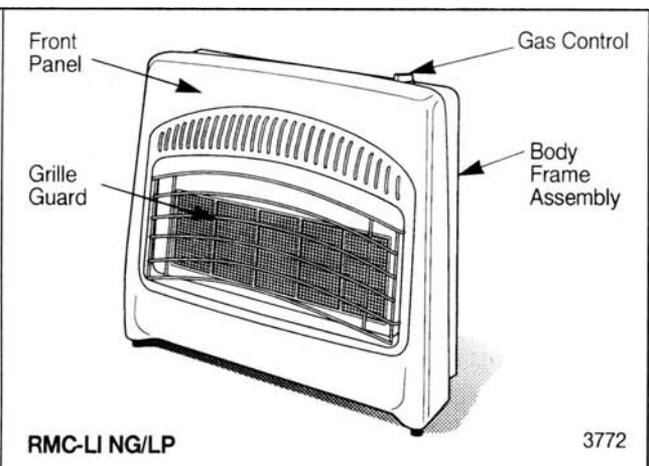
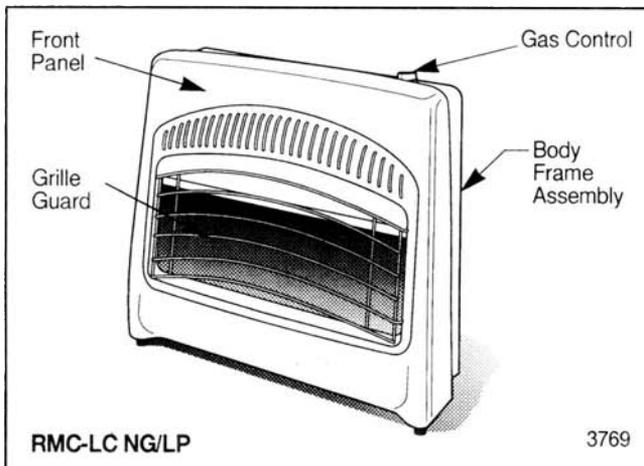
- This heater needs fresh, outside air for combustion to run properly. This heater has an oxygen depletion sensor (ODS) pilot light safety system. The ODS shuts down the heater if not enough fresh air (oxygen content > 18%) is available.
- Never run heater in confined space. Refer to page 4.
- If heater shuts off, do not relight until you provide fresh, outside air. If heater keeps shutting off, clean it and have it serviced.
- Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Keep burner and control compartment clean. See maintenance section of this manual.
- Do not place clothing or other flammable material on or near the appliance.
- Children and adults should be alerted to the hazard of high surface temperatures and should stay away to avoid burns and clothing ignition.
- Young children should be carefully supervised when they are in the same room with the appliance. Never allow them to sit, stand or play on or around the heater.
- Make sure that if the safety screen or guard is removed for servicing or lighting the appliance, it is replaced prior to operating the heater.
- Do not use the heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
- The ODS pilot light safety system is designed to prevent asphyxiation due to a lack of oxygen in the air.
- The heater does not monitor the air for CO.

RMC-LCNG, RMC-LCLP, RMC-LING, RMC-LILP Specifications

| Models (Manual & Thermostat) | Gas Type | Input Rating (Btu/Hr) Variable | | Regulator Pressure Setting | Inlet Gas Supply Pressure | | Size of Heater | Weight |
|------------------------------------|----------|-----------------------------------|--------|----------------------------------|------------------------------|------------|------------------------|---------|
| | | Min. | Max | | Min. | Max | | |
| RMC-LC30NG | Natural | 15,000 | 30,000 | 4.0" w.c. | 5.0" w.c. | 11" w.c. | 27"x24"x8 1/2" | 30 lbs. |
| RMC-LC20NG | | 10,000 | 20,000 | | | | 19 3/8"x22 7/8"x8 1/2" | 22 lbs. |
| RMC-LC10NG | | 5,000 | 10,000 | | | | 15 1/2"x20 7/8"x7 7/8" | 17 lbs. |
| RMC-LC30LP | LP | 15,000 | 30,000 | 10" w.c. | 11.0" w.c. | 14.0" w.c. | 27"x24"x8 1/2" | 30 lbs. |
| RMC-LC20LP | | 10,000 | 20,000 | | | | 19 3/8"x22 7/8"x8 1/2" | 22 lbs. |
| RMC-LC10LP | | 5,000 | 10,000 | | | | 15 1/2"x20 7/8"x7 7/8" | 17 lbs. |
| RMC-LI30NG | Natural | 6,400 | 30,000 | | | | 27"x24"x8 1/2" | 30 lbs. |
| RMC-LI18NG | | 6,400 | 18,000 | | | | 19 3/8"x22 7/8"x8 1/2" | 22 lbs. |
| RMC-LI10NG | | 5,500 | 10,000 | | | | 15 1/2"x20 7/8"x7 7/8" | 17 lbs. |
| RMC-LI06NG | | - | 6,000 | | | | 15 1/2"x20 7/8"x7 7/8" | 17 lbs. |
| RMC-LI30LP | LP | 6,400 | 30,000 | 10" w.c. | 11.0" w.c. | 14.0" w.c. | 27"x24"x8 1/2" | 30 lbs. |
| RMC-LI18LP | | 6,400 | 18,000 | | | | 19 3/8"x22 7/8"x8 1/2" | 22 lbs. |
| RMC-LI10LP | | 5,500 | 10,000 | | | | 15 1/2"x20 7/8"x7 7/8" | 17 lbs. |
| RMC-LI06LP | | - | 6,000 | | | | 15 1/2"x20 7/8"x7 7/8" | 17 lbs. |

NOTE: For altitude above 2,000 feet, reduce the input ratings (Btu/Hr) 4% for each 1,000 feet above sea level.

DO NOT USE THIS HEATER AT AN ELEVATION ABOVE 4,500 FEET



LOCAL CODES

**RMC-LC30 / RMC-LC20 / RMC-LC10
RMC-LI30 / RMC-LI18 / RMC-LI10 / RMC-LI06
Certified to ANSI Z21.11.2b-2004 Unvented Heaters**

Install and use heater with care. Follow all local codes. In the absence of local codes, use the latest edition of the National Fuel Gas Code ANSI Z223.2, also known as NFPA54.

Available from:
American National
Standards Institute, Inc.
1430 Broadway
New York, NY 10018

National Fire Protection
Association, Inc.
Batterymarch Park
Quincy, MA 02269

PRODUCT FEATURES

SAFETY DEVICE

This heater has a pilot with an Oxygen Depletion Sensor Shut-off system (ODS). The ODS pilot is a required feature for vent-free heaters. The ODS pilot shuts off the heater if the normal air oxygen content is reduced below 18%.

PIEZO IGNITION SYSTEM

This heater has a piezo ignitor. This system requires no matches, batteries or other electrical sources to light the heater.

Installation

PROVIDE ADEQUATE COMBUSTION AND VENTILATION AIR

- This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.
- This heater must have fresh air for proper operation. If not, poor fuel combustion could result. Read the following instructions to insure proper fresh air for this and other fuel burning appliances in your home.

Modern construction standards have resulted in homes that are highly energy efficient and that allow little heat loss. However, your home needs to breathe and all fuel burning appliances need fresh air to function properly and safely. Exhaust fans, clothes dryer, fireplaces and other fuel burning appliances all use the air inside the building. If the available fresh air supply is insufficient to meet the demands of these appliances, problems can result.

Confined Space:

The National fuel Gas Code, ANSI Z223.1 / NFPA 54 defines a confined space as a space whose volume is less than 50 cubic feet per 1000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space.

Unconfined Space:

An unconfined space is defined in the same standards as a space whose volume is not less than 50 cubic feet per 1000 BTU per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

Example:

10,000 BTU Legacy heater should only be installed in a room whose volume is more than 500 cubic feet. A room that is 8' x 8' x 8' (512 cubic feet) would be acceptable for a Legacy 10,000 BTU/hour heater.

If an additional fuel fired appliance is installed in the same room, the input rating of that appliance should be added to that of the Legacy heater to determine the minimum sized room that should be serviced by both appliances.

Unusually tight construction is defined as construction where:

- a) Walls and ceilings exposed to the outside atmosphere have a continuous water vapour retarder with a rating of 1 perm (6 x 10⁻¹¹ kg per pa-sec-m²) or less with openings gasketed or sealed;
- b) Weather stripping has been added on openable windows and doors; and
- c) Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

WARNING: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National fuel Gas code, ANSI Z223.1 / NFPA 54, Section 5.3 or applicable local codes.

GAS TYPE

Verify the type of gas supply to be used, either natural gas or LP (Propane), and make sure the marking on the appliance rating plate agrees with that of the supply gas. The rating plate is located on the side of the heater, which indicates the type of gas the heater is manufactured for.

WARNING: This appliance is only for use with the type of gas indicated on the rating plate.

This appliance is not convertible for use with other gases.

ITEMS NEEDED FOR HEATER INSTALLATION

Before installing the heater, make sure you have these items:

- Gas piping (check local codes)
- Test gauge connection
- Sealant (resistant to LP gases) - approved thread compound
- Manual shut-off valve*
- Sediment trap - where required
- Ground joint union
- Tee joint and pipe wrench

*An installer supplied design-certified manual shut-off valve with 1/8 NPT tap connection.

LOCATING THE HEATER

- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies. Keep flammable objects more than 36" from the front and top of the heaters and more than 10" from the sides of the heater.
- Provide adequate clearances for accessibility for purposes of servicing the heater.
- Maintain adequate clearances around the air openings to allow for proper and safe operation of the heater.
- **WARNING: Do not allow fans to blow directly into the heater. Avoid any drafts that alter the burner flame patterns.**

This heater is designed to be mounted on a wall or on the floor.

WARNING: Never install the heater;

- in a bathroom*
- in a recreational vehicle
- where curtains, furniture, clothing or other flammable are less than 36" from the front, top or sides of the heater
- as a fireplace insert
- in high traffic areas
- in windy or drafty areas

*Models RMC-L106NG or LP Permitted for bathroom installation.

WARNING: Vent-free heaters add moisture to the air. Although this is beneficial, installing heater in rooms without enough ventilation may cause mildew formation from too much moisture content. See National Fuel Code for Fresh Air for Combustion and Ventilation.

This appliance may be installed in an aftermarket, permanently located manufactured (mobile) home, were not prohibited by state or local codes.

Caution: If you install the heater in a home garage:

- Heater must be at least 18" above floor
- Locate heater where moving vehicle will not hit it.
- Install to ANSI Z223.2 / NFPA 54 using fixed gas supply piping.

PREPARING FOR INSTALLATION

1. Remove heater from carton
2. Remove all protective packaging applied to heater for shipment.
3. Check heater for any shipping damage. If heater is damaged, promptly inform dealer/distributor.
4. Select a location for the heater that will provide maximum exposure of the radiant surface to the room, but will not be subjected to accidental contact.
5. Adequate clearance must be available around the air opening. Refer to Figure 2 for clearances that must be maintained to the side walls, floor and horizontal surface surrounding the heater.

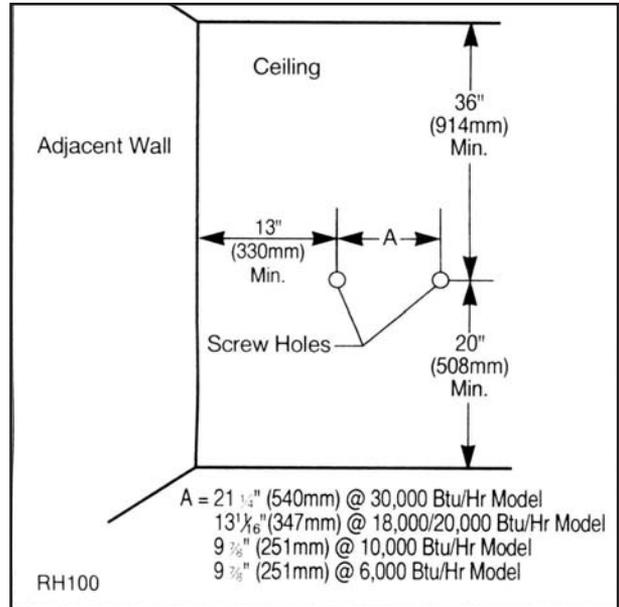


Fig. 2 Minimum clearances from mounting holes to top surface of flooring, adjacent walls and ceiling

ATTACH MOUNTING SCREWS TO WALL

NOTE: Wall anchors and mounting screws are in hardware package provided with heater.

1. Install mounting screws on wall as shown in Figure 3. Use enclosed paper template for proper location of holes. Be sure template is level. It may be necessary to use plastic or lead anchors for plaster walls.
2. Drill holes at marked location using 9/64" drill bit. Insert mounting screws.
3. Leave screw head out from wall far enough to attach heater.

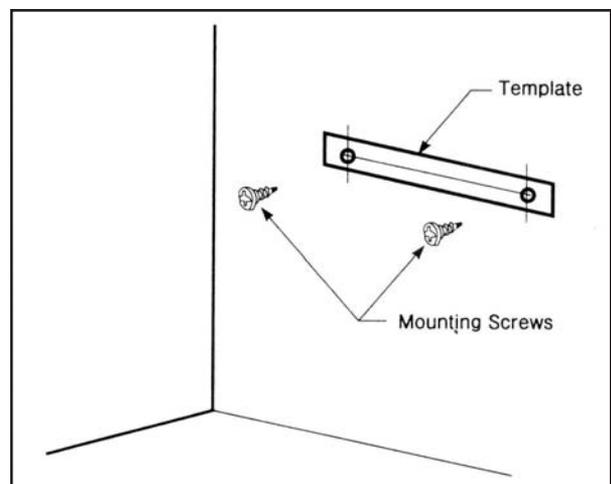


Fig. 3 Use paper template supplied to mark location of mounting holes. Be sure template is level.

WALL ANCHOR METHOD

When mounting heater to hollow walls (wall areas between studs) or solid walls (concrete or masonry) it may be necessary to use wall anchors.

1. Place paper template on wall maintaining minimum clearance. Be sure template is level.
2. Drill holes at marked locations using 5/16" drill bit.
For solid walls, concrete or masonry, drill holes at least 1" deep.
3. Insert plastic anchor. Tap anchor flush to wall. (Fig. 4)
4. Insert screw into wall anchor leaving screw head out far enough to attach heater. (Fig. 4)
5. Hang heater on mounting screws in holes provided at the rear of the heater.

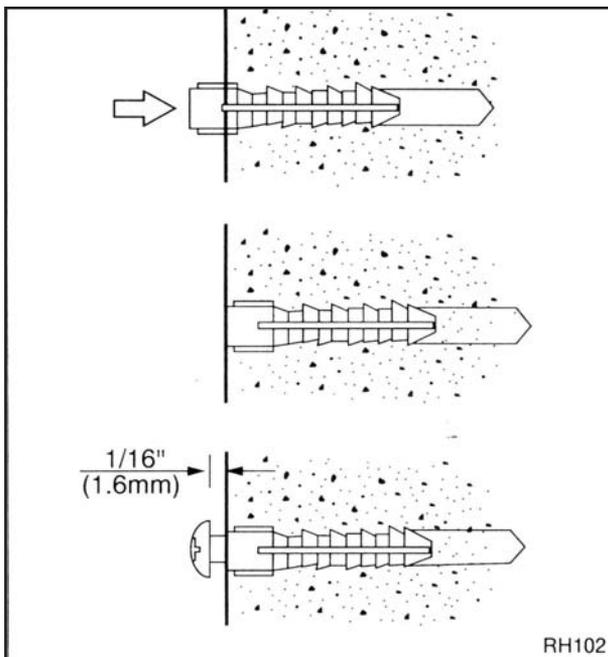


Fig. 4 Wall anchor.

FLOOR INSTALLATION

1. Heater may only be installed on a noncombustible flat surface. Where the flooring is carpeting, tile or of other combustible material other than wood flooring, maintain the minimum clearances to the floor as shown in figure 2 or else use a metal or wood panel (not supplied) extending the full width and depth of the appliance.
2. Measure heater mounting screw location "X" as desired above floor. (Fig. 5)
3. Use enclosed "paper template" for proper distance between holes. Be sure template is level. It may be necessary to use plastic or lead anchors for plaster walls.
4. Leave screw head out from wall far enough to attach heater.

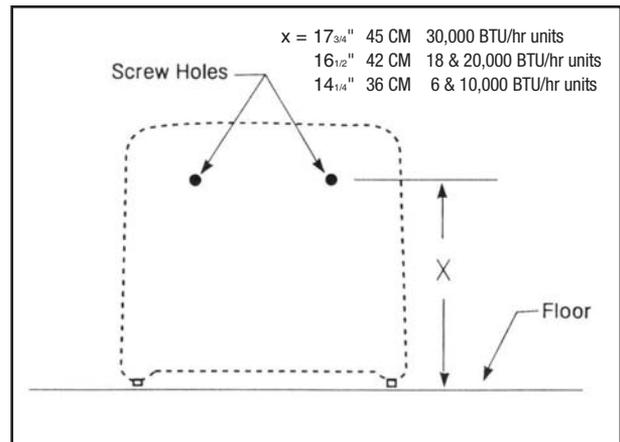


Fig. 5 Optional wall mounting screws for floor installation.

CONNECT TO GAS SUPPLY

Installation should be done by a qualified service person. Before connecting the appliance, turn off all gas appliances. Close the main gas valve at the gas meter or LP tank. Make certain there is good ventilation where the installation will be made. Installation should comply with all applicable building codes and ANSI Z223.1, latest edition. Use PLP gas resistant pipe compound to seal threaded joints.

An installer supplied, design certified gas pressure regulator must be installed to bring the gas supply pressure down to 14" w.c. for LP gas or 11" for natural gas.

WARNING: Never connect an unregulated gas line to the heater.

IMPORTANT: Check gas line pressure before connecting heater to gas line. Gas line pressure must not be higher than 14" w.c. for LP gas or 11" for natural gas.

NOTE: The gas line connection can be made with 3/8" black or steel pipe. Internally tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of large enough diameter to allow proper gas volume to heater. If pipe is too small, undue pressure loss will occur.

CAUTION: Use pipe joint sealant that is resistant to liquefied petroleum gases. Install sediment trap in supply as shown in Figure 6.

Locate sediment trap where it is within reach for cleaning. Locate sediment trap where matter is not likely to freeze. A sediment trap prevents moisture and contaminants from going into the heater controls. If the sediment trap is not installed or is installed wrong, the heater may not operate properly.

Test for gas leaks with a mild soap and water solution. Apply water/soap solution with brush only - do not over apply.

NEVER test with an open flame.

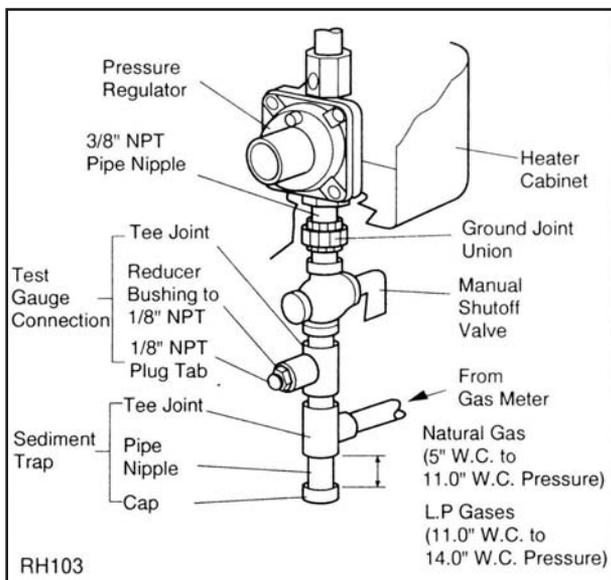


Fig. 6 Gas line connection

PRESSURE TEST GAS SUPPLY PIPING SYSTEM

The appliance and its individual shut off (control) valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressure in excess of 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing the individual manual shut-off valve (fig. 7) during any pressure testing of the gas supply system at test pressure equal to or less than 1/2 psi (3.5 kPa).

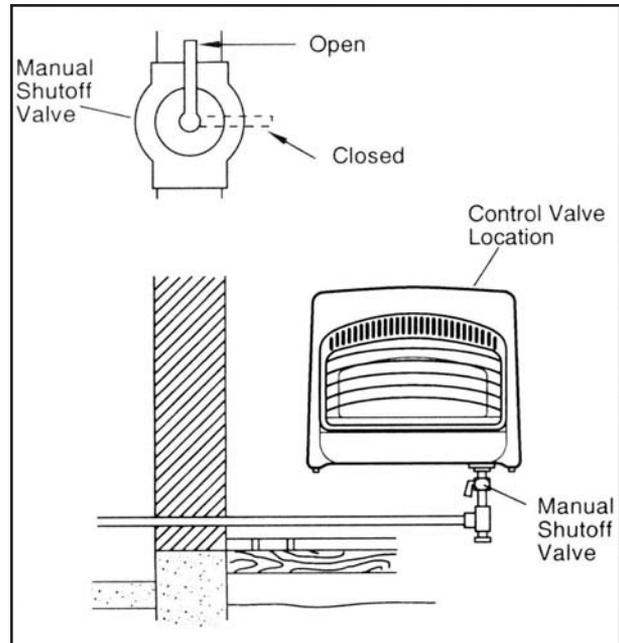


Fig. 7 Manual shut-off valve location.

LEAK TESTING HEATER GAS CONNECTION

1. Make sure control knob of heater is in the OFF position.
2. Open manual shut-off valve.
3. Open main gas valve located near gas meter.
4. Check all joints from manual gas valve up to control valve and including the manifold assembly. Apply the soap solution around the connections, valve and tubing. Soap bubbles will appear where a leak is present.
5. If a leak is present, immediately turn off gas supply, tighten any leaky fittings, turn gas on and recheck.
6. To check burner and safety valve, the burner must be lit. (See Operating Instructions) Check the rest of the connections for leaks.
7. Turn off the heater prior to making any gas connection repairs.

Operation Instructions

FOR YOUR SAFETY - READ THIS SECTION BEFORE LIGHTING

WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE

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

IF YOU SMELL GAS:

1. Do not try to light appliance.
2. Do not touch electrical switches; do not use any phone in your building.
3. Immediately call your gas supplier from a neighbour's phone. Follow your gas suppliers instructions.
4. If you cannot reach you gas supplier's, call the fire department.

B. Use only your hand to push in or turn the gas valve control knob. Never use tools. If the knob will not push in or 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.

C. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of this control system and any gas control which has been under water.

ATTENTION:

Keep burner and control compartment clean.

See installation and operating instructions accompanying the heater.

See the safety information on the sides of the heater.

WARNINGS:

Hot while in operation. Do not touch.

Keep children, clothing and furniture away.

Do not light or operate where gasoline and other liquids having flammable vapors are present.

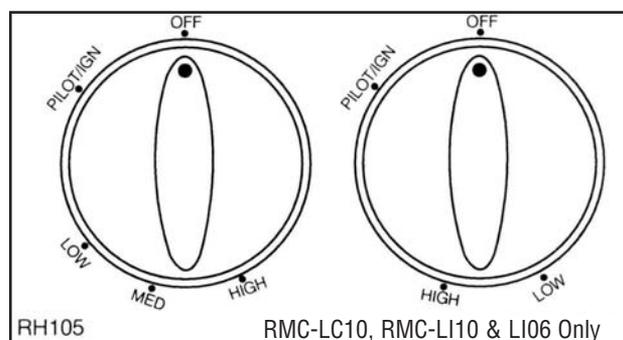


Fig. 8 Control knobs

LIGHTING INSTRUCTIONS

MANUAL GAS CONTROL

1. Stop! Read and Heed the Warnings and Cautions on the side of the heater.
2. Check that gas supply to the heater is on.
3. Push in gas control knob slightly and turn clockwise to "OFF" position.

NOTE: knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

4. Wait five (5) minutes to clean out any air. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on the side of the heater. If you do not smell gas, go to the next step.
5. Push in gas control knob slightly and turn counterclockwise to "PILOT/IGN" and depress for five (5) seconds.

NOTE: The first time that the heater is operated after connecting the gas supply, the control knob should be depressed for about thirty (30) seconds. This will allow air to bleed from the gas system.

6. Release control knob and turn clockwise to "OFF".
7. Depress control knob while "OFF", then turn back to "PILOT/IGN". This should cause the spark from the piezo ignitor to light the pilot gas. Keep control knob depressed for ten (10) seconds before releasing. If pilot does not light, repeat steps 5, 6 and 7 or use a match.
8. When pilot is lit, turn the ignition knob to "ON".
9. To select the heating level desired, use the knob LOW to HIGH.

THERMOSTAT GAS CONTROL

1. Stop! Read and Heed the Warnings and Cautions on the side of the heater.
2. Check that gas supply to the heater is on.
3. Push in gas control knob slightly and turn clockwise to "OFF" position.
4. Wait five (5) minutes to clean out any air. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on the side of the heater. If you do not smell gas, go to the next step.
5. Turn control knob counterclockwise to "PILOT" position. Press in control knob for five (5) seconds.

NOTE: The first time that the heater is operated after connecting the gas supply, the control knob should be depressed for about thirty (30) seconds. This will allow air to bleed from the gas system.

6. With control knob pressed in, push down and release ignitor button. This will light pilot. If needed, keep pressing ignitor button until pilot lights.
7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
8. If pilot goes out, repeat steps 5 through 7 or use a match.
9. When pilot is lit, turn control knob to on. Turn control knob counterclockwise to desired heating level between 5 and 1.

TO TURN OFF GAS TO APPLIANCE

MANUAL GAS CONTROL

Turning Heater Off

Push in gas control knob slightly and turn clockwise  to "OFF" position. Do not force.

Turning Burner Only Off (Pilot stays lit).

Turn control knob clockwise to the PILOT position.

CAUTION: Do not try to adjust heating levels by using the manual shut-off valve.

NOTE: The thermostat sensing bulb measures the temperature of air near the heater cabinet. This may not always agree with room temperature (depending on housing construction, installation location, room size, ect.). Frequent use of your heater will let you determine your own comfort levels.

THERMOSTAT GAS CONTROL

Turning Heater Off

Turn control knob clockwise  to "OFF" position.

Turning Burner Only Off (Pilot stays lit).

Turn control knob clockwise to the PILOT position.

CAUTION: Do not try to adjust heating levels by using the manual shut-off valve.

NOTE: The thermostat sensing bulb measures the temperature of air near the heater cabinet. This may not always agree with room temperature (depending on housing construction, installation location, room size, ect.). Frequent use of your heater will let you determine your own comfort levels.

MANUAL LIGHTING INSTRUCTION

1. Use a long match or a BBQ lighter. If not available, remove guard assembly by flexing it.
2. Follow steps 1 through 4 as stated under Lighting Instructions.
3. Press and turn control knob counterclockwise to the PILOT/IGN position .
4. With control knob pressed in, strike match, hold match to pilot until pilot lights.
5. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
6. Replace guard assembly if it was removed in step 1.

PILOT AND BURNING INSPECTION

Each time you light your heater check that the pilot flame and burner flame patterns are as shown in Figures 9, 10 and 11. If flame patterns are incorrect, turn the heater off. Contact your dealer or qualified gas technician for assistance. Do not operate the heater until the pilot flame is correct.

WARNING: If yellow tipping occurs, your heater could produce increased levels of carbon monoxide. If burning flame pattern shows yellow tipping, follow instruction in the Troubleshooting section on page 10.

NOTE: Do not mistake orange flames with yellow tipping. Dirt or other particles may enter the heater and cause transient patches of orange flame.

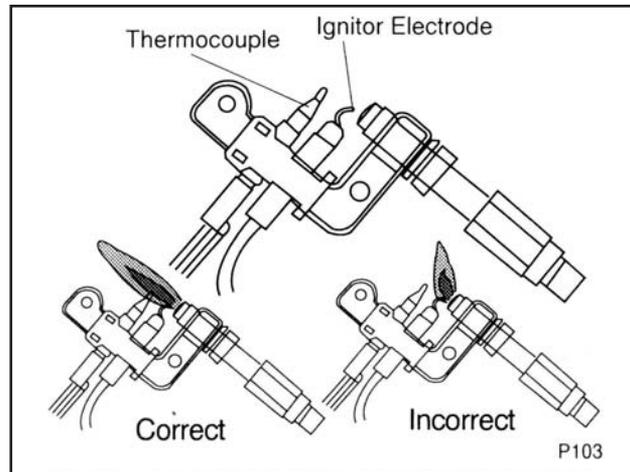


Fig. 9 Proper pilot flame

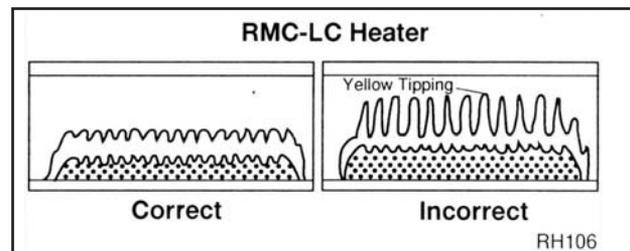


Fig. 10 Correct burner flame pattern for the RMC-LC blue flame burner.

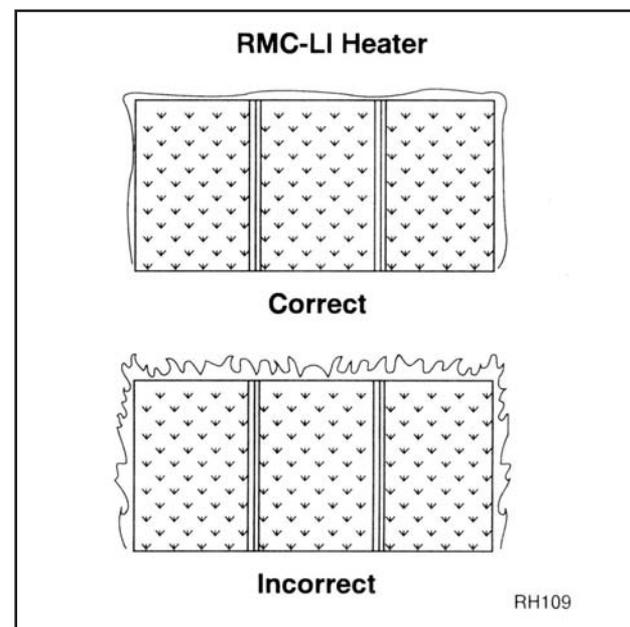


Fig. 11 Correct burner flame pattern for the RMC-LC plaque heater.

Troubleshooting

| Problem | Possible Cause | What To Do |
|---|---|---|
| When control knob is pressed in and turned counterclockwise to ignition, there is no spark at ODS pilot. | <ol style="list-style-type: none"> 1. Ignitor electrode positioned wrong. 2. Ignitor electrode broken. 3. Ignitor cable pinched or broken. 4. Ignitor cable not connected to ignitor electrode. | <ol style="list-style-type: none"> 1. Reposition ignitor electrode. 2. Replace electrode. 3. Free ignitor cable, if damaged, replace. 4. Connect cable to electrode |
| When control knob is pressed in and turned counterclockwise to ignition/pilot position there is spark but no ignition | <ol style="list-style-type: none"> 1. Gas supply turned off. 2. Control knob not in pilot position. 3. Control knob not pressed in while in pilot position. 4. ODS pilot is clogged. 5. Air in gas lines. | <ol style="list-style-type: none"> 1. Turn gas supply on. 2. Turn control knob to pilot position. 3. Press in control while in pilot position. 4. Call a qualified service technician. 5. Purge gas lines and repeat ignition operation. |
| ODS pilot lights but flame goes out when control knob is released. | <ol style="list-style-type: none"> 1. Control knob not pressed long enough. 2. Safety interlock is triggered. 3. Pilot flame not touching the thermocouple. Problem could be result of one or both of the following: <ul style="list-style-type: none"> • Partially clogged ODS pilot orifice. • Low gas pressure. 4. Thermocouple damaged. 5. Thermocouple connection loose at gas control valve. 6. Gas control valve damaged. | <ol style="list-style-type: none"> 1. After ODS pilot lights, keep control knob pressed in approximately 30 seconds. 2. Wait one minute, repeat ignition operation. 3. Contact your gas company, gas supplier or qualified service technician. 4. Replace thermocouple. 5. Hand tight until snug then tighten 1/4 turn with a wrench. 6. Replace gas control. |
| Burner does not light after ODS pilot is lit. | <ol style="list-style-type: none"> 1. Burner orifice clogged. 2. Gas supply pressure is very low. | <ol style="list-style-type: none"> 1. Clean burner orifice. 2. Contact gas supplier. |
| Delayed ignition. | <ol style="list-style-type: none"> 1. Main burner carry over ports clogged. 2. Gas supply pressure is very low. | <ol style="list-style-type: none"> 1. Clean main burner ports. 2. Contact gas supplier. |
| Burner backfiring during operation. | <ol style="list-style-type: none"> 1. Burner orifice is clogged. 2. Burner ports damaged. | <ol style="list-style-type: none"> 1. Clean burner orifice. 2. Replace burner. |
| Yellow flames during burner operation. (RMC-LC) | <ol style="list-style-type: none"> 1. Not enough air | <ol style="list-style-type: none"> 1. Check air passageways and burner for dirt and debris (Refer to Maintenance section) |
| Burner plaque(s) does not glow. (RMC-LI) | <ol style="list-style-type: none"> 1. Plaque(s) is damaged. 2. Inlet gas pressure too low. 3. Control knob set between locked positions. | <ol style="list-style-type: none"> 1. Replace burner. 2. Contact local gas supplier. 3. Turn control knob until it locks at desired setting. |
| Slight smoke and odor during initial operation. | <ol style="list-style-type: none"> 1. Residues from manufacturing processes. | <ol style="list-style-type: none"> 1. Will stop after a few hours of operation. |
| Heater produces a whistling noise when burner is lit. | <ol style="list-style-type: none"> 1. Air passageways blocked. 2. Air in gas line. | <ol style="list-style-type: none"> 1. Check minimum installation clearances and air passageways for debris. 2. Operate burner until the air is completely purged. |

Troubleshooting continued

| Problem | Possible Cause | What To Do |
|--|--|--|
| Heater produces a clicking noise just after burner is lit or turned off. | 1. Metal expanding and contracting. | 1. This is common with heaters. If noise is excessive, contact a qualified service technician. |
| Gas odor even when control knob is in OFF position. | 1. Gas leaks. Refer to front of page Warnings. 2. Gas control defective. | 1. Locate and correct leaks immediately. 2. Replace gas control. |
| Gas odor during combustion. | 1. Foreign matter in gas or on burner ports. 2. Heater burning vapors from paint, impurities in air. 3. Gas leaks, refer to front page Warnings. | 1. Check gas passage way and burner. 2. Ventilate room, stop storing and using odor causing products near heater. 3. Locate and correct leaks immediately. |
| Heater shuts off on ODS. | 1. Not enough fresh air is available. 2. Low gas pressure. 3. ODS pilot partially clogged. | 1. Open window. 2. Contact gas supplier. 3. Clean the pilot. |

Maintenance

Repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the heater be kept clean. Dust, lint, cobwebs or debris may affect heater performance. The heater draws air into it during normal operation and in the process dust, lint or debris may be drawn in also. It is important to keep the burner, gas control and combustion and circulating air passageways clean. Inspect or have these areas inspected annually at the beginning of the heating season by a qualified service person. Depending on the surroundings, the room heater may require frequent cleaning due to excessive lint or debris.

Before cleaning ensure the gas supply is off and the gas control knob is in the OFF position. Make sure the heater is cool.

WARNING: Danger of bodily injury. If fan assembly accessory is used, turn off power supply at disconnect switch or service panel before removing any access panels from heater.

BURNER AND ODS PILOT CLEANING

Clean the exterior with soft bristle brush, vacuum cleaner or pressurized air. Never use a wooden toothpick as it may break off and clog the ODS pilot or main burner port.

Use a flashlight to inspect the main burner inlet to ensure it is not blocked. If obstruction can be seen, use a metal wire coat hanger that has been straightened out. Use a vacuum cleaner to clean the primary air openings to the main burner(s).

WARNING: Failure to keep the primary air openings to the burner(s) clean may result in sooting and property damage.

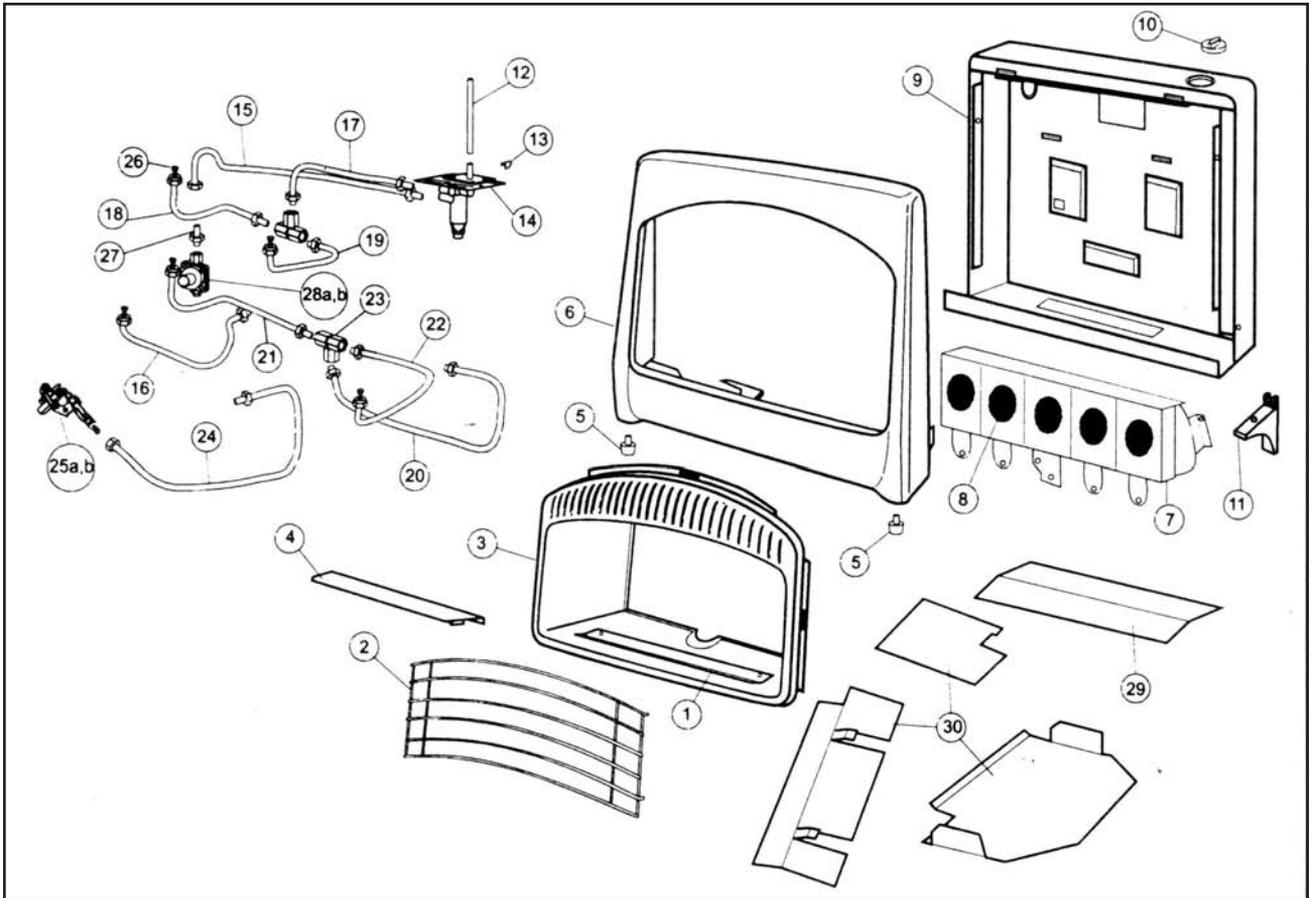
In order to clean ODS pilot orifice, use pressurized air to blow dust out. Sometimes blowing air backwards through the pilot will get rid of the accumulated dirt. If that does not work blow out any dust through primary air openings of pilot assemblies (This unit has two openings; one beneath the bimetal strip and the second one opposite from bimetal strip. Use the one wide open, do not try to lift the bimetal strip.)

CLEANING AIR PASSAGEWAYS AND UNIT CASINGS

Use a vacuum cleaner or pressurized air to clean the combustion and circulating air passageways and dampened cloth to clean the cabinet/casing.

RMC-LI NG/LP Unvented Room Heater

| Item/Model Number | RMC-LI06NG/LP | RMC-LI10NG(T)/LP(T) | RMC-LI18NG(T)/LP(T) | RMC-LI30NG(T)/LP(T) |
|-----------------------------------|-------------------|---------------------|---------------------|---------------------|
| 1. Lower Heat Cover | LI10LP-01-01-02 | LI10LP-01-01-02 | LI18LPT-01-01-03 | LI30NG-01-01-02 |
| 2. Guard Assembly | LC10NG-01-04 | LC10NG-01-04 | LI18LPT-01-04 | LC30NGTF-01-04 |
| 3. Reflector | LI10LP-01-01-01 | LI10LP-01-01-01 | LI18LPT-01-01-01 | LI30NG-01-01-01 |
| 4. Upper Heat Cover | LC10NG-01-01-02 | LC10NG-01-01-02 | LI18LPT-01-01-02 | LC30NGTF-01-01-02 |
| 5. Leg Front | LC10NG-05 | LC10NG-05 | LC10NG-05 | LC10NG-05 |
| 6. Front Panel | LC10NG-01-03 | LC10NG-01-03 | LI18LPT-01-03 | LC30NGTF-01-03 |
| 7. Burner Assembly Body | LI6LP-03-00 | LI10LP-03-00 | LI18LPT-03-00 | LI30LP-03-00 |
| 8. Ceramic Plate | LI18LPT-03-09 | LI10LP-03-03 | LI18LPT-03-09 | LI18LPT-03-09 |
| 9. Body Frame Assembly | LC10NG-02-00 | LC10NG-02-00 | LC20NG-02-00 | LC30LP-02-00 |
| 10. Knob – Valve | LC10NG-12-00 | LC10NG-12-00 | LC10NG-12-00 | LC10NG-12-00 |
| 11. Leg – Rear | LC10NG-04 | LC10NG-04 | LC10NG-04 | LC10NG-04 |
| 12. Valve Link | LI6LP-02 | LI6LP-02 | LI18LPF-02 | LI30NG-02 |
| 13. Fix Pin – Link | LI6LP-03 | LI6LP-03 | LI6LP-03 | LI6LP-03 |
| 14a. Gas Control | CK-890SL-A1/00(B) | CK-890SL-A1/00(D) | CK-890SL-A1/00(E) | CK-890SL-A1/00(E) |
| 14b. Thermostat Gas Control | | LI18LPT-04-00 | LI18LPT-04-00 | LI18LPT-04-00 |
| 15. Tubing Inlet Assembly | LI6LP-07-00 | LI10LP-07-00 | LI18LPF-07-01 | LI30NG-07-01 |
| 16a. Outlet Tubing Assembly | | LI10NGT-08-00 | LI18LPT-08-00 | LI30LP-08-00 |
| 16b. Tubing Outlet – A Assembly | LI6LP-08-00 | LI10LP-08-00 | LI18LPF-08-00 | LI30NG-08-00 |
| 17. Tubing Outlet – B Assembly | | LI10LP-10-00 | LI18LPF-10-00 | LI30NG-10-01-00 |
| 18. Tubing Outlet – BL Assembly | | | | LI30NG-10-02-00 |
| 19. Tubing Outlet – BR Assembly | | | | LI30NG-10-03-00 |
| 20. Tubing Outlet – C Assembly | | | LI18LPF-11-00 | LI30NG-11-01-00 |
| 21. Tubing Outlet – CL Assembly | | | | LI30NG-11-02-00 |
| 22. Tubing Outlet – CR Assembly | | | | LI30NG-11-03-00 |
| 23a. Manifold – “C” | | | | LI30NG-10-02 |
| 23b. Manifold Assembly | - | LI10NGT-03-02-00 | LI18LPT-03-02-00 | LI30LP-03-02-00 |
| 24. ODS Tubing Assembly | LI6LP-09-00 | LI10LP-09-00 | LI18LPF-09-00 | LI30NG-09-00 |
| 25a. ODS Pilot Assembly – Natural | 144NG 4-7" | NG 8224 | NG 8224 | NG 8224 |
| 25b. ODS Pilot Assembly – LP | 158LP 8-11" | LPG 8420 | LPG 8420 | LPG 8420 |
| 26a. Main Nozzle – Natural | LI6NG-08-05 | LI10NG-08-05 | LI6NG-08-05 | LI6NG-08-05 |
| 26b. Main Nozzle – LP | LI6LP-08-05 | LI10LP-08-05 | LI06LP-08-05 | LI06LP-08-05 |
| 27. Connector – “B” | LC10NG-05-02 | LC10NG-05-02 | LC10NG-05-02 | LC10NG-05-02 |
| 28a. Pressure Regulator – Natural | RTZ-11/20B3 | RTZ-11/20B1 | RTZ-11/20B3 | RTZ-11/20B3 |
| 28b. Pressure Regulator – LP | RTZ-11/20B4 | RTZ-11/20B2 | RTZ-11/20B4 | RTZ-11/20B4 |
| 29. Rear Radiant Heat Shield | LC10NG-01 | LC10NG-01 | - | LC30NGTF-01 |
| 30. Shield | - | - | LI18LPT-01 | - |
| 31. Optional Fan-Natural/LP | - | - | RMA-FT | RMA-FT |



CFM Home Products reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

WARNING: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

RMC-LC NG/LP Unvented Room Heater

| Item/Model Number | RMC-LC10NG/LP | RMC-LC20NG/LP | RMC-LC30NG/LP |
|---|-------------------|-------------------|-------------------|
| 1. Guard Assembly | LC10NG-01-04 | LI18LPT-01-04 | LC30NGTF-01-04 |
| 2. Glass Panel | LC10NG-01-02-01 | LC20NGT-01-02-01 | LC30NGTF-01-02-01 |
| 3. Glass Holder | LC10NG-01-02-02 | LC10NG-01-02-02 | LC10NG-01-02-02 |
| 4. Reflector | LC10NG-01-01-01 | LC20NGT-01-01-01 | LC30NGTF-01-01-01 |
| 5. Heat Cover – Upper | LC10NG-01-01-02 | LI18LPT-01-01-02 | LC30NGTF-01-01-02 |
| 6a. Pressure Regulator – Natural | RTZ-11/20B5 | RTZ-11/20B1 | RTZ-11/20B1 |
| 6b. Pressure Regulator – LP | RTZ-11/20B2 | RTZ-11/20B2 | RTZ-11/20B2 |
| 7. Nozzle Holder | LC10NG-03-13 | LC10NG-03-13 | LC10NG-03-13 |
| 8a. ODS Pilot Assembly – Natural | NG 8224 | NG 8224 | NG 8224 |
| 8b. ODS Pilot Assembly – LP | LPG 8420 | LPG 8420 | LPG 8420 |
| 9. Fix Nut – Nozzle Holder | LC10NG-03-11 | LC10NG-03-11 | LC10NG-03-11 |
| 10a. Main Nozzle – Natural | LC10NG-03-12 | LC20NG-03-12 | LC30NGTF-03-12 |
| 10b. Main Nozzle – LP | LC10LP-03-12 | LC20LP-03-12 | LC30LP-03-12 |
| 11a. Valve Bracket-Manual Gas Control | LC10NG-04-02 | LC10NG-04-02 | LC10NG-04-02 |
| 11b. Valve Bracket-Thermostat Gas Control | LI18LPT-04-02 | LI18LPT-04-02 | LI18LPT-04-02 |
| 12a. Manual Gas Control-Natural | CK-890SL-A1/00(C) | CK-890SL-A1/00(F) | CK-890SL-A1/00(F) |
| 12b. Manual Gas Control-LP | CK-890SL-A1/00(C) | CK-890SL-A1/00(F) | CK-890SL-A1/00(F) |
| 12c. Thermostat Gas Control-Natural | LC10NGT-04-00 | LC20NGT-04-00 | LC30NGTF-04-00 |
| 12d. Thermostat Gas Control-LP | LC10NGT-04-00 | LC20NGT-04-00 | LC30NGTF-04-00 |
| 13. Outlet Tubing Assembly | LC10NG-08-00 | LC20NG-08-00 | LC30LP-08-00 |
| 14. ODS Tubing Assembly | LC10NG-09-00 | LC20NG-09-00 | LC30LP-09-00 |
| 15. Inlet Tubing Assembly | LC10NG-07-00 | LC20NG-07-00 | LC30LP-07-00 |
| 16. Leg – Front | LC10NG-05 | LC10NG-05 | LC10NG-05 |
| 17. Front Panel | LC10NG-01-03 | LI18LPT-01-03 | LC30NGTF-01-03 |
| 18. Burner Assembly | LC10NG-03-00 | LC20NGT-03-00 | LC30NGTF-03-00 |
| 19a. Burner Support – Left | LC10NG-03-08 | LC10NG-03-08 | LC10NG-03-08 |
| 19b. Burner Support – Right | LC10NG-03-09 | LC10NG-03-09 | LC10NG-03-09 |
| 20. Body Frame Assembly | LC10NG-02-00 | LC20NG-02-00 | LC30LP-02-00 |
| 21. Leg – Rear | LC10NG-04 | LC10NG-04 | LC10NG-04 |
| 22. Knob – Valve | LC10NG-12-00 | LC10NG-12-00 | LC10NG-12-00 |
| 23. Shield | - | LI18LPT-01 | - |
| 24. Rear Radiant Shield | LC10NG-01 | | LC30NGTF-01 |
| 25. Optional Fan-Natural/LP | - | RMA-FT | RMA-FT |

The following accessories are available from your local distributors/dealer. Each accessory comes with a separate installation instruction. Be sure to read each instruction thoroughly before installation.

Accessories

OPERATION & MAINTENANCE INSTRUCTIONS

FMA-(F,FT) MANUALLY & THERMOSTATICALLY CONTROLLED BLOWERS

IMPORTANT: The blower power cord is equipped with a three prong grounding plug for your safety and protection against electric shock. Do not modify the plug provided if it will not fit the outlet source. Have the proper source outlet installed near the heater location to avoid damage to the power cord. Source outlet and grounding plug are illustrated in the Fig. 12.

| Description | Model Number |
|--------------------|--------------|
| Manual Fan Kit | FMA-F |
| Thermostat Fan Kit | FMA-FT |

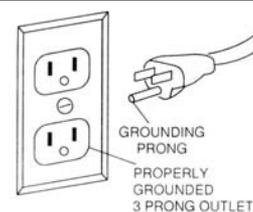
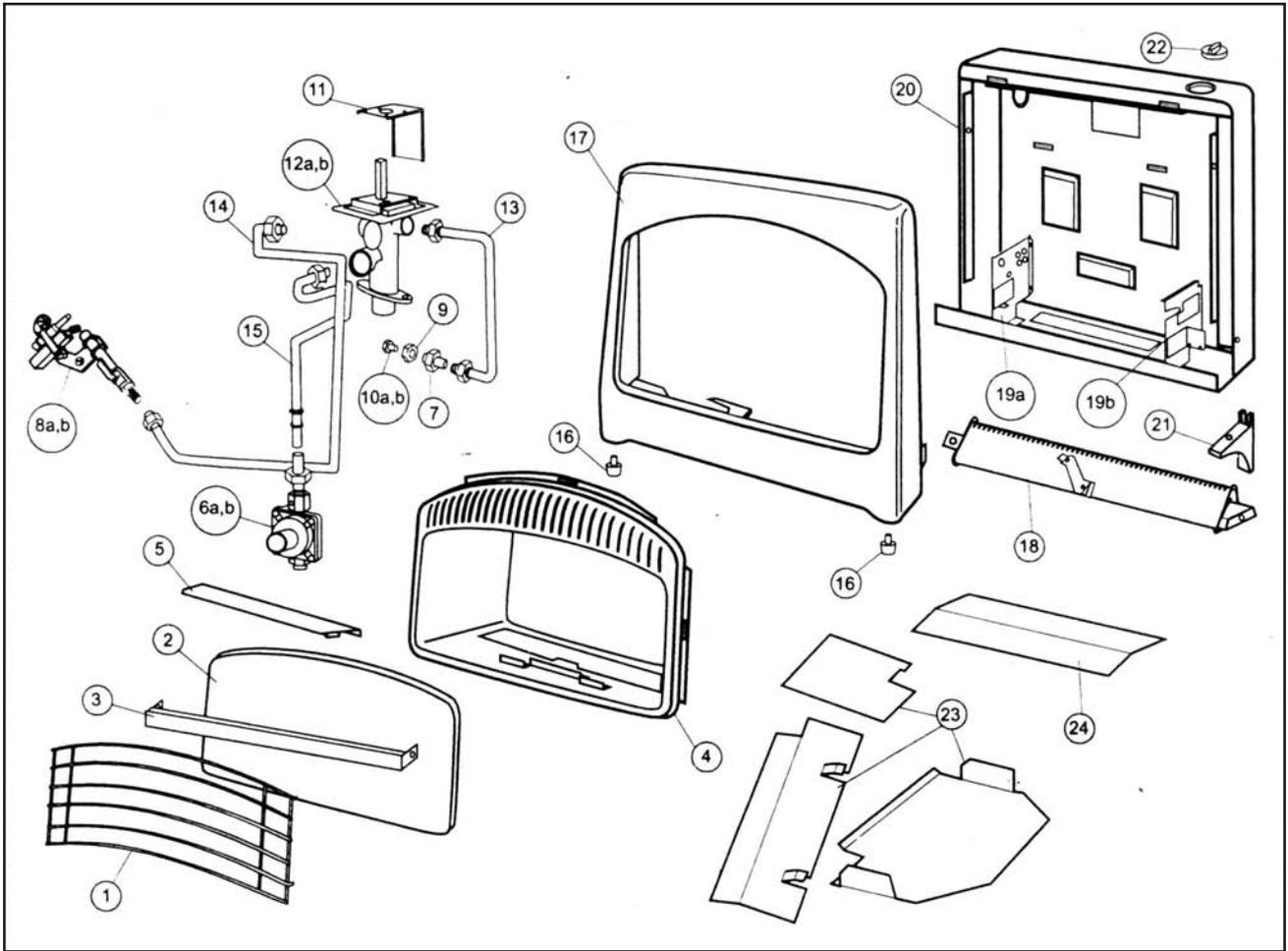


Fig. 12



CFM Home Products reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

WARNING: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

Accessories continued

CAUTION: Damaged power cord can cause a fire or electric shock.

Prior to installing the blower, check for blower for any shipping damage. If blower is damaged, promptly inform dealer where you bought the blower.

INSTALLATION: Plug the blower power cord into a 110-120V properly grounded type outlet (three prong receptacle) protected by a 15 amp time delay or Circuit Saver fuse for circuit breaker.

WARNING: Do not let your fingers touch the prongs of plug when installing or removing the plug from the power outlet.

OPERATION:

Manually Operated: Use the ON/OFF rocker switch to manually switch the blower ON or OFF as desired.

Manually & Thermostatically Controlled: Use the MAN/OFF/AUTO rocker switch to MAN for manual ON or AUTO

for thermostatically controlled operation as desired. Thermostat turns the blower ON when the temperature near the discharge area reaches 105F and turns it OFF when the temperature at the aforementioned location goes down to 86F.

MAINTENANCE:

WARNING: For your safety, turn switch "OFF" and remove plug from power source outlet before cleaning and maintaining blower. If power cord is worn, cut, or damaged in any way, have it replaced immediately.

CARE OF BLOWER

In normal use, blower may accumulate excessive lint or dust, so the blower should be vacuumed or brushed and checked for proper operation at least once each year by a qualified service personnel. Excessive accumulation of lint and dust can cause the blower motor to overheat frequently and burn out.

WARRANTY

Service and Limited Warranty

CFM Home Products warrants this product to be free from defects in materials and components for three (3) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented. This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and labor when provided by a CFM Home Products Authorized Service Center.

Warranty part(s) MUST be obtained through authorized dealers of this product and/or CFM Home Products who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THREE (3) YEARS FROM THE DATE OF FIRST PURCHASE; AND CFM HOME PRODUCTS' LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND CFM HOME PRODUCTS SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. Always specify model and serial number when communicating with the factory.

Contact CFM Home Products with questions concerning prices and policies covering replacement parts. Parts may be ordered through CFM Home Products distributor or dealer. You will need the following information when ordering replacement parts:

- The appliance model number.
- The serial number.
- A description of the part.

Should you need additional information beyond what your dealer can furnish, contact:

DISTRIBUTOR:

CFM Home Products
2695 Meadowvale Boulevard
Mississauga, Ontario, L5N 8A3
CANADA
Telephone: 1-800-668-5323

Model and serial numbers are listed on the rating plate (located on right side of heater).

Record your model and serial number here for future reference.

Model # _____

Serial # _____