

**HOME OWNER / INSTALLER  
FOR YOUR SAFETY  
THIS MANUAL MUST BE READ IN ITS  
ENTIRETY BEFORE OPERATING HEATER**

**IB35ETRN  
IB35ETRLC**



**Gas Radiant Space Heater  
Owners Operation and Installation Manual**

**WARNING:** If the information in these instructions are 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 the gas supplier.**

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.

**INSTALLER:** MUST LEAVE THIS MANUAL WITH THE UNIT AFTER INSTALLATION  
**OWNER:** RETAIN THIS MANUAL SAFELY, FOR FUTURE REFERENCE

# LIMITED WARRANTY

## RINNAI FIREPLACE HEATER

### WHAT IS COVERED?

This Warranty covers any defects in materials or workmanship, subject to the terms stated below. This Warranty extends to the original purchaser and subsequent transferees, but only while the product remains at the site of the original installation. This Warranty only extends through the first installation of the product and terminates if the product is moved or reinstalled at a new location.

### HOW LONG DOES COVERAGE LAST?

<u>Item</u>	<u>Period of Coverage</u>
<i>All Parts and Components</i>	<i>2 Years from Date of Purchase</i>

### WHAT WILL RINNAI DO?

Rinnai will repair or replace the product or any part or component that is defective in materials or workmanship, except as set forth as follows. Rinnai will pay reasonable shipping costs, provided you obtain prior authorization from an Authorized Rinnai Distributor. Rinnai will not pay labor charges associated with the repair or replacement of the product or any part or component. All repair parts must be genuine Rinnai parts. All repairs or replacements must be performed by an individual or servicing company that has been authorized by Rinnai or its distributor.

Replacement of the product or replacement of the heat exchanger may be authorized by Rinnai only. Rinnai does not authorize any person or company to assume for it any obligation or liability in connection with the replacement of a product or heat exchanger. If Rinnai determines that repair of a product is not possible, Rinnai will replace the product with a comparable product, at Rinnai's discretion.

### HOW DO I GET SERVICE?

You must contact an Authorized Distributor or Installer for the repair of a defective product under this Warranty. Failure to contact an Authorized Distributor or Installer will void the Warranty. For the name of the Authorized Distributor or Installer nearest you, please contact your local HVAC dealer or gas service technician, visit the Rinnai website ([www.rinnai.us](http://www.rinnai.us)), call Rinnai at 1-800-621-9419 or write to Rinnai, 103 International Drive, Peachtree City, Georgia 30269.

Proof of purchase is required. You can show proof of purchase with a dated sales receipt, or by completing and mailing the enclosed Warranty registration card within 30 days of purchasing the product. Please complete the enclosed Warranty registration card and mail it to Rinnai at the address shown on the card. Receipt of this card by Rinnai will constitute proof-of-purchase for this product. However, return of this Warranty registration card is not necessary in order to validate this Warranty.

### WHAT IS NOT COVERED?

This Warranty does not cover any failures or operating difficulties due to accident, abuse, misuse, alteration, misapplication, force majeure, improper installation, improper maintenance or service, or for any other causes other than defects in materials or workmanship. This warranty does not apply to any product whose serial number or manufacture date has been defaced.

Rinnai is not liable for any special, incidental, indirect or consequential damages that may arise, including damage to person or property, loss of use, or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

### LIMITATION ON IMPLIED WARRANTIES

Any implied warranties of merchantability and fitness arising under state law are limited in duration to the period of coverage provided by this limited Warranty, unless the period provided by state law is less. Some states do not allow limitations on how long an implied Warranty lasts, so the above limitation may not apply to you.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**WARNING**

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

This manual applies to the following models only:  
IB35ETRBN/US                      IB35ETRSN/US  
IB35ETRBL/US                     IB35ETRSL/US

**Inbuilt Fire ETR  
Electronic Timer Remote  
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**CONTACTS**

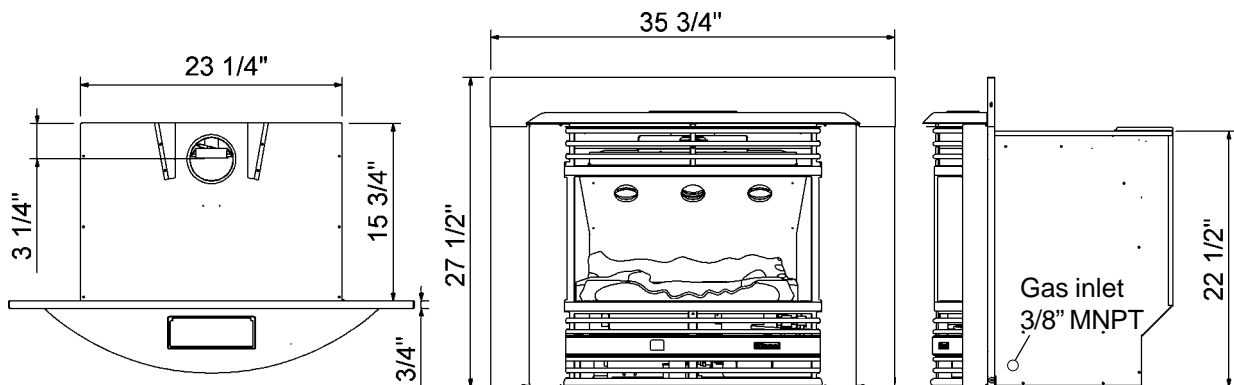
**Rinnai**

America Corporation	1-800-621-9419
103 International Drive	www.rinnai.us
Peachtree City	
Georgia 30269	

## SPECIFICATIONS

Model:	IB35ETRBN/US, IB35ETRSN/US (NG) United States IB35ETRBL/US, IB35ETRSL/US (Propane) United States
Description:	Freestanding radiant/convector, glass-fronted, ceramic log space heater with forced convection and natural draft flue system
Gas Control:	Electronic control valve
Burners:	Ember bed flame and heat burner
Warm Air Discharge:	Top front louvres
Flue:	Natural draft. Approved 4" B vent system
Ignition:	Electronic spark
Power Supply:	120V. 60Hz
Rating Plate Location:	Bottom right hand side door, inside
Weight:	119 lb

## DIMENSIONS



## IMPORTANT POINTS / USAGE AND INSTALLATION MUSTS

Unpack the heater and check for damage (DO NOT INSTALL DAMAGED HEATER). If the heater is damaged, contact your supplier for advice. Before installing the heater, check the label for the correct gas type (see rating plate, bottom right hand side of pillar). Refer to local gas authority for confirmation of the gas type if you are in doubt.

### Included in the carton

Customer operation information.

### IMPORTANT

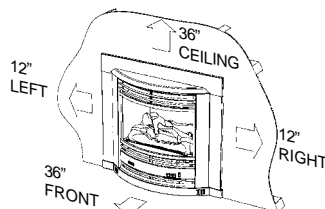
Before using this product, please read this manual carefully to ensure proper use of the product:

- 1 The installation must conform with local codes, or in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1, or the Canadian Installation Code, CAN/CGA -B149.
- 2 For information on gas type see the data plate on the heater.
- 3 This heater must not be installed where curtains or other combustible materials could come into contact with it. In some cases curtains may need restraining.
- 4 If you move, check the gas type in the area where you are moving to. The local gas authority will be able to advise on local regulations.
- 5 This heater discharges a large volume of warm air to provide even heat distribution. If the air in the room contains cooking vapor or cigarette smoke, and the heater is used on a carpet, the surface of the carpet may become discolored. In addition, some nylon carpets contain dyes which may be affected by the warm air flow. Some soft vinyl surfaces are also subject to distortion, or discoloration by warm air. To prevent discoloration of carpets, etc., a mat should be placed in front of the appliance, extending about 30" in front of it.
- 6 This heater must be installed on a hearth at least 2" thick and the width and depth of the heater.
- 7 Read these rules and the instructions carefully. Check all local codes. Failure to follow these could cause a malfunction of the heater resulting in death, serious bodily injury and/or property damage.
- 8 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.
- 9 **WARNING:** Any change to this heater or its controls can be dangerous.
- 10 If a gas leak is suspected, turn heater off, turn gas supply valve off at appliance connector valve. Open windows to ventilate area immediately and contact your dealer or gas company.
- 11 **DO NOT PLACE CLOTHING OR FLAMMABLE MATERIALS, GASOLINE AND OTHER FLAMMABLE VAPORS AND LIQUIDS, ON OR NEAR THE HEATER.**
- 12 Do not spray aerosols when the heater is in operation.
- 13 **YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM WITH THE HEATER.**
- 14 LPG containers must not be installed indoors.
- 15 Do not use this appliance 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.

- 16 Adequate clearances for accessibility for purposes of servicing and proper operation should be provided.
- 17 Adequate clearances around air openings into the combustion chamber should be provided.
- 18 Do not install in areas where curtains, drapes, clothing, or other moving flammables are within 15 inches of this unit.

Diagram shows minimum clearances from combustible materials



- 19 Periodic examination of the venting system is required.
- 20 The flow of combustion and ventilation air should not be obstructed.
- 21 A manufactured home (USA only) or mobile home OEM installation must conform with the Manufactured Home Construction and Safety Standard, *Title 24CFR, Part 3280*, or, when such a standard is not applicable, the Standard for *Manufactured Home Installations, ANSI/NCSBCS A225.1* or Standard for *Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4*.
- 22 The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at pressures equal to or less than 1/2 psi (3.5 kPa).

- 23 The draft hood on the appliance should be installed in the same atmospheric pressure zone as the combustion air inlet to the appliance and shall be located so that the relief opening is accessible for checking vent operation.
- 24 The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, or the *Canadian Electrical Code, CSA C22.1*
- 25 A gas appliance must not be connected to a chimney flue serving a solid fuel burning appliance.
- 26 Do not restrict the warm air discharge by placing articles in front of heater.
- 27 This appliance must not be used for any purpose other than heating.
- 28 Do not allow anyone to post articles through the louvers.
- 29 Do not allow anyone to sit or lean against the appliance.
- 30 DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.
- 31 CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.
- 32 CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.
- 33 INSTALLATION AND 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 TOO EXCESSIVE LINT FROM CARPETING

BEDDING MATERIAL, ETCETERA. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE ARE KEPT CLEAN.

34 The glass window shall be replaced as one piece as supplied by the manufacturer. See log and glass installation on page 17.

35 Do not substitute glass, glowing embers or logs. Use only glass, glowing embers and logs supplied by manufacturer.

36 Caution: Do not operate unit with broken glass.

37 WARNING: DO NOT OPERATE APPLIANCE WITH THE FRONT REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE GLASS SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.

## TECHNICAL SPECIFICATIONS

Gas Input Rate:	Natural Gas	Propane
	Btu/hr	Btu/hr
Pilot:	200	200
Low:	11,000	11,000
High:	32,000	32,000
Minimum permissible gas supply pressure for purpose of input adjustment	WC	WC
Min:	7"	10"
Max:	10.5"	13"
Gas Connection:	3/8" MNPT	
Flue Termination:	An approved 4" vent cap must be fitted to all installations	
Fan:	90 Watt 2 speed tangential	
Combustion System:	Multi port burner and ceramic logs	
Ignition System:	Continuous spark electronic ignition	
Operation:	Finger touch control buttons or remote control	
Temperature control:	Electronic thermostat High~Low / Off Flame picture select option Up / Down buttons	
Temperature range:	Low = 50°F, 60°F~80°F, High 97°F	
Safety Devices:	Flame failure- flame rod Over heat - thermistors, thermal fuse Power surge - 3 amp fuse Room overheat - Automatic cut off at 104°F after 10 minutes	
Fan delay	Micro computer timer	
Combustion Method:	Naturally aspirated burner	
Flue Type:	Approved B vent system	
Heat transfer:	Direct radiation and forced convection	
Installation Type:	Inbuilt	
Flue Requirement:	Manufacturers minimum, 10 ft vertical. <i>Local codes may have a greater requirement and must be followed</i>	

## FOR YOUR SAFETY READ BEFORE OPERATING

**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 This appliance is equipped with an ignition device which automatically ignites the pilot. Do not try to light the pilot by hand

B. BEFORE OPERATING 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 electrical switch
- Do not use any phone in your building
- Immediately call your gas supplier from

a neighbour's phone. Follow the gas suppliers instructions.

- If you cannot reach your gas supplier call the fire dept.

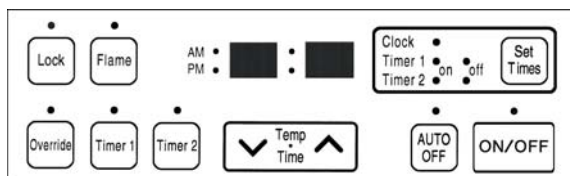
C. Use only your hand to push the gas control buttons. Never use tools. If the buttons will not activate by hand, don't try and repair it, call a qualified service technician. Force or attempted repair may result in a fire or an explosion.

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 INSTRUCTIONS

**STOP** Read the safety information above.

- **To turn the unit on (Refer to diagram below)**



Do not attempt to light the pilot by hand.

Wait for five 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 the next step.

Press the On / Off button. This operates the ignition sequence.

If the appliance does not light it will automatically turn off.

To re-attempt ignition, press the On / Off button again.

- **To adjust the heat**

Press the "▲" and "▼" buttons to increase and decrease the room temperature setting.

- **To turn the unit off**

Press the On /Off button. The appliance will turn off.

If the appliance will not operate; follow the instructions "to turn off the gas to appliance" and call your service technician or gas supplier.

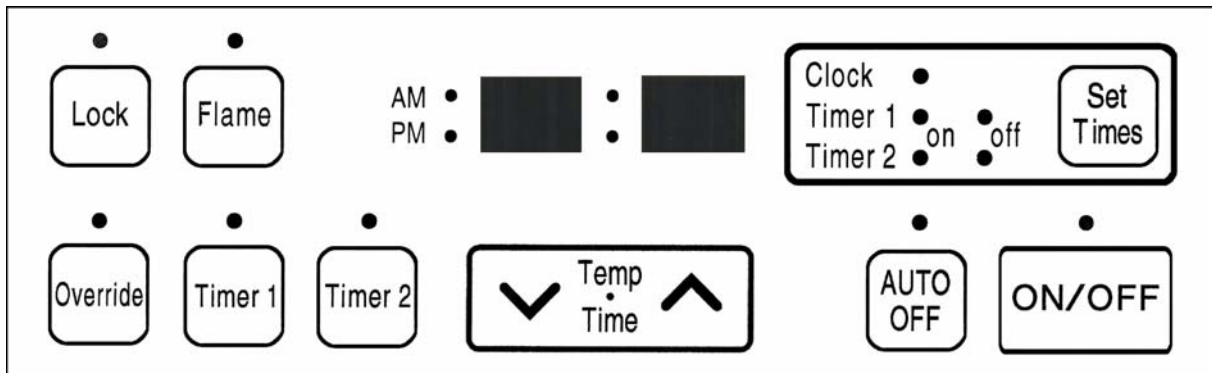
## TO TURN OFF GAS TO APPLIANCE

Turn off the appliance by operating the On/Off button and turn off the power at the wall switch.

Disconnect the electric plug. This will isolate the gas supply and prevent the solenoid valve from opening.



## CONTROL PANEL LAYOUT



For your convenience the controls on your new Flame Fire are situated under the cover on the top right-hand side of the fire and are accessed by simply lifting the lid. All necessary adjustments to the operation of your fire can be made with these controls.

## OPERATION

### • TURNING ON

Press the ON/OFF button to operate the unit. The ON indicator will glow green. The spark generator will be heard before the burner ignites and the ON indicator glows red, indicating that the burner is alight. Warm air can be felt coming from the louvres. The fan will come on automatically after 4 minutes.

**If the unit does not ignite on initial use this may be due to air remaining in the gas supply line. The spark generator will only continue for 15 seconds. After this it will be necessary to press the ON/OFF button OFF, then ON again.**

### • TURNING OFF



Simply press the ON/OFF button to switch off the unit. The ON indicator will go out. The convection fan will continue to operate for several minutes after the burner has gone out in order to cool the appliance.

**Do not turn off the heater by unplugging it from the wall. Do not unplug the heater while the convection**

**fan is running.**

### • ROOM TEMPERATURE ADJUSTMENT

The room temperature and preset temperatures are only displayed and adjustable while the heater is running.

Press the “” button to increase the temperature setting or “” button to decrease the temperature setting. The temperatures can be preset to:

- [L] low (50°F)
- [61°F] to [79°F] in 1°F steps
- [H] (97°F)

Once the pre-set temperature has been reached the burners will cycle between high and low (or high and pilot only depending on the auto off setting).

### • LOCK

The LOCK function will help prevent accidental operation of the controls.

LOCK is activated by pressing the button and the LOCK indicator will glow. To

deactivate the LOCK press and hold the button for 3 seconds until the indicator goes off.

During normal operation the LOCK may be activated and all controls, other than the OFF switch, will be locked. Deactivating the LOCK releases the controls.

If the LOCK is activated while the unit is turned OFF, then all functions will be locked including the ON/OFF function. If the unit is turned OFF while the LOCK is activated, it cannot be turned ON again until the LOCK is deactivated.

- **FLAME**

To operate the FLAME function, press the FLAME button. This function will automatically override the thermostat and set the unit to a default Medium High heat setting for full visual flame effect.

- **AUTO OFF**



AUTO OFF is activated by pressing the button and the AUTO OFF indicator will glow when on.

When the AUTO OFF function is on and the room temperature reaches or exceeds the pre-set temperature then the burners will reduce to pilot only.

When the AUTO OFF is off then the burners will reduce to the front (ember) burner and pilots.

- **SETTING THE CLOCK**

When the appliance is first plugged in or after a power failure, the Digital Display will show --:--.

Press the SET TIMES button once, the Clock indicator will flash. Press and hold the “” or “” button, the minutes will begin to count up or down until they reach 00, the time will now change by one hour increments.

Release the button when the correct hour shows on the Digital Display. Confirm that

you have selected AM or PM as required, a small indicator on the left hand side of the Digital Display indicates the AM/PM setting.

Use the buttons again to set the minutes. Scroll up or down using the buttons until the correct time is reached.

Press the TIMER SET button five times to lock in the time. The CLOCK and TIMER indicators will go out. A small indicator on the digital display will flash to show that the clock is operating.

- **TIMERS / PREHEAT**

This heater has two programmable timers, these allow you to set a start and finish time. The temperature is preset each time the timers are activated.

There is also a preheat function that measures the temperature of the room and estimates the time it will take to bring the room up to the preset temperature by the programmed start time.

This means that the heater may start heating an hour or more before the programmed start time.

- **PROGRAMMING THE ON / OFF TIMERS**

Before programming the Timers you must ensure that the clock has been set to the correct time.

Press the SET TIMES button twice. The digital display will show AM 6:00 and the TIMER 1 - ON indicator will flash.

Set the desired start time the same way as for setting the clock. Be aware that the heater may start up much earlier than the programmed start time due to the preheat function, as explained earlier.

Press the SET TIMES button again, the TIMER 1 - OFF indicator will flash.

Set the desired stop time the same way as for setting the clock.

Press the SET TIMES button once to

proceed to TIMER 2 - which is programmed in the same way - or three times to return to the clock display. This must be done within 1 minute of setting the time to lock it into the memory.

The digital display will show the current time. A small indicator on the digital display will flash to show that the display has returned to the clock.

After setting timer 2 the SET TIMES button must be pressed once within one minute of programming to lock in the times and return to the clock display.

The timers operate over a 24 hour period, and will activate 7 days a week when set.

#### • OPERATING THE TIMERS

Before operating the timer(s), the clock time must be correct and a starting time and finishing time for the timer(s) must be programmed, see page 9. Both timers operate in the same way.

Ignite the heater and select the preset temperature as for normal operation.

Press the timer 1 and / or timer 2 button(s). The timer indicator(s) will glow and the unit will change to stand-by mode. The burners will extinguish and the ON indicator will change from red to green. The display will show the start time for the selected timer briefly before returning to the clock display.

When the heater is in stand-bys mode, you can display and change the clock and the on and off times for both timers in the same way as described earlier.

The timers can be deactivated by either pressing the timer button(s) that you want to deactivate or by turning the heater off using the ON/OFF button.

*NOTE: If there is a power failure, the system memory will retain the Timer programs, and the clock will stop at the time the power goes off. The clock will start*

*again when the power comes back on, but the time will be slow by the duration of the power failure. To set the clock to the correct time after the power has come back on, simply follow the instructions on page 9.*

#### • OVERRIDE

This function is intended to be used to manually override the current operation of the heater. For example; If the heater is in stand-by mode (ie. between finishing time and starting time of a timer), and the OVERRIDE button is selected, then the heater will begin to operate and heat the room.



Press the OVERRIDE button to activate. The indicator light will flash when active.

To manually deactivate the OVERRIDE press the OVERRIDE button again. The OVERRIDE indicator will go out, and the heater will return to stand-by mode.

The heater will continue to operate on OVERRIDE until the OVERRIDE button is pressed again, or one of the timers takes over the operation of the heater. This means that the OVERRIDE mode will automatically turn off if a programmed starting time is reached. The heater will then return to operating at times programmed into the timer(s). Turning the heater off will also deactivate the OVERRIDE.

#### • REMOTE CONTROL

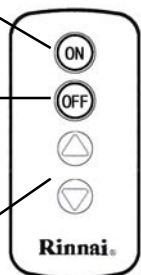
The remote control can only be used for manual operation of the heater. If the heater is in stand-by (timer) mode then only the OFF button will work. Pressing the OFF button when the heater is in stand-by mode will deactivate the timers and the heater can now be operated manually.

The ON and OFF buttons on the remote work in the same way as the ON / OFF button on the control panel as do the “” and “” buttons.

**ON BUTTON**  
Operates the unit manually.

**OFF BUTTON**  
Stops unit manually.

**TEMPERATURE ADJUSTMENT**  
Increases or decreases the temperature setting.



• **TO REPLACE REMOTE CONTROL BATTERY**

The battery is held in a clip that slides out the bottom of the remote control. The clip is removed by inserting a coin or similar into the recess in the back of the remote control and sliding downwards.

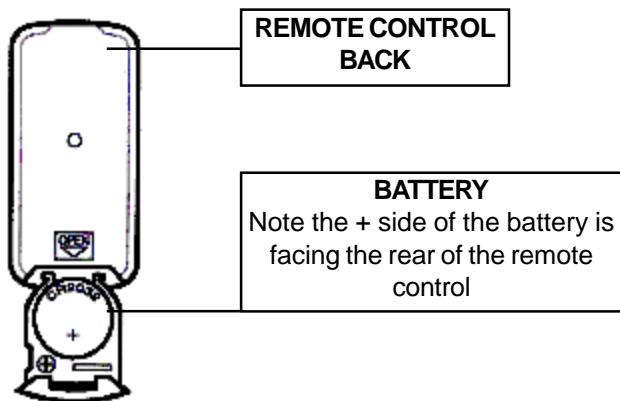
The battery must be of type CR 2032 and will only operate if installed the right way up, as shown below.

Remove the battery if the remote control is not going to be used for a long period. This will help avoid damage from leaking batteries.

*NOTE: Some fluorescent lights may interfere with the transmission of remote control signals, in this case changing the position from which you are operating the remote control may help.*

Avoid getting the remote control wet, or dropping it.

The remote control works within 15 feet and an angle of 40° to the receiver on the unit.

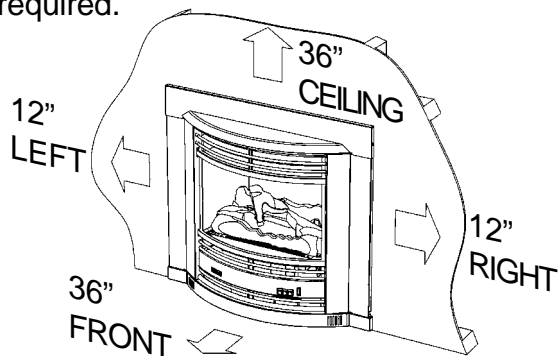


## LOCATION

When positioning the heater, the main points governing the location are:

1. Flue connection and proper venting
2. Warm air distribution.
3. Adequate air supply.
4. The heater must not be installed where curtains or other combustible materials could come into contact with it. In some cases, curtains may need restraining.

See below for minimum clearances required.

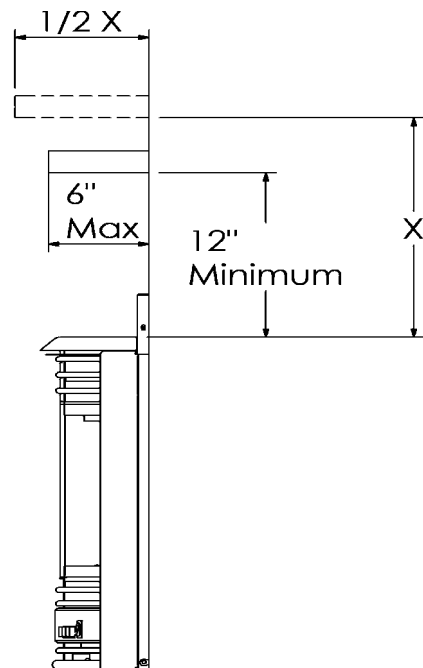


5. The heater is not designed to be built into bookcases or shelves or any combustible opening.
6. Check that room ventilation complies with local regulations.
7. This heater must be mounted on a hearth not less than 2" thick and at least the width and depth of the heater.
8. Installation location shall provide adequate combustion and ventilation air.
9. A gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.
10. Before installing the heater, inspect the chimney, flue piping and/or solid fuel burning fire place and remove any combustible materials.
11. A zero clearance kit is available from your gas appliance retailer.

### • Mantles

A mantle is allowable providing that it is outside the minimum clearances and the distance it protrudes is no more than half the distance it is above the heater.

*See diagram below*



### • Fireplace

Cutting any sheet metal parts of the fireplace, in which the gas fireplace insert is to be installed is prohibited.

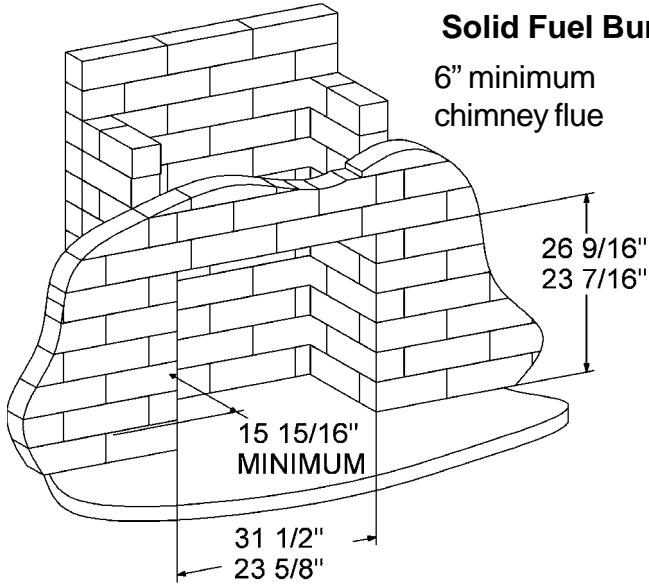
Refractory, glass doors, screen rails, screen mesh and log grates can be removed from the fireplace before installing the gas fireplace insert.

- **Fireplace dimensions**

There are two types of installation that may be used with this heater.

- Non-combustible (masonry, brick etc) fire place.
- Zero clearance kit installation, for installation in combustible materials.

In each case there are minimum and maximum dimension that the fire place or opening must fall within, as shown in these diagrams.



For a non-combustible fire place, the hearth must be not less than 2" thick and at least the width and depth of the heater. The base where the heater is to sit must be flat with no protrusions that could damage the base of the heater.

This may require a sheet of non-combustible material to be laid under the heater or a layer of cement to be poured on the hearth.

The fireplace flue damper can be fully blocked open or removed for installation of the gas fireplace insert.

The fireplace and fireplace chimney must be clean and in good working order and constructed of non-combustible materials.

Make sure that chimney cleanouts fit properly.

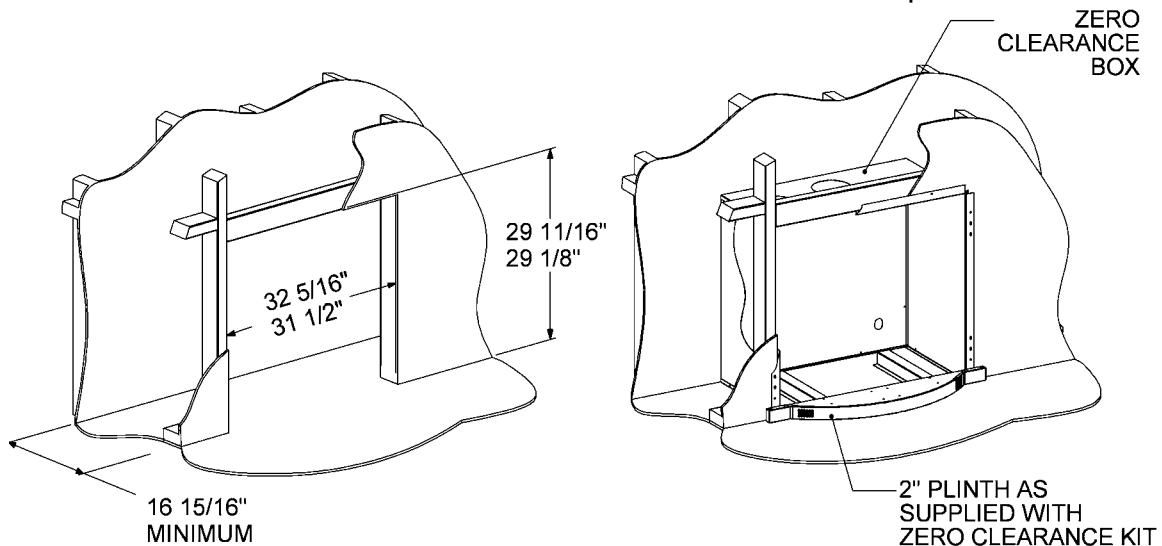
Refractory, glass doors, screen rails, screen mesh and log grates can be removed from the fireplace before installing the gas fireplace insert.

Smoke shelves, shields and baffles may be removed if attached by mechanical fasteners.

**Combustible installation**

For combustible installations a zero clearance kit must be used.

Cutting any sheet metal parts of the fireplace, in which the gas fireplace insert is to be installed is prohibited.



## VENTING

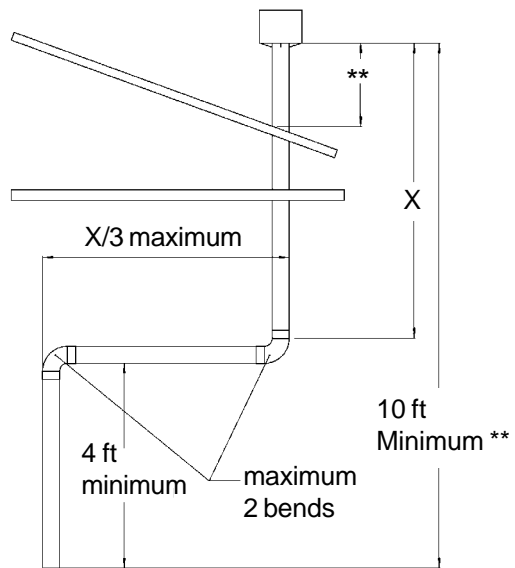
**Use only an approved B vent system.**

**An approved chimney liner must be used.**

It is recommended that the flue be installed vertically only. If installation prevents this then there must be **at least 4 feet of vertical flue before any bends.** The flue must not fall below horizontal at any stage. There must not be more than 2 bends in any system. Any horizontal section of flue must be less than 1/3 the length of vertical flue which follows it.

**See diagram**

An approved B vent system must be attached by mechanical means to the flue spigot and sealed using an approved high temperature sealant.



\*\* Refer to local codes for other minimum requirements.

## GAS CONNECTION

### • RUN GAS SUPPLY

For pipe sizing, refer to your local gas installation codes.

### • PURGE SUPPLY OF AIR AND DEBRIS

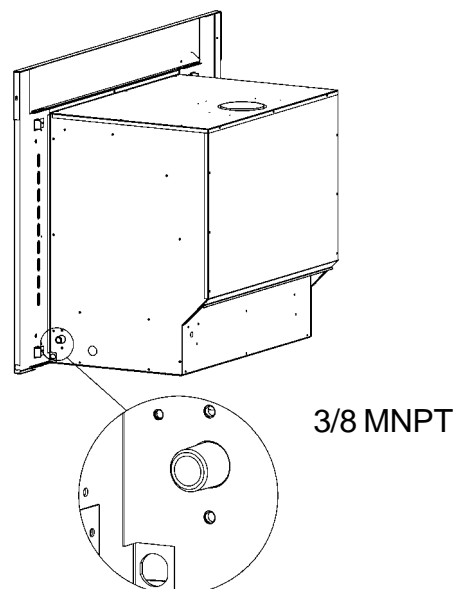
All foreign materials such as filings must be purged from the gas supply, as they may cause the gas valve to malfunction.

A means to measure the gas pressure immediately upstream of the supply connection to the appliance shall be provided by the installer.

Connect and tighten union.

On completion of work, check for gas leaks.

Use a soapy solution on all gas connections. Leaks will be visible when the soapy solution forms bubbles. When finished wipe soapy solution with rag to remove residue.



## ELECTRICAL CONNECTION

There is a junction box provided at the front of the heater for the electrical connection.

**WARNING: This appliance must be properly grounded for your protection against shock hazard.**

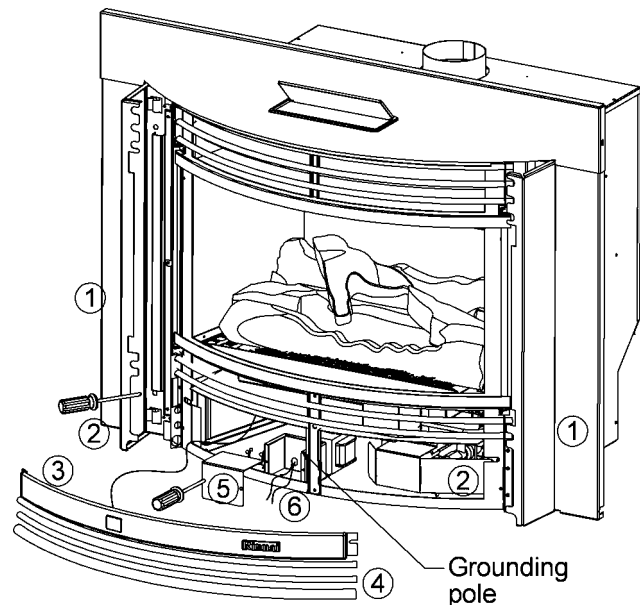
Connecting the power supply:

*Refer to the diagram opposite,*

- 1 Open the side doors.
- 2 Loosen the screws holding the front panel in place.
- 3 Remove the front panel by sliding to one side to release it and then sliding back again to release the other end. Take care not to place strain on the wires from the remote control receiver on the front panel.
- 4 Remove the three lowest louvres from the heater by sliding to one side to release the end and then sliding back again to release the louvre completely.
- 5 Remove the two screws holding the front cover of the junction box in place and remove the cover. A hole is provided on the right hand side of the junction box for a suitable electrical gland to be attached and the electrical supply to pass through.
- 6 There are two wires (one black, one white) that have been partially bared inside the box and a grounding (earth) pole with a green wire attached. It is important that the power supply is connected to the correct wires and that the appliance is properly grounded by attaching a ground connection to the grounding pole.

Black wire = Hot (115V AC 60Hz)

White wire = Neutral



- 7 Once all three connections have been made, make sure that all connections are safe and that the power connections cannot come into contact with the appliance casing.

Replace the cover on the junction box and reassemble the heater in the opposite order.

Take care not to trap or damage any wires when reassembling the appliance.

**WARNING:** Failure to properly ground this appliance will affect its operation and may cause damage to the appliance or personal injury.



## LOG INSTALLATION

The logset is packed inside the unit and the packaging must be removed prior to installing the logset in its correct position.

- Open both side panels.
- Remove fasteners on both sides of the top glass retainer.
- Lift retainer away from unit.
- Loosen screws on bottom glass retainer.
- Carefully lift glass out of bottom channel.
- Carefully remove log packaging.

The logset has two holes underneath for location onto the pins inside the unit.

Place the logset into the unit ensuring that the locating pins enter the two locating holes on the bottom face of the logset.

**Gently place loose ember bed material in front of the front log only. Do not pour as dust particles from the plastic bag may block the burner ports.**

Level it with a pencil or screwdriver and remove excess material. Note: The ember bed material must be placed after the logs are fitted. If the logs are to be removed for any reason, the ember bed material must be removed first and replaced after the logs are refitted. Any material that prevents the logs sitting flat on the burner top can upset the burning pattern and performance of the heater.

- Replace glass and top glass retainer, tighten bottom glass retainer screws.

**Note:** Fit glass so that the joint in the glass seal is at the bottom.

- Take care not to damage seals.
- Reinstall side panels.



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

**Note:** When first lighting the heater, the logs need to be burnt in, which may take approximately 2 hours. The flame color may change after the initial burning in period.

## TESTING AND COMMISSIONING

### • TESTING PROCEDURE

Turn gas supply on and plug the unit into the power supply. (Caution 115V)

### • TO CHECK BURNER PRESSURE

- Refer to rating plate.
- Remove the wiring cover panel.
- Remove test point plug and attach manometer to test point.

The test point is on the front injector block.

- Light heater, turn to High heat setting and check pressure.
- If adjustments are necessary, the regulator is situated on the front of the gas control.
- After checking pressure, turn the unit off, remove manometer and replace test point plug.
- Turn the heater on and off a few times to check ignition.
- When you are satisfied that the heater is working correctly, reassemble panels.
- All burner aeration is factory preset and cannot be adjusted.
- If you are unable to get the unit to operate correctly, refer to Troubleshooting on Page 22 before contacting your local service contact as listed on Page 3.
- It may take approximately 2 hours for the logs to achieve their full flame pattern and glow.

• **During the initial burning in period, some smoke and smell may be experienced. The heater should be run on the high position in a well ventilated room until these dissipate.**

**It is the responsibility of the installer to check that under normal operating conditions of the appliance, all flue gases are exhausted to the outside atmosphere and that there is no spillage of combustion gases into the room.**

### COMMISSIONING

### • INSTALLATION / COMMISSIONING CHECKLIST

Complete the installation checklist and the installer details on page 31 and make sure that this instruction book is left with the customer.

### • INSTRUCT CUSTOMER ON USE OF UNIT

Explain to the customer about use and care of unit. Make sure the customer understands the instructions.

### • EXPLAIN

Ignition (on / off), adjusting heat level, programming timers, flame setting, auto off, lock, override and the remote control.

### NOTE:

THE MANUFACTURE RESERVES THE RIGHT TO CHANGE OR MODIFY SPECIFICATIONS WITHOUT NOTICE

# MAINTENANCE INSTRUCTIONS

## IMPORTANT MAINTENANCE INSTRUCTIONS

### ANNUAL INSPECTION

The unit should be inspected at least once a year by a qualified service technician including inspection of the flue system.

The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

#### • CLEANING INSTRUCTIONS.

Before cleaning, make sure the electrical power and gas are turned off and that the unit has cooled down.

**WARNING:** Do not clean the glass or unit when hot.

Do not remove any internal wiring covers.

Do not use abrasive cleaners.

Do not use solvent based cleaners.

#### • OUTER CASE

The outer case of the fire place should be cleaned with a soft, damp cloth.

Do not use aerosol polishes to clean the casing while the fire is in operation. Do not damage or distort any part of the heater.

Do not use wet cloth or spray cleaners on burners.

#### • VENT MAINTENANCE

The flue should be inspected annually for blockages and signs of damage.

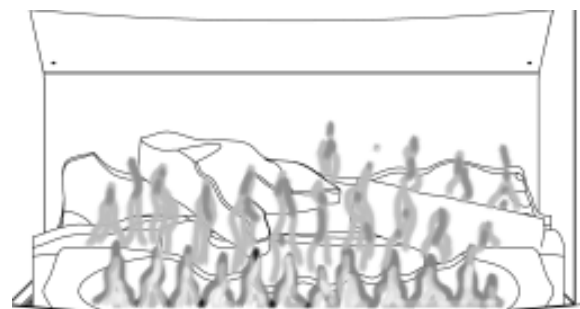
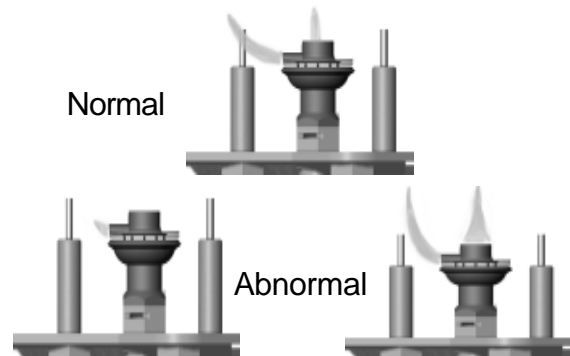
#### • VISUAL INSPECTION OF FLAME

Check that the pilot and burner flames are operating normally.

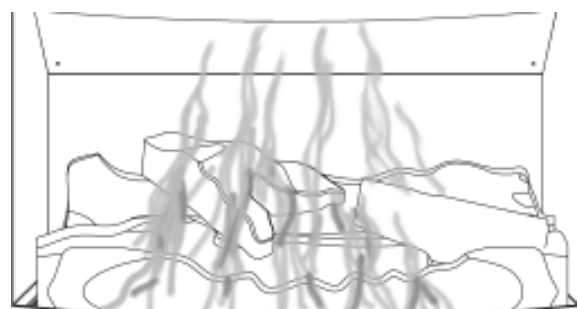
If the flames appear either very short or very long and streaky or are producing smoke or soot deposits then there may be a problem with the heater or the gas supply.

A heater should not be used if you suspect there may be a problem, and a service agent must be called to investigate the cause of the problem.

The main burners are designed to produce some yellow flame but should not produce smoke or excessive soot.



Normal



Abnormal

#### NOTE:

The flames may take up to 15 minutes to settle from ignition when heater is cold

- **ELECTRIC MOTOR MAINTENANCE**

Motors are permanently lubricated and need no lubrication.

Keep fan and motor free of dust and dirt, clean annually.

**The heater should be serviced annually only by an authorised person.**

- **GLASS REPLACEMENT AND CLEANING.** (May be performed by the owner)

It is best to handle the glass with clean gloves to avoid smearing the glass with finger prints which might show after replacement.

*Refer diagram opposite*

Open the side panels.(1) Access can now be obtained to the two top glass retaining screws.(2)

Gently lift the retaining trim away from the glass.(3)

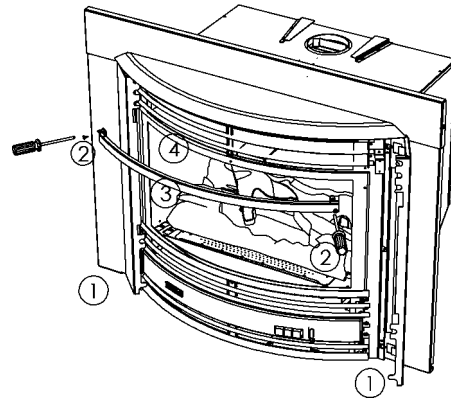
Carefully lift the glass out of the bottom retaining channel, taking care not to damage the fiber seal on the perimeter of the glass.(4)

The glass may be cleaned with a damp sponge and soapy water. If the seal is damaged it should be replaced. Remove any soot deposit from the log set with a soft brush and a vacuum cleaner. Soot deposit may indicate that the flue is not drawing properly. Check the flue for correct operation.

It is best to handle the glass with clean gloves to avoid smearing the glass with finger prints which might show after replacement.

**NOTE:**

When replacing the glass make sure that the joint of the fiber seal is at the bottom of the glass.



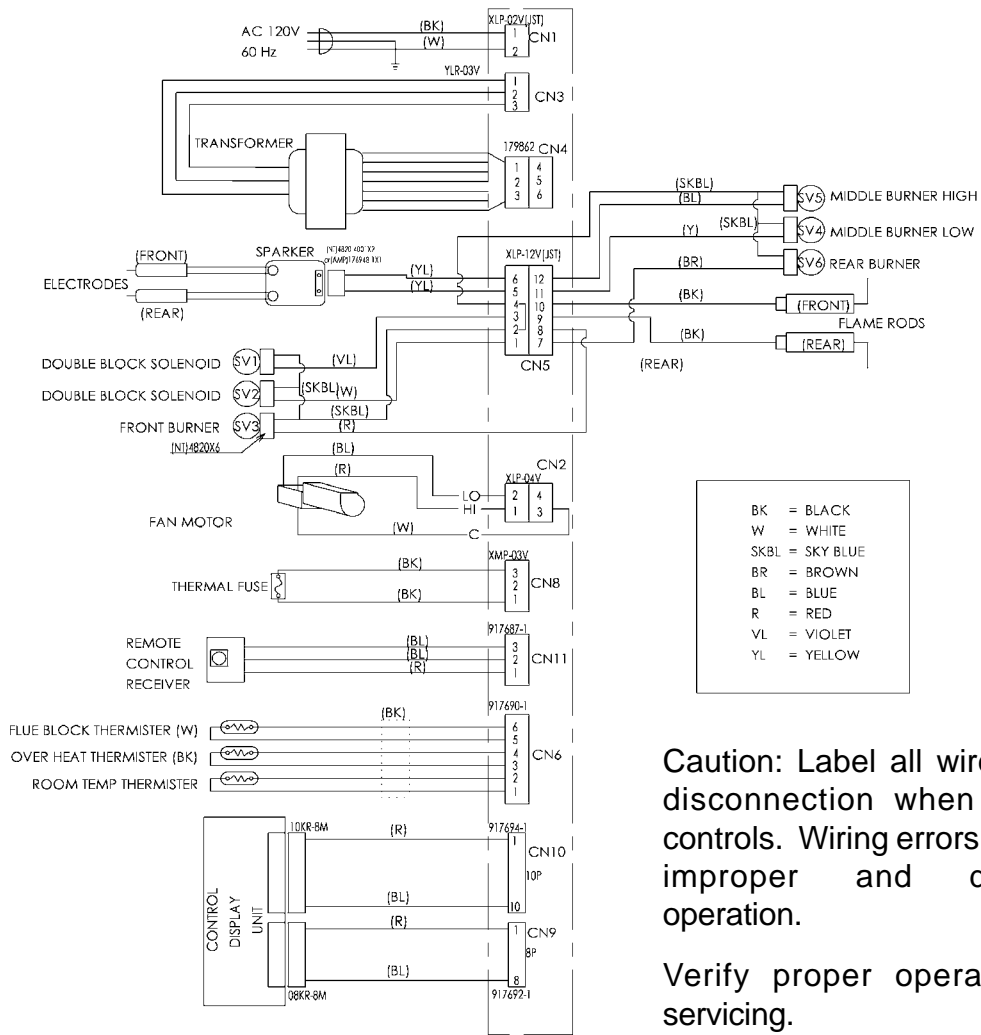
- **BURNERS**

Due to the design of the burners in this heater, they do not require cleaning by the owner. The burners should be cleaned once a year by a qualified service agent.

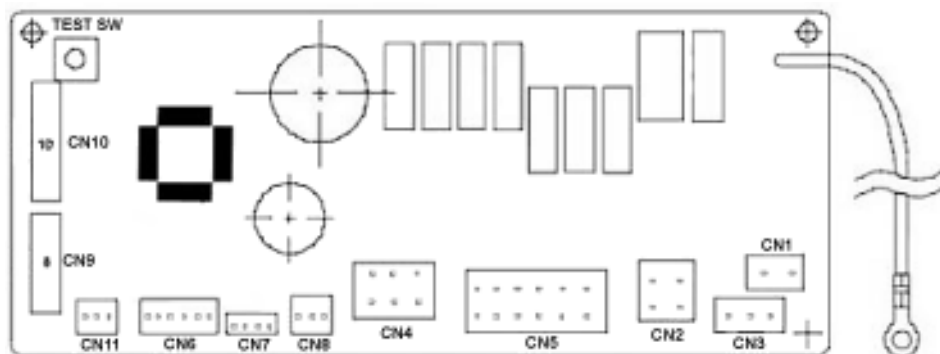
**FAN REMOVAL** *Refer diagram below*

**NOTE:** The fan has a permanently lubricated bearing. **DO NOT OIL.**

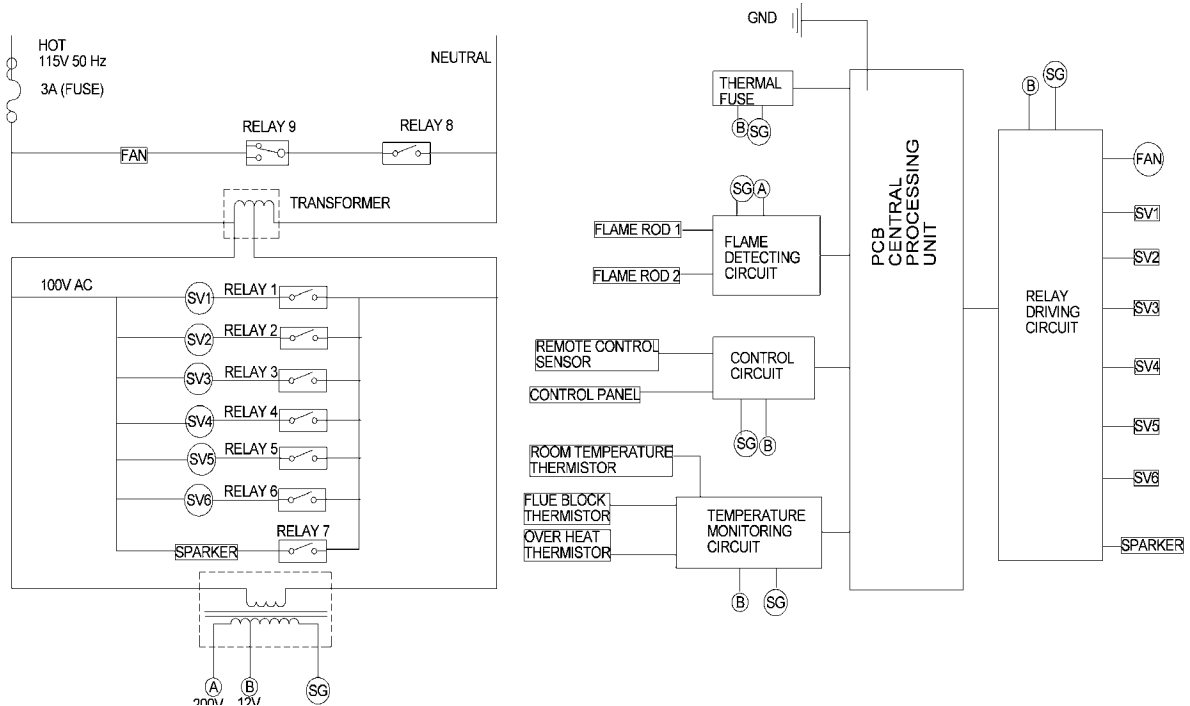
# WIRING DIAGRAM



# PCB LAYOUT



## WIRING DIAGRAM-LADDER



## TROUBLE SHOOTING

SYMPTOM	CAUSE	SOLUTION
Burner will not light	No power present No gas present power cut Air in gas pipe Ignition failure	Ensure power cord is plugged in and turned on Ensure gas supply is turned on Re-ignite after power is restored Purge air (installer) Repeat lighting procedure.
Smell of gas	Leaking gas	Turn gas off at meter and call installer
Fan not working	Heater still warming up	The fan is programmed to start after the heater has been operating for 4 minutes.
Fan does not stop	Heater cooling down	The fan is programmed to continue running for 4 minutes after the burners have been extinguished
Small soot deposit	Normal operation	No action required
Soot deposit forming on glass or logs	Inadequate flue system Log misalignment Incorrect gas pressure	Call service department/agent
Condensation on glass	Normal operation	Allow fire to warm up
Streaky lines on glass	Normal operation	Remove and clean glass
Digital error message on control panel	Electronic fault detected	Refer <i>Error Messages page 23</i>

**NOTE:**

If you have any other faults or problems, please refer to your **Installer** or local qualified service agency

## ERROR CODES

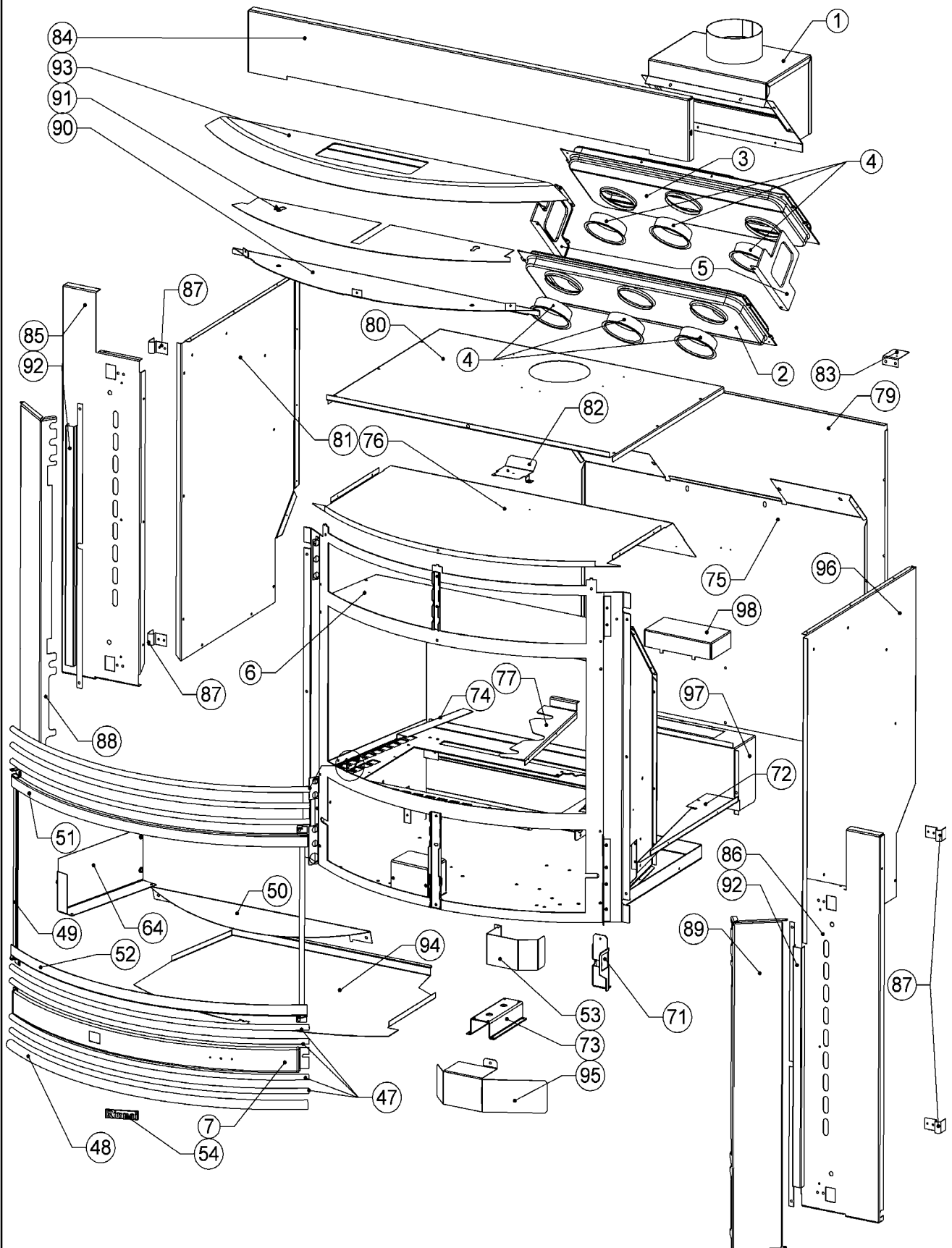
- ERROR CODE MESSAGE

The Flame Fire ETR has the ability to check its own operation continuously. If a fault occurs, an Error Message will flash on the Digital Display of the control panel. This assists with diagnosing the fault, and may enable you to overcome a problem without a service call. Please quote the code displayed when enquiring about service.

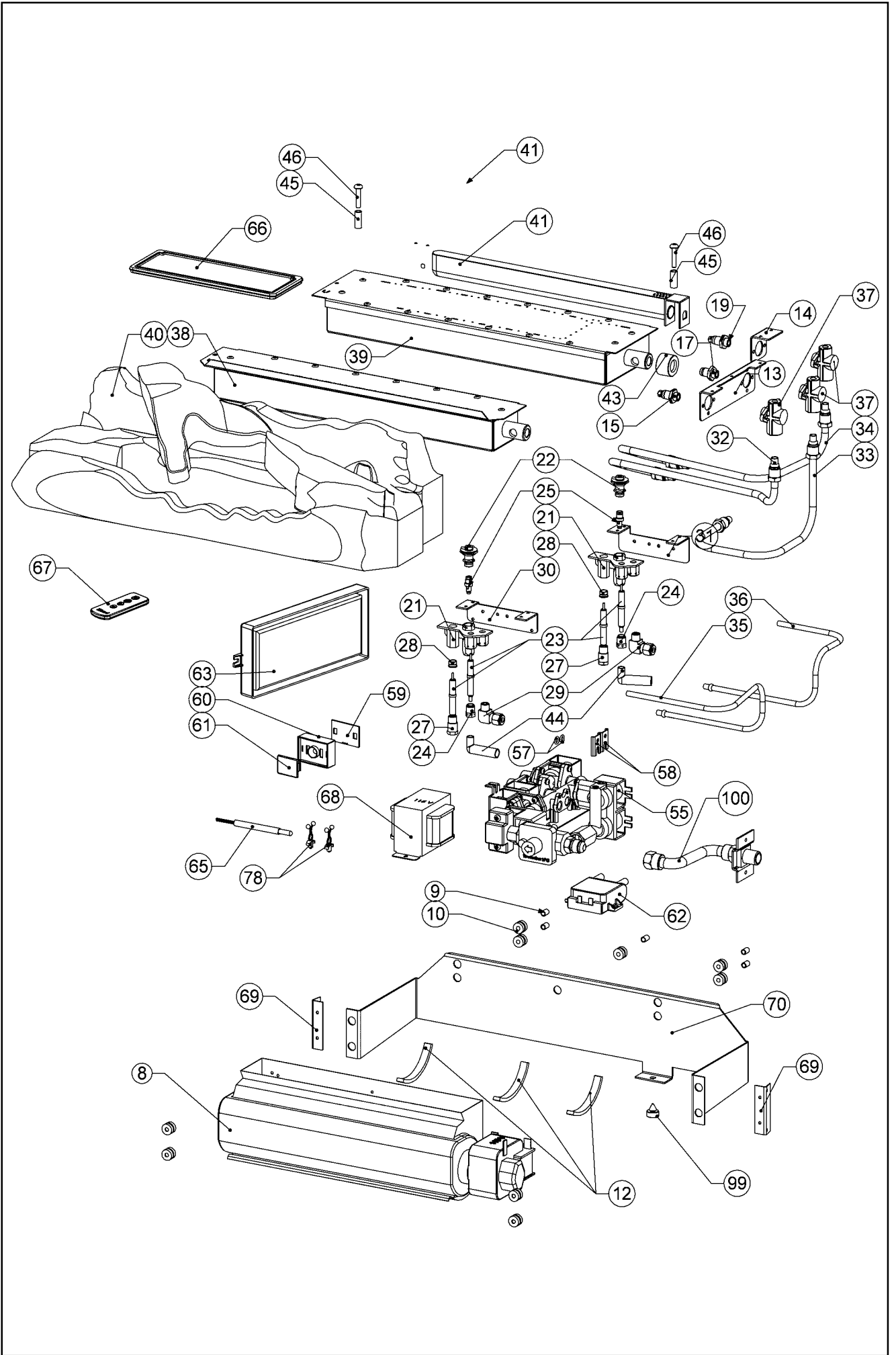
<b>Error code</b>	<b>Probable cause</b>	<b>Comments</b>
11	Ignition failure	Check gas is turned on. Service call if repeated
12	Flame failure	Check gas is turned on. Service call if repeated
14	Overheat	Service call
16	Room overheat	Lower room temperature to less than 104°F
31	Room temperature sensor faulty	Service call
32		Service call
33	Overheat temperature sensor faulty	Service call
70	faulty ON / OFF switch	Service call
71	Faulty solenoids	Service call
72	Faulty flame rod	Service call
73	Communication error	Service call
99	Flue block	Service call
-- : --	Power failure	Service call

In all cases, you may be able to clear the Error Message simply by turning the unit OFF, then ON again. If the Error Message still remains or returns on the next operation, please contact your nearest service contact and arrange for a service call.

# EXPLODED DIAGRAMS







## PARTS LIST

ITEM NO.	QTY.	PART NO.	DESCRIPTION	
1	1	7993-1	FLUE SPIGOT ASSY NAT IB USA	
2	1	7074	HEAT EXCHANGER FRONT ASSY 3+3H	
3	1	7075	HEAT EXCHANGER REAR ASSY 3H	
4	6	6624	BURNER EXCHANGER TRANSFER TUBE	
5	2	6625	BURNER HEAT EXCHANGER BRACKET	
6	1	7927	COMB CHAMB ASSY IB ETR USA PAI	
7	1	7616V	FRONT PANEL IB35ETR VIPER	BLACK
	1	7616SP	FRONT PANEL IB35ETR SP	SILVER
8	1	7141	FAN QLN65/0030-3038LH MVL 110V	
9	9	7130	FAN MTG SLEEVE	
10	9	7129	FAN MTG GROMMET	
11	9	9028	SCREW 8X5/8 MUSH HEAD 33611923	
12	3	6651	CUSHION RUBBER REH210	
13	1	7950	INJECTOR BLOCK BRKT FRONT MKII	
14	1	7951	INJECTOR BLOCK BRKT REAR MKII	
15	1	7338	INJECTOR BRAY 260 CAT33 MULTI	NG
	1	7175	INJECTOR BRAY 120 CAT23 SINGLE	LP
17	1	7337	INJECTOR BRAY 560 CAT33 MULTI	NG
	1	7183	INJECTOR BRAY 200 CAT33 MULTI	LP
19	1	7906	INJECTOR BRAY 180 CAT23 SINGLE	NG
	1	7173	INJECTOR BRAY 95 CAT23 SINGLE	LP
20	6	9064	SCREW M4 X 8 PHPMZ SPRINGWASH	
21	2	7870	PILOT BODY TOP CONVERTIBLE	
22	2	7871	PILOT CONVERTIBLE HOOD 2 FLAME	
23	2	7875	ELECTRODE	
23	2	7520	THERMOCOUPLE	
24	2	7876	ELECTRODE NUT (S.I.T)	
25	2	7872	INJECTOR NG 51	NG
	2	7873	INJECTOR LPG 31	LP
27	2	7900	ELECTRODE NUT ETR	
28	2	7902	SPACER ELECTRODE PILOT	
29	2	7986	ELBOW 6mmx1/8"BSPT BFM690602	
30	1	7904	PILOT BRACKET FRONT USA	
31	1	7985	PILOT BRACKET REAR ETR USA	
32	1	7931	GAS SUPPLY TUBE A IBETR	
33	1	7932	GAS SUPPLY TUBE B IBETR	
34	1	7933	GAS SUPPLY TUBE C IBETR	
35	1	7945-1	TUBE IBETR FRONT CUT	
36	1	7946-1	TUBE CUT IBETR REAR	
37	3	7952	INJECTOR BLOCK A+B	
38	1	7924	FRONT BURNER US ASSY PAINTED	
39	1	4990	MAIN BURNER NG USA FLAME	NG
		4990L	MAIN BURNER LP USA FLAME	LP
40	1	7044	CERAMIC LOG SET c/w GRANULES	
41	1	6384	BURNER COSYPANEL	
42	1	7276	BURNER BRACKET	
43	1	7258	AERATION SLEEVE SHORT	
44	2	7564	ELECTRODE SLEEVE	
45	2	7240	LOG LOCATING SLEEVE	
46	2	9115	SCREW M5 X 25 PHSMZ PHIL	
47	7	7029	LOUVRE TUBE FS 9.5 GOLD	BLACK
	7	7029BN	LOUVRE TUBE FS 9.5 BLK NICKEL	SILVER
48	1	7099	LOUVRE TUBE RD 15.8 GOLD	BLACK
	1	7099BN	LOUVRE TUBE RD 15.8 BKL NICKLE	SILVER
49	1	4996	GLASS PANEL ASSY IB/FS35	
50	1	7004	BURNER DIVERT PANEL PTD ETR	
51	1	7033	GLASS RET TOP ASSY PAINTED	
52	1	7037	GLASS RET BOTTOM ASSY PAINTED	

53	1	7920	FRONT PILOT SHIELD USA PAINTED	
54	1	5327G	BRAND BADGE GOLD	
55	1	4993	GAS CONTROL ASSY NG US IB35ETR	NG
	1	4994	GAS CONTROL ASSY LP US IB35ETR	LP
57	2	6308	O RING MAIN GAS	
58	2	6313	GAS TUBE RETAINER	
59	1	7536	RECEIVER UNIT ETR-015X01	
60	1	7537	RECEIVER UNIT HOLDER 35ETR-016	
61	1	7539	RECEIVER COVER 35ETR-017	
62	1	7542	SPARK IGNITOR ETR EI-145	
63	1	7544	PCB ASSY ETR 35ETR-020	
64	1	7596	PCB MOUNTING BRKT PNT IB35ETR	
65	1	7549	THERMISTOR OH SWIT.35ETR-023	
66	1	7545	CONTROL UNIT ASSY 35ETR-010BX0	BLACK
	1	7545S	CONTROL UNIT 35ETR-010B SILVER	SILVER
67	1	7541	REMOTE CONTROL 556F-2005	
68	1	7899	TRANSF. USA ETR ET-277 100V	
69	2	7288	FAN MOUNTING BRACKET IBR	
70	1	7072	FAN MTG PANEL IBR	
71	1	7614	REGULATOR SUPPORT IB35ETR	
72	1	7202	FAN PARTITION PANEL LOWER IBR	
73	1	7610	GAS MANIFOLD MTG BRKT IB35ETR	
74	1	7220	FAN DIVIDING PANEL BRKT IB	
75	1	7858	FAN PARTITION PANEL IBR ETR US	
76	1	7601-1	FAN GUIDE TOP NAT IB35ETR	
77	1	7613	FAN DIVIDING BRKT RH IB35ETR	
78	2	7554	CLIP THERMISTER CP-90125-2-B	
79	1	7989	REAR PANEL IBR USA	
80	1	7197	REAR TOP PANEL IBR	
81	1	7198	REAR SIDE PANEL LH IBR	
82	1	7563	BRACKET THERMAL FUSE IB35ETR	
83	1	7621	THERMISTER BRKT REAR IB35ETR	
84	1	7190V	SURR TOP PANEL IBR VIPER	BLACK
	1	7190SP	SURR TOP PANEL PAINTED IBR SP	SILVER
85	1	7191V	SURROUND LEFT HAND IBR VIPER	BLACK
	1	7191SP	SURR LH PAINTED IBR SP	SILVER
86	1	7192V	SURROUND RIGHT HAND IBR VIPER	BLACK
	1	7192SP	SURR RH PAINTED IBR SP	SILVER
87	4	7177	DOOR SPRING IBR	
88	1	7193V	DOOR LH IBR VIPER	BLACK
	1	7193SP	DOOR LH PAINTED IBR SP	SILVER
89	1	7194V	DOOR RH IBR VIPER	BLACK
	1	7194SP	DOOR RH PAINTED IBR SP	SILVER
90	1	7227	AIR GUIDE TOP IBR	
91	1	7228	FRONT TRIM PAINTED IBR	
92	2	7598	CABLE COVER PAINTED IB35ETR	
93	1	7615V	TOP PANEL ASSY IB35ETR VIPER	BLACK
	1	7615SP	TOP PANEL ASSY IB35ETR SP	SILVER
94	1	7230	FAN DIVIDING PANEL IBR	
95	1	7617	PROTECTIVE SHIELD IB35ETR PNT	
96	1	7857	FAN PARTITION PANL DGREASE USA	
97	1	7221	FAN DISCHARGE GUIDE IBR	

## INSTALLATION NOTES

## INSTALLATION NOTES

## INSTALLATION NOTES

## INSTALLATION / COMMISSIONING CHECKLIST

- |   | NO                       | YES                      |
|---|--------------------------|--------------------------|
| 1. Was a fireplace inspection carried out?<br>(i.e. clearances, combustibles etc.)              | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Was a manufactured flue system installed?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Has specified gas pressure been set?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are decorative logs located correctly on pins?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Have ember granules been placed and free of dust and powder?                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Has appliance been sealed around the fireplace?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Has the appliance been test fired for correct operation<br>(All burners light without delay) | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Is the end-user fully aware of operating procedure?  | <input type="checkbox"/> | <input type="checkbox"/> |

## INSTALLER DETAILS

Company name: \_\_\_\_\_

Installers name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_ Mobile: \_\_\_\_\_

Permit number for installation: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

# Rinnai

Part Number 7919B