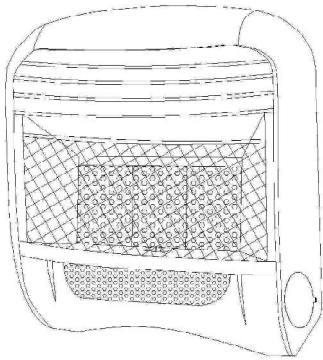




INFRARED VENT-FREE
PROPANE/LP GAS
SPACE HEATER

OWNERS OPERATION AND INSTALLATION MANUAL



ML170EPC ML170EHPC
ML250EPC ML250EHPC

⚠ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or gas supplier.

⚠ WARNING: 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 Air For Combustion and Ventilation section on page 5 of this manual.

Continental Appliance Inc./US Office

5 Musick | 4600 Highlands Parkway S.E.
Irvine | Suite# D/E
CA 92618 | Smyrna GA 30080

Nanjing PRO-COM Electric Appliance Co.,Ltd.
#6 Chuangye Road,High New Tech.Zone,
Great Bridge Road North,Nanjing,210061,China.



TOLL FREE NUMBER: 1-877-886-5989

⚠ 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 neighbor'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 gas supplier.

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.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 4.

*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.

Installer: Please leave these instructions with the consumer.

Consumer: Please retain these instructions for future use.

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SAFETY INFORMATION

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this heater.

⚠ IMPORTANT: Read this owner'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, and carbon monoxide poisoning.

⚠ DANGER: Carbon monoxide poisoning may lead to death!

WARNING

When used without fresh air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

DO NOT INSTALL HEATER UNTIL ALL NECESSARY PROVISIONS ARE MADE FOR COMBUSTION AND VENTILATION AIR. CONSULT THE WRITTEN INSTRUCTIONS PROVIDED WITH THE HEATER FOR INFORMATION CONCERNING COMBUSTION AND VENTILATION AIR. IN THE ABSENCE OF INSTRUCTIONS. REFER TO THE **NATIONAL FUEL GAS CODE. ANSI Z223.1** SECTION 5.3 OR APPLICABLE LOCAL CODES.

This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the heater if not enough fresh air is available

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If heater shuts off, do not relight until you provide fresh air.

If heater keeps shutting off have it serviced. Keep burner and control compartment clean.

CARBON MONOXIDE POISONING MAY LEAD TO DEATH!

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

WARNING

Propane/LP Gas: Propane/LP gas is odorless. An odor-making agent is added to Propane/LP gas. The odor helps you detect a Propane/LP gas leak. However, the odor added to Propane/LP gas can fade. Propane/LP gas may be present even though no odor exists.

SAFETY INFORMATION

WARNING: Do not use any accessory not approved for use with this heater.

WARNING: Any change to this heater or its controls can be dangerous.

WARNING
Models ML170HPC, ML170EHPC, ML250EPC, ML250EHPC are equipped for propane gas. Field conversion is not permitted.

Due to high temperatures, heater should be kept out of traffic and away from furniture and draperies.

Front surface of heater becomes very hot when running heater. Keep children and adults away from hot surface to avoid burns or clothing ignition. Heater will remain hot for a time after shut down. Allow surface to cool before touching.

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the heater.

Carefully supervise young children when they are in the same room with heater.

Make sure grill guard is in place before running the heater.

Keep the appliance area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

1. 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.
2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outside.
3. If you smell gas
 - Shut off gas supply.
 - 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 neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
4. This heater shall not be installed in a bedroom or bathroom.
 5. This heater needs fresh, outside air ventilation to run properly. This heater has an Oxygen Depletion Sensor (ODS) safety shutoff system. The ODS shuts down the heater if not enough fresh air is available. See *Fresh Air for Combustion and Ventilation* pages 5 and 7.
 6. Keep all air openings in front and bottom of heater clear and free of debris. This will insure enough air for proper combustion.
 7. If heater shuts off. Do not relight until you provide fresh, outside air. If heater keeps shutting off, have it serviced.
 8. Do not operate
 - Where flammable liquids or vapors are used or stored
 - Under dusty conditions
 9. Before using furniture polish, wax, carpet cleaner, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
 10. Do not use 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.
 11. Turn off and unplug heater and let cool before servicing. Only a qualified service person should service and repair heater.
 12. Operating heater above elevations of 4,500 feet could cause pilot outage.
 13. To prevent performance problems, do not use propane/LP fuel tank of less than 100lbs. capacity.

PRODUCT FEATURES

(See Figure 1, page 4)

SAFETY PILOT

This heater has a pilot with an Oxygen Depletion Sensor (ODS) safety shutoff system. The ODS/pilot shuts off the heater if there is not enough fresh air.

AUTOMATIC IGNITION SYSTEM

This heater is equipped with an automatic control system. This system requires no matches, or batteries to light heater.

TOUCH PAD

THERMOSTATIC HEAT CONTROL

This heater has a control module with a thermostat sensing bulb. Set desired temperature with touch pad. This results in the greatest heater comfort and may result in lower gas bills.

MANUAL OVERRIDE CONTROL SYSTEM (ML170EHPC, ML250EHPC)

There are two control systems, electric and manual override. If no electric power is available, you can operate heater by manual override.

LOCAL CODES

This heater is designed for vent-free operation. Some state and local codes prohibit the use of vent-free heater.

PRODUCT FEATURES

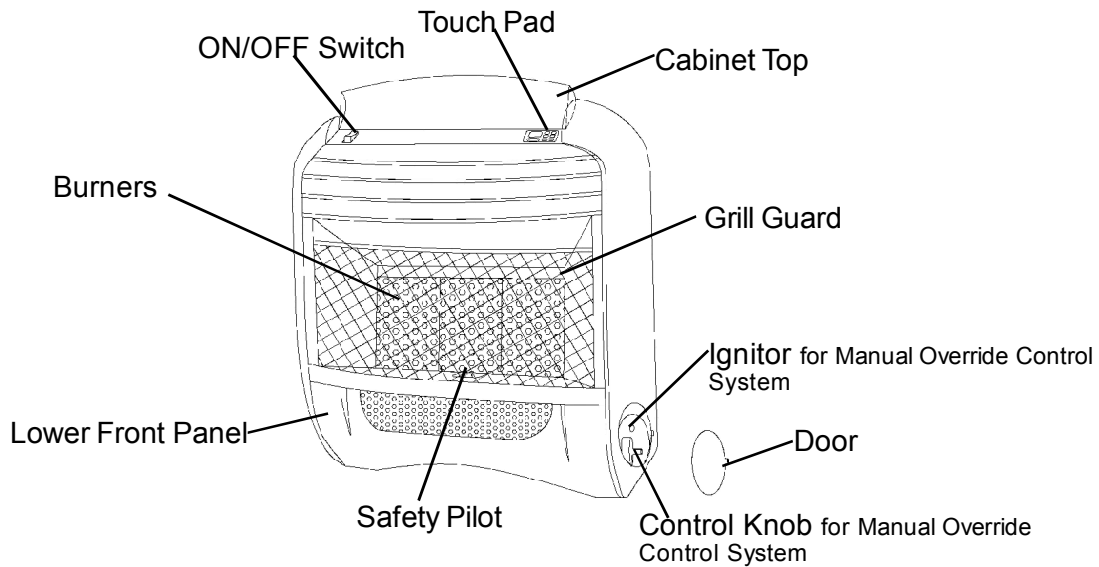


Figure1-Vent-Free Heater

LOCAL CODES CONTINUED

Install and use heater with care. Follow all local codes. In the absence of local codes, use the latest edition of *National Fuel Gas code ANSI Z223.1*, also known as NFPA 54*.

*Available from :

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

National Fire Protection Association, Inc.
1 Batterymarch Park
Quincy, MA 02269-9101

State of Massachusetts : The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR30 upon sale of the unit.

In the State of Massachusetts, unvented propane and natural gas-fired space heaters shall be prohibited in bedrooms and bathrooms.

UNPACKING

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 where you bought heater.

WATER VAPOR: A BY-PRODUCT OF VENT-FREE ROOM HEATER

Water vapor is a by-product of gas combustion. An vent-free room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Vent-free room heaters are intended for supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat application, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experience during cold weather.

The following steps will help insure that water vapor does not become a problem.

1. Be sure the heater is sized properly for the

application, including ample combustion and ventilation air.

2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.

3. Do not use a vent-free room heater as the primary heat source.



IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing heater in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Fresh Air for Combustion and Ventilation*, pages 5 and 6.

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from National Fuel Gas Code. NFPA 54/ANSI Z223.1, Section 5.3. Air for Combustion and Ventilation. All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space
3. Confined Space

The information on pages 5 through 6 will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6×10^{-11} kg per pa-sec- m^2) or less with openings gasketed or sealed and
- 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. **If your home meets all of the three criteria above, you must provide additional fresh air.**

See Ventilation Air From Outdoors, page 6.

If your home does not meet all of the three criteria above, see *Determining Fresh-Air Flow for Heater Location, page 5.*

Confined and Unconfined Space

The National Fuel Gas Code

ANSI Z223.1 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 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.

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

* Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

DETERMINING FRESH-AIR FLOW FOR HEATER LOCATION

Determining if you have a Confined or Unconfined Space*

Use this worksheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install heater plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

1. Determine the volume of the space (length \times width \times height).

Length \times Width \times Height=_____cu.ft. (volume of space)

Example: Space size 20ft. (length) \times 16ft. (width) \times 8ft. (ceiling height)=2560cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Divide the space volume by 50 cubic feet to determine the maximum Btu/Hr the space can support.

_____(volume of space) \div 50 cu. ft.= (Maximum Btu/Hr the space can support)

Example: 2560 cu. ft. (volume of space) \div 50 cu.ft.=51.2 or 51.200(maximum Btu/Hr the space can support)

3. Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free heater	_____	Btu/Hr
Gas water heater*	_____	Btu/Hr
Gas furnace	_____	Btu/Hr
Vented gas heater	_____	Btu/Hr
Gas Fireplace logs	_____	Btu/Hr
Other gas appliances* +	_____	Btu/Hr
Total	= _____	Btu/Hr

Example:

Gas water heater	40,000	Btu/Hr
Vent free heater	+ 18,000	Btu/Hr
Total	= 58,000	Btu/Hr

*Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

_____ Btu/Hr (maximum the space can support)

_____ Btu/Hr (actual amount of Btu/Hr used)

Example : 51,200 Btu/Hr(maximum the space can support)

58,000 Btu/Hr(actual amount of Btu/Hr used)

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support.

You must provide additional fresh air. Your options are as follows:

A. Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From inside Building*

B. Vent room directly to the outdoors. See *Ventilation Air From Outdoors*

C. Install a lower Btu/Hr heater, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

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, Air for Combustion and Ventilation, or applicable local codes.

Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 2). You can also remove door into adjoining room (see option 3, Figure 2). Follow the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

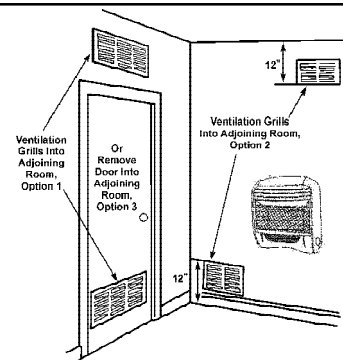


Figure 2-Ventilation Air from Inside Building

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts: You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

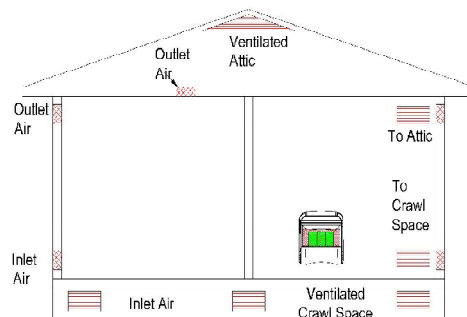


Figure 3-Ventilation Air from Outdoors

Rework worksheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

INSTALLATION

⚠ NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

⚠ WARNING: A qualified service person must install heater. Follow all local codes.

⚠ WARNING: Electrical Grounding Instructions

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle

⚠ WARNING: Never install the heater

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

⚠ WARNING: Maintain the minimum clearances shown in Figures 4, 6. If you can, provide greater clearances from floor, ceiling, and joining wall.

CAUTION: If you install the heater in a home garage

- heater pilot and burner must be at least 18 inches above floor.
- locate heater where moving vehicle will not hit it.

CAUTION: This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist may discolor walls.

CHECK GAS TYPE

Use only Propane/LP gas. If your gas supply is not Propane/LP, do not install heater. Call dealer where you bought heater for proper type heater.

LOCATING HEATER

This heater is designed for mounting on a wall, set on floor, away from a wall.

Purchase optional floor mounting stand from your dealer. See Accessories, page 16.

For convenience and efficiency, install heater

- where there is easy access for operation, inspection, and service
- in coldest part of room

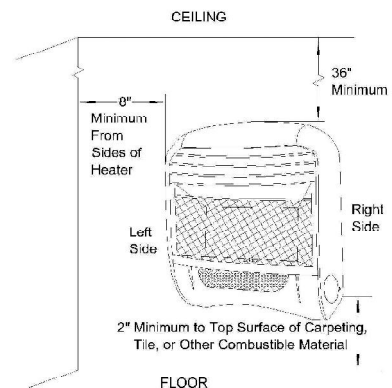


Figure 4-Mounting Clearances As Viewed From Front Of Heater

FASTENING HEATER TO WALL Mounting Bracket

The mounting bracket is located on back panel of heater (see Figure 5). It has been taped there for shipping. Remove mounting bracket from back panel.

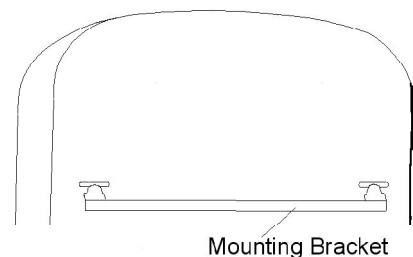


Figure 5-Mounting Bracket Location

INSTALLATION

continued

Methods For Attaching Mounting Bracket To Wall

Only use last hole on each end of mounting bracket to attach bracket to wall. These two holes are 16 inches apart from their centers. Attach mounting bracket to wall only in one of two ways:

1. Attaching to wall stud
2. Attaching to wall anchor

Note: Wall anchors, mounting screws are in hardware package. The hardware package is provided with heater.

Attaching to Wall Stud: This method provides the strongest hold. Insert mounting screws through mounting bracket and into wall studs.

Attaching to Wall Anchor: This method allows you to attach mounting bracket to hollow walls (wall areas between studs) or to solid walls (concrete or masonry). Decide which method better suits your needs. Either method will provide a secure hold for the mounting bracket.

Marking Screw Locations

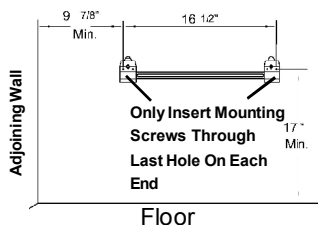
1. Tape mounting bracket to wall where heater will be located. Make sure mounting bracket is level.

⚠ WARNING: Maintain minimum clearances shown in Figure 6. If you can, provide greater clearances from floor and joining wall.

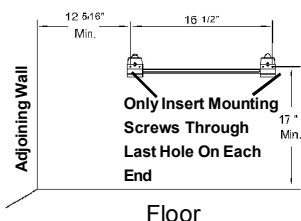
2. Mark screw locations on wall. (see Figure 6)

Note: Only mark last hole on each end of mounting bracket. Insert mounting screws through these holes only.

3. Remove tape and mounting bracket from wall.



Model ML170EPC ML170EHPC



Model ML250EPC ML250EHPC

Figure 6 - Mounting Bracket Clearances

Attaching to Wall Stud Method

For attaching mounting bracket to wall studs

1. Drill holes at marked locations using 9/64" drill bit.
2. Place mounting bracket onto wall. Line up last hole on each end of bracket with holes drilled in wall.
3. Insert mounting screws through bracket and into wall studs.
4. Tighten screws until mounting bracket is firmly fastened to wall studs.

Attaching to Wall Anchor Method

For attaching mounting bracket to hollow walls (wall areas between studs) or solid walls (concrete or masonry)

1. Drill holes at marked locations using 5/16" drill bit. For solid walls (concrete or masonry), drill at least 1" deep.
2. Fold wall anchor as shown in Figure 7 below.

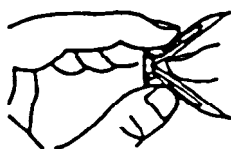


Figure 7- Folding Anchor

3. Insert wall anchor (wings first) into hole. Tap anchor flush to wall.
4. For thin walls (1/2" or less), insert red key into wall anchor. Push red key to "pop" open anchor wings (see Figure 8).

⚠ IMPORTANT: Do not hammer key! For thick walls (over 1/2" thick) or solid walls, do not pop open wings.

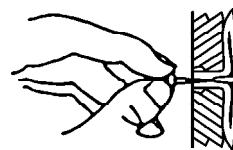


Figure 8 - Popping Open Anchor Wing For Thin Walls

5. Place mounting bracket onto wall. Line up last hole on each end of bracket with wall anchors.
6. Insert mounting screws through bracket and into wall anchors.
7. Tighten screws until mounting bracket is firmly fastened to wall.

Placing Heater on Mounting Bracket

1. Locate two horizontal slots on back panel of heater (see Figure 9).
2. Place heater onto mounting bracket. Slide horizontal slots onto stand-out tabs on mounting bracket.

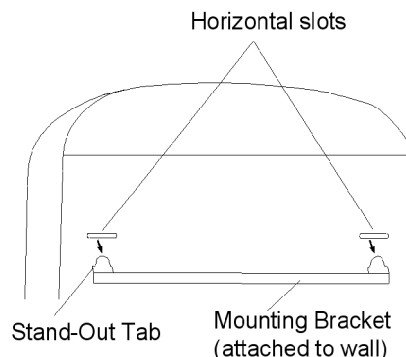


Figure 9 - Mounting Heater Onto Mounting Bracket

INSTALLATION

continued

Installing Bottom Bracket (See Figure 10)

1. Install bottom bracket to heater bottom with two screws. It may be more convenient to remove heater from wall mounting bracket to attach bottom bracket
2. Place heater on mounting bracket
3. Locate two bottom mounting holes on wall. These holes are near bottom on heater (see Figure 10).

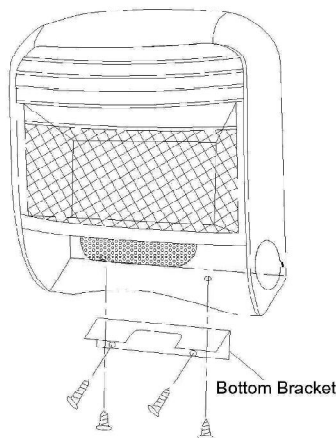


Figure 10 - Installing Bottom Bracket

4. Mark screw locations on wall.
5. Remove heater from mounting bracket.
6. If installing bottom mounting screws into hollow or solid wall, install wall anchors. Follow steps 1 through 4 under Attaching To Wall Anchor Method. If installing bottom mounting screw into wall stud, drill holes at marked locations using 9/64" drill bit.
7. Replace heater onto mounting bracket.
8. Tighten both screws until heater is firmly secured to wall. Do not over tighten.

CONNECTING TO GAS SUPPLY

⚠ WARNING: A qualified service person must connect heater to gas supply. Follow all local codes.

⚠ WARNING: This appliance requires a 3/8" NPT (National Pipe Thread) inlet connection to the pressure regulator.

⚠ WARNING: Do not over tighten gas connections.

⚠ CAUTION: Never connect heater directly to the propane/LP supply. This heater requires an external regulator (not supplied). Install the external regulator between the heater and propane/LP supply.

⚠ CAUTION: Use only new, black iron 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,

⚠ CAUTION: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

⚠ CAUTION: Avoid damage to regulator. Hold gas regulator with wrench when connecting to gas piping and/or fittings.

INSTALLATION NEEDS

Before installing heater, make sure you have the items listed below.

- piping (check local codes)
- sealant (resistant to Propane/LP gas)
- equipment shutoff valve*
- ground joint union
- test gauge connection*
- sediment trap
- tee joint
- pipe wrench

*A CSA/AGA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection.

The installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 11. Pointing the vent down protects it from freezing rain or sleet.

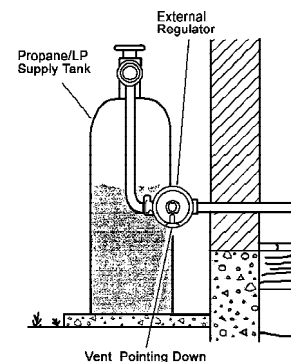


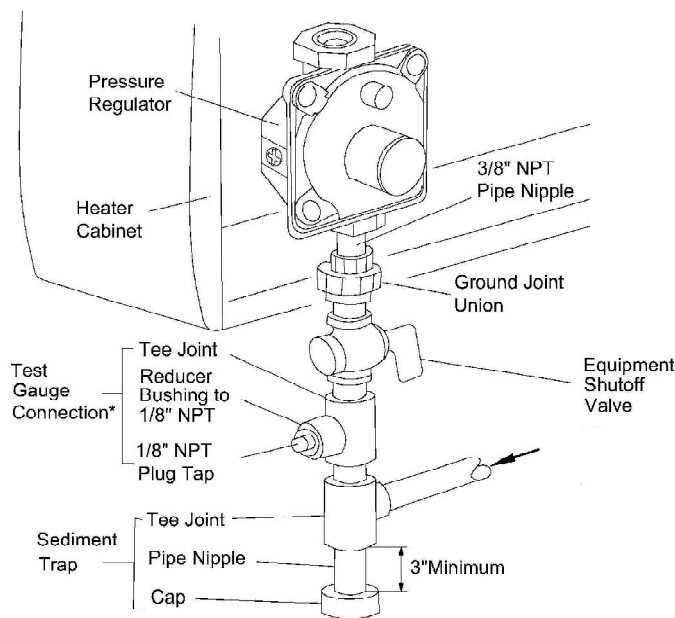
Figure 11 - External Regulator with Vent Pointing Down

Typical Inlet Pipe Diameters

All models up to 20,000 BTU's use 3/8" or greater pipe;

All models 25,000 BTU's and higher, use 1/2" or greater pipe.

Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from heater(see Figure 12).



*A CSA/AGA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA/AGA design-certified equipment shutoff valve from your dealer.

State of Massachusetts : The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts. Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR30 upon sale of the unit. In the State of Massachusetts, unvented propane and natural gas-fired space heaters shall be prohibited in bedrooms and bathrooms.

IMPORTANT: Install an equipment shut off valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance. Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged heater valves. Install sediment trap in supply line as shown in Figure 12. Locate sediment trap where it is within reach for cleaning. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them

from going into heater controls. If sediment trap is not installed or is installed wrong, heater may not run properly.

CHECKING GAS CONNECTIONS

WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

WARNING: Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

CAUTION: Make sure external regulator has been installed between gas supply and heater. See guidelines under Connecting to Gas Supply.

Pressure Testing Gas Supply Piping System Test Pressures In Excess Of 1/2 PSIG (3.5 K Pa)

1. Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage heater regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening propane/LP supply tank valve.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 K Pa)

1. Close equipment shutoff valve (see Figure 13).
2. Pressurize supply piping system by either using compressed air or opening propane/LP supply tank valve.
3. Check all joints from propane/LP supply tank to equipment shutoff valve (see Figure 14). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

CHECKING GAS CONNECTIONS

Continued

Pressure Testing Heater Gas Connections

1. Open equipment shutoff valve (see Figure 13).
2. Open propane/LP supply tank valve.
3. Make sure control knob of heater is in the OFF position.
4. Check all joints from equipment shutoff valve to control valve (see Figure 14). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light heater (see Operating Heater, pages 11 and 12). Check the rest of the internal joints for leaks.
7. Turn off heater (see page 12).

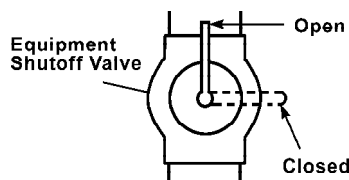


Figure 13 -Equipment Shutoff Valve

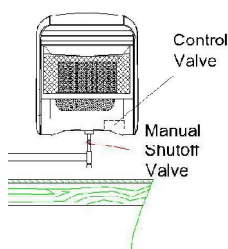


Figure 14 -Checking Gas Connections

OPERATING YOUR HEATER

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result in causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor .

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - 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.
- C. Use only your hand to push on button. Never use tools. If the button does not operate, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.
 - D. 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 the control system and any gas control which has been under water.

OPERATING INSTRUCTION

For ML170EHPC, ML 250EHPC models with manual override control system heaters, make sure the Control Knob is in ELECTRIC position.(See Figure 15).

1. STOP! Read the safety information above before lighting.
2. Disconnect or turn off all electric power to heater.
3. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.

4. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above. If you don't smell gas, go to next step.
5. Plug into a properly grounded three-prong receptacle, set ON/OFF switch on, you will hear a high pitch sound that indicates the burner is ready to be operated.
6. Make sure Control Knob is in ELECTRIC position.
7. Press IGN/OFF button an electric spark will ignite the pilot.
8. Press BURNER button for desired burner operation.
AUTO: Burner will automatically turn on or off to desired temperature setting, press ◀ or ▶ for desired temperature setting.
MAN: Burner operates continuously.
OFF: The main burner will shut off.
9. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

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, air temperatures, etc.) Frequent use of your heater will let you determine your own comfort levels.

SETTING CLOCK

Clock setting: Press CLOCK button to select item (hour, minute). The selected item will flash. Press ◀ or ▶ to change to correct time (hour, minute); Press CLOCK button again, to set clock.

OPERATING YOUR HEATER


continued

SETTING TIMER

Auto on: With burner off, press TIMER button. Then press ◀ or ▶ to change to the scheduled time, then press the TIMER button again, the TIMER starts timing and the TIMER will flash. Burner will automatically come on at the set time.

AUTO OFF: With burner operating, press TIMER button. Then press ◀ or ▶ to change to the scheduled time, then press the TIMER button again, the TIMER starts timing and the TIMER will flash. Burner will automatically shut off at the desired time.

LOCKING TOUCH-PAD (child proof)

A. Key-press locking: Press LOCK button on the operating panel, a  symbol will appear on the LCD.

B. Key-press unlocking: Press ▶, then press LOCK button to unlock.

OPERATING BLOWER

Press BLOWER button, for desired burner operation.

AUTO: Blower will come on several minutes after burner comes on and will go off several minutes after burner goes off.

MAN: Blower operates

OFF: Blower is off.

TO TURN OFF GAS TO HEATER

1. Press the IGN/OFF button on the touch pad.
2. Set the ON/OFF switch to OFF position on top panel.

NOTE: Wait one minute to light again after shutting off heater.

MANUAL OPERATING INSTRUCTIONS

We provide the manual control system just in case of power shortage.

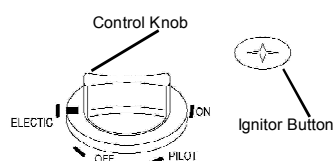
Install battery for Manual Ignitor:

1. Unscrew the ignitor cap.
2. Insert a AAA type battery with its anode (“+”) pointing out.
3. Screw the ignitor back cap.

Note: We recommend that the battery be taken out of the ignitor when the power supply gets right.

IF NO ELECTRIC POWER IS AVAILABLE, HEATER CAN BE OPERATED MANUALLY

1. **STOP!** Read the safety information on page11 before lighting.



2. Check that gas supply to the heater is on.
3. Remove round access door of right side panel. Push in control knob slightly and turn clockwise to the OFF position.

If the manual control knob points to ELECTRIC position, press in the control knob and turn counter clockwise to OFF position.

4. Wait five (5) minutes to clear any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow “B” in the safety information on page11. 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 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 exit the gas system.



6. With control knob pressed, push and release ignitor button. This will light the pilot. If needed, keep pressing ignitor button until pilot lights.

7. Keep control knob depressed for ten (10) seconds after lighting pilot. If pilot goes out, repeat steps 5,6 and 7.

8. Rotate counterclockwise to ON position to light burner. Do not operate between locked positions.

MANUAL OPERATING INSTRUCTIONS

continued

9. When electric power is available and electronic operation is desired, turn clockwise  to OFF position for one minute. Then press down knob and rotate clockwise  to ELECTRIC position. Do not operate between locked positions.

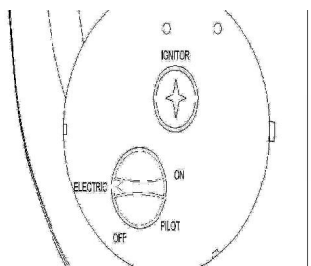




Figure 15- Manual Control

TO TURN OFF GAS TO APPLIANCE

Push in gas control knob slightly and turn clockwise  to OFF. Do not use force. NOTE: Wait one (1) minute with control knob in OFF position before operating heater.

MANUAL LIGHTING PROCEDURE (Match Light)

1. Remove lower front panel.
2. Follow steps 1 through 5 under *Manual Operating Instructions on page 12.*
3. With control knob pressed in, strike match. Hold match to pilot until pilot lights.
4. Keep control knob pressed in for 30 seconds after lighting pilot.
5. Rotate counterclockwise  to ON position to light burner. Do not operate between locked positions.
4. Replace lower front panel

INSPECTING BURNER

Check pilot flame pattern and burner flame pattern often.

PILOT FLAME PATTERN

Figure 16 shows a correct pilot flame pattern. Figure 16 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the heater will shut down. If pilot flame pattern is incorrect, as shown in Figure 17.

- turn heater off (see page 11)
- see Troubleshooting, pages 17 through 19.

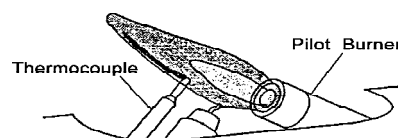


Figure 16 - Correct Pilot Flame Pattern

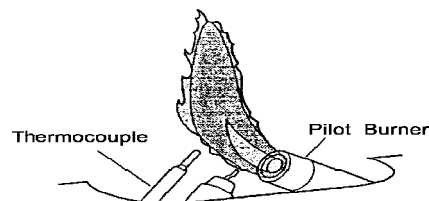


Figure 17- Incorrect Pilot Flame Pattern

BURNER FLAME PATTERN

Figure 17 shows a correct burner flame pattern. Figure 19 shows an incorrect burner flame pattern. If burner flame pattern is incorrect, as shown in Figure 19.

- turn heater off (see page 11).
- see Troubleshooting, pages 17 through 19.

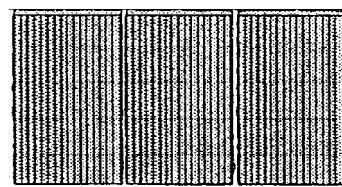


Figure 18 - Correct Burner Flame Pattern

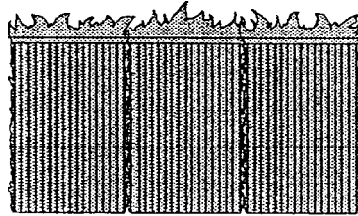


Figure 19 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

⚠ WARNING: Disconnect power before attempting any maintenance or cleaning to reduce the risk of fire, electric shock or personal injury. Turn off heater and let cool before cleaning.

⚠ WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in soot causing property damage.

⚠ CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

⚠ CAUTION: You must keep control areas, burner, and circulating air passageways of heater clean. Inspect these areas of heater before each use. Have heater inspected yearly by a qualified service person. Heater may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

DISCONNECT WIRING OR CONTROL MODULE

1. Remove two screws from the lower front panel, pull the lower front panel forward then down take out thermostat sensing bulb from the clip, then disconnect the wires from to control module.

Note: Do not confuse the mark on each wire.

2. Remove two screws and hex nuts,

take out the control module. When installing, reverse the steps above. (See Figures 20, 23 and 24)

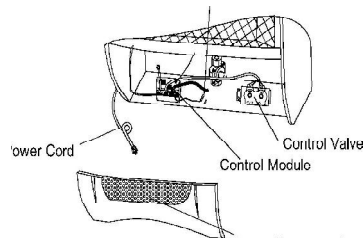


Figure 20 Control Model Access

DISCONNECT FAN

1. Remove screws from the fan bracket panel, pull the fan bracket panel out to remove. Disconnect two wires of temperature sensor.
2. Mark or tag each wire removed for its exact reconnection. Remove the four screws from the fan, when installing, reverse the steps above. (See Figures 21, 23 and 24)

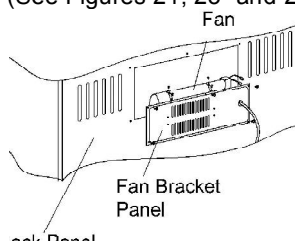


Figure 21- Fan Access

CLEANING ODS/PILOT AND BURNER

- Use a vacuum cleaner, pressurized air to clean.

CLEANING BURNER AND PILOT AIR INLET HOLE

We recommend that you clean the unit every 2,500 hours of operation or every three months. We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt.

To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
2. Inspect burner, pilot for dust and dirt.
3. Blow air through the ports/slots and holes in the burner.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 22). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

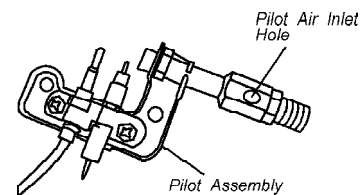


Figure 22 - Pilot Inlet Air Hole

CLEANING HEATER CABINET Air Passageways

- Use a vacuum cleaner or pressurized air to clean.

Exterior

- Use a soft cloth dampened with a mild soap and water mixture. Wipe the cabinet to remove dust.

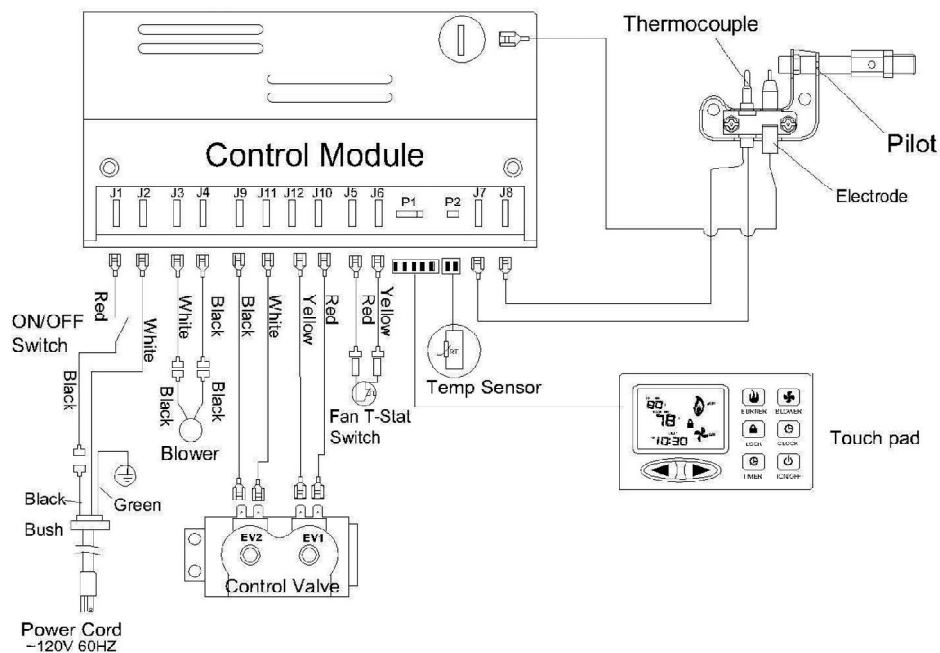


Figure 23-Touch pad control System Diagram
(Model ML170EPC ML250EPC)

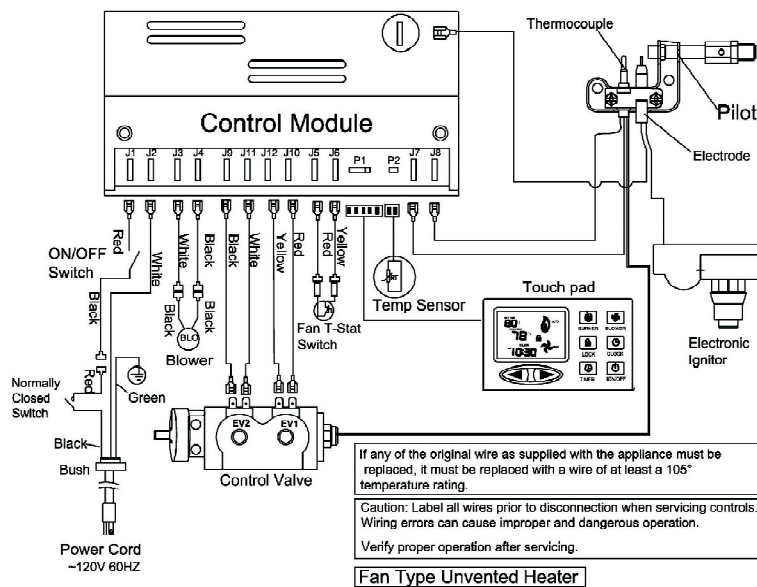


Figure 24- Double Control Systems Diagram
(Model ML170EHPC ML250EHPC)

REPLACEMENT PARTS

Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

PARTS UNDER WARRANTY

Contact authorized dealer from whom you purchased this product. If they are unable to supply original replacement part(s), call the number on the front of manual. When contacting your dealer or PRO-COM, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- type of gas used (Propane/LP or Natural gas)
- purchase date
- warranty card

Usually, we will ask you to return the defective part to the factory.

PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call PRO-COM's phone number (877)886-5989.

TECHNICAL SERVICE

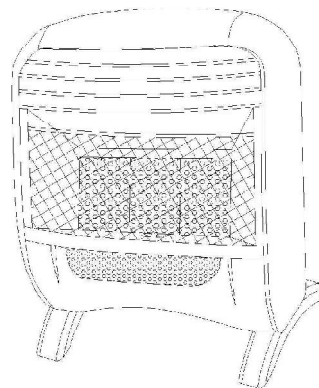
You may have further questions about installation, operation, or troubleshooting. If so, contact PRO-COM'S phone number (877) 886-5989.

ACCESSORIES

Purchase these heater accessories from your local dealer. If they can not supply these accessories, contact PRO-COM for information. You can also write to the address listed on the front of this manual.

FLOOR MOUNTING STAND

For locating heater on the floor, away from a wall. Complete installation instructions provided with floor mounting base stand.



BASE STAND MODEL: PF0920C

SPECIFICATIONS

	ML170EPC(ML170EHPC)	ML250EPC(ML250EHPC)
BTU/Hr	17,000	25,000
Gas Type	Propane/LP Only	Propane/LP Only
Ignition	Automatic (Automatic/Electronic)	Automatic (Automatic/Electronic)
Volts	120 V	120 V
Watts	20 W	27W
Manifold Pressure	10" W.C	10" W.C.
Inlet Gas Pressure (inches of water)		
Maximum	14"	14"
Minimum	11"	11"
Dimensions, Inches (HxWxD)		
Heater	23 5/8×19 5/8×9	23 5/8×27 1/16×9
Carton	27 1/2×22×10 1/8	27 1/2×29 7/16×11 1/8
Weight (pounds)		
Heater	33(34)	42(43)
Shipping	38(39)	55(56)

Note: Dimensions listed are outer most points on the heater (includes grill).

* For purposes of input adjustment.

TROUBLESHOOTING



WARNING: If you smell gas

- Shut off gas supply.
- 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 neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT: Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors.

Warning : Make sure that power is turned off before proceeding.

WARNING: Turn off and let cool before servicing. Only a qualified service person should service and repair heater.

CAUTION: Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignition button is pressed, there is no spark at ODS/pilot. When IGN/OFF is pressed	<ol style="list-style-type: none"> 1. No power to heater 2. ON/off switch not ON 3. Wire is damaged or loose 4. Pilot electrode position is not correct 5. Touch pad cable is not connected 6. System halt 	<ol style="list-style-type: none"> 1. Check the electric power 2. Turn ON/OFF switch on 3. Check the wire for damage and make sure connection is tight 4. Replace Pilot 5. Reconnect touch pad cable 6. Place the control knob of manual override or OFF position for at least 1 minute, then turn to ELECTRIC position
Spark at ODS/pilot but no ignition.	<ol style="list-style-type: none"> 1. Gas supply turned off or equipment shut off valve closed 2. Air in gas lines when installed 3. Depleted gas supply 4. ODS/pilot is clogged 5. Gas inlet supply pressure not correct 6. Wire is damaged or loosen 7. Pilot electrode position is not correct 8. Gas valve or regulator is damaged 	<ol style="list-style-type: none"> 1. Turn on gas supply or open equipment shutoff valve 2. Press ignitor button again until air is removed 3. Contact local gas company 4. Clean ODS/pilot (see cleaning and Maintenance, Page 12) or replace ODS/pilot assembly 5. Have qualified service technician check inlet pressure 6. Check the wire for damage and make sure connection is tight 7. Replace Pilot 8. Contact dealer or PRO-COM
ODS/pilot has flame, but continues to spark.	<ol style="list-style-type: none"> 1. Equipment shutoff valve is not fully open 2. Thermocouple connection loose at control module 3. Low gas pressure 4. Dirt or partially clogged ODS/pilot 5. Thermocouple damaged 6. Gas valve or regulator damaged 	<ol style="list-style-type: none"> 1. Fully open equipment shutoff valve 2. Check that connectors secure on module 3. Contact local natural gas company 4. Clean ODS/pilot (see Cleaning and Maintenance, Page 13) or replace ODS/pilot assembly 5. Replace thermocouple 6. Contact dealer or PRO-COM

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot has flame, but burner(s) does not light	<ol style="list-style-type: none"> 1. Burner injector is clogged 2. Inlet gas pressure is too low 3. Thermocouple leads disconnected or improperly connected 4. Batteries weak 	<ol style="list-style-type: none"> 1. Clean burner injector (see <i>Cleaning and Maintenance</i>, Page 14) or replace burner injector 2. Contact local Propane/LP gas company 3. Reconnect leads (See wiring diagram) 4. Replace batteries
Delayed ignition of burner(s)	<ol style="list-style-type: none"> 1. Manifold pressure is too low. 2. Burner injector is clogged 	<ol style="list-style-type: none"> 1. Contact local Propane/LP gas company. 2. Clean burner (see <i>Cleaning and Maintenance</i>, Page 14) or replace burner injector
Burner backfiring during combustion	<ol style="list-style-type: none"> 1. Burner injector is clogged or damaged 2. Burner is damaged. 3. Excessive supply pressure damaged regulator 	<ol style="list-style-type: none"> 1. Clean burner injector (see <i>Cleaning and Maintenance</i>, Page 14) or replace burner injector(s) 2. Replace burner 3. Replace gas regulator
Burner Plaque(s) does not glow	<ol style="list-style-type: none"> 1. Plaque damaged 2. Inlet gas pressure is too low 	<ol style="list-style-type: none"> 1. Replace burner 2. Contact local propane/LP gas company
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> 1. Residues from manufacturing processes 	<ol style="list-style-type: none"> 1. Problem will stop after a few hours of operation
Heater produces a clicking/ticking noise just after burner is lit or shut off	<ol style="list-style-type: none"> 1. Metal expanding while heating or contracting while cooling 	<ol style="list-style-type: none"> 1. This is common with most heaters. If noise is excessive, contact qualified service person
White powder residue forming within burner box on adjacent walls or furniture	<ol style="list-style-type: none"> 1. Heated vapors from furniture polish, wax, carpet cleaners, etc. turn into white powder residue 	<ol style="list-style-type: none"> 1. Turn heater off when using furniture polish, wax, carpet cleaner, or similar products

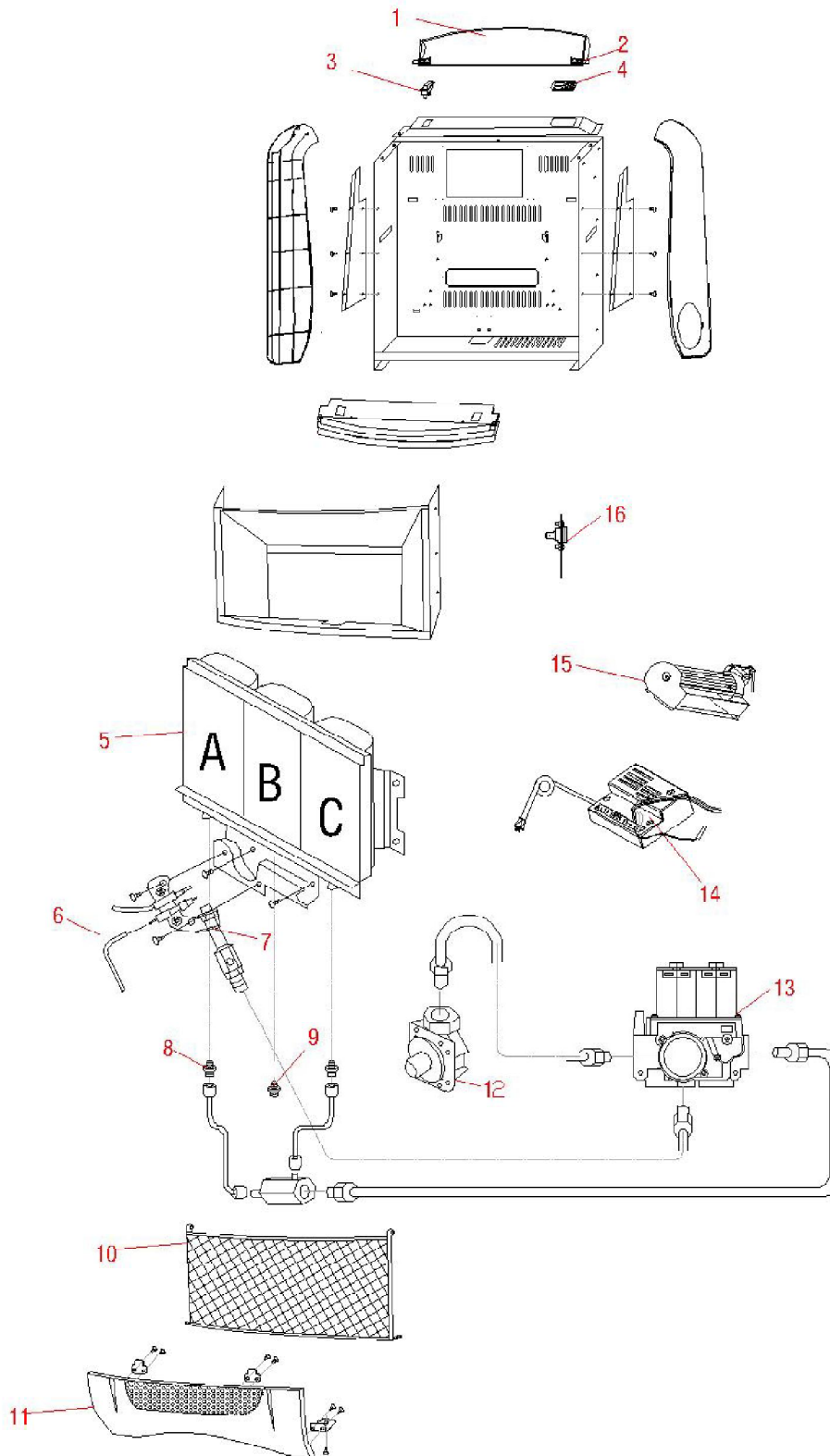
TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater produces unwanted odors	<ol style="list-style-type: none"> 1. Heater is burning vapors from paint, hair spray, glues, etc. (See IMPORTANT statement at beginning of troubleshooting) 2. Gas leak. See WARNING Statement at beginning of troubleshooting 	<ol style="list-style-type: none"> 1. Ventilate room. Stop using odor causing products while heater is running 2. Locate and correct all leaks(see Checking Gas Connections, Page 10)
Heater shuts off in use (ODS operates)	<ol style="list-style-type: none"> 1. Not enough fresh air is available. 2. Low line pressure 3. ODS/pilot is partially clogged 	<ol style="list-style-type: none"> 1. Open window and/or door for, ventilation 2. Contact local propane/LP gas company 3. Clean ODS/pilot (see Cleaning Page 14)
Gas odor exists even when heater is shut off	<ol style="list-style-type: none"> 1. Gas leak. See WARNING Statement at beginning of trouble shooting 	<ol style="list-style-type: none"> 1. Locate and correct all leaks(see Checking Gas Connections, Page 10)
Gas odor during combustion	<ol style="list-style-type: none"> 1. Foreign matter between control valve and burner 2. Gas leak See WARNING Statement at beginning of troubleshooting 	<ol style="list-style-type: none"> 1. Remove foreign matter. 2. Locate and correct all leaks (see Checking Gas Connections, Page 10)
Moisture/condensation on windows	<ol style="list-style-type: none"> 1. Not enough combustion/ventilation air 	<ol style="list-style-type: none"> 1. Refer to Air for Combustion and Ventilation requirements , Page 5

NOTE: BEFORE YOU SWITCH TO “ELECTRIC” CONTROL LEVEL FROM MANUAL CONTROL, YOU NEED TO TURN THE KNOB TO “OFF” LEVEL FIRST AND WAIT FOR ONE MINUTE, THEN TURN THE KNOB TO “ELECTRIC”. IN CASE OF “ELECTRONIC” CONTROL LEVEL DOES NOT WORK, PLEASE TURN THE CONTROL KNOB COUNTERCLOCKWISE TO “OFF” LEVEL AND WAIT FOR ONE MINUTE.

ILLUSTRATED PARTS BREAKDOWN ML170EPC

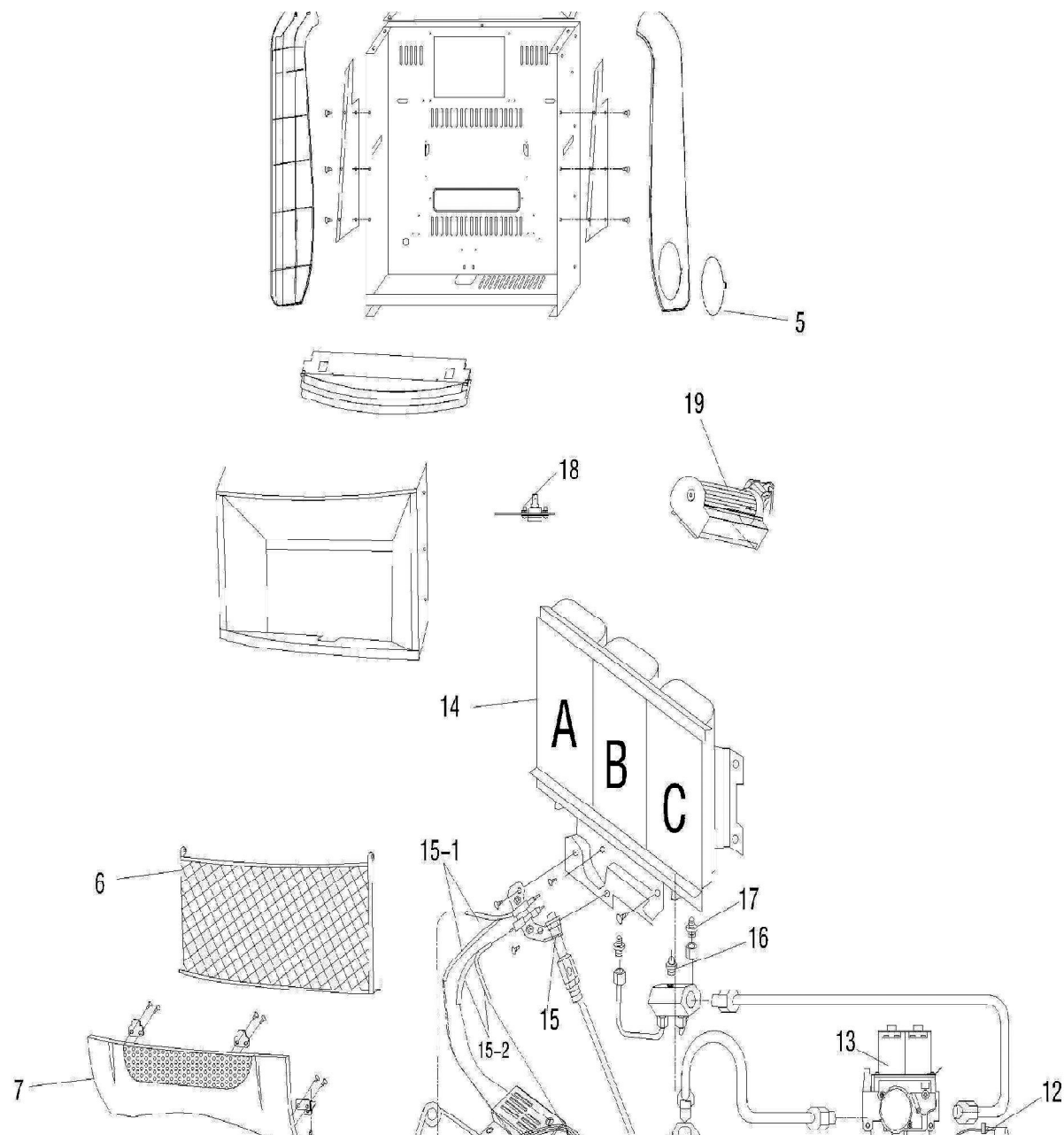


PARTS LIST ML170EPC

This list contains replaceable parts for your heater. When ordering replacement parts, following the instructions listed under Replacement Part on page16 of this manual.

KEY NO.	ML170EPC PART NO.	DESCRIPTION	QTY
1	MCL001-02	Cabinet Top	1
2	MCL008-01	Cabinet Top Hinge	2
3	VL067-01	ON/OFF Switch	1
4	NAM02-00	Top Pad	1
5	MCB19004	Burner Assembly	1
6	NAY03-05-01	Igniting Cable	1
7	ND2808X400-R	ODS Pilot Assembly	1
7-1	ND0803-B	Thermocouple	1
7-2	ND0807	Igniting Electrode	1
8	ML090-05	Injector	2
9	MCL090-02	Injector	1
10	MCB29002	Grill Guard Assembly	1
11	MCB09002	Lower Front Panel Assembly	1
12	NRV81-10	Regulator	1
13	SIT852001	Control Valve	1
14	NAM03-00	Control Module	1
15	NFHTX100-D	Blower	1
16	MCB62001	Blower Thermostat Switch ASM	1
PART AVAILABLE NOT SHOWN			
	MCB28001	Hardware Assembly	1

**ILLUSTRATED
PARTS BREAKDOWN
ML170EHPC**

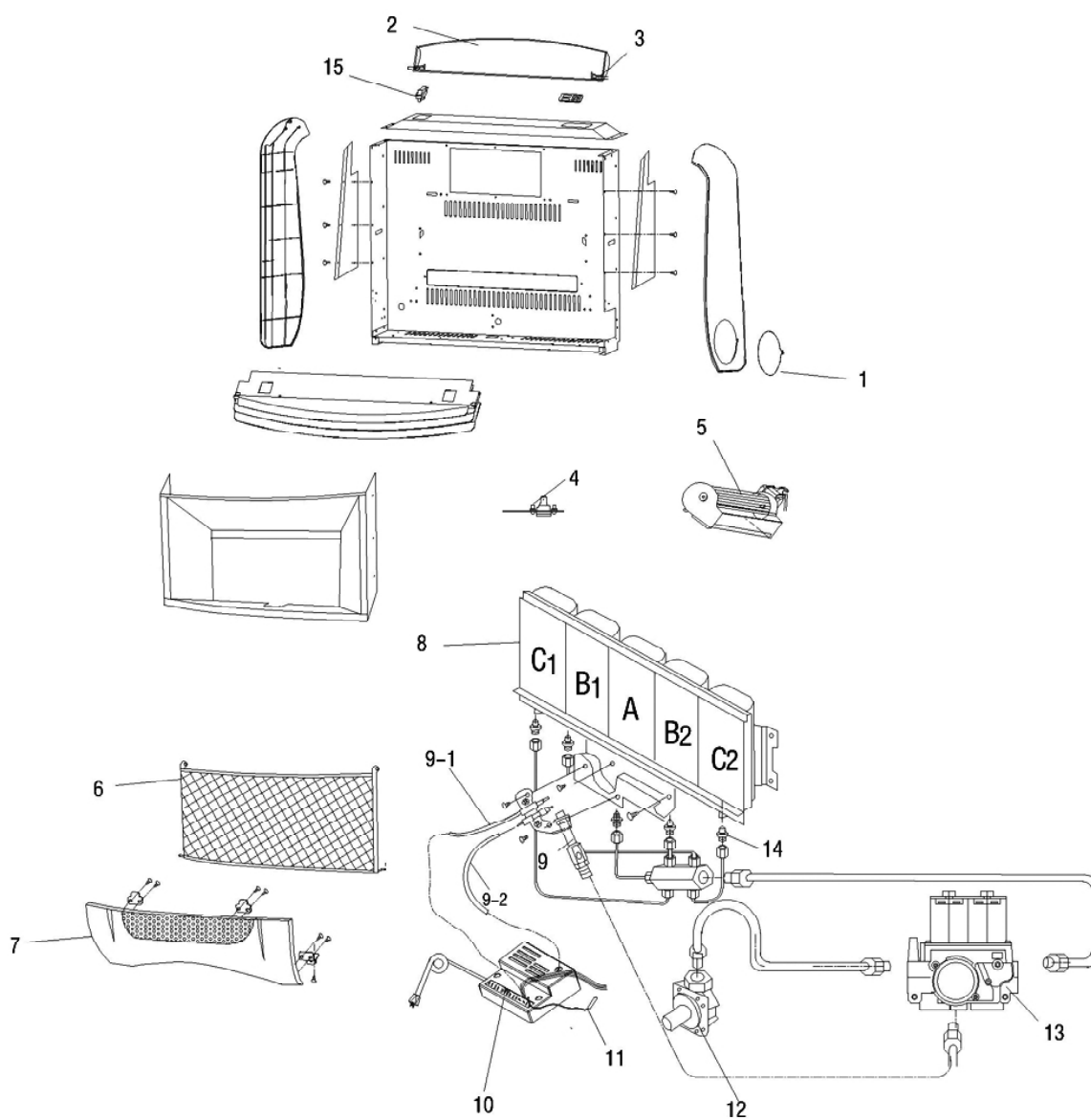


PARTS LIST ML170EHPC

This list contains replaceable parts for your heater. When ordering replacement parts, following the instructions listed under Replacement Part on page16 of this manual.

KEY NO.	ML170EHPC PART NO.	DESCRIPTION	QTY
1	MCL001-02	Cabinet Top	1
2	MCL008-01	Cabinet Top Hinge	2
3	VCL067-01	ON/OFF Switch	1
4	NAM02-00	Touch Pad	1
5	MCL003-01	Right Panel	1
6	MCB29002	Grill guard Assembly	1
7	MCB09002	Lower Front Panel Assembly	1
8	NAM03-00	Control Module	1
9	NRVA81FIL-10	Regulator	1
10	AL092-01	Ignitor	1
11	MB16004	Control Knob Assembly	1
12	MCL099-01	Control Switch	1
13	NV2020-22	Control Valve	1
14	MCB19004	Burner Assembly	1
15	ND1808X400-C	ODS Pilot Assembly	1
15-1	ND0803-C2	Thermocouple	1
15-2	ND0807	Ignitor Electrode	1
16	MCL090-02	Injector	1
17	ML090-05	Injector	2
18	MCB62001	Blower Thermostat Switch Assembly	1
19	NFHTX100-D	Blower	1
PART AVAILABLE NOT SHOWN			
	MCB28001	Hardware Assembly	1

**ILLUSTRATED
PARTS BREAKDOWN
ML250EPC**

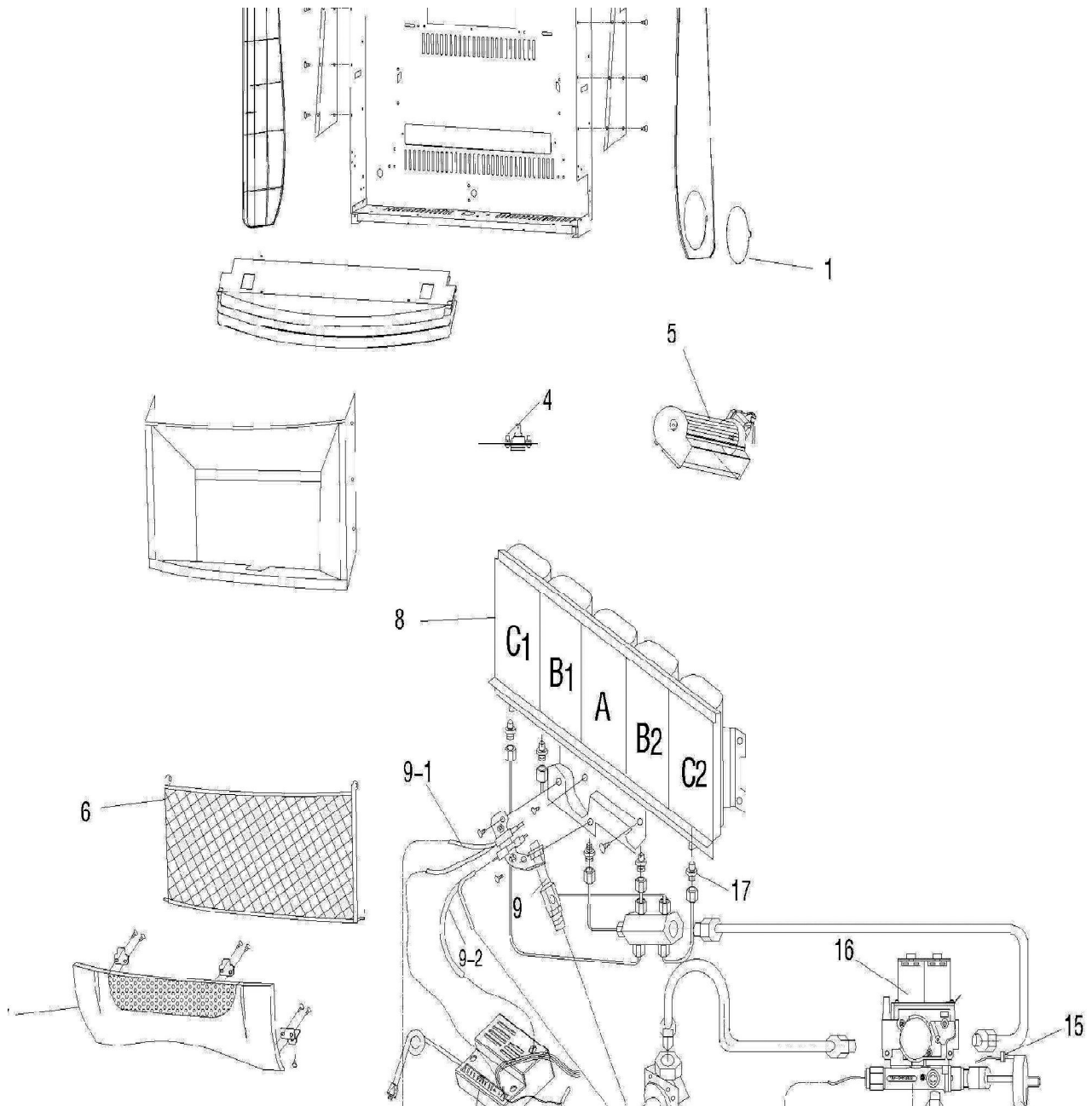


PARTS LIST ML250EPC

This list contains replaceable parts for your heater. When ordering replacement parts, following the instructions listed under Replacement Part on page16 of this manual.

KEY NO.	ML250EPC PART NO.	DESCRIPTION	QTY
1	MCL003-01B	Door	1
2	MCL001-01	Cabinet Top	1
3	MCL008-01	Cabinet Top Hinge	2
4	MCB62001	Blower Thermostat Switch Assembly	1
5	NFHTX100-D	Blower	1
6	MCB29001	Grill guard Assembly	1
7	MCB09001	Lower Front Panel Assembly	1
8	MCB19001	Burner Assembly	1
9	ND2808X400-R	ODS /Pilot Assembly	1
9-1	ND0803-4C	Thermocouple	1
9-2	ND0807-C2	Ignitor Electrode	1
10	NAM03-00	Control Module Assembly	1
11	NAM03-07	Temperature Sensor	1
12	NRV81FIL-10	Regulator	1
13	SIT852002	Valve	1
14	ML090-02	Injector	5
15	VL067-01	ON/OFF Switch	1
PART AVAILABLE NOT SHOWN			
	MCB28001	Hardware Assembly	1

**ILLUSTRATED
PARTS BREAKDOWN
ML250EHPC**



PARTS LIST ML250EHPC

This list contains replaceable parts for your heater. When ordering replacement parts, following the instructions listed under Replacement Part on page16 of this manual.

KEY NO.	ML250EHPC PART NO.	DESCRIPTION	QTY
1	MCL003-01B	Door	1
2	MCL001-01	Cabinet Top	1
3	MCL008-01	Cabinet Top Hinge	2
4	MCB62001	Blower Thermostat Switch Assembly	1
5	NFHTX100-D	Blower	1
6	MCB29001	Grill guard Assembly	1
7	MCB09001	Lower Front Panel Assembly	1
8	MCB19001	Burner Assembly	1
9	ND4808X400-C	ODS /Pilot Assembly	1
9-1	ND0803-4C	Thermocouple	1
9-2	ND0807-C2	Ignitor Electrode	1
10	NAM03-00	Control Module	1
11	NAM03-07	Temperature Sensor	1
12	NRV81FIL-10	Regulator	1
13	AL092-01	Ignitor	1
14	MB16004	Control Knob ASM	1
15	MCL099-01	Control Switch	1
16	NV2020-22	Control Valve	1
17	ML090-02	Injector	5
18	VL067-01	ON/OFF Switch	1
PART AVAILABLE NOT SHOWN			
	MCB28001	Hardware Assembly	1

